

WATER RESOURCES DEVELOPMENT UNDER THE FISH AND WILDLIFE COORDINATION ACT

An update and expansion of:

*Issues in Fish and Wildlife Planning: Water Resources Development
Under the Fish and Wildlife Coordination Act*

by Karl F. Stutzman, 1980

and

*Policy and Guidance on Fulfillment of the Fish and Wildlife Coordination Act
Responsibilities in the Corps of Engineers Water Resources Development Program*

by Charles K. Baxter, Catherine D. Duncan, and David R. Parsons, 1986

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ACRONYMS USED

AFB	Alternative Formulation Briefing
ASA-CW	Assistant Secretary of the Army for Civil Works
BCR	Benefits to Cost Ratio
BR	Bureau of Reclamation
CAP	Continuing Authorities Program
CBRA	Coastal Barrier Resources Act
CEQ	Council on Environment Quality
CFR	Code of Federal Regulations
Corps	U.S. Army Corps of Engineers
DDR	Design Documentation Report
DEIS	Draft Environmental Impact Statement
DOT	Department of Transportation
DPR	Detailed Project Report
EA	Environmental Assessment
EDR	Engineering Documentation Report
EIS	Environmental Impact Statement
EQ	Environmental Quality Objective/Account
ESA	Endangered Species Act
EWP	Emergency Watershed Protection Program, Natural Resources Conservation Service
FCSA	Feasibility Cost Share Agreement
FERC	Federal Energy Regulatory Commission
FR	Federal Register
FSM	Feasibility (Study) Scoping Meeting
FWCA	Fish and Wildlife Coordination Act
FWCAR	Fish and Wildlife Coordination Act Report
FWS	U.S. Fish and Wildlife Service
FEIS	Final Environmental Impact Statement
FY	Fiscal Year
GDM	General Design Memorandum
GRR	General Reevaluation report
GI	General Investigations
HEP	Habitat Evaluation Procedures
HES	Habitat Evaluation System
HGM	Hydrogeomorphologic Methodology
HSI	Habitat Suitability Index
HU	Habitat Unit

HV	Habitat Value
IFIM	Instream Flow Incremental Methodology
INRMP	Integrated Natural Resources Management Plan
IPR	In Progress Review
IRC	Issue Resolution Conference
LRR	Limited Reevaluation Report
LOI	Letter of Intent
MFR	Memorandum For the Record
NASA	National Atmospheric and Scientific Administration
NED	National Economic Development Objective/Account
NEPA	National Environmental Policy Act
NER	National Ecosystem Restoration
NFS	National Marine Fisheries Service (NOAA-Fisheries)
NRC	Nuclear Regulatory Commission
NRCS	Natural Resources Conservation Service
O&M	Operation and Maintenance
OCE	Office of the Chief of Engineers
OEPC	Office of Environmental Policy and Compliance (Department of the Interior)
OMB	Office of Management and Budget
P&G	Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies (Also Called Principles and Guidelines)
P&S	Principles and Standards for Planning Water and Related Land Resources
PAL	Planning Aid Letter
PAM	Planning Aid Memorandum
PAR	Planning Aid Report
PCA	Project Construction Agreement
PDA	Planning and Design Analysis
PED	Preconstruction Engineering and Design
P.L.	Public Law
PMP	Project Management Plan
PRP	Preliminary Restoration Plan
RRC	Reconnaissance Review Conference
SOW	Scope of Work
Stat.	Statutes at Large
TEA-21	Transportation Equity Act fir the 21 st Century
TVA	Tennessee Valley Authority
U.S.C.	United States Code
WET	Wetland Evaluation Technique
WRAP	Wetland Rapid Assessment Procedure
WRC	Water Resources Council
WRDA	Water Resources Development Act

PREFACE

This document provides information and guidance on the Fish and Wildlife Coordination Act (FWCA) and its application to water resources development project planning and implementation. It has been developed primarily for use by Fish and Wildlife Service (FWS) biologists working on water resource development projects under the authority of the FWCA. Subject matter includes:

- The legislative history and provisions of the FWCA;
- Agency programs to which the FWCA applies;
- Water resource development project planning;
- The basic roles and responsibilities of the biologist in conjunction with water resources development planning under the FWCA;
- Related legal authorities; and
- The content and format of FWCA reports and recommendations that biologists prepare.

This document is an update and expansion of two existing guidance documents on the FWCA including the FWS biologist's involvement in water resources development project planning and implementation under the statute. Substantial portions of the material in this report are taken directly from these two documents, updated and revised as needed:

“Issues in Fish and Wildlife Planning: Water Resources Development under the Fish and Wildlife Coordination Act.” by Karl F. Stutzman. FWS/OBS-80/44, Biological Services Program, Fish and Wildlife Service, Eastern Energy and Land Use Team, Kearneysville, West Virginia. August 1980.

“Policy and Guidance on Fulfillment of the Fish and Wildlife Coordination Act Responsibilities in the Corps of Engineers Water Resources Development Program” by Charles K. Baxter, Catherine D. Duncan, and David R. Parsons, U.S. Fish and Wildlife Service Southeast Region, Atlanta, Georgia. July 1986.

Chapter I provides information on the FWCA itself. Chapter II address various agency programs to which the FWCA is or may be applicable. Chapter III provides information on water resources development project planning and implementation and the FWS biologist's roles and responsibilities. This chapter includes detailed information on mitigation, transfer funding for Service work on federally constructed water projects, and General Plans for the designation of lands and waters set aside for management for fish and wildlife purposes. Chapter IV deals

specifically with the water resource development planning process of the U.S. Army Corps of Engineers. However, information in this chapter is also applicable in general to planning by other agencies. Chapters V and VI provide information on how FWS biologists evaluate projects, and on the content and format of FWCA reports. Chapter VII describes legislation related to the FWCA. Appendices are linked to this document. In addition, a list of acronyms used in this document is located at the end of the Table of Contents.

Involvement in water resource development project planning and implementation under the FWCA was historically and continues to be one of the primary responsibilities of biologists within the Ecological Services program. However, FWCA involvement may also involve biologists in other programs. In addition, program nomenclature and responsibilities change from time to time. Therefore, within this document, reference is made to FWS biologists, to include the primary role of the Ecological Services biologist, but with the recognition of the actual and potential role of other program biologists in the FWCA process.

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CHAPTER I

THE FISH AND WILDLIFE COORDINATION ACT

A. Introduction

The Fish and Wildlife Coordination Act (FWCA) was pioneering environmental legislation that was ahead of its time in providing mechanisms for assessing impacts to fish and wildlife resources, and offering opportunities to protect and improve them in association with water resources development projects. The initial legislation of 1934 that was ultimately to become the FWCA was enacted at a time when public interest in wildlife issues was taking off. Biologist Konrad Lorenz was popularizing the study of biology in the field as well as in the lab. The Civilian Conservation Corps had from 1933 to 1942 employed two million people planting trees and restoring rangeland and wildlife refuges. The cooperative wildlife research units had been established in 1935 at land grant colleges to help train State and Federal wildlife managers. Federal money available for wildlife management had increased as a result of the sale of duck stamps and excise taxes on guns and ammunition (Stewart et al. 1999).

Bean (1983) states that, “Probably the first major Federal wildlife statute to employ the strategy of compelling consideration of wildlife impacts was the Fish and Wildlife Coordination Act.” Its enactment pre-dates much of the current body of environmental law, including the National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA). In fact, as originally introduced, NEPA was to have been an amendment to the FWCA (Bean 1983). The FWCA represents one of the earliest and most significant indications of the intent of Congress that fish and wildlife considerations were to be a major component of the analysis of projects affecting bodies of water and were to receive equal consideration with other traditional project purposes such as navigation and flood damage reduction. Because of its wide applicability to water resource development projects, it has often been referred to as “umbrella” authority for the involvement of the Fish and Wildlife Service (FWS) in project planning.

Written in broad and general language, the FWCA lends itself to continuing interpretation, thereby accommodating changing conditions and needs. This is clearly shown in that its provisions are as applicable to water resources development projects now as they were 45 years ago when the Act as we currently know it was passed. However, these characteristics of the FWCA, along with its permissive nature (i.e., acceptance of conservation recommendations is not mandatory) has fostered a perception that the FWCA is weak in assuring the maintenance of productive habitats for fish and wildlife. The partnership opportunities fostered by the FWCA, however, serve as a key underpinning of successful efforts to streamline environmental reviews,

and help create positive solutions for water resource development and natural resource conservation across the country.

While interpretation of the FWCA has varied over the years within and between agencies and the environmental community, agency policies and legislative mandates have made it more uniformly understood and applied within the Federal community. The FWCA has provided procedural opportunities to ensure that fish and wildlife issues and recommendations are heard and considered through the decision making chain within national water development programs. In the case of major proposed Federal water projects, this chain of decision makers extends to the Administration and Congress. The success rate in obtaining means and measures for fish and wildlife conservation, protection, development and improvement is in no small part the result of the scientific soundness of recommendations made under the FWCA, the skill and persuasiveness of the fish and wildlife biologist, and the receptivity of decision makers.

A number of the FWCA's major provisions has been emphasized and expanded in planning guidance and other legislation. It is important to state, however, that new legislation has strengthened but not replaced the applicability of and need for the FWCA. The presence of the NEPA and ESA, in combination with the FWCA, represent three of the major authorities used by FWS biologists to evaluate federally constructed, permitted, or licensed water resources development projects. Subsequent authorizations contained in Water Resource Development Acts that provide direction and authorities to the U.S. Army Corps of Engineers Civil Works program have tended to support and bolster a number of FWCA provisions, leaving little question as to their intent and applicability. In an era of ever increasing environmental sensitivity, the FWCA has withstood the test of time and remains one of the basic legal authorities for assessing the impacts on and potential benefits for fish and wildlife resources at water resource development projects.

B. Background

Basic Problem Addressed by the FWCA

The basic problem that Congress sought to address in enacting the FWCA was how to accommodate two aspirations of society that may, at first blush, appear at odds with one another. The first is to promote economic development and further human well-being through the maintenance of a viable and thriving economy. The second is to insure the maintenance or restoration of productive fish and wildlife habitats and environmental quality, also essential to human well-being. Economic development, often supported by water projects, can damage or destroy environmental values if pursued with only the development objective in mind. Similarly, single-minded attempts to preserve environmental quality can place constraints on economic development.

At the time of passage of the FWCA, many large water resource development projects such as reservoirs and navigation projects were being constructed throughout the United States. Concerns over the impacts of these projects on the Nation's fish and wildlife resources, and the need to develop ways of evaluating and addressing these impacts, were instrumental to the passage of the FWCA as we know it today. There was also the need to address opportunities for the development and improvement of these resources (i.e., enhancement), an issue also provided for in the FWCA, as amended in 1958. In spite of the passage of a number of environmental laws and authorities since the 1980s specific to water resources development agencies such as the U.S. Army Corps of Engineers, the issues expressed decades ago are still of concern today. The FWCA remains one of the FWS's major authorities for providing fish and wildlife evaluations and recommendations that help advance positive water projects.

Due to perceived conflicts between economic development and environmental protection, two national planning objectives evolved under the aegis of the Water Resources Council's (WRC) Principles and Standards for Planning Water and Related Land Resources. These were the National Economic Development (NED) Objective, and the Environmental Quality (EQ) Objective. Within this multi-objective framework it was often feasible to adjust the two objectives so that both aspects of the human environment were adequately served. In 1983, the WRC issued the Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies (Principles and Guidelines), which required selection of the plan with the greatest net economic benefit consistent with protecting the Nation's environment (NED Plan; Water Resources Council 1983). Achieving a balance of these two objectives is the basic thrust of the NEPA and the Principles and Guidelines. Implementation of the FWCA is consistent with and complementary to these mandates, even though it was enacted more than a decade earlier.

General Approach to the Problem

The FWCA provides a basic procedural framework for the orderly consideration of fish and wildlife conservation and enhancement measures in federally constructed, permitted, or licensed water development projects. The FWCA provides that, whenever any water body is proposed to be controlled or modified "for any purpose whatever" by a Federal agency or by any "public or private agency" under a Federal permit or license, the action agency¹ is required first to consult with the wildlife agencies², "with a view to the conservation of fish and wildlife resources in

¹The term "action agency" as used herein applies to those Federal departments or agencies that plan, construct, operate, or maintain a water resources development project, or that approve and issue permits and licenses for such projects, except for any agencies or projects that are exempted from the provisions of the FWCA.

²The term "wildlife agencies" as used in this report includes the FWS and the head of the State fish and wildlife agency, as specified in the FWCA, and NOAA - Fisheries (formerly the

connection with that project.” The FWCA authorizes preparation of reports and recommendations by the Secretary of the Interior (and/or Commerce³) and the head of the State agency responsible for the administration of fish and wildlife resources, to be submitted to the action agency. That report, if prepared, must be made available to the Congress or other authorizing agents when decisions are made to authorize (or not to authorize, or authorize with modifications) a project. Other provisions of the FWCA relate to the acquisition and use of project lands and waters for fish and wildlife purposes, the evaluation of project effects including benefits and costs, and related matters.

C. Legislative History

The legislative history of the FWCA spans more than 25 years. The U. S. Army Corps of Engineers had been engaged in improvements of navigable waterways of the United States since at least 1824, and had been issuing permits for work by others in navigable waters since it received authorization to do so in Section 10 of the Rivers and Harbors Act of 1899. The Bureau of Reclamation had been developing the water resources of the west since the Newlands Reclamation Act of 1902. Private development of water resources had been underway since the founding of the Republic and before. It was in an attempt to address issues related to fish and wildlife resources in water resources development project planning that the original FWCA and subsequent amendments were passed. “Through strengthening amendments, it has developed into a rather detailed directive that requires intricate reporting, coordination, and planning procedures to be followed by Federal construction agencies.” (Shiple 1974).

The FWCA was legislatively derived from several amendments to basic legislation passed in 1934. Originating on March 10, 1934 (48 Stat. 401), it was amended on August 14, 1946 (60 Stat. 1080); June 19, 1948 (62 Stat. 497); August 12, 1958 (72 Stat. 563; 16 U.S.C. 661, et. Seq.); and July 9, 1965 (79 Stat. 213). The Act of 1958, which basically created the law as we know it today, established the official title of this legislation as the “Fish and Wildlife Coordination Act.”

The Act of 1934

The initial legislation that was ultimately to become the FWCA had its beginnings on March 10, 1934 (Appendix A). Although the statute had limited application to fish and wildlife resource protection, Michael Bean (1983) notes:

National Marine Fisheries Service) of the Department of Commerce. (Reorganization Plan No. 4, 1970).

³The reporting authorization of the Secretary of Interior was extended to the Secretary of Commerce as a concurrent authority by virtue of Reorganization Plan No. 4.

In some respects, the Coordination Act originally passed in 1934 was a remarkably forward-looking statute. For example, it authorized “investigations . . . to determine the effects of domestic sewage, trade wastes, and other polluting substances on wildlife,” encouraged the “development of a program for the maintenance of an adequate supply of wildlife” on the public domain and other federally owned lands, and called for State and Federal cooperation in “developing a Nation-wide program of wild life conservation.”

Consultation with the Bureau of Fisheries (precursor to the FWS) regarding dams constructed by the Federal Government or under Federal permit was required in an effort to insure that fish passage was provided, if economically practicable.

The 1934 Act provided for the Secretaries of Agriculture and Commerce to assist in and cooperate with Federal, State and other agencies to increase the supply of game and furbearing animals and fish, combat disease, and develop a nationwide program for wildlife conservation and development. The Secretaries of Agriculture and Commerce were authorized to investigate the effects of domestic sewage, trade wastes, and other pollutants on wildlife, with emphasis on birds, mammals, fish, and shellfish. Other provisions addressed fish and wildlife issues on Indian reservations, surveys of wildlife resources, and a framework for improving resources on lands in the public domain. Donations of lands, funds, and other aids to the development of projects and conservation were also authorized, if acceptable to the applicable State.

In all its provisions, the 1934 Act was permissive in nature. Bean (1983) notes that only “two provisions appeared to be mandatory. They required consultation . . . before construction of any dam and opportunity to use impounded water for ‘fish-culture water stations and migratory-bird resting and nesting areas’ . . . The mandatory nature of both these provisions was questionable for, according to the House Report, ‘There is nothing but a spirit of cooperation which is insisted on in this bill. There is nothing mandatory about the bill.’” Shipley (1974) notes that “it was made abundantly clear that this bill did not elevate the consideration of fish and wildlife to a parity with considerations of economics or any of the ‘primary uses’ of such projects. The construction agencies’ discretion was unrestricted.”

McBroom (1955) stated that:

The 1934 act . . . very largely a permissive piece of legislation. It did not provide the machinery for incorporating fish and wildlife values and fish and wildlife resources into the plans of the construction agencies. The lack of result from the 1934 Act resulted in a very great upwelling of demand on the part of sportsmen and conservationists throughout the country who had seen some pretty needless havoc wreaked on fish and wildlife resources. They had seen streams below dams dried up with the consequent destruction of all fish life. They had seen reservoirs flood and destroy valuable habitat for both waterfowl and other species.

The Coordination Act of 1946

Because of shortcomings in the 1934 Act, it was amended in 1946 (Appendix B). The 1946 amendments more closely resembled the FWCA as we know it today, but were more limited in scope, with a principal emphasis on mitigation of losses to fish and wildlife resources resulting from water resources development projects. Under the 1946 authority, many major Federal projects were studied, in some cases rather thoroughly, and some positive results were realized in terms of fish and wildlife conservation measures.

Shipley (1974), citing the House Committee on Agriculture Report No. 1944 in 1946, states:

The 1946 Amendments to the Fish and Wildlife Coordination Act were designed, *inter alia* (1) To make land and water which was acquired for flood control, irrigation, and other use available to State, public, or private agencies for administration for wildlife conservation purposes . . . and (2) to require coordination between the various State and Federal agencies in connection with the initial planning for projects, as well as after the projects were under construction. However, the legislative history of the amending Act points out that . . . the bill purposely does not provide for curtailment of flood control, irrigation, and other impoundment programs for the sole benefit of wildlife resources but rather it provides simply that due consideration be given to the requirement of such other resources as may be affected by those programs.

The 1946 Act contained a number of the provisions from the 1934 Act, but in a rearranged and, in some cases, expanded form. The 1946 Act in part “represented a retreat from some of the more ambitious goals of 1934” in that it deleted the goals of establishing a nationwide program of wildlife conservation and of maintaining an adequate supply of wildlife on Federal public lands (Bean 1983). The amendment expanded the consultation provision by providing that a Federal agency constructing or permitting a water resources development project that impounded, diverted, or otherwise controlled for any purpose a stream or other body of water must first consult with the FWS and State fish and game agency to prevent damage or loss to wildlife resources (i.e., mitigation). The reports and recommendations of the wildlife agencies, based on the biological surveys and investigations they conducted, were to be included in reports submitted by the Federal agency responsible for engineering surveys and construction.

The Act provided that the cost of mitigation measures was to be part of the cost of the projects, with specific additional provisions made regarding projects of the Bureau of Reclamation. It also added a new provision for the use of project lands and waters at Federal water projects covered by the Act for fish and wildlife conservation, maintenance, and management, when consistent with the purposes of the project. The 1946 Act introduced the General Plan as the vehicle for designating lands and waters for fish and wildlife purposes (General Plans are discussed in detail below and in a separate chapter of this report).

The Coordination Act also included sections on investigating the effects of contaminants (an expansion of provisions in the 1934 Act); specific reference to fish and wildlife in the

management of facilities on a portion of the Mississippi River; authorization of appropriation of funds; exclusion of the Tennessee Valley Authority from the provisions of the Act; and an expansive definition of the term “wildlife.” The latter is very significant in conjunction with the consultation provisions of the Act, in that the term “wildlife” was very broadly defined. The sections that were not changed in later amendments are discussed in more detail below.

The 1946 Coordination Act stimulated development of the present institutional organization within wildlife agencies to implement its provisions. Within the FWS’s Bureau of Sports Fisheries and Wildlife, the Office of River Basin Studies was established for this purpose.

Coordination Act Amendments of 1948

The 1946 Coordination Act was amended in 1948 by the addition of Subsection 5(a) dealing with the management of Corps facilities on the Upper Mississippi River (Appendix C). Section 5(a) provides that the Corps is to give full consideration to the needs of fish and wildlife resources and their habitats and, to the extent possible, operate and maintain pool levels as though navigation was carried throughout the year.

The Fish and Wildlife Coordination Act of 1958

The pivotal point in the history of this legislation was the enactment of the Fish and Wildlife Coordination Act on August 12, 1958 (Appendix D). The main purpose of the 1958 amendments was to provide for more effective integration of a fish and wildlife program with Federal water resource developments (House Report No. 85-2183 1958). The 1958 Amendments were developed by the Department of the Interior at the request of the International Association of Game, Fish and Conservation Commissioners (Metcalf 1958). The amendments had broad support from most if not all of the major environmental and conservation organizations in existence at that time as well as the governors of all of the then 48 States. The amendments were supported by a wide variety of constituencies, including the very agencies that would be affected by the amended Act.

The 1958 amendments gave us the FWCA as we know it today and gave the Act its current statutory title. The FWCA was enacted because of a recognized need to strengthen the provisions of the existing legislation. The 1946 Act was passed “at a time when there was a very great demand for public works projects, at a time in the postwar years when it was expected that there would need to be a lot of construction by the Federal Government in order to assist the economy in converting from a wartime to a peacetime basis; therefore the Act was aimed at Federal agencies that were in the construction business and agencies that were under Federal license [permit]” (McBroom 1955). In hearings on the Coordination Act amendments in the House of Representatives, it was noted that the House Committee on Government Operations had recommended revision of the Act in a 1957 report on Army-Interior land acquisition policy. The 1957 report stated “the Coordination Act of August 14, 1946, which facilitates coordination of fish and wildlife conservation, should be broadened and extended in accordance with the

general objectives of the amendments that have been endorsed by the governors of all 48 States” (Metcalf 1958).

In testimony at the Coordination Act hearing, Under Secretary of the Interior Hatfield Chilson noted that:

There is, however, need for broader legislation for fish and wildlife conservation in connection with water development projects. H.R. 12371 [a bill similar to H.R. 13138 which became the FWCA] is principally designed to amend and strengthen the Fish and Wildlife Coordination Act of 1946, which constitutes a complete revision of the Act of March 10, 1934. The 1946 Act is the authority for fish and wildlife planning on Federal water development projects. Although substantial contributions have been made toward fish and wildlife conservation under the 1946 Act, that Act has a number of deficiencies which now need to be corrected . . . The main deficiency of the [1946] Act is its lack of clear, general authority for construction agencies like the Bureau of Reclamation and the Corps of Engineers to plan and construct, as part of their projects, measures that will provide adequately for fish and wildlife conservation and development. Improvement in this situation through enactment of amendments to the 1946 Act would be a needed and welcome addition to the body of Federal statutes related to water resources (Chilson 1958).

The Senate Report on Amending the Coordination Act states “Despite the considerable accomplishments under the 1946 Coordination Act, the results have fallen far short of the results anticipated by the conservationists who sponsored the 1946 law. The limitations and deficiencies of that Act will not permit the FWS and the State fish and game departments to accomplish the objectives of fish and wildlife conservation and river basin development that are clearly essential if we are to preserve our fish and wildlife resources on a scale demanded by the people of the Nation . . . This amendment to the Coordination Act would grant authority to the agencies of Government engaged in construction to consult with the FWS before and during the building of Federal water development projects. The FWS would make known to these construction agencies, such as the Corps of Engineers and Bureau of Reclamation, the project necessary to protect fish and wildlife.” (Senate Report No. 85-1981 1958). The Senate Report went into considerable detail on the shortcomings of the 1946 Act.

Chilson (1958) also stated that the existing Coordination Act provided for mitigation of losses to fish and wildlife resources, but not for the enhancement of these resources. The applicability of the 1946 Act to dredging and navigation projects was questioned, as was the applicability to projects authorized prior to the enactment of the 1946 Act, whether constructed or not. Small watershed projects of the Department of Agriculture were not clearly included under its provisions, and the 1946 Act did not provide for the acquisition of land for fish and wildlife purposes.

The 1958 amendments to the Coordination Act changed and added several sections. Section 1 conferred the statutory title "Fish and Wildlife Coordination Act." Section 2 replaced in their

entirety the first four sections of the 1946 Act and left standing without amendment Sections 5 - 9 of the 1946 Act. Section 3 enacted a new Section 12 to the Watershed Protection and Flood Prevention Act (P.L. 83-566; Appendix E). Section 12 of P.L. 83-566 provides for consultation similar to that required under the FWCA for small watershed projects of the Natural Resources Conservation Service (NRCS, formerly the Soil Conservation Service (SCS)). Section 4 authorized the appropriation of funds to “carry out the purposes of this Act.” Insertion of these changes into the 1946 Act resulted in the FWCA that appears in Appendix D.

Of great significance was the addition to Section 1, stating that one of the purposes of the amended legislation was that wildlife conservation was to receive equal consideration with other features of water resource development programs. As discussed below, the “equal consideration” purpose of the FWCA set the stage for placing fish and wildlife on an equal footing with other project purposes in the evaluation of water resources development projects. Many of the provisions of the Act are geared toward assuring that this purpose is met. Section 1 also included authorization for the Secretary of the Interior “to accept donations of land and contributions of funds” to further the Act’s purposes.

The 1958 Act was more comprehensive than the 1946 Act. The 1958 amendments authorized the installation of means and measures for not only mitigating for losses to fish and wildlife resources, but also for enhancing these resources. As noted by Congressman Metcalf (1958), “Under the Act as it stands today [1946 Act] these agencies [FWS and State wildlife agencies] are to concern themselves with a ‘mitigation of losses’ which may be caused by such projects. And there is no requirement in the act that the construction agencies pay any attention to recommendations submitted by the FWS and State agencies. We would give these agencies a positive job – the ‘development and improvement of wildlife resources’ in connection with these projects. And their recommendations would be made a part of the report of the construction agency to the Congress.” The amended Act authorized fish and wildlife conservation and enhancement means and measures at previously authorized projects, and authorized allocation of benefits and costs of fish and wildlife enhancement as a “purpose” of water resource development projects.

The FWCA authorized, under prescribed circumstances, the modification of projects or their operations for fish and wildlife conservation purposes, affirmed the application of the Act and its consultation provisions to Federal dredging and navigation projects, and to other non-Federal or Federal actions conducted under Federal permit and license, and required that the FWS and/or State reports and recommendations made under the FWCA accompany project reports for authorization or approval. It more clearly authorized land acquisition and use for fish and wildlife purposes. It provided a major authority for the transfer of funds to the FWS from construction agencies for investigations related to Federal projects. These funds were to be from appropriations or other funds available for “investigations, engineering, or construction,” suggesting an intent to establish a continuing participation by the wildlife agency, at least through the construction of projects.

Subsequent Amendments and Proposals to Amend

Public Law 89-72, the Federal Water Project Recreation Act (Appendix F), amended the FWCA in 1965 to (1) remove the 1958 provision (first enacted in 1946) that the costs of mitigation measures for projects constructed by the Water and Power Resources Service (now the Bureau of Reclamation) were to be borne totally by the Federal Government; and (2) insert the provision that measures undertaken for enhancement could include (a) “facilities” as well as (b) land acquisition, (c) modification of projects, and (d) modification of project operations. The effect of the provision identified in (1) above was that such costs were thereafter allocated jointly among benefitting project purposes (discussed later). The effect of (2) was to enlarge the limited enhancement authority of the 1946 Act to include facilities for the first time (a major precedent was found in Section 8 of the Colorado River Storage Project Act (1956) and its use of the term “facilities”). A minor changes was affected by P.L. 102-285, the National Geologic Mapping Act of 1992. Section 10(b) of this Act changed the names of the Bureau of Mines to the United States Bureau of Mines, causing this name change to be applied in Section 5 of the FWCA.

Several efforts to amend the FWCA were initiated during the 1970s. These stemmed principally from a series of five workshops conducted around the United States early in the decade to record the dissatisfactions of State fish and wildlife agencies and private conservation organizations with the Act and its implementation. A bill was drafted to cover many of these concerns and was introduced in both Houses of Congress. Hearings were held in 1974 and again in 1978 by the Subcommittee on Fisheries and Wildlife Conservation and the Environment of the House Committee on Merchant Marine and Fisheries. In neither instance did time permit the Committee to complete its markup of a bill and report it for floor action before the end of the congressional session. The bill was revised frequently during the 1970s.

In addition, a number of proposed amendments were introduced in the 1980s in an effort to legislatively provide equality under the FWCA to the National Marine Fisheries Service (now NOAA-Fisheries) because of its role under the Act after it became a separate entity from the FWS under Reorganization Order No. 4 of 1970. None of these legislative initiatives were ever passed.

Relationship to Other Legislative Authorities

The FWCA of 1958 (P.L. 85-624) is closely related to or dependent on other legislation and the regulations, guidelines, and procedures which have evolved under them. One class of legislation is, in effect, directly amended or supplemented by the FWCA. A second class is complementary in nature and of a similar orientation. Examples of complementary legislation include the NEPA and the ESA in that they address in a similar nature general or specific components of the ecosystem as those covered by the FWCA.

Among the authorities considered to be “supplementary legislation” are the Federal Reclamation Laws and various flood control project authorizations. The Bureau of Reclamation

authorizations typically begin with a phrase to the effect that the project in question is authorized pursuant to the Reclamation Laws and “Legislation supplementary thereto,” or similar. The FWCA is among those laws “supplementary thereto.” Corps public works authorizations (omnibus legislation) also authorize Corps projects and programs, to which the FWCA is applicable as supplementary legislation. Section 906 of the Water Resources Development Act of 1986 (33 U.S.C. 2283) on fish and wildlife mitigation enacted a number of provisions relating to mitigation and enhancement at Corps of Engineers projects. Section 906(e) of that Act provided that the major provisions of Section 906 “shall be deemed to supplement the responsibility and authority of the Secretary pursuant to the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), and that nothing in this section is intended to affect that Act.”

Other action agency laws which were conditioned or supplemented by the FWCA include portions of the Clean Water Act, the Federal Power Act, permitting authorities of the Nuclear Regulatory Commission, and others. Some special provisions of recent individual project legislation have put limits on mitigation for those special projects, and they must be taken into account in any inquiry into authorities to plan for or implement mitigation. The Water Resources Development Act of 1986 and subsequent Water Resources Development Acts have included provisions that are complementary to, and supportive of, several of the provisions of the FWCA. A discussion of these and other legislation with a FWCA nexus is contained in Chapter VII.

The FWCA (and NEPA) in effect condition or supplement other water development legislation to require consideration of recommendations generated under the FWCA procedures. A classic statement affirming this principle is set out in *Zabel v. Tabb*, 430 F2d 199 (5th Cir. 1970). cert. denied 401 U.S. 910 (1972):

Governmental agencies in executing a particular statutory responsibility ordinarily are required to take heed of, sometimes effectuate and other times not thwart other valid statutory governmental policies. And here the government-wide policy of environmental conservation is spectacularly revealed in at least two statutes, the Fish and Wildlife Coordination Act and the National Environmental Policy Act.

The Fish and Wildlife Coordination Act clearly requires the dredging and filling agency (under a governmental permit), whether public or private, to consult with the Fish and Wildlife Service, with a view of conservation of wildlife resources. If there be any question as to whether the statute directs the licensing agency (the Corps) to so consult it can quickly be dispelled. Common sense and reason dictate that it would be incongruous for Congress, in light of the fact that it intends conservation to be considered in private dredge and fill operations (as evidenced by the clear wording of the statute), not to direct the only Federal agency concerned with licensing such projects both to consult and to take such factors into account.

This opinion signaled a change from earlier periods when the Corps generally interpreted narrowly its mandates under the Rivers and Harbors Act of 1899 to consider only impacts on

navigation. The revised viewpoint, revealed by the courts, established the Corps' authority and duty to consider impacts on fish and wildlife and to deny permit applications where damages were sufficient to justify that decision, even though no adverse impacts on navigation were apparent. The history of this topic is indicative of the nature of change in traditional law and policy. Traditional policy viewpoints tended to resist change, in this example, from 1958 to 1972. Since that time, a number of laws, both specific to water resources development agencies such as the Corps, as well as on various environmental issues, have embraced and amplified basic concepts of the FWCA.

“Federally assisted” water projects such as the watershed projects planned and constructed under Section 3 of the Watershed Protection and Flood Prevention Act (P.L. 83-566) are not specifically covered by the FWCA. However, as noted above, Section 12 was added to P.L. 83-566 by the 1958 amendments to the FWCA to substitute for this limitation on coverage. Section 12 provides that the Secretary of Agriculture – in practice acting through the Natural Resources Conservation Service (NRCS, formerly the Soil Conservation Service) – shall notify the Secretary of the Interior of proposed work plans for small watershed projects so that the latter – in practice acting through the FWS – may make such investigations and reports as he deems necessary. Subsequent recommendations that “are acceptable to, and agreed to by, the local organization and the Secretary of Agriculture” are incorporated into work plans. Pursuant to Section 12 of P.L. 83-566, FWS involvement on P.L. 83-566 projects is not funded by NRCS.

For more detail on the legislative history of the FWCA, the following documents relating to the 1958 Act, its background, and interpretations are included in the appendices to this report:

1. Senate Report No. 85-1981. “Amending the Coordination Act.” Committee on Interstate and Foreign Commerce. 85th Congress, 2nd Session. July 28, 1958. (Appendix G)
2. Hearing on Coordination Act Amendments before the Subcommittee on Fisheries and Wildlife Conservation of the Committee on Merchant Marine and Fisheries. House of Representatives. 85th Cong., 2d Sess., June 27, 1958. (Appendix H)

D. Fish and Wildlife Coordination Act Proposed Regulations

No regulations for implementing the provisions of the FWCA currently exist, although draft regulations were at one time proposed. President Carter’s Water Policy Memorandum on July 12, 1978, stated that the Secretary of the Interior in cooperation with the Secretary of Commerce were to issue regulations by March 1, 1979, defining the requirements and procedures that had to be met for full compliance with the FWCA. This memorandum further called for the issuance of individual compliance procedures by agencies subject to the FWCA within three months of issuance of the regulations.

The FWS was given the lead in developing these regulations. A notice of intent to propose rules under the FWCA was published in the Federal Register on September 29, 1978 (43 FR 44870-44872). On May 18, 1979, the Departments of Interior and Commerce issued a notice of proposed rulemaking in the Federal Register (44 FR 29300-29358). At that time, it was determined that the document was a significant rule, but that it did not require a regulatory analysis under Executive Order 12044, and NEPA compliance was accomplished through preparation of an environmental assessment.

On August 17, 1979, a notice was issued in the Federal Register (44 FR 48305) inviting public comment on whether or not the proposed FWCA rules could have a significant affect on environmental quality, thereby requiring preparation of an environmental impact statement. This notice was issued as a result of proposed NEPA compliance procedures that had been issued on July 10, 1979, which included provision for public involvement in the environmental assessment process.

On December 18, 1980, a revised proposed rulemaking was issued in the Federal Register (45 FR 83412-83422). Extensive public comment on the initial proposed rulemaking resulted in revisions to the proposal and preparation of a draft environmental impact statement. The Federal Register Notice stated that the rules would standardize agency procedures and interagency relationships in the analysis of the impacts of Federal, or federally approved, water-related projects on wildlife resources (45 FR 83412).

In a Federal Register notice dated July 19, 1982 (47 FR 31299), The FWCA proposed rulemaking was officially withdrawn. In withdrawing the proposed rule, the notice states that the proposal “became subject to review by the Presidential Task Force on Regulatory Relief (see 47 FR 1700). This proposed rulemaking is hereby withdrawn in favor of administrative actions preparing memoranda of agreement and other Executive instructions.”

E. Provisions of the Fish and Wildlife Coordination Act

Overview

The FWCA in its current form has been in existence for some 45 years. As noted earlier, while other legislation relating to environmental and fish and wildlife issues as well as legislation that supports some of the provisions of the FWCA have been enacted since that time, the FWCA remains one of the major pieces of legislation aimed at ensuring that fish and wildlife resource issues, concerns, and opportunities are brought to the attention of decision makers and given equal consideration in project planning. Along with the NEPA and ESA, it is one of the three primary pieces of legislation that form the basis for the involvement of FWS biologists in water resources development planning. Since the passage of the FWCA of 1958, some policies and procedures applicable to Federal water resource development have changed and additional

legislation has been passed that, directly or indirectly, affect the provisions of the FWCA. Some of these will be discussed in the evaluation of the FWCA as well as in later chapters of this document.

Definitions and Concepts

The wording of the FWCA is very complex and complicated. It takes careful reading to fully understand the intent and meaning of the various subsections, particularly since some sections caveat or qualify others. Multiple interpretations are possible in some instances due to the legislative wording used. An understanding of the definitions of a few basic terms and concepts will help in understanding the FWCA.

The terms “wildlife” or “wildlife resources” as used in the Act are the only terms actually defined. Section 8 defines these to include not only fish and wildlife, but also the various elements of their habitat and life support systems. Thus, although the Act uses the term wildlife, it is representing all fish and wildlife and their vegetative habitats. Evaluations made under the FWCA can, therefore, take into consideration a wide spectrum of environmental factors, including a watershed or ecosystem approach such as that which currently helps guide FWS conservation, protection, and restoration efforts.

Consultation is one of the major actions required under the FWCA. The term “consult” has not been defined in law or in regulation and has varied in practice from simple notification to full participation in formulating project plans. Consultation is properly defined in terms of a procedural framework which insures that true consultation can take place. It encompasses the idea of open and free communication with and among planning team members, preferably on an interdisciplinary planning or evaluation team basis. Consultation also embraces the concept of early participation in the planning process.

The definitions of the terms “mitigation,” “compensation,” and “loss prevention” (associated with “conservation of wildlife resources by preventing loss of and damage to such resources” contained in Section 2 of the FWCA) have been subject to misuse. The objective of mitigation is to “prevent loss of or damage to” fish and wildlife. Mitigation is accomplished through the use of a five step process for reducing or eliminating losses from a project – avoidance, minimization, rectification, rectification over time, and compensation. Compensation is used to mitigate for unavoidable losses after the first four components of mitigation have been applied. Mitigation principles in this document are based on the “Fish and Wildlife Service Mitigation Policy (FR 46(15):7644-7663; January 23, 1981; Appendix I), with which the fish and wildlife biologist involved in project evaluation should be thoroughly familiar. The Mitigation Policy uses the definitions set out in the NEPA regulations promulgated by the Council on Environmental Quality (40 CFR Part 1508.20(a-e)). Mitigation is discussed later in this section and in detail in Chapter III.

Evaluation of water projects effects (gains and losses or benefits and costs) is accomplished by comparing future conditions as they are projected to occur in the absence of the project (future

without the project) with conditions expected to occur with the project in place (future with the project). The comparison of the “future with the project” and “future without the project” scenarios is basic to measuring project effects and determining whether the project will cause damages which must be mitigated and whether the project will or can be designed to fully mitigate resource losses and/or enhance these resources. An inventory of existing baseline, or “before” situation is usually needed as a basis for projecting the “future without the project” conditions, but it is not the basis for comparison unless conditions are projected not to change over the period of analysis. Projections of future conditions are always difficult and require close coordination between all planning team members.

Other concepts inherent to the FWCA that may need clarification will be addressed as they appear within the discussion of the various sections of the Act.

Institutional Framework

The FWCA directs or authorizes consultation, reporting, consideration, and in some cases, installation of fish and wildlife features – in short, a program. The provisions of the FWCA are summarized in Table I-1. Appropriations (i.e., funds) for FWCA planning are secured from Congress through transfer of funds from construction agencies, appropriations directly to the FWS, occasionally from “contributed” funds under Section 1 of FWCA, and through other mechanisms. The level of funding and personnel authorizations are critical to the level of effectiveness of the program.

The Washington Office of the FWS will generally provide policy oversight on the FWCA and projects, permits, licenses and other issues falling under it, and will on occasion be involved on individual projects when there is a need to determine policy implications or when there are issues that cannot be resolved at lower levels. The Washington Office is also involved in the authorization process through making recommendations on the contents of authorization bills and presenting the FWS’s positions on individual projects and general resource concerns to FWS and Department of the Interior management and Congress. The Washington Office may also become involved in seeking elevation of individual permits and permit issues under the Section 404(q) memorandum of Agreement of 1992 between the Department of the Army and the Department of the Interior.

Summary of the Provisions of the FWCA

Table I-1 provides a summary of all the provisions of the FWCA (P.L. 85-624; 16 U.S.C. 661 - 666(c)). In the column headed “Section,” the top number refers to the section in P.L. 85-624, while the number in brackets refers to the section citation as found in Title 16 of the United States Code (U.S.C.). The column headed “Operational Language,” as defined here, refers to specific words or phrases in a statute that indicate the nature of the mandates given by Congress to departments or agencies. In the table, only those words, phrases or sentences that appear in quotation marks are taken directly from the statute. All other language is paraphrased. Detailed

discussion of the provisions of the FWCA follows Table I-2. In a few instances, subsections of the FWCA are discussed slightly out of order because of their inter-relatedness with other sections or subsections.

Table I-1: Summary of the Provisions of the Fish and Wildlife Coordination Act of 1958

Section ¹	Subject	Purpose	Operational Language ²
1 [661]	Declaration of purpose; cooperation of agencies; surveys and investigations; donations	Provides that wildlife conservation shall receive equal consideration and be coordinated with other features of water resource development programs	“The Secretary of the Interior is authorized to” (1) provide assistance to Federal, State and public or private agencies and organizations; (2) make surveys and investigations; (3) accept donations of land and contribution of funds.
2 [662]	Impounding, diverting, or controlling waters		
2(a)	Consultation between agencies	Requires consultation whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, channelized, controlled or modified for any purpose whatever with a view to the conservation and development of fish and wildlife resources.	Department or agency of the U.S. that proposes or is authorized to, or permits or licenses changes in a water body “first shall consult with the United States Fish and Wildlife Service” and appropriate State fish and game agency. (This subsection does not apply to Federally assisted projects such as the NRCS Small Watershed Program under P.L. 83-566; however, see Section 12 of P.L. 83-566).
2(b)	Reports and recommendations; consideration	Requires reports and recommendations of FWS and State to be given full consideration and included in project reports to Congress or to any other relevant agency or person for authorization or approval.	Reports and recommendations of the Secretary of Interior and the head of the State fish and game agency “shall be made an integral part of any report” supporting project authorization or modification of previously authorized projects. “The project plan shall include such justifiable means and measures for wildlife purposes as the reporting agency finds should be adopted to obtain overall project benefits.”

Section ¹	Subject	Purpose	Operational Language ²
2(c)	Modification of projects; acquisition of lands (see also Subsection 3(c))	Authorization to implement recommendations, including land acquisition, if project is not substantially completed	“Federal agencies . . . are hereby authorized to modify or add to the structures and operations of such [water control] projects, the construction of which has not been substantially completed . . . and to acquire lands in accordance with Section 3 of this Act.”
2(d)	Project costs	Fish and wildlife conservation costs (mitigation and enhancement) are to be considered Federal project costs	The costs of planning, construction, installation and maintenance of conservation measures “shall constitute an integral part of the cost of such projects.” (Excluding the cost of operation of wildlife enhancement facilities.)
2(e)	Transfer of Funds	Authorizes Federal construction agencies to transfer funds to the Fish and Wildlife Service to finance FWCA investigation.	Federal construction agencies are “authorized to transfer funds to the United States Fish and Wildlife Service . . . as may be necessary” to conduct investigations.
2(f)	Estimation of wildlife benefits and losses	Requires an analysis of the costs and benefits for wildlife features (monetary and non-monetary)	“There shall be included in any report submitted to Congress . . . for any new project . . . an estimation of the wildlife benefits and losses” including enhancement benefits, costs of providing such benefits, share of joint costs allocated to enhancement purposes, and estimates of losses.
2(g)	Applicability to projects	Makes the provisions of the FWCA applicable to all projects except those that were authorized before enactment of the FWCA and where construction was substantially completed at the time of enactment of the 1958 amendments (60% of construction funds obligated).	“The provisions of this section shall be applicable . . . to any project . . . or any unit of such project authorized before or after the date of enactment of the FWCA for planning and construction, but shall not be applicable to any project or unit thereof authorized before . . . enactment . . . if construction . . . has been substantially completed.”

Section ¹	Subject	Purpose	Operational Language ²
2(h)	Exempt project and activities	Exempts surface water impoundments less than 10 acres and Federal land management activities	“The provisions of the Act shall not be applicable to . . . projects for the impoundment of water where the maximum surface area . . . is less than 10 acres, nor to activities for or in connection with . . . land management and used . . . by Federal agencies with respect to Federal lands under their jurisdiction.”
3 [663]	Impoundment or diversion of waters		
3(a)	Conservation, maintenance, and management of wildlife resources; development and improvement	Provides authority for the use of project lands and waters for fish and wildlife conservation, maintenance, and management including enhancement	“adequate provision consistent with the primary purposes of such [project] shall be made for the use thereof, together with any areas of land, water or interests therein, acquired or administered by a Federal agency . . . for the conservation, maintenance, and management of wildlife resources . . . including the development and improvement.”
3(b)	Use and availability of waters, lands, or interests therein	Provides that use of project lands and waters for wildlife conservation be in accordance with General Plans for management by the Secretary of Interior (migratory birds) or by the State (for the conservation of nonmigratory birds/ wildlife).	The use of waters, lands, or interests therein “shall be in accordance with General Plans approved jointly” by the heads of the construction agency, Interior, and State. Lands and water will be made available without cost; nothing affects authority of Secretary of Agriculture to make national forest lands available to States.
3(c)	Acquisition of land, waters and interests therein; report to Congress	Provides authority for land acquisition for wildlife conservation and development	“any land, water, and interests therein may be acquired . . . for the wildlife conservation and development purposes of the Act” provided, if deemed necessary by the action agency, that the extent/ details are included in report to Congress and Congress approves such acquisition.

Section ¹	Subject	Purpose	Operational Language ²
3(d)	Use of acquired properties	Requires continued use of properties acquired under this section for fish and wildlife purposes	“Properties acquired for the purposes of this section shall continue to be used for such purposes and shall not become the subject of exchange or other transactions if . . . [it] would defeat the initial purpose of their acquisition.”
3(e)	Availability of Federal lands acquired or withdrawn for Federal water resource purposes	Requires that lands acquired or withdrawn and made available to Interior or the State shall be in accordance with the FWCA	“Federal lands acquired or withdrawn for Federal water-resource purposes . . . shall be made available for such purposes in accordance with this Act, notwithstanding other provisions of law.”
3(f)	National forest lands	Requires that lands acquired for wildlife conservation within a national forest shall be part of the national forest, unless acquired for migratory birds	“lands acquired pursuant to this section . . . within the external boundaries of a national forest shall . . . be administered as part of the national forest . . . unless such lands are acquired to carry out the National Migratory Bird Management Program.”
4 [664]	Administration; rules and regulations; availability of lands to State agencies	Provides that lands made available to the Secretary of the Interior for management of migratory birds may be managed by the Secretary or made available to the States for management	“Such areas as are made available to the Secretary of the Interior . . . shall be managed by him” pursuant to General Plans and regulations, consistent with States law. “Lands having value for . . . migratory birds [may] be made available without cost . . . to the State.”
5 [665]	Investigations as to the effect of sewage, industrial wastes; reports	Authorizes the Secretary of the Interior to investigate the effects of certain pollutants and report to Congress	“The Secretary of the Interior . . . is authorized to make [investigations] to determine the effects of domestic sewage, mine, petroleum, and industrial wastes, erosion silt, and other polluting substances on wildlife.”

Section¹	Subject	Purpose	Operational Language²
5(a)	Maintenance of adequate water levels in upper Mississippi River	Requires the Department of Army to fully consider the needs of fish and wildlife in managing the Mississippi River between Rock Island, Illinois and Minneapolis, Minnesota	“In managing [facilities] in the Mississippi River between Rock Island, Illinois and Minneapolis, Minnesota, . . . the Department is directed to give full consideration” to fish and wildlife resources and their habitats and, to the maximum extent possible . . . operate and maintain pool levels as though navigation was carried on throughout the year.
6 [666]	Authorization of appropriations	Authorizes appropriations of funds to carry out the purposes of the Act	“authorized to be appropriated . . . such amounts . . . necessary to carry out the provisions of sections 661 6- 666c . . . including construction of facilities . . . and employment . . . of persons.”
7 [666a]	Penalties	Provides penalties for those violating any rule or regulation developed for the Act.	“Any person who shall violate any rule or regulation promulgated in accordance with Sections 661 to 666c . . . shall be guilty of a misdemeanor.” If convicted, fine of not more than \$500 or prison for not more than one year, or both.
8 [666b]	Definitions	Defines wildlife and wildlife resources to include fish, wildlife, and the habitat on which they depend	“The terms “wildlife” and “wildlife resources” . . . include birds, fishes, mammals, and all other classes of wild animals and all types of aquatic and land vegetation upon which wildlife is dependent.”
9 [666c]	Applicability to Tennessee Valley Authority	Provides that FWCA does not apply to the TVA	“The provisions of Section 661 to 666c of this title shall not apply to the Tennessee Valley Authority.”

¹ The top number refers to the sections as contained in P.L. 85-624, while the number in brackets refers to the section in Title 16 of the United States Code.

²Text in quotation marks is taken directly from the statute. All other language is paraphrased.

Section 1: Declaration of Purpose; Cooperation of Agencies; Surveys and Investigations; Donations

The language of Section 1 sets the tone for the balance of the FWCA. Some aspects of Section 1 have application beyond the water resources program. The purpose of the FWCA is twofold:

1. to recognize the vital contribution of our wildlife resources to the Nation and the increasing public interest and significance thereof due to expansion of the national economy and other factors, and
2. to provide that wildlife conservation is to receive equal consideration and be coordinated with other features of water resource development programs.

The recognition of the importance of fish and wildlife resources to the Nation and the impacts of water projects on these resources were the major reasons for the enactment of the 1934 Act and subsequent amendments. The legislative history of the FWCA is replete with statements recognizing this fact, several of which have been noted above. For the Congress to have given such emphasis to this issue by passage of the FWCA even before the advent of the environmental movement as it later came to be, and before the passage of such legislation as the National Environmental Policy Act and the Endangered Species Act, is a sign of the foresightedness of this legislation.

Equal Consideration

Of perhaps the greatest importance is the “equal consideration” provision of Section 1. Specifically, Congress stated that “For the purpose of recognizing the vital contribution of our wildlife resources to the Nation, the increasing public interest and significance thereof due to the expansion of our national economy and other factors, and to provide that wildlife conservation shall receive equal consideration and be coordinated with other features of water-resource development programs through the effectual and harmonious planning, development, maintenance, and coordination of wildlife conservation and rehabilitation for the purposes of this Act in the United States, its Territories and possessions.” Many of the provisions of the Act are aimed at insuring that the “equal consideration” purpose is met.

Senate Report No. 85-1981 (1958) states that the equal consideration provision:

would provide that wildlife consideration shall receive equal consideration with other features in planning of Federal water resource development programs. This would have the effect of putting fish and wildlife on the basis of equality with flood control, irrigation, navigation, and hydroelectric power in our water resource programs, which is highly desirable and proper, and represents an objective long sought by conservationists of the Nation.

Comments by the Department of the Interior noted that Interior “is dedicated to the principle that construction of water projects should give full consideration to the conservation of fish and wildlife resources while serving other objectives of multipurpose development (Chilson 1958).” (The reference in the Interior testimony was to H.R. 12371, a bill which was similar to H.R. 13138, the bill enacted as the FWCA of August 12, 1958). The Department of the Army commenting on the bill to amend the Coordination Act stated that, with regard to the civil works water resource development program, Army:

is in complete agreement with the objective of promoting effective coordination on wildlife conservation with resource development programs and equal consideration of wildlife conservation in planning and carrying out such programs. All purposes must be considered in any comprehensive and coordinated development if the maximum sustained benefits are to be obtained for each public dollar invested in the development of our natural resources This will involve the active participation of all responsible State and Federal agencies in the planning, development and maintenance of water resources programs. (emphasis added; Brucker 1958).

The equal consideration provision is fraught with significance in interpreting the FWCA. “Equal consideration” was not defined and is given meaning in terms of prescribed procedures in the FWCA that insure decision makers do, in fact, have opportunity to consider the need, potential, and justification for conservation measures as a major co-equal objective of project planning. This phrase, plus another – “coordinated with” – suggest that fish and wildlife were to be considered not only on a par with other traditional water development purposes such as flood control, irrigated agriculture, power, and the like, but that the planning process should insure a true integration of fish and wildlife features in project formulation, and that coordination in planning would be continuous and pervasive. These references, considered in conjunction with the “first shall consult” phrase of Subsection 2(a) noted below (as well as other provisions of the FWCA) indicate a full partner status for the FWS at the water development planning table.

It is clear that it was the intent of Congress to establish fish and wildlife conservation and development as co-equal with other potential project purposes in the evaluation of any given project. It should not be considered simply as an incidental issue to be addressed only if it is seemingly consistent with the “primary use” of a particular project (as suggested by the language of the 1934 Act).

Other Provisions of Section 1

A number of the provisions of Section 1 are supportive of the role of the Secretary of the Interior in general as well as the national water program. Interior is authorized to provide assistance and cooperate with Federal, State, public and private entities in developing, protecting, rearing, and stocking wildlife resources and their habitat; controlling losses from disease; minimizing damages from overabundance; providing public shooting and hunting areas; and conducting surveys and investigations of wildlife in the public domain. These authorizations provide a wide range of discretion to the Secretary, particularly when read in conjunction with the Fish and

Wildlife Act of 1956. Congress recognized the need for greater emphasis on fish and wildlife conservation through the 1956 act. It specifically pointed to the need to maintain and increase fish and wildlife resources through development and management, and directed the Secretary to take steps for improving these resources (Senate Report No. 85-1981, 1958).

Another reference in Section 1 of special interest in carrying out the water resource planning aspects of the FWCA is the final phrase that authorizes the Secretary to “accept donations of land and contributions of funds in furtherance of the purposes of this Act.” Under this provision, contributed funds can be accepted for FWCA studies. This provision, read in conjunction with the preceding provisions of Section 1, has also been used as authorization for accepting donated lands and funds in furtherance of actions outside the Federal water development program.

Section 2: Impounding, Diverting, or Controlling Waters

Section 2 contains the consultation and reporting provisions of the FWCA. These provisions are critical to the success or failure in meeting the goal of equal consideration in Section 1. Compared to the 1946 Act, this section broadens the range of water resource activities to which the FWCA applies; spells out clearly the authority to provide for the improvement and development (i.e., enhancement) of fish and wildlife resources as well as mitigation of damages; makes the Act applicable to projects already authorized; establishes specific procedures for reporting by construction agencies and fish and wildlife agencies; and provides for orderly consideration of conservation recommendations (Department of the Interior 1958).

Subsection 2(a): Consultation

Subsection 2(a) requires consultation on certain water resource development projects. This provision, which is so central to the FWCA, states that:

Except as hereafter stated in Subsection (h) of this section, whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the United States, or by any public or private agency under Federal permit or license, such department or agency first shall consult with the United States Fish and Wildlife Service, Department of the Interior, and with the head of the agency exercising administration over the wildlife resources of the particular State wherein the impoundment, diversion, or other control facility is to be constructed, with a view to the conservation of wildlife resources by preventing loss of and damage to such resources as well as providing for the development and improvement thereof in connection with such water-resource development.

Who Consults?

Subsection 2(a) defines who must consult with the wildlife agencies. The more obvious include the planners and builders of Federal water resource development projects, primarily the Corps of Engineers and the Bureau of Reclamation, but the list also includes any other agencies that build facilities falling under the provisions of Section 2. Federal agencies that issue permits and licenses for water projects are required to consult. Primary among these are the: Corps of Engineers (permits under Section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, and Section 103 of the Marine Protection, Research and Sanctuaries Act); the Environmental Protection Agency (permits under Section 402 of the Clean Water Act, although almost all States have now assumed this authority); the Federal Energy Regulatory Commission (licensing of hydroelectric plants and power transmission lines); the Nuclear Regulatory Commission (licensing of nuclear reactors and regulation of other aspects of the nuclear industry); and any other Federal agency authorized to construct, permit, or license water development actions. The above list is not exhaustive.

Applicants for Federal permits and licenses may also seek consultation before filing formal applications. The language “such department or agency” quoted in Subsection 2(a) can be interpreted to include the applicant, although this interpretation has not been vigorously advocated. Irrespective of whether or not they are required to do so, many applicants as a matter of course and logic do consult prior to applying for permits or licenses, and the FWS strives to work early with the proponents of projects under its pre-development consultation efforts. Early participation, when plans and site selection are not yet determined, can save time, effort, money, and controversy as compared to situations where consultation occurs only after the plan is formulated. This is believed to be the reason that Congress inserted the “first shall consult” phrase. It is advantageous both to the applicant and to the consulting agency to promote early consultation and avoid last minute problems.

Actions that normally would not require consultation may still be subject to the FWCA if and when these projects require a Federal license or permit. Again, where Federal permits or licenses will be required, early involvement in the planning phase, particularly for the larger of these projects that have a high potential for destroying or damaging productive habitats, can maximize fish and wildlife conservation and help streamline the environmental review process.

As noted earlier, consultation under Subsection 2(a) does not apply to the Natural Resources Conservation Service (NRCS, formerly the Soil Conservation Service) in connection with its small watershed program under P.L. 83-566 because these projects are built, owned, and managed by local sponsors and only assisted by the NRCS. However, as will be discussed later, these projects are subject to similar consultation requirements because of Section 12 of the 1958 FWCA amendments, which amended P.L. 83-566. Pursuant to Section 2(h) and Section 9 of the FWCA, certain types of projects are exempted from the provisions of the FWCA (see discussions later in this chapter). A more detailed discussion of agency programs with an FWCA nexus is contained in Chapter II.

Federally approved State programs that function in lieu of Federal programs are also generally not covered by the FWCA. An example would be an approved National Pollution Discharge Elimination System program under Section 402 of the Clean Water Act administered by a State. The theory is that the Federal program is not delegated to the State, but that the Federal program simply becomes inactive when the State program is brought to Federal standards and criteria and is so certified. It is then an approved State program, not a federally delegated one. (*Chesapeake Bay Foundation Inc. v. U. S.*, 453 F. Supp. 122 E.D. Va. 1978). A similar rationale was applied to Section 404 permits for the discharge of dredged material and fill in House Report 95-830 in 1977.⁴

In many such programs, the FWCA responsibility will have been implemented when the FWS reviews the proposed State program. In addition, consultation with the FWS (and other Federal agencies) is often a component of a State-assumed program. For example, in an approved Section 404 program, the State must show that it has the authority “to assure continued coordination with Federal and Federal-State water-related planning and review processes.” (Section 404(h)(1)(H)). The intent of this language was to assure continuation of processes such as the kind of consultation that occurs under the FWCA.

With Whom Does Consultation Take Place?

Consultation is mandated in the FWCA with both the FWS (and, if applicable, NOAA-Fisheries for reasons described earlier), and with the State wildlife resources agency. The relevant State agency may be the State fish and wildlife agency, or a department of natural resources within which the fish and/or wildlife agency is found. State involvement may result in a separate report from the State, but is often reflected in a letter accompanying the FWCA report of the FWS. Such consultation can be a strength or weakness. If all parties are in agreement, the recommendations in the report will carry more weight. If they are not, it will be a challenge to establish some area of agreement if at all possible. If agreement cannot be reached, separate recommendations could be provided, leaving the action agency to determine which to accept and to reject. Close coordination is important to ensure that the involved resource agencies, to the extent possible, speak with one voice.

What Types of Projects Trigger Consultation?

⁴The conferees wish to emphasize that such a State program is one which is established under State law and which functions in lieu of the Federal program. It is not a delegation of Federal authority. This is a point which has been widely misunderstood with regard to the permit program under Section 402 of the Act. That section, after which the conference substitute concerning State programs for the discharge of dredged or fill material as model [sic], also provides that State programs which function in lieu of the Federal program and does not involve a delegation of Federal authority.” (H. Rept. No. 95-830, 95th Congress, 1st Sess. 3 (1977) reprinted in U. S. Code Cong. & Admin. News 424, 4479 (1977)).

The FWCA applies to “any stream or other body of water.” With the exception of the exemptions contained in section 2(h) (see below), this language places no restrictions on the water body involved. In addition, the FWCA applies to water resource development programs in the United States, its territories and possessions. Thus, the application of the FWCA is very broad. In practicality, the FWCA authority follows the authorities of the Federal agencies that are required to consult with wildlife agencies. The reach of the FWCA is to all waters affected by Federal planning and construction, licensing, or permitting authorities. For example, in the case of the Section 404 program it follows the Corps' jurisdiction over waters of the United States, including wetlands.

The types of activities that trigger FWCA consultation are also very broadly defined in the FWCA, including any controlling or modification of any water for any purpose whatever. This language is specific and all encompassing. Specifically, the wording of the act includes “impounded, diverted, the channel deepened, or otherwise controlled or modified for any purpose . . . including navigation and drainage.” (Emphasis added). The latter activities were specifically added by the 1958 amendments because “The present [1946] act has questionable application to Federal projects which widen and deepen streams for navigation and other purposes, and does not apply to dredging and filling activities conducted under navigation permit issued by the Corps of Engineers.” The amendment “makes the act clearly applicable to drainage and navigation projects, whether these are undertaken by the Federal Government itself or under Federal permit or license (Department of the Interior 1958).”

When Does Consultation Occur?

Subsection 2(a) provides that the Federal agency constructing, permitting, or licensing a water resource development project “shall first consult.” The principal procedural elements of consultation should include: (1) timely notification to the wildlife agencies of the initiation of studies; (2) opportunity for continuing participation in planning that begins at the early stages such as at the reconnaissance stage and in scoping meetings where decisions are made on the needed studies, who will do them, and when they will be prepared; and (3) the mechanics of coordinating FWCA compliance with the consultation and review requirements of other environmental legislation. Involvement in project planning will be driven by the particular planning process of the agency involved. Scoping meetings are directed by the NEPA regulations.

Early participation can save time, effort, money and controversy and result in better projects because it occurs before commitments are made to a particular course of action. When consultation occurs only after the plan is formulated, it is much more difficult to affect changes to mitigate for impacts to resources. This may be the reason that Congress inserted the “first shall consult” phrase. It is usually advantageous both to the applicant and to the consulting agency to promote early consultation. The general and specific elements of project planning are discussed in Chapter IV.

Why Consult? The Goal of Consultation

The goal stated in Section 1 of the FWCA is to conserve fish and wildlife resources. “Conservation” in the clear context of the language includes the concepts of loss minimization and enhancement. Subsection 2(a) states that consultation is to be accomplished “with a view to the conservation of wildlife resources by preventing loss of and damage to such resources as well as providing for the development and improvement thereof.” The phrase “preventing loss of and damage to” refers to mitigation, while “providing for the development and improvement thereof” refers to enhancement. These two terms are discussed briefly below. Mitigation is discussed in more detail in Chapter III, Section G.

Enhancement

The issue of enhancement was another addition of the 1958 amendments. The FWCA as it existed prior to 1958 was limited largely to authorization of mitigation for damages in connection with construction of water projects (Chilson 1958). The authority for improvement measures (enhancement) had been in question. Senate Report 85-1981 (1958) states that:

Principally the 1946 act does not provide clear, general authority for the Federal agencies who construct water-resource projects to incorporate in project construction and operation plans the needed measures for fish and wildlife conservation. The act is mainly concerned with compensatory measures to mitigate the loss of or damage to fish and wildlife resources; it contains no clear authority to permit the planning of installations of appropriate means and measures to take advantage of opportunities provided by water projects for enhancement or improvement for fish and wildlife resources.

The 1958 amendments made it clear that water use projects should be planned to develop and improve fish and wildlife resources, where feasible, as well as to prevent damages to them (Hearing on the Coordination Act Amendments 1958; McBroom 1958).

Methods for Determining Mitigation Needs

The Service Mitigation Policy calls for the use of habitat-based methods where possible (such as the FWS Habitat Evaluation Procedures and Instream Flow Incremental Methodology) to compare the “future with” and “future without” the project. Other methods are available for measuring various environmental components. In the absence of solid biological data, the evaluation may have to be based on best professional judgement. Chapters III and IV discuss project planning and mitigation concepts in detail.

Subsection 2(b): Reports and Recommendations; Consideration

The findings and recommendations of the fish and wildlife biologist under the FWCA are communicated to project decision makers by at least three means: (1) orally in the interactive planning process, (2) through notes and memoranda (such as the planning aid letters), and finally

(3) through the formal reporting authorized by Subsection 2(b). If the first two means are completely successful, the formal report might consist of a record of that fact and an endorsement of the project to be recommended or authorized. This ideal situation is less likely to happen in planning for major Federal projects than for some smaller licensed or permitted projects.

Section 2(b) states that:

In furtherance of such purposes, the reports and recommendations of the Secretary of the Interior on the wildlife aspects of such projects and any report of the head of the State agency exercising administration over the wildlife resources of the State, based on surveys and investigations conducted by the United States Fish and Wildlife Service and such State agency for the purpose of determining the possible damage to wildlife resources and for the purpose of determining means and measures that should be adopted to prevent the loss of or damage to such wildlife resources, as well as to provide concurrently for the development and improvement of such resources, shall be made an integral part of any report prepared or submitted by any agency of the Federal Government responsible for engineering surveys and construction of such projects when such reports are presented to the Congress or to any agency or person having the authority or the power, by administrative action or otherwise, (1) to authorize the construction of water-resource development projects or (2) to approve a report on the modification or supplementation of plans for previously authorized projects, to which this Act applies.

Recommendations of the Secretary of the Interior shall be as specific as is practicable with respect to features recommended for wildlife conservation and development, lands to be utilized or acquired for such purposes, the results expected, and shall describe the damage to wildlife attributable to the project and the measures proposed for mitigating or compensating for these damages. The reporting officers in project reports of the Federal agencies shall give full consideration to the report and recommendations of the Secretary of the Interior and to any report of the State agency on the wildlife aspects of such projects, and the project plan shall include such justifiable means and measures for wildlife purposes as the reporting agency finds should be adopted to obtain maximum overall project benefits.

As with Subsection 2(a), the language of Subsection 2(b) is complicated, but critical to the discussion of reporting. It is quoted segmentally with commentary following.

1. “In Furtherance of Such Purposes”

This refers to the conservation purposes stated at the end of the preceding subsection, as well as to the equal consideration doctrine of Section 1. These have been discussed above.

2. “The reports and recommendations of the Secretary of the Interior on the wildlife aspects of such projects and any report of the head of the State agency exercising administration over the wildlife resources of the State.”

Thus, while the consultation mandate is given in the FWCA to the FWS, the reporting mandate is given to the Secretary of the Interior. In practice, however, the Secretary of the Interior has delegated reporting responsibilities to the FWS (and as a result of Reorganization Plan No. 4 (1970), the Secretary of Commerce to NOAA-Fisheries). Thus, when the FWS biologist prepares a “Section 2(b)” report, it is a report that is a Secretarial report – it “speaks” on behalf of the Department of the Interior. Approving/signing these reports is a responsibility delegated to the Regional Directors, which has been further delegated to Field Supervisors.

As noted above, the concerns of State fish and wildlife agencies are usually included in the reports of Federal wildlife agencies, and, therefore, separate State reports are seldom submitted (although the option is there to do so). States are usually important suppliers of data necessary to the consultation and report. They are full partners in arriving at recommended means and measures for achieving the conservation purposes of the Act, and usually indicate their position on the project through concurrence with the report or comments accompanying it. State biologists may participate in the habitat evaluations that are central to the preparation of effective reports.

3. “Based on surveys and investigations conducted by the United States Fish and Wildlife Service and such State agency for the purposes of determining the possible damage to wildlife resources and for the purpose of determining means and measure that should be adopted to prevent the loss or damage to such wildlife resources, as well as to provide concurrently for the development and improvement of such resources.”

This part of Subsection 2(b) provides a further link to the consultation process of Subsection 2(a). The investigations conducted pursuant to 2(a) are to provide the facts basic to the report. Subsection 2(b) restates the 2(a) objectives but with some added interpretation. The “means and measures” refer to both those for mitigation of project impacts (“preventing loss of or damage to” phrase in Subsection 2(a)), as well as for the enhancement of these resources (“development and improvement” phrase in Subsection 2(a)). It is for the surveys and investigations, including FWCA reports, that funding is authorized under Subsection 2(e) (see discussion below).

4. “[The 2(b) report] shall be made an integral part of any report prepared or submitted by any agency of the Federal Government responsible for engineering surveys and construction of such projects when such reports are presented to the Congress or to any agency or person having the authority or the power, by administrative action or otherwise, (1) to authorize the construction of water-resource development projects or (2) to approve a report on the modification or supplementation of plans for previously authorized projects, to which this Act applies.”

The thrust of this part of 2(b) is to insure that the ultimate decision maker, as well as intermediate officials in the often long planning and decision trains, have access to the specific findings and recommendations of the wildlife agencies. One of the major goals of the 1958 amendments to the FWCA was to better inform Congress of fish and wildlife related issues. House of Representatives Report No. 85-2183 (1958) notes that, under this bill, the FWS must be consulted and its plan, whether accepted or rejected by the constructing agency, must be submitted to the Congress for its consideration as a part of the authorizing legislation for each project. In the Hearing on Coordination Act Amendments, Interior Under Secretary Chilson (1958) noted that “the bill would provide procedures through which the Congress itself can be better informed on the fish and wildlife aspects of water projects when it is considering project authorizing legislation.” Testimony of the National Wildlife Federation noted that “In a very real sense, the amendments are designed to provide the Congress and its committees which consider these projects with far better information on proposals for fish and wildlife conservation (Callison 1958).” This was reiterated in Senate Report No. 85-1981 (1958).

The language of 2(b) states that the FWCA report is to be an “integral part” of the agency project report, which implies something more than simply attaching the FWCA report(s) to the action agency’s report(s). It is not considered sufficient that the planning staff of the action agency knows what the wildlife agencies recommended. Rather, every point in the decision chain, up to Congress and the highest levels of the Administration, where applicable, must have the opportunity to review the recommendations, including those that were not accepted. In the case of permitted actions, the local decision maker (e. g., District Engineer for Corps permits) would also be assured of having access to the recommendations before making decisions.

Subsection 2(f), Estimation of Wildlife Benefits and Losses, further qualifies the reporting requirements for new work projects requiring congressional authorization (see below).

5. “Recommendations of the Secretary of the Interior shall be as specific as practicable with respect to features recommended for wildlife conservation and development, lands to be utilized or acquired for such purposes, the results expected, and shall describe the damage to wildlife attributable to the project and the measures proposed for mitigating or compensating for these damages.”

Reports provided by the resource agencies under the FWCA should contain information addressing fish and wildlife resources present, problems and opportunities, impacts of a project and its alternatives, and means and measures for mitigation, including any needed compensation measures and, if applicable, enhancement opportunities. It is in this subsection that the first reference appears to “land to be utilized or acquired for such purposes.” The authority to acquire lands was a major provision of the 1958 amendments (see below).

Recommendations are to be “as specific as practicable,” which suggests that lack of time or other resources, lack of needed data, or the current state of the art for projecting effects may be such that it is not always possible to predict impacts and prescribe in detail the measures needed

for mitigating or compensating damages attributable to the project. In these cases, the report should describe the situation and recommend what information and analyses are needed to make more precise recommendations. The more completely recommendations are justified based on sound biological data and analyses, and the more they are persuasive based on the effects of the project on fish and wildlife, the greater the chances are that they will be accepted and included in the project plan.

Full Consideration by the Action Agency

6. The reporting officers in project reports of the Federal agencies shall give full consideration to the report and recommendations of the Secretary of the Interior and to any report of the State agency on the wildlife aspects of such projects, and the project plan shall include such justifiable means and measures for wildlife purposes as the reporting agency finds should be adopted to obtain maximum overall project benefits.

The “full consideration” mandate to be given to the FWCA report findings and recommendations was another key provision of the 1958 amendments. Undefined in the FWCA, its application has varied widely over time within and among action agencies. The level of consideration has at times been thought to be so unsatisfactory by some that efforts were made to amend the FWCA and to develop proposed regulations. As noted, “full consideration” is best achieved by “due process” through active participation in project planning. Such participation ensures adequate opportunity to present and defend recommendations, take into account public viewpoints, and provide various guidance for decision making. Once again, this speaks strongly to the need for early involvement in project planning under the FWCA, as discussed earlier.

The permissive nature of the FWCA is based on the “full consideration” provision. Chilson (1958) noted that the FWCA is “permissive legislation for the water development agencies; there is nothing mandatory in the bill requiring the adoption of any fish and wildlife conservation measures nor even a suggestion of a veto power over any projects by the fish and wildlife agencies.” Also, McBroom (1958) noted that “The Act does not give the Fish and Wildlife Service or the State fish and game agencies any automatic veto power, or any semblance of a veto power, over any part of the Federal water-resources program or any projects.”

Thus, the recommendations of the wildlife agencies need not be adopted by the action agency decision maker. However, in the case of many Federal projects, Congress is the ultimate decision maker, and it is important that all fish and wildlife issues and recommendations be brought to its attention. Further, even where decisions are made at levels below Congress, the agency decision makers will have the recommendations of the natural resource agencies to aid them in making decisions on projects.

The critical terms in the last sentence of Subsection 2(b) are “full consideration,” “justifiable means and measures,” and “maximum overall project benefits.” Full consideration has been

discussed at length above. The term “justifiable” traditionally has meant that a project, or feature of a project, must meet a benefit:cost ratio (BCR) test. Economic benefits must exceed costs. This test has been adequate to justify the inclusion of certain enhancement features usually (but not always) related to the provision of recreational opportunities. However, it is inappropriate for judging the merits of mitigation measures (see discussion below under Concepts of Federal Project Plan Formulation).

The legislative history of the FWCA amendments makes it clear that the justification for conservation measures was not to be based on economics. The Department of the Interior (1958) analysis of the FWCA amendments states that

The justification for means and measures to prevent loss of and damage to fish and wildlife resources, however, is not ordinarily to be presented in monetary terms, such as by use of a benefit-cost analysis. The justification for such means and measures normally is to be presented only in nonmonetary terms because of the inherent difficulty in assigning a monetary evaluation to losses to fish and wildlife, whose value is, basically, intangible. Also . . . water projects should provide for all reasonable restitution of project-occasioned losses to fish and wildlife, without dependence on attempted monetary evaluations.

Further support is found in the statement that “Conservation measures . . . would not have to be justified under the usual benefit-cost type of analysis. They would not produce ‘benefits.’ These measures would be for reducing or compensating for losses (Senate Report No. 85-1981 1958).” The costs of means and measures to prevent loss of and damage to wildlife and to provide for the development and improvement of wildlife do not have to be justified by the results expected (Brucker 1958). This position has been re-enforced in legislation passed subsequent to the FWCA amendments of 1958. For example, Section 907 of the Water Resources Development Act of 1986 (33U.S.C. 2284) and applicable to the Corps of Engineers provides that “In the evaluation of the benefits and costs of a water resources project, the benefits attributable to measures included in a project for the purpose of environmental quality, including improvement of the environment, shall be deemed to be at least equal to the costs of such measures (Water Resources Development Act 1986).”

Despite admonitions against the use of BCR analyses to justify mitigation measures, construction agencies have in the past used such analyses to reject many proposals, particularly when land acquisition was involved. The Habitat Evaluation Procedures and other habitat-based evaluation techniques used today provide an improved basis for justifying mitigation measures. It is now general practice that mitigation and enhancement measures are not subject to a BCR analysis in the traditional sense for their justification.

The term “maximum overall project benefits” found at the end of Subsection 2(b) was intended to include not only the dollar measured benefits of projects but also the non-dollar effects. This is apparent from the fact that Senate Report No. 85-1981 (1958) recognized that in some instances, the level of dollar benefits to some purposes might have to be diminished “in some

slight degree” in order to accomplish the wildlife conservation objectives of the Act. Presumably, this would help assure maximum overall project benefits. This view is consistent with the provisions of the Principles and Guidelines that call for selection of the plan with the greatest net economic benefits, consistent with protecting the Nation’s environment. In addition, it seems quite consistent with the reference in Subsection 102(2)(B) of the National Environmental Policy Act to the development of procedures to “insure that presently unquantified environmental amenities and values may be given appropriate consideration in decision making along with economic and technical considerations.”

Some Concepts in Federal Project Plan Formulation

The discussion of the remaining subsections of Section 2 includes the concepts of separable and joint project costs in relation to fish and wildlife conservation under the FWCA (i.e., mitigation and enhancement). A brief description of these terms is provided here. More detailed information is provided in later chapters.

The costs of the various features of Federal water projects are associated with the purposes for which the project is built. The project may have only one purpose (single purpose project) or several purposes (multi-purpose project). The costs associated with the purposes are divided into two categories – “separable costs” and “joint costs” (joint-use costs). The separable cost for a purpose is a measure of how much less the project would cost if that purpose was excluded from the plan. Joint costs are those for features that are essential to or “shared” among all project purposes, such as a dam at a flood damage reduction project that also includes water supply, hydroelectric power generation, and stream flow augmentation. Joint costs are the total financial cost for a plan minus the sum of separable costs for all purposes (Water Resources Council 1983).

Project sponsors of water projects are required to share in the cost (or reimburse part of the cost) of the project according to cost-share percentages. For the Corps of Engineers, these are established in Section 103 of the Water Resources Development Act of 1986. The project sponsor’s share of the project costs will vary depending on the purpose(s) of the project.

As noted earlier, the objective of mitigation is to “prevent loss of and damage to” fish and wildlife values. The basic principle for project costs associated with mitigation is that there is joint responsibility among project purposes for minimizing losses to fish and wildlife resources (i.e., all project purposes that contribute to the need for mitigation measures share in their cost). In other words, the costs of these measures are included in the joint costs of the project because the purposes of the project that are creating project benefits share jointly in the damage, and therefore, in the responsibility for mitigating losses. The installation and operation of fish and wildlife mitigation measures does not create benefits to these resources (see Senate Report No. 85-1981), although they may incidentally create benefits to other purposes (e.g., a wildlife management area for mitigation of losses may create certain flood control storage benefits that

the project can “claim”). Therefore, costs are not allocated to mitigation but, rather, mitigation costs are allocated to the purposes causing the impacts that require mitigation.

On the other hand, fish and wildlife enhancement is recognized as a potential coequal purpose of water resource development, indicated by the fact that costs may be allocated to it, and enhancement measures must be cost-shared by a non-Federal entity (which is seldom the sponsor of the Federal water project). For enhancement features at Federal projects, this may, therefore, also include the allocation of separable costs and joint costs. Fish and wildlife enhancement may be a project purpose considered in conventional water resources development project planning, but is seldom included. However, fish and wildlife conservation, especially in terms of prevention of losses (mitigation), is to be a goal of all Federal water projects and federally permitted or licensed water projects. This is related to the fact that the FWCA in effect conditions or supplements other authorities, adding consideration of fish and wildlife opportunities in connection with such projects, and providing that justifiable means and measures for wildlife purposes shall be included in the in the project plan.

Enhancement and Public Law 89-72, the Federal Water Project Recreation Act

Subsections 2(c), 2(d) and 2(f) of the FWCA contain provisions for cost-sharing enhancement measures included in a project. These provisions on reimbursement costs of enhancement measures are, in effect, interpreted in the provisions of P. L. 89-72, the Federal Water Project Recreation Act of 1965, as amended (see Appendix F; the Act is discussed in detail in Chapter VII). Public Law 89-72 provides that, as a general rule, non-Federal public bodies are responsible for paying 25 percent of the separable costs allocated to fish and wildlife enhancement at Federal projects, and not less than 50 percent of the annual costs of operation and maintenance and replacement of such lands and facilities. The source of repayment funds can be limited to revenues from user fees. The Federal Government would assume all other allocated costs (i.e., 75 percent of separable costs and 100 percent of joint costs allocated to the fish and wildlife purpose).

Under Section 2(d) of the FWCA, enhancement “means and measures” can include only the facilities, land acquisition, and modification of the project or project operations. Annual costs of operation and maintenance of mitigation lands and facilities are prohibited for enhancement measures under 2(d) but are partially covered in the Federal Water Project Recreation Act. Exceptions are made for the types of projects and lands to which the provisions of P.L. 89-72 apply (see Chapter VII).

There are several other elements of P.L. 89-72 that will not be discussed here. The provisions of P.L. 89-72 have been of little practical effect and have seldom been used. The reasons why P.L. 89-72 provisions have not been attractive include the fact that the most likely sources of repayment are State fish and wildlife agencies, which often prefer to spend limited dollars in other ways. Also it is not generally the local interests pressing for the project who would support enhancement measures (although this is changing). As a result, they have frequently

objected to paying for enhancement features, particularly when there are uncompensated losses to fish and wildlife. Further, some agencies question whether enhancement is even possible. In recent times, more emphasis has been placed on mitigation as well as restoration projects where efforts are made to partially or totally replace fish and wildlife values lost over time. In essence, the enhancement issue has been subsumed under the current emphasis on restoration.

P.L. 89-72 does not relate to mitigation measures except indirectly. It repealed the provision in the 1958 amendments to the FWCA that made mitigation costs non-reimbursable for Federal reclamation projects, allowing for normal cost allocation and reimbursement policies. That is, these joint project costs (for mitigation) are allocated among project purposes, some of which are reimbursable (to the Federal Government).

Organization of the Remainder of Section 2

The remainder of Section 2 addresses the development of conservation measures at new and previously authorized projects; modification of projects for fish and wildlife conservation to include acquisition of lands (and waters); definition of previously authorized projects for consideration of fish and wildlife conservation measures; and estimation of wildlife benefits and costs for mitigation and enhancement measures.

Before proceeding to discuss the remaining subsections, the following briefly explains the interrelationship between Subsections 2(c), 2(d), 2(f) and 2(g) in conjunction with Subsections 2(b) and 3(c). These sections can be confusing and have been interpreted in different ways. Subsection 2(b) requires that FWCA reports be made an integral part of project reports for new projects as well as modification or supplementation of existing projects. Recall also that Section 2(b) referenced the use or acquisition of lands for fish and wildlife conservation.

1. Subsection 2(f) contains additional provisions relating to the content of reports to Congress on wildlife at new projects (remembering that “wildlife” includes “fish and wildlife and their vegetative habitats”).
2. Subsection 2(c) authorizes modification of project structures for mitigation and enhancement of fish and wildlife, including land acquisition pursuant to Section 3, at new and previously authorized projects. Subsection 2(g) defines previously authorized projects.
3. Subsection 2(d) addresses cost of planning and construction of mitigation and enhancement measures at both new work projects and previously authorized projects.
4. Additional provisions applicable to land acquisition at previously authorized projects are contained in Subsection 3(c) for mitigation and enhancement.

5. Subsection 2(g) provides that all of Section 2 applies to new work, and to previously authorized projects as long as construction has not been substantially completed.

Subsection 2(f): Estimation of Wildlife Benefits and Losses

Under Subsection 2(b), the FWCA report is to be an integral part of the construction agency's report on projects to be authorized for construction, or on approval of modification or supplementation of an existing project (i.e., previously authorized project). Subsection 2(f) further qualifies the reporting requirements of Subsection 2(b) for reports to Congress on new work (new projects, new divisions of a project, or new supplemental work on an existing project). It addresses benefits and costs of Federal projects and their treatment and reporting by the construction agency. It also provides that reports to Congress must include an estimation of the wildlife benefits or losses, including enhancement benefits. These estimates are not necessarily to be made in monetary terms (Department of the Interior 1958). Also to be included are the cost of providing wildlife development and improvement (e.g., enhancement) benefits, costs of joint-use facilities allocated to wildlife, and portion of costs, if any, to be reimbursed. In essence, it further accords fish and wildlife enhancement the status of a project "purpose" – requiring an estimation of wildlife benefits and losses, including benefits from enhancement, and the cost (dollar) of providing enhancement benefits. Subsection 2(f) provides for an estimation of losses (not in dollars), and the monetary costs of mitigation means and measures. For both mitigation and enhancement, the Subsection calls for the identification of the part of the cost of joint-use facilities allocated to wildlife.

Subsection 2(c): Modification of Projects; Acquisition of Lands

Subsection 2(c) of the FWCA authorizes Federal agencies that construct or operate water projects to modify or add to the structures and operations of projects and to acquire lands for fish and wildlife mitigation and enhancement purposes. This continuing authority provides that:

Federal agencies authorized to construct or operate water-control projects are hereby authorized to modify or add to the structures and operations of such projects, the construction of which has not been substantially completed on the date of enactment of the Fish and Wildlife Coordination Act, and to acquire lands in accordance with Section 3 of this Act, in order to accommodate the means and measures for such conservation of wildlife resources as an integral part of such projects. Provided, That for projects authorized by a specific Act of Congress before the date of enactment of the Fish and Wildlife Coordination Act (1) such modification or land acquisition shall be compatible with the purposes for which the project was authorized; (2) the cost of such modifications or land acquisition, as means and measures to prevent loss of and damage to wildlife resources to the extent justifiable, shall be an integral part of the cost of such projects; and (3) the cost of such modifications or land acquisition for the development or improvement of wildlife resources may be included to the extent justifiable, and an appropriate share of the cost of any project may be allocated for this purpose with a finding as to the part of such allocated cost, if any, to be reimbursed by non-Federal interest.

Subsection 2(c) made several significant revisions. In conjunction with Subsection 2(g), (see below) this subsection made it clear that the FWCA applied to previously authorized projects as long as the modification or land acquisition for fish and wildlife conservation were compatible with the project purposes. The applicability of the 1946 Act to such projects had been questioned, and the significance of this at the time was reflected in the large number of “backlogged” projects that had been authorized but not yet constructed.

Subsection 2(c) also authorizes land acquisition in accordance with the provisions of Section 3 (see below). The specific authorization to construction agencies to acquire land was considered in 1958 to be a major improvement in the powers granted by the 1946 Act. Senate Report No. 85-1981 (1958) states that:

existing law [1946] contains no reference to the authority of the water-project construction agencies to acquire land around water-use projects for fish and wildlife conservation purposes. In very many cases, the availability of lands for these purposes is the key to adequate and satisfactory project measures to compensate for losses and to provide for the enhancement and improvement of fish and wildlife. The conservation agencies are restricted and hampered by this lack of authority, particularly where the land acquisition necessary for flood control and other so-called primary purposes of projects results in little or no land being available for conservation purposes.

As noted earlier, the land acquisition element complemented a recommendation of the House Committee on Government Operations in conjunction with the study of land acquisition policies of Army and Interior, which concluded that enactment of the amendments would assure that the important objective of making conservation and recreation values available to the public would be accomplished. It would authorize the acquisition of necessary lands for fish and wildlife purposes (Poole 1958).

The authority under Subsection 2(c) is confined to Federal agencies constructing and operating water projects. The authority is continuing, applying retroactively to projects not “substantially completed” (as defined in Subsection 2(g)) on August 12, 1958 (date of enactment of the FWCA), and including by inference projects authorized after that date.

Subsection 2(c) is further qualified by the proviso (“provided, that . . .”) for projects specifically authorized by Congress prior to enactment of the FWCA. This proviso includes requirements that modification or land acquisition be compatible with the project purposes, measures for mitigation will be an integral part of the project cost, and enhancement measures may be included and part of the project cost allocated to them, with non-Federal cost share, if deemed appropriate.

Despite the new 1958 authority, relatively little land was initially acquired specifically for fish and wildlife, apart from land that would have been acquired for other “joint” project uses. Some of these project lands were used for fish and wildlife management, either exclusively or on a multi-purpose basis. However, as time progressed, use of project lands and/or acquisition of

separable lands solely for mitigation of unavoidable losses (i.e., compensation) became more common. Today, this is not an uncommon practice (at least for Corps of Engineers projects), assuming that the construction agency agrees that there is an unmet mitigation need and is willing to propose land acquisition to compensate for this loss.

Land acquisition, especially if condemnation is involved, tends to be controversial. In more recent years, land acquisition has been considered on a “willing seller” basis. Certain restrictions on the use of condemnation for Corps of Engineers projects were placed in effect in Section 906 of the Water Resources Development Act of 1986. The key to success lies not only in providing a convincing case, as through the use of Habitat Evaluation Procedures, but also by participating early in the project planning and assuring the acquisition of adequate lands for joint (all) project purposes. The fish and wildlife biologist should review the “Joint Policy of the Departments of the Interior and of the Army Relative to Reservoir Project Lands” dated February 19, 1962, which followed a long study and discussion of Federal land acquisition policies. It has not been abrogated and, despite certain technical shortcomings, is still in effect. This is discussed in more detail in *Section VI, Water Resources Development Planning and FWCA Involvement*.

Subsection 2(g): Applicability to Projects

The language of Subsection 2(g) further defines the application of Section 2 to previously authorized projects, stating that:

The provisions of this section shall be applicable with respect to any project for the control or use of water as prescribed herein, or any unit of such project authorized before or after the date of the enactment of the Fish and Wild Coordination Act for planning or construction, but shall not be applicable to any project or unit thereof authorized before the date of enactment . . . if the construction of the particular project or unit thereof has been substantially completed. A project or unit thereof shall be considered to be substantially completed when sixty percent or more of the estimated construction cost has been obligated for expenditure. [emphasis added.]

Subsection 2(g) has broader application than 2(c) alone, as it applies all subsections of Section 2 to all projects, including those previously authorized projects. This includes the consultation, reporting, full consideration, and installation authorities. The only class of projects exempted from the provisions of Section 2 of the FWCA, then, are those on which project construction was 60 percent or more completed (based on obligation of estimated construction costs) on August 12, 1958. Projects that are later modified or supplemented thus fall under the provisions of Section 2 of the FWCA, even if the original project modified or supplemented was more than 60 percent constructed at the time of enactment of the FWCA.

Subsection 2(d): Project Costs

Subsection 2(d) provides that:

The cost of planning for and the construction or installation and maintenance of such means and measures adopted to carry out the conservation purposes of this section shall constitute an integral part of the cost of such projects, provided that such cost attributable to the development and improvement of wildlife shall not extend beyond that necessary for (1) land acquisition, (2) facilities as specifically recommended in water resource project reports, (3) modification of the project, and (4) modification of project operations, but shall not include the operation of wildlife facilities.

Subsection 2(d) provides that planning, installation, and maintenance costs for “conservation” measures (including mitigation and enhancement features) are to be included in project financial and economic analyses as an integral part of the cost of such projects. The proviso at the end of this Subsection, applicable only to enhancement (development and improvement) measures, limits the kinds of costs that may be included as project costs to land acquisition, facilities recommended in project reports, project modifications, and modification of project operations. Thus it does not include the cost of operation and maintenance of enhancement features. However, P.L. 89-72 requires non-Federal public bodies to pay not less than 50 percent of the costs of operation, maintenance, and replacement. Thus, P.L. 89-72 would allow up to 50 percent of these costs to be integral to the project.

The concluding phrase of 2(d) does not apply to mitigation measures. The operation and maintenance costs of mitigation measures should be considered as integral project costs and funded (budgeted) by the construction agency that had responsibility for constructing the project. The scope of measures is broader in the case of mitigation measures. These could include, among other things, provision by the project or project sponsors of the additional pre- or post-construction studies to determine detrimental impacts which could not be forecast with confidence, and other “means” which might be applicable to the particular project and that are reasonable and capable of justification to the planning, construction, or permitting agency.⁵

Subsection 3(c): Acquisition of Land, Waters and Interests Therein

In cases where doubt remains as to the authority to acquire lands, waters, and rights at Federal projects, Subsection 3(c) is fairly specific (Section 2(c) confers land acquisition authority “in accordance with Section 3 of this Act”). Subsection 3(c) provides that:

When consistent with the purposes of this Act and the reports and findings of the Secretary of the Interior prepared in accordance with Section 2, land, waters, and interests therein may be acquired by Federal construction agencies for the wildlife conservation and development purposes of this Act in connection with a project as reasonably needed

⁵ Mitigation is discussed in Chapter III, Section G. For a more comprehensive discussion of current FWS mitigation policy, see the Fish and Wildlife Service Mitigation Policy (Appendix I to this document.

to preserve and assure for the public benefit the wildlife potentials of the particular area, provided that before properties are acquired for this purpose, the probable extent of such acquisition shall be set forth, along with other data necessary for project authorization, in a report submitted to the Congress, or in the case of a project previously authorized, no such properties shall be acquired unless specifically authorized by Congress, if specific authority for such acquisition is recommended by the construction agency.

This Subsection provides that properties acquired shall be “as reasonably needed to preserve and assure for the public benefit the wildlife potentials of the particular project area.” The language seems clear, though it is sufficiently general to have been subject to considerable interpretation. It is clear that properties to be acquired at projects not yet authorized should be included wherever possible in the project authorizing documentation going to Congress. Where such properties are to be acquired in connection with projects already authorized, the debate has centered on whether or not the proviso in Subsection 3(c) (“Provided . . . in the case of a project previously authorized, no such properties shall be acquired unless specifically authorized by Congress, if specific authority for such acquisition is recommended by the construction agency”) requires the construction agency to go to Congress for specific authorization.

Shortly after the passage of the FWCA amendments in 1958, the Corps of Engineers contended that specific congressional authorization was required, whereas the Department of the Interior Solicitor’s opinion in 1962 concluded that, based on the legislative history of the FWCA amendments of 1958, acquisition of such lands was authorized by the FWCA unless the construction agency recommended congressional authorization (i.e., Federal construction agencies are authorized by Subsection 3(c) to acquire land for fish and wildlife purposes in connection with previously authorized projects without seeking additional, specific legislation).

In practice, more often than not the construction agencies usually seek congressional authorization for the acquisition of significant additions to lands and waters at authorized projects. This preference may originate within the action agency or at the request of the Office of Management and Budget, or the Secretary. In more recent years (since the passage of the 1986 and subsequent Water Resource Development Acts), additional authority has been provided to the Corps of Engineers for the acquisition of lands for environmental purposes. In addition, this issue relating to previously authorized projects becomes all but moot since the number of projects that were authorized prior to the 1958 amendments to the FWCA and that are not “substantially completed” as defined in the FWCA is probably minimal to nonexistent.

Subsection 2(e): Transfer of Funds

Subsection 2(e) authorizes the transfer of funds from Federal water resources development project construction agencies to the FWS from funds appropriated or available for investigations, engineering, or construction. These funds are for conducting all or part of the investigations, including preparation of reports necessary to carry out the purposes of Section 2 of the FWCA. In practice, the major entities from which the FWS receives funding under Subsection 2(e) are the Corps of Engineers and the Bureau of Reclamation (BR). The FWS has national transfer

funding agreements with both agencies. Both of these agreements contain details about the transfer of funds for work under the FWCA, as well as important coordination procedures and requirements regarding FWCA involvement and input.

Other agencies may also provide funding to the FWS as a result of this provision. Funds may be provided under Section 1 of the FWCA, as mentioned earlier. In addition, funds may be provided under the Economy Act of 1932, as amended (31 U.S.C. 1535), in conjunction with the Fish and Wildlife Act of 1956 (16 U.S.C. 742a-742j). Transfer funding is discussed in detail in Chapter III.

Subsection 2(h): Exempt Projects and Activities

Subsection 2(h) provides that the provisions of the Act apply neither to impoundments less than 10 acres, nor to activities for or in conjunction with programs primarily for land management and use by Federal agencies on Federal lands under their jurisdiction. The Department of the Interior (1958) states that the exemption of minor impoundments less than 10 acres constructed by the Federal Government was intended to include the vast majority of Federal ponds and tanks built for stock watering and other purposes within the Federal domain and Indian lands. It states that the second provision makes the FWCA inapplicable to programs primarily for land management conducted by Federal agencies on Federal lands – for example, logging and road building on national forests where control of water, if any, would be incidental.

The above interpretation regarding small impoundments is of considerable interest, as there is no reference to “Federal” in the language relating to small impoundments. The reference to “Federal” in Subsection 2(h) is only contained in the statement pertaining to land management on Federal lands by a Federal agency. Given the time when the FWCA and its predecessor laws were passed, it may be that this provision was intended to apply to small impoundments with a Federal nexus. In reality, should any of these activities require a permit from the Corps of Engineers under Section 10 of the Rivers and Harbors Act or Section 404 of the Clean Water Act, the FWCA nexus would be exerted. Further, for management of Federal lands by Federal agencies, the FWS is often involved because of other legal requirements, including the National Environmental Policy Act and the Endangered Species Act. If the activity goes beyond those “for or in connection with programs primarily for land management,” the FWCA should apply.

Section 3: Impoundment or Diversion of Waters

Section 3 deals with the use of projects and their associated lands for fish and wildlife where possible and not inconsistent with the purposes of the project. As noted above, it also provides specifically for the acquisition of lands and waters and interests therein for fish and wildlife conservation purposes. Project lands and waters that are to be managed for fish and wildlife, including lands acquired for that purpose, are designated as such through documents called General Plans. Such lands and waters may be managed by the FWS or State fish and game agencies.

Subsection 3(a): Conservation, Maintenance, and Management of Wildlife Resources; Development and Improvement

Subsection 3(a) has its antecedents in the 1934 Act and provides that, for Federal projects, adequate provision shall be made “consistent with the primary purposes” of the project for the use of the project along with lands and water acquired or administered by the agency in connection with the project, for fish and wildlife purposes. Procedurally within the FWCA, this represents the completion of the application of the “conservation purpose” element of mitigation and enhancement, which started with consultation, proceeded to reports and recommendations, then installation of means and measures (including land acquisition), and finally to the use of lands and waters for fish and wildlife management. The lands and waters acquired or administered by a Federal agency in conjunction with a Federal project and, according to the wording of Subsection 2(a), the project itself are authorized to be used for fish and wildlife management and enhancement, where not inconsistent with the primary purposes of the project.

Subsection 3(b): Use and Availability of Waters, Lands, and Interests Therein

Subsection 3(b) provides guidance on procedures for designating the use of lands and waters for fish and wildlife conservation purposes. It provides for the use of “General Plans” to govern the use of project lands and waters for fish and wildlife conservation. General Plans are coordination documents that provide an official designation of specific lands and waters to be used for this purpose. They are signed by the head of the primary administering department or agency, the Secretary of the Interior, and the head of the State fish and wildlife agency. Contents of the General Plan are not specified in the statute but they have tended to be general two to three page documents specifying the authority under which lands are made available for fish and wildlife management, what the lands and waters will be managed for, and identifying the area covered.

General Plans have, unfortunately, often been given little emphasis. Yet they are one of the primary vehicles for ensuring that lands managed solely for fish and wildlife conservation continue to be used for this purpose, as called for in Subsection 3(e) of the FWCA. Subsection 3(e) requires that properties acquired for fish and wildlife conservation shall continue to be used for such purposes and shall not become the subject of exchange or other transactions that would defeat the purpose of their original acquisition. General Plans are discussed in more detail in Chapter III, I.

Subsection 3(b) also specifies that the lands and waters under General Plans are to be made available to the Department of the Interior for administration if they have value in carrying out the national migratory bird program, or to the State if the management relates to wildlife other than migratory birds. The legislative history discusses this aspect noting that, before the 1958 amendments, the Department, which has jurisdiction for the migratory bird program, often found that it was in the public interest for the States to take over management of certain lands particularly valuable for migratory birds. The project lands first had to be assigned to the FWS

and then reassigned to the State fish and game departments (Senate Report No. 85-1981 1958). As a result, Section 4 was added by the 1958 amendments to the FWCA which provides that areas made available to the Secretary of the Interior because of their value to migratory birds may either be managed by the Department (through the FWS) or, if determined by the Secretary and the State that it was in the public interest to do so, the lands may be made available to the State for management. In both instances, the vehicle for the transaction is the general plan. In practice, this often occurs when the lands and waters may have value for migratory birds and resident wildlife. This Subsection also provides that management of such lands may be taken over by the Department if the State can no longer manage the lands or gives up this responsibility.

Both Subsection 3(b) and Section 4 (Administration; Rules and Regulations; Availability of Lands to State Agencies) also specify that, when such lands (and waters) are made available to the Secretary or the State, they “shall be made available without cost for administration.” The meaning of the phrase has grown increasingly obscure, particularly in light of subsequent requirements for cost sharing, cost allocation, and the like that are more specific and direct in nature. Over the years, some have contended that this provision means there was to be no cost to the managing entity (FWS or State). Others contend that it means at no cost to the Federal construction agency.

Protection of the Authorities of the Secretary of Agriculture

The prerogatives of the Secretary of Agriculture are particularly noted and preserved at various points in Section 3 as well as elsewhere in the FWCA. During the course of evaluation of the various bills that led to passage of the 1958 amendments to the FWCA, there had been considerable concern expressed about the amendments affecting the authority of the Forest Service with regards to lands and waters under its jurisdiction. Testimony of the American Forestry Association in the hearing on the FWCA states that, with regard to the consultation provision of Subsection 2(a), “This proviso to our minds nullifies the responsibility already assigned the Forest Service for the protection, administration, and multiple use of national forests. Its restrictive implications are of particular concern as they affect the timing, location, and design of access road construction through control of drainage features (Pomeroy 1958).”

Subsection 3(b) provides that nothing in Section 3 affects the authority of the Secretary of Agriculture to cooperate with States and make lands available to them. This “is intended to preclude Subsection 3 from interfering with the existing authority of the Secretary of Agriculture to enter into agreements with State conservation agencies for the management of fish and wildlife resources on national forests or other lands administered by the Secretary, and to make such lands available to the States for such purposes (Department of the Interior 1958).”

In continuation of the national forests theme, Subsection 3(f) provides that lands acquired within the exterior boundaries of a national forest shall be added to and administered as national forest lands unless migratory bird areas are involved. As noted earlier, the exemption of

impoundments less than ten acres in size from the provisions of the Act (Subsection 2(h)) eliminates most livestock and farm ponds on Federal lands and, more specifically, exempts activities related to land management programs of Federal agencies on Federal lands. It therefore appears that the provisions relating to the Department of the Agriculture were added so as not to abrogate its responsibilities with regard to national forests.

Other Aspects of Section 3

Subsection 3(c) has already been discussed above in conjunction with subsections of the FWCA that deal with land acquisition. It provides for the use of project lands and waters for fish and wildlife management under General Plans.

Subsection 3(d) provides for the continued use of fish and wildlife properties acquired under Section 3 for the purposes of this section. This is effectuated through the use of General Plans and realty documents such as a license or a lease.

Subsection 3(e) relates to Sections 3 and 4, providing that lands acquired or withdrawn at a Federal water project and made available (for fish and wildlife management under a General Plan) to a State fish and game agency or the Department of the Interior (FWS) are to be made available under the provisions of the FWCA (Sections 3 and 4), notwithstanding other provisions of law. In other words, such lands and water are to be designated by the use of General Plans, maintained for their fish and wildlife management uses, and used for fish and wildlife management in compliance with the other provisions of the FWCA.

Sections 4 - 9

Section 4 has also previously been discussed. It relates to the management of properties made available to the Secretary of the Interior because of their value to the national migratory bird management program. It provides that State game laws will be adhered to and that the Secretary may make such properties to available to State agencies if they both find it to be in the public interest to do so, but with the option of resuming direct management if he finds that the State has relinquished management and administration for the purpose intended.

Section 5 deals with investigations of the effects of polluting substances on fish and wildlife. Section 5 bears little connection with evaluation of water resource development projects under the FWCA. The Clean Water Act and establishment of the Environmental Protection Agency have subsumed much of what was intended by this section. However, this authority is used within the FWS's Contaminants Program as the basis for some of the activities in which that program is involved.

As noted above, Section 5(a) makes special reference to conservation of fish and wildlife in connection with the activities of the Corps of Engineers in the Upper Mississippi River. It provides that, for a designated portion of the Upper Mississippi, the Corps is directed to give full

consideration and recognition to the needs of fish and other wildlife resources and their habitats. It also addresses maintaining pool levels in relation to navigation. The fish and wildlife aspects of Subsection 5A have essentially been usurped and replaced by the Upper Mississippi Environmental Management Plan enacted in Subsection 601(a) of the Water Resources Development Act of 1986.

Section 6 is an authorization for appropriations and personnel to implement the Act. Actual requests for appropriations of funds are submitted annually to Congress. Some funds are appropriated directly to Federal wildlife agencies, others are appropriated to and transferred from the construction agencies for FWCA studies under Subsection 2(e). Still other funds may be obtained under Section 1. Additional mechanisms exist for the funding of the fish and wildlife related activities, primary among these being the Economy Act of 1932 and the Fish and Wildlife Act of 1956 (as discussed above).

Section 7 provides penalties for persons violating rules and regulations promulgated in accordance with FWCA. The FWS and NOAA-Fisheries jointly proposed regulations for the FWCA in the Federal Register on May 18, 1979 (44 FR 29300) and re-proposed them on December 18, 1990 (45 FR 83412). On July 19, 1982, a joint NFS-FWS notice was published in the Federal Register (47 FR 31299) withdrawing the proposed rule in favor of administrative actions preparing memoranda of agreement and other executive instructions. There are currently no rules or regulations covering the FWCA.

Section 8 defines “wildlife” and “wildlife resources” as discussed earlier, and should be carefully read. It defines the terms “wildlife” and “wildlife resources” to include “birds, fishes, mammals, and all other classes of wild animals and all types of aquatic and land vegetation upon which wildlife is dependent.” As noted earlier, this definition is so encompassing that it covers all fish and wildlife and their habitats and a very wide range of environmental values.

Section 9 exempts the Tennessee Valley Authority from the provisions of the FWCA.

F. Summary

The FWCA is a “living document” which can and does adjust to changing conditions and viewpoints. It is as relevant today as it was when originally enacted, although there have been a number of additional laws passed that supplement and reinforce the provisions of the FWCA (such as the National Environmental Policy Act and provisions of various Water Resources Development Acts, particularly those passed in and subsequent to 1986) or address certain components of the ecological systems that the FWCA covers in totality (such as the Endangered Species Act). One major purpose of the FWCA is to provide procedural opportunities for wildlife agencies to coordinate with action agencies. Through this procedural process involving consultation, investigation, and the reporting and consideration of findings and recommendations, wildlife agencies have an opportunity to offer and argue for means and

measures to benefit fish and wildlife resources, both in terms of mitigation of impacts and enhancement of fish and wildlife. In turn, the FWCA provides action agencies the authority to implement such recommendations as they find acceptable.

Because acceptance of conservation recommendations is not mandatory with decision makers, the FWCA does not guarantee results that will be beneficial to fish and wildlife. Therefore, its effectiveness in assuring the maintenance of environmental quality must depend in part on the skills and dedication of fish and wildlife biologists, and the ability of project officers to give an objective review and consideration of recommended means and measures. More detail on these aspects of project planning are provided in Chapter IV.

CHAPTER II

AGENCY PROGRAMS SUBJECT TO THE FISH AND WILDLIFE COORDINATION ACT

A. Types of Projects Covered by the Fish and Wildlife Coordination Act

As noted in Chapter I, water resource development projects covered by the FWCA include those authorized and constructed by a Federal agency or by a Federal or non-Federal entity under a Federal permit or license. A number of different Federal agency programs fall directly or indirectly under the provisions of the FWCA. The following is a very brief summary of the primary agencies and their programs where there is or may be an FWCA involvement by the Fish and Wildlife Service (FWS). While not all-inclusive, the discussion can lead to the identification of other agencies that may have projects that fall under the FWCA by virtue of circumstances similar to those described below.

B. Construction Agencies

The category of water resources development projects where the FWCA is involved in the greatest detail and to the greatest extent are those constructed by the Federal Government. It is these types of projects that by and large prompted the initial passage of the precursors to the FWCA as we know it today. In general, the four agencies that are predominantly involved in the development and construction of Federal water projects include:

- U.S. Army Corps of Engineers
- Bureau of Reclamation
- Natural Resources Conservation Service
- Tennessee Valley Authority

The discussion that follows will address the first three of these agencies. Tennessee Valley Authority is exempt under Section 9 of the FWCA.

U.S. Army Corps of Engineers

The Corps of Engineers (Corps) has been involved in the construction of water resources development projects since the first Corps navigation project in 1824. Since that time, the number of Corps projects and variety of purposes for which they are developed have continued

to expand. This became particularly true in the period from 1986 to the present when a number of programs relating to ecosystem restoration and other environmentally oriented programs were added to the Corps' authorities.

The missions of the Corps' Civil Works Program include:

- Navigation
- Flood Damage Reduction
- Hurricane and Storm Damage Reduction
- Water Supply
- Hydroelectric Power Generation
- Recreation
- Ecosystem Restoration
- Multiple Purpose Studies

Each of these missions encompasses several types of projects. Currently, the Corps' primary missions are commercial navigation, flood damage reduction, and ecosystem restoration. All Corps projects must have a local sponsor willing to pay a share of the project costs, including 50 percent of the cost of feasibility studies.

The Ecosystem Restoration Policies of the Corps are relatively new and direct restoration to be a major goal in the planning of all projects. The purpose of these activities is to restore significant ecosystem function, structure and dynamic processes that have been degraded. Ecosystem restoration efforts are to involve a comprehensive examination of the problems contributing to system degradation, and the development of alternative means for their solution. The intent of ecosystem restoration is to partially or fully establish the attributes of a natural, functioning, and self-regulating system (Corps of Engineers 1999).

The Corps' Civil Work Program includes major projects that proceed through the Corps' Civil Works Planning process, often culminating in a report to Congress requesting authorization to construct the project. The FWCA involvement in these projects should start early and continue throughout the planning process. The Corps' Civil Works Program also includes 10 types of projects developed under its Continuing Authorities Program. These are smaller projects for which funds are appropriated annually by category (authority). These funds are made available to the Corps' Divisions for the implementation of projects. Continuing Authority projects include:

- Emergency Streambanks Protection
- Shoreline Protection
- Navigation
- Shoreline Mitigation
- Navigation Clearing and Snagging (no projects in a number of years)
- Clearing and Snagging

Flood Control
Beneficial Uses of Dredged Material
Aquatic Restoration
Restoration Associated with Corps Projects

The FWS becomes involved under the FWCA as a planning team member in the formulation of plans and development of projects. Transfer funds are provided by the Corps for FWCA involvement. Planning studies may take upwards to three to five years or more, with FWCA input in the form of planning aid reports and, at the culmination of the planning process, the Section 2(b) Fish and Wildlife Coordination Act report. The FWS will often be involved in recommending and developing mitigation plans for compensation of unavoidable losses. Corps projects, project authorities and the Corps' project planning process is discussed in Chapter IV.

Bureau of Reclamation

Established in 1902, the Bureau of Reclamation (BR) in the Department of the Interior is involved in water resources development projects in the 17 western States (west of the 100th Meridian or, essentially, west of the Mississippi River). BR has constructed over 600 dams and reservoirs, providing water to contract-holders for irrigation of farmland. The agency also produced hydroelectric power at many of its reservoirs. Current BR priorities include operating and maintaining projects in a safe and reliable manner and ensuring the delivery of water and power benefits consistent with environmental and other requirements (Bureau of Reclamation 2004).

Historically, the missions of the BR included water supply, flood control, hydroelectric power generation, and irrigation. BR was responsible for transforming many areas of the arid west into irrigable land, also providing for municipal and industrial water supplies. By and large, almost all BR water projects have been built or are nearing completion. Only one project, the Animas-LaPlata project in New Mexico, is authorized but as yet unbuilt. As with the Corps, BR projects must have a project sponsor.

In recent years, with the completion of most of its projects, BR has changed its emphasis to one of management of existing projects. Among the types of actions and projects it has recently been involved in are water conservation, water contract renewals, transferring the title of some projects and components of projects to the project sponsor, and conducting environmental and stream restoration projects. BR has been delegated limited FWCA authority by the Secretary of the Interior to facilitate some of its stream restoration work. This authority allows BR to provide assistance, through grants and cooperative agreements, to public or private organizations for the improvement of fish and wildlife habitat associated with water systems or waters supplies affected by BR projects.

The FWS is also working closely with BR under specific legislative initiatives. For example, a major restoration effort has been underway for a number of years in California under the

provisions of the Central Valley Project Improvement Act. Under this Act, some 30 provisions provide for environmental restoration measures to restore the fishery resources of the Sacramento - San Joaquin River Basins and the Bay Delta of Central California. Other small restoration projects are also being undertaken.

Natural Resources Conservation Service

The Natural Resource Conservation Service (NRCS, formerly the Soil Conservation Service) implements the Small Watershed Program under the Watershed Protection and Flood Prevention Act (P.L. 83-566; 16 U.S.C. 1001-1008). Prior to fiscal year 1996, watershed planning activities and the cooperative river basin surveys and investigations authorized by Section 6 of the Act were operated as separate programs. The 1996 appropriations act combined the activities into a single program entitled the Watershed Surveys and Planning Program. Activities related to both continue under this authority today.

The purpose of the Watershed Program, including River Basin operations, is to help Federal, State, local agencies, local government sponsors, tribal governments, and program participants protect and restore watersheds from damage caused by erosion, floodwater, and sediment; conserve and develop water and land resources; and solve natural resource and related economic problems on a watershed basis. The program provides technical and financial assistance to local people or project sponsors, builds partnerships, and requires local and State funding contribution.

Resource concerns addressed by the program include watershed protection, flood prevention, erosion and sediment control, water supply, water quality, water conservation, wetland and water storage capacity, agricultural drought problems, rural development, municipal and industrial water needs, upstream flood damages, water needs for fish, wildlife, and forest-based industries, fish and wildlife habitat enhancement, wetland creation and restoration, and public recreation in watersheds of 250,000 or fewer acres. Both technical and financial assistance are available.

Types of surveys and plans include watershed plans, river basin surveys and studies, flood hazard analyses, and flood plain management assistance. The focus of these plans is to identify solutions that use conservation practices and nonstructural measures to solve resource problems. Watershed plans involving contributions in excess of \$5,000,000 for construction, or construction of any single structure having a capacity in excess of 2,500 acre feet, require congressional approval. Other plans are administratively authorized. After approval, technical and financial assistance can be provided for installation of works of improvement specified in the plans. There are presently over 1600 projects in operation (Natural Resources Conservation Service 2003). These projects are cost-shared by the project sponsor.

While these projects are not covered by the consultation provisions of the FWCA per se, consultation is required under Section 12 of P.L. 83-566. Section 12 was added to P.L. 83-566 by the 1958 amendments to the FWCA in recognition of the need for evaluation of fish and wildlife impacts and opportunities similar to that required for other projects under the FWCA.

Section 12 requires consultation in a manner very similar to that of the FWCA, but without the funding provisions applicable to other agencies under the FWCA. The provisions of Section 12 are discussed in Chapter VII.

A major emphasis of the program now is an evaluation of old P.L. 83-566 project dams. Local communities, with NRCS assistance, have constructed over 11,000 dams in 47 States since 1948. Many of these dams are nearing the end of their 50-year design life. Rehabilitation of these dams is needed to address critical public health and safety issues in these communities (see Chapter VII). Evaluation of dams for rehabilitation is conducted under the normal planning procedures for small watershed projects which includes consultation with the FWS.

NRCS also implements the Emergency Watershed Protection Program (EWP) which assists local sponsors in relieving imminent hazards to life and property as a result of floods and natural disasters in watersheds. The program may require rapid response to damages incurred by events such as hurricanes and other flooding events. The NRCS National Watershed Manual provides for coordination with the FWS in implementing the EWP. The most effective process includes advance coordination to identify resources and issues of concern that should be addressed in emergency situations.

Others Agencies

Other agencies may conduct activities that trigger the FWCA. Agencies such as the International Boundary Water Commission and other quasi-governmental entities may conduct actions that require FWCA consultation because of construction and/or Federal permitting actions. In addition, land management agencies may on occasion conduct activities that involve projects that fall under the FWCA consultation provisions.

C. Permitting Agencies

The consultation provisions of the FWCA apply to projects that are permitted by the Federal Government. Several agencies implement major permitting programs under a number of authorities. Primary among these is the Corps of Engineers.

Corps of Engineers

The Corps implements its regulatory program and issues permits under Section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act of 1977, and Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972. Under Section 10, permits are required for activities in navigable waters. Section 404 requires permits for the discharge of dredged or fill material into the waters of the United States. Section 103 involves permits for the discharge of dredged material in ocean waters. The Corps evaluates the public interest in issuing permits under these authorities. The public interest review includes compliance with guidelines

issued by the Environmental Protection Agency under Subsection 404(b)(1) of the Clean Water Act.

These permit actions are subject to the FWCA. Public notices for permit applications, and other permit-related matters (i.e., proposed general permits, best management practices, etc.), are reviewed by the FWS, when then provides comments provided to the Corps in the form of a letter report (Section 2(b) of the FWCA). A memorandum of agreement of 1992 developed pursuant to Subsection 404(q) of the Clean Water Act provides for the resolution of questions related to permit decisions and policy issues. A number of the provisions of Section 404 of the Clean Water Act specifically reference the FWS (see Chapter VII).

Coast Guard

The U.S. Coast Guard issues permits under Section 9 of the Rivers and Harbors Act for the construction of bridges and causeways in the navigable waters. Section 9 permits cover only those elements necessary for the structural crossing of the navigable waters. It does not cover approaches to such structures and other ancillary facilities that may also require Section 10 and/or Section 404 permits. The latter elements are addressed under the Corps' regulatory program. Thus, permits from the Corps may also be required in conjunction with bridges and causeways.

Minerals Management Service

The Outer Continental Shelf Lands Act covers all submerged lands seaward of the 3-mile State limit. Within this area, leases and permits are issued for mineral extraction and the placement of equipment to control wastes and pollution and conserve natural resources. Leases and permits may be cancelled if the activity is likely to cause serious harm to fish and wildlife. Permits and lease sales are reviewed by the FWS under the FWCA and other applicable laws.

Other Agencies

The actions of other agencies that may or may not in and of themselves fall under the FWCA may nonetheless become subject to the Act should permits be required for activities impacting a water body. Thus, consultation under the FWCA may be required for projects of agencies such the Housing and Urban Development.

D. Licensing Agencies

Several Agencies issues licenses for various activities related to water resource development projects. Primary among these is the Federal Energy Regulatory Commission (FERC).

Federal Energy Regulatory Commission

The FERC, headed by five commissioners, was established by the Federal Power Act (FPA) and authorized to issue licenses for the purpose of constructing, operating and maintaining dams, conduits, reservoirs, powerhouses, transmission lines and other project works for the generation of hydroelectric power by non-Federal entities. Licensing applies to such development, even when the hydroelectric facilities are constructed at a Federal dam and reservoir. Under the FPA, the FERC is technically authorized to issue licenses to construct the above facilities to improve navigation and to develop power from any stream or other bodies of water over which it has jurisdiction (16 U.S.C. 797(e); Fish and Wildlife Service 2004). FERC also has other functions related to the sale of natural gas and interstate transmission of oil and natural gas.

In deciding whether or not to issue a license, the FERC is required to give “equal consideration” to energy conservation; protection, mitigation of damage to, and enhancement of, fish and wildlife (including spawning grounds and habitat); protection of recreational opportunities; and preservation of other aspects of environmental quality. The 1986 amendments to the FPA (Electric Consumers Protection Act) mandated several provisions related to fish and wildlife. These are described in Chapter VII of this document. Each license is to include conditions to protect, mitigate, and enhance fish and wildlife affected by the project. These conditions are to be based on recommendations received pursuant to the FWCA from the FWS, NOAA-Fisheries, and State fish and wildlife agencies. Specific requirements apply with regard to notification of the FWS when relicensing of a project is sought by a licensee. The FERC is also required to mandate the construction, maintenance, and operation of fish passage facilities as prescribed by the Secretaries of Commerce and/or Interior (Fish and Wildlife Service 2004).

Additional information on the FWS involvement in hydro power projects can be obtained on the FWS web page at <http://www.fws.gov/r9dhcbfa/> and “The U.S. Fish and Wildlife Service Role in Hydropower Licensing.”

Nuclear Regulatory Commission

The primary mission of the Nuclear Regulatory Commission (NRC) is to protect the public health and safety and the environment from the effects of radiation from nuclear reactors, materials, and waste facilities. NRC also regulates these nuclear materials and facilities to promote national security. In connection with its mission, NRC authorizes an applicant to use or transport nuclear materials or to operate a nuclear facility (includes new licenses, renewals, amendments, and transfers).

NRC licenses the following activities:

1. Construction, operation, and decommissioning of commercial reactors and fuel cycle facilities;

2. Possession, use, processing, exporting, and certain aspects of transporting nuclear materials and waste; and
3. Siting, design, construction, operations, and closure of waste disposal areas.

To be licensed to use nuclear materials or operate a facility that uses nuclear materials, an entity or individual submits an application to the NRC. Staff review this information, using standard review plans, to ensure the applicant's assumptions are technically correct and the environment will not be adversely affected by a nuclear operation or facility (Nuclear Regulatory Commission, 2004).

It is with the licensing aspects of the NRC that the FWS becomes primarily involved under the FWCA. As new nuclear power plants have not been licensed in many years, the application of the FWCA to NRC activities is limited to other aspects requiring NRC licensing.

CHAPTER III

WATER RESOURCES DEVELOPMENT PLANNING AND INVOLVEMENT UNDER THE FISH AND WILDLIFE COORDINATION ACT

A. Introduction

As noted in the preface, this document is based to a large extent on two existing documents from the 1980s. One of these is *Policy and Guidance on Fulfillment of the Fish and Wildlife Coordination Act Responsibilities in the Corps of Engineers Water Resources Development Program* by Charles K. Baxter, Catherine D. Duncan, and David R. Parsons, U.S. Fish and Wildlife Service Southeast Region, Atlanta, Georgia (1986). A major portion of the next four chapters comes from this document, with some expansion and updating to reflect current conditions such as the planning procedures of the Corps of Engineers. The original document, comprised of six chapters, has been reduced to four.

Chapter III: Water Resources Development Planning and Involvement Under the Fish and Wildlife Coordination Act

Chapter IV: Corps of Engineers Project Planning and Implementation

Chapter V: An Evaluation Framework for Federal Projects

Chapter VI: Fish and Wildlife Coordination Act Report Content, Organization, Format and Style

B. How Water Resources Development Projects are Planned and Authorized

Water resource development projects constructed by Federal agencies are planned and implemented in several major steps. While the names may vary somewhat, the purpose of each is basically the same. These basic steps are:

1. Reconnaissance Phase (called Appraisal Phase in BR)
2. Feasibility Phase
3. Preconstruction Engineering and Design

4. Construction
5. Operation and Maintenance

During the reconnaissance phase, a determination will be made as to whether or not there is a Federal interest in proceeding with detailed project planning. If there is, detailed planning and development of project alternatives and selection of a recommended plan will take place in the feasibility phase. The feasibility phase culminates in either authorization of a project or a determination that there is no Federal interest. If authorized, some form of detailed design will take place in the preconstruction engineering and design phase or an equivalent planning effort. Construction will then commence, predicated on a formal agreement with a project sponsor that may be required to share or repay a portion of or all the project cost and be responsible for operation and maintenance of the project once construction is completed. These phases are described in detail for Corps projects in Chapter IV. As discussed later, FWS involvement under the FWCA will predominate in the first two phases, but will often carry on into preconstruction engineering and design and construction, and may also be called for during operation and maintenance activities.

Water resource development projects are authorized by Congress, whether this takes the form of specific authorization for individual projects or authorization of categories of similar types of projects. For example, the Corps can implement a variety of specific projects through its “Continuing Authorities” programs (see Chapter IV). Public works bills may originate in either the House of Representatives or the Senate. Hearings are often held by the respective committees that prepare the language of the bill that will ultimately be reported out of the committee for debate and vote (House Committee on Transportation and Infrastructure and Senate Committee on Environment and Public Works). If the Senate and House pass different versions of the bill, then a conference committee is convened with a number of Senators and Representatives to resolve differences, if possible. When the compromise bill is passed by both the Senate and House, it is sent to the President for signature, which chooses whether to sign the bill into law.

Corps projects are authorized in omnibus legislation called Water Resources Development Acts (formerly called Flood Control Acts and Rivers and Harbors Acts). Other agency projects are authorized individually. These statutes authorize specific water resources development projects for study, construction, or modification. This authorizing legislation does not appropriate funds for the projects, and authorized projects may in some instances remain unfunded for years, or may never be funded at all.

Projects are authorized to move to the construction phase after the action agency has studied a particular problem or issue and submitted a report to Congress. The planning process that culminates in the completion of a project report to Congress includes the involvement of resource agencies pursuant to the FWCA (and other applicable laws). The agency report to Congress must include the FWS FWCA report and recommendations (see Chapter I). It is this involvement in the planning of projects that affords the FWS the opportunity to ensure that, to

the maximum extent possible, fish and wildlife conservation receives equal consideration with other project features. The FWS may provide comments to the appropriate committee(s) in Congress on the various projects proposed, if requested to do so. These comments are usually provided when proposed legislation is reviewed.

It is important to understand the legislative distinction between “authorization” and “appropriation.” Federal water projects are authorized by the Congress for study, construction, or modification based on the recommendation of legislative committees. The action of authorizing a project in and of itself does not provide funds, although it generally authorizes the expenditure of funds (usually a set amount). An independent action, involving the appropriations committees of both houses of Congress, the full Congress, and the President, may annually provide the funds to implement the project or program. Appropriations acts generally do not change authority provided by other law, but they may limit the ability to plan for, monitor, or install mitigation measures, and they may forbid the use of appropriated funds in carrying out a disputed authority. Further, appropriations acts may be used to add projects that were not in other basic authorizing legislation.

C. Objective of FWS Involvement under the FWCA

The FWCA provides clear authority and a mandate for the conservation of fish and wildlife resources associated with Federal water resource development projects. The FWS's primary objective under the FWCA is to ensure that approved project plans include necessary means and measures to guarantee the conservation of fish and wildlife resources. Full participation in the process – the collective procedures mandated by the FWCA – is essential to the accomplishment of FWS and FWCA objectives. This process includes consultation, which involves informal and formal participation in all phases of project planning, construction, operation, and maintenance; reporting of findings and recommendations, which is the formal culmination of mandated surveys and investigations; and consideration and implementation, which, technically, are action agency activities but that may be significantly influenced by FWS actions and continued participation in the planning and decision making process. To meet the FWCA’s objective of ensuring that fish and wildlife receive equal consideration with other project features, the FWS biologist needs to recognize the validity of this process and fully understand it, be proficient at interacting within it, and function as a full planning team member to the maximum extent possible.

On occasion there has been a tendency by agencies involved in water resource development to view FWCA input from the FWS and the State as simply technical data from a contractor or biological consultant. As the previous discussion should indicate, the FWCA coordination and reporting process is substantially broader in purpose and context. Based on its legal mandate under the FWCA, the FWS is providing biological information, evaluations, and recommendations in an unbiased manner in fulfillment of its goal to conserve, protect, and enhance fish and wildlife and their habitats and facilitate balanced development of the natural

resources by providing timely and effective fish and wildlife information and recommendations (Fish and Wildlife Service Mitigation Policy FR 46(15):7644-7663; January 23, 1981 (Appendix I)). Full participation is essential to the achievement of the intent of Congress, as stated in House Report No. 2183, that construction agencies “cooperate with [the] Fish and Wildlife Service in planning and constructing, as part of Federal water-development projects,” to protect fish and wildlife values (House of Representatives Report 2183 1958; emphasis added).

D. Interrelationship of the Fish and Wildlife Coordination Act, National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA) in Project Planning

Three basic legal mandates – the FWCA, NEPA, and ESA – are used in conjunction with a variety of other applicable laws, executive orders, treaties, and agreements to guide FWS involvement in water project planning. All three by definition deal with or include fish and wildlife resource issues. While the ESA deals with the issue of threatened and endangered species and their critical habitats, these are also part of the fish and wildlife resource base in general and cannot be separated from the ecosystems in which they exist. In fact, attention to their needs will in many instances also attend to the needs of other fish and wildlife species present but not included under the ESA. NEPA also addresses general environmental concerns including those covered by the FWCA and ESA. In fact, provisions of the NEPA Guidelines (Council on Environmental Quality 1978) require as part of compliance with NEPA that, to the fullest extent possible, agencies shall prepare draft environmental impact statements concurrently with related surveys and studies required by the FWCA and ESA (40 CFR 1502.25). Integrating each of these reviews in a single planning process is a key element of “environmental streamlining,” which helps achieve maximum conservation benefits and advance the project in a timely manner.

The provisions of the FWCA have already been discussed in detail in Chapter I. They include consultation, reporting, inclusion of means and measures for wildlife conservation (mitigation and enhancement), and development of mitigation measures and plans. Consultation is required when a Federal agency constructs, permits or licenses a water resources development project as defined in Subsection 2(a) of the FWCA (16 U.S.C. 662(a)). Project plans are to include such justifiable means and measures for fish and wildlife purposes as the action agency (as defined in Chapter I) finds should be adopted to obtain maximum overall project benefits.

NEPA (Appendix J), passed 11 years after the 1958 amendments to the FWCA (and originally proposed as an amendment to the FWCA (Bean 1983)), established a national policy of protecting the quality of the human environment. That policy calls for the use of “all practicable means and measures . . . to create and maintain conditions under which man and nature can exist in productive harmony” and to “fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.” Thus NEPA's policies ratify, supplement, and

embrace the FWCA policy of equal consideration for the conservation of fish and wildlife resources. Like the FWCA, NEPA and subsequent NEPA regulations promulgated by the Council on Environmental Quality (CEQ) require the Federal action agency to consult with other Federal agencies having recognized special expertise (such as the FWS relative to fish and wildlife matters) prior to the preparation of an environmental impact statement (EIS). The regulations also require the action agency to obtain the comments of those agencies and to disclose those comments by appending them to appropriate documents being circulated for review. Finally, NEPA regulations require the action agency to “include appropriate mitigation measures . . . in the proposed action or alternatives.” NEPA is not a substitute for the FWCA but represents an expansion of the FWCA concept that fish and wildlife values are to be fully and equally considered and appropriately mitigated in water resource development planning. FWS “comments” required by NEPA are submitted separately from the “report and recommendations” required by the FWCA.

The ESA (Appendix K) establishes specific consultation, evaluation, and reporting requirements for both the action agency and the FWS. The ESA requires that each Federal agency shall, in consultation with the Secretary of the Interior, ensure that any action authorized by such agency is not likely to jeopardize the continued existence of listed species or their critical habitats. Subject to such guidelines as the Secretary may establish, Federal agencies are to consult on any prospective agency actions that may affect such species or habitats. Action agencies should determine the listed species that may occur in a project area; whether or not such species are present and, if so, whether or not they are “likely to be affected” by the proposed action; and enter into formal consultation where a “likely to be adversely affected” determination is made.

The FWS biologist responsible for ESA compliance and consultation may or may not be the same person coordinating with the action agency under the FWCA. It is important that treatment of ESA issues pursuant to FWCA responsibilities be fully coordinated with staff responsible for ESA issues where they are different. FWCA reports may discuss species that are threatened or endangered as part of the fish and wildlife resources involved in the analysis of project impacts and should, at a minimum, summarize completed and on-going ESA-related activities. Section 7 consultation and Biological Opinions issued under the ESA are often contained in a separate document. Some field offices combine Section 7 and FWCA information into one piece of correspondence, but they are careful to distinguish the separate legislative requirements through clear formatting. For example, one cover memo may transmit both the Biological Opinion and separate FWCA Section 2(b) report.

While the NEPA and ESA apply to all agency actions, the FWCA applies only to those that in some way affect a body of water. However, all projects subject to the FWCA are also subject to the NEPA and ESA. Consultation provisions of each are made for somewhat differing purposes, yet they overlap and operate within a circle of influence that should involve a concurrent application of their requirements. As stated in NEPA guidelines, “To the fullest extent possible, agencies shall prepare draft environmental impact statements concurrently with and integrated

with environmental impact analyses and related surveys and studies required by the Fish and Wildlife Coordination Act, National Historic Preservation Act and Endangered Species Act.”

E. Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies

To address economic development and environmental protection issues, guidance for planning water resources projects was developed under the aegis of the U.S. Water Resources Council (WRC). The guidance currently in use is the Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies, commonly referred to as Principles and Guidelines or P&G (Appendix S). P&G contain the rules or basic process (without the full force of law) that Federal agencies must use in formulating and evaluating alternative plans for water and related land resources implementation studies.

History

P&G were formulated by the U.S. Water Resources Council in accordance with Section 103 of the Water Resources Planning Act (P.L. 89-80) and Executive Order 11747. This was the culmination of planning guidance that had been developed over the previous three decades. The following summary of the development of P&G and its predecessors is taken from the Corps’ Planning Manual (Corps of Engineers 1996).

In 1952, the Bureau of the Budget issued guidance in the form of Circular A-47 that contained the standards the bureau was going to use to accept or reject evaluations of water resource projects by the Corps of Engineers, Bureau of Reclamation, and Soil Conservation Service (now the Natural Resources Conservation Service). In the same time period, the so called “Green Book” was developed in 1950 and published in 1958 as the “Proposed Practices for Economic Analysis of River Basin Projects.” This document provided guidance on benefit-cost analysis, cost allocation, and the major planning steps of analyzing needs, available resources, and alternatives.

In 1962, President Kennedy approved “Policies, Standards, and Procedures in the Formulation, Evaluation, and Review of Plans for Use and Development of Water and Related Land Resources,” more commonly referred to as Senate Document 97. The document identified development, preservation, and well-being of people as three objectives that were to receive full consideration. This first-time addition of resource preservation was an important consideration that was added as a result of the growing environmental movement at this time. The Water Resources Planning Act of 1965 (P.L. 89-80) resulted in the initiation of review of principles and standards for planning water and related land resources projects in 1968 by the Water Resources Council. Four “accounts” were identified: National Economic Development, Environmental

Quality, Social Well-being and Regional Development. These “Principles” and “Standards” were published as reports which became known collectively as the “Orange Book.”

Not long thereafter, Section 209 of the Flood Control Act of 1970 identified National Economic Development, Regional Economic Development, Environmental Quality, and Social Well-being as four national planning objectives that were to be considered equally. Notwithstanding the Flood Control Act of 1970, the Water Resources Council developed its “Proposed Principles and Standards for Planning Water and Related Land Resources” in 1971, which, after extensive review, were published in the Federal Register on September 10, 1973, as the “Principles and Standards for Planning Water and Related Land Resources (P&S).” P&S contained two planning objectives (enhancement of economic development and enhancement of the quality of the environment) and four accounts (National Economic Development, Environmental Quality, Regional Development, and Social Well-being). It also contained a six-step planning process.

Actions directed in President Carter’s 1978 “Water Policy Initiatives” resulted in the review and revision of P&S in September 1980. These revisions included changes in water policy including development of “Procedures for Evaluation of National Economic Development (NED) Benefits and Costs in Water Resources Planning” and “Proposed Revisions to the Standards for Planning Water and Related Land Resources.” The national objective was stated to be two coequal objectives of protection and enhancement of national economic development (NED) and protection and enhancement of environmental quality (EQ). The six steps to project planning remained the same, but were better described. For the first time, P&S required that alternative plans be developed, taking into consideration completeness, effectiveness, efficiency, and acceptability. Alternative plans were to include both a NED and an EQ plan.

Under the Reagan Administration, P&S were repealed in September 1982 and were replaced in 1983 with the P&G. P&G and the six step planning process are what are used today for water resource development project planning.

Purpose

P&G are intended to ensure proper and consistent planning by Federal agencies in the formulation and evaluation of water and related land resources implementation studies. The “Principles” part of P&G establishes the Federal water resource development objective:

The Federal objective of water and related land resources project planning is to contribute to national economic development consistent with protecting the Nation's environment, pursuant to national environmental statutes, applicable executive orders, and other Federal planning requirements [emphasis added].

P&G has only one mandatory account – the NED account. However, environmental protection requirements are incorporated into the account. The latter have often been omitted or not fully

met in the past, perhaps in part because of the perception that national economic development (NED) benefits cannot be achieved otherwise.

P&G goes a step further toward solidifying the environmental protection aspect of the Federal objective by requiring that “Protection of the Nation's environment . . . is to be provided by mitigation . . . of the adverse effects of each alternative plan.” The FWCA, in turn, requires the action agency to consult with the FWS and the State wildlife agency on the measures for mitigating the adverse effects on fish and wildlife resources. Thus, P&G establishes the rules for planning, which include protecting the environment and mitigating adverse impacts. In turn, the FWCA establishes a procedure for ensuring full participation by the FWS to determine impacts to fish and wildlife resources and appropriate mitigation and enhancement measures. In this manner, a solid linkage is established between the FWCA and P&G, further supported by the overall environmental requirements of NEPA.

Agencies to which Principles and Guidelines Apply

P&G (and their precursors) were developed in order to achieve consistency in the way that various agencies involved in water resources development projects at the Federal level conducted their planning. They apply to the four major agencies involved in water project planning, including the:

- U.S. Army Corps of Engineers (Department of Army);
- Bureau of Reclamation (Department of the Interior);
- Natural Resources Conservation Service (Department of Agriculture); and
- Tennessee Valley Authority.

Six Steps of Planning under Principles and Guidelines

P&G delineate six basic planning steps to be used by agencies in formulating projects. These steps may be applied somewhat differently between agencies and within an agency for different types of projects. The P&G steps are considered an orderly and systematic approach to defining problems and opportunities, identifying potential solutions, and selecting the plan most consistent with the Federal objective. It is important to understand the six steps, because each offers different opportunities for input with regard to fish and wildlife resources under the FWCA. The following discussion of the six steps is general in nature. More detailed information may be found in Section III of P&G and in applicable agency guidance.

It is important to remember that the steps are sequential, and it is procedurally impossible for the planning process to focus full effort on each step simultaneously. Planning is a dynamic process, and the steps will be repeated through successive iterations before an acceptable plan is developed. This iterative process may sharpen the focus of the study or change its emphasis as problems and their potential solutions become clearer.

Step 1. Specification of Problems and Opportunities. This step involves the specification of water and related land resources problems and opportunities (relevant to the planning setting) associated with the Federal objective and specific State and local concerns. Simply, this step is used to define the problems and opportunities upon which the study will focus. More than any other, this step defines the direction and emphasis of the study. Problems and opportunities should be defined as specifically as possible and in a way that encourages a wide range of alternatives and meaningful levels of achievement. Problems and opportunities should be identified for both current and future conditions to facilitate the “future with the project” and “future without the project” comparisons.

Step 2. Inventory, Forecast, and Analyze Water and Related Land Resource Conditions. This step should be applied to resources within the planning area relevant to the identified problems and opportunities. Inventorying is the process of defining and describing the existing or baseline conditions with the emphasis on those conditions that are pertinent to the problems and opportunities previously identified. Forecasting is the projection of future conditions without the project and future conditions with the project.

Step 3. Formulation of Alternative Plans. Alternative plans are to be formulated in a systematic manner that ensures all reasonable solutions are evaluated. Although alternatives may be identified at any time during the planning process, a large number are usually identified early and then screened and refined as planning progresses. Alternatives need not be limited to those the action agency can implement under existing authority, but may include plans that would require changes in statutes, regulations, or law. Nonstructural measures should, and in some circumstances, must be considered. Protection of the Nation's environment is accomplished by mitigating the adverse effects of each alternative plan. Each alternative plan is to include those mitigation measures determined to be appropriate by the action agency in consultation with the FWS and the State fish and wildlife agency as required by the FWCA.

Step 4. Evaluation of the Effects of Alternative Plans. As defined by P&G, the evaluation of alternatives consists of assessment and appraisal. Assessment is the process of measuring or estimating the effects of any given alternative against the without project condition. Appraisal is the process of assigning social values or otherwise making value judgements concerning the effects.

Step 5. Comparison of Alternative Plans. This step is a comparative evaluation of each alternative against the others based on the evaluation of effects made during Step 4. Step 4 may be thought of as determining the impacts (beneficial and adverse) associated with each individual alternative and Step 5 as evaluating the relative merit of the alternatives.

Step 6. Plan Selection. After consideration of the various alternative plans, their effects, and public comments, a plan is usually (although not always) selected. The selected plan is to be the alternative with the greatest net economic benefits consistent with protecting the Nation's environment, unless otherwise approved by the head of the agency involved.

Fish and Wildlife Service Input to the Six Steps of Planning

Step 1. Specification of Problems and Opportunities. As noted above, this step defines the direction and emphasis of the study. Therefore, the first step toward achieving equal consideration for fish and wildlife should be to clearly define fish and wildlife problems and opportunities. It is essential that identified problems and opportunities be relevant to or capable of being addressed by water resource planning. For example, there would be little benefit in focusing on the problem of conversion of upland hardwood forest to pine monoculture in that the solutions to such a problem are generally beyond the purview of Federal water resource planning. For each problem or opportunity identified, a specific and attainable fish and wildlife planning objective should be established.

Step 2. Inventory and Forecast of Water and Related Land Resource Conditions. The major concern in this step is to define the baseline (existing) conditions for fish and wildlife and then to forecast (predict) those conditions expected to exist in the future both with and without the project. Descriptions of base and future conditions should focus on information pertinent to an understanding of the previously defined problems and opportunities and information necessary to the complete identification of impacts.

Step 3. Formulation of Alternative Plans. This step provides the greatest opportunity to prevent or reduce adverse impacts and to make positive contributions to fish and wildlife problems and opportunities. Input should be provided with two basic objectives in mind: 1) to ensure that alternatives addressing previously defined fish and wildlife planning objectives are identified, and 2) to ensure that those alternatives formulated to address other planning objectives contain as many fish- and wildlife-compatible features as possible, including needed mitigation measures, and measures to take advantage of enhancement opportunities. The Corps is required to consider nonstructural plans without bias pursuant to Section 73 of the Water Resource Development Act of 1974 and other legislative and planning mandates and guidance that have gone into effect since that time.

Step 4. Evaluation of the Effects of Alternative Plans. In this step, impacts are identified and described. It is the FWS's responsibility and authority under the FWCA to describe the significant fish and wildlife impacts associated with each alternative. Impacts should be linked as specifically as possible to the project feature or component that is responsible for the impact. Until this cause and effect relationship is clear, the trade-offs between fish and wildlife and other project purposes cannot be fully disclosed and, therefore, cannot be fully considered during plan formulation.

Step 5. Comparison of Alternative Plans. This step should provide the logic for choosing the selected plan. As such, the aim is to evaluate the relative merits of alternative courses of action and ultimately determine their acceptability from the standpoint of the FWS's mission to conserve, protect, and enhance the Nation's fish and wildlife resources. The primary objectives are to ensure that impacts are identified and considered, that fish and wildlife trade-

offs are fully recognized and considered, and that justifiable conservation measures are included in the selected plan.

Step 6. Plan Selection. The selection of the recommended plan is the responsibility of the action agency. As such, the FWS does not designate the actual plan, although input during the process and comments on alternatives may be used by the action agency in making that determination. In addition, the FWS may recommend its own “preferred alternative” from a fish and wildlife standpoint. FWCA responsibilities and authorities require the FWS biologist to formulate the FWS’s recommendations and position on the preferred plan selected by the action agency.

F. Roles and Responsibilities of the Fish and Wildlife Service Biologist

The FWS is authorized and obligated to provide Federal water planning agencies with the best possible advice and recommendations so that sound and reasonable decisions can be made regarding the use of our Nation’s water and fish and wildlife resources. It is the policy of the FWS to fully participate in all aspects of Federal water resource development planning activities. Simply stated, the overall FWS biologist’s role is to influence water resource planning for the benefit of fish and wildlife resources through constructive participation in all phases and steps of the planning process.

This basic role of the FWS biologist involved can be divided into five parts. All FWS biologists involved in project evaluation under the FWCA will find that they must be much more than just a biologist. Their role in project planning requires that they at one time or another be a planner, biological expert, negotiator, coordinator, and conservation advocate.

Planner

The biologist may have no formal training in natural resource development planning and, therefore, may feel uncomfortable in this role. However, it is only through full and active participation in all aspects of the planning process that fish and wildlife conservation can receive “equal consideration” and be “coordinated with” other features of water resource development programs. Indeed, the FWCA requires that this coordination and equal consideration be achieved through “effectual and harmonious planning” (emphasis added). Through detailed involvement in the planning process, FWS biologists can influence the formulation, design, construction, operation, and maintenance of a proposed project while it is still on the drawing board in such a way that potential adverse impacts to fish and wildlife resources can be avoided.

Early and timely involvement is essential to successful involvement in planning. The most meticulous and justifiable plans for wildlife conservation will be of limited value if they are not developed in concert with the established planning process and study schedule. Success will relate largely to the effectiveness of coordination activities during the time that plans are being

formulated. Informal exchanges of ideas at this time with those persons actually formulating and weighing alternatives are a key to achieving desired and justifiable mitigation and enhancement features or, in other words, equal consideration of fish and wildlife. It will be much more difficult to seek mitigation and enhancement once specific project elements designs have been formulated. While the FWCA report serves to formalize and document the coordinated planning and analytical effort accomplished prior to writing the report, the report in and of itself should not be intended or expected to achieve equal consideration and coordinated planning for fish and wildlife resource conservation. The FWS biologist should strive to actively participate in formulation and evaluation of alternative plans and measures as a full project planning team member, persuasively articulating the needs of natural resources. Effective involvement should ideally result in achieving equal consideration of fish and wildlife without the need for compensation for unavoidable losses.

In recent years, ecosystem restoration and other environmental goals and missions have become more prevalent in water resources development planning and implementation. These offer the FWS planner increased opportunities to integrate fish and wildlife conservation with other project purposes. The FWS biologist should take advantage of these opportunities in a proactive manner rather than waiting for the construction agency to make a proposal and then react to it.

The FWS biologist should establish a close, professional working relationship with the project manager. The FWS biologist may work predominantly with the project biologist, but must remember that the project manager makes the decisions that are going to decide the effects on fish and wildlife and may also be the individual with the best information on the status of the project in the planning process. The FWS biologist's ability to work effectively within the established planning process will have a direct effect upon the future quality and quantity of the Nation's fish and wildlife resources.

Biological Expert

While construction agencies do not have to accept recommendations made under the FWCA, the FWS nevertheless has had a tremendous impact on the design and implementation of many water projects. This stems largely from the FWS's biological expertise and the credibility that is derived from that expertise. This credibility is hard-earned and must be maintained by always starting with sound biology. As the construction agencies acquire more biological expertise, the FWS biologist's role sometimes changes from developing technical information to interpretation and application of that biological information. The FWS has a different perspective than the construction agency and a different mission, analyzing information from a conservation perspective. This may mean, for example, asking for more detailed studies or expressing concern about a neglected faunal group, possibly revealing a whole new area of possible impacts that could be avoided by project design modifications.

Effective fish and wildlife conservation planning must be backed by good biology to consistently achieve equal consideration for wildlife conservation. Planning recommendations must be based

on sound biological principles, surveys, investigations, analyses, and predictions. Occasionally, environmental issues are addressed in Federal court, and the FWS biologist may be called upon to serve as a factual or expert witness. Because FWS biologists are required to address wide-ranging ecological ramifications of numerous types of development proposals on various types of terrestrial, wetland, and aquatic environments, maintaining technical proficiency is a critically important part of effective FWCA involvement.

Negotiator

While planning may involve many groups, it is mainly directed at the construction agency. Effective negotiation includes the construction agency but also includes a much broader audience. Construction of a project depends on the recommendations of the construction agency, acceptance of those recommendations by Congress and inclusion in an authorized project and, ultimately, on funding of the project by Congress. This is a public process that includes many stakeholders, from the local sponsor to the general public. Negotiating in this arena is difficult and different in each case. Good faith and sound biology are the bases for successful negotiation of projects that do not damage, and hopefully benefit, fish and wildlife resources.

The FWS biologist must also negotiate scopes-of-work for funding of FWCA involvement with the construction agency. While this is not directly related to conservation per se, the FWS biologist must be involved early in project planning and try to ensure that FWCA funding needs are included in action agency budgets and budget requests to have sufficient funds to support the staff and tools required for participation in the planning process.

Coordinator

The achievement of effective and harmonious planning and equal consideration hinges on the development of working relationships with a wide audience. Communicating and coordinating are critical to success. The FWS biologist may have good ideas, but if these ideas are not accepted by others, they will not be implemented. The biologist may have to initiate coordination rather than always waiting for the action agency to call as a precursor to involvement in project planning.

The FWS biologist may need to coordinate with a wide variety of entities in addition to the action agency including State fish and wildlife agencies, other FWS programs, other State and Federal agencies, Tribes, elected officials, local sponsors, trade groups, and environmental groups. While the State fish and wildlife agencies and the FWS are granted equal authority and responsibility under the FWCA, the FWS has historically taken the lead in fulfilling FWCA requirements. This is largely a function of State funding and personnel constraints and the fact that the FWCA activities of the FWS are traditionally funded by the Federal construction agency, whereas State involvement is not. Therefore, it is incumbent upon the FWS biologist to coordinate closely with the appropriate State biologists, strive to involve them in all steps of the

planning process, seek their advice and technical input, and ensure their concerns and recommendations are accurately reflected in FWS reports and recommendations. Differences in philosophies, policies, and/or legal mandates between the FWS and the State agency may lead to issues that cannot be reconciled. Every effort should be made to present a unified position. However, if the position of the State relative to technical/biological issues should differ from the FWS's, these differences should be clearly defined and the reasons for them should be identified in the 2(b) report.

It is important to coordinate with other involved Federal agencies, and, in particular, with NOAA-Fisheries when appropriate. NOAA-Fisheries' FWCA responsibilities were combined with the FWS at the time of passage of the FWCA. In addition, water development projects frequently affect national wildlife refuges, national fish hatcheries, or anadromous fish. Coordination is especially important if mitigation calls for the purchase of land that will eventually be under FWS management. Tribes may be very involved in water resource issues where Tribal lands and/or Tribal resources are involved. Wherever Tribes are involved, the FWS should keep them informed and be aware of their concerns. It also is important to keep members of Congress, State governors and State congressional members informed about project evaluations and FWS involvement. At the State level, they may be very involved in projects, as they represent the interests of their State. At the national level, they ultimately authorize and fund all Federal projects through the authorization and appropriations processes. If all their information on FWS activities comes from other sources, the FWS's concerns and position may be misunderstood or not clearly explained.

Most Federal water resource development projects have a local sponsor who must cost-share in the study and construction costs of the project. The local sponsor will be consulted at every phase of the project study and construction. Many different entities can be local sponsors – levee boards, drainage districts, flood control districts, navigation districts, soil and water conservation districts, cities, State agencies, and non-governmental organizations. These are influential local citizens with an interest in public service. Communication with the local sponsor is important. If local sponsors know the FWS representatives and understand the fish and wildlife needs in the project area, they are much more likely to be supportive of requests for studies and project modifications. By working with the local sponsor, misconceptions can be dispelled, the FWS can better understand the sponsor's needs, and the sponsor can learn more about fish and wildlife concerns. Local sponsors have a genuine interest in conservation. Trade groups such as cattleman's associations, barge operators, poultry federations, and similar organizations have an interest in many water resource development projects. These groups can and do help shape positive outcomes.

Environmental groups do not always agree with the FWS on Federal water projects, but they can be very influential in water project development issues. They also have the authority to act as sponsors for some types of projects. The FWS can help these groups by clarifying and defining the issues. The FWS biologist will often have more information and a better understanding of that information than the environmental group. Knowledge can be shared, but always being

careful to honor the confidentiality of any advanced documents or information received from the construction agency. For example, preliminary documents provided for FWS review and comment should never be distributed outside of the FWS.

Conservation Advocate

The FWS biologist needs to be a staunch advocate of fish and wildlife resource conservation. The biologist works for an agency whose mission is to provide the Federal leadership in the conservation of the Nation's fish and wildlife resources. Those leadership responsibilities are exercised under the authority of a law that directs that water resource development be responsive to the "vital contribution of our wildlife resources to the Nation." In its strictest sense, the FWCA represents a congressional directive that the Federal and State agencies responsible for fish and wildlife conservation be given an opportunity to advocate the equal consideration of fish and wildlife conservation in the development of the Nation's water resources. The FWS biologist is thus by design at the center of development decisions and is charged with ensuring fish and wildlife receive equal consideration.

FWS biologists should be cognizant of the position in the several institutional systems of which they are a part in carrying out their activities under the FWCA. That system includes (for the FWS and NOAA-Fisheries) a hierarchy of organizational units, each playing a necessary function that may vary with the type of project. The Washington Office has a policy-making function. For a Federal project, the Washington Office may be deeply involved in 1) helping to resolve issues on controversial projects on which the FWS has fish and wildlife-related concerns; 2) the interagency review and negotiating processes relating to the specific plan immediately before it goes to the Congress; (3) the legislative hearing and other contacts with the Congress necessary to securing authorization (or denial of authorization) of the project for construction; and in some cases, (4) the appropriations process needed to obtain funds to install the project.

The Washington Office does not normally become involved in individual Corps of Engineers permit applications unless there are questions about the application of the FWCA or when there are issues that need to be resolved, either through the chain of command or when a case is referred under the Memorandum of Agreement for resolution at the Departmental level.

G. Mitigation and the Fish and Wildlife Service Mitigation Policy

Mitigating the impacts of water projects is one of the primary goals of the FWCA and NEPA. Recommendations of the FWS on mitigation follow the principles of mitigation as defined by the Council on Environmental Quality (CEQ) and as contained in the FWS Mitigation Policy.

The Concept of Mitigation

The term "mitigation" is defined in the dictionary as to make or become less severe, intense or

harsh; to alleviate or soften. The Mitigation Policy uses the component definition of mitigation as contained at 40 CFR 1508.20) of the CEQ's Regulations for Implementing the National Environmental Policy Act (Council on Environmental Quality 1978). The examples provided for each are not part of the CEQ definition.

"Mitigation" includes:

Avoiding the impact altogether by not taking a certain action or parts of an action.

Examples include relocating the action to avoid sensitive resources; use of nonstructural alternative (floodplain zoning or buy-out in lieu of construction of a reservoir or stabilization of streambanks using vegetative techniques rather than hard structures); modifying structural features of the action (such as directional drilling for oil and gas exploration or placement of pipelines under streams, spanning streams, and multiple-level outlets at reservoirs for control of release water temperatures); and use of the "no project" alternative.

Minimizing impacts by limiting the degree or magnitude of the action and its implementation

Examples include reducing the project size; selecting the least environmentally damaging alternative; controlling damaging activities (such as vegetative clearing, livestock use, off-road vehicular use); and limiting the degree or magnitude of the action by decreasing the use or excavation of fill material (such as use of best management practices to minimize erosion, sedimentation, pollutant inflow, and ground disturbance).

Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.

Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

Compensating for the impact by replacing or providing substitute resources or environments

Examples include increasing the habitat value of existing areas, restoring or rehabilitating previously altered habitats, acquiring water rights, securing in-stream flows, and protecting existing habitats from future loss through fee title acquisition or easements.

The FWS considers the 5 components of mitigation to be in priority order as listed above. Thus measures may be developed to compensate for avoidable losses only after all actions have been made to first avoid and then minimize, rectify, and reduce or eliminate over time the impacts of the proposed project.

The FWS Mitigation Policy

Purpose and Goal

The Fish and Wildlife Service's Mitigation Policy (Federal Register 46(15):7644-7663; January 23, 1981; see Appendix I) established policy for FWS recommendations on mitigating the adverse impacts of land and water developments on fish, wildlife, their habitats, and uses thereof. It is the result of a concept that has evolved over the last 40 years, largely through the leadership of the FWS. The policy is intended to help insure consistent and effective recommendations by outlining policy for the levels of mitigation needed and the various methods for accomplishing mitigation. The Mitigation Policy provides a comprehensive blueprint for mitigation planning in that it 1) outlines the FWS's approach to determining what is important in terms of agency concerns, and 2) determines the level of mitigation to be pursued as a matter of agency policy. The Policy allows Federal action agencies and private developers to anticipate FWS recommendations early in the planning process. In this way, it can help reduce conflicts between the FWS and developers that, in turn, can help preserve fish and wildlife resources while preventing project delays.

Applicability to other agencies

The Mitigation Policy is required guidance for use by FWS biologists regarding the development of mitigation recommendations. As such, it does not dictate actions or positions that Federal action agencies or individuals must take any more than recommendations under the FWCA are mandatory. It does provide a common basis for mitigation decision making and facilitates earlier consideration of fish and wildlife values (as is required by the FWCA) in project planning. The policy does not apply to threatened and endangered species matters covered by the Endangered Species Act.

Resource Categories and Mitigation Goals

The Mitigation Policy covers impacts to fish and wildlife populations, their habitat and the human uses thereof. However, the primary focus in terms of specific guidance is on recommendations related to habitat value loss. The Mitigation Policy uses four Resource Categories to ensure that the level of mitigation recommended will be consistent with the fish and wildlife resource values involved. Associated with each are Designation Criteria and a Mitigation Goal upon which mitigation recommendations are based. Narrative guidelines for each Resource Category are contained in the Mitigation Policy.

Resource Category I:

1. Designation Criteria - Habitat to be impacted is of high value for evaluation species and is unique or irreplaceable on a national basis or in the ecoregion section.

2. Mitigation Goal - No loss of existing habitat value.

Resources Category 2:

1. Designation Criteria - Habitat to be impacted is of high value for evaluation species and is relatively scarce or becoming scarce on a national basis or in the ecoregion section.

2. Mitigation Goal - No net loss of In-kind Habitat Value.

Resources Category 3:

1. Designation Criteria - Habitat to be impacted is of high to medium value for evaluation species and is relatively abundant on a national basis.

2. Mitigation Goal - No net loss of Habitat Value while minimizing loss of in-kind habitat value.

Resources Category 4:

1. Designation Criteria - Habitat to be impacted is of medium to low value for evaluation species.

2. Mitigation Goal - Minimizing loss of habitat value.

Evaluation Species

Resource Category determinations include a technical rationale that 1) explains why the evaluation species were selected, 2) discusses the habitat value to the evaluation species, and 3) addresses the relative scarcity of the resources on a national and ecoregion section basis.

Evaluation species include:

1. FWS trust species (except threatened and endangered species) such as migratory birds and anadromous fish;
2. Species with economic or social value, including consumptive and non-consumptive human uses (from hunting to birdwatching);
3. Environmentally sensitive or “indicator” species;
4. Species performing a key ecological role; and
5. Species that represent groups of species that use a common environmental resource (guilds).

Impact Assessment

The net biological impact of a development proposal (or alternatives) is the difference in predicted biological conditions between the future with, and the future without, the action. If the future without the action cannot be reasonably predicted and documented by the project sponsor or the action agency, then the FWS analysis should be based on biological conditions that would be expected to exist over the planning period due to natural species succession or implementation of approved restoration and/or improvement plans, or conditions that currently exist in the planning area. The biologist may have to use best professional judgement in the absence of more concrete data or predictions. FWS review should consider, whenever practicable, the total long-term biological impact of the project including secondary, indirect, and cumulative effects.

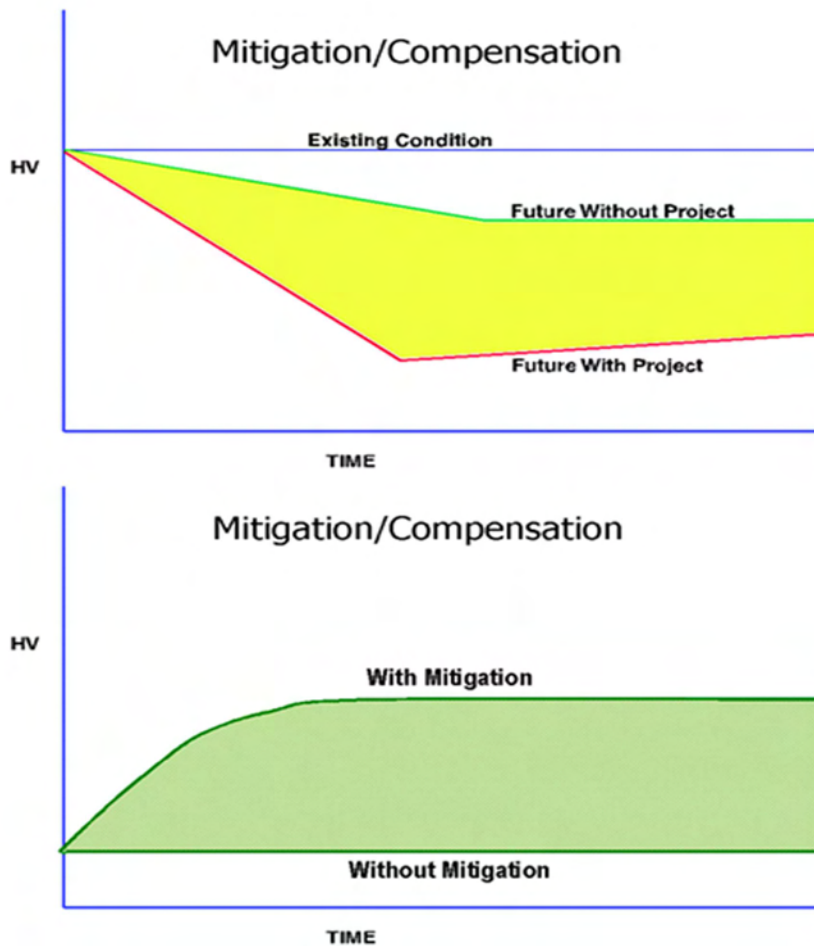
Compensation

Compensation is undertaken to replace lost habitat value remaining after all other forms of mitigation have been applied. Habitat value is defined as the suitability of an area to support a given evaluation species. In the Mitigation Policy, the term “replacement” is used for the mechanism of accomplishing compensation. Replacement refers to the substitution or offsetting of fish and wildlife resource losses with resources considered to be of equivalent biological value. Replacement actions never restore lost fish and wildlife resource – the resources are lost forever.

Compensation may be in two forms. In-kind compensation measures are those that provide substitute resources that are physically and biologically the same as or closely approximate the resources to be impacted or lost. Out-of-kind compensation measures provide substitute resources that are physically and biologically different from the resources lost. Compensation is accomplished through management of habitat where there is the potential for increasing its value or, in some instances, through protection of land where it can be predicted that all or part of its habitat value would be lost over time. In both instances, the “credit” or habitat value used to offset losses from project impacts is only that habitat value increase resulting from management over time or the habitat value “not lost” over time as a result of protection strategies (i.e., “protection credit”). The “base” habitat value of land used for compensatory mitigation is not a credit that can be applied against losses because this base value existed all along. Figure IV-1 below provides a graphic example of the concept of mitigation/compensation credits.

Timing of Mitigation Planning

As with all elements of planning, it is important to become involved in determining project impacts and possible mitigation needs and measures as early as possible. Early involvement can help identify important resources and potential mitigation needs before planning has proceeded to the point where commitments have been made and funds spent toward a particular course of action. In addition, early involvement in planning will facilitate early notification of



mitigation needs which can reduce conflicts as well as help orient planning in less damaging directions.

Figure III-1: Mitigation and Compensation

The yellow area in the upper portion of the figure shows the mitigation need for a hypothetical project based on impacts determined by comparison of the future without the project and the future with the project. After all elements of mitigation have been applied, unavoidable losses should be compensated. The green area shows compensation credits achievable with management at a hypothetical compensation area. The area below the line marked “Without Mitigation” provides no compensation “credit,” as

the habitat value already existed.

HV = Habitat Value

Evaluation Methodologies

In general, evaluation methodologies should be quantitative, scientifically based, and repeatable. Such techniques may be used in conjunction with establishing the project boundary, determining baseline values, establishing the future with and future without the project scenarios, and determining net change between the two.

The Mitigation Policy calls for evaluation using habitat-based evaluation techniques wherever possible. The Habitat Evaluation Procedures (HEP) developed by the FWS are specified for use

as a basic tool for evaluating project impacts and as a basis for formulating subsequent recommendations for mitigation subject to identified exemptions. The HEP is quantitative, but it is also fairly time-consuming. Nevertheless, it or other similar methods can yield data that can be used effectively in comparing alternatives and conditions. Further, the HEP use a team approach with consensus on habitat values selected, thus reducing the possibility of disagreement on the results later on. When the HEP do not apply or cannot be used, other evaluation systems may be used provided they conform to the policies contained in the Mitigation Policy. Other available “standard” techniques that may be applicable include the Habitat Evaluation System (HES) and Wetland Evaluation Technique (WET) developed by the Corps of Engineers, and the Hydromorphologic Methodology (HGM) under development by the Corps of Engineers. Where instream flows are involved, the FWS’s Instream Flow Incremental Methodology (IFIM) may be able to provide information in making mitigation recommendations.

A variety of other techniques, some of which were developed in localized areas, may also be applicable. Wetland assessment tools include the Wetland Value Assessment developed for use in coastal Louisiana, the Charleston Method developed for use in conjunction with Corps permits in South Carolina, Duck-Use-Days used in the Mississippi Alluvial Valley, and the Wetland Rapid Assessment Procedure (WRAP) used in Florida. The Rapid Bioassessment technique was developed by the Environmental Protection Agency to determine stream quality. SALMOD is used in the Pacific Northwest for evaluating salmon streams, and the Richter/TNC (The Nature Conservancy) Technique developed by Brian Richter is used to evaluate instream flow. A number of diversity indices are also available that provide quantitative “index” numbers that can be used to indicate localized conditions, effects of short-term variables, and to detect degraded conditions. Diversity indices using aquatic benthic macroinvertebrates have been around for many decades, are relatively easy to use, and can applied to determine general stream health.

Probably the most used technique is best professional judgement. Best professional judgement is often the fallback “technique” due to time and staff constraints, although for large Federal water projects, methodologies such as those listed above should be used. Best professional judgement may be used in conjunction with literature information, as well as input from local experts. It is mostly based on qualitative observations.

Additional information and literature citations on a number of the techniques listed above can be found in Stream Corridor Restoration - Principles, Processes and Practices (Federal Interagency Stream Restoration Working Group, 1998).

H. Transfer Funding

Subsection 2(e) of the FWCA (16 U.S.C. 662(e)) provides that:

In the case of construction by a Federal agency, that agency is authorized to transfer to the United States Fish and Wildlife Service, out of appropriations or other funds made available for investigations, engineering, or construction, such funds as may be necessary to conduct all or part of the investigations required to carry out the purposes of this section.”

This funding mechanism, commonly referred to as “Transfer Funding,” does not apply to State fish and wildlife agencies, nor does it apply to NOAA-Fisheries (formerly the National Marine Fisheries Service).

The FWS receives a significant portion of transfer funding under Subsection 2(e) from the Bureau of Reclamation (BR) in the Department of the Interior and the Corps of Engineers (Corps) within the Department of the Army. The FWS has long-standing national agreements with these agencies. It is through implementation of these agreements that the planning and reporting requirements of the FWCA are identified and agreed upon, and necessary funds secured. In more recent times, funds have also been received from other agencies such as the Department of Transportation, Federal Highways Administration, for FWS involvement in project planning.

National Transfer Funding Agreements

Between the mid-1960's and 1978, funding transfers were usually accomplished through negotiations at the Washington level. During this period, funds received by FWS Ecological Services Field Offices often did not provide the capability for adequate and timely planning input to the construction agencies. In 1978, both the Corps and BR entered into formal agreements with the FWS that outlined methods for negotiating funds at the field level to fulfill FWCA requirements.

The original agreement with BR signed in September 1977 was replaced by a new Agreement in April 1981 and revised in October 1982. A new set of agreements with the Corps was signed on January 22, 2003, replacing the original agreement developed in September 1977 and revised in April 1980. These agreements with the Corps and BR provide for funds to be transferred to the FWS for investigations of specific studies or projects, and require that the FWS keep records and report on how these transfer funds are expended in fulfillment of FWS responsibilities under the FWCA.

The National Agreements with the Corps and BR are similar, although the new Agreement with the Corps is more detailed. Among their provisions, they provide that the FWS will first be contacted to obtain fish and wildlife information and investigations for FWCA purposes (“right of first refusal”). If the FWS cannot conduct the needed investigations, outside contracts may be used as jointly developed by the FWS and the Corps or BR. Many procedural provisions are contained in the Agreements, including the specification of meetings and coordination throughout the year and the responsibilities of the agencies with regard to FWCA involvement.

Corps of Engineers

Transfer Funding with the Corps is addressed in three agreements (Appendix O):

- Partnership Agreement for Water Resources and Fish and Wildlife
- “Two-way” Memorandum of Agreement Between the U.S. Fish and Wildlife Service and the U.S. Army Corps of Engineers
- Agreement Between the U.S. Fish and Wildlife Service and the U.S. Army Corps of Engineers for Conducting Fish and Wildlife Coordination Act Activities.

The latter of these three documents, which is the agreement that updates and supersedes the previous transfer funding agreement, will be discussed first.

The 2003 revisions to the National Transfer Funding Agreement with the Corps maintain a majority of the provisions of the Agreement developed in 1977 (and amended in 1981) while also strengthening and underscoring key components of effective and efficient agency coordination. In addition to specific guidance on transferring funds to the FWS, the Agreement also contains guidance on the coordination process for FWS involvement in the planning and implementation of Corps water resources development projects under the FWCA. The Agreement renews the existing commitment to involve the FWS in the Corps’ Planning process and to transfer funds so that the FWS can play an active role in shaping projects. It stresses the need to involve the FWS early in the planning process to help streamline projects, avoid delays and maximize benefits to fish and wildlife and other project goals. This includes emphasis on budget coordination to share information so as to help anticipate future workloads and maximize the benefits to fish and wildlife.

The National Agreement affords the FWS the opportunity to be an active planning team member in Corps project development, and invited and funded to participate early in and throughout the planning process to facilitate the “equal consideration of fish and wildlife with other project features” provision of the FWCA. In compliance with Subsections 2(a), (b) and (e) of the FWCA, the Agreement provides guidance and establishes uniform procedures for transfer funding negotiations at the field level for obtaining FWS input.

The Agreement states that the data and analyses from the activities conducted by the FWS will be used by the Corps to consider fish and wildlife resources at each stage of water resources development projects; serve as a basis for FWS assessment and evaluation of proposed alternative measures and plans for fish and wildlife resources; and provide a substantive basis for the recommendations the FWS and Corps may deem appropriate to preserve, mitigate, or restore these resources. Information developed by the FWS may also be used in environmental impact statements under NEPA.

The Agreement provides for transfer funding during planning, construction, coordination on new dredged material placement sites, post-authorization modifications, and post-construction

monitoring. It does not apply to review of NEPA documents, Section 7 consultations under the ESA, operations and maintenance, or general interagency coordination unrelated to the FWCA, emergency actions, Corps regulatory responsibilities, or project operations.¹ Under the Agreement, there is to be close budget coordination between the Corps and the FWS, and the Corps is to include funds for FWCA study and reporting in budget requests and submissions. The Agreement provides for meetings annually to coordinate project planning, including new starts, and develop information on funding needs for inclusion in the Corps' budget process.

The Corps will come to the FWS first for fish and wildlife investigations in compliance with the FWCA ("right of first refusal"), and the FWS has 30 calendar days from notification of the signing of the feasibility cost sharing agreement to notify the Corps that it will conduct the fish and/or wildlife investigations on a particular study. Where the FWS cannot conduct the work needed and notifies the Corps within 30 days, the Corps and FWS will jointly select alternate contract sources for fish and wildlife information. The project management plan that detailed the activities to be conducted during the feasibility phase of study is to include FWCA activities, data exchanges, and time schedules.

Detailed scopes of work will be developed specifying the work to be conducted and milestones for each Corps project. In addition, the Corps will furnish the FWS with copies of final project documents. This new provision provides field offices the information needed to report accomplishments to the Regional and Washington Offices at the end of the fiscal year. Coordination between the two agencies is to take place throughout the year, with information on each study exchanged as needed. Formal study or project-specific coordination meetings are to be scheduled at least twice annually, and more frequently as mutually agreed to by the Corps and FWS. The Agreement contains specific responsibilities of both the Corps and the FWS.

Another of the agreements signed in 2003, the so-called "Two-Way" agreement, provides a framework under which goods and services can be provided between the two agencies outside of the FWCA agreement process. This agreement provides a tool that allows the FWS and Corps to each take advantage of the expertise of the other when advancing projects to benefit the American people. It is broader in scope than the FWCA Transfer Funding Agreement, allowing the FWS and Corps to transfer funds to each other for work above and beyond the mandate of the FWCA. For example, the Corps could use this Agreement and the authorities on which it is based to fund FWS involvement in ongoing project operations, maintenance, and adaptive management in instances where the FWCA is triggered, but funding under the Transfer Funding Agreement is not possible (see footnote 1). In addition, the FWS could use this agreement to

¹ Operations and maintenance is, by and large, not covered under the transfer funding provision of the FWCA because Section 2(e) specifies that such funds are to come from appropriations or other funds made available for investigations, engineering, or construction. However, the Two-Way Agreement allows for funding for FWS involvement in operations and maintenance activities that trigger the FWCA.

fund the Corps, allowing use of its engineering expertise to help the FWS restore habitats.

In the overall Partnership Agreement, the FWS and Corps express the purpose of working together to improve the development of water resources and to conserve, protect, and restore fish and wildlife resources. This is to be accomplished through goals and objectives that express a joint commitment to fish and wildlife conservation and restoration, encourage cooperation and synergy between the two agencies at all levels, ensure the development of a close partnership through joint training and interagency assignments, and commit to amicable resolution of differences in finding solutions benefitting the American people.

Bureau of Reclamation

The original agreement with BR developed in 1977 was replaced by a revised Agreement in 1981 that was later revised in 1982 (Appendix P). This Agreement, also developed in compliance with Sections 2(a), (b), and (e) of the FWCA, provides for the transfer of funds to the FWS to conduct investigations and prepare reports. It specifies that the FWS will participate in the development of BR's budget-year and program-year budgets to determine the level of funding necessary to support FWS planning and study involvement on BR water resources study and development programs. The Agreement calls for close coordination to ensure that data, information and analyses are developed to satisfy FWCA requirements and provide a substantive basis for recommendations the FWS deems appropriate for the preservation, mitigation, compensation, or enhancement of fish and wildlife resources.

The transfer funding process for BR projects involves the development of Regional Agreements for each fiscal year. Memoranda of Agreement are prepared between each BR and FWS Regional Office to cover all studies to be funded in that fiscal year and the level of funding to be provided. Separate enclosures for each study or project set forth the scope of work, milestones for information exchanges, and negotiated level of funding. Coordination meetings are to be held as needed to discuss schedules, progress, and problems associated with ongoing and anticipated studies and projects, including those for the program year (upcoming fiscal year) and budget year.

The Agreement specifies the responsibilities of the FWS and BR, as well as joint responsibilities of the two agencies. The FWS will provide fish and wildlife information and reports for use in BR feasibility reports and data or reports required for appraisal, basin, special studies, advance planning reports, and data for environmental impact statements.² Details of specific project requirements are to be included in the scopes of work for each project. The FWS will provide

² Additional activities of BR outside those described in the Agreement may call for involvement of the FWS under the FWCA. FWS biologists should maintain coordination with their BR counterparts with regard to current BR activities and planning efforts that may be subject to the FWCA.

information on fish and wildlife resources, resources affected by alternative plans, and compensation and enhancement plans. Report preparation by the FWS is specified in the Agreement.

The Agreement provides that BR will initially negotiate with FWS for obtaining fish and wildlife data and input. Provision is made for contracting with outside parties where the FWS determines that it cannot conduct the work, with both BR and the FWS jointly selecting contractors and SOW. BR is to keep the FWS informed of changes during the budget process, any deviations from schedules, and project details and status that may affect FWS responsibilities. The Agreement calls for the FWS to participate jointly with the BR in the planning process to include scoping meetings, public hearings, and multi-objective planning activities. Coordination meetings are to be held as needed to discuss and coordinate schedules, progress and problems associated with ongoing and anticipated studies and projects. Provisions for handling delays in projects and failure to meet obligations are included in the Agreement.

Fish and Wildlife Service Guidance on Transfer Funding

Current guidance on transfer funding is contained in Instructional Memorandum No. 53 (IM-53), revised in January 1985 (Appendix Q). Some of the information contained in this document is dated by the provisions of the 2003 Agreements with the Corps of Engineers and by changes that have occurred since preparation of IM-53. Efforts have been underway in the last few years to more fully standardize and streamline the process for calculating Staff Day Costs. It is important that FWS biologists are aware of the provisions of IM-53 as well as any local or regional policies and procedures related to the Staff Day Cost, its calculation, and procedures for developing transfer funding figures.

Scopes of Work

Work to be conducted by the FWS is specified and detailed in documents called Scopes of Work (SOW). These documents are developed for each project and formally establish time schedules, information transfer requirements, tasks to be accomplished, reporting requirements, and funding amounts that are binding on both agencies under the specific terms of the National Transfer Funding Agreements. The National Transfer Funding Agreements provide a mechanism to ensure that SOWs are developed, reviewed, and revised on a schedule that is consistent with the construction agency's budget cycle and the planning and reporting schedule for the study. At any given time, there should be an agreed-upon SOW for each study. The reporting requirements and schedules in each SOW should be consistent with those for the study phase and key actions agreed to between the construction agency and the FWS. Tasks and activities identified in the SOW should also be consistent with the basic requirements of an FWCA Section 2(b) report (see Chapter VI) and with the Evaluation Framework steps discussed in Chapter V. Careful attention should be given to preparing SOWs and keeping them current. There should be a schedule for reviewing and revising the SOW itself during the budget cycle and as planning proceeds.

The emphasis on transfer funding has historically been on what will be done in any given fiscal year (i.e., activities identified for the current fiscal year, the action fiscal year (current fiscal year + 1), and the budget fiscal year (current fiscal year + 2)). Although it is important that activities be identified by fiscal year, they should be defined by the phase of planning and the type of study, as noted above. By having SOWs specific to study phase and type, annual negotiations will involve only reviewing and revising the SOW (rather than starting from scratch on every study every year), and then making sure that budget submissions and billing mirror the SOW.

SOWs are generally developed on a fiscal year basis. They may be developed on a multi-fiscal year basis, and in such instances, care must be taken to carefully delineate those work items that will be done in each fiscal year. Individual SOWs and agreed-upon levels of funding required for Service participation during the fiscal year will be negotiated by the Field Supervisor or designee and the construction agency representative. In the case of the Corps, the Agreement of 2003 specifies that points of contact shall be established by both agencies for transfer funding coordination. Regional procedures for finalizing and approving SOWs and funding agreements should be followed. Additional coordination meetings and ad hoc coordination are generally required to address new studies or projects that are added, planned studies or projects that are modified or terminated, and for the purpose of participation in the planning of each project.

As indicated earlier, it is important that the development, review, and revision of SOWs be integrated not only with the budget cycle, but also with the planning and reporting schedule for the study itself. In this regard, it is important that a SOW for the feasibility study phase be developed to coincide with any planning aid report submitted for use in the reconnaissance phase of study (appraisal stage with BR). FWS involvement at this time is critical, as the whole course of the feasibility study will be set and the project management plan (PMP) for the feasibility study will developed at this time. As a rule, by this time the construction agency should have already made its initial budget submission for the feasibility phase study and, therefore, a feasibility phase SOW theoretically should already exist. In such cases, it would be reviewed and revised to reflect the results of the reconnaissance study to date.

The SOW for the feasibility study takes on added significance in that 50 percent of the costs for this study are paid by the project sponsor. The PMP should include the FWCA activities and tasks that are to be incorporated into the feasibility study and that the sponsor will have to help fund. SOWs may be required for specific elements of the PMP, and a SOW for FWCA activities should be reflected in the PMP, as it will contribute to the costs reflected in it. While negotiations between the Corps and the project sponsor may affect the SOW, any proposed changes as a result of PMP negotiations should require the concurrence of the FWS, as the SOW is a jointly developed agreement between the FWS and the Corps. If appropriations bills have not been passed at this time, the construction agency may insert wording to the effect that any agreements are subject to the availability of funds.

Scheduling of Transfer Funding Coordination Meetings

IM-53 as well as the Corps and BR National Transfer Funding Agreements provide a means for ensuring that SOW's described above are developed, reviewed, and revised on a schedule that is consistent with the budget cycle. Figure IV-2 below displays three important time periods for coordination with the Corps for the current fiscal year (FY N), action fiscal year (FY N+1), and budget fiscal year (FY N+2). Figure IV-2 is generally applicable to the BR as well as other agencies because all Federal agencies use the same budget process. Critical time periods for coordination are shown in green.

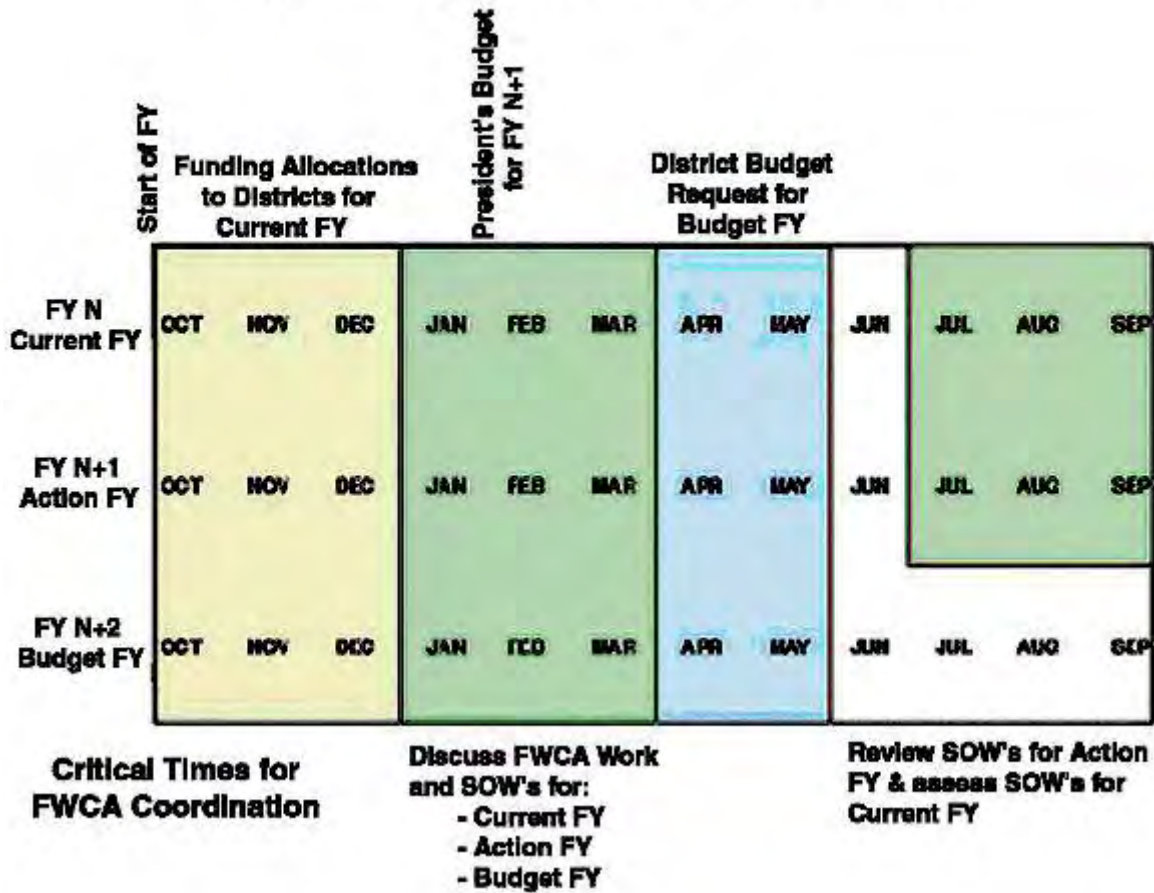
Budget development requires Corps districts to provide information on budget needs for planning studies for the Budget Fiscal Year some 18 months in advance for inclusion in the consolidated budget proposals made by the Administration to Congress. Therefore, it is important that the FWS be involved in coordination for upcoming studies at a time prior to the submission of budget requests by the Corps districts. Coordination in the January to March time frame allows for development of Budget Fiscal Year funding estimates, as well as development or refinement of SOWs on projects immediately upcoming in the Action Fiscal Year and those that are on-going in the Current Fiscal Year.

Items to be discussed include project work schedules and any necessary revisions to cost estimates and overall schedules for the action fiscal year; preliminary estimates of funding levels for the Budget Fiscal Year, and specific discussion of refinements and/or modifications needed for studies in the Current Fiscal Year for which funding has just been or will soon be received. In this time period, an initial SOW should be prepared for each study in which the Corps is making its initial budget submission for funding. Any existing SOWs should be reviewed and revised for consistency with any budget year submission being made for that study. The initial SOW for any given phase will of necessity be general in nature, but through the review and revision process described above, any given SOW can and should increase in detail as planning proceeds.

Coordination in the July to September time frame before the beginning of the new fiscal year can help direct current FWCA investigations as well as modify or refine those for the Action Fiscal Year. At this meeting, final details should be worked out for FWS participation on project planning and construction activities. SOWs, Memoranda of Agreement, and any other locally required coordination documents may be prepared or finalized at this time for projects that do not follow the typical budgetary process for individual projects (i.e., Continuing Authorities projects and projects that are added in appropriation bills by Congress). For major projects that follow the normal budgetary process, there should be no need for the development of new SOWs at this time because initial SOW development should coincide with initial budget submissions.

The National Transfer Funding Agreements with the Corps and BR require that these agencies provide the FWS with lists of projects included in their budget submissions. These lists when

**Figure III-2
Corps Funding Process and FWCA Coordination**



finalized are contained in the President's budget request to Congress and will include projects for which study or construction funds are being sought. The FWS should be involved in the process of developing these list and may be asked to provide information for inclusion in the requests. The FWS should be provided a list of projects for which funding will be requested. This information is to be considered as privileged and not revealed to anyone outside the FWS until the President's Budget Request is submitted to Congress. The FWS should also be provided information on the projects contained in these lists both at the time the President's budget is submitted as well as after the appropriation bills are passed and the agency confirms the projects that are funded and level of funding for each.

Funding Estimates - The Staff Day Cost

IM-53 provides an extensive list of items that should be considered in developing funding

estimates. The level of detail involved in providing fish and wildlife information should be geared to the type of study being conducted, particular stage of planning for any given project, and the scope of the study. For example, the level of detail of the analyses conducted and information provided will increase as project planning proceeds from the reconnaissance or appraisal level to the feasibility study, and as the feasibility study progresses into the description and comparative analysis of various alternatives.

Funding of FWS activities is based on a staff day costs. The amount of funding required for the FWS to conduct its investigations on any water resource development study or project will depend on the number of staff-days required to complete the investigations and prepare FWCA planning aid letters or memoranda and the draft and final FWCA Section 2(b) report. The negotiated funding will include the direct project-related costs plus supervisory, clerical and administrative support costs, fringe benefits (e.g., leave and health insurance), and administrative costs such as utilities for the particular field station on a prorated basis. Expenses and personnel grade structure will vary among field stations and, therefore, the average staff-day cost will also vary. A 38 percent overhead charge is added on top of the field office costs (see below). Procedures for calculating staff-day costs are explained in IM-53. In some cases, this may have supplemented by regional guidance. It is important that the current guidance on calculating staff-day costs be followed to insure consistency in approach so that these costs vary as little as possible and that variations that do exist can be consistently explained.

Charges recorded by FWS Field Office staff are billed to the Corps and BR, respectively, on a monthly basis and processing is handled by the Denver Finance Center. Provisions are made in the National Agreements for the manner in which funding and billing will be conducted, as well as how funds will be handled for projects where planning is discontinued or interrupted, and for carry-over of unexpended funds at the end of a fiscal year. Again, close coordination with the respective agencies is critical, as the provisions of the Agreements do not reach the level of detail that may be required for specific projects, and because there is some variability in how funding is handled among different action agency offices.

As noted above, in addition to the staff-day cost estimates based on field office costs, an overhead surcharge of 38 percent is to be added as provided for in the Agreements with the two construction agencies. This overhead is used to fund support provided by the Denver Finance Center, Contracting and General Services, and the Regional and Washington offices. This flat surcharge of 38 percent should be shown as a separate item in the cost estimates provided to the construction agency. It should not be included as part of the average staff-day costs nor as part of the total field office cost for work under the SOW. Failure to show the overhead as a separate item could add to inconsistencies by making the staff-day cost appear to be higher than it really is. When a study or a portion of a study is subcontracted by the FWS, the overhead rate for such work is 15 percent.

Additional Information

IM-53 lists a number of documents that will be of assistance in planning, budgeting, and negotiating for transfer funds. These include:

1. Construction agency target budget requests submitted to the Office of Management and Budget;
2. President's budget message of public works;
3. Congressional reports (House, Senate, Conference Committees);
4. The Corps' project management plan/reconnaissance report for each project and any other reports that are issued at the end of the various planning stages, including all plans for alternatives;
5. BR Field Engineer's report, Regional Director's feasibility report, Commissioner's report, and any preliminary versions of these reports prepared for review during the BR's planning process;³
6. Annual report of the Chief of Engineers (status of authorized projects);
7. "Names of Bureau Projects and Major Structures" (a computerized list giving a brief account of the status of projects; published annually);
8. Corps reports, "Water Resources Development" published periodically by State and giving the status or current and completed projects in that State;
9. Publications of the Headquarters, United States Army Corps of Engineers (USACE) – this collection of publications is the only repository for all official USACE engineering regulations, circulars, manuals, and other documents

³ Because BR has completed construction on a majority of its projects and few additional projects are likely to be authorized, BR's emphasis is now more on project management. It is making modifications to projects where needed (i.e., environmental features under the Central Valley Project Improvement Act), conducting environmental and stream restoration activities, completing water contract renewals, and transferring title of some projects (usually projects or portions of projects that are relatively innocuous). These activities often do not involve the normal types of planning documents referenced above. Close coordination with the BR should be maintained to keep abreast of its activities and ensure that the FWCA is complied with and that opportunities to provide fish and wildlife resources-related information and evaluations are recognized and seized.

originating from HQUSACE. These publications are provided in portable document format (PDF). <http://www.usace.army.mil/inet/usace-docs>;

10. Planning References of the U.S. Army Corps of Engineers – A CD prepared by the Institute for Water Resources containing all the major planning and environmental references; prepared in January, 2003; contact CEIWR.Publications@wrc01.usace.army.mil

Other Mechanisms for Transferring Funds

Several other mechanisms exist that can be used to provide funds to the FWS for work on fish and wildlife resource issues including those under the FWCA that may not be funded under Subsection 2(e). The “Two-Way” Agreement addresses the Corps directly, and The Economy Act may be the most useful tool for developing other reimbursable agreements above and beyond the scope of the FWCA. Brief discussions of these two tools and others follow.

Section 1 of the Fish and Wildlife Coordination Act (16 U.S.C. 661)

Section 1 of the FWCA contains a potential mechanism for funding the FWS. Section 1 provides, among other things, that the Secretary of the Interior may accept donations of land and contributions of funds in furtherance of the purposes of the FWCA.

The Economy Act, as amended (31 U.S.C. 1535)

This Act, available to all Federal agencies, allows them to order goods and services from the same or another agency when it is in the best interest of the government and where the goods or services cannot be provided by contract as conveniently or cheaply by a commercial enterprise. The Act is subject to the provision that funds obligated under it must be deobligated at the end of their availability to the extent that the agency performing the services or providing the goods has not expended or otherwise incurred valid obligations.

The Fish and Wildlife Act of 1956 (16 U.S.C. 742(a) et seq.)

This Act recognizes the importance of fish, shellfish and wildlife resources to the Nation and, among other things, provides a number of mechanisms aimed at accomplishing the objective of proper resource development. One of the provisions authorizes the Secretary of the Interior to take such steps as may be required for the development, management, advancement, conservation, and protection of wildlife resources through research, acquisition of refuge lands, development of existing facilities, and other means.

The “Two-Way” Memorandum of Agreement between the Fish and Wildlife Service and Corps of Engineers

As mentioned above the recently-signed “Two-Way” Memorandum of Agreement with the Corps of Engineers is a vehicle that can be used to fund FWCA-related activities not covered by the National Transfer Funding Agreement under Section 2(e). Among other things, this agreement covers “goods and services that the FWS may provide such as environmental management, fish and wildlife resource management, training, and such other related goods or services as may be agreed upon in the future. These services may be ordered for both Civil Works projects and military installations for a variety of tasks such as those relating to operations and maintenance.” Funded activities could therefore include participation in various activities initiated during ongoing project operations and maintenance that trigger the FWCA, and involvement in adaptive management. The authorities used for this Agreement are the Economy of Government Act and Fish and Wildlife Act of 1956 referenced above.

The National Environmental Policy Act (42 U.S.C. 4331 et seq.)

NEPA requires all Federal agencies to consult with each other and the public and to employ systematic and interdisciplinary techniques in planning and decision making. When a proposed action is likely to have a significant effect on the human environment, an environmental impact statement (EIS) is required. Other agencies may participate in the development of an EIS as cooperating agencies and funding may be provided by the lead agency for this participation.

Because of the multiple avenues available through the FWCA and other authorities, there need not be insurmountable obstacles to obtaining funding necessary to support FWS involvement in project planning under the FWCA, even in those instances where Section 2(e) of the FWCA may not be applicable. Using the skills discussed above and working closely with the action agency, it is very often possible to find ways to support FWS involvement, particularly where it can be shown that such involvement will make positive contributions to solving the water resource problem confronted while at the same time protecting, mitigating, restoring, and enhancing fish and wildlife resources.

I. General Plans for Management of Fish and Wildlife at Federal Water Resources Development Projects

Purpose of General Plans

General Plans are not a topic that is well known because of the relative infrequency with which they are encountered. Yet they can be very important in assuring the protection and continued use of designated lands and waters for fish and wildlife management purposes. The FWCA provides for the management, maintenance, and management of fish and wildlife resources and habitats related to water projects. Designation of such lands and waters is through documents called

General Plans. The documents provide an official designation of specified lands and waters for fish and wildlife management purposes.

The provision for General Plans was provided by the 1946 amendments to the Coordination Act that subsequently became the FWCA in amendments passed in 1958. Although the legislative history regarding the purpose of General Plans is scanty, General Plans serve as coordination documents to formalize the determination of lands and waters that have value for fish and wildlife management purposes as their sole use, including those specifically acquired for fish and wildlife purposes under the FWCA. Formulation of General Plans also triggers a process for determining if the lands and waters involved have value to the National Migratory Bird Program and, if so, whether or not the FWS will manage them as part of the National Wildlife Refuge System. The existence of a Department level agreement on those lands provides a basis for conservation and protection.

General Plan Provisions in the Fish and Wildlife Coordination Act

Sections 3 and 4 of the FWCA include provisions for the use and management of lands and waters at waters resources development projects for fish and wildlife purposes. Section 3(a) provides that “adequate provision, consistent with the primary purposes of such impoundment, diversion, or other control, shall be made for the use thereof, together with any areas of land, water, or interests therein, for the conservation, maintenance, and management of wildlife resources thereof, and its habitat thereon, including the development and improvement of such wildlife resources pursuant to the provisions of Section 2 of this Act (16 U.S.C. 663(a)).” This means that the projects and any lands and waters within the project should be considered for their potential to be managed for fish and wildlife purposes, to include lands and waters and interests therein acquired for wildlife purposes (16 U.S.C. 663(c)).

The FWCA specifies that the vehicle for the designation of lands and waters to be used and managed for fish and wildlife purposes is the General Plans. Lands and waters designated under General Plans may be managed by the Department of the Interior (through the FWS) for migratory birds, or by the fish and game agency(ies) in the affected State(s) for migratory birds or resident wildlife. Section 3(d) provides that properties acquired for fish and wildlife management are to continue to be used for such purposes and not be subject to exchange or other transactions that would destroy the purpose of their acquisition (16 U.S.C. 663(d)) and are to be made available pursuant to the provisions of the FWCA, notwithstanding other provisions of law (16 U.S.C. 663(e)). Management of lands and waters by the Secretary of the Interior is to be in accordance with General Plans as well as rules and regulations adopted by Interior. Lands and waters that have value for migratory birds may be managed by State fish and game agencies where it is determined to be in the public interest by Interior and the State, provided that management may revert to Interior where a State is not doing such. (16 U.S.C. 664). More detail on Sections 3 and 4 are contained in Chapter I of this document.

Existing Guidance

Subsequent to enactment of the 1946 amendments to the Coordination Act, the FWS and Corps developed a Memorandum of Agreement for promoting sound planning on fish and wildlife matters related to water projects of the Corps with regard to the 1946 Act. This Agreement, signed in 1954, specified among other things that standard procedures for development of General Plans would be developed and made available to the field offices of both agencies. In 1955, both agencies signed *Procedures for Developing General Plans for Fish and Wildlife Management*, which became the guidance on this subject. The most recent guidance on General Plans for the FWS is contained in a memorandum dated November 4, 1986 entitled *General Plans for Fish and Wildlife Management* (Appendix R).

Signatories to General Plans

General Plans are signed by three officials:

- The head of the department/agency administering primary administration of the lands and waters involved (Assistant Secretary of the Army for Civil Works for Corps and Engineers Projects; Assistant Secretary for Water and Science for Bureau of Reclamation Projects)
- The Assistant Secretary of the Interior for Fish and Wildlife and Parks⁴
- Head of the agency in the appropriate State(s) responsible for administering fish and wildlife resources

The high level of designation is evidence of the importance placed in the FWCA on these documents as means of designating fish and wildlife areas and ensuring that they continue to be used for fish and wildlife purposes.

Types of General Plans

General Plans should be developed for any and all Federal lands allocated or designated primarily for fish and wildlife management at water resource projects. In practice, the provisions of Section 3 of the FWCA mainly apply to Corps of Engineers and the Bureau of Reclamation projects, but could be applicable to any lands and waters administered by a Federal agency in conjunction with such a project. Tennessee Valley Authority projects are exempt from the provisions of the FWCA, and Department of Agriculture lands may be exempted from

⁴ Section 3(b) of the FWCA calls for General Plans to be signed by the Secretaries of the appropriate agencies. However, in 1981, signature authority was delegated to the Assistant Secretarial level in an effort to reduce processing time.

General Plan requirements by provisions in Subsection 3(b) of the FWCA.⁵

Four kinds of General Plans are recognized under the procedures of the FWS and Corps for implementing this provision on the FWCA.

Type I – Lands and waters managed by the FWS for migratory birds

Type II – Lands and waters managed by the State for migratory birds

Type III – Lands and waters managed by the State for resident wildlife

Type IV – Lands and waters managed by the Federal construction agency or project sponsor for wildlife purposes.

Type IV General Plans are not specifically referenced in the FWCA. However, there are instances, particularly within the Corps, where the Federal construction agency manages lands for fish and wildlife purposes in lieu of the other two agencies. In correspondence between the Corps and FWS in 1987, the Corps agreed that, for projects where the FWCA is applicable under 16 U.S.C. 662(g), lands and waters managed by the Corps to comply with authorized mitigation requirements will be identified under General Plans. The Corps also stated that preparation of General Plans was not necessary for areas where the lands were multipurpose in nature, including stewardship of fish and wildlife resources, citing the exemption provided in Section 2(h) of the FWCA (16 U.S.C. 662(h)) as the reason. Section 2(h) exempts activities for or in connection with programs primarily for land management and used carried out by Federal lands under its jurisdiction. This position did not address lands and waters that were not acquired for mitigation, but which are being management solely for fish and wildlife. However, the Corps did state that its objective was to develop land use categories that better reflected the multi-purpose land use objectives, and that it might be reclassifying much of the land that was then identified as fish and wildlife to multi-purpose natural resources management, with certain exceptions.

It is also possible that a project sponsor could manage such lands, although no such management has appeared in General Plans to date. It is also conceivable that some other non-Federal entity might manage lands at a project for fish and wildlife purposes. These lands should still be designated under a General Plan.

Development and Content of General Plans

⁵ “Provided, That nothing in this section shall be construed as affecting the authority of the Secretary of Agriculture to cooperate with the States or in making lands available to the States with respect to the management of wildlife and wildlife habitat on lands administered by him.

General Plans are coordination document that designate land. They are not realty documents transferring jurisdiction to the managing entity. General Plans are brief documents that identify the management purpose for the lands and waters involved, the agency that will manage the lands, and the acreage and location of the lands and waters to be managed.

The 1955 Memorandum of Agreement provides that the need for a General Plan should be included in FWCA reports on Corps projects. This should also be the case for BR projects. When project lands and waters are proposed to be used for fish and wildlife, the action agency, FWS, and State fish and wildlife agency should jointly be involved in development of a General Plan. This includes lands and waters acquired for mitigation of fish and wildlife losses (i.e., compensation lands). From the FWS perspective, this should involve the Regional Director level so that the FWS Region is aware of the General Plan development and can consider whether or not the FWS wishes to manage all or part of the areas to be included.

General Plans should include and identify, if possible, any of the following three categories of fish and wildlife lands, as applicable:

- Joint purpose lands acquired in fee title and allocated to fish and wildlife purposes;
- Lands acquired specifically for fish and wildlife purposes; and
- Separable lands acquired specifically for fish and wildlife enhancement under Public Law 89-72 (Federal Water Project Recreation Act).

General Plans normally do not include management plans for the areas, although a management plan should be prepared. This is usually done in conjunction with the actual realty document that will be used to transfer management authority. Where lands will be managed by the FWS, the FWS's Division of Realty will be involved and a determination of refuge suitability will be made.

Once the General Plan has been developed, a draft should be reviewed by the agencies, with the FWS review reaching at least to the Regional level and, more preferably, to the Washington staff level. Coordination of General Plans and General Plan issues take place with the Division of Habitat and Resource Conservation, Branch of Advanced Planning and Habitat Conservation. The latter coordinates with the Division of Realty, particularly where the FWS will manage all or a portion of the areas.

The completed General Plan in triplicate is forwarded to the State for signing, after which the action agency usually forwards it to the Division of Habitat and Resource Conservation in Washington. The General Plans are then transmitted to the Department of the Interior for

signing by the Assistant Secretary for Fish and Wildlife and Parks. It is important that this take place through the Branch of Advanced Planning so that the General Plans can be tracked and the signed General Plans returned.

While a fish and wildlife management plan is not a part of the General Plan, it is important that such a management document be developed prior to development and signing of the General Plan. Only in that way will it be clear what lands and waters are involved, the purpose(s) for which they will be managed, and what management activities will take place. In cases where the FWS, State, (or local sponsor) will manage the area, a realty document (lease, license or cooperative agreement) will be used for the actual transfer of the land for management purposes. In almost all cases, this will be secondary jurisdiction, as the action Federal agency will maintain primary jurisdiction. Under this arrangement, the managing entity will make decisions on how the land is to be managed, but any decisions regarding the land and waters themselves remain with the action agency because it maintains primary jurisdiction. In a few cases where the FWS manages the land and water, primary jurisdiction or “ownership” was transferred to the FWS. In these cases, the became part of the National Wildlife Refuge System. This could conceivably occur with States too, although no transfers have thus far proceeded in that manner.

The references cited above should be consulted for more detailed guidance on procedures for developing and completing General Plans.

Issues with General Plans

At the close of FY 2004, there were approximately 2.2 million acres of lands and waters under General Plan at Corps and BR projects. When completed, the General Plan for the Tennessee-Tombigbee Waterway Project will add another 181,000 acres to this total. Table III-1 at the end of this chapter lists all the General Plans currently on file in the Division of Habitat and Resource Conservation, Branch of Advanced Planning and Habitat Conservation, in Arlington, Virginia. It is likely that there are lands and waters currently managed for fish and wildlife where General Plans have not been developed, but should have been. Where this is the case, General Plans should be developed in compliance with the FWCA to provide a measure of conservation and protection for the fish and wildlife resources and habitats they contain. Where Federal lands managed for fish and wildlife lack such designation and/or approved land use allocation, risks exist that the values of these lands and purposes for which they are managed may not be protected. An example is when surplus lands considerations take place for Federal lands at water resource development projects. Another is from changes in land use that would be incompatible with or compromise that value of lands and waters managed for fish and wildlife.

In identifying the purpose(s) for management of lands for fish and wildlife, it is common today that management will be for purposes in addition to those identified in the FWCA and previous guidance. For example, lands may be acquired for mitigation or protection of wetlands, threatened and endangered species, and other resources. These are not specified under Section 3 and 4 of the FWCA, although they are means and measures for conservation of fish and wildlife

resources. Thus, the General Plans may need to include these purpose either under the term of “resident wildlife” or in conjunction with “migratory birds” and “resident wildlife” in the specifications of the General Plans.

J. Reservoir Land Acquisition Policy

Three mechanisms exist for the acquisition of lands at Federal reservoirs. Lands may be purchased from landowners by the government in fee title which may include, where necessary, condemnation. Several courts have found that condemnation was proper even for lands that would be used for mitigation purposes. Lands may also be withdrawn from the Public Domain. The third approach is the use of flowage easements wherein the landowner retained ownership of the lands, but the government purchases the right to flood these lands when necessary.

From the inception of Federal civil works reservoir construction in the 1930's until 1953, lands for Federal water projects were obtained through withdrawal from the Public Domain or by fee title acquisition. It was during the implementation of this early fee title acquisition “policy” that Congress first authorized the purposes of public recreation and fish and wildlife at Federal water projects. The recognition of those resources was described in the Flood Control Act of 1944. Fee title acquisition often resulted in the acquisition of substantial amounts of land outside what was strictly needed for the project which left substantial amounts of land in some cases available for uses such as fish and wildlife management.

In 1953 both the Corps of Engineers (Corps) and the Bureau of Reclamation (BR) were instructed by the Administration to formulate a new policy to reduce fee title acquisition to the minimum required for operation of projects. Flowage easements were to be acquired between the 5-year flood elevation and the maximum flowage line of the reservoir. Lands for “collateral purposes,” such as public recreation and wildlife conservation, were not to be acquired unless specifically authorized. The stated purposes of the 1953 Joint Policies were to decrease reservoir land costs, increase the amount of land left on the local tax roles, and improve relations with local landowners.

Federal reservoir construction was beginning to accelerate during the 1950's, and the impacts of the 1953 Joint Policies on public use and related fish and wildlife values at water projects quickly became apparent. In 1957 the House Subcommittee of the Committee on Government Operations held hearings on the Army-Interior reservoir real estate practices, which revealed numerous problems with easement acquisition. Problems identified by the subcommittee (House Report No. 85-1185, 1957) included 1) a total lack of the potential for public recreation or wildlife management on flowage easement lands, 2) excessive Federal cost for easement versus the benefits obtained by acquisition of fee title, and 3) hardship for private landowners left with “uneconomic remainders” of severance, such as uplands with low agricultural potential. The House committee concluded that the apparent lower initial cost of flowage easement acquisition (averaging approximately 80 percent of the cost of fee title acquisition) was “no bargain. The

effect of the new policy can be best described as penny wise, pound foolish (House Report No. 85-1185 cited above, page 20).”

The Committee’s recommendations resulted in formulation of a new policy (published in the Federal Register in 1962 and codified in 43 CFR Part 8) that emphasized fee in lieu of easement acquisition. This policy provides that easements will be used in lieu of fee title acquisition only if the lands involved are located above the storage pool, are remote, contain no substantial value for fish and wildlife or recreation, and acquisition by easement is to the financial advantage of the government.

In 1971 the House Committee on Government Operations investigated additional issues relating to the Reservoir Land Acquisition Policy (House Report No. 92-586 1971). This report provided a clear analysis of why the House of Representatives recommended a policy of fee in lieu of easement acquisition at reservoirs and also provided clarification of the 1962 Joint Policies terminology referencing the “maximum flowage line of the reservoir.”

Reservoir construction is less common today and the policy is therefore less frequently implemented than in the past. However, there are instances where lands acquired for reservoir projects and that have value to fish and wildlife resources may be considered for sale as surplus to project needs. If such lands are under General Plans as provided for in the FWCA, they are usually not considered for disposal as surplus. Therefore, it is important to ensure that project lands at reservoir projects that have value to fish and wildlife resources are identified and General Plans developed where applicable and where they do not already exist.

Table III-1: Fish and Wildlife Coordination Act General Plans for Fish and Wildlife Management of Project Lands and Waters

Project Name	State	Acres	Lead Agency	Manager	Date Signed	Date Amended	Refuge Name
Demopolis Lock and Dam	AL	8,586	CE	State	1958		
Jackson Lock and Dam	AL	4,218	CE	FWS	1963		Choctaw
Walter F. George Lock and Dam	GA	11,100	CE	FWS	1964		Eufaula
Arkansas River Multi-Purpose	AR	8,100	CE	FWS	1968		
Beaver Dam and Reservoir	AR	34,000	CE	State	1965		
Dardanelle Dam and Reservoir	AR	44,800	CE	State	1967		
Dierk's Lake	AR	950	CE	State	1980		
Greers Ferry Dam and Reservoir	AR	40,900	CE	State	1967		
Alamo Reservoir	AZ	17,300	CE	State	1908		
Mittry Lake	AZ	3,575	SR	State	1972		
Painted Rock Reservoir	AZ	5,165	CE	State	1902		
San Luis Unit, Central Valley Project	CA	2,325	SR	State	1969	1975	
Warm Springs Dam and Reservoir	CA	3,200	CE	State	1909		
Bonny Reservoir	CO	5,143	OR	State	1951	1966	
Green Mountain Dam and Reservoir	CO	3,563	BR	State	1957		
John Martin Dam and Reservoir	CO	16,002	CE	State	1971		
Pueblo Reservoir	CO	8,312	BR	State	1976		
Willow Creek Dam and Reservoir	CO		OR	State	1954		
Chesapeake and Delaware Canal	DE	6,700	CE	State	1950		
Jim Woodruff Reservoir	FL	5,027	CE	State	1950	1960	
Allatoona Reservoir	GA	3,170	CE	State	1965		
Clark Hill Reservoir	GA	17,003	CE	State	1957		
Richard B. Russell Reservoir	GA	24,238	CE	CE/State	1998		
Jim Woodruff Reservoir	GA	35,965	CE	State	1950		
Coralville Reservoir	IA	3,595	CE	State	1957		
Mississippi River (9-foot Channel)	IA	10,931	CE	State	1959		
Mississippi River (9-foot Channel)	IA	30,315	CE	FWS	1961	1961	
Rathburn Reservoir	IA	14,104	CE	State	1970		
Saylorville Reservoir	IA	472	CE	State	1976		
Red Rock Dam and Lake	IA	11,222	CE	State	1967		
Albeni Falls Dam	ID	6,575	CE	State	1955		
Mindoka Project	ID	760	BR	State	1980		
Lucky Peak Reservoir	ID		CE	State	1956		
Ririe Dam and Reservoir	ID	3,850	CE	State	1973		
Carlyle Dam and Reservoir	IL	15,500	CE	State	1967		
Mississippi River	IL	62,228	CE	State	1961		

Project Name	State	Acres	Lead Agency	Manager	Date Signed	Date Amended	Refuge Name
Rend Lake/Reservoir	IL	16,000	CE	State	1908		
Shelbyville Reservoir	IL	6,300	CE	State	1968		
Upper Mississippi River (9-foot Channel)	IL		CE	State	1953		
Uniontown Lock and Dam	IN	2,304	CE	State	1973		
Cedar Bluff Dam and Reservoir	KS	12,034	SR	State	1955	1962	
Cheney Reservoir	KS	9,230	OR	State	1905		
Clinton Lake	KS	9,200	CE	State	1961		
Copan Lake	KS	2,360	CE	State	1980		
Council Grove Reservoir	KS	2,838	CE	State	1905		
El Dorado Lake	KS	4,377	CE	State	1997		
Elk City Reservoir	KS	11,700	CE	State	1967		
Fall River Reservoir	KS	10,892	CE	State	1961		
Glen Elder Dam and Reservoir	KS	25,100	OR	State	1968		
John Redmond Reservoir	KS	1,900	CE	State	1968		
John Redmond Reservoir	KS	18,546	CE	FWS	1905		Flint Hills
Kanopolis Lake	KS	14,219	CE	State	1968		
Kirwin Dam and Reservoir	KS	10,778	BR	FWS	1954		Kirwin
Lovewell Dam and Reservoir	KS	4,905	OR	State	1959	1962	
Marion Reservoir	KS	4,300	CE	State	1967		
Melvern Reservoir	KS	9,940	CE	State	1976		
Milford Reservoir	KS	11,130	CE	State	1968		
Norton Reservoir	KS	5,767	SR	State	1968		
Perry Lake	KS	10,984	CE	State	1970		
Pomona Reservoir	KS	3,106	CE	State	1954		
Toronto Reservoir	KS	10,092	CE	State	1901		
Tuttle Creek Reservoir	KS	10,300	CE	State	1963		
Webster Reservoir	KS	5,562	BR	State	1962		
Wilson Reservoir	KS	6,130	CE	State	1964		
Woodston Diversion Dam	KS	210	BR	State	1960		
Hillsdale Lake	KS	6,900	CE	State	1992		
Smithland Lock and Dam	KY	1,280	CE	State	1981		
Uniontown Lock and Dam	KY	4,642	CE	State	1975		
Bayou Bodcau Reservoir	LA	32,472	CE	State	1957		
Bonnet Carre Spillway	LA	3,330	CE	State	1957		
Red River Backwater Mitigation	LA	12,800	CE	State	1978		
Barre Falls Dame and Reservoir	MA	555	CE	State	1963		
Hodges Village Reservoir	MA	752	CE	State	1963		
West Hill Reservoir	MA	475	CE	State	1963		
Westville Reservoir	MA	385	CE	State	1963		
Tully Reservoir Area	MA	1,150	CE	State	1955		
Chesapeake and Delaware Canal	MD	2,443	CE	State	1968		
Big Stone Lake	MN	10,100	CE	FWS	1968		Big Stone
Mississippi River	MN	16,463	CE	FWS/State	1961		

Project Name	State	Acres	Lead Agency	Manager	Date Signed	Date Amended	Refuge Name
Orwell Reservoir	MN	1,870	CE	State	1957		
Bull Shoals Reservoir	MO	12,069	CE	State	1959		
Harry S. Truman Reservoir	MO	53,800	CE	State	1982		
Long Branch Lake	MO	2,450	CE	State	1983		
Mississippi River Navigation	MO	13,611	CE	State	1958	1961	
Pomme de Terre Reservoir	MO	6,900	CE	State	1962		
Stockton Lake	MO	15	CE	State	1970		
Table Rock Reservoir	MO	51,300	CE	State	1962		
Arkabutla Reservoir	MS	36,034	CE	State	1968		
Enid Reservoir	MS	43,437	CE	State	1968		
Grenada Reservoir	MS	84,585	CE	State	1960		
Hillside Floodway (Yazoo)	MS	15,600	CE	FWS	1969		Hillside
Okatibbee Reservoir	MS	6,000	CE	State	1969		
Sardis Reservoir	MS	98,155	CE	State	1963		
Canyon Ferry Dam and Reservoir	MT		BR	State	1953		
Clark Canyon Dam and Reservoir	MT	6,861	BR	State	1965		
Fresno Reservoir	MT	2,640	BR	State	1976	1979	
Freezeout Sump (Greenfields Lake)	MT	6,040	BR	State	1965		
Helena Valley Reservoir	MT	968	BR	State	1965		
Pishkun Reservoir (Sun River Project)	MT	1,550	BR	State	1971		
Tiber Dam and Reservoir	MT	31,827	BR	State	1957	1960	
Willow Creek Reservoir	MT	1,574	BR	State	1971		
Fort Peck Dam and Reservoir	MT		CE	FWS	1961		
John H. Kerr Dam and Reservoir	NC	5,741	CE	State	1954		
Bowman-Haley Lake	ND	3,563	CE	State	1981		
Garrison Dam	ND	51,000	CE	State	1983		
Garrison Diversion Unit	ND	2,406	BR	FWS	1986		
Lonetree Reservoir	ND	32,890	BR	State	1993		
Heart Butte Reservoir	ND	9,500	BR	State	1951	1957	
Lake Audubon	ND	11,285	CE	State	1982		
Lake Audubon	ND	14,735	CE	FWS	1982		
Lake Ashtabula – Bladhill Lake	ND	1,140	CE	State	1951		
Oahe Dam	ND	46,534	CE	State	1981		
Enders Reservoir	NE	19,203	BR	State	1960		
Gavins Point Dam	NE	4,583	CE	State	1958	1964	
Harlan County Lake	NE	5,160	CE	State	1965		
Hugh Butler Lake	NE	4,387	BR	State	1962	1963	
Merritt Dam and Reservoir	NE	8,774	BR	State	1964	1967	
Milburn Diversion Dam and Reservoir	NE	672	BR	State	1967		
Salt Creek and Tributaries	NE	3,943	CE	State	1965		
Sherman Dam/Arcadia Rivers	NE	3,957	BR	State	1964		
Blackwater Reservoir	NH	3,535	CE	State	1955		
Vermejo Project	NM	439	BR	FWS	1969		Maxwel 1

Project Name	State	Acres	Lead Agency	Manager	Date Signed	Date Amended	Refuge Name
Vermejo Project	NM	2,621	BR	State	1962		
Navajo Reservoir	NM	26,875	BR	State	1963		
Humbolt Project	NV		BR	State	1956		
Whitney Point Reservoir	NY	4,428	CE	State	1962		
Berlin Project	OH	8,070	CE	State	1959		
Dillon Reservoir	OH	4,400	CE	State	1962		
Arbuckle Reservoir	OK	1,165	CE	State	1967		
Broken Bow Reservoir	OK	5,420	CE	State	1969		
Copan Lake	OK	7,532	CE	State	1980		
Denison Dam (Lake Texoma)	OK	30,000	CE	State	1958		
Denison Dam (Lake Texoma)	OK	3,170	CE	State	1956		
Eufaula Lake	OK	35,000	CE	State	1972		
Fort Cobb Dam and Reservoir	OK	3,570	BR	State	1960		
Heyburn Lake	OK	4,400	CE	State	1972		
Hugo Lake	OK	18,196	CE	State	1976		
Hulah Reservoir	OK	13,935	CE	State	1969		
Kaw Lake	OK	16,254	CE	State	1976		
Keystone Lake	OK	16,000	CE	State	1973		
McGee Creek	OK	10,000	BR	State	1984		
Mountain Park Reservoir	OK	5,000	BR	State	1976		
Norman (Little River) Reservoir)	OK	3,605	BR	State	1965		
Oologah Reservoir	OK	33,000	CE	State	1976		
Optima Lake	OK	3,355	CE	State	1976		
Optima Lake	OK	4,333	CE	FWS	1971		Optima Lake
Pine Creek Reservoir	OK	10,525	CE	State	1968		
Robert S. Kerr Lock and Dam	OK	22,000	CE	FWS	1968		Sequoia
Robert S. Kerr Lock and Dam	OK	2,000	CE	State	1973		
Lock and Dam 17, Verdigris River	OK	1,960	CE	State	1971		
Altus Dam and Reservoir (W.C. Austin Project)	OK	3,530	BR	State	1964		
Foss Dam and Reservoir	OK	8,200	BR	FWS	1961		Washita
Waurika Lake	OK	10,400	CE	State	1977		
Webbers Falls Lock and Dam	OK	3,961	CE	State	1971		
McNary Lock and Dam	OR	2,933	CE	FWS	1953		McNary
McNary Lock and Dam	OR	113	CE	State	1953		
John Day Lock and Dam	OR	8,531	CE	FWS	1968		Umatilla
John Day Lock and Dam	OR		CE	State	1968		
Beltzville Reservoir	PA	300	CE	State	1970		
Conemaugh River Reservoir	PA	7,130	CE	State	1954		
Curwensville River Reservoir	PA	385	CE	State	1968		
Foster Joseph Sayers Reservoir	PA	1,030	CE	State	1971		
Indian Rock Reservoir	PA	1,539	CE	State	1957		
Raystown Lake	PA	3,019	CE	State	1978		
Clark Hill Reservoir	SC		CE	State	1955		

Project Name	State	Acres	Lead Agency	Manager	Date Signed	Date Amended	Refuge Name
Richard B. Russell Dam and Reservoir	SC	25,018	CE	CE/State	1996		
Angostura Dam and Reservoir	SD	7,560	BR	State	1955		
Fort Randall Dam and Reservoir	SD	6,978	CE	FWS/State	1955		
Gavins Point Dam	SD	4,850	CE	State	1958		
James Diversion Dam and Reservoir	SD	81	BR	State	1965		
Oahe Reservoir	SD	2,465	CE	FWS	1963		Pocasse
Shadehill Reservoir	SD		BR	State	1953		
Cheatham Lock and Dam	TN	1,600	CE	State	1959		
Old Hickory Reservoir	TN	3,567	CE	State	1955		
Aquilla Lake	TX	9,700	CE	State	1993		
Aquilla Lake	TX	9,700	CE	State	1993		
Granger Lake	TX	10,600	CE	State	1977		
Pat Mayse Reservoir	TX	8,317	CE	State	1971		
San Angelo Reservoir	TX	6,000	CE	State	1956		
Sommerville Lake	TX	3,500	CE	State	1981		
Texarkana Reservoir	TX	79,400	CE	State	1955		
Town Bluff Dam	TX	9,403	CE	State	1978		
Bonneville Unit	UT	23,671	BR	State	1992		
John H. Kerr Dam and Reservoir	VA	765	CE	State	1954		
Philpott Reservoir	VA	4,747	CE	State	1959		
Dalles Dam	WA		CE	State	1960		
Ice Harbor Lock and Dam	WA	500	CE	State	1963		
McNary Lock and Dam	WA	7,550	CE	State	1953		
Mill Creek Reservoir	WA	124	CE	State	1963		
Mississippi River Navigation		30,013	CE	FWS	1961		
Sutton Reservoir	WV	7,000	CE	State	1961		
Alcova Dam and Reservoir	WY	30	BR	State	1956		
Kortes Dam and Reservoir	WY	2,640	BR	State	1967		
Riverton Unit	WY	28,225	BR	State	1977		
Seedskaadee (South Devel Farm)	WY	742	BR	State	1975		
Yellowrail Reservoir	WY	14,410	BR	State	1967		

Total Acreage

2,170,619

CHAPTER IV

CORPS OF ENGINEERS PROJECT PLANNING AND IMPLEMENTATION

A. Corps References

The U.S. Army Corps of Engineers (Corps) undertakes studies of water and related land resources problems and opportunities in response to directives, called authorizations, from Congress. Congressional authorizations are contained in public laws, and in resolutions of either the House Transportation and Infrastructure Committee or the Senate Environment and Public Works Committee. Study authorizations are either unique, study-specific authorities, or standing, program authorities, usually called Continuing Authorities, under which specific studies related to the program authority may be done. The focus of studies is on determining whether a Federal project responding to the problems and opportunities of concern should be recommended to Congress for construction authorization (Corps of Engineers 1999a). This is the focal point for the Service's involvement in the planning of Corps projects under the FWCA (and other applicable authorities).

A number of references are available on various aspects of the Corps planning and implementation of water resources development projects within its Civil Works Program. Many of the most important, including those that address environmental issues, are available on a CD entitled "Planning References" (publication IWR CD-03-01 issued in 2003 by the Institute for Water Resources, Water Resources Support Center). Information about this CD is available at ceiwr.publications@wrc01.usace.army.mil. Several documents are of particular interest in describing the Corps' Civil Work Program and planning process. These include:

- Planning Guidance Notebook (ER 1105-2-100) (Corps of Engineers 2000a);
- Digest of Water Resources Policies and Authorities (EP 1165-2-1)(Corps of Engineers, 1999a);
- Civil Works Policy Pocket Reference (Corps of Engineers 2001); and
- Water Resource Development Acts, 1976 - 2000 (contained on the CD referenced above).

Much of the material that follows on Corps projects, studies, and planning is taken from the Planning Guidance Notebook and other Corps publications and information. The references

section at the end of this document contains full citations. The FWS Federal Activities web page (<http://www.fws.gov/r9dhcbfa>) also contains a number of these same references as well as others, including all of the Corps Omnibus Acts (Water Resource Development Acts, Flood Control Acts and River and Harbor Acts) since 1938 (see Appendix N).

B. Types of Projects

The Federal interest in water resources development is established by law. Within the larger Federal interest in water resources development, the Corps is authorized to carry out projects in seven mission areas: navigation, flood damage reduction, ecosystem restoration, hurricane and storm damage reduction, water supply, hydroelectric power generation, and recreation (Corps of Engineers 2000a). Of these, flood damage reduction, commercial navigation, and ecosystem restoration are considered by the Corps as “high priority” missions (Corps of Engineers 2000b). Wherever possible, the Corps combines these functions to formulate multiple purpose projects. Several different types of projects may be developed under each major project type. For example, navigation projects may include harbor and waterway projects, special navigation projects, removal of wrecks and obstructions, snagging and clearing, and drift and debris removal (Corps of Engineers 2000a).

Ecosystem restoration is one of the primary missions of the Corps’ Civil Works program. The objective in ecosystem restoration planning is to contribute to national ecosystem restoration (NER) through increases in the net quantity and/or quality of desired ecosystem resources. Single purpose ecosystem restoration plans may be formulated and evaluated in terms of net contributions to increases in ecosystem value (NER outputs), expressed in non-monetary units. Multipurpose plans that include ecosystem restoration must contribute to both national economic development outputs and NER outputs. In this latter case, a plan that trades off NED and NER benefits to maximize the sum of net contributions to NED and NER is usually recommended (Corps of Engineers 2000a).

In addition to planning for “major” projects, the Corps also develops a variety of projects under the Continuing Authorities Program (CAP). These are smaller projects, often with individual limitations on total project cost. The Corps also has a number of other authorities under which studies may be conducted. The CAP and other authorities are described below.

C. Project Planning, Implementation and Operation

Corps Civil Works projects fall into three basic funding categories: general investigations, construction, and operations and maintenance. Project planning takes place from the time the Corps is authorized to evaluate a problem that has been identified to the time that a project is authorized for construction or a determination is made that Federal involvement is not

warranted. The planning process, which is funded by general investigations, typically involves two phases: an initial reconnaissance study phase to determine whether or not to proceed to detailed planning, and the feasibility study phase during which detailed studies are conducted. It is during the planning stage that most (but not all) of the FWS involvement under the FWCA will take place. The requirement for cost sharing by the local sponsor begins in the feasibility study phase. The construction phase begins after authorization by Congress in an omnibus bill or under a CAP or other authority. Preconstruction engineering and design studies are first conducted, and then design, engineering and other details are finalized. Once the project sponsor has signed the appropriate agreements ensuring its participation and partial funding responsibilities, construction of the project proceeds, subject to the appropriation of construction funds by Congress. Construction typically takes place over a number of years, with Congressional appropriations each year. In some instances, there may be delays in funding, requiring studies to reevaluate the project or components of it. Once construction is completed, the project enters the operations and maintenance stage (operations, maintenance, repair, replacement, and rehabilitation). Involvement under the FWCA can and often does continue into the construction and operations and maintenance phases.

D. How Corps Projects Are Authorized

As noted above, Corps Civil Works projects are authorized by Congress either individually or through the Corps' CAP. Corps projects are authorized in legislation referred to under the general name of omnibus acts. Originally, Corps project omnibus acts were called Rivers and Harbors Acts and Flood Control Acts. Starting in 1976, they were given the name Water Resources Development Acts (WRDA), a term that remains in effect today. The intent through the years has been to pass an omnibus bill every two years. However, WRDA 1986 was the first in some 12 years, and there have on other occasions when WRDA was not passed in the standard two-year period. For instance, WRDAs were passed in 1996, 1999, and 2000. No WRDA was enacted from 2001-2003, although bills were introduced in Congress.

The process that leads to the construction of a major Corps project generally begins with the identification of a water resource-related problem or need by local interests. The issue is brought to the attention of a U.S. Senator and/or Representative or the Corps. The Corps district evaluates the problem and, for smaller projects, may request funds through annual appropriations under its CAP. For larger projects, a new study will need to be authorized. Congressional representatives may request that the appropriate committee in Congress authorize particular studies. Studies and project are authorized by the Senate Committee on Environment and Public Works, Subcommittee on Transportation and Infrastructure; and the House Committee on Transportation and Infrastructure, Subcommittee on Water Resources and Environment. Congress, acting through these committees, can authorize a study in several ways. A study resolution may be passed by either of the public works committees. Very often, specific authorization for any number of studies is contained in a WRDA bill. Study authorization may

occasionally come in the form of a separate, distinct act or be placed as an added item in an appropriations bill.

It is important to remember that the authorization to study (or construct) a project and the appropriation of money to actually do the study (or the construction) are separate and distinct actions involving separate and distinct Congressional committees. Corps planning efforts are conducted under funding for general investigations; funding for construction is under the construction category. Funding for Corps activities generally originate in the House Committee on Appropriations, Subcommittee on Energy and Water Development. The Senate Committee on Appropriations, Subcommittee on Energy and Water Development then considers the proposals. The law that finally appropriates the money is generally called the Public Works Appropriation Act. There is usually a lag-time (at least one year) between authorization in a WRDA and funding in an appropriations bill.

The basic study process for Corps projects contains two phases – the reconnaissance study phase and the feasibility study phase. After authorization of project study by one of the means described above, the Corps will obtain funding for and initiate the reconnaissance study. This is a short term very general evaluation aimed at determining whether or not one potentially feasible alternative exists that will justify proceeding with more detailed studies. The feasibility study looks at the problem in more detail and evaluates the problem and potential solutions, using the six step planning process discussed in Chapter III, Section E. At the beginning of the reconnaissance study, the Corps should consult with the FWS relative to meeting FWCA requirements. Coordination meetings held with the Corps under the national transfer funding agreement (see Chapter III, Section H) should have identified upcoming project studies. Likewise, for the feasibility stage, consultation should begin prior to the submission of budget requests in order to include the funding needs for FWCA activities.

As required by NEPA, the District will usually prepare an EIS to accompany the feasibility report. In addition, pursuant to Section 2(b) of the FWCA, the report of the Service (referred to as the 2(b) report) must be included in and made an integral part of the feasibility study. Following completion and review, the feasibility study is transmitted to Congress and referred to the committee in which the study authorization originated. The report is then printed as either a Senate or House document, which is commonly referred to as either the “project document” or the “authorizing document.” The House and Senate public works committees may then hold hearings on the report and consider the project recommended by the Corps for authorization. Projects favorably considered are then authorized for construction, generally in WRDA.

The WRDA bill typically lacks a detailed description of the project being authorized and makes only a general reference to a project being authorized substantially in accordance with the recommendations the Chief of Engineers feasibility study. Thus, a full understanding of exactly what was authorized requires that the project document be studied carefully. In recent years, Congress has sometimes authorized projects for construction where the planning process has not

been completed. These projects are called “conditional authorizations” and are authorized contingent upon or in accordance with a Chief of Engineers Report yet to be prepared.

After a project is authorized, funds must be appropriated for the construction phase of the project. Again, such funding is an entirely separate action, and there is usually a lag of at least one year, but it may be much longer if the project does not have a high priority. The backlog of authorized projects for which construction has not yet commenced is in the tens of billions of dollars. The Corps begins specific design studies needed to construct the project during the preconstruction engineering and design phase (PED). During this phase, the Corps will finalize detailed engineering and design to ready the project for construction. The Corps will also prepare plans and specifications for the first construction contracts. During this phase, the Corps will also develop the Project Construction Agreement that must be signed by the project sponsor before construction can begin (Corps of Engineers 2000b). The local sponsor also cost shares in the feasibility study. During this time, the Corps may also be completing or refining studies started during the feasibility stage. It may also be necessary to prepare a new or supplemental EIS and/or feasibility study for the project if some time has passed since the project was authorized and/or the project is substantially modified.

It is only after the completion of all PED studies and appropriation of construction funds that construction may begin. If construction funding is started but then ceases for some reason, further reevaluations studies may be required before project construction can once again commence.

The project is constructed, usually over a period of years with annual appropriations for work to be conducted in the fiscal year for which the budget is prepared. Once construction is completed, the project passes from the construction phase into the operation and maintenance stage. For the most part, planning and evaluation will be complete at this point. However, some planning may take place as a result of the need to modify a project or its operation, update operations and maintenance plans such as for finding new dredged material disposal sites for a navigation project, and implement adaptive management for various reasons including impacts that may not have been anticipated or accurately predicted. It is also possible for detailed mitigation planning and implementation to extend into the operations and maintenance phase.

E. Types of Studies

Most of the Corps studies that require FWCA involvement fall in the category of “Level C Implementation Studies” as defined by the Water Resources Council. These are detailed project feasibility studies aimed at formulating specific projects to solve specific water resource problems. It is such types of studies at which P&G (see Chapter IV) is aimed. In recent years, the Corps has been authorized to study broader issues and large projects (e.g., South Florida Everglades Restoration). However, at the current time a majority of the Corps’ planning efforts are on individual projects.

The process by which major projects specifically authorized by Congress are formulated and evaluated is one step in the larger project delivery process. In addition to formulation and evaluation, the process includes the preparation of the decision document, and technical and policy reviews of that document and supporting material (Corps of Engineers 2000a). The Corps groups its project formulation and evaluation studies and reports into one of three basic categories: pre-authorization, post-authorization, and other studies, which includes CAP.

Pre-authorization Studies

Studies for project authorization are undertaken in response to either a study-specific authority or a general authority. Study-specific authorization may be a resolution from the House Committee on Public Works and Transportation, a resolution from the Senate Committee on the Environment and Public Works, or included in a public law. General authorities are contained in Section 216 of the Flood Control Act of 1970 and Section 2 of the FWCA of 1958. These studies and reports are funded with general investigations (GI) funds (Corps of Engineers 2000a). Planning studies are conducted in two phases in accordance with the requirements of WRDA 1986 – reconnaissance and feasibility. The feasibility study and construction of projects are cost-shared by a local sponsor. The cost sharing provisions of Federal water projects were modified and strengthened in the Water Resources Development Act of 1986 in an effort to ensure a more equitable sharing of costs by the non-Federal project sponsor. Some projects remain, however, almost entirely federally funded.

Reconnaissance Studies (Phase)

The objective of reconnaissance studies is to determine whether or not planning to develop a project should proceed to the more detailed feasibility phase. These studies are 100 percent federally funded. A Section 905(b) analysis documents the reconnaissance study and provides a basis for determining whether the study should proceed into the feasibility phase. The reconnaissance study also includes development of a project management plan for the conduct of the feasibility study.

Feasibility Studies (Phase)

The objective of the feasibility phase is to investigate and recommend solutions to water resources problems. These studies are 50 percent federally funded and 50 percent funded by a non-Federal project sponsor. Up to one-half of the local sponsor's contribution can consist of "in-kind" services or products, the values of which are determined through negotiations between the Corps and the local sponsor. This phase culminates in the preparation of a feasibility report that provides a basis for a decision on construction of a project. The feasibility report includes either an environmental assessment (EA) or an environmental impact statement (EIS) in compliance with NEPA.

Post-Authorization Studies

These planning studies and reports are generally funded as a part of engineering and design studies under the general investigation appropriation. They are undertaken pursuant to project specific construction authorizations. Construction authorizations also allow for reevaluation studies, if needed (Corps of Engineers 2000a).

Post-authorization studies take place during the preconstruction engineering and design phase (PED). During this phase, the Corps prepares design documentation reports (DDR) and engineering documentation reports (EDR) in preparation for construction of the project. Reevaluation reports may also be prepared in needed, as noted above. A general reevaluation or limited reevaluation (discussed below) may be conducted to re-analyze a previously completed study using current planning criteria and policies, if any conditions and/or assumptions change. If significant reevaluation and reformulation are required, preparation of reevaluation reports may approximate a feasibility study in scope and detail, and the P&G planning process may need to be followed again. A project cooperation agreement is also prepared for signing by the project sponsor.

NEPA compliance of the appropriate type during post-authorization studies will involve documenting the scope and nature of changes in the environmental effects of the project identified as a result of new information, changed conditions, or changes in the project. NEPA options include an environmental assessment, finding of no significant impact, or supplemental.

Continuing Authority Program Studies

In certain instances, Congress has granted the Corps a continuing authority to plan, design, and construct projects without first seeking the specific Congressional authorization for construction. The Corps refers to these various authorities as the Continuing Authorities Program (CAP – see list below). The basic objective of the CAP is to respond more quickly to the needs of local interests than is possible with the larger feasibility study. By nature, these projects are smaller in scope than feasibility studies, and there are cost ceilings associated with each type of CAP project. Statutory limits include all Federal expenditures including preauthorization study costs. Some additional caveats apply to a few of the authorities listed above. The CAP is described in more detail in Appendix F of ER 1105-2-100 (Planning Guidance Notebook) and EP 1165-2-1 (Digest of Water Resources Policies and Authorities).

Corps of Engineers Continuing Authorities Projects

1. Small Flood Control Projects (Section 205 of the Flood Control Act of 1948; \$7 million maximum per project, \$40 million maximum annual total)
2. Small Navigation Projects (Section 107 of the River and Harbor Act of 1960; \$4 million maximum per project, \$35 million maximum annual total)

3. Small Beach Erosion Control Projects (Section 103 of the River and Harbor Act of 1962; \$3 million maximum per project, \$30 million maximum annual total)
4. Streambank and Shoreline Protection for Public Facilities (Section 14 of the Flood Control Act of 1946; \$1 million maximum per project, \$15 million maximum annual total)
5. Mitigation of Shore Damage from Federal Navigation Projects (Section 111 of the Rivers and Harbors Act of 1968, \$5 million maximum per project)
6. Snagging and Clearing for Flood Control (Section 208 of the Flood Control Act of 1954; \$500,000 maximum per project, \$7.5 million maximum annual total)
7. Project Modifications for Improvement of the Environment (Ecosystem Restoration) (Section 1135 of the Water Resources Development Act of 1986; \$5 million maximum per project, \$25 million maximum annual total)
8. Projects for Protection, Restoration, and Creation of Aquatic and Ecologically Related Habitats, including Wetlands (Ecosystem Restoration Projects in Connection with Dredging) (Section 204 of the Water Resources Development Act of 1992; no maximum per project, \$15 million maximum annual total)
9. Aquatic Ecosystem Restoration Projects (Section 206 of the Water Resources Development Act of 1996; \$5 million maximum per project, \$25 million maximum annual total)
10. Navigation Clearing and Snagging (Section 3, Rivers and Harbors Act of 1945; no maximum per project. This authority has not been funded in recent years)

Other Studies

The Corps conducts other types of studies under a number of authorities. These include Section 216 review of completed projects studies, and fish and wildlife studies. Section 216 of the Flood Control Act of 1970 authorizes investigations for modification of completed projects or their operation (Appendix L). Section 2 of the FWCA allows investigation of modifications to projects that were not substantially completed prior to August 1958 in the interest of conservation of fish and wildlife. Several categorical types of studies were authorized by various provisions of WRDAs between 1986 and 2000. Post authorization change reports may be developed on authorized projects for a variety of reasons. A number of these follow the same planning procedures that apply to studies associated with major projects. The Corps also conducts flood insurance studies and provides planning assistance to States.

Review of Completed Projects Studies

These studies are conducted in response to the standing authority of Section 216 of the Flood Control Act of 1970, which authorizes studies to review the operation of completed Federal projects and recommend project modifications “when found advisable due to significantly changed physical or economic conditions . . . and for improving the quality of the environment in the overall public interest.” An initial appraisal is conducted using operation and maintenance (O&M) general funds to determine whether or not a study is warranted. If so, these studies are conducted in the two phase study process in the same manner as feasibility studies (Corps of Engineers 1999a).

The potential significance of this process in addressing fish and wildlife problems associated with the operation of existing projects should be apparent; however, Section 216 studies have in the past generally been initiated only in response to problems associated with project purposes other than fish and wildlife conservation. The enactment of WRDA 1986 and subsequent WRDAs provided the Corps with a number of new environmental authorities. Section 1135 of WRDA 1986 is very similar to the provisions of Section 216 of the 1970 Flood Control Act. The Corps’ Ecosystem Restoration Policy (Corps of Engineers 1999b), in conjunction with the variety of environmentally related authorities now available to the Corps, has resulted in a significant increase of projects designed in whole or in part to address environmental issues, including those associated with completed projects.

Fish and Wildlife Reports

Fish and wildlife reports may be prepared pursuant to Section 2 of the FWCA for the purpose of obtaining Congressional authority to include specific measures as modifications or additions to previously authorized projects that were not substantially completed prior to the 1958 amendments of the FWCA.¹ Section 216 of the Flood Control Act of 1970 as well as 1135 of WRDA 1986 and Section 206 of WRDA 1996, as amended, in essence augment this authority, providing the Corps with the ability to conduct other environmental restoration projects (see Chapter VII). If the project was completed early enough that the FWCA is not applicable, the Corps may be able to accomplish the same result by other authorities.

Water Resources Needs of River Basins and Regions

These studies were authorized under Section 729 of WRDA 1986 to study water needs of river basins and regions of the United States. They may result in recommendations for more detailed feasibility studies, but these studies alone do not result in recommendations for Congressional authorization of specific projects.

¹ Substantially completed is defined as those projects where 60 percent or more of the estimated construction cost has been obligated for expenditure (16 U.S.C. 662(g)) before 1958.

Floodplain Management and Riverine Restoration Program

Section 212 of WRDA 1999 authorizes the Corps to implement projects to reduce flood hazards and restore the natural functions and values of rivers. The authority places emphasis on nonstructural approaches to flood loss reduction. Twenty-seven specific locations are named in the legislation for examination (see Chapter VII).

Project Deauthorizations

Section 710 of the WRDA of 1986 requires the annual submission to Congress of a list of authorized but incomplete water resources studies which have not had funds appropriated during the preceding five full fiscal years. Congress has 90 days, after the submission to appropriate funds for the studies on the list or the studies are no longer authorized. Section 1001 of the WRDA of 1986, as amended, provides for the deauthorization of water resources projects if Federal funds for planning, design or construction have not been obligated for seven fiscal years. Every two years, the Secretary of the Army is required to submit to Congress a list of projects that meet this eligibility criteria. The projects remain on the list for 30 months, after which they are automatically deauthorized if Federal funds are not obligated during the 30-month period. (Corps of Engineers 2000a). WRDAs usually contain a section listing projects that are deauthorized.

Legislative Phase I Studies

This is a special type of study, where only continuation of planning, rather than construction, was authorized for selected projects in the WRDAs of 1974 (Public Law 93-251) and 1976 (Public Law 94-587). For these studies, which are subject to a two-stage authorization process, a new feasibility report would be submitted to Congress for construction authorization (Corps of Engineers 1999a). In these situations, the Corps prepared a Legislative Phase I General Design Memoranda (GDM) to document the results of the advanced planning and then resubmit the report to Congress seeking the authority to construct. GDMs are no longer prepared by the Corps (Corps of Engineers 2000a), and in all likelihood few of these older style studies remain.

Congressional Adds

Congress sometimes authorizes studies that were not recommended by the Corps. These Congressionally-added studies follow the same procedures as those discussed above unless specific provisions are included through the budget process.

F. Corps Planning Procedures

The Corps of Engineers planning process is grounded in the Economic and Environmental Principles and Guidelines (P&G) promulgated in 1983 and the laws that apply to the Civil

Works Program. The Corps' planning process is intended to reflect a systematic and comprehensive treatment of watershed resources, including urban watersheds. The process is intended to assure that both economic and environmental values are added to watersheds (Corps of Engineers 2000a).

P&G establishes a six-step process to be used by Federal agencies to plan water projects. These steps are:

1. Specifications of Problems and Opportunities
2. Inventory and Forecast of Water and Related Water and Related Land Conditions
3. Formulation of Alternative Plans
4. Evaluation of the Effects of Alternative Plans
5. Comparison of Alternative Plans
6. Plan Selection

A detailed description of these steps and FWS input in each is discussed in Section E of Chapter III. Figure IV-1 shows the steps in development and implementation for projects specifically authorized by Congress.

Pre-authorization Studies and Reports

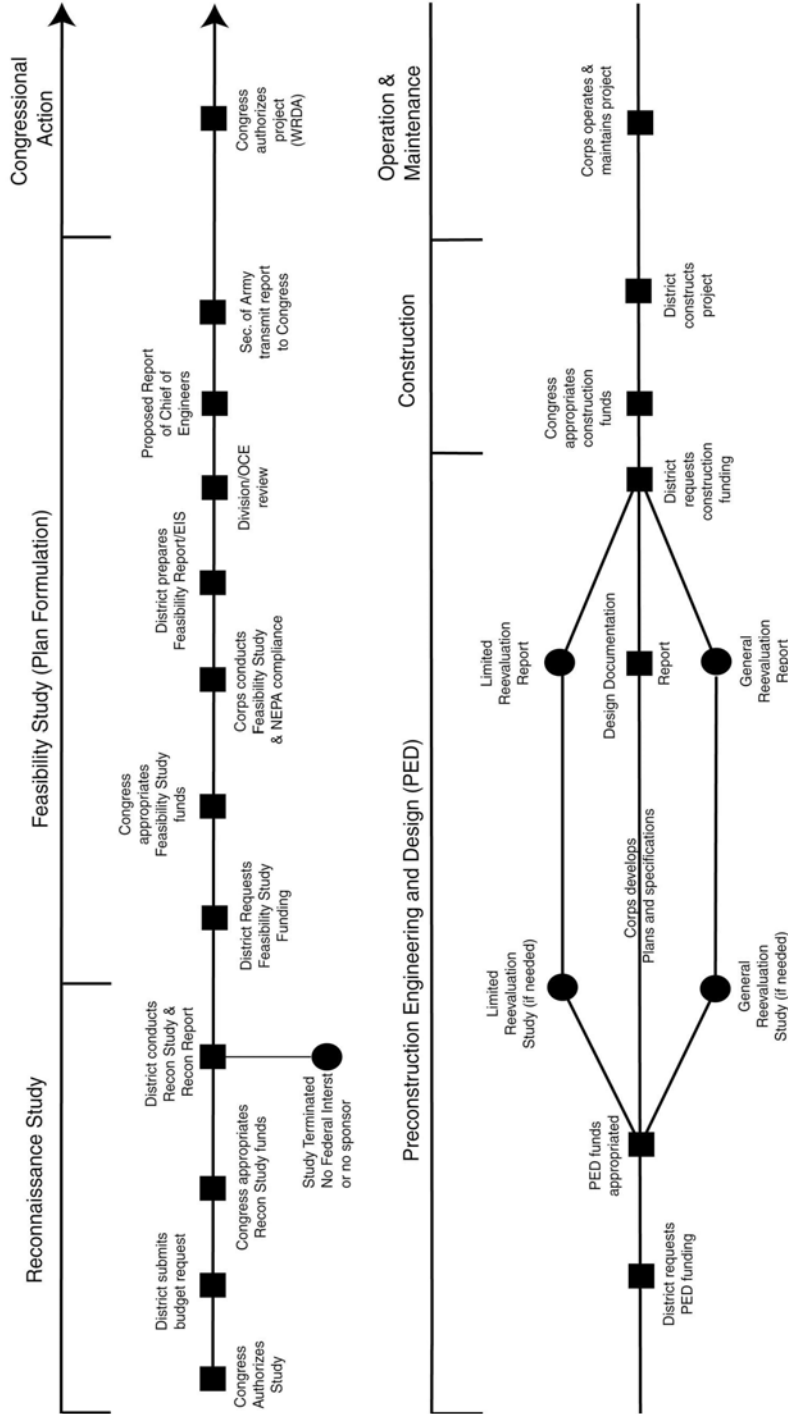
Planning for Congressionally authorized projects occurs in two phases – reconnaissance and feasibility, as briefly described above. The six steps of planning under P&G are applied at varying levels of detail to the reconnaissance and feasibility studies. This approach in one form or another is used in planning major projects as well as many of those listed above under “other studies.”

Reconnaissance Phase

The overriding purpose of the reconnaissance phase of planning is to determine if the water resource problems warrant Federal participation in feasibility studies. The reconnaissance phase commences with the obligation of appropriated reconnaissance funds, and ends with the execution of a feasibility cost sharing agreement (FCSA) or the Division Commanders' public notice for a report recommending no Federal action. The reconnaissance phase is totally federally funded at a target level of \$100,000 (about \$40,000 for preparation of the Section 905(b) analysis and \$60,000 for development of the project management plan). Target time for completion of the reconnaissance phase is 6-12 months (18 months with an extension) from initial obligation of funds to a signed FCSA (Corps of Engineers 2000a). The feasibility study cannot be initiated until the FCSA is signed (Corps of Engineers 1999a; Corps of Engineers 2000a). Additional detail on the reconnaissance study may be found in the Corps' Planning Guidance Notebook, Appendix G.

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Figure V-1: Major Steps in Corps of Engineers Project Development Process for Projects Specifically Authorized by Congress



**IV-1:
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Specific objectives and tasks to be accomplished by the reconnaissance study include:

1. defining problems and opportunities and identifying potential solutions at a very general level of detail;
2. determining whether or not planning should proceed into the feasibility phase based on a preliminary appraisal of Federal interests, costs, benefits, and environmental impacts of potential solutions;
3. estimating the cost of the feasibility study phase (if recommended); and
4. assessing the level of local interest and willingness of local sponsors to cost-share the feasibility study phase.

The reconnaissance phase normally results in a reconnaissance report. This report documents study efforts and analyses and recommends either study termination or continuation. The reconnaissance report does not contain a recommendation for project approval. Products of the reconnaissance phase include a 905(b) analysis report, project management plan (PMP), letter of intent (LOI) from the non-Federal sponsor and feasibility cost sharing agreement (FCSA). The 905(b) analysis report – specified in Section 905(b) of WRDA 1986 – documents the results of the reconnaissance phase study including a preliminary analysis of Federal interest, costs, benefits, environmental impacts, and an estimate of the cost of preparing the feasibility report.

The PMP documents the Federal and non-Federal efforts required to conduct the feasibility study and forms the basis for estimating the total study cost and share of that cost to be paid by the non-Federal sponsor. The PMP will ensure that the work required for the feasibility phase has been carefully developed and considered. It also is the basis for assigning tasks between the Corps and the non-Federal sponsor and establishing the value of in-kind services. The PMP will be completed in two phases: the first during the reconnaissance phase will detail the conduct of the initial phase of the feasibility study, while the second will detail the remainder of that study. The PMP will be incorporated into the FCSA.

The FCSA documents the commitments of the Corps and non-Federal sponsor to share the cost of the feasibility study. While intended to promote a partnership for the feasibility study, the Corps is responsible for representing the Federal interest by following policies (including environmental laws) and budgetary priorities (Corps of Engineers 2000a). The LOI from the local sponsor states that it is ready, willing, and able to execute the cost sharing agreement to participate in the feasibility study.

While the Corps is fiscally responsible for reconnaissance phase planning, efficient execution of a cost-shared feasibility phase requires a cooperative reconnaissance effort. The Corps will seek to involve potential local sponsors in reconnaissance planning through the early establishment of a multi-disciplinary study team. Consisting of representatives of the Corps and potential local

sponsors, the study team is responsible for determining the scope of problems and potential solutions to be addressed, narrowing the range of issues, and establishing the appropriate roles and interests of the Federal and non-Federal planning partners. When the reconnaissance phase has progressed sufficiently, an Executive Committee, consisting of the Corps District Commander, his chief planner or designated representative, and local sponsor representatives will be organized. The Executive Committee will be responsible for the overall management and direction of the study to include termination if appropriate.

The reconnaissance phase of planning is completed after all required documents and analyses have been approved by the Corps hierarchy, the PMP has been completed, and the FCSA has been executed with the local project sponsor. At that point, and upon the appropriation of necessary funds, the feasibility phase of planning begins. A reconnaissance review conference (RRC) will be held within the Corps at the end of the reconnaissance phase of planning. If necessary, issue resolution conferences (IRC) will be held prior to the Division Commander's approval of the reconnaissance report and the cost-sharing agreement. An IRC may be held at any point in the planning process where higher level review is needed in defining and resolving issues.

The conduct of the reconnaissance phase is based on professional and technical judgement, using the experience of the study team. The detailed procedures contained in P&G and Corps regulations are not required at this point, although the general principles of P&G will be followed. The reconnaissance phase will include the first five steps of planning. The initial emphasis will involve identifying problems and defining planning objectives. Inventorying and forecasting will generally rely on existing or readily available data. The primary emphasis in Steps 4 and 5 will be to identify the potentially significant impacts associated with the alternatives and determine if potentially feasible alternatives exist. A public meeting may be held at the discretion of the District Commander. Assessments of benefits and costs are provided in limited detail, as is the environmental evaluation to describe existing conditions, effects of potential measures, and likely requirements for mitigation (Corps of Engineers 2000a).

Fish and wildlife resources considerations during the reconnaissance phase are to be sufficient in scope and detail so as to:

1. Identify the presence and general location of known fish and wildlife resources within the study area that should be approached with care;
2. Make preliminary determinations of the likely impacts that potential alternative plans would have on these fish and wildlife resources, and opportunities for the restoration and development of fish and wildlife resources;
3. Briefly describe potential mitigation features that would address these impacts; and

4. Develop the scope of fish and wildlife resources surveys, studies and analyses to be conducted during the feasibility study (Corps of Engineers 2000a).

Feasibility Phase (Plan Formulation)

The purpose of the feasibility study is to identify, evaluate and recommend to decision makers an appropriate, coordinated and workable solution to identified water resources problems and opportunities. This process called plan formulation. The process is often integrated into the overall planning process in such a way that it does not appear as a distinct entity. It is the process by which the Corps applied the six steps of planning required by P&G in an iterative fashion to develop alternative and, ultimately, select a plan intended to address needs consistent with environmental protection (the NED plan under P&G). It does not result in a formal Corps report per se, but is the basis for the analyses and conclusions in the feasibility report.

The feasibility report will provide a complete presentation of study results and findings as a sound and documented basis for decision makers to judge the recommended solution (Corps of Engineers 2000a). Cost of feasibility studies are 50 percent Federal and 50 percent non-Federal as required by Section 105(a)(1) of WRDA 1986. Feasibility phase cost sharing is not applicable to navigation studies on inland waterways because the non-Federal share comes from revenues in the Inland Waterways Trust Fund established in the Water Resources Development Act of 1986. Half of the local sponsor's share of the cost of the feasibility study may be provided by in-kind products and services. Feasibility studies may sometimes be referred to within the Corps as survey studies or general investigation studies and, indeed, the funding source with the Corps are from those for general investigations.

The feasibility phase begins with the issuance of initial feasibility funds after execution of the FCSA and ends with submission of the feasibility report to the Office of Management and Budget (OMB). It applies the six steps of planning (discussed above and in Chapter III) contained in P&G in an iterative process to develop alternative solutions. The results of feasibility phase studies are documented in a feasibility report that includes documentation of environmental compliance. Documentation of compliance with applicable environmental laws and regulations must be prepared including items such as biological assessments required by the Endangered Species Act, as well as the FWCA reports and NEPA documents. The feasibility report provides recommendations to Congress for or against Federal participation in a project. A recommendation for Federal participation is generally a recommendation for construction authorization. The feasibility study will contain the array of alternatives and, in most cases, the preferred alternative for construction authorization. The feasibility report will present the recommended plan and, if applicable, the degree of and rationale for departure from the NED plan developed under P&G (see Section E).

It is also during this phase that NEPA compliance takes place and environmental documentation is prepared. An environmental assessment (EA) or environmental impact statement (EIS), as appropriate, may be either a supporting document combined with and bound in the feasibility

report or integrated within the report. Generally, the Corps integrates the feasibility report with the EA or EIS unless complex environmental impacts preclude this alternative (Corps of Engineers 1999a, 2000a, 2000b).

Pursuant to Section 904 of WRDA 1986, feasibility reports must address a number of matters in the formulation and evaluation of alternative plans, which include protecting and restoring the quality of the total environment. In accordance with Section 905 of WRDA 1985, the report must also describe with reasonable certainty the economic, environmental, social and engineering benefits and costs of the recommended and alternative plans. Corps guidance provides that feasibility reports are to describe specific considerations given to fish and wildlife conservation and other environmental resources during the study. All factors that the reporting officer considered as contributing to the justification of the expenditures recommended for mitigation, conservation and restoration features are to be explicitly described. The feasibility report is to:

1. Describe fish and wildlife resource features included in the recommended plan, including the basis for justification, consistent with guidance set forth in this section;
2. Include appropriate letters and reports furnished by the FWS, NOAA-Fisheries, and State agencies;
3. Describe recommendations furnished by the FWS, NOAA-Fisheries, and affected states in compliance with the FWCA and Section 7 of the ESA, discuss specifically how each recommendation was addressed, and provide reasons for adoption or non-adoption of each recommendation;
4. Include, as appropriate, provisions for monitoring mitigation features included in the recommended plan;
5. Describe consideration given to the protection and conservation of wetland resources, including the establishment of wetlands in connection with recommended plans that include the disposal of dredged material, as set forth in ER 1165-2-27;
6. Include the necessary letters of intent from agencies and non-Federal sponsors participating in fish and wildlife mitigation features; and
7. Describe how such features will be operated, managed and funded over the life of the project.

The Corps and the local sponsor share responsibilities to the extent that each may have a study manager responsible for individual tasks, budgets, and schedules designated in the PMP.

However, it remains the Corps' responsibility to further the Federal interest relative to Congressional and/or Administration directives. This includes the Corps' responsibilities under the P&G, FWCA, NEPA, Endangered Species Act, and other relevant statutes, regulations, and policies. The product of the feasibility phase, the feasibility report, presents the results of both study phases and recommends a specific solution to the identified water resource problems.

The study management team and executive committee (established during the reconnaissance phase) are responsible for conducting and completing the feasibility phase in accordance with the tasks, schedules, and assignments set forth in the PMP and other provisions of the FCSA. The Corps will conduct in-progress Reviews (IPR) and issue resolution conferences (IRC) during the feasibility study. It is after the first IPR that the Corps will complete the second phase of development of the PMP to detail the remainder of the feasibility study work. An IRC called the feasibility scoping meeting (FSM) will be held early in the feasibility study. The FSM will bring headquarters, division and district staffs, the non-Federal sponsor and resource agencies together to focus the feasibility study on key alternatives, to further define the depth of analysis required, and to refine study/project constraints.

Later in the feasibility phase when the district has identified a selected plan and is prepared to present the formulation and evaluation of alternatives, it will hold an alternative formulation briefing (AFB) with Washington-level participation. At the AFB, the Corps will confirm that the plan formulation and selection process, identified preferred alternative plan, and definition of Federal and non-Federal responsibilities conform to current policy, and identify and resolve any policy concerns. The goal of the AFB is to allow the district to release the draft report to the public concurrent with Corps policy compliance review at the headquarters level.

Review of the feasibility report by the Division Commander is essentially complete upon the release of the draft feasibility report/DEIS for public review. Upon receipt of an acceptable final feasibility report from the District Commander, the Division Commander will transmit the report to Corps headquarters within the Office of the Chief of Engineers (OCE) for review and will release a public notice announcing the recommendations of the study and requesting comments. Upon issuance of the Division Engineer's public notice, the Corps will also initiate the preconstruction engineering and design phase of project study (discussed below).

OCE input is primarily of a policy nature and will have occurred throughout the planning process. At OCE, the Policy Compliance Branch will conduct a final policy review and prepare a proposed report of the Chief of Engineers for distribution to affected State(s) and to the Secretaries or heads of prescribed Federal departments and agencies (including the Secretary of the Interior). Thirty days are allowed for the receipt of comments. The Chief of Engineers may revise the report after considering comments. The report of the Chief of Engineers (Chief's report) is then transmitted to the Assistant Secretary of the Army for Civil Works (ASA-CW) where it will be reviewed and then coordinated with OMB, which evaluates the relationship of the proposed project to executive policy. After approval by OMB, the Secretary of the Army transmits the Chief's Report to Congress for review and action. The feasibility phase and the

local sponsor's cost-sharing obligations end upon ASA-CW request to OMB for the views of the Administration.

Post Authorization Studies and Reports

As discussed earlier, post authorization studies and reports are completed after project authorization for construction. These studies are undertaken under project-specific construction authorities and include reevaluation studies. Where needed, reevaluation studies may be necessary if a significant period of time has elapsed or conditions have changed notably since the feasibility study was completed (Corps of Engineers 2000a).

Preconstruction Engineering and Design (PED)

This is the next phase in the implementation of a project after it is authorized for construction. During the preconstruction, engineering and design (PED) phase, districts will prepare a design documentation report (DDR) that provides a record of final design after the feasibility phase. The DDR provides the technical basis for the plans and specifications and serves as a summary of the final design. An engineering documentation report (EDR) may also be prepared to support the project construction agreement (PCA) when there are minor changes in design and costs from the authorizing reports. Requirements for preparation and processing of these reports are stated in ER 1110-2-1150. If reformulation of plans is required during the PED phase, then the Corps prepares a general reevaluation report or limited reevaluation report. General design memoranda and design memoranda (described below) are no longer prepared by the Corps (Corps of Engineers 2000a).

Reevaluation Studies

A general reevaluation study involves re-analysis of a previously completed study using current planning criteria and policies, which is required due to changed conditions and/or assumptions. The results may affirm the previous plan; reformulate and modify it, as appropriate; or find that no plan is currently justified. The results of the study are documented in a general reevaluation report (GRR) (Corps of Engineers 2000a).

A limited reevaluation study provides an evaluation of a specific portion of a plan under current policies, criteria and guidelines, and may be limited to economics, environmental effects, or in rare cases, project formulation. A limited reevaluation report (LRR) documents the results of the analysis undertaken (Corps of Engineers 2000a).

Because of the compressed time frame of project planning compared to that of some years ago, studies that are more typical of the planning stage and conducted during the feasibility study may not be completed when projects are authorized and may, therefore, continue into the post-authorization phase in PED.

National Environmental Policy Act (NEPA) Documentation

The scope and nature of the changes in the environmental effects of the project identified as a result of acquisition of new information, changed conditions, or changes in the project will determine the appropriate type of NEPA documentation. Options include an environmental assessment which may result in a finding of no significant impact or a supplemental environmental impact statement (Corps of Engineers 2000a). Guidance regarding NEPA documentation is contained in Corps guidance ER 200-2-2.

Construction

Construction will begin upon the appropriation of construction funds in the Corps appropriations act. Funding will take at least one year, and may not occur for several years or longer if Congress does not appropriate funds for its construction. Construction will take place over a period of years based on annual appropriations. In some instances, construction actions may start, followed by cessation for one or more years. In such instances, some sort of reevaluation may be required before project construction can commence once funds are again available.

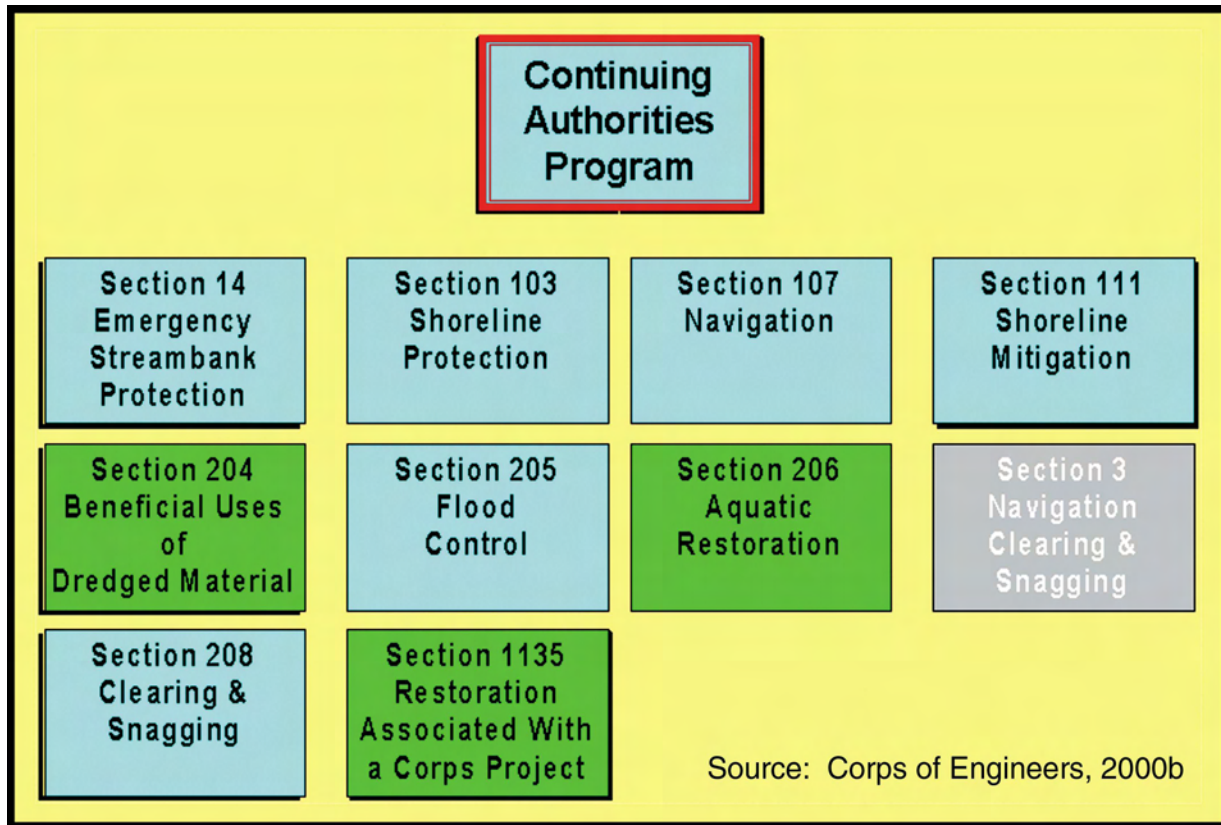
Operations and Maintenance

Once construction of a project is completed, the operations and maintenance phase (O&M) of the project begins. The funding source switches accordingly, from construction to operations and maintenance appropriations. Studies and activities relative to the planning and construction phase may still be ongoing or initiated, however. For example, post-construction monitoring may take place to determine whether or not project impacts are as predicted. Adaptive management actions may be required if actual conditions deviate significantly from those on which the project was predicated. Additional activities such as finalization of mitigation plans, development of mitigation management plans, and acquisition and lands for compensation of unavoidable losses may also take place during the O&M phase.

Continuing Authorities Program Studies

As noted earlier, the CAP involves nine legislative authorities (Fig. V-2) under which the Corps plans, designs, and constructs certain types of water resource and ecosystem restoration projects without additional and specific congressional authorization (Section 3 Navigation Clearing and Snagging has not been funded in recent year). Funds are appropriated under these authorities and are distributed to the various Corps Divisions, which are responsible for planning and approving projects. Funding limits apply to individual projects as well as to total annual expenditures for each authority (see Table V-1 above). The CAP is fully described in Appendix F of the Corps' Planning Guidance Notebook (Corps of Engineers 2000a).

FIGURE IV-2: Continuing Authorities Projects

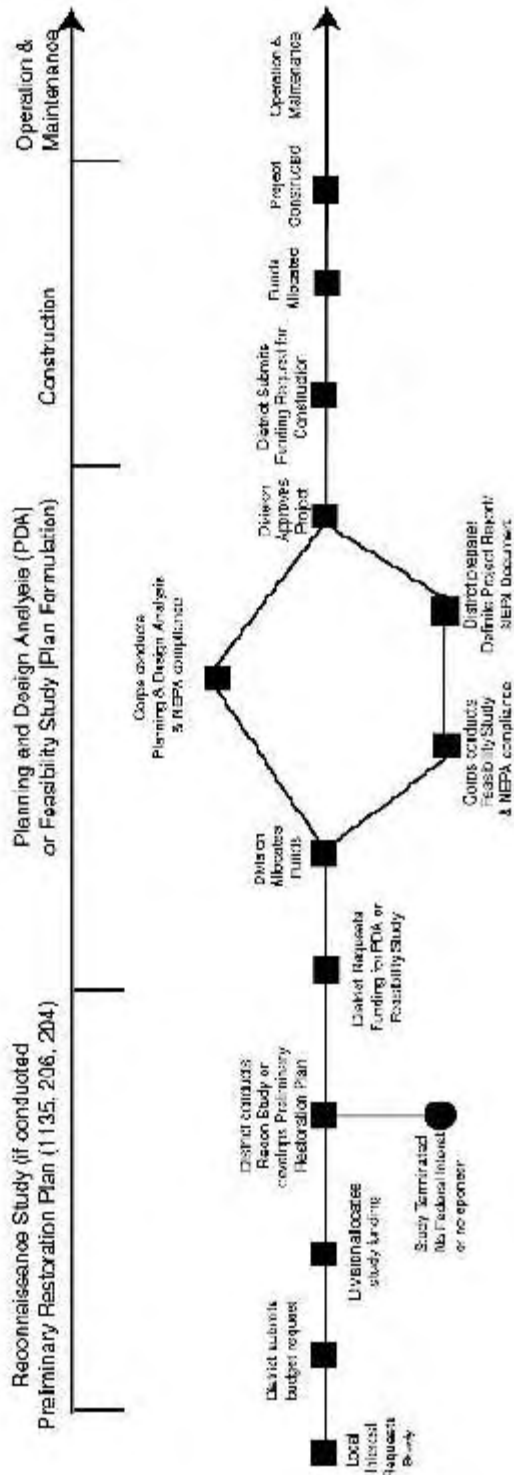


The purpose of the CAP is to plan, design, and construct projects of limited scope and complexity, leaving bigger more complex projects to the specifically authorized program and very small projects to other Federal or non-Federal entities. Simplified evaluation procedures may be developed for low risk/low cost projects. Work funded under the CAP program must meet the Corps requirements of Federal interest and responsibility as set forth in each of the legislative authorities. While CAP projects are generally smaller, single purposes projects, multipurpose projects may be formulated under more than one of the CAP authorities. However, one of the program legislative authorities must be designated as primary for project implementation. Specifically authorized projects may be converted to CAP projects and vice versa.

CAP Project Planning

Figure V-3 provides an overview of the planning for CAP projects. The planning Principles and Guidelines (P&G) described in previous chapters apply to studies conducted under the CAP. However, due to specific legislative requirements, the guidance for each authority must be referenced. CAP projects vary in the degree to which they follow the plan formulation,

Figure IV-3: Major Steps in Corps of Engineers Project Development Process for Continuing Authority Projects



evaluation, and selection procedures developed for specifically authorized studies and projects. However, the level of detail will reflect the scope and complexities of the proposed CAP project. The two-phase planning process of reconnaissance and feasibility applies to some CAP project authorities, but many are planned without conducting the reconnaissance phase. All CAP projects require a non-Federal sponsor that will cost share the cost of the project. For all authorities except Sections 1135, 204, and 206 the non-Federal sponsor must be a public agency able to enter into binding agreements. For Sections 1135, 204, and 206, the non-Federal sponsor may also be a non-profit organization capable of undertaking the requirements for operation, maintenance, repair, replacement, and rehabilitation of the project.

CAP Project Studies

For Section 1135, 206, and 204 projects, the initial step for a proposed ecosystem restoration project is the preparation of a preliminary restoration plan (PRP). For projects with a Federal cost of \$1 million or less, the PRP will serve as the basis for initiation of a combined planning and design phase resulting in environmental compliance documentation and plans and specifications. For those requiring a feasibility study, a FCSA will be required. All projects will require a project cooperation agreement with the sponsor.

For Section 14 and 208 projects, as well as Section 1135, 206, and 204 projects with a Federal cost of less than \$1 million, a planning and design analysis (PDA) is conducted as the pre-implementation phase. The PDA consists of all planning and design activities required to demonstrate that Federal participation in a project is warranted. Project formulation (planning) and design are completed to include all technical, Federal environmental and regulatory compliance activities. There is no formal report at the completion of the PDA.

For Section 103, 107, 111, 205, and proposed Section 1135, 206, and 204 projects with a Federal cost exceeding \$1 million, a feasibility phase is required. The study will complete the plan formulation process, including the selection of a plan, generally in accordance with guidance for feasibility studies for specifically authorized projects. However, the level of detail will be commensurate with the scope and complexity of the project. A report in the form of a detailed project report (DPR) is prepared, generally in accordance with the procedures associated with preparation of a feasibility report for a specifically authorized project. For feasibility phase projects, development of plans and specifications will commence upon approval of the DPR at the Division level and after the cost share agreement has been developed.

CAP Project Approval

For Section 14 and 208 projects as well as Section 1135, 206, and 204 projects with a Federal cost less than \$1 million, approval is at the Division level upon completion and approval of the PDA. For Section 1135, 206, and 204 projects with a cost over \$1 million, approval occurs concurrently with approval of the DPR. For Section 103, 107, 111, and 205 projects approval normally occurs during the development of plans and specifications when the decision document

has been approved, project costs and scheduling are adequate and the cooperation agreement has been developed.

CAP Project Cost Share

Unless otherwise specified, cost sharing policies applicable to studies and projects that are specifically authorized are applicable to studies and projects pursued under the CAP. For Section 103, 107, 111, and 205 studies, the feasibility study is initially federally funded up to a cost of \$100,000. Remaining study costs are shared equally with the study sponsor. For Section 14 and 208 studies, the costs of planning and design will be initially federally funded up to a cost of \$40,000, with costs above this level recovered from the sponsor during construction. For Section 204, 206, and 1135 projects, the non-Federal sponsor's share of the costs for planning and design, whether done in one or two stages, will initially be federally funded. The non-Federal sponsor will be responsible for these costs when the project cooperation agreement is executed. The cost sharing provisions of each authority are somewhat complicated. Appendix F of the Corps' Planning Guidance Notebook should be consulted for more detailed information on this topic.

G. Purpose and Timing of FWS Involvement in Studies

The material that follows is closely tied to the discussion of the Corps' planning and implementation process discussed in Section F. Table V-2 provides a very general overview of the major milestones in the development and implementation of a water resources development project, and involvement in this process under the FWCA. Although the table is based on the development process for Corps projects, it is applicable in general way to the development of any water resources project. The items listed in bold-faced type are FWS activities related to the FWCA, while items in plain text are important milestones which are completed by others. Not all the activities listed may necessarily be applicable to every project. Further, the degree of effort and detail in each action will vary depending on the types and size of the project involved.

The FWS should be aware of upcoming studies through the coordination required in the national transfer funding agreement and should be notified of new project starts when the project team is formed within the Corps. Initial alternatives often have a profound influence on the future direction of project planning. Therefore, it is important to consider all points of view and a wide range of ideas at the onset of project planning. The FWS may be able to suggest fish and wildlife opportunities and planning objectives, project modifications, and enhancement measures that would broaden project benefits and possible project acceptance by various stakeholders. Early involvement should occur for both general investigation projects as well as those under the CAP and other studies.

The first Service involvement in the Corps planning process should come during the transfer funding negotiation process, in the form of consultation between the FWS and the Corps on the

actions and funding necessary to fulfill FWCA requirements. The Corps will determine its budget needs for use in the agency budget request process. Unless the requirements of the transfer fund agreement are followed, future funding for FWS activities may not be adequate to maintain involvement throughout the planning process. While FWS involvement in the reconnaissance phase will generally not be funded due to the limited funds available to the Corps at this stage of planning, this is not an absolute restriction. The FWS should seek to obtain funding for this phase, particularly for significant projects with a wide array of potential fish and wildlife ramifications.

Table IV-2
Outline of FWS Fish and Wildlife Coordination Act Activities for a Federal Project²

- I. Problem or need identified, usually by local interests.
- II. Congress passes study authorization and funds study.
- III. Action agency conducts a reconnaissance study or equivalent.
 - A. Meet with action agency and/or project sponsor**
 - B. Determine needed information and needed funding for entire planning process**
 - C. Investigate project area - field trips**
 - D. In planning aid letter/memo/report:**
 - 1. Identify resource values and issues**
 - 2. Identify endangered species issues**
 - 3. Make Preliminary Impact Assessment**
 - 4. Propose preliminary changes, mitigation, or enhancement opportunities**
 - E. Action agency publishes reconnaissance report
Review and comment on reconnaissance report
- IV. Action agency conducts feasibility study
 - A. Make detailed impact assessment**
 - 1. Quantified if possible**
 - 2. Identify ways to redesign project to avoid impacts**
 - 3. Design and quantify mitigation (including compensation)**
 - B. Write as many planning aid reports as needed**
 - C. Write draft Fish and Wildlife Coordination Act report**
 - D. Draft feasibility report, EIS, and FWCAR out for public review

² Bold items are related to FWCA involvement; other items are important but are completed by others. Not all of the activities listed below are needed for each project. FWCAR = Fish and Wildlife Coordination Act Report

Review and comment on draft feasibility report and EIS

- E. Write final Fish and Wildlife Coordination Act report**
 - F. Write final Section 7 ESA document (This may be done before, after, or at the same time as FWCAR)
- V. Final feasibility report, EIS and FWCAR go to Congress to authorize project for construction
- A. Congress authorizes project construction
Review final project documents for Department of the Interior comments
 - B. Congress authorizes project construction
 - C. Congress funds project construction
- VI. Action agency prepares detailed construction plans during post-authorization studies
- A. Participate in continuation of planning studies (if applicable) and evaluate design refinements/changes regarding fish and wildlife**
 - B. Develop/complete fish and wildlife mitigation plan**
- VII. Project construction
- A. Participate in any planning/design studies that are still ongoing.**
 - B. Evaluate any changes in design and construction or resources**
 - C. Complete development/implementation of mitigation plans**
- VIII. Operation and maintenance
- A. Monitoring and follow-up studies**
 - B. Evaluate changes in operations and maintenance falling under the FWCA**
-

Reconnaissance Studies

It is critical that the FWS participate to the maximum extent possible in the reconnaissance study, as it is during this phase that the study process for the feasibility study will be developed. Available information on various aspects of the problem will be examined, including fish and wildlife resources, issues, problems and opportunities, and study needs. The FWS may be able to provide important resource information that can help determine whether or not to proceed with the feasibility study, and help guide the direction the study should it occur.

As noted earlier, the project planning team is organized by the Corps at the beginning of reconnaissance study. This group typically includes Corps engineers, biologists, real estate specialists, and lawyers. The team meets as needed and guides the project through all stages of planning. FWS personnel can become full team members and should be included in early discussions on proposed projects. As a team member, the FWS will have the opportunity to

incorporate fish and wildlife measures into the project from the onset, and should be considered an equal partner in the planning process.

Corps policy provides that, in the interest of improving interagency coordination on planning studies and avoiding issues later in planning, appropriate Federal and non-Federal agencies are to be invited to participate in the RRC, and IRC during the reconnaissance phase (as well as similar meeting held during the feasibility phase if the study proceeds past the reconnaissance phase). They are also to be afforded the opportunity to participate in the development of the PMP, and be invited to be cooperating agencies as defined by NEPA. (Corps of Engineers 2000a). The FWS should take the initiative and seek to actively participate as a member of the planning team in the development of the PMP (and subsequent planning efforts). A large part of the Corps' effort during the reconnaissance phase will be devoted to its development. It is important that needed fish and wildlife studies and FWS involvement be included in both the PMP and FCSA. Absent FWS involvement, the PMP may not include important fish and wildlife investigations and data gathering, and the Corps' budget and the contributions from the project sponsor may not include what is necessary to support FWS involvement through the transfer funding mechanism. Fish and wildlife resource information, concerns, data needs and associated funding needs should also be contained in the Section 905(b) Analysis.

The PMP is possibly the most significant document from the FWS perspective produced during the reconnaissance phase. The PMP must contain at least the following items pertaining to the conduct of the feasibility phase:

1. Work tasks and entity responsible for accomplishment;
2. Negotiated costs for tasks;
3. Schedule of performance;
4. Procedures for coordination between the Corps and local sponsor;
5. Appropriate references to regulations and guidance relevant to the completion of designated tasks; and
6. A "Review Contingency" of five percent (not to exceed \$50,000) of the total feasibility phase cost.

Identified work tasks will include not only those necessary to complete the planning activities leading to the completion of a formal report but those necessary to complete the review process as well. Work tasks relating to the review process may include answering comments, attending meetings, revising reports, and reformulating the recommended plan. Detailed scopes of work (see Chapter IV, Section H) may be required as support documents for individual work tasks listed in the PMP.

The first Service report will generally be in the form of a reconnaissance planning aid report/letter (PAR/PAL) submitted during the reconnaissance phase. The purposes of the reconnaissance PAR/PAL are to:

1. establish the presence of any significant fish and wildlife resources likely to be affected;
2. define those fish and wildlife resource problems and opportunities that should be addressed by the study;
3. define as specifically as possible the potentially significant impacts that could result from meeting other study purposes or objectives;
4. highlight the potentially significant fish and wildlife issues or concerns; and
5. define the scope and level of FWCA coordination that would be necessary during the feasibility phase along with an estimate of the cost of such effort.

The information provided during the reconnaissance phase will be based on available information, as detailed studies will not be conducted at this time. This information should be provided to the Corps at any point in the reconnaissance phase. However, it should be documented in one PAR provided early enough to influence the preparation of the Corps reconnaissance report and to be included in the 905(b) analysis and influence development of the FSCA. The input referenced in (5) above should be developed in the form of a scope of work (SOW) which should be incorporated into the PMP and cost-sharing agreement for the feasibility phase of planning.

Feasibility Studies

From the Service standpoint, this is the most basic and important category of Corps studies. It is the most basic because the feasibility study defines and justifies the project recommended by the Corps as the solution to the water resource problems being addressed (which may be that there is no Federal interest). It is the most important because a favorable feasibility study results in a report being sent to Congress seeking authorization to construct a project or substantially modify an existing project. It is during this phase that the FWS will conduct studies, evaluate resources of the project area and likely project impacts, make recommendations between alternatives and on the preferred alternative, and prepare the draft and final Section 2(b) FWCA report. Pursuant to Section 2(b), the FWCA report must be an integral part of the agency report sent to Congress or to agency representatives at a level lower than Congress who can authorize a project or modification of an existing project.

Again, Corps policy provides that, in the interest of improving interagency coordination on planning studies and avoiding issues later in planning, appropriate Federal and non-Federal

agencies are to be invited to participate in IRCs, the FSM, and the AFB, as deemed appropriate. They are also to be afforded the opportunity to participate in the continued development of the PMP, and be invited to be cooperating agencies as defined by NEPA. All issues involving other agencies (concerns or non-agreement) should be raised and discussed in a separate section of the memorandum for the record (MFR) of the meetings held during the planning process. Issues that can not be resolved at the local or regional level will be sent forward for resolution at the Washington level (Corps of Engineers 2000a). If appropriate meetings and coordination have been occurring pursuant to the national transfer funding agreement (see Chapter IV, Section H), the FWS should already be aware of projects on which feasibility studies will be initiated and should already have scopes of work developed for FWS involvement.

Once the feasibility study is initiated, the Service's first concern is to provide plan formulation input. Depending on the nature and complexity of the study, this input can take the form of one or more PAR/PAL. The ultimate number of PAR/PAL's required will depend on the complexity of the project, alternatives considered, and alternations in projects plans made as a result of iterative application of the six-step planning process.

Emphasis should be placed on identifying means and measures (to include additional alternatives as necessary) that will 1) mitigate the adverse impacts of the alternatives under consideration and/or 2) make positive contributions to fish and wildlife problems and opportunities. Problems and opportunities for fish and wildlife resources should be identified early on for consideration by the Corps as it develops project alternatives. Plan formulation input can and should be provided as it becomes available. Such input is necessary in light of the FWS mitigation policy's emphasis on avoiding, minimizing, and reducing impacts.

The final and most important report provided during a feasibility study is the 2(b) report. Presented in both a draft and final format, the 2(b) report is prepared in specific response to the Congressional directive of Section 2(b) of the FWCA. As such it is a report required by law. Section 2(b) requires a report from the Secretary of the Interior "based on surveys and investigations conducted by the United States Fish and Wildlife Service." The Secretary has in turn delegated this responsibility for reporting on proposed Corps projects to the FWS. In this regard, the survey, investigation, and reporting responsibilities given the FWS by the Congress and the Secretary cannot be performed or completed by the Corps or any other party.

The purpose of the 2(b) report is to document and recommend. It should document the results and findings of the FWS's study, planning, and coordination. It should recommend those actions considered necessary by the FWS to accomplish the fish and wildlife conservation goal of the FWCA. In this regard, the most basic requirements of a 2(b) report are 1) a clear documentation of the recommended project's impacts upon fish and wildlife and 2) concise recommendations as to the measures that should be taken to conserve fish and wildlife resources in light of those impacts. Chapter VI provides information on format and content of the 2(b) report. The effectiveness and completeness of a 2(b) report is a direct function of how well it meets these two requirements.

The 2(b) report should also state the position of the FWS on the project as proposed by the Corps (“preferred” or “selected” alternative) and on other alternatives that were evaluated. If it is the position of the FWS that another alternative would be a better choice from a fish and wildlife resource perspective, the 2(b) report should make this clear.

The 2(b) report should address those alternatives evaluated in detail by the feasibility report, but should focus on the recommended plan. The requirements of Section 2(b) are such that the report “shall be made an integral part” of the feasibility report. Thus the 2(b) report becomes an essential part of the supporting documents of the project. However, the 2(b) report is not an end unto itself. It is a means of documenting the results of careful planning and analysis and a vehicle for recommending measures to conserve and enhance fish and wildlife resources. The goal of the FWS is not just to produce report; it is to ensure that fish and wildlife conservation is an integral part of the development of our Nation's water resources.

A draft 2(b) report should be provided early enough to influence and be attached to the draft feasibility report submitted to the Corps Division office during the review process discussed earlier. The draft should have been coordinated with the State game and fish agency (and NOAA-Fisheries, if applicable). If the State fish and game agency does not provide its own report, it will often provide a letter of concurrence to be included with the 2(b) report prepared by the FWS.

The draft 2(b) report and its findings and recommendations are available for public release during the public comment period on the draft feasibility report/DEIS. This report is the basis for any public meeting statement by the FWS, and the comments provided on the draft feasibility report and DEIS. The FWS provides comments on the draft feasibility report/DEIS in response to direction from the Office of Environmental Policy and Compliance (OEPC) in the Department of the Interior. The request for comments is forwarded to FWS field and Regional Offices via the FWS Assistant Director for Fisheries and Habitat Conservation. If the DEIS is modified as a result of the public review process, the draft 2(b) report may also need to be revised and finalized early enough to be made an integral part of the final feasibility report/FEIS.

When the District submits its final feasibility report/FEIS to the Division with a final 2(b) report attached, the most intense Service/Corps coordination is over. However, any final comments go through the Regional environmental office for consolidation and transmittal to the Corps.³ To the extent that the reports undergo an extensive review as described earlier in this chapter, the outcome of which can have significant ramifications for fish and wildlife resources. The FWS biologist should therefore be aware of that review process and provide input at the appropriate

³ 505 FW 4.2 (FWCA) should be consulted for information on how to comment, the relationship between reviews under the FWCA and NEPA, coordination with the Corps and the Department of the Interior, and other related matters. This chapter is found in the FWS NEPA Reference Handbook at www.fws.gov/r9esnepa and listed under FWS NEPA Guidance.

time. The FWS provides its comments through the Department of the Interior when the Chief of Engineers transmits the proposed Chief's report to Interior agencies for review.

Service procedures for reviewing and commenting on the proposed report of the Chief of Engineers are formally handled through the Department of the Interior. When this report is transmitted to Interior, it is directed to OEPC. From there, the report is transmitted to the Directors of the appropriate Interior agencies with a specific request for comments. The FWS sends the report via the Assistant Director Fisheries and Habitat Conservation's environmental review distribution transmittal to the appropriate field and Regional Office(s) for review and comment. Comments are provided to OEPC for consolidation into a Department response to the Office of the Chief of Engineers. The Departmental letter contains a separate section for FWCA comments on the Chief's proposed report. The proposed Chief's report offers the last opportunity to comment on the recommended plan before it is sent to Congress. These comments carry considerable weight and are among the first documents in the package that ultimately go to Congress. Specific instructions on reviewing and commenting on the proposed Chief's report are contained in the FWS Manual at 505 FW 4.2B.⁴

Post Authorization Studies and Reports and Beyond

The first consultation between the Corps and the Service during the preconstruction engineering and design (PED) phase and development of the DDR and EDR should again occur during the transfer fund process. The PED process will be initiated at the same time as the release of the Division Engineer's public notice on the completion of the feasibility report. Once the PED studies are initiated, the Service should provide any comments regarding the extent to which reevaluation studies (GRR or LRR) are needed. If the conditions (environmental, economic, etc.) under which the project was originally planned have changed, and as a result, the fish and wildlife impacts or opportunities to conserve fish and wildlife are appreciably different, the Service should recommend a reevaluation of the project to address those concerns.

Due to the reduced time frames associated with the feasibility studies in recent years, it is not uncommon for some studies to be ongoing after a project is authorized. In addition, some fish and wildlife related activities may be taking place after project authorization during the same time or as part of the PED. Thus, FWS involvement under the FWCA may very well continue into this phase of project planning and even into the project construction and operation and maintenance phases. Such involvement should be funded under the transfer funding agreement with the Corps. If involvement continues into the operations and maintenance phase, opportunities for funding under the FWCA transfer funding agreement will be limited, as funds come from those appropriated or available for investigations, engineering, or construction. However, the "Two-Way" agreement with the Corps signed in 2003 provides a mechanism for funding a number of different types of FWS involvement, including operations and maintenance.

⁴ See Footnote 3 above

Examples of the kinds of activities that may require FWCA involvement include:

1. Work on projects where planning continues after authorization because Congress authorized the project before planning was completed (“conditional authorizations”).
2. Involvement required by changes in the project that affect fish and wildlife resource impacts and mitigation.
3. Evaluation of resource changes that occur after project authorization.
4. Additional studies authorized as part of the project to be undertaken after authorization.
5. Ongoing studies during and after construction conducted to assess adaptive management needs (e.g., fish entrainment and minimum flows).
6. Assistance in PED studies and modeling.
7. Authorization of “programmatic approach” projects – conceptual projects that are authorized prior to any detailed studies. The process assumes there will be the need for post-authorization changes that may not require post-authorization change reports to Congress.
8. Stoppages in project planning or project implementation (budgetary and other) that require the reevaluation of the project or certain components.
9. Development, review, revisions to and implementation of mitigation plans (e.g., acquisition of separable mitigation land), and management plans and general plans for fish and wildlife.
10. Involvement during construction to insure that mitigation measures are adequate and properly installed, and to address unforeseen impacts.
11. Mitigation follow-up and monitoring; development and involvement in monitoring plans.
12. Involvement in final design and construction of restoration projects and other types of projects with a fish and wildlife restoration component.
13. Design and implementation of beneficial uses of dredged material projects.

14. Changes in maintenance plans (e.g., development of new disposal sites and/or changes in dredging alignments for maintenance dredging projects).

Continuing Authority Studies

As with feasibility studies, the first potential opportunity for Service input to a continuing authority program (CAP) study comes during budget year transfer fund negotiations (Figure 3.4). However, since CAP projects may be proposed at any time during the year, close coordination with the Corps should be maintained to be aware at the earliest possible time of proposals. Scopes of work should be developed for FWS involvement in project planning. For projects where there is no feasibility phase required, the SOW should include all work to be accomplished by the FWS, including the preparation of the 2(b) report.

The first Service report for the CAP projects that go through the reconnaissance phase of planning may be a PAR that should be provided early enough to influence the preparation of the Corps' reconnaissance report. Its purpose and emphasis is similar to that of a reconnaissance PAR for feasibility studies, although the complexity and level of detail may be less. If the planning process does not include the reconnaissance phase (as is the case with many CAP studies), the first input will be PAR/PAL on the early portion of the planning process (PRP or PDA, as described earlier).

For projects where the planning is completed by the PRP or PDA, plan formulation input should be provided as necessary and a draft and final 2(b) report should be prepared for inclusion in the Corps planning documents. If the effort will continue into the feasibility phase, the Service should also develop a SOW with the Corps that details the activities, tasks, and the associated schedule and level of effort for FWCA. The SOW should be incorporated into the PMP and cost-sharing agreement for the feasibility phase or equivalent documents.

Plan formulation input should be provided as necessary during the feasibility phase. A draft 2(b) report should be submitted early enough to influence the preparation of the draft feasibility report. Following Division and public review of the draft feasibility report, the draft 2(b) report will be revised as necessary and finalized early enough to be made an integral part of the final feasibility report. Although these projects are generally less complex, the 2(b) report is the same in purpose and requirement as that prepared for feasibility studies. Therefore, previous guidance applies.

H. Implementing Procedures for Participating in the Corps Planning Process through the National Transfer Fund Agreement.

All discussions thus far have emphasized that effective involvement in the Corps planning process requires an understanding of the process and consistent procedures for interacting within that process. The national FWCA transfer fund agreement identifies planning and reporting

requirement and establishes the procedures to secure the necessary funds (see Chapter IV, Section H).

The transfer of funds from the Corps to the FWS for FWCA activities is authorized by Section 2(e) of the FWCA. The established procedures for transferring funds are set forth in the 2003 transfer fund agreement which replaces the agreement of 1980 and its 1982 amendments. A scope of work (SOW) formally establishes time schedules, information transfer requirements, tasks to be accomplished, reporting requirements, and funding amounts that are binding upon both agencies. Four things need to be accomplished in the transfer funding process:

1. SOWs, like the procedures themselves, should be specific to the type of study and the phase of planning.
2. The reporting requirements and schedules established in each SOW should be consistent with the phase of planning and activities to be accomplished;
3. The tasks and activities identified in the SOW should be consistent with the two basic requirements of a 2(b) report (see Chapter VI) and with the evaluation framework steps defined in Chapter V.
4. SOWs should be developed, reviewed, and revised on a schedule that is consistent with the Corps budget cycle and the planning and reporting schedule in question.

The emphasis on transfer funding has historically been on what will be done in any given year (i.e., activities are identified for the current fiscal year, action fiscal year (FY + 1) and the budget fiscal year (FY + 2)). Although it is important that activities be identified by fiscal year, they should be defined by the phase of planning and the type of study. In this regard, for feasibility studies and CAP and “other studies” described earlier, there should be a SOW specific to the reconnaissance phase (if present) and another specific to the feasibility phase. There should also be a SOW specific to any PED activities. Each SOW could be multi-year, and because funds are transferred on a fiscal year basis, the tasks and activities must be specific to fiscal year. By having SOWs specific to study phase and type, annual negotiations will be an issue of reviewing and revising the SOW.

I. When FWCA Responsibilities Cannot Be Fulfilled by the “2(b) Report”

The procedures for fulfilling Service responsibilities in the corps planning process as described thus far assume that normal, established planning procedures that provide for adequate FWCA coordination are followed and that timely and sufficient project design data are available and provided to the Service prior to preparation of the 2(b) report. Under these conditions, the Service is able to fulfill the requirements of Section 2(b) by providing a report which provides 1)

clear documentation of the proposed project's impacts on fish and wildlife resources and 2) specific recommendation as to the measures that should be taken to conserve those resources.

In reality, any number of problems may arise during a given study that may make it impossible for the Service to fully meet the two basic requirements. These problems may stem from insufficient or untimely data as a result of coordination problems (e.g., inadequate transfer funds or failure of the Corps to provide available information on a timely basis), or they may occur as a result of circumstances beyond the control of the Corps (e.g., the information needed cannot be provided until the actual design of the project begins. Project delays may also affect the ability to complete project evaluations or may result in the need to reevaluate aspects of the project or planning process.

Due to the uniqueness of each study or project, specific "procedures" for handling each potential problem cannot be established. However, as a general policy, the Service should not provide a report that fulfills the statutory requirements of Section 2(b) unless and until adequate data are available fulfill its mandate in good faith. The FWS should provide a report to accompany the Corps report regardless of the adequacy of the data on which the evaluation is based. However, in such instances, the FWS report should contain the following information.

1. The report should clearly state that it is presented in partial fulfillment of the FWCA and does not constitute the final report of the Secretary of the Interior as required by Section 2(b) of the FWCA.
2. The reasons that the report does not constitute the final 2(b) report should be clearly presented and documented. This requirement makes it essential that the Ecological Services field office officially document coordination problems as they occur.
3. The remaining coordination, data, and analyses necessary to fully comply with the FWCA should be identified as clearly and specifically as possible.

While the reasons behind the Service's inability to fulfill Section 2(b) requirements do not affect the above policy, they could very well affect the Service's recommendations and position as presented in the report. If inadequate coordination resulting in insufficient or untimely data is the reason the 2(b) report cannot be provided, the Service may take the position that the Corps report not be submitted for project authorization, or that further Corps study not be initiated until the necessary data are provided and the final 2(b) report submitted. On the other hand, the Service may not oppose authorization and/or further study if provisions for completion of needed FWCA coordination are recommended in the Corps report. Such a position may be particularly appropriate when adequate project data cannot be provided prior to detailed design studies. In this regard, it is not uncommon for substantive impacts to hinge on design issues or construction techniques and thus impacts cannot be assessed or recommendations made at the time of report submission. In these situations it is essential that the FWS report define the coordination

necessary during design, construction, and/or operation and state that the requirements of Section 2(b) will not be fulfilled until this coordination is completed.

This policy recognizes that Section 2(b) requires not simply a report, but rather surveys and recommendations for the purpose of determining the possible damage to wildlife resources and means and measures that should be adopted to prevent the loss of or damage. If these tasks cannot be completely fulfilled at the time the report is submitted, they must be completed during ensuing coordination.

CHAPTER V

EVALUATION FRAMEWORK

A. Introduction

As discussed in earlier chapters, the FWCA provides the FWS with the authority and responsibility to conduct surveys and investigations of proposed water projects to determine potential impacts on fish and wildlife (evaluating), and to develop recommendations for preventing negative effects. In addition, the FWS can offer strategies for improving the quality of habitat. The purpose of this chapter is to provide an orderly, analytical evaluation framework to guide the FWS biologist through the assessment of impacts and the development of conservation measures. This chapter closely follows previous guidance developed for the FWS southeast Region (Baxter, et al. 1986).

The fish and wildlife evaluation framework (Framework) is a step-by-step procedure designed to direct thoughts and activities through an orderly process for developing well-founded findings and recommendations consistent with “good, sound biology” and FWS policy and guidance. It basically presents a series of actions (in the form of steps) that should help lead the biologist to effective and creative participation in the planning process and fulfillment of FWCA responsibilities. The Framework parallels the basic steps of planning contained in the Principles and Guidelines, as discussed earlier (see Chapter III, Section E).

The products of the Framework steps are ultimately the written items of content that comprises an FWCA report (see Chapter VI). Thus, this framework is guidance, the application of which will help organize a biologist's involvement under the FWCA and lead to a well written and thorough FWCA report that will be consistent with the goals of the law. It should be remembered that these steps are meant only as guidance and are flexible. Some adjustments to the steps may be called for in some instances. The order of steps may be altered without compromising the effectiveness of the process. However, following these steps in basically the form given should help the biologist to address project planning in a systematic way that avoids extra time and effort in going back to accomplish tasks that should have been done earlier.

There are often constraints that may limit the level of detail in each step. These constraints may include insufficient funds, insufficient time, the phase of planning involved, the significance of the resources likely to be affected, and the likelihood of successfully achieving fish and wildlife conservation goals. Development of adequate scopes of work (SOW) for transfer funding purposes should reduce these constraints considerably (see Chapter IV, Section H), but it is unlikely that all such constraints can be eliminated.

Depending upon the above constraints, application of the Framework may range from general to detailed. A reconnaissance phase progression through the Framework may be very general, even categorical. However, analyses and evaluations will not be complete and thorough until all steps are completed, if only in a very general manner. In this regard, completeness and thoroughness are not necessarily synonymous with a high level of detail. Regardless of the level of detail, following the Framework's sequential steps will help orient the thought process to those activities essential to producing a quality FWCA report.

B. The Evaluation Framework

Fulfillment of FWCA responsibilities ultimately requires that the FWS prepare a 2(b) report that provides 1) clear documentation of the proposed project's impacts on fish and wildlife resources and 2) specific recommendations as to the measures that should be taken to conserve those resources. Until these tasks are completed, the FWS cannot consider that all FWCA requirements have been met. Before the 2(b) report can be completed, there are four basic questions that need to be answered:

1. What are the resources likely to be affected?
2. What are the alternatives being considered or evaluated?
3. What are their impacts?
4. What will be recommended to conserve fish and wildlife resources?

The 13 steps that follow (summarized in Table V-1) constitute the Framework through which these four questions may be answered. Like the six steps of planning discussed in Chapter III and agency planning processes, the Framework will be applied in an iterative manner (i.e., it may be necessary to repeat all or a portion of the evaluation steps several times during the course of a study). Even though the level of detail in each step may vary considerably, it is necessary to complete all steps at each study phase requiring a FWCA report. As noted above, alteration in the order of the steps is acceptable, as long as the basic Framework is maintained to provide a systematic and logical approach to involvement in project planning. The products of these steps will provide the content of the FWCA report (see Chapter VI).

A prerequisite to the application of the Framework is defining the potential impact area, at least in a general way. This should include the areas that could potentially be impacted as a result of direct, secondary, and cumulative impacts. Only after the general impact area(s) has been identified can the resources that may potentially be impacted be identified and problems and opportunities from a fish and wildlife resources standpoint be considered. This process will be refined in Step 3 of the Framework. The impact area will include both terrestrial and aquatic

Table V-1
Summary of Evaluation Framework Steps

1. Specify the resources likely to be impacted.
2. Adopt an evaluation method or methods.
3. Define the baseline condition and significant resources likely to be impacted.
4. Determine the most probable future resource conditions without the project.
5. Define resource problems, opportunities, and planning objectives.
6. Define the alternatives.
7. Determine the most probable future resource conditions with project alternatives.
8. Define impacts.
9. Evaluate and compare alternatives.
10. Formulate conservation measures and the FWS alternative.
11. Develop recommendations.
12. Establish the FWS position.
13. Write the report.

resources that might be directly and indirectly impacted. Initially, the impact area may be identified in general terms because specific project details are not available. While this may initially be somewhat of a liability, it will provide the biologist with a positive opportunity to influence the direction of project planning. FWS involvement can direct project development away from significant resources as well as provide the opportunity to restore and develop fish and wildlife resources where opportunities exist. This provides the FWS biologist with the

conservation of fish and wildlife resources. As planning progresses and plans and alternatives become more refined, so will evaluations of resources present and measures needed to protect and develop these resources.

Step 1: Specify the Resources Likely to be Impacted

The result of this step should be a determination of the types, kinds, or categories of resources that are of concern to the FWS and that are apt to be affected by a project, followed by a listing of the impacts that can and should be evaluated. The biologist need not be concerned at this point with describing or quantifying the resources or their impacts. The purpose of this step is to define the scope, direction, and emphasis of FWCA evaluations by first listing the resources and the impacts that should be evaluated.

Initially, the listing will be preliminary and can be formulated from a familiarity with the work area and similar projects and/or from a review of available resource information, conversations with area biologists, perhaps a brief site visit, and discussions with the planning agency about problems in the area and potential solutions. However, as later steps are completed and as the study progresses, the listing can and should be revised to serve as an up-to-date reference to the scope and emphasis of your evaluations. The resources being evaluated may be specified in terms of habitat (e.g., bottomland hardwoods, brackish marsh), species, groups of species (e.g., wintering waterfowl), or species life stage or life stage habitat requisites (e.g., mallard nesting, estuarine nursery habitat).

Step 2: Adopt an Evaluation Method or Methods

The purpose of this step is to determine (prior to expending significant effort on resource description, impact analysis, etc.) the way project impacts on fish and wildlife resources will be measured or otherwise defined. Once the types, kinds, or categories of resources and impacts to be evaluated have been determined (Step 1), the technique (procedure or methodology) to be used to measure changes in the quantity and/or quality of each category of resource should be specified. This involves decisions whether to measure impacts in terms of acres filled, acres isolated from tidal influx, changes in "habitat units" (HUs), etc. Making these decisions up front and consciously will have a marked effect on how efficiently and effectively the remaining Framework steps may be completed

For example, the Instream Flow Incremental Methodology (IFIM) may be used as an evaluation method if there are significant riverine resources within the study area that are likely to be affected by alternatives that would alter the magnitude or timing of flows (this decision is made as a result of Step 1). Once this decision is made, it will provide focus and direction to which resources are ultimately described in the FWCA report (and which are not), how they are described, how problems and needs are defined, and how impacts are discussed. As indicated in Step 1, the resources and impacts being evaluated may change during the course of the study due

to such things as more detailed analyses or the addition or deletion of alternatives. If so, it will be necessary to reassess and possibly change the evaluation method(s) being used.

The FWS's Mitigation Policy (FR 46(15):7644-7663; Appendix I) specifies that the Habitat Evaluation Procedures (HEP, 102 ESM) "will be used by the FWS as a basic tool for evaluating project impacts and as a basis for formulating subsequent recommendations for mitigation subject to the exemptions in the Ecological Services Manual." When HEP does not apply, then other evaluation systems may be used provided such use conforms with policies provided herein. The policy also specifies that "where instream flows are an important determinant of habitat value, consideration should be given to the use of the FWS's Instream Flow Incremental Methodology."

HEP and IFIM were two of the earliest techniques developed to quantify impacts. Since then many other techniques have been developed by the Service and others. The Hydrogeomorphic Methodology is an elaborate, but very useful tool for quantifying wetland impacts. Other tools that can be used are the Habitat Evaluation System (Corps of Engineers), Rapid Bioassessment (EPA), and the "duck-use-days" method developed by the Service in the Mississippi Alluvial Valley. New techniques are frequently developed, and you should use the tool that fits your resources and planning environment the best.

FWS guidance, therefore, requires that a quantitative methodology consistent with identification of "resource categories," as defined in the FWS Mitigation Policy, be used whenever possible. In those instances when a quantitative approach is not possible, the policy provides the following guidance: "Where specific impact evaluation methods or mitigation technologies are not available, Service employees shall continue to apply their best professional judgment to develop mitigation recommendations." Traditional analysis such as user-days for recreation or wildlife, population censuses, or other similar information, can be used to support best professional judgment. However, Service recommendations for acquisition of separable mitigation lands should always be supported by a quantitative methodology.

The FWS now uses the traditional analysis less and less and has expanded the use of habitat-based procedures. However, a simple display of HU's gained or lost will generally not be considered a complete analysis of impacts. Evaluation methods should include more traditional units of measures such as acres of habitat, user-days, acre-days of flooding, commercial landings, or carrying capacity. Despite a tendency to avoid assigning monetary values to fish and wildlife resources, we must remember that in passing the 1958 FWCA amendments, Congress stated that these resources "are tremendously important . . . to our national economy" (Senate Report No. 1981). Quantifying user-days and assigning a dollar value is not an indication that fish and wildlife resources are "for sale" but that they do contribute to the national economy just as do flood protection, hydropower, navigation, and other water resource development purposes. Quantifying this use and its value simply supplements and increases the value of resources the Service is trying to conserve. Section 3.4.4 in P&G provides some useful guidance on selection of evaluation methods and presents various techniques that may be used.

Step 3: Define the Baseline Condition and Significant Resources Likely to be Impacted

Whereas Step 1 identified the resources to be evaluated, the purpose of this step is to define the quality, quantity, and significance of those resources. It establishes the existing baseline conditions of the resource that ultimately support all future projections, impact evaluations, and mitigation recommendations. The definition of the quality, quantity, and significance of resources likely to be affected provides the necessary “justification” for all FWS recommendations from initiation of the study through project construction and operation.

National environmental policy requires that only losses of and damages to significant resources must be avoided, minimized, and compensated. The Mitigation Policy is based on the premise that levels of mitigation must be consistent with the resource values involved. Failure to establish and document the significance of the resource base is likely to result in unmitigated losses of fish and wildlife resources. Thus, the importance of this step cannot be overemphasized.

The area of impact should first be delineated; this may or may not coincide with the study area, depending upon the expected extent of impacts. Once the impact area (the FWS's study area) is delineated, the significance of existing resources may be established in terms of institutional, public, or technical recognition that the resources are important. A given resource may be significant as defined by any one or all of these criteria. Existing resources should be evaluated against all three criteria to establish full significance. Clearly documenting the significance of affected resources is the only manner way to firmly establish a foundation adequate to justify recommended mitigation measures.

The key words in this step are significant and likely to be impacted. The P&G (see Chapter III, Section E) provide guidance on these aspects for Federal water resources development planning. The focus in resources definition should be on those resources that are of concern to the FWS and likely to be impacted by the project. Concentrating efforts to these resources establishes the limits or “sideboards” necessary to effectively participate in the planning process where time and funds are typically limited.

Three types of significance are discussed in P&G:

Institutional Significance – Significance based on institutional recognition means that the importance of the resource is acknowledged by laws, adopted plans, and other policy statements of public agencies or private groups. Using this definition, there should seldom be difficulty establishing the institutional significance of resources under the FWS's direct jurisdiction, such as migratory birds, anadromous fishes, and endangered and threatened species. Identification and description of resources in terms of the Mitigation Policy, species of concern, endangered and threatened species, anadromous fishes, and migratory birds should always be included in FWCA reports. The Mitigation Policy requires the earliest possible identification of resource categories. Coordinating with other Federal, State, and local agencies and private

groups can help in the identification of the institutional significance of resources not under direct FWS management authority. Table V-2 presents a partial list of laws, policies, and plans which should be used in defining institutional significance of resources.

Public Significance – Significance based on public recognition means that some segment of the general public recognizes the importance of the resource. According to P&G, this recognition may take the form of controversy, support, conflict, or opposition and may be expressed formally or informally. Published surveys on public attitude regarding fish and wildlife resources, environmental protection, wetlands protection, and other environmental issues provide excellent bases for establishing public significance. Good coordination with environmental and other public groups, colleges, and individuals is an invaluable asset when attempting to establish public significance of resources.

Technical significance – Significance based on technical recognition means that the importance of the resource is based on scientific or technical knowledge or judgement of critical resource characteristics. One example given in P&G is “a meadow identified by a wildlife biologist as the major breeding ground for a deer herd.” FWS development of Habitat Suitability Index (HSI) models and species and community profiles indicates that certain species and communities are of particular technical significance. Individual research projects conducted by the FWS, NOAA-Fisheries, State wildlife agencies, universities, cooperative research units, and numerous other management or research institutions are also indicative of technical significance.

Step 4: Determine the Most Probable Future Resource Conditions without a Project

The basic principle of impact assessment is that the impacts associated with a given activity are defined as the differences between the future without and the future with the project (e.g., NEPA, P&G, Mitigation Policy, HEP). The FWS and its planning partners must therefore predict the future condition of fish and wildlife resources without any project; in essence, they must ask “are these resources expected to experience losses, gains, or remain the same during the period of analysis.” The period of analysis will generally coincide with the economic period of analysis being used by the planning agency. However, Section 3.4.7(f) of P&G allows the use of a differing period of analysis if necessary to fully describe impacts.

Table V-2*
**Laws, Policies, and Plans Relevant to Establishing the
Institutional Significance of Fish and Wildlife Resources**

NOTE: Internet locations for most of the laws cited below are summaries in the FWS's Digest of Federal Resource Laws (<http://laws.fws.gov>). Updated in 2003, the digest is a comprehensive listing and description of Federal authorities under which the FWS functions. A listing of all laws in the digest can be found at <http://laws.fws.gov/lawsdigest/reslaws.html>. Also included in this table are the U.S. Code citations for most of these laws. The U.S. Code may be accessed online at <http://uscode.house.gov/usc.htm>. THOMAS refers to the Library of Congress legislative information at <http://thomas.loc.gov>.

**Laws and Policies Delegating Specific Resources Management Authorities to the
Department of the Interior and/or Fish and Wildlife Service**

Anadromous Fish Conservation Act (16 U.S.C. 757a-757g)
<http://laws.fws.gov/lawsdigest/anadrom.html>

Federal Aid in Sport Fish Restoration Act (16 U.S.C. 777-777k)
<http://laws.fws.gov/lawsdigest/fasport.html>

Fish and Wildlife Coordination Act (16 U.S.C. 661-667e)
<http://laws.fws.gov/lawsdigest/fwcoord.html>
Also in App. C of this document

Fishery Conservation and Management Act of 1976 (16 U.S.C. 1801-1882)
<http://laws.fws.gov/lawsdigest/fishcon.html>

Migratory Bird Conservation Act (16 U.S.C. 715-715d, 715e, 715f-715r)
<http://laws.fws.gov/lawsdigest/migbird.html>

Migratory Bird Hunting and Conservation Stamp Act (16 U.S.C. 718-718j)
<http://laws.fws.gov/lawsdigest/mighunt.html>

Migratory Bird Treaty Act (16 U.S.C. 703-712)
<http://laws.fws.gov/lawsdigest/migtrea.html>

Wetlands Loan Act (16 U.S.C. 715k-3 - 715k-5)
<http://laws.fws.gov/lawsdigest/wetloan.html>

Lacey Act Amendments of 1981 (16 U.S.C. 3371-3378)
<http://laws.fws.gov/lawsdigest/lacey.html>

Federal Aid in Wildlife Restoration Act (16 U.S.C. 669-669i)
<http://laws.fws.gov/lawsdigest/fawild.html>

Endangered Species Act (16 U.S.C. 1531-1544)
<http://laws.fws.gov/lawsdigest/esact.html>

Bald Eagle Protection Act (16 U.S.C. 668-668d)

<http://laws.fws.gov/lawsdigest/baldegl.html>

Wild and Scenic Rivers Act (16 U.S.C. 1271-1287)
<http://laws.fws.gov/lawsdigest/wildriv.html>

Estuary Protection Act (16 U.S.C. 1221-1226)
<http://laws.fws.gov/lawsdigest/estuary.html>

Coastal Barrier Resources Act (16 U.S.C. 3501 et seq.)
<http://laws.fws.gov/lawsdigest/coasbar.html>

Cooperative Research and Training Units Act (16 U.S.C. 753a-753b)
<http://laws.fws.gov/lawsdigest/coopres.html>

Land and Water Conservation Fund Act (16 U.S.C. 4601 - 4601-11)
<http://laws.fws.gov/lawsdigest/lwcons.html>

Marine Mammal Protection Act (16 U.S.C. 1361-1407)
<http://laws.fws.gov/lawsdigest/marmam.html>

National Fish Hatchery Acts
<http://laws.fws.gov/lawsdigest/nfhacts.html>

National Trails System Act
<http://laws.fws.gov/lawsdigest/ntrails.html>

National Wildlife Refuge Acts
<http://laws.fws.gov/lawsdigest/nwracts.html>

National Wildlife Refuge System Administration Act (16 U.S.C. 668dd-668ee)
<http://laws.fws.gov/lawsdigest/nwrsact.html>

Recreation Coordination and Development Act (16 U.S.C. 4601 - 4601-11)
see Land and Water Conservation Fund
<http://laws.fws.gov/lawsdigest/lwcons.html>

Refuge Recreation Act (16 U.S.C. 460k-460k-4)
<http://laws.fws.gov/lawsdigest/refrecre.html>

Sikes Act (16 U.S.C. 670a-670o, 74 Stat. 1052)
<http://laws.fws.gov/lawsdigest/sikes.html>

Wilderness Act (16 U.S.C. 1131-1136)
<http://laws.fws.gov/lawsdigest/wildrns.html>

U.S. Fish and Wildlife Service Mitigation Policy
<http://www.fws.gov/r9dhubfa/HPMPOL.htm>
Also Appendix I to this document

Interagency Mitigation Banking Policy
<http://www.epa.gov/owow/wetlands/mitbankn.html>

Other Laws and Executive Orders Establishing Institutional Significance

Archeological and Historic Preservation Act (16 U.S.C. 469-469c-2)
<http://www2.cr.nps.gov/laws/archpreserv.htm>

Coastal Zone Management Act (16 U.S.C. 1451-1464)
<http://laws.fws.gov/lawsdigest/coaszon.html>

Clean Water Act (33 U.S.C. 1251 et seq.)
<http://www.epa.gov/region5/defs/html/cwa.htm>

Federal Water Project Recreation Act (16 U.S.C. 460(L)(12)- 460(L)(21))
<http://laws.fws.gov/lawsdigest/fwatre.html>
Also in Appendix F, this document

Marine Protection, Research and Sanctuaries Act (33 U.S.C. 1401-1445)
<http://laws.fws.gov/lawsdigest/marprot.html>

National Environmental Policy Act (42 U.S.C. 4321-4347)
<http://laws.fws.gov/lawsdigest/natlep.html>

Renewable Resources Extension Act (16 U.S.C. 1671-1676)
<http://laws.fws.gov/lawsdigest/renewre.html>

Sustainable Fisheries Act
http://www.nmfs.noaa.gov/sfa/sustainable_fishereries_act.pdf

Water Bank Act (16 U.S.C. 1301-1311)
<http://laws.fws.gov/lawsdigest/watrbn.html>

Water Resources Development Act of 1986
Summary: <http://laws.fws.gov/lawsdigest/wat1986.html>
Text: THOMAS Web Sites under Public Law 99-662

Water Resources Development Act of 1988,
Summary: <http://laws.fws.gov/lawsdigest/wat1988.html>
Text: THOMAS web site under Public Law 100-676

Water Resources Development Act of 1990
Summary: <http://laws.fws.gov/lawsdigest/wat1990.html>
Text: THOMAS web site under Public Law 101-640

Water Resources Development Act of 1992
Summary: <http://laws.fws.gov/lawsdigest/wat1992.html>
Text: THOMAS web site under Public Law 102-580

Water Resources Development Act of 1996
Summary: <http://laws.fws.gov/lawsdigest/wat1996.html>
Text: THOMAS web site under Public Law 104-303

Water Resources Development Act of 1999
Text: THOMAS web site under Public Law 106-109

Water Resources Development Act of 2000
Text: THOMAS web site under Public Law 106-541

Executive Order 11988: Floodplain Management

<http://www.usace.army.mil/inet/functions/cw/cecwo/reg/eo11988.htm>

Executive Order 11990: Protection of Wetlands

<http://www.wetlands.com/fed/exo11990.htm>

NOTE: The listed Water Resources Development Acts (WRDA) include a number of specific authorizations for environmental purposes, projects and project mitigation. Appendix M to this document contains the Corps' environmental authorities.

Future without predictions – Future without predictions should be made only to the level of detail necessary to evaluate project impacts on fish and wildlife resources (i.e., focus only on those factors that have a bearing on the future quality and quantity of fish and wildlife resources being evaluated – see Step 1). Principles and Guidelines provide some useful guidance on factors that should be considered when predicting future without conditions and on general forecasting approaches that may be used (Section 3.4.7). The Mitigation Policy also states the following:

If the future without the action cannot be reasonably predicted and documented by the project sponsor, then the FWS analysis should be based on biological conditions that would be expected to exist over the planning period due to natural species succession or implementation of approved restoration/improvement plans or conditions which currently exist in the planning area.

As the basis for impact assessment, the future without prediction is extremely important, particularly if the project will affect land use outside the immediate construction area (i.e., secondary, induced, and cumulative impacts). Some approaches are likely to result in erroneous and/or unsupported future predictions, such as use of incomplete or inaccurate data; unquestioned acceptance of someone else's prediction; or inadequate consideration of laws, policies, and adopted plans for resource conservation and restoration. The consequences of such errors may range from significant and unmitigated project-induced resource losses to erroneous conclusions that discredit the FWS's position and future study efforts.

Uncertainty, risk, and sensitivity – Not surprisingly, making future resource condition predictions is often referred to as the “crystal ball” step. Even with guidance from P&G and the Mitigation Policy, there remains a certain degree of uncertainty and risk associated with any future projection.

“Uncertainty” relates to the level of confidence placed on, or the reliability of, estimates or predictions. Uncertainties abound and are inherent within the disciplines that are brought to bear on impact analyses (i.e., the ecological, physical, and social sciences). Since impact analyses involve the prediction and estimation of physical, social, and associated ecological responses

under several hypothetical alternative scenarios over a period of 50 years or more, uncertainties are virtually guaranteed.

“Risk” relates to the consequences of making a wrong decision because of erroneous assumptions, estimates, and/or predictions. Associated with these consequences are two fundamental attributes – magnitude and probability. The highest risk is associated with a high probability of large magnitude consequences (e.g., significant unmitigated resource losses), while lowest risk is associated with a low probability of small magnitude consequences. A range of intermediate risks exists between these two examples.

“Sensitivity” deals with the relationship between the degree of error in basic assumptions or predictive models and the results of impact analyses. Sensitivity analysis involves an examination of the effect of a change in the value of some key parameter on the outcome of the overall impact analysis. For example, if a 5 percent change in the expected acreage of bottomland hardwood forest to be cleared in response to a flood control project results in a 50 percent increase in the acreage required for compensation, the analysis would be considered highly sensitive to clearing predictions, and one should strive for the most reliable estimate of induced clearing. Alternatively, if a 30 percent change in the HSI value for the gray squirrel results in only a 2 percent change in net project impacts, the analysis would be considered relatively insensitive to estimates of the parameters that drive the gray squirrel model, and one might be willing to accept a greater degree of uncertainty in these estimates.

P&G (Section 1.4.13) recognizes that some degree of uncertainty and risk is inevitably associated with impact analyses and directs these factors associated with project benefits and costs (impacts) to be clearly described “so that decisions can be made with knowledge of the degree of reliability of available information (Water Resources Council 1983).” If the uncertainties and risks associated with impact analyses have a material bearing on the magnitude of impacts (i.e., significant uncertainty and/or moderate to high sensitivity exists), then those uncertainties and risks should be fully explained and documented in FWCA reports. For example, the following questions should be asked and answered. What is the probability (in qualitative terms unless statistics are available) that predictions are wrong? What factors could change projections? How and to what degree can these factors affect projections? Would these factors result in lesser or greater net project benefits or costs?

Alternative Future without Scenarios – When the degree of uncertainty and risk associated with predicting future resource conditions without a project is great, one possible solution is to develop alternative scenarios. This is consistent with P&G guidance that states a “range of reasonably likely outcomes can then be described by using sensitivity analysis – the technique of varying assumptions as to alternative economic, demographic, environmental, and other factors, and examining the effects of these varying assumptions on outcomes of benefits and costs (Water Resources Council 1983).” When a great deal of uncertainty or disagreement exists about future resource conditions, use of alternative future scenarios may be “the only effective manner in which to clearly show decision makers the degree of uncertainty and risks associated

with potential project impacts and thus the varying levels of mitigation that may be necessary to offset those impacts.”

Habitat assessment using HEP requires projections of future resource conditions that are directly relevant to this step. Results of the HEP analysis may be used to qualitatively (HSIs) and quantitatively (acreage, habitat units – HUs) describe future resource conditions without a project. Because the HEP are designed to specifically track changes in land use and habitat quality, developing alternative scenarios is particularly pertinent. When HEP are used and a great deal of uncertainty and risk is associated with evaluated alternatives, alternative scenarios for future resource conditions should be developed and analyzed.

Step 5: Define Resource Problems, Opportunities, and Planning Objectives

As required by the FWCA, equal consideration of fish and wildlife resources begins with a clear assessment of fish and wildlife problems, opportunities, and planning objectives. Thus, in this step specific resource problems and needs must be identified, including opportunities for conserving or enhancing resources, and fish and wildlife resource planning objectives must be established. Concise planning objectives will set the direction of the study in relation to fish and wildlife.

P&G encourages the use of brief, active, positive statements expressed in terms of a desired output (e.g., “To assist in the development of waterborne commerce in the lower Cape Fear River” and “To meet the demands of recreational boating in the St. John's River”). Similar phrasing of FWS objectives is most effective. While the Mitigation Policy is not binding on any other agency, the FWS should always establish planning objectives in FWCA reports that are consistent with the policy. For example, an objective could state: “To conserve in-kind the habitat values associated with the forested wetlands in the Tombigbee River Basin.”

Step 6: Define the Alternatives Relative to their Potential Impacts on Fish and Wildlife

Alternatives developed by the planning agency should be defined only to the degree necessary to relate proposed project features to resource impacts. Details regarding proposed design, implementation, and operation of the alternatives and/or the selected plan should be defined sufficiently to permit a clear understanding of project-induced changes in conditions such as land use, water regimes, and water quality, and to support discussions of project effects on fish and wildlife resources. Features relevant to or causing impacts, such as reservoir pool elevations, surface acres or stream miles flooded, or changes in stream flow or channel characteristics should be defined. If the project is to be operated in conjunction with one or more existing projects in a manner that affects resources – such as a new reservoir above or below an existing reservoir – the proposed coordinated operation with these projects should be defined.

In early planning such as the reconnaissance phase, alternatives are typically defined only in general terms. Thus, definition of alternatives relative to potential impacts will also be general,

perhaps even categorical. As the planning process proceeds in the feasibility phase, however, alternatives will be developed in more specific detail and definition of impacts should reflect this progression.

Step 7: Determine the Most Probable Future Resource Conditions with Identified Alternatives

As discussed under Step 4, the basic principle of impact assessment is that impacts associated with a given activity are those differences between the future without the project condition and the future with the project condition. Step 7 must produce the assessment of the future with the project condition. Guidance on level of detail, sensitivity analysis, alternative scenarios, and HEP utilization provided in Step 4 is equally applicable here.

It is usually unnecessary to make projections of future conditions associated with every alternative. The level of detail commonly associated with early planning efforts (the reconnaissance phase) may not allow or require a discussion of future conditions in specific or quantitative terms. Likewise, early in the feasibility phase some alternatives will be screened from further consideration, making future with projections unnecessary. However, providing projections of future resource conditions for any alternative of concern to the FWS may influence the screening process to help eliminate alternatives with greater resource impacts and favor those with lesser impacts and/or those that make positive contributions. Therefore, use future projections, as necessary, to encourage or discourage further consideration of particular alternatives.

In determining the need for projecting future with the project conditions, several points should be considered:

1. the potential that the alternative in question may result in significant impacts;
2. the potential of the alternative to conserve fish and wildlife consistent with the FWCA; and
3. the likelihood of the alternative being carried into feasibility phase study or being selected as the recommended plan.

While the 2(b) report may or may not address future resource conditions associated with every identified alternative, it should address conditions associated with the selected plan or any alternative being recommended by the FWS.

Step 8: Define Impacts

This step is comparable to that identified in P&G's environmental quality Evaluation Procedure as the "assess effects" phase (Sections 3.4.9-3.4.12, Water Resources Council 1983). Step 8 identifies and describes the effects of alternative plans on fish and wildlife resources. It consists

of three activities: comparing conditions without versus with the project to identify impacts, describing those impacts, and determining their significance.

Compare Conditions without Versus with the Project – Impacts are identified by comparing future resource conditions without a project (Step 4) to the future conditions with a project (Step 7). All resources identified in Step 1 should be addressed. Depending on the evaluation methods selected in Step 2, impacts may be identified in terms of changes in land use, cover types, user-days, commercial harvest, habitat acreage, HSI values, HUs, or other approaches. If HEP was used, annualized HUs for without and with the project conditions provide the basis for determining net project impacts.

Causal relationships between alternative features and impacts on fish and wildlife resources should be clearly identified (i.e., what particular feature of the alternative – dredging, spoil disposal, land clearing, water releases, etc. – will cause each specific impact identified).

Describe Impacts (Direct, Indirect, Cumulative) – Impacts should be described in terms of the following aspects.

Beneficial versus adverse: Does the impact represent a loss or gain of fish and wildlife resources? (Gains or losses in annualized HUs as displayed in HEP Form D may be used to determine the beneficial or adverse nature of impacts.)

1. Location: Identify the place where (or the area over which) the impact is expected to occur.
2. Duration: Define the time when the impact is expected to occur. (While duration is generally confined to the span of the project life, some impacts, such as the loss of a given habitat type or species, may exceed this period of time.)
3. Magnitude: Determine the size of the impact by examining the difference between the without-project versus with-project conditions. (Use of a quantitative evaluation procedure such as HEP or IFIM makes this procedure simple – changes in habitat acres, HUs, or available fishery habitat are easily calculated. If a qualitative evaluation procedure was used, the FWCA report must use a descriptive narrative to convey the magnitude of the impact.)
4. Reversibility/retrievability: Is the impact reversible such that the resource or its baseline values can be retrieved (restored) or is the resource or its values irretrievably lost?
5. Relationship to long-term productivity: Will the impact affect the long-term productivity of the resource and, if so, how?

Determine the Significance of the Impacts – According to P&G, this activity is performed to identify which of the impacts are significant (i.e., which are institutionally, publicly, or technically recognized as important to people and should therefore be taken into account in decision making). If Step 3 of the Framework was followed, only impacts on significant resources will have been identified and described. The significance of these impacts is then determined based upon the same three criteria of institutional, public, or technical significance used to determine resource significance (refer back to Framework Step 3 and also P&G Section 3.4.12 (Water Resources Council 1983)).

In summary, referring back to Chapter III to the Ecological Services biologist's five roles as planner, biologist, negotiator, coordinator, and conservation advocate, the results of Step 8 should be a product of the biologist role. Impacts should have been defined objectively, clearly, and concisely without judgment about their acceptability or whether they can or should be mitigated. This strong science basis helps clarify the FWS position on one alternative versus another. The next four steps are appropriate to the role of planner advocating equal consideration of fish and wildlife conservation.

Step 9: Evaluate and Compare Alternatives

The purpose of this step is to evaluate the relative merits of alternative courses of action and ultimately determine their acceptability from the standpoint of the FWS's mission to conserve, protect, and enhance the Nation's fish and wildlife resources. This evaluation, like any other, involves a degree of subjectivity. Yet, too often there is a tendency to equate subjectivity with a lack of credibility or an absence of rigorous analysis. This is not the case. A professional judgement stemming from the FWS's mission is not only acceptable but required. This judgement must be based on an objective analysis conducted through a logical, sequential framework.

The credibility of any evaluation is a function of the analysis supporting it and the criteria upon which it is made. If the preceding Framework steps have been carefully followed to document resource significance, establish clear fish and wildlife planning objectives, and define impacts, a solid and objective analytical base will be available for the evaluation and comparison of alternatives.

Using the information base from the preceding Framework steps, alternatives should be evaluated and compared against the following criteria:

1. Significance of fish and wildlife resource losses and gains;
2. Responsiveness to stated fish and wildlife planning objectives;
3. Extent to which impacts have been or can be avoided and/or reduced;

4. Extent to which unavoidable impacts have been or can be compensated; and
5. Acceptability of trade-offs.

Basic to the evaluation of a project is a determination of whether or not it reflects an equal consideration of fish and wildlife conservation. If the FWS position is predicated on the belief that there has not been equal consideration, the FWS rationale should be fully documented.

Trade-off analysis is an often overlooked aspect of the FWS's evaluation of alternatives. Too often, the words invoke a negative connotation; yet, a trade-off analysis is the most basic aspect of the equal consideration process. Essential to the concepts of equal consideration and trade-offs is the recognition that fish and wildlife resources and their benefits are existing – not something to be created but, rather, something to be conserved. The benefits accruing to other project purposes are, on the other hand, not extant; they must be created through some form of development. Thus any development decision involves a trade-off, whether conscious or otherwise, between existing values and values yet to be created. The essence of the FWCA is that the benefits of fish and wildlife resource conservation are to be considered equally with the benefits of other resource development.

The trade-offs between fish and wildlife conservation and other project purposes are easiest to define when impacts are clearly related to the project feature or purpose responsible for those impacts. However, a trade-off analysis should go beyond displaying and discussing impacts, and explain the rationale supporting the decision to incur or forego those impacts. For example, if an alternative is selected that would destroy 1,000 acres of wetlands, the trade-offs would be different if it is the least damaging alternative and compensation is provided than if 500 acres could have been avoided and project benefits reduced only 10 percent. Trade-offs would be different if it is a project to provide “100 year” frequency flood protection to a largely urban area than if it is an agricultural drainage project that depends on wetland conversion for its economic justification.

A trade-off analysis requires an evaluation of the extent to which fish and wildlife values (monetary and non-monetary) will be destroyed or degraded in order to produce other project-related benefits. A trade-off analysis is not a questioning of the accuracy of the benefits attributed to other project purposes. It is instead an analysis of whether the loss of fish and wildlife resources necessary to incur those benefits is in the public interest. Trade-off analysis is the essence of the process whereby “wildlife conservation shall receive equal consideration . . . with other features of water-resource development programs.” This trade-off analysis will frequently be difficult to quantify because different values are being lost and gained (i.e., economic benefits from increased agricultural production versus lost waterfowl habitat).

Step 10: Formulate Conservation Measures

Fish and wildlife conservation measures as specified in the FWCA consist of “means and measures that should be adopted to prevent the loss of or damage to such wildlife resources [mitigation], as well as to provide concurrently for the development and improvement of such resources [enhancement].” Mitigation and its components are discussed in detail in Chapter III, Section G. As defined by the Council on Environmental Quality and adopted by the FWS in the Mitigation Policy, mitigation includes:

- 1. Avoiding the impact** altogether by not taking a certain action or parts of an action;
- 2. Minimizing impacts** by limiting the degree or magnitude of the action and its implementation;
- 3. Rectifying the impact** by repairing, rehabilitating, or restoring the affected environment;
- 4. Reducing or eliminating the impact over time** by preservation and maintenance operations during the life of the action; and
- 5. Compensating** for the impact by replacing or providing substitute resources or environments.

These five actions as listed above should be viewed as being in priority order for formulating conservation measures (i.e., the FWS biologist should follow the five step process by identifying and evaluating measures for first avoiding; then minimizing, rectifying, reducing or eliminating; and finally compensating for project-induced resource losses. All mitigation measures formulated by the FWS should be consistent with the Mitigation Policy resource categories and their associated mitigation goals. Measures that would achieve full compensation (i.e., no net loss of habitat value) must be formulated for all but Resource Category 4 resources where the mitigation goal is only to minimize habitat losses (refer to the Mitigation Policy for specific resource category mitigation goals). The Mitigation Policy also discusses trade-offs between habitat types.

Enhancement measures result in a net increase in resource values under the “with project” condition compared to the “without project” condition. For any given type, kind, or category of resource being evaluated (Step 1), all project-associated losses must first be fully mitigated (including compensation to achieve full replacement, if needed) before any enhancement of that given resource can occur. For example, if wood duck HUs under “without project” conditions are 1,000 and the project would result in the loss of 500 HUs, mitigation measures to restore the “with project” condition to 1,000 HUs must first be developed (this represents full compensation). Any further measures that would increase the with project HUs for wood duck

to greater than 1,000 HUs would represent enhancement. Depending upon differing circumstances, a given project may result in loss of some resources, no net change in others, and enhancement of still others. The inability to fully compensate for losses of one or more resources does not necessarily preclude the enhancement of another resource.

During the reconnaissance phase, conservation measures will typically be formulated on a conceptual or general basis. However, any PAR should describe as specifically as is practicable how these measures would reduce impacts (e.g., a smaller channel would result in less severe alteration of flooding regimes, thereby affecting fewer acres of forested wetlands). Development of conservation measures should increase in detail as plan formulation proceeds and should be as specific as possible when addressing the selected plan, as specified in Section 2(b) of the FWCA. As developed, measures should be discussed with the Corps to ensure technical feasibility. Success in influencing the plan selection process for the benefit of fish and wildlife conservation will be directly related to the timeliness with which conservation measures are presented (the earlier, the better), and to the specificity with which the benefits and costs are identified.

The application of the five step mitigation process to the formulation of conservation measures generally requires the following actions:

- 1. Identify modifications to the selected plan or other evaluated alternatives that would avoid, minimize, rectify, or reduce adverse impacts.** If the selected plan or one or more of the alternative plans considered could be modified by the addition or deletion of certain features that would mitigate predicted adverse effects on significant fish and wildlife resources, identify those modifications. In discussions with the planning agency and in FWCA reports, describe specifically how and to what degree the identified modifications would mitigate the impacts.
- 2. Identify measures necessary to compensate for unavoidable impacts of the selected plan and other evaluated alternatives.** If after application of the first four mitigation steps significant resource losses remain, conservation measures determined necessary to compensate for those losses should be identified. The FWCA requires that the 2(b) report “shall be as specific as is practicable with respect to features recommended for wildlife conservation and development, lands to be utilized or acquired for such purposes, and the results expected.” (Section 2(b)).
- 3. Identify or formulate the plan in which trade-offs between fish and wildlife conservation and other project purposes are most consistent with the equal consideration provisions of the FWCA.** In the event that the construction agency has developed an alternative that meets the FWCA mandate of equal consideration for wildlife conservation, Step 10 consists of simply identifying that alternative. However, if none of the alternatives meet or could be modified to meet this criterion, the FWS biologist should attempt to identify a plan that does.

This may consist of selecting features from several plans to create a new alternative, developing an entirely new and different alternative, or stating preference for the “no action” alternative. With the widespread use of tools such as geographic information systems, formulating our own new and different alternative is a practical and effective way to participate creatively in the planning process and to bring our issues to the forefront. For the most effect, developing our own alternative should be done as soon as possible in the planning process.

When developing the FWS's recommended plan, remember that the FWCA requires that wildlife conservation must receive equal consideration and be coordinated with other features of water resource development programs. Clearly, the FWS plan must not be a single purpose plan for the development and improvement of fish and wildlife resources. It must address other water and related land resources needs consistent with meeting the equal consideration provisions of the FWCA (see Step 9, trade-off analysis discussion). To ignore this fact is to essentially make useless any efforts to formulate a recommended FWS plan.

This does not, however, foreclose the option of recommending the “no action” alternative. If progression through the Framework leads to the conclusion that the trade-offs associated with construction of any project are inconsistent with the FWCA's equal consideration provision or the five mitigation criteria listed in the Mitigation Policy (Section V.C.4.), then recommending the no action alternative is appropriate. In most cases, however, application of the five step mitigation process – avoiding, minimizing, rectifying, reducing or eliminating, and compensating – should result in development of an implementable plan consistent with the FWCA.

A non-structural alternative may present the best opportunities for solving water resources problems while often providing the least impacts on fish and wildlife resources. Such an alternative (such as floodplain evacuation) may also present significant opportunities to restore and maintain important fish and wildlife resources. Non-structural alternatives should be among those considered by the planning agency.

Step 11: Develop Recommendations

Completion of the preceding ten steps should lead to the development of recommendations for the purpose of incorporating wildlife conservation into any proposed water resource development project. Depending upon the study phase, these recommendations may be very broad or quite specific in scope. A particular consideration to keep in mind when developing recommendations is that once implemented, a conservation measure may need to be evaluated at some future date to determine its effectiveness. ***Measures for monitoring and associated adaptive management should always be considered and recommended to verify the performance of mitigation and other conservation features*** (see Section V.C.4. of the Mitigation Policy).

The FWS's goal should be to formulate recommendations that will be accepted and implemented or recommendations that, if not accepted, were rejected not on the basis of technical or engineering feasibility but on the basis of agency policy, views, or position. Interagency policy differences can be discussed and resolved; technical feasibility cannot. In this context, each recommendation should be thoroughly coordinated with the planning agency before being formally presented.

Step 12: Establish the Fish and Wildlife Service Position on the Project

The Framework has been developed to provide a logical and analytical procedure for establishing a solid and justifiable FWS position. The position of the FWS regarding what it would support, oppose, or not oppose under certain specified conditions is the culmination of all preceding efforts. Most often this position depends upon how the construction agency responds to FWS recommendations (i.e., if certain recommendations are not incorporated, the position would be to oppose the project). However, developing recommendation only does not establish the Service position. Step 12 is a separate and necessary action, although it is largely dependent on whether or not the construction agency accepts and incorporates the products of Steps 10 and 11 into the selected project plan.

1. **Alternative Plans:** Generally it is advantageous, and often it is necessary for effective input into the planning process, to establish a FWS position on certain alternative plans in a PAR prior to the construction agency's selection of a recommended plan. Early statements of FWS position regarding certain alternatives could aid the screening process and result in the selection of a recommended plan that is more responsive to fish and wildlife resource needs. The FWS should clearly provide a rationale based on fish and wildlife resource impacts for taking such a position.
2. **Selected Plan:** A clear FWS position on the planning agency's selected plan must be established and included in the 2(b) report. This would be in the form of expressing support, opposition, or no opposition provided certain specified conditions are met. A brief rationale for the position should be presented. The position should be consistent with the requirements of Section V.C.4. of the Mitigation Policy.
3. **Alternative FWS Plan:** If the FWS is recommending the implementation of an alternative other than the selected plan, the position statement should include a brief rationale for the selection of that alternative.

Step 13: Write the Fish and Wildlife Coordination Act Report

Perhaps this step should be more accurately defined as "complete the report," since report writing may begin well in advance of completion of the first 12 steps. However, the Framework

is an iterative process and theoretically the FWS biologist should have completed to some extent each of the preceding 12 actions prior to initiation of report writing in order to give the work direction and organization. See Chapter VI for guidance on report content, organization, and format.

CHAPTER VI

FISH AND WILDLIFE COORDINATION ACT REPORT CONTENT, ORGANIZATION, FORMAT, AND STYLE

A. Introduction

The FWCA imposes upon the Service a specific reporting responsibility as addressed throughout the preceding chapters. Results of surveys and investigations to determine possible damage to wildlife resources from water resource development projects, and means and measures to prevent loss of or damage to, as well as provide concurrently for development and improvement of these resources must be documented in reports to the Federal agency consulting under the FWCA. Chapter V presented a Evaluation Framework (Framework) of actions through which project impacts may be identified and evaluated and necessary conservation measures developed. It also provided some discussion on the inclusion of the results of Framework steps in FWCA reports. This chapter provides guidance for fulfilling FWCA reporting responsibilities. Careful application of the Framework steps will result in the development of the material needed to complete FWCA reports. Application of the Framework steps will result in the development of the material needed for FWCA reporting purposes.

This chapter deals with FWCA reports as specifically described in Section 2(b) for water projects planned by a Federal agency. It defines the information that should go into the various types of FWCA reports (content), a recommended sequence in which it should be arranged (organization), and the manner in which the report contents should be presented (format and style). For illustrative purposes in this chapter, the Corps of Engineers project planning and implementation studies – reconnaissance and feasibility studies, preconstruction engineering and design, and continuing authority studies – are used in discussing the types of FWCA reports. (Chapter IV discusses these Corps studies and associated Service reports in detail).

The material that follows does not deal in its specifics with FWCA reporting on permit applications nor to some of the other types of projects on which the FWS will provide written input. In addition, some of partner agencies may have specific procedures or additional requirements, such as the Federal Energy Regulatory Commission. Nevertheless, the reporting guidance discussed below for major Federal projects (using the Corps projects as the example) will be generally applicable to any involvement of the FWS where FWCA reports are necessary. While it may be necessary to vary the format or content to accommodate slightly differing

agency procedures, nevertheless the material below provides information on the general form and content of reports under the FWCA that can be adapted as necessary.

Despite the fact that proposed water resources development projects vary in scope, complexity, and significance of resources likely to be affected; that there are often time and funding constraints; and that studies do not always follow the “normal” planning procedure, the Service must still provide FWCA reports in a timely manner. Therefore, the guidance presented herein is intended to be specific but not inflexible.

The material that follows also does not present a prescribed format consisting of required headings for each type of report. Rather, emphasis is placed on the major items of content that should appear in the reports and the logical sequence in which these items of content should be presented. The items of content do not represent required headings of a report, but are the products that result from successful completion of each of the sequential steps (or actions) of the Framework. The adequacy of information available for each of the content items will be a direct result of the completeness and thoroughness of the application of the Framework. Section B (Content and Organization) contains frequent references to the Framework step responsible for a given item of content. Section C presents a format that has frequently been used successfully. However, the format should be adjusted to best display the report's contents. Judgement of the quality of a report will be based more on content and organization than on format.

B. Content and Organization

This section describes the subject matter that should appear in planning aid reports (PAR) and 2(b) reports, as well as the order in which it should be presented. The inclusion of specific subject matter should not be interpreted as requiring specific headings or subheadings in the report (e.g., the heading “Discussion” may be used for items of content related to evaluation of the selected plan and for discussion and justification of fish and wildlife conservation measures, or a section heading of “Introduction” may be used to discuss study purpose, scope, and authority. Report headings are discussed in Section C).

The content and organization of the 2(b) report are discussed first and in the greatest detail, as this report is ultimately the most important and all encompassing. Subject matter items included in both 2(b) reports and PARs are explained fully under the 2(b) report section. Content and organization of PARs are displayed in tables, with notations explaining content not covered in the 2(b) report section. Differences in the manner of treatment of certain items of content that appear in both PARs and the 2(b) report are reflected in the wording of the subject matter requirement, such as “evaluation and comparison of the selected plan and other evaluated alternatives” in the 2(b) report versus evaluation and comparison of potential alternatives in the reconnaissance phase PAR. Regardless of the type of report, as a general rule a short report is better than a long report. It is important not to leave out essential material just to make a report shorter, but it is equally important to avoid filling the document with information that is not

needed or relevant. A short report also may be more effective, will be easier to follow, and is more likely to be read thoroughly.

The 2(b) Report

Because this is the only Service report that, by law, travels through the complete decision making chain (including Congress for specifically authorized projects), it must be complete and capable of standing on its own. However, detailed information and data presented in previous PARs need not be repeated verbatim if summarization with reference to the original source is sufficient. Subject matter items are presented below in the sequence that has proven to be successful. Table VI-1 provides a summary of the content and organization of 2(b) reports.

Executive Summary

The most basic guidance that can be given regarding the content of an Executive Summary is that it should be written as if it were the only part of the report that will ever be read. The objective of the Executive Summary is to concisely present significant findings, conclusions, and recommendations, and to define pertinent (in particular, unresolved) issues. It should be brief and concise, rarely exceeding 3 to 4 single spaced pages; present only major significant information; and be directed at the policy and decision making levels. The Executive Summary should be written after the main body of the report is finished, and it should stand on its own in presenting and defining all issues, conclusions, and recommendations that warrant attention. It should provide a summary of the investigations, findings, and conclusions including some level of inventory and geographic delineation of existing and projected resource values, and project impacts to these resources, both direct and indirect. The Executive Summary should rely on the main body of the report for the detailed explanation, analysis, or justification for each point raised.

Identification of Purpose, Scope, and Authority (Both Construction Agency and FWS)

This section should cite the purpose and scope of, and authority for, the study. This information, contained in the authorizing legislation or Corps reconnaissance report, will provide a general “project description by defining why and where the study was conducted (e.g., to look at flood damage reduction solutions for the town) and what was addressed (e.g., the scope of the study included evaluation of reservoirs, channels, levees, and flow diversion structures). This section should also explain the type, purpose, scope, and authority for the FWCA report. It should state that the report does constitute the report of the Secretary of Interior as required by Section 2(b) of the FWCA. This statement should be contained in draft versions as well as the final, but clearly identified as draft reports.

Acknowledgment of Input, Coordination, and Concurrence (or Explanation of Non Concurrence) of State Fish and Wildlife Agency, and NOAA-Fisheries, If Appropriate

While this may be done in the transmittal letter, it should also be contained within the main body of the report, as the FWS-prepared document typically represents the report of the State as well (and NOAA-Fisheries, when appropriate).

Discussion of Prior Studies and/or Reports (Both the Construction Agency and/or FWS

It is both unnecessary and undesirable to list or discuss all studies and/or reports that may have been conducted or prepared on the study area or the identified water resources problems. Only those considered pertinent or relevant need be addressed. If a number of relevant studies and reports are available or if discussions are lengthy, they may be listed or briefly discussed here with details placed in an appendix. Reference should be made to any PARs that have been prepared upon which the 2(b) report relies.

Description of the Study Area

The goal of this section is to provide the reader with a brief but clear mental picture of the study area and an understanding of pertinent natural and/or socioeconomic features and resources. A figure showing the area will go a long way toward reaching these goals. Topics covered in this item of content may include but are not limited to the following: topography, climate, hydrology, soils, land use, natural history, biogeography, human demographics, industry, transportation facilities, and past water resource development. This discussion should be limited to only those characteristics of the study area that are of special pertinence to an understanding of the significant fish and wildlife resources, water resources problems, impacts of potential or selected solutions, and FWS interests and concerns. For example, if an understanding of the geologic history of the area is not important, it need not be discussed. However, if soil characteristics and agricultural land use practices are relevant to an understanding of potentially significant impacts, these should be discussed. The size of this section may vary depending on the complexities involved.

A general discussion of fish and wildlife resources may be included here. This information can be used to set the stage for later discussions. However, detailed descriptions of these resources should not be included here. This section should also define the geographic limits of the zone of project impacts (the area being analyzed by the FWS) and include an appropriate discussion if this area is different from the planning agency's study area.

Explanation of Fish and Wildlife Resource Concerns, Problems, Needs, and Planning Objectives (Framework Step 5)

This item of content, which should be more than a simple relisting of problems, opportunities, and planning objectives from previous PARs, may appear out of order at first glance; obviously, a clear understanding of existing and future resource conditions is necessary before FWS concerns and planning objectives can be identified. Indeed, defining resource problems, opportunities, and planning objectives (Framework Step 5) is an action that is taken only after identifying and defining resource conditions (Framework Steps 1, 3, and 4) and, in the reconnaissance PAR, this item of content is addressed only after a description of the resources.

Table VI-1
Summary of Content and Organization of 2(b) Reports

Executive Summary

Identification of Purpose, Scope, and Authority

Acknowledgment of Input, Coordination, and Concurrence of State Fish and Wildlife Agency and NOAA-Fisheries, if appropriate

Discussion of Relevant Prior Studies/Reports

Description of the Study Area

Explanation of Fish and Wildlife Resource Concerns and Planning Objectives

Description of Evaluation Methods

Description of Fish and Wildlife Resources:

Existing

Future Without Project

Summary of Plan Selection Process and Identification of Evaluated Alternatives

Description of Selected Plan and Evaluated Alternatives

Description of Impacts

Evaluation and Comparison of the Selected Plan and Evaluated Alternatives

Discussion and Justification of Fish and Wildlife Conservation Measures

List of Recommendations

The organization of a FWCA report is influenced by the iterative nature of the Framework as well as by the purpose and timing of FWCA reports. As the first FWS report submitted to the Corps, it is appropriate that the reconnaissance PAR first describe the area's fish and wildlife resources before identifying resource problems, opportunities and planning objectives. The 2(b) report, however, is written after iterations of the Framework steps (the same in number as iterations of the six steps of planning by the planning agency) and is the final documentation of all major FWS activities – activities that were guided throughout the study by FWS concerns and planning objectives. As such, the report should present an explanation of the priority concerns and planning objectives that directed the focus and scope of resource analyses and evaluations prior to presenting an in-depth discussion of resources (i.e., justify the report's coverage or lack of coverage of certain resources). If there was a need to place sideboards or constraints on analyses and evaluations during the study, explain this here. Also, include previously stated planning objectives so that the selected plan (and other evaluated alternatives) may be evaluated in later report sections relative to how well it meets these FWS objectives.

Description of Evaluation Methods (Framework Step 2)

This section should follow the explanation of FWS concerns and planning objectives in the 2(b) report because it was these concerns and objectives that influenced final application of certain evaluation methods over others. This subject should be presented prior to the description of resource conditions, as the methods used dictate the manner (units of measure or qualitative descriptors) in which resources will be described in the report.

Description of Fish and Wildlife Resource Conditions

This section includes a description of the existing conditions (Framework Step 3), and a description of the future without the project (Framework Step 4).

Identification of Alternative Plans Considered, Outcome of Plan Selection Process, and Alternative(s) Evaluated and Addressed by the FWS in this Report (Framework Step 6)

Regardless of the level of detail in which alternatives have been developed, extensive narrative describing all technical features is unnecessary and undesirable in a FWCA report. Reference should be made to the planning agency's report for detailed descriptions of alternatives. However, if any given feature of an alternative is expected to produce an effect that is discussed in the impacts section of a FWCA report, then that feature must also be described in the report to the extent that the relationship between the feature and the impact is clear. If the feature is not described, it does not exist for the reader. If it does not exist, it cannot have any impacts. If there are no impacts, there can be no recommendations to mitigate impacts. Therefore, when writing a FWCA report, it is necessary to identify and describe those specific alternative features that are responsible for the impacts to fish and wildlife resources.

This emphasis is not intended to restrict a discussion of impacts simply because the exact design or description of a particular feature (such as the location, dimensions, and construction material of a weir) is unavailable. “Known features” that will cause an impact may sometimes be described in only a general sense (i.e., a channel with two weirs). However, if the FWCA report describes the alternative only in relation to the channel without mention of the weirs but includes impacts related to the weirs, an adequate basis for impact assessment has not been established.

Description of the Selected Plan and Other Plans Evaluated by FWS (Framework Step 6)

This section does not need to be overly descriptive – refer the reader to the Corps report for a complete, technical description. However, all features of the selected plan and other FWS evaluated plans that will result in impacts identified and discussed in the 2(b) report must be described. In addition, any alternatives developed by the FWS should be described in detail with an explanation of why the alternative is being proposed.

Description of Impacts of Selected Plan and Other Alternatives (Framework Step 8)

Use of an impacts matrix such as that shown in Table VI-2 reduces required narrative, facilitates understanding of these causal relationships, and is recommended whenever feasible.

Evaluation and Comparison of the Selected Plan and Other Evaluated Alternatives (Framework Step 9)

Results of trade-off analyses would be presented here.

Discussion and Justification of Fish and Wildlife Measures (Framework Step 10)

This section should fully discuss and justify recommended means and measures for mitigation (includes compensation) of losses to and/or restoration and enhancement of fish and wildlife resources:

- 1. Discuss and justify modifications that would mitigate adverse effects of the selected plan and/or other evaluated alternative (Framework Step 10a).** The first four steps of achieving mitigation – avoiding, minimizing, rectifying, or reducing – should be included in this discussion. How (i.e., avoid, minimize, rectify, etc.) and to what degree a given modification will achieve desired mitigation should be clearly explained.
- 2. Discuss and justify compensation needs for unavoidable losses of the selected plan and/or other alternatives evaluated (Framework Step 10b).** This discussion would involve application of only the final step of mitigation – compensation – to the selected plan as proposed by the Corps and other alternatives, as appropriate.

Table VI-2
Example of an Impacts Matrix for a Hypothetical
Channelization Project Using Confined Upland Disposal

Impact	Features of Proposed Channelization Plan			
	Dredging	Spoil Disposal	Streambanks Clearing	Channel Straightening
Removal of natural substrate	X			
Reduction in riverine habitat diversity	X			X
Reduction of river miles				X
Elimination of riparian vegetation			X	
Loss of upland hardwoods		X		
Reduction in frequency and/or duration of overbank flooding	X		X	X
Lowering of water table	X			X
Reduction in water quality	X		X	X
Increase in water velocities	X			X
Elimination of shallow water spawning and nursery habitat	X			X
Reduction in invertebrate biomass and diversity	X		X	X
Reduction in fish biomass and diversity	X	X	X	
Loss/degradation of adjacent floodplain wetlands	X		X	X

3. **Discuss and justify the plan in which the trade-offs between fish and wildlife conservation and other project purposes are most consistent with the “equal consideration” provision of the FWCA (Framework Step 10c).**

List of Recommendations (Framework Step 11)

While the preceding section provides the discussion, explanation, and justification of conservation measures developed by the FWS, this section should consist of a clear, concise enumeration of FWS recommendations. This may include additional studies needed to accurately evaluate impacts or portions thereof. Everything contained in this section should have been previously discussed and justified. New items should not be introduced here.

When submitting FWS recommendations in a FWCA report, a number of criteria should be met. The report must contain a presentation of the data, analyses, evaluations, and issues resulting in the recommendation such that a clear understanding of the basis and justification for a given recommendation is established. A recommendation cannot be considered justified until what will be gained from its implementation has been made clear. Recommendations made must:

1. **Be specific, reasonable, and doable.**
2. **State specifically who is to do what in carrying out the recommendation.**
3. **Be self-contained and clearly and concisely stated.** Understanding the meaning of the recommendation should not be dependent on discussions or substantiating data elsewhere in the report. However, clear justification for each recommendation must be given in prior report sections.
4. **Have a clear purpose (i.e., for avoiding, minimizing, rectifying, reducing, compensating, restoring or enhancing fish and wildlife resources).**
5. **Be as specific as is practicable regarding estimated implementation (or up-front cost), operation and maintenance, and total annual costs (using the appropriate discount rate).** They should identify the agency or entity expected to bear the costs to accomplish necessary construction, and to implement, operate, and maintain the proposed conservation measures. For restoration and enhancement measures, cost-sharing provisions as established under the Federal Water Project Recreation Act, as amended (P.L. 89-72) and/or other authorities should be discussed.

Summary of Findings and FWS Position (Framework Step 12)

This should be a summary of major findings and/or conclusions as presented in detail in various preceding sections, and a presentation of the FWS position relative to the Corps proposed plan. This position – a statement regarding what the FWS would support, oppose, or not oppose under certain specified conditions – is the culmination of all preceding efforts and as such represents the “bottom line.” While recommendations and the FWS position may be irrevocably intertwined, providing recommendations alone does not establish a FWS position; it is support of or opposition to a Corps project, generally based on whether or to what degree the Corps incorporates FWS recommendations, that constitutes the FWS position.

Reconnaissance Phase PAR

The purpose of this report is discussed in Chapter IV, Section G. It is usually the first report prepared by the FWS on a Corps study. Because reconnaissance phase data gathering is normally restricted to reviews of project files, previous project reports (if any), selected literature, State fish and wildlife data, personal communications, and/or a brief site visit, data and information presented in this report are usually general and qualitative rather than detailed and quantitative. Particular emphasis should be placed on the identification of problems, opportunities, and planning objectives from the FWS perspective. Equally important (particularly when the feasibility phase will be cost-shared) is the discussion of specific FWS tasks and their costs (i.e., the SOW) that will be necessary for the completion of the feasibility phase. Identifying information needs is very important at this phase. Table VI-3 presents guidance on subject matter entries and format for a reconnaissance PAR.

Plan Formulation PAR(s), Feasibility Study Phase (Plan Formulation)

Plan formulation – one of the most crucial steps – is an activity that is often integrated into the overall planning process in such a way that it may be difficult to recognize as a distinct activity. It does not result in a formal Corps report, and therefore a “formal” FWS report (while not inappropriate) is not required. However, FWS input into the plan formulation process is essential to the achievement of FWCA objectives. Plan formulation PARs can take the form of a letter or report or a series of letters or reports. As defined in Chapter IV, the objective of this input should be to identify alternatives or measures that will make positive contributions to fish and wildlife problems and opportunities and/or mitigate adverse impacts. As appropriate, Plan formulation PARs should refine and update information and data presented in the reconnaissance PAR, with emphasis on the formulation, reformulation, screening, and/or evaluation of project alternatives. Guidance on content and organization for the “ultimate” Plan formulation PAR is presented in Table VI-4.

Continuing Authorities Program PAR

Continuing Authority Program (CAP) studies are usually smaller in scope and shorter in duration than feasibility studies. As discussed in Chapter IV, Section F, the planning procedures for CAP projects vary in the degree to which they follow the plan formulation, evaluation, and selection

Table VI-3
Content and Organization of a Reconnaissance PAR/PAL¹

Identification of Purpose, Scope, and Authority (Corps and FWS)
Discussion or Mention of Prior Studies and/or Reports (Corps or FWS) Relevant to the Current Study
Description of the Study Area
Description of Fish and Wildlife Resource Conditions:
Existing (Framework Step 3)
Future Without the Project (Framework Step 4)
Identification and Definition of Fish and Wildlife-related Problems, Opportunities, and Planning Objectives (Framework Step 5) ²
Identification and Description of Potential Alternatives Being Considered or Likely to be Considered by the Corps (Framework Step 6)
Description of Potential Impacts (Framework Step 8)
Evaluation and Comparison of Potential Alternatives (Framework Step 9)
Discussion of Potential Fish and Wildlife Conservation Measures (Framework Step 10)
Discussion of FWCA Activities for the Feasibility Phase (<u>Data Needs</u> , Tasks, Cost Estimate) ³
List of Recommendations (Framework Step 11)
Summary of Findings and FWS Position (Framework Step 12) ⁴

¹ Should state that the PAR does not constitute the final report of the Secretary of the Interior as required by Section 2(b) of the FWCA.

² Well-defined alternatives will not be developed at this stage. However, a variety of management measures may be under consideration in a general way. The report should reflect the level of detail that planning has attained.

³ A feasibility phase SOW should be provided to the Corps in this report or separately.

⁴ A statement of FWS position is optional at this point. It may be appropriate to take a position on some issues such as opposition to or support of certain alternatives or continuation of the study. Frequently the FWS will not yet have a position on the project and will support continued study of the project.

Table VI-4
Content and Organization of a Plan Formulation PAR/PAL

Identification of Purpose, Scope, and Authority of this PAR¹

Discussion of Fish and Wildlife Resource Concerns and Planning Objectives
(Framework- Step 5)

Discussion of Evaluation Methods (Framework Step.2)

Description of Fish and Wildlife Resource Conditions:

Existing (Framework Step 3)

Future Without the Project (Framework Step 4)

Description of Alternatives Under Consideration (Framework Step 6)²

Description of Impacts (Framework Step 8)

Evaluation and Comparison of Alternatives (Framework Step 9)

Discussion of Modifications or Additional Alternatives (i.e., Fish and Wildlife Conservation Measures) Needed to Address Fish and Wildlife related Problems, Opportunities, and Planning Objectives (Framework Step 10)

List of Recommendations (Framework Step 11)

Summary of Findings and FWS Position (Framework Step 12)³

¹ State that this report does not constitute that of the Secretary of the Interior required by Sec.2(b) of the FWCA.

² As this report is provided during the plan formulation stage of planning, well defined alternatives may not yet be developed. However, at this point a variety of management measure should at least be under consideration. The report should reflect the level of detail that the construction agency has attained in plan formulation,

³ As with the reconnaissance PAR, it may or may not be appropriate to establish a definitive FWS position relative to some aspect of the study at this time. A statement of opposition to or support for one or more alternatives may be appropriate. Early in plan formulation the FWS may have no position on the project at this point and may often recommend continuation of further study of a project.

process developed for specifically authorized projects. While a few CAP projects types involve both a reconnaissance and feasibility study, a number have only a feasibility study. Other planning documents may be prepared depending on the applicable CAP authority. For these reasons, guidance presented in Table VI-5 reflects a combination of reconnaissance and plan formulation inputs, which may need to be modified to fit the planning process for the particular CAP project.

C. Format

The following section presents guidance on FWCA report format (i.e., the general layout for report presentation).

Letter Versus Report Format

Reports can be constructed as a long letter (letter format) or as a formal, titled report (report format). Subsequent subsections and Table VI-5 present the components of a formal, titled report. The letter format is the standard for responding to reviews of permit actions under the FWCA. For construction projects, the letter format is appropriate for short reports (less than 10 pages), while the report format is generally better for longer documents. The use of report covers gives FWCA documents a more professional and formal appearance and is strongly encouraged, but may not be appropriate for short reports.

Signature of Responsible Official

The letter report will be signed by the responsible official on the last page of text as with any letter. For formal reports, the signature should be on a letter of transmittal placed immediately behind the title page. The transmittal can be a simple one paragraph letter, or it can be a means of communication between the signing and receiving officials on any issues or topics of concern that warrant attention. In the latter instance, however, it should not be a lengthy repetition of or substitute for the Executive Summary.

Headings

Section or subsection headings are not required and may not be desirable in letter reports. All formal, titled reports should contain headings that serve to define and explain the basic organization and content of the report.

Author Recognition

The principal author(s) of the report should be identified, generally on the title page.

Table VI-5
Content and Organization of a Continuing Authorities Program PAR/PAL

Identification of Purpose, Scope, and Authority (Corps and FWS)¹

Discussion/ Reference to Prior Studies or Reports (either Corps or FWS) Relevant to the Current Study

Description of the Study Area

Description of Fish and Wildlife Resource Conditions:

Existing (Framework Step 3)

Future Without the Project (Framework Step 4)

Identification and Definition of Fish- and Wildlife-related Problems, Opportunities, and Planning Objectives (Framework Step 5)

Description of Alternatives Under Consideration (Framework Step 6)

Description of Potential, Significant Impacts (Framework Step 8)

Evaluation and Comparison of Alternatives (Framework Step 9)

Discussion of Modifications or Additional Alternatives (i.e., Fish and Wildlife Conservation Measures) Needed to Address Fish- and Wildlife-related Problems, Opportunities, and Planning Objectives (Framework Step 10)

FWCA Activities for the Feasibility Phase (Data Needs, Tasks, Cost Estimate)²

List of Recommendations (Framework Step 11)

Summary of Findings and FWS Position (Framework Step 12)³

¹ The PAR should also state that it does not constitute the report of the Secretary of the Interior as required by Section 2(b) of the FWCA.

² A SOW for involvement during the CAP study should be provided to the Corps in this report or under separate cover if it has not already been negotiated.

³ The statement of FWS position is optional at this point. However, under certain circumstances, it may be appropriate to take a position on some issues at this point, such as opposition to or support of certain alternatives or features, or continuation of the study.

Title Page Content

All formal, titled reports should have a title page containing the following information (Figure VI-1).

1. Type of report being prepared (e.g., PAR or FWCAR). Identification of the type of PAR is not necessary.
2. Title of Corps study.
3. Name of preparers with office affiliation and location (if different from releasing office).
4. “U.S. Fish and Wildlife Service” followed by recognition of the releasing office and its city and State location.
5. Month and year released.

Suggested Report Format

Table VI-6 provides the suggested format for a formal FWCA report, while the report format should be flexible enough to allow for different circumstances and situations. Certain sections are critical to the effectiveness of the report and are designated by an (*) in Table VI-6.

Draft versus Final 2(b) Reports

Normally, the 2(b) report will be presented to the Corps in two or three differing stages of completion – first as a draft, sometimes followed by a revised draft, and lastly as a final 2(b) report, and will be designated as such in the title.

D. Style

Scientific Versus Common Names

The use of scientific names is optional. When deemed appropriate, scientific names may be used in lieu of common names; they may be placed in parentheses behind the common name, or they may be displayed in an appendix to the report. The decision to use or not to use scientific names should be based on an analysis of the most likely audience and the overall readability of the report.

Figure VI-1: Title Page

Fish and Wildlife Coordination Act Report/
Planning Aid Report

on

[Title of Project]

Prepared by:

Name(s) of Author(s)
Division of Ecological Services
City, State

U.S. Fish and Wildlife Service
Region

Table VI-6
Suggested FWCA Report Format¹

COVER

*TITLE PAGE

*LETTER OF TRANSMITTAL

*STATE FISH AND WILDLIFE AGENCY CONCURRENCE LETTER (Required in 2(b) report only)

*EXECUTIVE SUMMARY

ACKNOWLEDGMENTS

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DESCRIPTION OF SELECTED PLAN AND OTHER ALTERNATIVES

*PROJECT IMPACTS

*EVALUATION OF THE SELECTED PLAN

*FISH AND WILDLIFE CONSERVATION MEASURES

*RECOMMENDATIONS

*SUMMARY AND FWS POSITION

LITERATURE CITED

APPENDICES

¹ * Critical

Literature Citations

The name-and-year system (the Harvard System) will be used to cite literature in the text. Depending on sentence context, either the year or the author(s) and year will be enclosed in parentheses. Examples follow:

Smith (1985) or (Smith 1985)

Doe and Smith (1985) or (Doe and Smith 1985)

For three or more authors, cite as follows:

Doe et al. (1985) or (Doe et al. 1985)

Consult a scientific journal for guidance on how to construct individual entries in the “literature cited” section.

Grammar, Style, and Tone

A report that provides good biological data; accurate analyses; and sound, logical recommendations but is poorly written will be ineffective in achieving its intended purpose. Some common writing errors include improper tense, subject-predicate disagreement, dangling participles, coinage of new words, overuse of the passive voice, misuse of noun modifiers, and overuse of “that” and “of.”

While writing styles vary, there are certain elements that all FWS biologists should seek to master in FWCA report writing. These include clear and concise statements constructed to minimize the possibility of misinterpretation; omission of unnecessary words and sentences; avoidance of “fancy” words, jargon, overwriting, and overstating; minimal use of qualifiers, figures of speech, and dialect; and use of an appropriate and consistent tone. FWCA reports should be written in a way that draws the reader's attention to the sense and substance of the writing, rather than to the mood and temper of the author.

Tone is that part of writing style that is expressive of mood or emotion. It is the quality of feeling conveyed by the writing such as humorous, factual, sober, urgent, ironic, or sarcastic. Appropriate tone for FWCA reports is factual. Tone should be consistent, inoffensive, conducive to the understanding and the resolution of issues, and free from any suggestion of the author's personal opinions and biases.

CHAPTER VII

RELATIONSHIP OF THE FISH AND WILDLIFE COORDINATION ACT TO OTHER LEGISLATION

A. Introduction

The Fish and Wildlife Coordination Act (FWCA) is related directly and indirectly to a variety of other Federal legislative mandates in that a number of laws reference the FWCA specifically or authorize activities that trigger the FWCA. Other authorities relate to issues that are of concern under the FWCA (such as wetlands protection).

Table 2 in Chapter V lists a number of authorities that establish institutional significance for fish and wildlife resources. A number of these laws are related to the FWCA in that they designate or define for specific protection significant resources including those that the FWCA was enacted to protect. Other laws such as the National Environmental Policy Act and the Endangered Species Act are complementary to the FWCA yet separate in that they address different aspects of the institutional significance of the environment.

Some of laws that are specifically related to the FWCA or issues of concern under it are discussed in this chapter. Others that address various specific aspects of fish and wildlife resources of significance are listed in Table V-2 and may be found in other sources such as the FWS's Digest of Federal Resource Laws on the web at <http://laws.fws.gov>. Another source of information on current legislative initiatives is THOMAS, maintained by the Library of Congress and accessible at <http://thomas.loc.gov>.

B. National Environmental Policy Act and Endangered Species Act

Two primary laws with which the FWCA is closely related are the National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA). These three Acts, along with a number of other specific and general legal mandates that may apply to any given project, form the basis for the FWS's involvement in water resources development project planning. The relationship between the FWCA, NEPA, and the FWCA is discussed in detail in Chapter III, Section D.

C. Federal Water Projects Recreation Act (P.L. 89-72)

Fish and wildlife enhancement was an aspect of the FWCA that was added by the amendments of 1958. Prior to that time, the emphasis had been solely on the mitigation of adverse impacts to fish and wildlife resources occasioned by water resources development projects. The 1958 amendments included a provision to address the “development and improvement” of fish and wildlife resources in connection with water resources development projects (see Chapter I).

The Federal Water Projects Recreation Act (Public Law 89-72; 79 Stat. 213) was enacted in 1965 to address recreation and fish and wildlife enhancement development at Federal water resources development projects. It declares the intent of Congress that opportunities, if any, for outdoor recreation and fish and wildlife enhancement are to be given full consideration at Federal water resources development projects. Its purpose is to provide uniform policies regarding recreation and fish and wildlife enhancement and to provide the Secretary of the Interior with authority to implement recreation and fish and wildlife enhancement at projects under the Department’s control. Much of the emphasis in the Act is on acquisition and management of land for these purposes. It contains provisions for implementing recreation and fish and wildlife enhancement at projects that are planned as well as those that are already completed. It made minor changes to several other laws including the FWCA with regard to fish and wildlife enhancement.

Under P.L. 89-72, a non-Federal public body must agree to 1) bear not less than one-half the separable costs allocated to recreation and/or 25 percent of the separable costs allocated to fish and wildlife enhancement; 2) administer project land and water areas devoted to these purposes; and 3) bear not less than 50 percent of the costs of operation, maintenance, and replacement. Section 906(e) of the Water Resources Development Act of 1986 discussed below makes fish and wildlife enhancement up-front costs 100 percent Federal when the enhancement: benefits species of national significance as defined in Section 906(e); are designed to benefit listed threatened or endangered species; or take place on a National Wildlife Refuge.

Projects specifically cited as applicable to this Act are Federal navigation, flood control, hydroelectric, or multipurpose water resource projects. Excluded from the procedural requirements of the Act are nonreservoir local flood control projects, beach erosion control projects, small boat harbor projects, hurricane protection projects, and project areas or facilities authorized by law for inclusion in a national recreation area or appropriate for administration as part of a national forest or other Federal lands as well as management in connection with an authorized Federal program for the conservation and development of fish and wildlife. Further, the project sponsor requirements do not apply where the facilities either serve other project purposes and are justified irrespective of their recreation or fish and wildlife enhancement benefits, or are provided as minimum facilities required for public health and safety. Section 9 of P.L. 89-72 provides that the sum of the allocations to recreation and fish and wildlife enhancement cannot exceed the sum of the allocations to other project purposes except for

enhancement of anadromous fisheries, shrimp, or the conservation of migratory birds protected by treaty.

This Act also specifically references the implementation of recreation and fish and wildlife enhancement at Bureau of Reclamation (BR) projects and authorizes BR to enter into agreements with other Federal agencies to administer project lands and waters or to transfer the lands by lease or agreement for recreation and fish and wildlife enhancement use (recall that Sections 3 and 4 of the FWCA address the use of project lands and waters for fish and wildlife management, with management by the FWS or States provided for through General Plans – see Section H of this chapter).

The issue of enhancement has been and is problematic in that it involves improvement of the situation over that which exists. In this regard, the question of when and what were the baseline conditions becomes a critical consideration. The FWCA as amended in 1958 intends this to be one aspect of the evaluation carried out under the FWCA. However, enhancement has not been commonly implemented at water resources development projects, both because of the issue of what constitutes enhancement as well as the requirement for a sponsor able or willing to pay 25 percent of the up-front costs and at least 50 percent of the operations, maintenance, and replacement costs. The issue has become somewhat moot in recent years because of the ever increasing emphasis being placed in authorizations and Federal policy on ecosystem restoration. Much of what might at one time have been considered as enhancement is being proposed as restoration of resources degraded by past impacts of one kind or another.

D. Watershed Protection and Flood Prevention Act (P.L. 83-566)

The Watershed Protection and Flood Prevention Act (sometimes called small watershed projects or P.L. 566 projects) authorizes the Natural Resources Conservation Service (NRCS) in the Department of Agriculture to assist States and local agencies in the development of water resources development projects in watersheds of 250,000 acres or less. NRCS provides technical, financial, and credit assistance to local sponsors in the development of projects for purposes including watershed protection, flood prevention, agricultural water management, ground water recharge, water quality management, and municipal and domestic water supply.

These projects are not covered by the consultation provisions of the FWCA. However, consultation is required under Section 12 of P.L. 83-566 (see Appendix E), which was added to P.L. 83-566 by the 1958 amendments to the FWCA. Section 12 was added in recognition of the need for evaluation of fish and wildlife resources impacts and opportunities at P.L. 83-566 projects in a manner similar to that required for other construction projects under the FWCA.

Section 12 provides that, in preparing project plans, the Department of Agriculture must consult with the FWS with regard to the conservation and development of fish and wildlife resources and provide the FWS with the opportunity to participate in project planning. The FWS is to be

afforded the opportunity to make surveys and investigations and prepare reports with recommendations on the conservation and development of fish and wildlife. The Department of Agriculture must give full consideration to the recommendations contained in FWS reports and include features that are determined to be feasible and that are acceptable to the Department and the local project sponsor. FWS reports are to be included in project reports prepared by the Department of Agriculture. No funds are provided by the Department of Agriculture for FWS involvement in P.L. 83-566 projects; funds for such work must come from those appropriated for FWS work in project planning.

The addition of Section 12 to P.L. 83-566 provided the FWS the opportunity to become involved in the planning of these projects. At that time, this was a major program impacting fish and wildlife resources and their habitats around the country. Activities such as channel straightening, clearing of vegetation on both sides of a channel, destruction of instream habitat, and construction of thousands of small impoundments on lower order streams were creating major impacts. In addition, projects were authorized that included many “elements” such as impoundments in a watershed that were constructed one by one in a piecemeal fashion. With the advent of NEPA, impacts were addressed in NEPA documents, but very often no assessment was made of the cumulative impact from all the impoundments proposed under a particular project. In recent years, more watershed planning coupled with very low funding for this program have affected its significance. A review of the backlog list of projects several years ago resulted in the elimination of thousands of miles of channel work and several hundred small impoundments. However, many unconstructed elements exist in the backlog of authorized projects including some with many small impoundments.

P.L. 106-472 amended the Watershed Prevention and Flood Protection Act to authorize the rehabilitation of structural measures [dams] near, at, or past their evaluated life expectancy. Some 2,245 dams in 22 States were identified as in need of reevaluation because of changes in surrounding conditions and/or dam safety issues (Figure VII-1). Under this authority, these projects are evaluated under the same planning procedures as are applicable to new P.L. 83-566 projects, including coordination with the FWS on fish and wildlife resource issues and impacts.

E. Water Resources Development Acts (Corps of Engineers Omnibus Acts)

The legislation that authorizes Corps of Engineers projects and general authorities is called an omnibus bill in general. Before 1974, these were called Flood Control Acts and Rivers and Harbors Acts. Since 1974, they have been referred to as Water Resources Development Acts (WRDA). In addition to authorizing projects, omnibus acts provide authority for the Corps of Engineers to engage in various types of project planning or to otherwise consider various matters in its project planning. The WRDA of 1986 was the first such act in 10 years.

Prior to WRDA 1986, the Corps’ authority to include measures for fish and wildlife was somewhat limited, based primarily on the FWCA and Section 216 of the Flood Control Act of

1970. As discussed in earlier chapters, Section 216 of the Flood Control Act of 1970 authorizes investigations for modification of completed projects or their operation (Appendix L). Section 2 of the FWCA authorizes mitigation measures for impacts to fish and wildlife resources, including land acquisition, and enhancement of those resources.

Figure VII-I

**Table 2. National Summary of
Known Rehabilitation Needs
on Dams built by PL-566, PL-534, Pilot, and RC&D
April 1999**

State	Total No. of Project Dams	No. of Dams Needing Rehab.	Estimated Funds Needed
Alabama	108	71	\$23,937,000
Arkansas	201	77	\$20,427,000
Colorado	152	49	\$28,106,000
Georgia	357	129	\$85,099,000
Illinois	54	36	\$10,336,000
Indiana	127	41	\$14,040,000
Iowa	1187	284	\$20,124,000
Kansas	792	97	\$19,214,000
Kentucky	195	105	\$19,688,000
Mississippi	578	84	\$30,454,000
Missouri	659	244	\$21,148,000
Nebraska	900	294	\$3,600,000
New Mexico	71	17	\$22,360,000
New York	53	49	\$2,239,000
Ohio	77	46	\$7,124,000
Oklahoma	2094	190	\$52,728,000
Pennsylvania	91	14	\$817,000
Tennessee	137	43	\$12,143,700
Texas	1932	283	\$84,187,000
Virginia	144	16	\$9,775,000
West Virginia	167	34	\$53,346,000
Wisconsin	86	42	\$2,332,000
Totals	10172	2245	\$543,226,000

Caution: These are preliminary estimates subject to change upon completion of detailed on-site assessment.

Source: Natural Resources Conservation Service, 2000

In addition to authorizing a large number of projects, WRDA 1986 and subsequent WRDAs also contained a number of significant authorities and placed requirements on the Corps with regard to the environment and fish and wildlife. The major environmental provisions of these sections of WRDA 1986 through WRDA 2000 are contained in Appendix M. Many of these authorities relate directly to responsibilities and requirements of the FWCA, are supplementary thereto, and/or provide the authority to conduct projects or contain project requirements that can be used in conjunction with the FWCA and other laws to implement projects that conserve, protect, restore or otherwise benefit fish and wildlife resources. A number of these authorities, especially those under the Continuing Authorities Program, can be used in conjunction with other authorities and programs of the Corps and other agencies to create “partnership projects” that accomplish a number of goals for a variety of stakeholders in cooperative ventures.

As these authorities are of such potential significance in conjunction with the FWS role under the FWCA, a brief summary of a number of these authorities is included here. Many have constraints associated with them including per project and total annual cost limits, and cost-sharing requirements. In some instances, funds have not yet been appropriated by Congress to carry out their provisions. In addition, a few of these authorities are not being implemented by the Corps at this time because of policy and budgetary constraints. Current Corps policy and guidance should be consulted regarding the status and specific restrictions associated with each of these authorities.

Section 704, WRDA 1986 – Corps Capability to Conserve Fish and Wildlife

This section authorized the Corps to investigate and study the feasibility of using its capabilities to conserve fish and wildlife including their habitats where the fish and wildlife resources are indigenous to the United States, its possession or its territories. The study was to include the use of engineering and construction capabilities to create alternative habitats or improve, enlarge, develop, or otherwise beneficially modify existing habitats of such fish and wildlife. It was to be conducted in consultation with the FWS, NOAA-Fisheries, and the Environmental Protection Agency with an initial report to Congress in 1986. The authority provides for continuation of this program, with biennial reports to Congress.

Section 704 also authorized projects for alternative or beneficial modified habitats for fish and wildlife, including manmade reefs, in consultation with the FWS and NOAA-Fisheries. Included were several specific projects in Lake Erie, the Atlantic Ocean near Fort Lauderdale, Florida, Lake Ontario, and the Chesapeake Bay. Non-Federal Cost share for such projects is 25 percent.

Section 906, WRDA 1986 – Fish and Wildlife Mitigation

One of the most significant set of provisions of WRDA 1986 is found in Section 906 on mitigation. The provisions of this section reinforce a number of the provisions of the FWCA. Section 906 provides that:

1. Mitigation, including land acquisition, is to be implemented before or concurrently with project construction;
2. In consultation with Federal and non-Federal agencies, the Corps is authorized to mitigate damages to fish and wildlife resulting from any Corps water resource project, whether completed, under construction, or yet to be constructed. This authority includes land acquisition, with certain constraints including limitation on cost of such measures.
3. Costs incurred after enactment of WRDA 1986 for implementation and operation, maintenance, and rehabilitation to mitigate damages to fish and wildlife shall be allocated among authorized project purposes and shall be subject to cost-sharing and reimbursement to the same extent as other project costs;
4. All Corps projects submitted for authorization after the enactment of WRDA 1986 shall include either a specific plan to mitigate fish and wildlife losses created by the project, or a determination that the project will have negligible adverse impact on fish and wildlife. In addition, this subsection provides that such plans will, to the extent possible, mitigate bottomland hardwood losses in-kind.
5. Provides that up-front costs (implementation costs) for fish and wildlife enhancement measures shall be 100 percent Federal when 1) the benefits are determined to be national, including benefits to species identified by NOAA-Fisheries as of national importance, species subject to treaties or international conventions that include the United States, and anadromous fish; 2) the enhancement is designed to benefit listed threatened or endangered species under the Endangered Species Act, or 3) the enhancement will be located on lands managed as a National Wildlife Refuge. In instances where fish and wildlife enhancement is proposed that does not qualify under the preceding, the non-Federal cost share for up-front costs shall be 25 percent. As of 2002, the Corps was not implementing this authority because of policy and budgetary constraints.
6. Fish and wildlife enhancement for the Atchafalaya Floodway System and project for the Mississippi Delta Region of Louisiana are considered to provide benefits that are national.
7. The provisions supplement the responsibility and authority under the FWCA and nothing in this section is intended to affect that Act.

Section 907, WRDA 1986 – Benefits and Costs Attributable to Environmental Measures

This subsection states that, in the evaluation of the benefits and costs of Corps water resources development projects, the benefits attributable to measures included for the purpose of environmental quality, including improvement of the environmental and fish and wildlife enhancement, shall be deemed to be at least equal to the costs of such measures.

Section 908, WRDA 1986 – Mitigation Fund

This authorized the establishment of an Environmental Protection and Mitigation Fund in the amount of \$35 million to be used to fund mitigation measures, including land acquisition, in advance of project construction. The fund was to be reimbursed from funds for project construction, once appropriated.

Section 1135, WRDA 1986 – Project Modification for Improvement of the Environment

This section authorizes the Secretary of the Army to review Corps projects to determine the need for modifications in the structures and operations to improve the quality of the environment and to determine if the operation of such projects has contributed to the degradation of the quality of the environment. The Secretary is authorized to make modifications to the structures and operations of Corps projects that are determined to be feasible and consistent with the purposes of the project, and that will improve the quality of the environment in the public interest.

Section 1135 actions may include measures for enhancement of environmental quality that are associated with restoration. Measures may be implemented through modifications either at the project site or at other locations that have been affected by construction and operation of a project. There are both per project and total annual spending limits associated with this authority. A non-Federal sponsor must pay 25 percent of the project costs, with not more than 80 percent of the non-Federal share made up of in-kind services. The non-Federal sponsor may be a non-profit entity. Section 1135 is implemented under the Corps' Continuing Authorities Program.

Section 306, WRDA 1990 – Environmental Protection Mission

Section 306 provides that the Secretary of the Army shall include environmental protection as one of the primary missions of the Corps in planning, designing, constructing, operating and maintaining water resources projects.

Section 307, WRDA 1990 – Wetlands

Under this section, the Corps was given a short term goal of no net loss of wetlands as defined by acreage and function, and a long term goal to increase the quality and quantity of the Nation's wetlands, as defined by acreage and function. This section required the development of a

wetlands action plan in consultation with the FWS, Environmental Protection Agency, and other appropriate agencies, submitted to Congress by November 1990. It also provided for a 3-year long wetlands restoration and enhancement demonstration program with annual reports by the Corps District to the Chief of Engineers.

Section 204, WRDA 1992 – Beneficial Uses of Dredged Material

Section 204 authorizes the Secretary of the Army to carry out projects for the protection, restoration, and creation of aquatic and ecologically related habitats, including wetlands, in connection with dredging for construction, operation, or maintenance of Corps navigation projects. Projects under this authority may be undertaken when the Corps finds that environmental, economic, and social benefits justify the cost and that the project will not result in environmental degradation. With the consent of the non-Federal sponsor, the Corps may under this authority select a disposal method that is not the least cost option if it is determined that the additional costs are reasonable in relation to the benefits to the environment. A non-Federal sponsor must pay 25 percent of the costs of projects under this authority as well as 100 percent of those for operations and maintenance. There is an annual total expenditure associated with this authority. Section 204 is carried out under the Corps' Continuing Authorities Program.

Section 206, WRDA 1996 – Aquatic Ecosystem Restoration

This section authorizes the Corps to conduct projects for aquatic ecosystem restoration and protection that improve the quality of the environment, are in the public interest, and are cost effective. A non-Federal (which may be a non-profit entity) must pay for 35 percent of the project costs and 100 percent of operations and maintenance. Per project and total annual expenditures apply to this authority. These projects are implemented under the Corps' Continuing Authorities Program.

Section 212, WRDA 1999 – Flood Mitigation and Riverine Restoration

This section authorizes the Corps to “undertake a program for the purpose of undertaking projects to reduce flood hazards and restore the natural functions and values of rivers throughout the United States.” Studies may be conducted to identify appropriate flood damage reduction as well as conservation and restoration measures. Section 212 provides that studies and projects under this section shall emphasize, to the maximum extent practicable and appropriate, nonstructural approaches to preventing or reducing flood damages. Twenty-eight specific sites are listed as locations where examinations under this section were to be undertaken. Projects may be undertaken if they will significantly reduce potential flood damages, improve the quality of the environment, and are justified considering all costs and beneficial outputs.

Section 202, WRDA 2000 - Watershed and River Basin Assessments

This section authorized the Corps to assess the water resources needs of river basins and watershed in the United States, including needs relating to ecosystem protection and restoration, flood damage reduction, navigation and ports, watershed protection, water supply, and drought preparedness. Assessments were to be carried out in cooperation and coordination with the Departments of Interior, Agriculture, Commerce and the Environmental Protection Agency. Priority watersheds and river basins listed were the Delaware, Kentucky, Potomac, Susquehanna and Willamette River Basins. A non-Federal sponsor was required that would pay 50 percent of the cost of such assessments.

Other section of interest under Water Resources Development Acts include:

1. Section 943, WRDA 1896 – authorized Corps to preserve, restore, and maintain historic properties at projects if in National Register of Historic Places;
2. Section 8, WRDA 1988 – authorized the Corps to try to use innovative technology in all phases of water resources development projects and programs;
3. Section 312, WRDA 1990 – authorized the Corps to remove and remediate contaminated sediments outside the boundaries of and adjacent to navigation channels to meet the provisions of the Clean Water Act;
4. Section 203, WRDA 1992 – provides that the Corps may accept contributions in carrying out water resources projects for environmental protection and restoration (except from the project sponsor);
5. Section 503, WRDA 1992 – Required a national survey of aquatic sediment quality throughout the United States by 1994, and a comprehensive and continuing program to assess aquatic sediment quality;
6. Section 212, WRDA 1996 – Authorized studies, plans and other efforts using innovative and environmentally sound engineering solutions and innovative environmental solutions.

F. Federal Power Act

The Federal Power Act is the primary authority for the involvement of the Federal Energy Regulatory Commission (FERC) involvement in the licensing of non-Federal hydroelectric power projects. FERC issues licenses for the construction, operation, and maintenance of hydro power dams, power houses, conduits, reservoirs, transmission lines and other project works for the development, transmission, and use of power across, along, from, or in any stream or other body of water. FERC also has other functions related to the sale of natural gas and interstate transmission of oil and natural gas.

The involvement of the FWS in evaluating the impacts of and recommending measures for fish and wildlife resulting from hydroelectric projects and other activities falling under the Federal

Power Act is pursuant to the FWCA, the National Environmental Policy Act, the Endangered Species Act and the Federal Power Act itself. Several specific sections of the Federal Power Act (as amended in 1986 by the Electric Consumers Protection Act (ECPA)) relate directly or indirectly to the FWCA.

Section 4(e) – Any license issued by FERC must be consistent with the purposes of any Federal land reservation and comply with conditions set forth by the Secretary of the Department responsible for managing the Federal reservation. This includes FERC’s environmental compliance under general environmental requirements and considerations including the National Environmental Policy Act, FWCA, and Endangered Species Act.

Section 10(a) – Any license issued by FERC must be adapted to a comprehensive plan for developing a waterway, interstate and foreign commerce, water-power development, adequate protection, mitigation, and enhancement of fish and wildlife, and other beneficial public uses.

Section 10(j) – In order to adequately and equitably protect, mitigate damages to, and enhance, fish and wildlife affected by the project, each license issued must include conditions based on recommendations received pursuant to the FWCA from the NOAA-Fisheries, FWS, and State fish and wildlife agencies. Should FERC consider not adopting the recommendations from the resource agency, it is obligated to explain why and offer opportunity for dispute resolution with that agency prior to making their final determination.

Section 18 – FERC shall require the construction, operation, and maintenance by a licensee at its own expense of such fishways as may be prescribed by the Secretary of the Interior or Commerce.

Thus, a number of the provisions of the Federal Power Act supplement those of the FWCA. For additional information on FERC involvement, see <http://www.fws.gov/r9dhcbfa/reghistory.htm>.

G. Coastal Barrier Resources Act (CBRA)

The purpose of CBRA is to minimize the loss of human life, wasteful expenditures of Federal funds, and damage to fish and wildlife and other natural resources associated with areas designated on coastal barrier islands. Before Federal funds may be committed to a project, a determination must be made as to whether or not the area in question lies within an area designated under CBRA. If the proposed area is within a CBRA unit, the purpose of the project is examined by the FWS to determine whether or not the proposal may be an exemption to the prohibitions against Federal expenditures. FWS procedures require that, whenever feasible, FWCA and CBRA actions will be reported concurrently.

H. Estuary Protection Act

The Estuary Protection Act, highlights the values of estuaries and the need to conserve their natural resources. It authorizes the Secretary of the Interior, in cooperation with other Federal agencies and the States, to study and inventory estuaries of the United States, including land and water of the Great Lakes, and to determine whether such areas should be acquired by the Federal Government for protection. This report to Congress was required by January 30, 1970.

This statute also authorizes the Secretary of the Interior to enter into cost-sharing agreements with States and subdivisions for permanent management of estuarine areas in their possession. Federal agencies are required to assess the impacts of commercial and industrial developments on estuaries. Reports submitted to Congress for such projects are required to contain an assessment by the Secretary of the Interior of likely impacts and related recommendations. This provision is complementary to the provisions of the FWCA for projects in estuarine areas.

The Secretary is also required to encourage State and local governments to consider the importance of estuaries in their planning activities related to Federal natural resource grants. In approving any State grants for acquisition of estuaries, the Secretary is required to establish conditions to ensure the permanent protection of estuaries, including a condition that the lands not be disposed of without the prior approval of the Secretary (FWS 2004).

I. Clean Water Act (formerly, Federal Water Pollution Control Act)

One of the major provisions of the Clean Water Act of 1977 is the permit program under Section 404. This section authorizes the Corps of Engineers to issue permits for the discharge of dredged or fill material into waters of the United States at sites specified in permits. EPA was authorized to prohibit the use of a site as a disposal site based on a determination that discharges would have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas, wildlife, or recreational uses (FWS 2004). In evaluating a permit application, consideration must be given to the Section 404(b)(1) guidelines issued by EPA. These guidelines provide an number of criteria that must be met, including avoidance of environmentally sensitive special aquatic sites (including wetlands) unless there is no practicable alternative.

In addition, Section 404 specifically involves the FWS in the review of permits, thereby supplementing the provisions of the FWCA. Section 404(g)(3) provides that the Secretary of the Interior will be afforded the opportunity to review and comment on applications for Section 404 permits. Section 404(h)(1) provides for the review of proposals by States to assume the permit program under provisions of Section 404. Section 404(m) provides for FWS comments on proposed general permits. Section 404(q) provided the basis for the development of memoranda of agreement between the Corps of Engineers and several agencies including the FWS on dispute resolution with the Corps on its permit program. Section 404(r) provides that a permit under

Section 404 is not needed for Federal water resources development projects as long as information on any applicable discharges of dredged or fill material and analysis under the Section 404(b)(1) environmental guidelines are contained in environmental impact statements prepared under the National Environmental Policy Act.

Section 402 of the Clean Water Act is the National Pollution Discharge Elimination System under which permits are issued for point source discharges. These were originally issued by the EPA and fell under the requirements of the FWCA. However, all States have now assumed this program, with commensurate review procedures.

J. Rivers and Harbors Act of 1899

Section 10 of the Rivers and Harbors Act of 1899 provides the authority for permits issued by the Corps of Engineers for activities in the navigable waters of the United States. The program applies to any activity that alters the course, condition, location or capacity of a navigable water. The reach of Section 10 is less than that of Section 404 of the Clean Water Act because of the origin of the Section 10 program, originally based on navigation. However, litigation in the early 1970s resulted in the expansion of factors considered under this program to include fish and wildlife and other environmental issues. The FWCA and NEPA were among the primary laws that resulted in this change. The Section 10 and 404 programs are interrelated in that actions involving one often also involve the other. The FWS reviews permit applications under Section 10 as well pursuant to the FWCA. Dispute resolution is handled under the memorandum of agreement established pursuant to Section 404(q) of the Clean Water Act.

Section 9 of the Rivers and Harbors Act covers the permitting of bridges and causeways over navigable waters. These permits are issued by the United States Coast Guard, and consultation under the FWCA is applicable. Because this permit program is limited to the actual bridge or causeway and not to approach fills and other aspects that may impact jurisdictional waters, permits under Section 10 of the Rivers and Harbors Act of 1899 and/or Section 404 of the Clean Water Act may also be required from the Corps of Engineers.

K. Marine Protection, Research and Sanctuaries Act

Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 covers the ocean disposal of dredged material. Under this section, a permit must be obtained from the Corps of Engineers for the transport of dredged material for the purpose of ocean disposal. Disposal is authorized at pre-designated disposal sites. The FWS was historically very involved in activities under Section 103, including the designation of disposal sites. Review of applications for these permits takes place under the FWCA, and dispute resolution is covered by the memorandum of agreement developed between the Corps of Engineers and the FWS under Section 404(q) of the Clean Water Act.

L. Transportation Equity Act for the 21st Century (TEA-21)

Passage of TEA-21 provided a significant boost for upgrading and improving the Nation's transportation infrastructure through the year 2003. Section 1309 of TEA-21 provides for "environmental streamlining" measures involving many Federal agencies, particularly the FWS. Section 1309 required the development of an interagency memorandum of understanding and a national action plan identifying specific environmental streamlining measures. The MOU and action plan are to be implemented by the U.S. Department of Transportation (DOT) and resource agencies such as the FWS.

As a result of TEA-21, the number of transportation projects has increased dramatically, placing increased demands on fish and wildlife resources. This necessitated building strong partnerships between the FWS and State DOTs to meet the expanded workload. Agreements between the FWS and State DOTs provide additional personnel committed to solving transportation issues early in the planning stage, while conserving fish and wildlife.

Authorities for FWS involvement in highway transportation projects include the NEPA, FWCA, ESA, Transportation Act, Section 1309 of TEA-21, and others. The FWS has taken a number of actions with DOT at the national and State levels to promote streamlining while protecting and enhancing fish and wildlife resources (FWS 2000).

M. Coastal Zone Management Act

The Coastal Zone Management Act provided for the development by states of Coastal Zone Management Plans under grant provisions provided for in the Act. These plans identify the boundaries of the coastal zone in each coastal state, and provide use regulations, criteria and priorities for uses. Federal actions are to be consistent with State coastal zone management plans. The FWS was involved in the review of proposed State coastal zone management plans when they were developed. These plans now also serve as one criteria against which proposals are evaluated under the FWCA.

N. Outer Continental Shelf Lands Act

The Outer Continental Shelf Lands Act covers all submerged lands seaward of the 3-mile State limit. Within this area, leases and permits are issued for mineral extraction and the placement of equipment to do so to control wastes and pollution and to conserve natural resources. Leases and permits may be cancelled if the activity is likely to cause serious harm to life, including fish and wildlife. Permits and lease sales are reviewed by the FWS under the FWCA and other applicable laws.

O. Sikes Act

The Sikes Act (P.L. 86-797, as amended; 16 U.S.C. 670a-670o) provides for the cooperation by the Department of the Interior and the Department of Defense with State agencies in planning, development, and maintenance of fish and wildlife resources on military reservations as well as lands under the control of the Department of Energy, NASA, the Forest Service, and the Bureau of Land Management (Fish and Wildlife Service 2004). In recent years, legislation has added the requirement for the development of Integrated Resources Management Plans (INRMP) for each military installation, to include sustainable use by the public of natural resources to the extent that the use is not inconsistent with the needs of fish and wildlife resources. The evaluation provided by the FWS of resources and potential impacts under the Sikes Act is very similar to that provided on projects under the FWCA. In addition, activities on military installations that involve water resources development or alteration of such resources may trigger the FWCA either directly or indirectly through the requirements for permits.

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APPENDICES

(NOTE: To the extent possible, the following list of appendices are linked to existing sites on the World Wide Web where copies of the documents reside. Only those not found elsewhere are included in this document, and they are also accessed by links.)

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APPENDIX A

Act of March 10, 1934 Public Law 73-121, 48 Stat. 401

AN ACT

To promote the conservation of wild life, fish, and game, and for other purposes.

Sec. 1. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of Agriculture and the Secretary of Commerce are authorized to provide expert assistance to and to cooperate with Federal, State, and other agencies in the rearing, stocking, and increasing the supply of game and fur-bearing animals and fish, in combating diseases, and in developing a Nation-wide program of wild-life conservation and rehabilitation.

Sec. 2. The Secretary of Agriculture and the Secretary of Commerce are authorized to make such investigations as they may deem necessary to determine the effects of domestic sewage, traae wastes, and other polluting substances on wild life, with special reference to birds, mammals, fish, and shellfish, and to make reports to the Congress of their investigations with recommendations for remedial measures. Such investigations shall include studies of methods for the recovery of wastes and the collation of data on the progress being made in these fields for the use of Federal, State, municipal, and private agencies.

Sec. 3. (a) Whenever the Federal Government through the Bureau of Reclamation or otherwise, impounds water for any use, opportunity shall be given to the Bureau of Fisheries and/or the Bureau of Bio ogical Survey to make such uses of the impounded waters for fish-culture stations and migratory-bird resting and nesting areas as are not inconsistent with the primary use of the waters and/or the constitutional rights of the States. In the case of any waters heretofore impounded by the United States, through the Bureau of Reclamation or otherwise, the Bureau of Fisheries and/or the Bureau of Biological Survey may consult with the Bureau of Reclamation or other governmental agency controlling the impounded waters, with a view to securing a greater biological use of the waters not inconsistent with their primary use and/or the constitutional rights of the States and make such proper uses thereof as are not inconsistent with the primary use of the waters and/or the constitutional rights of the States.

(b) Hereafter, whenever any dam is authorized to be constructed, either by the Federal Government itself or *by* any private agency under Government permit, the Bureau of Fisheries shall be consulted, and before such construction is begun or permit granted, when deemed necessary, due and adequate provision, if economically practicable, shall be made for the migration of fish life from the upper to the lower and from the lower to the upper waters of said dam by means of fish lifts, ladders, or other devices.

Sec. 4. The Office of Indian Affairs, the Bureau of Fisheries, and the Bureau of Biological Survey are authorized, jointly, to pre-prepare plans for the better protection of the wild-life resources, including fish, migratory waterfowl and upland game birds, game animals and fur-bearing animals, upon all the Indian reservations and unallotted Indian lands coming under the supervision of the Federal Government. When such plans have been prepared they shall be promulgated by the Secretary of the Interior, the Secretary of Commerce, and the Secretary of Agriculture, who are authorized to make the necessary regulations for enforcement thereof and from time to time to change, alter, or amend such regulations.

Sec. 5. The Bureau of Biological Survey and the Bureau of Fisheries are hereby authorized to make surveys of the wild-life resources of the public domain, or of any lands owned or leased by the Government, to conduct such investigations as may be necessary for the development of a program for the maintenance of an adequate supply of wild life in these areas, to establish thereon game farms and fish-cultural stations commensurate with the need for replenishing the supply of game and fur-bearing animals and fish, and, in cooperation with the National Park Service, The Forest Service, or other Federal agencies, the State agencies, to coordinate and establish adequate measures for wild-life control on such game farms and fish-cultural stations: Provided, That no such game farm shall hereafter be established in any State without the consent of the legislature of that State.

Sec. 6. In carrying out the provisions of this Act the Federal agencies charged with its enforcement may cooperate with other Federal agencies and with States, counties, municipalities, individuals, and public and private agencies, organizations, and institutions, and may accept donations of lands, funds, and other aids to the development of the program authorized in this Act: Provided, however, That no such donations of land shall be accepted without consent of the legislature of the State in which such land may be situated: Provided, That no authority is given in this Act for setting up any additional bureau or division in any department or commission, and shall not authorize any additional appropriation for carrying out its purposes.

Approved, March 10, 1934.

APPENDIX B

The Coordination Act*

(As amended by the Act of August 14, 1946; 60 Stat. 1080)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in order to promote effectual planning, development, maintenance and coordination of wildlife conservation and rehabilitation in the United States, its territories and possessions, The Secretary of the Interior, through the Fish and Wildlife Service, is authorized (a) to provide assistance to, and cooperate with, Federal, State and public or private agencies and organizations in the development, protection, rearing, and stocking of all species of wildlife, resources thereof, and their habitat, in controlling losses of the same from disease and other causes, in minimizing damages from overabundant species, in providing public shooting areas, and in carrying out other measures necessary to effectuate the purposes of this Act; and (b) to make surveys and investigations of the wildlife of the public domain, including lands and waters or interests therein acquired or controlled by any agency of the United States.

Sec. 2. Whenever the waters of any stream or other body of water are authorized to be impounded, diverted, or otherwise controlled for any purpose whatever by any department or agency of the United States, or by any public or private agency under Federal permit, such department or agency first shall consult with the Fish and Wildlife Service and the head of the agency exercising administration over the wildlife resources of the State wherein the impoundment, diversion, or other control facility is to be constructed with a view to preventing loss of and damage to wildlife resources, and the reports and recommendations of the Secretary of the Interior and of the head of the agency exercising administration over the wildlife resources of the State, based on surveys and investigations conducted by the Fish and Wildlife Service and by the said head of the agency exercising administration over the wildlife resources of the State, for the purpose of determining the possible damage to wildlife resources and of the means and measures that should be adopted to prevent loss of and damage to wildlife resources, shall be made an integral part of any report submitted by any agency of the Federal Government responsible for engineering surveys and construction of such projects.

The cost of planning for and the construction or installation and maintenance of any such means and measures shall be included in and shall constitute an integral part of the costs of such projects: *Provided*, That, in the case of projects

*Source: Reconstructed from House Report No. 85-2183. 1958. To Amend the Coordination Act. Report of the Committee on Merchant Marine and Fisheries, United States House of Representatives, 85th Congress, 2nd Session, July 16, 1958; and by deletion of changes made by the 1948 amendment to the Coordination Act.

after August 14, 1946, authorized to be constructed, operated, and maintained in accordance with the Federal reclamation laws (Act of June 17, 1902, 32 Stat. 388, and Acts amendatory thereof and supplementary thereto), the Secretary of the Interior shall, in addition to allocations to be made under section 9 of the Reclamation Projects Act of 1939 (53 Stat. 1187), make findings on the part of the estimated cost of the project which can properly be allocated to the preservation and propagation of fish and wildlife, and costs allocated pursuant to such findings shall not be reimbursable. In the case of construction by a Federal agency, that agency is authorized to transfer, out of appropriations or other funds made available for surveying, engineering, or construction to the Fish and Wildlife Service, such funds as may be necessary to conduct the investigations required by this section to be made by it.

Sec. 3. Whenever the waters of any stream or other body of water are impounded, diverted, or otherwise controlled for any purpose whatever by any department or agency of the United States, adequate provision consistent with the primary purposes of such impoundment, diversion, or other control shall be made for the use thereof, together with any areas of land, or interest therein, acquired or administered in connection therewith, for the conservation, maintenance, and management of wildlife, resources thereof, and its habitat thereon. In accordance with general plans, covering the use of such waters and other interests for these purposes, approved jointly by the head of the department or agency exercising primary jurisdiction thereof, the Secretary of the Interior, and the head of the agency exercising administration over the wildlife resources of the State wherein the waters and areas lie, such waters and interests shall be made available without cost for administration (a) by such State agency, if the management thereof for the conservation of wildlife relates to other than migratory birds; (b) by the Secretary of the Interior, if the waters and other interests have particular value in carrying out the national migratory bird program.

Sec. 4. Such areas as are made available to the Secretary of the Interior for the purposes of this Act under sections 1 and 3, or by any other law, proclamation, or Executive order, shall be administered directly or under cooperative agreements entered into pursuant to the provisions of section 1 by the Secretary of the Interior under such rules and regulations for the conservation, maintenance, and management of wildlife, resources thereof, and its habitat thereon, as may be adopted by him in accordance with general plans approved jointly by the Secretary of the Interior and the head of the department or agency exercising primary administration of such areas; Provided, That such rules and regulations shall not be inconsistent with the laws for the protection of fish and game of the States in which such area is situated.

SEC. 5. The Secretary of the Interior, through the Fish and Wildlife Service and the Bureau of Mines, is authorized to make such investigations as he deems necessary to determine the effects of domestic sewage, mine, petroleum, and

industrial wastes, erosion silt, and other polluting substances on wildlife, and to make reports to the Congress concerning such investigations and of recommendations for alleviating dangerous and undesirable effects of such pollution. These investigations shall include (1) the determination of standards of water quality for the maintenance of wildlife; (2) the study of methods of abating and preventing pollution, including methods for the recovery of useful or marketable products and byproduct of wastes; and (3) the collation and distribution of data on the progress and results of such investigations for the use of Federal, State, municipal, and private agencies, individuals, organizations, or enterprises.

SEC. 6. There is authorized to be appropriated from time to time, out of any money in the Treasury not otherwise appropriated, such amounts as may be necessary to carry out the provisions of this Act and regulations made pursuant thereto including the construction of such facilities, buildings, and other improvements necessary for economical administration of areas made available to the Secretary of the Interior under this Act, and the employment in the city of Washington and elsewhere of such persons and means as the Secretary of the Interior may deem necessary for such purposes.

SEC. 7. Any person who shall violate any rule or regulation promulgated in accordance with this Act shall be guilty of a misdemeanor and upon conviction thereof shall be fined not more than \$500 or imprisoned for not more than one year, or both.

SEC. 8. The terms "wildlife" and "wildlife resources" as used herein include birds, fishes, mammals, and all other classes of wild animals and all types of aquatic and land vegetation upon which wildlife is dependent.

SEC. 9. The provisions of this Act shall not apply to the Tennessee Valley Authority.

APPENDIX C

Coordination Act Amendments of June 19, 1948 (P.L. 697, 62 Stat. 497)

An Act to amend the Act of March 10, 1934, entitled "An Act to promote the conservation of wildlife, fish, and game, and for other purposes", as amended by the Act approved August 14, 1946

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That:

The Act of March 10, 1934 (48 Stat. 401), as amended by the Act approved August 14, 1946 (Public Law 732, Seventy-ninth Congress), is hereby amended to include the following new section:

"Sec. 5A. In the management of existing facilities (including locks, dams, and pools) in the Mississippi River between Rock Island, Illinois, and Minneapolis, Minnesota, administered by the United States Corps of Engineers of the Department of the Army, that Department is hereby directed to give full consideration and recognition to the needs of fish and other wildlife resources and their habitat dependent on such waters, without increasing additional liability to the Government, and, to the maximum extent possible without causing damage to levee and drainage districts, adjacent railroads and highways, farm lands, and dam structures, shall generally operate and maintain pool levels as though navigation was carried on throughout the year."

Approved June 19, 1948

APPENDIX D

The Fish and Wildlife Coordination Act¹ (P.L. 85-624, 72 Stat. 563; August 12, 1958)

SEC. 1. For the purpose of recognizing the vital contribution of our wildlife resources to the Nation, the increasing public interest and significance thereof due to expansion of our national economy and other factors, and to provide that wildlife conservation shall receive equal consideration and be coordinated with other features of water-resource development programs through the effectual and harmonious planning, development, maintenance, and coordination of wildlife conservation and rehabilitation for the purposes of this Act in the United States, its Territories and possessions, the Secretary of the Interior is authorized (1) to provide assistance to, and cooperate with, Federal, State, and public or private agencies and organizations in the development, protection, rearing, and stocking of all species of wildlife, resources thereof, and their habitat, in controlling losses of the same from disease or other causes, in minimizing damages from overabundant species, in providing public shooting and fishing areas, including easements across public lands for access thereto, and in carrying out other measures necessary to effectuate the purposes of this Act; (2) to make surveys and investigations of the wildlife of the public domain including lands and waters or interests therein acquired or controlled by any agency of the United States; and (3) to accept donations of land and contributions of funds in furtherance of the purposes of this Act.

SEC. 2. (a) Except as hereafter stated in Subsection (h) of this section, whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the United States, or by any public or private agency under Federal permit or license, such department or agency first shall consult with the United States Fish and Wildlife Service Department of the Interior, and with the head of the agency exercising administration over the wildlife resources of the particular State wherein the impoundment, diversion, or other control facility is to be constructed, with a view to the conservation of wildlife resources by preventing loss of and damage to such resources as well as providing for the development and improvement thereof in connection with such water-resource development.

(b) In furtherance of such purposes, the reports and recommendations of the Secretary of the Interior on the wildlife aspects of such projects and any report of the head of the State agency

¹ The Act of March 10, 1934, 48 Stat. 401, as amended by the Act of August 14, 1946, 60 Stat. 1080; the Act of June 19, 1948, 62 Stat. 497; the Act of August 12, 1958, 72 Stat. 563; 16 USC 661 et seq., and the Act of July 9, 1965, 79 Stat. 213.

The Act of August 12, 1958 established the official title of this legislation as the "Fish and Wildlife Coordination Act." It also revised the first four sections of the legislation and contains an authorization for appropriations.

exercising administration over the wildlife resources of the State, based on surveys and investigations conducted by the United States Fish and Wildlife Service and such State agency for the purpose of determining the possible damage to wildlife resources and for the purpose of determining means and measures that should be adopted to prevent the loss of or damage to such wildlife resources, as well as to provide concurrently for the development and improvement of such resources, shall be made an integral part of any report prepared or submitted by any agency of the Federal Government responsible for engineering surveys and construction of such projects when such reports are presented to the Congress or to any agency or person having the authority or the power, by administrative action or otherwise, (1) to authorize the construction of water-resource development projects or (2) to approve a report on the modification or supplementation of plans for previously authorized projects, to which this Act applies. Recommendations of the Secretary of the Interior shall be as specific as in practicable with respect to features recommended for wildlife conservation and development, lands to be utilized or acquired for such purposes, the results expected, and shall describe the damage to wildlife attributable to the project and the measures proposed for mitigating or compensating for these damages. The reporting officers in project reports of the Federal agencies shall give full consideration to the report and recommendations of the Secretary of the Interior and to any report of the State agency on the wildlife aspects of such projects, and the project plan shall include such justifiable means and measures for wildlife purposes as the reporting agency finds should be adopted to obtain maximum overall project benefits.

(c) Federal agencies authorized to construct or operate water-control projects are hereby authorized to modify, or add to the structures-and operations .of such projects the construction of which has not been substantially completed on the date of enactment of the Fish and Wildlife Coordination Act, and to acquire lands in accordance with section 3 of this Acts in order to accommodate the means and measures for such conservation of wildlife resources as an integral part of such projects: Provided, That for projects authorized by a specific Act of Congress before the date of enactment of the Fish and Wildlife Coordination Act (1) such modification or land acquisition shall be compatible with the purposes for which the project was authorized; (2) the cost of such modifications or land acquisition, as means and measures to prevent loss of and damage to wildlife resources to the extent justifiable, shall be an integral part of the cost of such projects; and (3) the cost of such modifications or land acquisition for the development or improvement of wildlife resources may be included to the extent justifiable,, and an appropriate share of the cost of any project may be allocated for this purpose with a finding as to the part of such allocated cost, if any, to be reimbursed by non-Federal interest.

(d) The cost of planning for and the construction or installation and maintenance of such means and measures adopted to carry out the conservation purposes of this section shall constitute an Integral part of the cost of such projects: Provided That such cost attributable to the development and improvement of wildlife shall not extend beyond that necessary for (1) land acquisition, (2) facilities as specifically recommended in water resource project reports, (3) modification of the project, and (4) modification of project operations, but shall not include the operation of wildlife facilities.

(e) In the case of construction by a Federal agency, that agency is authorized to transfer to the United States Fish and Wildlife Service, out of appropriations or other funds made available for Investigations, engineering, or construction, such funds as may be necessary to conduct all or part of the investigations required to carry out the purposes of this section.

(f) In addition to other requirements, there shall be included in any report submitted to Congress supporting a recommendation for authorization of any new project for the control or use of water as described herein (including any new division of such project or new supplemental works on such project) an estimation of the wildlife benefits or losses to be derived therefrom including benefits to be derived from measures recommended specifically for the development and improvement of wildlife resources, the cost of providing wildlife benefits (including the cost of additional facilities to be installed or lands to be acquired specifically for that particular phase of wildlife conservation relating to the development and improvement of wildlife), the part of the cost of joint-use facilities allocated to wildlife, and the part of such costs, if any, to be reimbursed by non-Federal interests.

(g) The provisions of this section shall be applicable with respect to any project for the control or use of water as prescribed herein, or any unit of such project authorized before or after the date of enactment of the Fish and Wildlife Coordination Act for planning or construction, but shall not be applicable to any project or unit thereof authorized before the date of enactment of the Fish and Wildlife Coordination Act if the construction of the particular project or unit thereof has been substantially completed. A project or unit thereof shall be considered to be substantially completed when sixty percent or more of the estimated construction cost has been obligated for expenditure.

(h) The provisions of this Act shall not be applicable to those projects for the impoundment of water where the maximum surface area of such impoundment is less than ten acres, nor to activities for or in connection with programs primarily for land management and use carried out by Federal agencies with respect to Federal lands under their jurisdiction.

Sec. 3. (a) Subject to the exceptions prescribed in section 2 (h) of this Act, whenever the waters of any stream or other body of water are impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the United States, adequate provision, consistent with the primary purposes of such control, shall be made for the use thereof, together with any areas of land, water, or interests therein, acquired or administered by a Federal agency, in connection therewith, for the conservation, maintenance, and management of wildlife resources thereof, and its habitat thereon, including the development and improvement of such wildlife resources pursuant to the provisions of section 2 of this Act.

(b) The use of such waters, land, or interests therein for wildlife conservation purposes shall be in accordance with general plans approved jointly (1) by the head of the particular department or agency exercising primary administration in each instance, (2) by the Secretary of the Interior,

and (3) by the head of the agency exercising the administration of the wildlife resources of the particular State wherein the waters and areas lie. Such waters and other areas shall be made available, without cost for administration, by such State agency, if the management of the properties relate to the conservation of wildlife other than migratory birds, or by the Secretary of the Interior, for administration in such manner as he may deem advisable, where the particular properties have value in carrying out the national migratory bird management program: Provided, That nothing in this section shall be construed as affecting the authority of the Secretary of Agriculture to cooperate with the States or in making lands available to the States with respect to the management of wildlife and wildlife habitat on lands administered by him.

(c) When consistent with the purposes of this Act and the reports and findings of the Secretary of the Interior prepared in accordance with section 2, land, waters, and interests therein may be acquired by Federal construction agencies for the wildlife conservation and development purposes of this Act in connection with a project as reasonably needed to preserve and assure for the public benefit the wildlife potentials of the particular area: Provided, That before properties are acquired for this purpose, the probable extent of such acquisition shall be set forth, along with other data necessary for project authorization, in a report submitted to the Congress, or in the case of a project previously authorized, no such properties shall be acquired unless specifically authorized by Congress, if specific authority for such acquisition is recommended by the construction agency.

(d) Properties acquired for the purpose of this section shall continue to be used for such purposes, and shall not become the subject of exchange or other transaction if such exchange or other transaction would defeat the initial purpose of their acquisition.

(e) Federal lands acquired or withdrawn for Federal water-resource purposes and made available to the States or to the Secretary of the Interior for wildlife management purposes, shall be made available for such purposes in accordance with this Act, notwithstanding other provisions of law.

(f) Any lands acquired pursuant to this section by any Federal agency within the exterior boundaries of a national forest shall, upon acquisition, be added to and become national forest lands, and shall be administered as a part of the forest within which they are situated, subject to all laws applicable to lands acquired under the provisions of the Act of March 1, 1911 (36 stat. 961), unless such lands are acquired to carry out the National Migratory Bird Management Program.

SEC. 4. Such areas as are made available to the Secretary of the Interior for the purposes of this Acts pursuant to sections 1 and 3 or pursuant to any other authorization, shall be administered by him directly or in accordance with cooperative agreements entered into pursuant to the provisions of the first section of this Act and in accordance with such rules and regulations for the conservation, maintenance, and management of wildlife, resources thereof, and its habitat thereon, as may be adopted by the Secretary in accordance with general plans approved jointly by the Secretary of the Interior and the head of the department or agency exercising primary

administration of such areas: Provided, That such rules and regulations shall not be inconsistent with the laws for the protection of fish and game of the States in which such area is situated (16 U.S.C., sec. 664): Provided further, That lands having value to the National Migratory Bird Management Program may, pursuant to general plans, be made available without cost directly to the State agency having control over wildlife resources, if it is jointly determined by the Secretary of the Interior and such State agency that this would be in the public interest: And provided further, That the Secretary of the Interior shall have the right to assume the management and administration of such lands in behalf of the National Migratory Bird Management Program if the Secretary finds that the State agency has withdrawn from or otherwise relinquished such management and administration.

SEC. 5. The Secretary of the Interior, through the Fish and Wildlife Service and the Bureau of Mines, is authorized to make such investigations as he deems necessary to determine the effects of domestic sewage, mine, petroleum, and industrial wastes, erosion silt, and other polluting substances on wildlife, and to make reports to the Congress concerning such investigations and of recommendations for alleviating dangerous and undesirable effects of such pollution. These investigations shall include (1) the determination of standards of water quality for the maintenance of wildlife; (2) the study of methods of abating and preventing pollution, including methods for the recovery of useful or marketable products and byproduct of wastes; and (3) the collation and distribution of data on the progress and results of such investigations for the use of Federal, State, municipal, and private agencies, individuals, organizations, or enterprises.

SEC. 5A. In the management of existing facilities (including locks, dams, and pools) in the Mississippi River between Rock Island, Illinois, and Minneapolis, Minnesota, administered by the United States Corps of Engineers of the Department of the Army, that Department is hereby directed to give full consideration and recognition to the needs of fish and other wildlife resources and their habitat dependent on such waters, without increasing additional liability to the Government, and, to the maximum extent possible without causing damage to levee and drainage districts, adjacent railroads and highways, farm lands, and dam structures, shall generally operate and maintain pool levels as though navigation was carried on throughout the year.

SEC. 6. There is authorized to be appropriated from time to time, out of any money in the Treasury not otherwise appropriated, such amounts as may be necessary to carry out the provisions of this Act and regulations made pursuant thereto including the construction of such facilities, buildings, and other improvements necessary for economical administration of areas made available to the Secretary of the Interior under this Act, and the employment in the city of Washington and elsewhere of such persons and means as the Secretary of the Interior may deem necessary for such purposes.

SEC. 7. Any person who shall violate any rule or regulation promulgated in accordance with this Act shall be guilty of a misdemeanor and upon conviction thereof shall be fined not more than \$500 or imprisoned for not more than one year, or both.

SEC. 8. The terms “wildlife” and “wildlife resources” as used herein include birds, fishes, mammals, and all other classes of wild animals and all types of aquatic and land vegetation upon which wildlife is dependent.

SEC. 9. The provisions of this Act shall not apply to the Tennessee Valley Authority.

APPENDIX E

Selected Sections of
Watershed Protection and Flood Prevention Act
(P.L. 566, 1954 as amended by P.L. 85-624, 1958)

SEC. 3. The Watershed Protection and Flood Prevention Act, as amended (16 U.S.C. secs. 1001-1007, inclusive), is amended by adding at the end thereof the following new section:

"SEC. 12. When the Secretary approves the furnishing of assistance to a local organization in preparing a plan for works of improvement as provided for in section 3:

"(1) The Secretary shall so notify the Secretary of the Interior in order that the latter, as he desires, may make surveys and investigations and prepare a report with recommendations concerning the conservation and development of wildlife resources and participate, under arrangements satisfactory to the Secretary of Agriculture, in the preparation of a plan for works of improvement that is acceptable to the local organization and the Secretary of Agriculture.

"(2) Full consideration shall be given to the recommendations contained in any such report of the Secretary of the Interior as he may submit to the Secretary of Agriculture prior to the time the local organization and the Secretary of Agriculture have agreed on a plan for works of improvement. The plan shall include such of the technically and economically feasible works of improvement for wildlife purposes recommended in the report by the Secretary of the Interior as are acceptable to, and agreed to by, the local organization and the Secretary of Agriculture, and such report of the Secretary of the Interior, accompany the plan for works of improvement when it is submitted to the Secretary of Agriculture for approval or transmitted to the Congress through the President.

"(3) The cost of making surveys and investigations and of preparing reports concerning the conservation and development of wildlife resources shall be borne by the Secretary of the Interior out of funds appropriated to his Department."

SEC. 4. There is authorized to be appropriated and expended such funds as may be necessary to carry out the purposes of this Act.

Approved August 12, 1958.

APPENDIX F

Federal Water Projects Recreation Act¹ (P.L. 89-72; 79 Stat. 213; July 9, 1965;)

SEC. 1. It is the policy of the Congress and the intent of this Act that (a) in investigating and planning any Federal navigation, flood control, reclamation, hydroelectric, or multiple-purpose water resource project, full consideration shall be given to the opportunities, if any, which the project affords for outdoor recreation and for fish and wildlife enhancement and that, wherever any such project can reasonably serve either or both of these purposes consistently with the provisions of this part, it shall be constructed, operated, and maintained accordingly; (b) planning with respect to the development of the recreation potential of any such project shall be based on the coordination of the recreational use of the project area with the use of existing and planned Federal, State, or local public recreation developments; and (c) project construction agencies shall encourage non-Federal public bodies to administer project land and water areas for recreation and fish and wildlife enhancement purposes and operate, maintain, and replace facilities provided for those purposes unless such areas or facilities are included or proposed for inclusion within a national recreation area, or are appropriate for administration by a Federal agency as a part of the national forest system, as a part of the public lands classified for retention in Federal ownership, or in connection with an authorized Federal program for the conservation and development of fish and wildlife.

SEC. 2.. (a) If, before authorization of a project, non-Federal public bodies indicate their intent in writing to agree to administer project land and water areas for recreation or fish and wildlife enhancement or for both of these purposes pursuant to the plan for the development of the project approved by the head of the agency having administrative jurisdiction over it and to bear not less than one-half the separable costs of the project allocated to recreation, and to bear one-quarter of such costs allocated to fish and wildlife enhancement and not less than one-half the costs of operation, maintenance, and replacement incurred therefor –

(1) the benefits of the project to said purpose or purposes shall be taken into account in determining the economic benefits of the project;

(2) costs shall be allocated to said purpose or purposes and to other purposes in a manner which will insure that all project purposes share equitably in the advantages of multiple-purpose construction: Provided, That the costs allocated to recreation or fish and wildlife enhancement shall not exceed the lesser of the benefits from those functions or the costs of providing recreation or fish and wildlife enhancement benefits or reasonably equivalent use and location by the least costly alternative means; and

¹ The Act of July 9, 1965 (P.L. 89-72; 79 Stat. 213), as amended by the Act of March 7, 1974 (P.L. 93-251; 88 Stat. 33), the Act of October 21, 1976 (P.L. 94-576; 90 Stat. 2728), and the Act of October 30, 1992 (P.L. 102-575; 106 Stat. 4691). A majority of the wording is taken from 16 U.S.C. 4601-12 - 4601-21; revised slightly to conform to wording of law as enacted.

(3) not more than one-half the separable costs of the project allocated to recreation and exactly three-quarters of such costs allocated to fish and wildlife enhancement and all the joint costs of the project allocated to recreation and fish and wildlife enhancement shall be borne by the United States and be nonreimbursable.

Projects authorized during the calendar year 1965 may include recreation and fish and wildlife enhancement on the foregoing basis without the required indication of intent. Execution of an agreement as aforesaid shall be a prerequisite to commencement of construction of any project to which this subsection is applicable.

(b) The non-Federal share of the separable costs of the project allocated to recreation and fish and wildlife enhancement shall be borne by non-Federal interests, under either or both of the following methods as may be determined appropriate by the head of the Federal agency having jurisdiction over the project: (1) payment, or provision of lands, interests therein, or facilities for the project; or (2) repayment, with interest at a rate comparable to that for other interest-bearing functions of Federal water resource projects, within fifty years of first use of project recreation or fish and wildlife enhancement facilities: Provided, That the source of repayment may be limited to entrance and user fees or charges collected at the project by non-Federal interests if the fee schedule and the portion of fees dedicated to repayment are established on a basis calculated to achieve repayment as aforesaid and are made subject to review and renegotiation at intervals of not more than five years.

SEC. 3. (a) No facilities or project modifications which will furnish recreation or fish and wildlife enhancement benefits shall be provided in the absence of the indication of intent with respect thereto specified in section 4601-13(a) of this title unless (1) such facilities or modifications serve other project purposes and are justified thereby without regard to such incidental recreation or fish and wildlife enhancement benefits as they may have or (2) they are minimum facilities which are required for the public health and safety and are located at access points provided by roads existing at the time of project construction or constructed for the administration and management of the project. Calculation of the recreation and fish and wildlife enhancement benefits in any such case shall be based on the number of visitor-days anticipated in the absence of recreation and fish and wildlife enhancement facilities or modifications except as hereinbefore provided and on the value per visitor-day of the project without such facilities or modifications. Project costs allocated to recreation and fish and wildlife enhancement on this basis shall be nonreimbursable.

(b) Notwithstanding the absence of an indication of intent as specified in section 4601-13(a) of this title, lands may be provided in connection with project construction to preserve the recreation and fish and wildlife enhancement potential of the project:

(1) If non-Federal public bodies execute an agreement after initial operation of the project (which agreement shall provide that the non-Federal public bodies will administer project land and water areas for recreation or fish and wildlife enhancement or both pursuant to the plan

for the development of the project approved by the head of the agency having administrative jurisdiction over it and will bear not less than one-half the costs of lands, facilities, and project modifications provided for recreation, and will bear one-quarter of such costs for fish and wildlife enhancement, and not less than one-half the costs of planning studies, and the costs of operation, maintenance, and replacement attributable thereto) the remainder of the costs of lands, facilities, and project modifications provided pursuant to this paragraph shall be nonreimbursable. Such agreement and subsequent development, however, shall not be the basis for any reallocation of joint costs of the project to recreation or fish and wildlife enhancement.

(2) If, within ten years after initial operation of the project, there is not an executed agreement as specified in paragraph (1) of this subsection, the head of the agency having jurisdiction over the project may utilize the lands for any lawful purpose within the jurisdiction of his agency, or may offer the land for sale to its immediate prior owner or his immediate heirs at its appraised fair market value as approved by the head of the agency at the time of offer or, if a firm agreement by said owner or his immediate heirs is not executed within ninety days of the date of the offer, may transfer custody of the lands to another Federal agency for use for any lawful purpose within the jurisdiction of that agency, or may lease the lands to a non-Federal public body, or may transfer the lands to the Administrator of General Services for disposition in accordance with the surplus property laws of the United States. In no case shall the lands be used or made available for use for any purpose in conflict with the purposes for which the project was constructed, and in every case except that of an offer to purchase made, as hereinbefore provided, by the prior owner or his heirs preference shall be given to uses which will preserve and promote the recreation and fish and wildlife enhancement potential of the project or, in the absence thereof, will not detract from that potential.

- (c)(1) Any recreation facility constructed under this part may be expanded or modified if -
 - (A) the facility is inadequate to meet recreational demands; and
 - (B) a non-Federal public body executes an agreement which provides that such public body -
 - (i) will administer the expanded or modified facilities pursuant to a plan for development for the project that is approved by the agency with administrative jurisdiction over the project; and
 - (ii) will bear not less than one-half of the planning and capital costs of such expansion or modification and not less than one-half of the costs of the operation, maintenance, and replacement attributable to the expansion of the facility.

(2) The Federal share of the cost of expanding or modifying a recreational facility described in paragraph (1) may not exceed 50 percent of the total cost of expanding or modifying the facility.

SEC. 4. At projects, the construction of which has commenced or been completed as of July 9, 1965, where non-Federal public bodies agree to administer project land and water areas for

recreation and fish and wildlife enhancement purposes and to bear the² not less than one-half the costs of operation, maintenance, and replacement of existing facilities serving those purposes, such facilities and appropriate project lands may be leased to non-Federal public bodies.

SEC. 5. Nothing herein shall be construed as preventing or discouraging postauthorization development of any project for recreation or fish and wildlife enhancement or both by non-Federal public bodies pursuant to agreement with the head of the Federal agency having jurisdiction over the project. Such development shall not be the basis for any allocation or reallocation of project costs to recreation or fish and wildlife enhancement.

SEC. 6. (a) The views of the Secretary of the Interior developed in accordance with section 3 of the Act of May 28, 1963 (77 Stat. 49)[16 U.S.C. 4601-2], with respect to the outdoor recreation aspects shall be set forth in any report of any project or appropriate unit thereof within the purview of this part. Such views shall include a report on the extent to which the proposed recreation and fish and wildlife development conforms to and is in accord with the State comprehensive plan developed pursuant to subsection 5(d) of the Land and Water Conservation Fund Act of 1965 (78 Stat. 897)[16 U.S.C. 4601-8(d)].

(b) Omitted [This subsection amended subsection 2(d) of the Fish and Wildlife Coordination of 1958]

(c) Expenditures for lands or interests in lands hereafter acquired by project construction agencies for the establishment of migratory waterfowl refuges recommended by the Secretary of the Interior at Federal water resource projects, when such lands or interests in lands would not have been acquired but for the establishment of a migratory waterfowl refuge at the project, shall not exceed \$28,000,000: Provided, That the aforementioned expenditure limitation in this subsection shall not apply to the costs of mitigating damages to migratory waterfowl caused by such water resource project.

(d) This Act shall not apply to the Tennessee Valley Authority, but the Authority is authorized to recognize and provide for recreational and other public uses at any dams and reservoirs heretofore or hereafter constructed in a manner consistent with the promotion of navigation, flood control, and the generation of electrical energy, as otherwise required by law, nor to projects constructed under authority of the Small Reclamation Projects Act, as amended (43 U.S.C. 422a et seq.), or under authority of the Watershed Protection and Flood Prevention Act, as amended (16 U.S.C. 1001 et seq.).

(e) Sections 2, 3, 4, and 5 shall not apply to nonreservoir local flood control projects, beach erosion control projects, small boat harbor projects, hurricane protection projects, or to project areas or facilities authorized by law for inclusion within a national recreation area or appropriate

² Worded so in the original; the word “the” probably should not appear. (United States Code Footnote)

for administration by a Federal agency as a part of the national forest system, as a part of the public lands classified for retention in Federal ownership, or in connection with an authorized Federal program for the conservation and development of fish and wildlife.

(f) As used in this Act, the term "nonreimbursable" shall not be construed to prohibit the imposition of entrance, admission, and other recreation user fees or charges.

(g) Subsection 6(a)(2) of the Land and Water Conservation Fund Act of 1965 (78 Stat. 897)[16 U.S.C. Section 4601-9(a)(2)] shall not apply to costs allocated to recreation and fish and wildlife enhancement which are borne by the United States as a nonreimbursable project cost pursuant to subsection 2(a) or subsection 3(b)(1) of this Act.

(h) All payments and repayment by non-Federal public bodies under the provisions of this part shall be deposited in the Treasury as miscellaneous receipts, and revenue from the conveyance by deed, lease, or otherwise, of lands under section 4601-14(b)(2) of this title shall be deposited in the Land and Water Conservation Fund.

SEC. 7. (a) The Secretary [of the Interior] is authorized, in conjunction with any reservoir heretofore constructed by him pursuant to the Federal reclamation laws or any reservoir which is otherwise under his control, except reservoirs within national wildlife refuges, to investigate, plan, construct, operate and maintain, or otherwise provide for public outdoor recreation and fish and wildlife enhancement facilities, to acquire or otherwise make available such adjacent lands or interests therein as are necessary for public outdoor recreation or fish and wildlife use, and to provide for public use and enjoyment of project lands, facilities, and water areas in a manner coordinated with the other project purposes. Lands, facilities and project modifications for the purposes of this subsection may be provided only after an agreement in accordance with subsection (b) or (c) of section 4601-14 of this title has been executed.

(b). The Secretary of the Interior is authorized to enter into agreements with Federal agencies or State or local public bodies for the administration of project land and water areas and the operation, maintenance, and replacement of facilities and to transfer project lands or facilities to Federal agencies or State or local public bodies by lease agreement or exchange upon such terms and conditions as will best promote the development and operation of such lands or facilities in the public interest for recreation and fish and wildlife enhancement purposes.

(c) No lands under the jurisdiction of any other Federal agency may be included for or devoted to recreation or fish and wildlife purposes under the authority of this section without the consent of the head of such agency; and the head of any such agency is authorized to transfer any such lands to the jurisdiction of the Secretary of the Interior for purposes of this section. The Secretary of the Interior is authorized to transfer jurisdiction over project lands within or adjacent to the exterior boundaries of national forests and facilities thereon to the Secretary of Agriculture for recreation and other national forest system purposes; and such transfer shall be made in each case in which the project reservoir area is located wholly within the exterior boundaries of a

national forest unless the Secretaries of Agriculture and Interior jointly determine otherwise. Where any project lands are transferred hereunder to the jurisdiction of the Secretary of Agriculture, the lands involved shall become national forest lands: Provided, That the lands and waters within the flow lines of any reservoir or otherwise needed or used for the operation of the project for other purposes shall continue to be administered by the Secretary of the Interior to the extent he determines to be necessary for such operation. Nothing herein shall limit the authority of the Secretary of the Interior granted by existing provisions of law relating to recreation or fish and wildlife development in connection with water resource projects or to disposition of public lands for such purposes.

SEC. 8. Effective on and after July 1, 1966, neither the Secretary of the Interior nor any bureau nor any person acting under his authority shall engage in the preparation of any feasibility report under reclamation law with respect to any water resource project unless the preparation of such feasibility report has been specifically authorized by law, any other provision of law to the contrary notwithstanding.

SEC. 9. Nothing contained in this part shall be taken to authorized or to sanction the construction under the Federal reclamation laws or under any Rivers and Harbors or Flood Control Act of any project in which the sum of the allocations to recreation and fish and wildlife enhancement exceeds the sum of the allocations to irrigation, hydroelectric power, municipal, domestic and industrial water supply, navigation, and flood control, except that this section shall not apply to any such project for the enhancement of anadromous fisheries, shrimp, or for the conservation of migratory birds protected by treaty, when each of the other functions of such a project has, of itself, a favorable benefit-cost ratio.

SEC. 10. As used in this part:

- (a) The term "project" shall mean a project or any appropriate unit thereof.
- (b) The term "separable costs," as applied to any project purpose, means the difference between the capital cost of the entire multiple-purpose project and the capital cost of the project with the purpose omitted.
- (c) The term "joint costs" means the difference between the capital cost of the entire multiple-purpose project and the sum of the separable costs for all project purposes.
- (d) The term "feasibility report" shall mean any report of the scope required by the Congress when formally considering authorization of the project of which the report treats.
- (e) The term "capital cost" includes interest during construction, wherever appropriate.

SEC. 11. Omitted. [Amended Subsection a of the Land and Water Fund Act of 1965 (78 Stat. 897)].

SEC. 12. This Act may be cited as the "Federal Water Project Recreation Act".

AMENDING THE COORDINATION ACT

—————
JULY 28, 1958.—Ordered to be printed
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Mr. MAGNUSON, from the Committee on Interstate and Foreign Commerce, submitted the following :

REPORT

[To accompany H. R. 13138]

The Committee on Interstate and Foreign Commerce, to whom was referred the bill (H. R. 13138) to amend the act of March 10, 1934, to provide for more effective integration of a fish and wildlife conservation program with Federal water-resource developments, and for other purposes, having considered the same, report favorably thereon without amendment and recommend that the bill do pass.

PURPOSE OF THE BILL

This amendment to the Coordination Act would grant authority to the agencies of Government engaged in construction to consult with the Fish and Wildlife Service before and during the building of Federal water development projects.

The Fish and Wildlife Service would make known to these construction agencies, such as the Corps of Engineers and the Bureau of Reclamation, the project necessary to protect fish and wildlife. Considerable study would be required in some cases, with suggested changes in construction plans to the great advantage to our wildlife resource. Under the bill suggestions regarding changes could be made previous to the commencement of construction. Such plans, or recommendations, whether accepted or rejected by the construction agency, would be submitted to the Congress at the time authorization legislation for the project was under consideration.

The bill would amend the Watershed Protection and Flood Prevention Act which is administered by the Department of Agriculture. It is designed to provide for greater consideration of fish and wildlife conservation in the Federal water-resource development program. Enactment of the bill would not retard that program but should help significantly in permitting Federal water development to serve the interests of a much larger share of our population.

The Secretary of Agriculture would be required to notify the Department of the Interior on any construction plans which concern the conservation and development of wildlife resources. The Secretary of Agriculture would give full consideration to any plans submitted to him by the Fish and Wildlife Service.

The Congress recognized the need for greater emphasis on fish and wildlife conservation through the enactment of the Fish and Wildlife Act of August 8, 1956 (70 Stat. 1119). This act specifically pointed to the need to maintain and increase these resources through proper development and management. The Congress also directed the Secretary of the Interior to take such steps as may be required for the betterment of fish and wildlife resources, and to make such recommendations for additional legislation as deemed necessary.

H. R. 13138 in the form reported by your committee is based on the recommendations of the Secretary of the Interior contained in a letter to the Committee dated April 1, 1958. That letter stated, in part:

* * * we have discussed this proposed legislation with other interested departments, including particularly, the Department of Agriculture and the Department of the Army. The bill as transmitted herewith has their concurrence.

The bill enjoys exceptionally enthusiastic and widespread support. Every one of the 48 State governors, or their authorized representatives, had expressed general endorsement of an earlier version of this bill, according to the Secretary of the Interior. Every major national conservation organization supports it. The bill has the wholehearted endorsement of the commercial fishing industry. As noted above, the Secretary of the Interior sponsored the bill and states that the administration, including all of the other affected Federal departments, supports the bill. The committee has received a very large number of written endorsements from all parts of the country.

COSTS

The Department of the Interior is of the opinion that the cost of this bill will be little above the amounts now being spent on studies of water development projects.

GENERAL DISCUSSION

The fish and wildlife resources of the Nation are tremendously important, not only to the physical and spiritual well-being of our people, but to our national economy as well. A survey made by an independent sampling organization in 1955 found that 1 out of every 3 of all the households in this Nation contains at least 1 person who hunts, fishes, or both. These people spent in that year some \$3 billion in pursuit of their sports. One in every 5 persons, 12 years of age or over—a total of 25 million in this age group—hunts or fishes, or both. In addition to the business these activities generate to provide profits and wages in the sporting goods, recreation and related industries, these 25 million people gained much in physical and spiritual health.

Not all of the recreational benefits from fish and wildlife accrue to those who hunt and fish. It has been estimated, for example, that 66 million people find recreation and release from tension in wildlife photography, bird watching, and other forms of nature study based on fish and wildlife resources.

Commercial fisheries are of major importance to our Nation. This industry provides employment, both direct and indirect, for about half a million workers. The commercial fisheries industry supplies somewhat more than 5 billion pounds of fish to our markets each year, nearly 3 billion pounds of which are used for human food, providing proteins and vitamins of great value in the national diet.

The remainder, as well as most of the waste from filleting, canning, and otherwise preparing food fish for market, is used in the production of supplements to animal feeds and as special-purpose materials in industry and the arts.

Fishmeals, when incorporated in poultry diets, enable the farmer to bring his birds to market weight in a period of 8 weeks, resulting in a significant saving in feed and a significant improvement in poultry quality. Fish solubles, another product derived from the fish wastes, are an acknowledged superior source of vitamins, minerals, and unknown growth factors and are universally used in feeds prepared for use by the poultry and swine-raising industries.

The commercial fish catch, when processed into human food and industrial products, is valued at well over a billion dollars annually at the retail level.

Some of the more desirable and most valuable commercial fishes such as salmon, striped bass, menhaden, shrimp, and other shellfish, are affected by water-use projects. The anadromous fishes, which include the salmon, striped bass, and shad, must migrate to locations in streams to perform their spawning act. After the eggs have hatched, the resulting young fish must make their way downstream to the ocean to achieve their growth. This two-way migration is particularly vulnerable to interference by dams. In some instances, shellfish may also be affected by dams, as these dams may alter the salinity of the water in river estuaries. Finally, the nursery and feeding grounds of valuable crustaceans, such as shrimp, as well as the young of valuable marine fishes, may be affected by dredging, filling, and diking operations often carried out to improve navigation and provide new industrial or residential land.

It is particularly important that adequate provision be made for fish and wildlife conservation in the water resource program, in view of the very great increases in demand for water in the Nation's expanding population and economy.

Since 1950, water demands for use by humans have increased by 35 to 40 percent. This is roughly three times the increase in population, even though the population itself is increasing very rapidly. Fish and wildlife species, like other living things, need land and water. Adequate provision must be made for the conservation and preservation of fish and wildlife in our water program if we are to continue to have them as part of our economy and way of life. H. R. 13138, as reported, is intended to provide more adequately for the conservation and preservation of fish and wildlife without unduly restricting needed development of our water resources to meet man's various requirements. Despite the considerable accomplishments under the

1946 Coordination Act, the results have fallen far short of the results anticipated by the conservationists who sponsored the 1946 law. The limitations and deficiencies of that act will not permit the Fish and Wildlife Service and the State fish and game departments to accomplish the objectives of fish and wildlife conservation and river basin development that are clearly essential if we are to preserve our fish and wildlife resources on a scale demanded by the people of the Nation.

Principally the 1946 act does not provide clear, general authority for the Federal agencies who construct water-resource projects to incorporate in project construction and operation plans the needed measures for fish and wildlife conservation. The act is mainly concerned with compensatory measures to mitigate the loss of or damage to fish and wildlife resources; it contains no clear authority to permit the planning of installations of appropriate means and measures to take advantage of opportunities provided by water projects for enhancement or improvement for fish and wildlife resources.

Existing law is of questionable application to many authorized projects, a very serious shortcoming. The Corps of Engineers, for example, has a backlog of 650 active authorized projects with an estimated cost of about \$6 billion on which construction has not yet started. Many of these cover vast areas, containing some of the most important fish and wildlife resources of the Nation. The Bureau of Reclamation has about 150 projects or units at an estimated cost of \$3.7 billion in this category. Most of these projects have never been investigated from the standpoint of their effects on fish and wildlife resources. Many of them were authorized 15 or 20 years ago or more. It would make good sense to have the policies and procedures of the Coordination Act applicable to them in order that the wishes of the Congress in enacting the 1946 statute and the proposed amendments can be observed.

The bill provides for the inclusion of fish and wildlife conservation features in these authorized projects so long as they are "compatible with the purposes for which the project was authorized." It is understood that some benefits from authorized project purposes may have to be diminished in some slight degree in order to obtain benefits from fish and wildlife conservation measures adopted to compensate for losses to these resources or to enhance and develop fish and wildlife.

The legislation would provide that conservation measures for the prevention of losses to fish and wildlife should be included "to the extent justifiable" in authorized projects. It is the understanding of your committee, however, that these measures would not have to be justified under the usual benefit-cost type of analysis. They would not produce "benefits." These measures would be for reducing or compensating for losses.

Similarly, it is the understanding of your committee that the "estimation of wildlife * * * losses" provided for in the bill would not require a dollar evaluation.

Existing law has questionable application to projects of the Corps of Engineers for the dredging of bays and estuaries for navigation and filling purposes. More seriously, existing law has no application whatsoever to the dredging and filling of bays and estuaries by private interests or other non-Federal entities in navigable waters

under permit from the Corps of Engineers. This is a particularly serious deficiency from the standpoint of commercial fishing interests. The dredging of these bays and estuaries along the coastlines to aid navigation and also to provide land fills for real estate and similar developments, both by Federal agencies or other agencies under permit from the Corps of Engineers, has increased tremendously in the last 5 years. Obviously, dredging activity of this sort has a profound disturbing effect on aquatic life, including shrimp and other species of tremendous significance to the commercial fishing industry. The bays, estuaries, and related marsh areas are highly important as spawning and nursery grounds for many commercial species of fish and shellfish.

Also existing law contains no reference to the authority of the water-project construction agencies to acquire land around water-use projects for fish and wildlife conservation purposes. In very many cases, the availability of lands to the Fish and Wildlife Service or the State fish and game departments for these purposes is the key to adequate and satisfactory project measures to compensate for losses and to provide for the enhancement and improvement of fish and wildlife. The conservation agencies are restricted and hampered by this lack of authority, particularly where the land acquisition necessary for flood control and other so-called primary purposes of projects results in little or no land being available for conservation purposes.

The amendments proposed by this bill would remedy these deficiencies and have several other important advantages. The amendments, would provide that wildlife conservation shall receive equal consideration with other features in the planning of Federal water resource development programs. This would have the effect of putting fish and wildlife on the basis of equality with flood control, irrigation, navigation, and hydroelectric power in our water resource programs, which is highly desirable and proper, and represents an objective long sought by conservationists of the Nation.

The amendments would also provide the Department of the Interior with authority to accept lands and funds for fish and wildlife conservation purposes given by individuals and other non-Federal entities. They would grant authority for the withdrawal of public lands to provide areas for fishing purposes and access to areas to be utilized by the public for both hunting and fishing. (The present act contains authority for withdrawal of public lands to provide areas for hunting purposes.) Much public land has been withdrawn for hunting purposes and large areas have been made available to State fish and game departments for administration and management.

Finally, the amendments to existing law would simplify procedures, for the assumption of management by the States of project lands found to be of particular value to the national migratory bird program. Under other existing law, the Department of the Interior has jurisdiction of this program, but frequently it is found to be in the public interest for the States to take over the management of certain lands particularly valuable for migratory birds. Today these lands must be assigned by the project construction agency first to the Fish and Wildlife Service, who in turn, assigns them to State fish and game departments. The bill would permit the assignment directly to the States, while safeguarding the Federal interest in migratory birds.

The legislation would be a permissive law so far as it concerns relationship between water project construction agencies and fish and wildlife conservation agencies. The latter would not be given any veto power over any part of the water resource development program.

The legislation would establish in law the provisions of a memorandum of understanding, dated May 12, 1955, entered into by the Fish and Wildlife Service and the Soil Conservation Service of the Department of Agriculture. It would provide for study of projects in the small watershed program by the Fish and Wildlife Service on a fully cooperative basis, leaving full control of the program with local groups, the Secretary of Agriculture, and the Congress, as at present. These studies could be made to determine desirable means of enhancing fish and wildlife resources in these small watershed projects as well as the mitigation of damages.

Unquestionably, the bill, if enacted, would result in the Congress having better information on the effects of water projects on fish and wildlife resources while considering project-authorizing legislation. It will then, of course, be for the Congress to decide what conservation measures should be incorporated in any project.

The Congress, moreover, would retain full control, through its consideration of project-authorizing legislation, and the review of supplemental reports, in the case of projects already authorized, of any costs incurred for fish and wildlife conservation purposes.

AGENCY COMMENT

Departmental reports on S. 3725, the Senate version of H. R. 13138, follow:

DEPARTMENT OF AGRICULTURE,
Washington, D. C., June 9, 1958.

HON. WARREN G. MAGNUSON,
*Chairman, Committee on Interstate and Foreign Commerce,
United States Senate.*

DEAR SENATOR MAGNUSON: This is in reply to your request of April 30, 1958, for the comments of this Department on S. 3725, a bill to amend the Coordination and Watershed Protection and Flood Prevention Acts, to promote the conservation of wildlife, fish, and game, and for other purposes.

The bill would amend the Coordination Act administered by the Department of the Interior and the Watershed Protection and Flood Prevention Act administered by the Department of Agriculture to further promote the conservation of wildlife, fish, and game resources.

The provisions of the bill are identical, except for two added subsections, to the provisions of the text recommended by the Secretary of the Interior on April 1, 1958, to the Committee on Interstate and Foreign Commerce as a substitute for S. 2496 and concurred in by this Department in its report dated April 30, 1958, to that committee in which it also outlined its strong objections to S. 2496 as introduced. The 2 added subsections consist of a further proposed identical amendment to each of the 2 acts to be amended by the bill which would require that any acquisition, withdrawal, administration, or transfer of water, water resources, or water rights necessary to carry out the provisions of those acts shall be accomplished in accordance with the water laws of the State or States in which such action is taken. This Department

feels that the proposed added subsection 12 (b) to the Watershed Protection and Flood Prevention Act beginning on page 13, line 23 of the bill does not appear to be necessary in view of the existing provisions in section 4 (4) of that act, which provides that local organizations shall acquire or provide assurance that landowners or water uses have acquired needed water rights, pursuant to State law.

The Bureau of the Budget advises that there is no objection to the submission of this report.

Sincerely yours,

TRUE D. MORSE, *Acting Secretary.*

FEDERAL POWER COMMISSION,
Washington, June 26, 1958.

S. 3725, 85th Congress, 2d session, to amend the Coordination and Watershed Protection * * * Act * * *.

HON. WARREN G. MAGNUSON,
*Chairman, Committee on Interstate and Foreign Commerce,
United States Senate, Washington, D. C.*

DEAR MR. CHAIRMAN: In response to your request of April 30, 1958, there are enclosed copies of the report of the Federal Power Commission on the subject bill.

Sincerely yours,

JEROME K. KUYKENDALL,
Chairman.

Enclosure No. 104472.

FEDERAL POWER COMMISSION REPORT ON S. 3725, 85TH CONGRESS,
A BILL TO AMEND THE COORDINATION AND WATERSHED PROTECTION
AND FLOOD PREVENTION ACTS, TO PROMOTE THE CONSERVATION OF
WILDLIFE, FISH, AND GAME, AND FOR OTHER PURPOSES

The amendments to the Wildlife Resources Coordination and Watershed Protection and Flood Prevention Acts (16 U. S. C. 661, 1001) proposed by this bill appear to be designed to secure more effective cooperation between State and Federal agencies and between Federal agencies themselves in planning for the preservation, improvement, and use of fish and wildlife resources in connection with water resource projects to be constructed by or under authority of the United States or with Federal financial or technical assistance. The amendments would also place an affirmative responsibility upon Federal agencies, not only to prevent loss or damage to wild life resources as presently contemplated by the Coordination Act, but to integrate wildlife conservation programs for the enhancement of wildlife with other water resource development programs whether carried out by Federal or non-Federal agencies.

There is much to be gained by an affirmative approach to wildlife protection and preservation. In the issuance of licenses under the Federal Power Act for water-power development by non-Federal agencies, the Federal Power Commission regards the Wildlife Resources Coordination Act as calling not only for protection but also for the enhancement of fish and wildlife resources whenever such enhancement can be reasonably achieved. It appears, therefore, that

the amendments carried by the bill would merely apply the same principle to Federal programs as is now applied to non-Federal developments under the Federal Power Act.

In this connection subsection 1 (c) of the bill would authorize the Secretary of the Interior "to accept donations of land and contributions of funds in furtherance of the purposes of this act." In issuing licenses the Commission has required in appropriate cases that licensees make funds available to the Secretary to conduct studies to determine measures and facilities required to conserve and enhance fish and wildlife resources. In addition, the Commission has required licensees to acquire or provide funds for acquiring lands for wildlife management programs. If any doubt exists as to the authority of the Secretary of the Interior to accept such donations and contributions, it appears desirable to expressly grant such authority as proposed by the bill.

We understand that the Secretary of the Interior in his report on this bill urges that Congress consider separately from this bill the matter of compliance with State laws covered by the two subsections appearing on page 11, lines 7 through 11, and on page 13, line 23, through line 2 on page 14, because of their controversial nature.¹ The matter of compliance with State water laws is presently before the Congress in other bills directly dealing with that subject. While we do not construe these two subsections as superseding any of the licensing provisions of the Federal Power Act, we also believe that the question of compliance with State laws might better be considered separately from S. 3725. Consequently, we recommend that the two subsections be deleted from the bill.

With the amendment recommended above the Commission is in favor of this bill.

FEDERAL POWER COMMISSION,
By JEROME K. KUYKENDALL, *Chairman*.

COMPTROLLER GENERAL OF THE UNITED STATES,
Washington, May 16, 1958.

HON. WARREN G. MAGNUSON,
*Chairman, Committee on Interstate and Foreign Commerce,
United States Senate.*

DEAR MR. CHAIRMAN: Further reference is made to your letter dated April 30, 1958, acknowledged May 2, requesting our comments on S. 3725, 85th Congress, 2d session.

S. 3725 would amend the Coordination Act of 1934, as amended (16 U. S. C. 661-667), and the Watershed Protection and Flood Prevention Act, as amended (16 U. S. C. 1001-1007), to provide for the integration of fish and wildlife conservation programs with water-resource development projects in which a Federal interest exists.

We find nothing in this bill which is objectionable from an accounting and auditing viewpoint. However, we have no information, other than that contained in the remarks of the sponsor upon introduction of the bill, with respect to the necessity for, or advisability of, legislation of this nature. We therefore make no recommendation with respect to its enactment.

¹ These lines were deleted by amendments.

Your attention is invited to the reference to "section o" in line 17, page 11, which apparently should read "section 3 (b)."

Sincerely yours,

JOSEPH CAMPBELL,
Comptroller General of the United States.

GENERAL SERVICES ADMINISTRATION,
Washington, D. C., July 9, 1958.

HON. WARREN G. MAGNUSON,
*Chairman, Committee on Interstate and Foreign Commerce,
United States Senate, Washington, D. C.*

DEAR MR. CHAIRMAN: Your letter of April 30 requested the views of the General Services Administration on S. 3725, 85th Congress, a bill to amend the Coordination and Watershed Protection and Flood Prevention Acts, to promote the conservation of wildlife, fish, and game, and for other purposes.

Inasmuch as the subject matter of this measure does not concern the operations and functions of GSA, we do not believe an expression of our views would be appropriate.

Enactment of this measure will not affect the budgetary requirements of GSA.

The Bureau of the Budget has advised that there is no objection to the submission of this report to your committee.

Sincerely yours,

FRANKLIN FLOETE, *Administrator.*

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D. C., June 11, 1958.

HON. WARREN G. MAGNUSON,
*Chairman, Committee on Interstate and Foreign Commerce,
United States Senate, Washington, D. C.*

DEAR SENATOR MAGNUSON: We invite your attention to S. 3725, a bill to amend the Coordination and Watershed Protection and Flood Prevention Acts, to promote the conservation of wildlife, fish, and game, and for other purposes. In this connection, we refer also to S. 2496, a bill to amend the act entitled "AN ACT To promote the conservation of wildlife, fish, and game, and for other purposes," approved March 10, 1934, as amended, known as the Coordination Act. On April 1, we transmitted to you our report on S. 2496. Our report was accompanied by suggested revisions of that bill.

S. 3725, which has been introduced following our report on S. 2496, contains the suggested amendments that we transmitted to you with our report. However, it includes also two new subsections, on page 11, lines 7 through 11, and on page 13, line 23 through line 2, page 14, dealing with the matter of compliance with State water laws along the lines of S. 863, 85th Congress. This Department in the past has recommended the enactment of legislation similar to S. 863, and we so reported to the chairman, Committee on Interior and Insular Affairs, United States Senate, by our letter of March 20, 1956, on S. 863 of the

84th Congress. We recognize, however, that there is considerable difference of opinion concerning such legislation. We recommend, therefore, that the controversy over S. 863 and similar bills not be injected into the consideration of the proposed legislation to amend the Fish and Wildlife Coordination Act. Accordingly, we urge that the Congress consider S. 863 separately. If enacted, that legislation would, of course, have the general application that its terms prescribe.

For the foregoing reasons, we recommend that S. 3725 be enacted in the form transmitted with our report on S. 2496. We recommend that S. 3725 be amended as follows:

- (1) On page 11, strike out lines 7 through 11.
- (2) On page 13, beginning with line 23, strike out the text through line 2 on page 14.

The Bureau of the Budget has advised us that there is no objection to the submission of this report to your committee.

Sincerely yours,

ROSS LEFFLER,
Assistant Secretary of the Interior.

DEPARTMENT OF THE ARMY,
Washington, D. C., April 29, 1958.

HON. WARREN G. MAGNUSON,
*Chairman, Committee on Interstate and Foreign Commerce,
United States Senate.*

DEAR MR. CHAIRMAN: Reference is made to your request to the Secretary of Defense for the views of the Department of Defense with respect to S. 2496, 85th Congress, a bill to amend the act entitled "AN ACT To promote the conservation of wildlife, fish, and game, and for other purposes," approved March 10, 1934, as amended, known as the Coordination Act." The Secretary of Defense has assigned to the Department of the Army the responsibility for the preparation of a report.

The Department of the Army has considered the above-mentioned bill, the purpose of which, stated generally, is to amend sections 1-3 of the act of Congress approved March 10, 1934, as amended by the act approved August 14, 1946 (16 U. S. C. 661-663), pertaining to the conservation of wildlife.

The primary interest of this Department in the proposed amendments pertains to the civil works water resource development program. The Department is in complete agreement with the objective of promoting effective coordination of wildlife conservation with resource development programs and equal consideration of wildlife conservation in planning and carrying out such programs. All purposes must be considered in any comprehensive and coordinated development if the maximum sustained benefits are to be obtained for each public dollar invested in the development of our natural resources. This will involve the active participation of all responsible State and Federal agencies in the planning, development and maintenance of water resources programs. Experience shows that each interest cannot be given everything it wants. There usually must be adjustments in balancing the degree to which the various purposes can be served considering the overall needs in the areas benefited. Full

consideration can be given to all conservation matters only with the active help of all responsible agencies concerned on a cooperative basis.

There is a strong implication in the modifications proposed in S. 2496, however, that wildlife conservation shall be given more than equal treatment. The costs of means and measures to prevent loss of and damage to wildlife, and to provide for the development and improvement of wildlife, do not have to be justified by the results expected. The bill implies that provisions for wildlife shall be included irrespective of other project considerations.

This Department is agreeable to the inclusion, in the project work to be performed and budgeted by it, of facilities and modifications for wildlife which are attached to or form an integral part of other project features. It is considered essential to the proper operation of the project that such facilities should be operated by the agency responsible for operation and maintenance of the project. However, it is considered that facilities and improvements which can be undertaken separately for wildlife conservation should be undertaken as a part of wildlife conservation programs by the agencies responsible for those programs.

The bill, S. 2496, in its present form, is inconsistent as to cost sharing. It provides that for projects under reclamation law all costs allocated to conservation of wildlife, including those for prevention of loss or damage, shall be nonreimbursable. On the other hand, for other Federal projects costs of measures for prevention of loss would be joint or integral project costs chargeable to other project functions (such as hydro-power or flood control), and for costs allocated to improvement of the resource the bill would require a finding of the amount which should be reimbursed by non-Federal interests. It is believed to be essential that whatever cost sharing procedure the Congress adopts as a matter of policy for wildlife conservation be uniformly applicable to programs of all Federal agencies.

S. 2496 would give broad authority for acquisition of lands for prevention of damage to wildlife resources and for improvement of such resources, in accordance with recommendations of the Fish and Wildlife Service and subject to approval by the Secretary of the Interior. No specific action by the Congress thereon would be required nor would affected States necessarily have an opportunity to comment on the appropriateness of such acquisition. It is considered essential to the accomplishment of such acquisition that before properties are acquired for this purpose, the extent of such acquisition be described as accurately as practicable and be set forth, along with other data necessary for project authorization, in a report submitted to the Congress, and that no such properties be acquired unless specifically authorized by the Congress, if specific authority for such acquisition is recommended by the construction agency.

Modification of the basic legislation of this matter has been the subject of extensive coordination among the Departments of the Interior, Army and Agriculture and the Bureau of the Budget as it relates to the various Federal programs that would be affected. As a result of these endeavors, the Department of the Interior has proposed certain modifications of the law on which substantial agreement has been reached among the agencies. A copy of those proposals is inclosed. If the amendments proposed in S. 2496 were modified to make the bill consistent with the inclosed proposals, the

Department of the Army would interpose no objection to its enactment.

The Bureau of the Budget advises that there is no objection to the submission of this report.

Sincerely yours,

WILBER M. BRUCKER,
Secretary of the Army.

CHANGES IN EXISTING LAW

In compliance with subsection 4 of rule XXIX of the Standing Rules of the Senate, changes in existing law made by the bill are shown as follows (existing law proposed to be omitted is enclosed in brackets; new matter is printed in italic; existing law in which no change is proposed is shown in roman):

SECTIONS 1 THROUGH 4, INCLUSIVE, OF AN ACT TO PROMOTE THE CONSERVATION OF WILDLIFE, FISH, AND GAME, AND FOR OTHER PURPOSES

(48 Stat. 401; 16 U. S. C., secs. 661 to 664, inclusive)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, [That in order to promote effectual planning, development, maintenance, and coordination of wildlife conservation and rehabilitation in the United States, its Territories and possessions, the Secretary of the Interior, through the Fish and Wildlife Service, is authorized (a) to provide assistance to, and cooperate with, Federal, State, and public or private agencies and organizations in the development, protection, rearing, and stocking of all species of wildlife, resources thereof, and their habitat, in controlling losses of the same from disease or other causes, in minimizing damages from overabundant species, in providing public shooting areas, and in carrying out other measures necessary to effectuate the purposes of this Act; and (b) to make surveys and investigations of the wildlife of the public domain, including lands and waters or interests therein acquired or controlled by any agency of the United States.

[Sec. 2. Whenever the waters of any stream or other body of water are authorized to be impounded, diverted, or otherwise controlled for any purpose whatever by any department or agency of the United States, or by any public or private agency under Federal permit, such department or agency first shall consult with the Fish and Wildlife Service and the head of the agency exercising administration over the wildlife resources of the State wherein the impoundment, diversion, or other control facility is to be constructed with a view to preventing loss of and damage to wildlife resources, and the reports and recommendations of the Secretary of the Interior and of the head of the agency exercising administration over the wildlife resources of the State, based on surveys and investigations conducted by the Fish and Wildlife Service and by the said head of the agency exercising administration over the wildlife resources of the State, for the purpose of determining the possible damage to wildlife resources and of the means and measures that should be adopted to prevent loss of and damage to wildlife resources, shall be made an integral part of any

report submitted by any agency of the Federal Government responsible for engineering surveys and construction of such projects.

[The cost of planning for and the construction or installation and maintenance of any such means and measures shall be included in and shall constitute an integral part of the costs of such projects: *Provided*, That, in the case of projects after August 14, 1946, authorized to be constructed, operated, and maintained in accordance with the Federal reclamation laws (Act of June 17, 1902, 32 Stat. 388, and Acts amendatory thereof or supplementary thereto), the Secretary of the Interior shall, in addition to allocations to be made under section 9 of the Reclamation Project Act of 1939 (53 Stat. 1187), make findings on the part of the estimated cost of the project which can properly be allocated to the preservation and propagation of fish and wildlife, and costs allocated pursuant to such findings shall not be reimbursable. In the case of construction by a Federal agency, that agency is authorized to transfer, out of appropriations or other funds made available for surveying, engineering, or construction to the Fish and Wildlife Service, such funds as may be necessary to conduct the investigations required by this section to be made by it.

[SEC. 3. Whenever the waters of any stream or other body of water are impounded, diverted, or otherwise controlled for any purpose whatever by any department or agency of the United States, adequate provision consistent with the primary purposes of such impoundment, diversion, or other control shall be made for the use thereof, together with any areas of land, or interest therein, acquired or administered in connection therewith, for the conservation, maintenance, and management of wildlife, resources thereof, and its habitat thereon. In accordance with general plans, covering the use of such waters and other interests for these purposes, approved jointly by the head of the department or agency exercising primary administration thereof, the Secretary of the Interior, and the head of the agency exercising administration over the wildlife resources of the State wherein the waters and areas lie, such waters and other interests shall be made available without cost for administration (a) by such State agency, if the management thereof for the conservation of wildlife relates to other than migratory birds; (b) by the Secretary of the Interior, if the waters and other interests have particular value in carrying out the national migratory bird management program.

[SEC. 4. Such areas as are made available to the Secretary of the Interior for the purposes of this Act under sections 1 and 3, or by any other law, proclamation, or Executive order, shall be administered directly or under cooperative agreements entered into pursuant to the provisions of section 1 by the Secretary of the Interior under such rules and regulations for the conservation, maintenance, and management of wildlife, resources thereof, and its habitat thereon, as may be adopted by him in accordance with general plans approved jointly by the Secretary of the Interior and the head of the department or agency exercising primary administration of such areas: *Provided*, That such rules and regulations shall not be inconsistent with the laws for the protection of fish and game of the States in which such area is situated.]

For the purpose of recognizing the vital contribution of our wildlife resources to the Nation, the increasing public interest and significance thereof due to expansion of our national economy and other factors, and

to provide that wildlife conservation shall receive equal consideration and be coordinated with other features of water-resource development programs through the effectual and harmonious planning, development, maintenance, and coordination of wildlife conservation and rehabilitation for the purposes of this Act in the United States, its Territories and possessions, the Secretary of the Interior is authorized (1) to provide assistance to, and cooperate with, Federal, State, and public or private agencies and organizations in the development, protection, rearing, and stocking of all species of wildlife, resources thereof, and their habitat, in controlling losses of the same from disease or other causes, in minimizing damages from overabundant species, in providing public shooting and fishing areas, including easements across public lands for access thereto, and in carrying out other measures necessary to effectuate the purposes of this Act; (2) to make surveys and investigations of the wildlife of the public domain, including lands and waters or interests therein acquired or controlled by any agency of the United States; and (3) to accept donations of land and contributions of funds in furtherance of the purposes of this Act.

SEC. 2. (a) Except as hereafter stated in subsection (h) of this section, whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the United States, or by any public or private agency under Federal permit or license, such department or agency first shall consult with the United States Fish and Wildlife Service, Department of the Interior, and with the head of the agency exercising administration over the wildlife resources of the particular State wherein the impoundment, diversion, or other control facility is to be constructed, with a view to the conservation of wildlife resources by preventing loss of and damage to such resources as well as providing for the development and improvement thereof in connection with such water-resource development.

(b) In furtherance of such purposes, the reports and recommendations of the Secretary of the Interior on the wildlife aspects of such projects, and any report of the head of the State agency exercising administration over the wildlife resources of the State, based on surveys and investigations conducted by the United States Fish and Wildlife Service and such State agency for the purpose of determining the possible damage to wildlife resources and for the purposes of determining means and measures that should be adopted to prevent the loss of or damage to such wildlife resources, as well as to provide concurrently for the development and improvement of such resources, shall be made an integral part of any report prepared or submitted by any agency of the Federal Government responsible for engineering surveys and construction of such projects when such reports are presented to the Congress or to any agency or person having the authority or the power, by administrative action, or otherwise, (1) to authorize the construction of water-resource development projects or (2) to approve a report on the modification or supplementation of plans for previously authorized projects, to which this Act applies. Recommendations of the Secretary of the Interior shall be as specific as is practicable with respect to features recommended for wildlife conservation and development, lands to be utilized or acquired for such purposes, the results expected, and shall describe the damage to wildlife attributable to the project and the measures proposed for mitigating or compensating for these damages. The re-

porting officers in project reports of the Federal agencies shall give full consideration to the report and recommendations of the Secretary of the Interior and to any report of the State agency on the wildlife aspects of such projects, and the project plan shall include such justifiable means and measures for wildlife purposes as the reporting agency finds should be adopted to obtain maximum overall project benefits.

(c) Federal agencies authorized to construct or operate water-control projects are hereby authorized to modify or add to the structures and operations of such projects, the construction of which has not been substantially completed on the date of enactment of the Fish and Wildlife Coordination Act, and to acquire lands in accordance with section 3 of this Act, in order to accommodate the means and measures for such conservation of wildlife resources as an integral part of such projects: Provided, That for projects authorized by a specific Act of Congress before the date of enactment of the Fish and Wildlife Coordination Act (1) such modification or land acquisition shall be compatible with the purposes for which the project was authorized; (2) the cost of such modifications or land acquisition, as means and measures to prevent loss of and damage to wildlife resources to the extent justifiable, shall be an integral part of the cost of such projects; and (3) the cost of such modifications or land acquisition for the development or improvement of wildlife resources may be included to the extent justifiable, and an appropriate share of the cost of any project may be allocated for this purpose with a finding as to the part of such allocated cost, if any, to be reimbursed by non-Federal interests.

(d) The cost of planning for and the construction or installation and maintenance of such means and measures adopted to carry out the conservation purposes of this section shall constitute an integral part of the cost of such projects: Provided, That such cost attributable to the development and improvement of wildlife shall not extend beyond those necessary for (1) land acquisition, (2) modification of the project, and (3) modification of project operations; but shall not include the operation of wildlife facilities nor the construction of such facilities beyond those herein described: And provided further, That, in the case of projects authorized to be constructed, operated, and maintained in accordance with the Federal reclamation laws (Act of June 17, 1902, 32 Stat. 388, and Acts amendatory thereof or supplementary thereto), the Secretary of the Interior, in addition to allocations made under section 9 of the Reclamation Project Act of 1939 (53 Stat. 1187), shall make findings on the part of the estimated cost of the project which can properly be allocated to means and measures to prevent loss of and damage to wildlife resources, which costs shall not be reimbursable, and an appropriate share of the project costs may be allocated to development and improvement of wildlife resources, with a finding as to the part of such allocated costs, if any, to be reimbursed by non-Federal fish and wildlife agencies or interests.

(e) In the case of construction by a Federal agency, that agency is authorized to transfer to the United States Fish and Wildlife Service, out of appropriations or other funds made available for investigations, engineering, or construction, such funds as may be necessary to conduct all or part of the investigations required to carry out the purposes of this section.

(f) In addition to other requirements, there shall be included in any report submitted to Congress supporting a recommendation for authorization of any new project for the control or use of water as described herein

(including any new division of such project or new supplemental works on such project) an estimation of the wildlife benefits or losses to be derived therefrom including benefits to be derived from measures recommended specifically for the development and improvement of wildlife resources, the cost of providing wildlife benefits (including the cost of additional facilities to be installed or lands to be acquired specifically for that particular phase of wildlife conservation relating to the development and improvement of wildlife), the part of the cost of joint-use facilities allocated to wildlife, and the part of such costs, if any, to be reimbursed by non-Federal interests.

(g) The provisions of this section shall be applicable with respect to any project for the control or use of water as prescribed herein, or any unit of such project authorized before or after the date of enactment of the Fish and Wildlife Coordination Act for planning or construction, but shall not be applicable to any project or unit thereof authorized before the date of enactment of the Fish and Wildlife Coordination Act if the construction of the particular project or unit thereof has been substantially completed. A project or unit thereof shall be considered to be substantially completed when sixty percent or more of the estimated construction cost has been obligated for expenditure.

(h) The provisions of this Act shall not be applicable to those projects for the impoundment of water where the maximum surface area of such impoundments is less than ten acres, nor to activities for or in connection with programs primarily for land management and use carried out by Federal agencies with respect to Federal lands under their jurisdiction.

SEC. 3. (a) Subject to the exceptions prescribed in section 2 (h) of this Act, whenever the waters of any stream or other body of water are impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the United States, adequate provision, consistent with the primary purposes of such impoundment, diversion, or other control, shall be made for the use thereof, together with any areas of land, water, or interests therein, acquired or administered by a Federal agency in connection therewith, for the conservation, maintenance, and management of wildlife resources thereof, and its habitat thereon, including the development and improvement of such wildlife resources pursuant to the provisions of section 2 of this Act.

(b) The use of such waters, land, or interests therein for wildlife conservation purposes shall be in accordance with general plans approved jointly (1) by the head of the particular department or agency exercising primary administration in each instance, (2) by the Secretary of the Interior, and (3) by the head of the agency exercising the administration of the wildlife resources of the particular State wherein the waters and areas lie. Such waters and other interests shall be made available, without cost for administration, by such State agency, if the management of the properties relate to the conservation of wildlife other than migratory birds, or by the Secretary of the Interior, for administration in such manner as he may deem advisable, where the particular properties have value in carrying out the national migratory bird management program: Provided, That nothing in this section shall be construed as affecting the authority of the Secretary of Agriculture to cooperate with the States or in making lands available to the States with respect to the management of wildlife and wildlife habitat on lands administered by him.

(c) When consistent with the purposes of this Act and the reports and findings of the Secretary of the Interior prepared in accordance with section 2, land, waters, and interests therein may be acquired by Federal construction agencies for the wildlife conservation and development purposes of this Act in connection with a project as reasonably needed to preserve and assure for the public benefit the wildlife potentials of the particular project area: Provided, That before properties are acquired for this purpose, the probable extent of such acquisition shall be set forth, along with other data necessary for project authorization, in a report submitted to the Congress, or in the case of a project previously authorized, no such properties shall be acquired unless specifically authorized by Congress, if specific authority for such acquisition is recommended by the construction agency.

(d) Properties acquired for the purposes of this section shall continue to be used for such purposes, and shall not become the subject of exchange or other transactions if such exchange or other transaction would defeat the initial purpose of their acquisition.

(e) Federal lands acquired or withdrawn for Federal water-resource purposes and made available to the States or to the Secretary of the Interior for wildlife management purposes, shall be made available for such purposes in accordance with this Act, notwithstanding other provisions of law.

(f) Any lands acquired pursuant to this section by any Federal agency within the exterior boundaries of a national forest shall, upon acquisition, be added to and become national forest lands, and shall be administered as a part of the forest within which they are situated, subject to all laws applicable to lands acquired under the provisions of the Act of March 1, 1911 (36 Stat. 961), unless such lands are acquired to carry out the National Migratory Bird Management Program.

SEC. 4. Such areas as are made available to the Secretary of the Interior for the purposes of this Act, pursuant to sections 1 and 3 or pursuant to any other authorization, shall be administered by him directly or in accordance with cooperative agreements entered into pursuant to the provisions of the first section of this Act and in accordance with such rules and regulations for the conservation, maintenance, and management of wildlife, resources thereof, and its habitat thereon, as may be adopted by the Secretary in accordance with general plans approved jointly by the Secretary of the Interior and the head of the department or agency exercising primary administration of such areas: Provided, That such rules and regulations shall not be inconsistent with the laws for the protection of fish and game of the States in which such area is situated (16 U. S. C., sec. 664): Provided further, That lands having value to the National Migratory Bird Management Program may, pursuant to general plans, be made available without cost directly to the State agency having control over wildlife resources, if it is jointly determined by the Secretary of the Interior and such State agency that this would be in the public interest: And provided further, That the Secretary of the Interior shall have the right to assume the management and administration of such lands in behalf of the National Migratory Bird Management Program if the Secretary finds that the State agency has withdrawn from or otherwise relinquished such management and administration.

WATERSHED PROTECTION AND FLOOD PREVENTION ACT (PUBLIC LAW 566, 83D CONG.; 68 STAT. 666), AS AMENDED BY THE ACT OF AUGUST 7, 1956 (PUBLIC LAW 1018, 84TH CONG.; 70 STAT. 1088) (16 U. S. C., SECS. 1001-1007).

AN ACT To authorize the Secretary of Agriculture to cooperate with States and local agencies in the planning and carrying out of works of improvement for soil conservation, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That erosion, floodwater, and sediment damages in the watersheds of the rivers and streams of the United States, causing loss of life and damage to property, constitute a menace to the national welfare; and that it is the sense of Congress that the Federal Government should cooperate with States and their political subdivisions, soil or water conservation districts, flood prevention or control districts, and other local public agencies for the purpose of preventing such damages and of furthering the conservation, development, utilization, and disposal of water and thereby of preserving and protecting the Nation's land and water resources.

SEC. 2. For the purposes of this Act, the following terms shall mean: The "Secretary"—the Secretary of Agriculture of the United States.

"Works of improvement"—any undertaking for—

(1) flood prevention (including structural and land treatment measures) or

(2) the conservation, development, utilization, and disposal of water

in watershed or subwatershed areas not exceeding two hundred and fifty thousand acres and not including any single structure which provides more than five thousand acre-feet of floodwater detention capacity, and more than twenty-five thousand acre-feet of total capacity. No appropriation shall be made for any plan involving an estimated Federal contribution to construction costs in excess of \$250,000, or which includes any structure which provides more than twenty-five hundred acre-feet of total capacity unless such plan has been approved by resolutions adopted by the appropriate committees of the Senate and House of Representatives: *Provided*, That in the case of any plan involving no single structure providing more than 4,000 acre-feet of total capacity the appropriate committees shall be the Committee on Agriculture and Forestry of the Senate and the Committee on Agriculture of the House of Representatives and in the case of any plan involving any single structure of more than 4,000 acre-feet of total capacity the appropriate committees shall be the Committee on Public Works of the Senate and the Committee on Public Works of the House of Representatives, respectively. A number of such subwatersheds when they are component parts of a larger watershed may be planned together when the local sponsoring organizations so desire.

"Local organization"—any State, political subdivision thereof, soil or water conservation district, flood prevention or control district, or combinations thereof, or any other agency having authority under State law to carry out, maintain and operate the works of improvement.

SEC. 3. In order to assist local organizations in preparing and carrying out plans for works of improvement, the Secretary is author-

ized, upon application of local organizations if such application has been submitted to, and not disapproved within forty-five days by, the State agency having supervisory responsibility over programs provided for in this Act, or by the Governor if there is no State agency having such responsibility—

(1) to conduct such investigations and surveys as may be necessary to prepare plans for works of improvement;

(2) to prepare plans and estimates required for adequate engineering evaluation;

(3) to make allocations of costs to the various purposes to show the basis of such allocations and to determine whether benefits exceed costs;

(4) to cooperate and enter into agreements with and to furnish financial and other assistance to local organizations: *Provided*, That, for the land treatment measures, the Federal assistance shall not exceed the rate of assistance for similar practices under existing national programs;

(5) to obtain the cooperation and assistance of other Federal agencies in carrying out the purposes of this section.

SEC. 4. The Secretary shall require as a condition to providing Federal assistance for the installation of works of improvement that local organizations shall—

(1) acquire without cost to the Federal Government such land, easements, or rights-of-way as will be needed in connection with works of improvement installed with Federal assistance;

(2) assume (A) such proportionate share, as is determined by the Secretary to be equitable in consideration of the direct identifiable benefits, of the costs of installing any works of improvement, involving Federal assistance, which is applicable to the agricultural phases of the conservation, development, utilization, and disposal of water, and (B) all of the cost of installing any portion of such works applicable to other purposes except that any part of the construction cost (including engineering costs) applicable to flood prevention and features relating thereto shall be borne by the Federal Government and paid for by the Secretary out of funds appropriated for the purposes of this Act;

(3) make arrangements satisfactory to the Secretary for defraying costs of operating and maintaining such works of improvement, in accordance with regulations presented by the Secretary of Agriculture;

(4) acquire, or provide assurance that landowners or water users have acquired, such water rights, pursuant to State law, as may be needed in the installation and operation of the work of improvement;

(5) obtain agreements to carry out recommended soil conservation measures and proper farm plans from owners of not less than 50 per centum of the lands situated in the drainage area above each retention reservoir to be installed with Federal assistance; and

(6) submit a plan of repayment satisfactory to the Secretary for any loan or advancement made under the provisions of section 8.

SEC. 5. At such time as the Secretary and the interested local organization have agreed on a plan for works of improvement, and

the Secretary has determined that the benefits exceed the costs, and the local organization has met the requirements for participation in carrying out the works of improvement as set forth in section 4, the local organization with such assistance as it may request from the Secretary, which assistance the Secretary is hereby authorized to give, shall secure engineering and other services, including the design, preparation of contracts and specifications, awarding of contracts, and supervision of construction, in connection with such works of improvement, and in order to properly carry out such services in such projects as to such structures therein providing for municipal or industrial water supplies, the local organization shall, and in such projects not providing for municipal or industrial water supplies, the local organization may, retain or employ a professional engineer or engineers satisfactory to the Secretary, and the Secretary shall reimburse the local organization for the cost it may incur for the services of such engineer or engineers as is properly chargeable to such works of improvement, except that if the local organization decides not to retain or employ a professional engineer or if the Secretary determines that competent engineering services are not available he may contract for a competent engineer to provide such services or arrange for employees of the Federal Government to provide such services: *Provided*, That at the request of the local organization which retains or employs a professional engineer or engineers as aforesaid, the Secretary may advance such amounts as may be necessary to pay for such services, but such advances with respect to any works of improvement shall not exceed 5 per centum of the estimated total cost of such works: *Provided further*, That, except as to the installation of works of improvement on Federal lands, the Secretary shall not construct or enter into any contract for the construction of any structure unless there is no local organization authorized by State law to undertake such construction or to enter into such contract, and in no event after July 1, 1956: *Provided*, That in participating in the installation of such works of improvement the Secretary, as far as practicable and consistent with his responsibilities for administering the overall national agricultural program, shall utilize the authority conferred upon him by the provisions of this Act: *Provided further*, That whenever the estimated Federal contribution to the construction cost of works of improvement in any watershed or subwatershed area shall exceed \$250,000 or the works of improvement include any structure having a total capacity in excess of twenty-five hundred acre-feet, the Secretary shall transmit a copy of the plan and the justification therefor to the Congress through the President: *Provided further*, That any such plan involving an estimated Federal contribution to construction costs in excess of \$250,000 or containing any structure having a total capacity in excess of twenty-five hundred acre-feet (a) which includes reclamation or irrigation works or which affects public or other lands or wildlife under the jurisdiction of the Secretary of the Interior, or (b) which includes Federal assistance for floodwater detention structures, shall be submitted to the Secretary of the Interior or the Secretary of the Army, respectively, for his views and recommendations at least thirty days prior to transmission of the plan to the Congress through the President. The views and recommendations of the Secretary of the Interior, and the Secretary of the Army, if received by the Secretary of Agriculture prior to the expira-

tion of the above thirty-day period, shall accompany the plan transmitted by the Secretary of Agriculture to the Congress through the President: *Provided further*, That, prior to any Federal participation in the works of improvement under this Act, the President shall issue such rules and regulations as he deems necessary or desirable to carry out the purposes of this Act, and to assure the coordination of the work authorized under this Act and related work of other agencies including the Department of the Interior and the Department of the Army.

SEC. 6. The Secretary is authorized in cooperation with other Federal and with States and local agencies to make investigations and surveys of the watersheds of rivers and other waterways as a basis for the development of coordinated programs. In areas where the programs of the Secretary of Agriculture may affect public or other lands under the jurisdiction of the Secretary of the Interior, the Secretary of the Interior is authorized to cooperate with the Secretary of Agriculture in the planning and development of works or programs for such lands.

SEC. 7. The provisions of the Act of June 22, 1936 (49 Stat. 1570), as amended and supplemented, conferring authority upon the Department of Agriculture under the direction of the Secretary of Agriculture to make preliminary examinations and surveys and to prosecute works of improvement for runoff and waterflow retardation and soil erosion prevention on the watersheds of rivers and other waterways are hereby repealed: *Provided*, That (a) the authority of that Department of Agriculture, under the direction of the Secretary, to prosecute the works of improvement for runoff and waterflow retardation and soil erosion prevention authorized to be carried out by the Department by the Act of December 22, 1944 (58 Stat. 887), as amended, and (b) the authority of the Secretary of Agriculture to undertake emergency measures for runoff retardation and soil erosion prevention authorized to be carried out by section 7 of the Act of June 28, 1938 (52 Stat. 1215), as amended by section 216 of the Act of May 17, 1950 (64 Stat. 163), shall not be affected by the provisions of this section.

SEC. 8. The Secretary is authorized to make loans or advancements to local organizations to finance the local share of costs of carrying out works of improvement provided for in this Act. Such loans or advancements shall be made under contracts or agreements which will provide, under such terms and conditions as the Secretary deems appropriate, for the repayment thereof in not more than fifty years from the date when the principal benefits of the works of improvement first become available, with interest at the average rate, as determined by the Secretary of the Treasury, payable by the Treasury upon its marketable public obligations outstanding at the beginning of the fiscal year in which the loan or advancement is made, which are neither due nor callable for redemption for fifteen years from date of issue. With respect to any single plan for works of improvement, the amount of any such loan or advancement shall not exceed five million dollars.

SEC. 9. The provisions of this Act shall be applicable to Hawaii, Alaska, Puerto Rico, and the Virgin Islands.

SEC. 10. There are hereby authorized to be appropriated such sums as may be necessary to carry out the purposes of this Act, such sums to remain available until expended.

SEC. 11. This Act may be cited as the "Watershed Protection and Flood Prevention Act".

SEC. 12. *When the Secretary approves the furnishing of assistance to a local organization in preparing a plan for works of improvement as provided for in section 3:*

(1) *The Secretary shall so notify the Secretary of the Interior in order that the latter, as he desires, may make surveys and investigations and prepare a report with recommendations concerning the conservation and development of wildlife resources and participate, under arrangements satisfactory to the Secretary of Agriculture, in the preparation of a plan for works of improvement that is acceptable to the local organization and the Secretary of Agriculture.*

(2) *Full consideration shall be given to the recommendations contained in any such report of the Secretary of the Interior as he may submit to the Secretary of Agriculture prior to the time the local organization and the Secretary of Agriculture have agreed on a plan for works of improvement. The plan shall include such of the technically and economically feasible works of improvement for wildlife purposes recommended in the report by the Secretary of the Interior as are acceptable to, and agreed to by, the local organization and the Secretary of Agriculture, and such report of the Secretary of the Interior shall, if requested by the Secretary of the Interior, accompany the plan for works of improvement when it is submitted to the Secretary of Agriculture for approval or transmitted to the Congress through the President.*

(3) *The cost of making surveys and investigations and of preparing reports concerning the conservation and development of wildlife resources shall be borne by the Secretary of the Interior out of funds appropriated to his Department.*

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COORDINATION ACT AMENDMENTS

HEARING
BEFORE THE
SUBCOMMITTEE ON
FISHERIES AND WILDLIFE CONSERVATION
OF THE
COMMITTEE ON
MERCHANT MARINE AND FISHERIES
HOUSE OF REPRESENTATIVES
EIGHTY-FIFTH CONGRESS
SECOND SESSION

ON

H. R. 12371

TO AMEND THE ACT OF MARCH 10, 1934, TO PROVIDE FOR MORE EFFECTIVE INTEGRATION OF A FISH AND WILDLIFE CONSERVATION PROGRAM WITH FEDERAL WATER-RESOURCE DEVELOPMENTS, AND FOR OTHER PURPOSES

H. R. 8631

TO AMEND THE ACT ENTITLED "AN ACT TO PROMOTE THE CONSERVATION OF WILDLIFE, FISH, AND GAME, AND FOR OTHER PURPOSES," APPROVED MARCH 10, 1934, AS AMENDED, KNOWN AS THE COORDINATION ACT

**And Similar Bills H. R. 8744, H. R. 8747,
H. R. 9053, H. R. 9308, and S. 2496**

JUNE 27, 1958

Printed for the use of the Committee on Merchant Marine and Fisheries

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COORDINATION ACT AMENDMENTS

FRIDAY, JUNE 27, 1958

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION
OF THE COMMITTEE ON MERCHANT MARINE AND FISHERIES,
Washington, D. C.

The subcommittee met at 10:10 a. m., pursuant to notice in room 219, Old House Office Building, Hon. Frank W. Boykin (chairman of the subcommittee) presiding.

Present: Representatives Frank W. Boykin, Miller, Dingell, Rivers, Tollefson, Allen, Van Pelt, and Gross.

Also present: Bernard J. Zincke, counsel, and William B. Winfield, chief clerk.

Mr. BOYKIN. Gentlemen, the committee will come to order.

Gentlemen, the bills to be considered today are to amend the Coordination Act so as to require the Secretary of Agriculture to consult with Fish and Wildlife Service and the State conservation departments before granting any assistance to any individual or group to change any waterway or drain any land.

(H. R. 12371 and H. R. 8631 follow.)

[H. R. 12371, 85th Cong., 2d sess.]

A BILL To amend the Act of March 10, 1934, to provide for more effective integration of a fish and wildlife conservation program with Federal water-resource developments, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Wildlife Coordination Act."

SEC. 2. The first four sections of the Act entitled "An Act to promote the conservation of wildlife, fish, and game, and for other purposes," approved March 10, 1934 (16 U. S. C., secs. 661-664, inclusive), are amended to read as follows:

"For the purpose of recognizing the vital contribution of our wildlife resources to the Nation, the increasing public interest and significance thereof due to expansion of our national economy and other factors, and to provide that wildlife conservation shall receive equal consideration and be coordinated with other features of water-resource development programs through the effectual and harmonious planning, development, maintenance, and coordination of wildlife conservation and rehabilitation for the purposes of this Act in the United States, its Territories and possessions, the Secretary of the Interior is authorized (1) to provide assistance to, and cooperate with, Federal, State, and public or private agencies and organizations in the development, protection, rearing, and stocking of all species of wildlife, resources thereof, and their habitat, in controlling losses of the same from disease or other causes, in minimizing damages from overabundant species, in providing public shooting and fishing areas, including easements across public lands for access thereto, and in carrying out other measures necessary to effectuate the purposes of this Act; (2) to make surveys and investigations of the wildlife of the public domain, including lands and waters or interests therein acquired or controlled by any agency of the United States; and (3) to accept donations of land and contributions of funds in furtherance of the purposes of this Act.

COORDINATION ACT AMENDMENTS

"Sec. 2. (a) Except as hereafter stated in subsection (h) of this section, whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the United States, or by any public or private agency under Federal permit or license, such department or agency first shall consult with the United States Fish and Wildlife Service, Department of the Interior, and with the head of the agency exercising administration over the wildlife resources of the particular State wherein the impoundment, diversion, or other control facility is to be constructed, with a view to the conservation of wildlife resources by preventing loss of and damage to such resources as well as providing for the development and improvement thereof in connection with such water-resource development.

"(b) In furtherance of such purposes, the reports and recommendations of the Secretary of the Interior on the wildlife aspects of such projects, and any report of the head of the State agency exercising administration over the wildlife resources of the State, based on surveys and investigations conducted by the United States Fish and Wildlife Service and such State agency for the purpose of determining the possible damage to wildlife resources and for the purpose of determining means and measures that should be adopted to prevent the loss of or damage to such wildlife resources, as well as to provide concurrently for the development and improvement of such resources, shall be made an integral part of any report prepared or submitted by any agency of the Federal Government responsible for engineering surveys and construction of such projects when such reports are presented to the Congress or to any agency or person having the authority or the power, by administrative action, or otherwise, (1) to authorize the construction of water-resource development projects or (2) to approve a report on the modification or supplementation of plans for previously authorized projects, to which this Act applies. Recommendations of the Secretary of the Interior shall be as specific as is practicable with respect to features recommended for wildlife conservation and development, lands to be utilized or acquired for such purposes, the results expected, and shall describe the damage to wildlife attributable to the project and the measures proposed for mitigating or compensating for these damages. The reporting officers in project reports of the Federal agencies shall give full consideration to the report and recommendations of the Secretary of the Interior and to any report of the State agency, on the wildlife aspects of such projects and the project plan shall include such justifiable means and measures for wildlife purposes as the reporting agency finds should be adopted to obtain maximum overall project benefits.

"(c) Federal agencies authorized to construct or operate water-control projects are hereby authorized to modify or add to the structures and operations of such projects, the construction of which has not been substantially completed on the date of enactment of the Wildlife Coordination Act, and to acquire lands in accordance with section 3 of this Act, in order to accommodate the means and measures for such conservation of wildlife resources as an integral part of such projects: *Provided*, That for projects authorized by a specific Act of Congress before the date of enactment of the Wildlife Coordination Act (1) such modification or land acquisition shall be compatible with the purposes for which the project was authorized; (2) the cost of such modifications or land acquisition, as means and measures to prevent loss of and damage to wildlife resources to the extent justifiable, shall be an integral part of the cost of such projects; and (3) the cost of such modifications or land acquisition for the development or improvement of wildlife resources may be included to the extent justifiable, and an appropriate share of the cost of any project may be allocated for this purpose with a finding as to the part of such allocated cost, if any, to be reimbursed by non-Federal interests.

"(d) The cost of planning for and the construction or installation and maintenance of such means and measures adopted to carry out the conservation purposes of this section shall constitute an integral part of the cost of such projects: *Provided*, That such cost attributable to the development and improvement of wildlife shall not extend beyond those necessary for (1) land acquisition, (2) modification of the project, and (3) modification of project operations; but shall not include the operation of wildlife facilities nor the construction of such facilities beyond those herein described: *And provided further*,

That, in the case of projects authorized to be constructed, operated, and maintained in accordance with the Federal reclamation laws (Act of June 17, 1902, 32 Stat. 388, and Acts amendatory thereof or supplementary thereto), the Secretary of the Interior, in addition to allocations made under section 9 of the Reclamation Project Act of 1939 (53 Stat. 1187), shall make findings on the part of the estimated cost of the project which can properly be allocated to means and measures to prevent loss of and damage to wildlife resources, which costs shall not be reimbursable, and an appropriate share of the project costs may be allocated to development and improvement of wildlife resources, with a finding as to the part of such allocated costs, if any, to be reimbursed by non-Federal fish and wildlife agencies or interests.

"(e) In the case of construction by a Federal agency, that agency is authorized to transfer to the United States Fish and Wildlife Service, out of appropriations or other funds made available for investigations, engineering, or construction, such funds as may be necessary to conduct all or part of the investigations required to carry out the purpose of this section.

"(f) In addition to other requirements, there shall be included in any report submitted to Congress supporting a recommendation for authorization of any new project for the control or use of water as described herein (including any new division of such project or new supplemental works of such project) an estimation of the wildlife benefits or losses to be derived therefrom including benefits to be derived from measures recommended specifically for the development and improvement of wildlife resources, the cost of providing wildlife benefits (including the cost of additional facilities to be installed or lands to be acquired specifically for that particular phase of wildlife conservation relating to the development and improvement of wildlife), the part of the cost of joint-use facilities allocated to wildlife, and the part of such costs, if any, to be reimbursed by non-Federal interests.

"(g) The provisions of this section shall be applicable with respect to any project for the control or use of water as prescribed herein, or any unit of such project authorized before or after the date of enactment of the Wildlife Coordination Act for planning or construction, but shall not be applicable to any project or unit thereof authorized before the date of enactment of the Wildlife Coordination Act if the construction of the particular project or unit thereof has been substantially completed. A project or unit thereof shall be considered to be substantially completed when sixty percent or more of the estimated construction cost has been obligated for expenditure.

"(h) The provisions of this Act shall not be applicable to those projects for the impoundment of water where the maximum surface area of such impoundments is less than ten acres, nor to activities for or in connection with programs primarily for land management and use carried out by Federal agencies with respect to Federal lands under their jurisdiction.

"Sec. 3. (a) Subject to the exceptions prescribed in section 2 (h) of this Act, whenever the waters of any stream or other body of water are impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the United States, adequate provision, consistent with the primary purposes of such impoundment, diversion, or other control, shall be made for the use thereof, together with any areas of land, water, or interests therein, acquired or administered by a Federal agency in connection therewith, for the conservation, maintenance, and management of wildlife resources thereof, and its habitat thereon, including the development and improvement of such wildlife resources pursuant to the provisions of section 2 of this Act.

"(b) The use of such waters, land, or interests therein for wildlife conservation purposes shall be in accordance with general plans approved jointly (1) by the head of the particular department or agency exercising primary administration in each instance, (2) by the Secretary of the Interior, and (3) by the head of the agency exercising the administration of the wildlife resources of the particular State wherein the waters and areas lie. Such waters and other interests shall be made available, without cost for administration, by such State agency, if the management of the properties relate to the conservation of wildlife other than migratory birds, or by the Secretary of the Interior, for administration in such manner as he may deem advisable, where the particular properties have value in carrying out the national migratory bird management program: *Provided*, That nothing in this section shall be construed as affecting the authority of the Secretary of Agriculture to cooperate with the States or in making lands available to

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the States with respect to the management of wildlife and wildlife habitat on lands administered by him.

"(c) When consistent with the purposes of this Act and the reports and findings of the Secretary of the Interior prepared in accordance with section 2, land, waters, and interests therein may be acquired by Federal construction agencies for the wildlife conservation and development purposes of this Act in connection with a project as reasonably needed to preserve and assure for the public benefit the wildlife potentials of the particular project area: *Provided*, That before properties are acquired for this purpose, the probable extent of such acquisition shall be set forth, along with other data necessary for project authorization, in a report submitted to the Congress, or in the case of a project previously authorized, no such properties shall be acquired unless specifically authorized by Congress, if specific authority for such acquisition is recommended by the construction agency.

"(d) Properties acquired for the purposes of this section shall continue to be used for such purposes, and shall not become the subject of exchange or other transactions if such exchange or other transaction would defeat the initial purpose of their acquisition;

"(e) Federal lands acquired or withdrawn for Federal water-resource purposes and made available to the States or to the Secretary of the Interior for wildlife management purposes, shall be made available for such purposes in accordance with this Act, notwithstanding other provisions of law.

"(f) Any lands acquired pursuant to this section by any Federal agency within the exterior boundaries of a national forest shall, upon acquisition, be added to and become national forest lands, and shall be administered as a part of the forest within which they are situated, subject to all laws applicable to lands acquired under the provisions of the Act of March 1, 1911 (36 Stat. 961), unless such lands are acquired to carry out the National Migratory Bird Management Program.

"Sec. 4. Such areas as are made available to the Secretary of the Interior for the purposes of this Act, pursuant to sections 1 and 3 or pursuant to any other authorization, shall be administered by him directly or in accordance with cooperative agreements entered into pursuant to the provisions of the first section of this Act and in accordance with such rules and regulations for the conservation, maintenance, and management of wildlife, resources thereof, and its habitat thereon, as may be adopted by the Secretary in accordance with general plans approved jointly by the Secretary of the Interior and the head of the department or agency exercising primary administration of such areas: *Provided*, That such rules and regulations shall not be inconsistent with the laws for the protection of fish and game of the States in which such area is situated (16 U. S. C., sec. 664): *Provided further*, That lands having value to the National Migratory Bird Management Program may, pursuant to general plans, be made available without cost directly to the State agency having control over wildlife resources, if it is jointly determined by the Secretary of the Interior and such State agency that this would be in the public interest: *And provided further*, That the Secretary of the Interior shall have the right to assume the management and administration of such lands in behalf of the National Migratory Bird Management Program if the Secretary finds that the State agency has withdrawn from or otherwise relinquished such management and administration."

Sec. 2. The Watershed Protection and Flood Prevention Act, as amended (16 U. S. C., sec. 1001-1007, inclusive), is amended by adding at the end thereof the following new section:

"Sec. 12. When the Secretary approves the furnishing of assistance to a local organization in preparing a plan for works of improvement as provided for in section 3:

"(1) The Secretary shall so notify the Secretary of the Interior in order that the latter, as he desires, may make surveys and investigations and prepare a report with recommendations concerning the conservation and development of wildlife resources and participate, under arrangements satisfactory to the Secretary of Agriculture, in the preparation of a plan for works of improvement that is acceptable to the local organization and the Secretary of Agriculture.

"(2) Full consideration shall be given to the recommendations contained in any such report of the Secretary of the Interior as he may submit to the Secretary of Agriculture prior to the time the local organization and the Secretary of Agriculture have agreed on a plan for works of improvement. The plan shall include such of the technically and economically feasible works of improvement for wildlife purposes recommended in the report by the Secretary of the Interior as

are acceptable to, and agreed to by, the local organization and the Secretary of Agriculture, and such report of the Secretary of the Interior shall, if requested by the Secretary of the Interior, accompany the plan for works of improvement when it is submitted to the Secretary of Agriculture for approval or transmitted to the Congress through the President.

"(3) The cost of making surveys and investigations and of preparing reports concerning the conservation and development of wildlife resources shall be borne by the Secretary of the Interior out of funds appropriated to his Department."

[H. R. 8631, 85th Cong., 1st sess.]

A BILL To amend the Act entitled "An Act to promote the conservation of wildlife, fish, and game, and for other purposes," approved March 10, 1934, as amended, known as the Coordination Act

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That sections 1 to 3, inclusive, of the Act entitled "An Act to promote the conservation of wildlife, fish, and game, and for other purposes", approved March 10, 1934, as amended (16 U. S. C. 661, 662, and 663), are amended to read as follows:

"That in order to promote effectual planning, development, maintenance, and coordination of wildlife conservation and rehabilitation in the United States, its Territories and possessions, the Secretary of the Interior, through the United States Fish and Wildlife Service, is authorized (a) to provide assistance to, and cooperate with, Federal, State, and public or private agencies and organizations in the development, protection, rearing, and stocking of all species of wildlife, resources thereof, and their habitat, in controlling losses of the same from disease or other causes, in minimizing damages from overabundant species, in providing public shooting areas, and in carrying out other measures necessary to effectuate the purposes of this Act; (b) to make surveys and investigations of the wildlife of the public domain, including lands and waters or interests therein acquired or controlled by any agency of the United States; and (c) to accept donations of land and contributions of funds in furtherance of the purposes of this Act.

"SEC. 2. Whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the United States, or by any public or private agency under Federal permit or with Federal financial or technical assistance, such department or agency first shall consult with the United States Fish and Wildlife Service and the head of the agency exercising administration over the wildlife resources of the State wherein the impoundment, diversion, or other control facility is to be constructed with a view to preventing loss of and damage to wildlife resources, and with a view to providing for the development and improvement of wildlife resources in connection with such water resource development.

"In furtherance of the aforesaid purposes, the reports of the United States Fish and Wildlife Service relating to such water resource developments, together with any recommendations thereon by the Secretary of the Interior and any report of the head of the State agency exercising administration over the wildlife resources of the State, based on surveys and investigations conducted by such Federal and State agencies for the purpose of determining the possible damage to wildlife resources and for the purpose of determining the most desirable means and measures that should be adopted in the public interest to prevent the loss of or damage to such wildlife resources, as well as to provide concurrently for the development and improvement of such resources, shall be made an integral part of any report prepared in or submitted by any agency of the Federal Government responsible for engineering surveys and construction of such projects when such reports are presented to the Congress or to any agency or person having the authority or the power, by administrative action, or otherwise, (a) to authorize the construction of water resource development projects or (b) to approve a report on the modification or supplementation of plans for previously authorized projects, to which this Act applies.

"The cost of planning for and the construction or installation and maintenance of such means and measures adopted to carry out the aforesaid purposes of this section, to prevent the loss of and damage to wildlife resources, and to provide

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for the development and improvement thereof, shall constitute an integral part of the costs of such projects: *Provided*, That, in the case of projects hereafter authorized to be constructed, operated, and maintained in accordance with the Federal reclamation laws (Act of June 17, 1902, 32 Stat. 388, and Acts amendatory thereof or supplementary thereto), the Secretary of the Interior shall, in addition to allocations to be made under section 9 of the Reclamation Project Act of 1939 (53 Stat. 1187), make findings on the part of the estimated cost of the project which can properly be allocated to the prevention of damage to, and to the development and improvement of wildlife, and costs allocated pursuant to such findings shall not be reimbursable. In the case of construction or the provision of financial or technical assistance by a Federal agency for such construction, that agency shall transfer to the United States Fish and Wildlife Service, out of appropriations or other funds made available for investigations, engineering, or construction, such funds as may be necessary to conduct the investigations required to carry out the purposes of this section.

"Sec. 3. Whenever the waters of any stream or other body of water are impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the United States, or when such purposes are to be accomplished with Federal financial or technical assistance or under Federal permit, adequate provision consistent with the primary purposes of such impoundment, diversion, or other control shall be made for the use thereof, together with any areas of land, or interest therein, acquired or administered by a Federal agency in connection therewith, for the conservation, maintenance, and management of wildlife, resources thereof, and its habitat thereon, as well as for the development and improvement of such wildlife resources pursuant to the provisions of section 2 of this Act, as amended. When consistent with reports prepared in accordance with the provisions of section 2 of this Act by the United States Fish and Wildlife Service and when approved by the Secretary of the Interior, the acquisition of land and interests therein by Federal construction agencies is authorized for the purposes of this Act. In accordance with general plans, covering the use of such waters and other interests for these purposes, approved jointly by the head of the department or agency exercising primary administration thereof, the Secretary of the Interior, and the head of the agency exercising administration over the wildlife resources of the State wherein the waters and areas lie, such waters and other interests shall be made available without cost for administration (a) by such State agency, if the management thereof for the conservation of wildlife relates to other than migratory birds; (b) by the Secretary of the Interior, if the waters and other interests have particular value in carrying out the national migratory bird management program."

Sec. 2. The provisions of such Act of March 10, 1934, as amended, shall be applicable hereafter with respect to any project for the control or use of water as prescribed in section 2 of such Act, as amended by this Act, or any unit of such project, hereafter authorized for planning or construction and to any project or unit thereof authorized heretofore if the construction of the particular project or unit thereon has not been completed.

Mr. BOYKIN. The following Members introduced the first set of bills on this subject:

Mr. Metcalf, author of H. R. 8631.

Mr. Gavin, author of H. R. 8744.

Mr. Reuss, author of H. R. 8747.

Mr. Dixon, author of H. R. 9053.

Mr. Tollefson, author of H. R. 9308.

Following departmental reports on these bills, H. R. 12371 was introduced by Mr. Curtis, which embodies the coordinated suggestions of the Department of Interior, Agriculture, and Defense. The bill, H. R. 13138, which I introduced, and H. R. 13139 which Mr. Dingell introduced are identical with H. R. 12371, which is on your desk.

In reporting on H. R. 12371, the Department of the Army on behalf of Defense, and the Department of Agriculture offer no objection.

The committee welcomes as its first witness this morning our distinguished colleague from the State of Montana, the Honorable Lee Metcalf.

Mr. Metcalf, we will be glad to hear your statement on these bills.

**STATEMENT OF HON. LEE METCALF, A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF MONTANA**

Mr. METCALF. Mr. Chairman, I appreciate this opportunity to support bills, among them my H. R. 8631, to move the Fish and Wildlife Service toward full partnership in water resource development projects. I am speaking also for the other members of Montana's congressional delegation—for Senator Murray, Senator Mansfield, and Congressman Anderson.

My bill is a companion to S. 2496, by the senior Senator from Utah (Senator Watkins), and to those by the gentleman from Pennsylvania (Mr. Gavin), the gentleman from Wisconsin (Mr. Reuss), the gentleman from Washington (Mr. Tollefson) and the gentleman from Utah (Mr. Dixon).

These measures would amend Public Law 732 of the 79th Congress, the Coordination Act, which authorizes the Fish and Wildlife Service and State wildlife agencies to conduct cooperative studies of the effect of Federal water impoundment and diversion projects on fish and game resources.

Under the act as it stands today, these agencies are to concern themselves with a "mitigation of losses" which may be caused by such projects. And there is no requirement in the act that the construction agencies pay any attention to recommendations submitted by the Fish and Wildlife Service and State wildlife agencies. We would give these agencies a positive job—the "development and improvement of wildlife resources" in connection with these projects. And their recommendations would be made a part of the report of the construction agency to the Congress.

The Corps of Engineers maintains that the Coordination Act does not apply to projects authorized prior to 1946, thus preventing consideration of the impact on wildlife of the huge backlog of projects authorized prior to passage of the 1946 amendments to the Coordination Act. This bill would make the act apply to previously authorized projects, construction of which has not been substantially completed and provided that the necessary modification is compatible with the purposes for which the project was authorized.

It also would make it clear that the act applies to dredging and navigation projects and local projects carried out with Federal financial or technical assistance, such as projects under the small watersheds program. In the case of the latter, full control of the program would remain with the Secretary of Agriculture and local groups.

In addition, it would authorize acquisition of lands at Federal water-development projects for fish and wildlife and recreation purposes.

Another important section of these bills provides that the Fish and Wildlife Service and the State wildlife agencies shall be consulted first, whenever any of these projects are proposed. Too often in the past, these agencies have not been called in until the construction agency is well along in its planning.

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These bills were developed in the Department of the Interior in response to a request of the International Association of Game, Fish, and Conservation Commissioners. Copies of the working draft were sent to the governors of all the States for their review and comment. Its introduction last year followed endorsement by the Western Association of Game and Fish Commissioners.

The Department of the Interior accompanied its favorable report of April 1, 1958, on H. R. 8631 with a revised text which included amendments proposed by other interested departments, among them Interior, the Department of Agriculture, and the Department of the Army. The senior Senator from Utah [Senator Watkins] introduced the revised text as S. 3725, which has been ordered reported by the Senate Committee on Interstate and Foreign Commerce. The gentleman from Missouri [Mr. Curtis] introduced the revised text as H. R. 12371.

The House Committee on Government Operations took note of the need for this revision of the act last year. In its report No. 1185 of August 16, 1957, on Army-Interior reservoir land-acquisition policy, the committee included the following among its principal recommendations:

3. In addition to restoration of the previous land-acquisition policy, the Coordination Act of August 14, 1946, which facilitates coordination of fish and wildlife conservation, should be broadened and extended in accordance with the general objectives of the amendments that have been endorsed by the conservation officials of all 48 States and are now embodied in H. R. 8747 and H. R. 8631 of the 85th Congress.

In a paper presented to the North American Wildlife Conference last year, Mr. George X. Sand of Deerfield Beach, Fla., presented a strong case for the revision. I extended Mr. Sand's speech with my remarks, entitled "Revised Federal Land Policy Denies Development," on pages A2022-A2024 of the Congressional Record of March 13, 1957.

As Mr. Sand points out, it is one thing to give the Fish and Wildlife Service the authority to do a job. It is another to give it the money to do so. I hope the Service gets both.

Among the letters I have had in support of this legislation is the following from Mr. A. A. O'Claire, Montana State fish and game director:

DEAR MR. METCALF: The Montana Fish and Game Commission in session February 19, 1958, discussed the amendment to the Coordination Act of Public Law No. 732, and it is their desire to present to you the following resolution for your information:

"Be it resolved, That the Montana Fish and Game Commission desires the active participation by the Montana congressional delegation to exert their efforts in getting the amendment to the Coordination Act passed, and this Coordination Act to include the necessary authority for withdrawal of unappropriated public land for fish conservation and access necessary for the management of the fishing resources to be accomplished under Public Law No. 732; be it further

Resolved, That in the public interest that the current interpretation of the withdrawal for fishing access and conservation be expedited by the United States Department of the Interior. This request is in support of the resolution passed by the Western Association of State Game and Fish Commissioners."

We have several areas in Montana where we have requested withdrawal for public access to fishing water, and we are waiting for the interpretation for final

passage of the amendment to the Coordination Act. Your assistance is solicited and will be appreciated by the wildlife conservationists of Montana.

Very truly yours,

A. A. O'CLAIRE,
State Fish and Game Director.

Mr. BOYKIN. Mr. Metcalf, that was a fine statement.

Are there any questions?

The committee thanks you for coming.

Mr. METCALF. Thank you, Mr. Chairman.

Mr. BOYKIN. Our next witness will be Secretary Chilson.

Mr. Secretary.

STATEMENT OF HATFIELD CHILSON, UNDER SECRETARY OF THE INTERIOR, ACCOMPANIED BY DANIEL H. JANZEN, DIRECTOR, BUREAU OF SPORT FISHERIES AND WILDLIFE; AND JAMES T. McBROOM, CHIEF, BRANCH OF RIVER BASIN STUDIES, BUREAU OF SPORT FISHERIES AND WILDLIFE, DEPARTMENT OF THE INTERIOR

Mr. DINGELL. Mr. Secretary, I notice that you have some others of your officers from the Department of Interior with you.

Would you like to have them sit with you?

Mr. CHILSON. Mr. Congressman, I thought maybe when we got to the questions we would know better which ones to call up. They are available for questioning.

Mr. Chairman and members of the committee, first let me express my appreciation for your courtesy in allowing me to make a statement in behalf of the legislation here involved.

The administration and the Department of the Interior strongly support H. R. 12371. This support was indicated in the letter of April 1, 1958, from Secretary of the Interior Fred A. Seaton to the chairman of this committee, reporting on H. R. 8631, a bill with objectives similar to the one here under consideration. That letter offered for the favorable consideration of the committee a recommended substitute for H. R. 8631. H. R. 12371 is identical to the substitute version submitted to the committee by the Secretary on April 1, save for relatively minor changes, largely editorial in nature.

H. R. 12371 is designed to strengthen fish and wildlife conservation in the water resources development program of the Federal Government. Legislation to accomplish this objective is urgently needed. This need is reflected in the unanimous support of conservation organizations, official and unofficial, throughout the Nation for the enactment of legislation with this objective.

That millions of people throughout the United States have an interest in the preservation and development of our fish and wildlife resources and the outdoor activities which they support is evidenced by the 34,200,000 hunting and fishing licenses issued in the United States in 1957. As the pace of modern living increases, and the work-week is shortened, more and more Americans are turning to the out-of-doors for recreational satisfaction. Hunting and fishing license sales increased by 63½ percent from 1946 to 1957 as compared to a population increase in the same period of 22 percent. This is true even though this rate of population growth is one of the largest in any 12-year period in the history of the country.

Concurrent with this increased demand for fishing and hunting opportunities, and for other outdoor activities related to fish and wildlife resources, such as photography and nature hikes, there has been the alarming shrinkage of living space for fish and game. This shrinkage results in large part from the demands of industry and agriculture for water and related land resources, which in turn stems from an expanding economy and population. The requirements for water and water control have increased in the last decade at an explosive rate. Everywhere there is a call for water regulation and control to satisfy the enormous demands for water.

Every reservoir and every channelization project of any significance has some effect on fish and wildlife habitat. If we are to maintain fish and wildlife resources on a scale desired by the people of our Nation, we must take prudent action before it is too late to provide for the conservation of fish and wildlife resources adequately in our Nation's water resources program. Unless we do, we must be prepared to accept a lower standard of living, as measured by opportunities for outdoor recreation. It is not necessary that this be so. Enactment of legislation along the lines of H. R. 12371 will, I believe, permit continued progress in the Nation's water resource program and at the same time expand fish and wildlife resources.

The Department of the Interior is dedicated to the principle that construction of water projects should give full consideration to the conservation of fish and wildlife resources while serving other objectives of multipurpose development. The Central Valley project in California and the Columbia Basin project in the State of Washington are examples of completed or nearly completed projects where fish and wildlife conservation measures have been built-in parts of project plans. When the upper Colorado River storage project was under consideration, this Department sponsored legislation, later enacted, which, among other things, provides for project measures for the protection and enhancement of fish and wildlife resources. In the Missouri River Basin, the Department has made an intensive planning effort for fish and wildlife conservation in cooperation with the State fish and game departments in the 10 States in that basin. Many of the conservation recommendations resulting from these investigations have been adopted for all units in the Missouri Basin proposed for construction by the Bureau of Reclamation, including the huge Garrison diversion unit in the Dakotas.

There is, however, need for broader legislation for fish and wildlife conservation in connection with water development projects. H. R. 12371 is principally designed to amend and strengthen the Fish and Wildlife Coordination Act of August 14, 1946, which constitutes a complete revision of the act of March 10, 1934. The 1946 act is the authority for fish and wildlife planning on Federal water development projects. Although substantial contributions have been made toward fish and wildlife conservation under the 1946 act, that act has a number of deficiencies which now need to be corrected. Conservation groups, as I have suggested, are unanimous in seeking amendments to strengthen it. The main deficiency of the act is its lack of clear, general authority for construction agencies like the Bureau of Reclamation and the Corps of Engineers to plan and construct, as part of their projects, measures which will provide adequately for fish and

wildlife conservation and development. Improvement in this situation through enactment of amendments to the 1946 act would be a needed and welcome addition to the body of Federal statutes related to water resources.

H. R. 12371 also would add a section to the Watershed Protection and Flood Prevention Act, as amended (68 Stat. 666; 70 Stat. 1088). The "small watershed" program is carried out pursuant to this act under the administration of the Department of Agriculture. The program provides, among other things, for the construction of dams and reservoirs by local organizations—usually soil conservation districts—with the financial and technical assistance of the Federal Government. The new section which would be added by H. R. 12371 would apply the principles of the Fish and Wildlife Coordination Act to the small watershed program while leaving full control of that program with the Secretary of Agriculture and the sponsoring local organizations. The proposal, in this form, has been endorsed by the president of the National Association of Soil Conservation Districts.

Our Department, through the United States Fish and Wildlife Service, cooperates closely under the present coordination act, with all of the State fish and game departments in fish and wildlife conservation activities. All project reports prepared by the Service in accordance with the act are submitted for review to the fish and game agencies of the appropriate State or States.

In 1956, the principal organization of the State fish and game directors, citing this cooperation between Federal and State agencies, requested the Department of the Interior to draft strengthening amendments to the 1946 act on the basis of 10 years of experience and to circulate this draft to the States for review and comment. That organization is the International Association of Game, Fish, and Conservation Commissioners. I have here a copy of the resolution making this request, adopted by the association at its annual meeting in Toronto on September 14, 1956, which I would like to offer for inclusion in the record at this point.

Mr. BOYKIN. Without objection, so ordered.

Mr. CHILSON. I will furnish that to the clerk.

(The resolution referred to follows:)

RESOLUTION ADOPTED AT THE 46TH ANNUAL CONVENTION OF THE INTERNATIONAL ASSOCIATION OF GAME, FISH, AND CONSERVATION COMMISSIONERS AT TORONTO, CANADA, SEPTEMBER 13 AND 14, 1956

RESOLUTION NO. 11—AMENDMENTS TO THE COORDINATION ACT (PUBLIC LAW 732)

Whereas the Coordination Act of August 14, 1946, sometimes known as Public Law 732, 79th Congress, has resulted in sound conservation gains for the fish and wildlife resources of the Nation; and

Whereas the number and size of water-control projects being planned and built throughout the Nation are rapidly increasing, with an ever more significant effect on wildlife resources; and

Whereas engineering construction programs are being developed for whole river basins; and

Whereas competition for land and water resources brought about by these construction programs and by expanding population, agriculture, and industry seriously threatens preservation of adequate wildlife habitat; and

Whereas there is now evident the need for strengthening the Coordination Act to provide for full and equal partnership of the wildlife conservation measures in water-development programs in view of the expanding scale of water-resources project construction; and

Whereas the report of the Presidential Advisory Committee on Water Resources Policy, a top-level Cabinet group, has recognized the need for more intensive biological studies of water-resource development and greater consideration of fish and wildlife conservation in water-resource development; and

Whereas the bill, S. 2372, introduced by Senator John L. McClellan, of Arkansas, was a step in the right direction toward strengthening the Coordination Act, but failed of enactment in the 84th Congress: Now, therefore, be it

Resolved, That the International Association of Game, Fish, and Conservation Commissioners urges development by the United States Fish and Wildlife Service and the Department of the Interior of proposed legislation, based on 10 years of experience with the Coordination Act, to strengthen that act and to bring the conservation of fish and wildlife resources to full equal partnership with water control for other purposes such as irrigation, flood control, hydroelectric power, and navigation; and

That members of the International Association of Game, Fish, and Conservation Commissioners be supplied with copies of such proposed legislation by the Department of the Interior for comment and suggestions so that the States, as partners with the Federal Government, may have an appropriate voice in determining the content of the proposed legislation and in supporting the same during consideration of its enactment by the Congress of the United States; be it further

Resolved, That copies of this resolution be sent to the Secretary of the Interior and to the Director of the United States Fish and Wildlife Service with the request for action consistent with the expressions given.

Mr. CHILSON. Responsive to this request, the Department of the Interior prepared such a draft bill and submitted it for review and comment to the Governor of each State in January 1957. H. R. 8631 is identical to the draft prepared by our Department a little more than a year ago.

Within a few weeks, approving comments were received from each of the 48 governors or their authorized representatives. I would like to offer to the committee copies of these comments. I want to emphasize that these letters and the resolutions to follow were directed toward the draft which became H. R. 8631. Several amendments have been incorporated in our report of April 1 on that bill which clarify our original objectives.

I might say, Mr. Chairman, that the copies of the letters and documents are quite bulky. I will leave it up to the committee as to whether they should be in the record, but a number of copies are available for the use of the committee.

Mr. BOYIN. Do you think they ought to be in the record?

Mr. ALLEN. I think they ought to be.

Mr. BOYKIN. We will put them in the record, Mr. Secretary.

Mr. CHILSON. Fine. We have a number of copies for your own use, too.

Mr. BOYKIN. Thank you very much.

(The documents referred to are in the committee files.)

Mr. CHILSON. The importance of these endorsements is worth emphasizing. Here is a piece of proposed Federal legislation the objectives of which have the written support of the chief executive of every one of the States in the Union. It is the kind of support that rarely occurs, with the heads of all the State governments expressing their unanimous approval on a completely nonpartisan basis. Most of the governors, you may note, not only signify their endorsement of the proposal, but express enthusiastic support for enactment of legislation of this type. We believe that the State governors would not have endorsed the proposal unless they thought it would make a good contribution to the balanced development of the water resources in their

States. The response of the State governors is truly an impressive and powerful argument for the enactment of this legislation.

The International Association of Game, Fish & Conservation Commissioners has also signified its support of this proposal. I offer for the record Resolution No. 1, adopted by the association at its last annual meeting in Las Vegas, Nev., in September 1957.

(The resolution follows:)

RESOLUTION ADOPTED AT THE 47TH ANNUAL CONVENTION OF THE INTERNATIONAL ASSOCIATION OF GAME, FISH, AND CONSERVATION COMMISSIONERS AT LAS VEGAS, NEV., SEPTEMBER 10, 1957

RESOLUTION NO. 1—COORDINATION ACT

Whereas this association has long recognized the need for strengthening the Coordination Act of 1946, sometimes known as Public Law 732; and

Whereas the need for achieving greater recognition in the water resources program of the Federal Government of fish and wildlife conservation is constantly increasing at a critical pace because of the more intensive competition for land and water resources; and

Whereas this association at its 1956 meeting in Toronto adopted a resolution requesting the Secretary of the Interior to develop amendments to the Coordination Act based on 10 years of experience, and to circulate the draft of amendments to the States for comments; and

Whereas the Secretary of the Interior complied with this request and has since received endorsing comments from each of the 48 governors or their authorized representatives: Now, therefore, be it

Resolved by the International Association of Game, Fish, and Conservation Commissioners in convention assembled at Las Vegas, Nev., on September 10, 1957, That:

1. The association heartily commends and expresses its appreciation to Secretary of the Interior Fred A. Seaton and his staff for his actions in cooperating with the association in this matter.

2. The association strongly endorses the amendments to the Coordination Act as developed by the Department of the Interior and submitted to the governors of the States in January 1957.

3. The association urges that the clearance of the amendments within the executive branch be expedited and that the proposed legislation be transmitted to the Congress for its consideration without further delay.

4. The members of the association be prepared actively to support the enactment of this legislation in the Congress at the 2d Session of the 85th Congress; and

5. That the members of this association be urged to undertake promptly a vigorous educational and information campaign in their respective States to rally support for the passage of this legislation; be it further

Resolved, That this association commends Senator Arthur V. Watkins, for introducing S. 2496, Congressman Lee Metcalf for H. R. 8631, and other Members of the House who have introduced the amendments to the Coordination Act in the form circulated to the States. We reaffirm our endorsement of the principles of this legislation and we urge the Senate Committee on Interstate and Foreign Commerce and the House Committee on Merchant Marine and Fisheries to hold early hearings.

Similarly impressive is the support of the legislation by the major conservation organizations of the Nation. I offer for the record copies of letters on this point received from the National Wildlife Federation, the Sport Fishing Institute, the Wildlife Management Institute, the Izaak Walton League, and the Wildlife Society.

COORDINATION ACT AMENDMENTS

(The letters follow :)

NATIONAL WILDLIFE FEDERATION,
Takoma Park, Washington, D. C., February 5, 1957.

Hon. ROSS LEFFLER,
Assistant Secretary,
Department of the Interior,
Washington, D. C.

DEAR ROSS: Thank you for sending me a copy of the preliminary draft of a proposed amendment to the Federal Coordination Act of August 14, 1946. This proposal, you explain, has been prepared in response to a resolution adopted by the International Association of State Game, Fish, and Conservation Commissioners at its last annual meeting in Toronto.

We have studied the proposed amendments and my comments will be brief and to the point. We think they are excellent and, if enacted by the Congress, should go a long way toward bringing about true integration of fish and wildlife conservation and development in connection with Federal water projects.

The Secretary of the Interior is to be complimented for taking the initiative in proposing a long-needed revision of the Coordination Act. I hope you will pass along to him the compliments of the National Wildlife Federation and the assurance that our organization will do everything it can to help bring about favorable action by the Congress on the proposed amendments.

Sincerely yours.

ERNEST SWIFT, *Executive Director.*

SPORT FISHING INSTITUTE,
Washington, D. C., February 12, 1957.

Hon. ROSS LEFFLER,
Assistant Secretary of the Interior,
Department of the Interior,
Washington, D. C.

DEAR ROSS: Many thanks for sending me your preliminary draft of the proposed amendments to the Coordination Act of August 14, 1946. It is gratifying to find you addressing your initial efforts to this important and vexing problem. The Sport Fishing Institute has long urged a strengthening of that act, in concert with other conservation agencies.

The detailed changes you suggest are acceptable to me. Careful study of the proposed amendments reveals that most of the difficulties experienced in the past should be overcome in the future if these proposed amendments are adopted. I believe these proposals to be highly desirable. I wish to compliment you on your initiative in this matter.

At the same time, it is my considered recommendation that the words "fish and" be inserted in the text of the Coordination Act and the amendments proposed thereto immediately prior to the word "wildlife" wherever it appears. I am attaching a copy of the proposed language with my proposed insertions clearly noted on the margins at appropriate places in the text.

I was much concerned to note that this choice of language originally incorporated in the act, is rejected at several points in the proposed amendments. I am disturbed by this oversight of or refusal to recognize the fundamental importance of employing the words "fish and." There is ample precedent and reason to insist on this language. Even more important, failure to include this phrase may create new and unnecessary future difficulties of great magnitude. It has become clear that the word "wildlife" does not necessarily include "fish" in its meaning. This doubt is underscored by the very name of the United States Fish and Wildlife Service itself.

Best wishes.

Sincerely yours.

RICHARD H. STROUD,
Executive Vice President.

WILDLIFE MANAGEMENT INSTITUTE,
Washington, D. C., January 30, 1957.

Hon. ROSS LEFFLER,
Assistant Secretary of the Interior,
Department of the Interior, Washington, D. C.

DEAR ROSS: I have read with deep interest your letter of January 24 and the proposed amendments to the Federal Coordination Act of August 14, 1946.

These proposed amendments would go far toward making the Coordination Act a useful instrument that was envisaged with the passage of the very weak Coordination Act of 1934. It was strengthened considerably by the amendments in 1946, but it still has not been an effective instrument in giving wildlife and fishery resources their proper place in the planning and development of these gigantic water-management schemes.

Experience during the past 10 years has shown many loopholes. In my opinion, the proposed draft plugs effectively those loopholes, and I hope that it will not only be introduced but supported vigorously by the Department of the Interior. I am sure that you can count on the united support of the national conservation agencies in securing the passage of such legislation.

Sincerely,

IRA N. GABRIELSON, *President.*

THE IZAAK WALTON LEAGUE OF AMERICA, INC.,
Chicago, Ill., May 15, 1957.

HON. FREDERICK A. SEATON,
Secretary of the Interior,
Department of the Interior, Washington, D. C.

DEAR SECRETARY SEATON: I am enclosing resolution No. 14 as adopted April 6, 1957, by the national convention of the Izaak Walton League of America recently held in Washington, D. C.

Attached to the resolution is the committee appointed to work toward the passage of the amendment of the Water Development Coordination Act.

So that our committee may work together, may I have a statement as to the present status of the bill and enough copies for our committee to use in this work.

We would appreciate any suggestions you may give us in regard to furthering the adoption of your amendment to this act.

Respectfully yours,

WM. A. WALLACE, M. D.,
National Vice President, Izaak Walton League of America, Martinsburg,
W. Va.

RESOLUTION No. 14—AMENDMENT OF WATER DEVELOPMENT COORDINATION ACT

Whereas Public Law 732, also known as the Coordination Act of August 1946, is a law which provides for protection of fish and wildlife values affected by federally licensed water development projects;

But this law has defects which long have caused concern to the Izaak Walton League and informed conservation-minded persons;

And the Secretary of the Interior, after conferences with the Izaak Walton League, and other conservation organizations, and with various State game and fish departments, has proposed amendments to Public Law 732 which would—

1. Make provisions of the law retroactive to projects authorized prior to August 1946, when the act became effective;
2. Provide for land acquisition for recreational purposes adjacent to such projects;
3. Provide for inclusion of measures to enhance fish and wildlife potentials, as well as to prevent fish and wildlife losses;
4. Provide for inclusion of plans and appropriations for fish and wildlife purposes in original project proposals, and require submission of such plans as integral features of reports to the Congress on such projects; and
5. Extend coverage of the act to project receiving Federal technical services.

And whereas all of these aims are in accord with established policies of the Izaak Walton League; Therefore, be it

Resolved, That Izaak Walton League of America, Inc., in 35th annual convention assembled this 6th day of April 1957, in Washington, D. C., do support and endorse amendment of Public Law 732 as set forth in accordance with the explanation set forth above; and, be it further

Resolved, That the national president of the Izaak Walton League of America, Inc., appoint, within 30 days after the close of this convention, a committee to take all practical steps necessary to implement this resolution and to bring it to the attention of all persons and groups important to affirmative action upon its provisions, said committee to report at the 1958 national convention of the Izaak Walton League of America, Inc., or before as required.

Resolution adopted.

COORDINATION ACT AMENDMENTS

THE WILDLIFE SOCIETY,
Washington, D. C., March 20, 1957.

HON. FRED A. SEATON,
Secretary, Department of the Interior,
Washington, D. C.

DEAR MR. SECRETARY: As executive secretary of the Wildlife Society, the council (governing board of the society) has requested me to transmit to you a copy of a resolution passed at our meeting March 4, 1957. It is a pleasure to enclose this resolution commending you and the Department for leadership in proposing amendments to the Coordination Act for the purpose of providing adequate planning for and development of fish and wildlife resources in connection with water development projects in which Federal agencies are concerned.

Very truly yours,

DANIEL L. LEEDY,
Executive Secretary.

THE WILDLIFE SOCIETY

RESOLUTION NO. 1—AMENDMENTS TO THE COORDINATION ACT

Whereas it is recognized that the recreational opportunities afforded by fish and wildlife are growing rapidly in importance both to the economy of the Nation and to the health and welfare of the people; and

Whereas the development and diversion of the Nation's watercourses for flood control, irrigation, navigation, hydroelectricity, and other purposes affect tremendously the fish and wildlife resources: Therefore be it

Resolved, The Wildlife Society, in convention assembled this 4th day of March 1957, commends the Secretary of the Interior for his leadership in proposing amendments to the Coordination Act (60 Stat. 1080) for the purpose of providing adequate planning for, and full development of, fish and wildlife resources in connection with water development projects constructed by Federal agencies, by non-Federal agencies under Federal license, and by non-Federal agencies with Federal financial or technical assistance; be it further

Resolved, The society endorses the objectives of the proposed amendments to the Coordination Act as transmitted by the Department of Interior to the governors of the various States for their review and comment.

The commercial fishing industry of the Nation has an important stake in the strengthening of this act, inasmuch as water-resource projects are having an increasing effect on finfish and shellfish of commercial significance. Commercial fishing interests, too, enthusiastically support the enactment of this legislation. I submit for the record a copy of a letter received from the general manager of the National Fisheries Institute on this subject.

(The letter follows:)

NATIONAL FISHERIES INSTITUTE, INC.,
Washington, D. C., May 15, 1957.

HON. ROSS LEFFLER,
Assistant Secretary of Interior,
Department of Interior, Washington, D. C.

DEAR MR. LEFFLER: This is to inform you at our recent convention in Chicago the board of directors unanimously went on record in favor of legislation to strengthen the Fish and Wildlife Service Coordination Act of August 14, 1946.

The fishing industry has become increasingly alarmed over the tremendous expansion and the development of various types of waterway projects throughout the Nation. The dredging of bays and estuaries along the coastline to aid navigation and to provide land fills for real estate and the general change taking place in marshes is apparently having adverse effect on the reproduction of shrimp, oysters, and many species of fin fishes. Most of these projects are undertaken without any consideration whatsoever on the effect they may have on fishery resources. We believe it is imperative that more concrete information be available and that ways must be found to protect these natural resources. Full knowledge should be available to all public agencies on the effect of these projects before they are undertaken. The public itself should be better informed.

We were glad indeed to learn that the Department of Interior is looking into this matter with a view to recommending legislation to strengthen the Coordina-

tion Act at the earliest possible time. The fishing industry will gladly do anything within its power to assist you in this endeavor.

Sincerely,

CHAS. E. JACKSON, *General Manager.*

The strengthening of the Fish and Wildlife Coordination Act is generally consistent with the report and recommendations of President Eisenhower's Advisory Committee on Water Resources Policy. This report, submitted to the Congress by the President on January 17, 1956, states, with respect to Federal water-resources projects:

Most of the planning done to date has been in the field of flood control, navigation, irrigation, soil conservation, watershed control, and hydroelectric power. There has not been sufficient planning, however, with respect to such functions as * * * preservation and propagation of fish and wildlife.

It must be remembered that this proposed legislation would have a significant effect on many programs and activities of other departments of the Federal Government, including particularly the Departments of the Army and Agriculture. We have had many conferences and discussions with these departments to assure that the legislation will be workable when applied to the water-development programs of all the departments. The proposal for the bill, as submitted by the Department of the Interior, has the endorsement and support of the Administration, including particularly the Department of the Army and the Department of Agriculture. The proposal before you reflects their suggestions, as well as the comment by the States and our own intensive study of the legislation.

As one of the Federal construction agencies affected by H. R. 12371, the Bureau of Reclamation supports and recommends its enactment. Its principal effects, insofar as the Federal reclamation program is concerned, would be to clarify existing law relating to the accommodation of the fish and wildlife function at reclamation projects and to give firm legislative sanction to policies which the Bureau of Reclamation has sponsored in its project authorizations in recent years.

Fishing and hunting are enjoyed on some 140 reclamation lakes and reservoirs in the 17 Western States. Some of the finest and most heavily used fishing areas in the West are found at these waters. In the more arid areas, reclamation reservoirs in many cases offer the only open-water fishing and hunting areas for hundreds of miles. The public use of and demand for fish and wildlife facilities at reclamation projects is increasing year by year at a phenomenal rate. The fish and wildlife function has become an important aspect of multiple-purpose reclamation developments, and present indications are that it will continue to grow in importance.

With this growing importance and demand for fish and wildlife facilities, there is need for clarification and reaffirmation of Federal policy for handling the fish and wildlife function at Federal developments. H. R. 12371, if enacted, would fulfill this need and would establish means satisfactory to the Bureau of Reclamation for the accommodation of fish and wildlife facilities at its projects.

Mr. Chairman, we suggest two minor amendments to H. R. 12371, as follows—

Mr. BOYKIN. Will the gentleman state them?

Mr. CHILSON. Since this bill only revises the first 4 of 9 sections in the present act, and since fishery resources as well as wildlife

resources would be benefited, we believe that, in the interest of clarification, lines 3 and 4 on page 1 should be revised to read as follows:

That the Act of March 10, 1934, as amended, and as further amended by this Act, may be cited as the "Fish and Wildlife Coordination Act."

That is the end of the quoted part of the act.

Mr. MILLER. Just in the title?

Mr. CHILSON. Just in the title. References to the Wildlife Coordination Act throughout the bill should be revised accordingly. In order to include the authorization for appropriations contained in the amendatory language in our report of April 1 on H. R. 8631, we recommend that an additional section be added at the end of the bill, as follows:

SEC. 4. There is authorized to be appropriated and expended such funds as may be necessary to carry out the purposes of this Act.

This language will make clear the authority of all agencies concerned to request the funds to accomplish the purposes of the bill.

In closing I want to emphasize that the bill represents needed and positive legislation to further sound water resource programs in this Nation. It is permissive legislation for the water development agencies; there is nothing mandatory in the bill requiring the adoption of any fish and wildlife conservation measures nor even a suggestion of a veto power over any projects by the fish and wildlife agencies. Most important, the bill would provide for procedures through which the Congress itself can be better informed on the fish and wildlife aspects of water projects when it is considering project authorizing legislation.

The preservation and betterment of fish and wildlife will contribute importantly to our human resources; approval of this bill as we have suggested will help tremendously to maintain the fish and wildlife heritage of this Nation in the face of competition for living space from our growing populations, industry, and agriculture.

I urge favorable consideration of H. R. 12371 with the modification we have presented.

That is the end of my statement.

Mr. BOYKIN. Mr. Miller.

Mr. MILLER. Mr. Secretary, it has come to my attention that the chairman of this subcommittee, Mr. Boykin, has introduced an identical bill, H. R. 13138. What you have said would apply to H. R. 13138?

Mr. CHILSON. Mr. McBroom, will you come up?

I believe that that is right.

Mr. MILLER. It is so right that the clerk informs me that the reason H. R. 13138 is not before us is because it is an identical bill and in the interest of saving time the Printing Office will not print it.

Mr. WINFIELD. It has not come over from the document room. It was just introduced yesterday.

Mr. CHILSON. Do I understand that it was just introduced?

Mr. WINFIELD. Yesterday.

Mr. CHILSON. If it is identical—

Mr. MILLER. It is generally a courtesy that you pass out a bill of the chairman of the subcommittee and that you pass out a bill of a member of the committee rather than that of a nonmember of the committee. At the proper time I am going to move the adoption of H. R. 13138.

I want the record to show that we are not trying to cross you up.

Mr. CHILSON. We want the record to show that our remarks go to H. R. 13138, it being identical to H. R. 12371.

Mr. BOYKIN. Are there any questions?

Mr. MILLER. I have no questions.

Mr. BOYKIN. Mr. Tollefson?

Mr. TOLLEFSON. You say that this legislation is permissive legislation. Can the Bureau of Reclamation and the Corps of Engineers do the things that are sought to be done by this bill without the bill?

Mr. CHILSON. No, they cannot, Mr. Congressman. As we interpret the present bill, the present Coordination Act is limited largely to authorization for the mitigation of damage in connection with the construction of a water project.

Now, the Bureau of Reclamation, however, has enhanced the fish and wildlife resources at projects by including authorization for that in the particular authorizing legislation but generally, without the particular authorizing legislation, the Bureau of Reclamation does not have the present authority.

Mr. TOLLEFSON. You do not have any idea what the cost of the legislation might be?

Mr. CHILSON. No, because it would differ, I think, project by project. The cost of the legislation is, of course, the cost of the investigations of the fish and wildlife resource, the damage that a particular project will do, how it might be enhanced. The investigative costs would depend, of course, upon each individual project as to how much work was to be done.

Mr. TOLLEFSON. When the Bureau of Reclamation or the Corps of Engineers have the new project or would have one after this bill was enacted into law, then would you contact them immediately as soon as you learned of the project authorization?

Mr. CHILSON. They would contact us and advise us of their proposed plan, the idea being that the Fish and Wildlife Service can begin its investigations of the fish and wildlife resource at the same time that the Army is investigating and preparing plans for the water development so that the two plans can grow at the same time and in coordination with each other.

Mr. TOLLEFSON. So that when they are building a project or planning it, then you are planning what you should do in connection with it?

Mr. CHILSON. That is correct.

Mr. MILLER. Will the gentleman yield on that point?

Mr. TOLLEFSON. Yes.

Mr. MILLER. Is it not also true that sometimes these fish and wildlife investigations cannot be hurried, they take time and quite frequently, by the time you get into the field, your time is foreshortened because you have not been informed of what has been taking place and you have to act rapidly and perhaps sometimes do not hit the right results?

Mr. CHILSON. That is correct. If at the same time the construction agency begins its preliminary planning of a water resource development or a water development program we can begin to plan and look toward what can be done for fish and wildlife, I think we will not run into some of the difficulties we have had heretofore where we have had to hurry our fish and wildlife studies.

Mr. MILLER. Because you cannot hurry a biological study. You cannot hurry it up. You have to find out where the fish or the wildlife are. You have to march on nature in this particular case.

Mr. CHILSON. To a large extent that is right, Mr. Congressman.

Mr. MILLER. Thank you.

Mr. TOLLEFSON. This has chiefly to do with coordinating your activities with those of other departments of Government which are engaged in construction projects of one sort or another?

Mr. CHILSON. Water resource.

Mr. TOLLEFSON. Water resource?

Mr. CHILSON. Yes.

Mr. TOLLEFSON. It does not have anything to do with acquiring on your part of new areas of water resources or land resources?

Mr. CHILSON. None whatever. In connection with it, of course, the Fish and Wildlife Service, I assume in many instances, will recommend that the constructing agency acquire land to be used in connection with the development of the fish and wildlife resources, but we do not acquire it, nor do we necessarily operate it. We merely make the planning and suggest to the constructing agency what we think is desirable. To the extent that the constructing agency agrees with us they will build our recommendations into their project.

To the extent that they do not agree with us, they are not bound to follow our plans but they are bound to submit to the proper committees of Congress, when they ask for authorization of the project, our full recommendations so that Congress can be advised; and I can imagine the situation, Mr. Congressman, where the Congress itself might well say, "Well, a part of these plans should be built in as a part of the project and as a part of the project cost, but here is a part of this that is really over and beyond the project purposes but which is desirable." Congress could authorize that as a separate fish and wildlife development.

Another situation might be where the constructing agency, such as the Corps of Engineers, would adopt our recommendations in toto. If they did in proposing the authorizing legislation, they would have all of those features built in as a part of the project.

Mr. TOLLEFSON. Of course, this takes care of such things as fish ladders and devices of that sort?

Mr. CHILSON. Yes.

Mr. TOLLEFSON. I remember when the Department was up here earlier this year they showed us a number of pictures of what I assumed to be reclamation projects where they drained off areas to bring into being more land for farmland purposes. In the drainage of areas, then, the water resources are taken away.

What would you do in those cases? Would you substitute other areas, or what would you do?

Mr. CHILSON. I do not know as I am enough of an expert, Mr. Congressman, in the field but I would assume that the remedy might be one thing in one case and one thing in another. Maybe it would be the acquisition of additional land in an attempt to replace the habitat that was lost.

In another case, maybe we are going to lose that particular resource but maybe we can replace it with another fish and wildlife resource.

For example, in building a reclamation reservoir you destroy a certain amount of stream fishing but nevertheless you replace with lake

fishing and in many instances the replacement of the lake fishing offers more fishing resource than did the stream fishing.

A good instance of that is in my home State with Granby Reservoir with which I am very well acquainted. Prior to the construction of the reservoir, on a weekend you could go through that lake area and see 15, 20, 30, maybe 50 people fishing. You go by Granby Reservoir now and you see hundreds of people out there with their boats fishing, so that I think it depends on the particular project.

Mr. TOLLEFSON. That is all, Mr. Chairman.

Mr. BOYKIN. Mr. Allen.

Mr. ALLEN. Mr. Chairman.

In connection with the proposed section 4, if I read the bill correctly, there is a section 2 on page 1 at line 5, and there is another section 2 on page 12 at line 15, and no section 3. Does that suggest that the numbering ought to be looked at?

Mr. CHILSON. Yes, indeed. We slipped up on that. We have it marked on our copy here. That should be section 3.

Mr. ALLEN. The new 1 should be section 3 or the present section 2 on page 12 should be section 3?

Mr. CHILSON. The present section 2 on page 12 should be section 3.

Mr. ALLEN. I think, Mr. Secretary, it would be well to have a little more in the record about the financial implications of the bill.

First as to the cost of surveys, while I can realize that the cost of a future survey is rather indefinite, particularly when you do not know what you are going to survey, could you possibly give us some estimate of the costs of surveys of the past, such as the survey for the Central Valley project or any of the reservoirs? Could you do that?

Mr. CHILSON. Yes. I think Mr. McBroom can give you some information on that.

Mr. ALLEN. Could you take 2 or 3 examples and tell us what the surveys cost?

Mr. McBROOM. Mr. Allen, I am not prepared to tell you what the surveys cost at this point on any particular project but I can tell you what have been the expenditures for this work throughout the United States and Alaska over the past several years.

In the current fiscal year we expect to spend for this work \$1,765,000 for investigations.

Mr. ALLEN. Do you have any comparable figure as to what the expenses on the project, as a whole, for the year will be?

Mr. McBROOM. Again I can give you a comparable figure for the two agencies that we deal with. For fiscal year 1958, the Corps of Engineers and the Bureau of Reclamation together are receiving an estimated \$829,344,000 for their project work.

Mr. ALLEN. Would that indicate that your expenses are one-eighth of 1 percent of the cost of the project?

Mr. McBROOM. That is right. I have before me an analysis of 6 years that shows that our effort on this work is 1/165 the effort of those 2 agencies measured by number of people, and 1/532 of the effort of the 2 agencies measured by dollars.

Mr. ALLEN. And going into the added cost of the project, can you give us any information, for example, as to what the cost of the additional facilities on the project like the Grand Coulee or Bonneville Dam was as compared with the cost of the project itself?

Mr. McBROOM. Again, Mr. Allen, I can give you an estimate of what it might run in total. We have made some computations that show that it would be minor in comparison to the total spent on the water resources program, perhaps about \$6 million a year, and I should say there that the expenditure of those funds would be subject to review by the Congress, project by project.

I might say that the bill does not necessarily call for more total expenditures of the Federal Government in the project development work but instead it is aimed at expending at perhaps the same budgetary level and getting more fish and wildlife good out of it and perhaps a little less flood control or navigation.

Mr. ALLEN. In instances, it is just a matter of planning the facilities where the cost of the project with or without the facilities for fish and wildlife would be about the same?

Mr. McBROOM. That is right. As a matter of fact, through multiple-purpose planning all purposes should share in any saving from that type of construction.

Mr. ALLEN. Then going back to that \$6 million figure, what was the total cost of the projects for that year against which the \$6 million could be compared?

Mr. McBROOM. As I recall, it is about one-fifth of 1 percent of the total funds available to the two major construction agencies.

Mr. ALLEN. A third type of expenditure might be purchasing additional areas in connection with the project?

Mr. McBROOM. That is right.

Mr. ALLEN. Have you any estimate as to what that might run?

Mr. McBROOM. That was included in the \$6 million estimate that I mentioned a moment ago.

Mr. ALLEN. Thank you, Mr. Chairman.

Mr. CHILSON. Mr. Congressman, may I add this, and this is just my own idea. I would anticipate under this proposed legislation that that percentage may increase to some extent because we would hope that under this legislation we could do a better job of fish and wildlife development than we are now doing under the present act so that it might get into the matter of additional land acquisition or perhaps better facilities and more facilities.

I still would conceive on the overall that the fish and wildlife portion of the total cost of a project would be a very, very small percentage of total cost.

Mr. MILLER. Would the gentleman yield?

Mr. ALLEN. Yes.

Mr. MILLER. In the case of Shasta Dam, where you had to build a fish hatchery to replace the natural spawning of the salmon on the Sacramento River, that was built by the Department of the Interior as part of the dam; is that not true?

Mr. McBROOM. Yes.

Mr. ALLEN. Is it operated by them? Are the operating costs charged to the operation of the dam or is that operating cost paid out of an appropriated fund to the Fish and Wildlife Service?

Mr. McBROOM. That is the Coleman hatchery. I believe that the costs there are paid now by the Fish and Wildlife Service. However, on the Nimbus hatchery, Mr. Miller, on the American River, the construction and operation costs have both been paid by the Bureau

of Reclamation through Federal appropriations and the hatchery is operated by the California Department of Fish and Game under cooperative agreement.

Mr. MILLER. That is right. I do not see why in the future the policy could not be established that the operation of the hatchery such as Coleman, that is brought about by building the dam, should not be charged to the operation of the dam just as the other people that must be maintained for all time to operate the power facilities or whatnot are charged; that it should not be part of that operation and not be a tax on the people of the United States but the charges should be borne by the beneficiaries of the dam who are the water and power users of the dam.

Mr. DINGELL. Those who made it necessary.

Mr. MILLER. If you did not build the dam you would not be called upon to maintain the hatchery.

Mr. CHILSON. May I say this, Mr. Congressman. I do not want to get into an extended discussion. There does seem to be one distinction. When you mitigate loss, I have heard that argument made and there is, of course, merit. There are arguments made on the other side, too. When you get into enhancement, I myself wonder if there is not a difference, because there you are going beyond mitigating the damage that is done by the project.

Mr. MILLER. Maybe a formula could be worked out where there is enhancement but can you determine today, using Coleman as a specific instance, that it increased the run of salmon in the river?

Mr. CHILSON. Well, I cannot. I do not know whether the Fish and Wildlife Service can.

Mr. MILLER. I do not know whether anyone can definitely say that it has. There may have been a lot of other factors that might have been responsible, the decrease of pollution in the lower reaches or many other things, but I doubt that there are more salmon as a result of the hatchery than there would have been had the salmon been allowed to go to their natural spawning grounds.

That is a question which you cannot determine.

In the case where enhancement could be shown, I think then it is a proper charge against Fish and Wildlife but, where no enhancement can be shown, I think the beneficiaries should pay the cost of that. They do not complain about paying the cost of the operation of the dam in the amount that they pay for water to irrigate with or for power, and this certainly is as much a charge against that as any other factor.

Thank you, Mr. Allen.

Mr. ALLEN. Thank you.

Mr. BOYKIN. Mr. Dingell.

Mr. DINGELL. Thank you, Mr. Chairman.

I note that you suggest an amendment to the bill to authorize such funds to be appropriated as are necessary to carry out the purposes of the bill. Does that amendment have the approval of the Bureau of the Budget?

Mr. CHILSON. Yes.

Mr. DINGELL. So that we can assume that the Bureau of the Budget is not only in entire accord with the purposes of the bill, but that they also expect to spend whatever funds are necessary to carry out the purposes of the bill; is that correct?

Mr. CHILSON. That is correct. We will make our requests through the Bureau of the Budget for the funds year by year to carry out the purposes of this act.

Mr. DINGELL. Let me ask you the next question.

Mr. TOLLEFSON. Would the gentleman yield before you get off that particular subject?

Mr. DINGELL. I would be glad to yield.

Mr. TOLLEFSON. You testified that you have been working with the Bureau of Reclamation and the Corps of Engineers already in coordinating your programs with theirs.

What I am trying to get at is this: Actually this bill does not call for the expenditure of any great amount of money in addition to what you have already been spending; is that so?

Mr. CHILSON. That is essentially correct because all we spend under the authority of this bill is investigative money and we have been making investigations and the way we have been making them heretofore with the Corps of Engineers is that they transfer to the Fish and Wildlife Department the funds to make investigations of their projects.

I do not want to say that that has been unworkable, but it offers some difficulties and we believe, and the Bureau of the Budget agrees with us, that it is more proper that the Fish and Wildlife Service apply to the Federal Government for appropriations to carry out these investigative works.

Mr. TOLLEFSON. Actually, this bill just makes for a better coordination between your Department and their Department?

Mr. CHILSON. That is correct.

Mr. TOLLEFSON. You are going to do the same things you have already been doing?

Mr. CHILSON. Except in, I think, one important respect. There is this change. Heretofore under the present act, it has been construed that our investigations and the features to be built into present projects so far as the corps is concerned is limited to mitigation of damage. Now, this very frankly recognizes that in addition to the studies to mitigate damage that we may also study and suggest means to enhance the fish and wildlife resource in connection with those water resource projects.

Mr. TOLLEFSON. You have done that before, have you not?

Mr. CHILSON. I think not.

Mr. McBROOM. Generally not. The present act, sir, is written in terms of mitigation of damages, and there has been a lack of clarity as to how far we can go in enhancement.

This bill will certainly clear that up.

Mr. TOLLEFSON. Thank you, Mr. Dingell.

Mr. DINGELL. I am always delighted to yield for any questions like that.

This is something which has concerned me. There is no section-by-section analysis in the bill. Knowing that we are rather pressed for time, would you like to give us the most brief section-by-section analysis or would you prefer, in the interest of saving time, to submit to us perhaps by letter later a statement telling us what each section does?

Mr. CHILSON. We have prepared one for our own use.

I have a copy here which we would be glad to submit to the committee.

Mr. DINGELL. That would be splendid. Will you put that in the record?

Mr. CHILSON. Yes; I will.

Mr. MILLER. Is it mimeographed, Mr. Secretary?

Mr. CHILSON. Yes.

Mr. MILLER. I wonder if we could have some copies sent to us later?

Mr. BOYKIN. If you have them now we could take them now.

Mr. CHILSON. We have just two here.

We will furnish to the clerk enough copies for each member of the committee.

Mr. MILLER. That would be fine.

Mr. DINGELL. You might see that we have enough for each member of the full committee when we have our executive meeting.

Mr. CHILSON. We will have the clerk tell us how many copies you want and we will furnish them.

Mr. BOYKIN. Mr. Secretary, we hope to be able to get this to the full committee very, very early next week, maybe Monday.

Mr. CHILSON. I see no reason why I cannot have these up here this afternoon.

Mr. BOYKIN. That may be received for the record.

(The document referred to follows:)

INTERIOR DEPARTMENT'S SECTION-BY-SECTION ANALYSIS OF PROPOSED AMENDMENTS TO THE COORDINATION ACT OF AUGUST 14, 1946 (60 STAT. 1080), AND PROPOSED AMENDMENT TO THE WATERSHED PROTECTION AND FLOOD PREVENTION ACT (68 STAT. 666, 70 STAT. 1088) CONTAINED IN H. R. 12371

SECTION 2¹

Section 1 of revised Coordination Act

The bill restates authority granted to the Secretary of the Interior in the present Coordination Act to cooperate with State and other agencies in activities for the conservation of wildlife resources (which, by definition of sec. 8 of the act, includes, birds, fish, mammals, and all other classes of wild animals and their habitat).

Proposed amendment adds the following new language:

Spells out, in the opening lines, the importance of fish and wildlife resources, and provides that wildlife conservation shall receive equal consideration with other features of Federal water-resource programs.

Adds new language to permit the Secretary to accept donations of lands or money to carry out the purposes of the act. This restores a provision in the original Coordination Act of March 10, 1934.

Gives the Secretary specific authority to withdraw public lands for public fishing purposes and to provide access across public lands to areas set aside for public fishing or hunting use. The present act contains authority for withdrawal of public lands to provide areas for hunting (shooting) purposes.

Section 2 of the revised Coordination Act

In general, the amendments in this section would do the following things: Broaden the range of water activities to which the act would apply; spell out clearly the authority to provide for the improvement and enhancement of fish and wildlife resources as well as mitigation of damages to those resources; make the act applicable to projects already authorized; establish specific procedures for the reporting on water-use projects by construction agencies and fish and wildlife agencies; and provide that more orderly consideration be given by construction agencies to conservation recommendations.

¹ Sec. 2 of H. R. 12371 would revise the first four sections of the act of August 14, 1946.

*Subsection 2 (a)*²

(1) One of the proposed amendments spells out need for consultation with respect to proposals to control or modify bodies of water as well as to authorized water-use projects. The present act is not clear on this point. New language clarifies the intent of Congress which, in recommending passage of the bill which became the Coordination Act of 1946, made clear that there should be consultation beginning with the earliest stages of project planning. The committee reports pointed out that, at those stages, changes in plans can be made for the benefit of wildlife without increasing costs materially.

(2) Makes the act clearly applicable to drainage and navigation projects, whether these are undertaken by the Federal Government itself or under Federal permit or license. (But the act would not be made applicable to drainage projects undertaken by private landowners or non-Federal agencies with Federal financial and technical assistance.) The present act has questionable application to Federal projects which widen and deepen streams for navigation and other purposes, and does not apply to dredging and filling activities conducted under navigation permit issued by the Corps of Engineers. The amendment would make the act applicable to projects which require such permits.

(3) Makes it clear, in the opening paragraph of section 2, that water-use projects should be planned to develop and improve fish and wildlife resources, where feasible, as well as to prevent damage to them. Main emphasis of the present act is on damage prevention, and authority for improvement measures has been questioned.

Subsection 2 (b)

H. R. 12371 specifies that fish and wildlife agencies are expected to recommend means and measures that should be adopted for enhancement as well as mitigation purposes, and that such of these measures as are adopted are to be built into project plans. These recommendations are to be as specific as is practicable. Requires reporting officers of engineering agencies, in preparing project reports, to give full consideration to conservation recommendations. Project reports will include such means and measures for fish and wildlife purposes as are considered justifiable by the engineering agencies.

Amendments are designed to apply also to postauthorization engineering reports which contain detailed plans and estimates and which are prepared prior to initiation of construction but which are not submitted beyond the Chief of Engineers and Commissioner of Reclamation, respectively. In many cases, these postauthorization reports provide for significant changes in the authorized project plans, in accordance with latitude normally provided in authorizing legislation. The suggested changes are intended to insure that reports of fish and wildlife agencies are included along with engineering reports—not only those reports which go to Congress, but also those prepared for internal use only.

Subsection 2 (c)

H. R. 12371 would provide, in the interest of wildlife conservation, for modification of projects to be authorized in the future, and those previously authorized, on which construction is not substantially completed as of the date the amended act becomes law. Makes it clear that modifications and additions on previously authorized projects must be compatible with the purposes for which the project was authorized. It is recognized that proposed changes in the interest of conservation at a project originally authorized primarily for irrigation, for example, must be reasonable and not destroy its justification as a reclamation project. However, the full measure of irrigation or other benefits may have to be modified in some degree in order to accomplish fish and wildlife conservation measures.

Spells out that costs of improvement measures for fish and wildlife conservation may be allocated for this purpose and a finding is to be made as to the portions of the costs, if any, to be reimbursed by non-Federal interests. Presumably, the Congress will make decisions on cost sharing on a case basis when considering project reports on proposed projects or supplemental reports on projects already authorized. This subsection provides that, on previously authorized projects, the cost of modifications on behalf of fish and wildlife conservation and of land acquisition, as means and measures to prevent loss of and damage to fish and wildlife resources, to the extent justifiable, shall be

² References to subsections are to those in H. R. 12371.

included as an integral part of the cost of such projects. The justification for means and measures to prevent loss of and damage to fish and wildlife resources, however, is not ordinarily to be presented in monetary terms, such as by the use of a benefit-cost analysis. Justification for such means and measures normally is to be presented only in nonmonetary terms because of the inherent difficulty in assigning a monetary evaluation to losses to fish and wildlife, whose value is, basically, intangible. Also, the spirit of H. R. 12371 is that water projects should provide for all reasonable restitution of project-occasioned losses to fish and wildlife, without dependence on attempted monetary evaluations.

The present act has questionable application to Federal water-use projects authorized for construction prior to August 14, 1946, and is silent with respect to financing costs of improvement measures for fish and wildlife. Moreover, it does not provide clearly stated authority for construction agencies to include fish and wildlife improvement measures in project construction and operation plans.

Subsection 2 (d)

A new proviso in H. R. 12371 defines and limits the types of conservation improvement measures and facilities which are to be integral parts of a Federal water-use project and which the construction agencies are authorized to provide. These would include land acquisition, modification of the project, and modification of project operations. A "modification of the project" may include subimpoundments, for example, near the upstream end of an arm of a reservoir. Operation of fish and wildlife facilities, which are not integral parts of project structures, and construction of other facilities for the enhancement of fish and wildlife are not to be financed or undertaken by the construction agencies.

A second proviso is similar to the language contained in the present Coordination Act making costs allocated to fish and wildlife at Federal reclamation projects nonreimbursable. New language in lieu of the term "preservation and propagation of fish and wildlife," which appears in the present act, is used for clarification. H. R. 12371 allows discretion in determining whether cost allocations are to be made for improvement measures and, if so, whether any portion of the cost is to be reimbursed by non-Federal interests.

Subsection 2 (e)

H. R. 12371 restates language in present Coordination Act authorizing transfers of funds from construction agencies to the United States Fish and Wildlife Service for investigations by the Service. The amendment authorizes the transfer of funds to finance all or part of the investigations. This recognizes that investigations in the project planning stage are to be financed with funds appropriated to the Interior Department. Note in section 2 of the H. R. 12371 (on p. 13 of the bill, discussed below on pp. 12 and 13) that direct financing of investigations by the Department of the Interior is proposed in the case of studies of small watershed projects. Reconnaissance surveys and certain special project studies are now financed by direct appropriations to the Fish and Wildlife Service.

Subsection 2 (f)

H. R. 12371 spells out that reports of construction agencies on a project proposed for authorization must contain an estimation of benefits or losses to fish and wildlife. This estimation is not necessarily to be made in monetary terms. Such report would be required to deal specifically with costs of enhancement facilities or lands to be acquired for wildlife improvement purposes. The reports would also contain a recommendation as to the portion of the cost of joint-use facilities, if any, to be reimbursed by non-Federal interests. Presumably, this recommendation will be the result of joint planning between, and judgment decisions of, the construction and conservation agencies.

This is new language, not contained in the present Coordination Act.

Subsection 2 (g)

H. R. 12371 would make the provisions of section 2 applicable to any project or unit thereof if construction on them is not substantially completed. Sets a cutoff time as to the section's application by defining substantial completion as the stage when 60 percent or more of the estimated construction cost has been obligated for expenditure. (Note: Many projects are vast developments from the standpoint of geography, economics, and engineering complexity. One project may cover a large area and consist of many separable units on which construction is authorized under rather general legislation. In one case, appro-

priations for construction of the project were first made about 25 years ago, yet there are units on which construction has not started or gone very far on which wildlife studies should be made and would be made under the provisions of this bill. Also, there are hundreds of authorized Federal water-use projects for which construction funds have not yet been appropriated).

This retroactive provision is not included in the present Coordination Act.

Subsection 2 (h)

In H. R. 12371, minor impoundments of less than 10 acres, constructed by the Federal Government, are exempted from the operation of the act. This would include the vast majority of Federal ponds and tanks, built for stock watering and other purposes on the public domain, Indian lands and national forests. Makes the act inapplicable to programs primarily for land management conducted by Federal agencies on Federal lands—for example, logging and roadbuilding on national forests where control of water, if any, would be incidental. (However, sec. 1 of the New Coordination Act would still be applicable as authority to withdraw public lands and make them available to the States for fish and wildlife management purposes and for access to fishing and hunting areas.)

The above amendments are contained in subsection 2 (h) of H. R. 12371. No such exemptions are spelled out in the present Coordination Act.

Section 3 of the revised Coordination Act

Subsections 3 (a) and 3 (b) of H. R. 12371 restate, in improved form, the policy set forth in section 3 of the present Coordination Act that lands and waters acquired by the Federal Government primarily for irrigation, flood control or other purposes but also adaptable for wildlife conservation should be made available for administration by fish and game agencies pursuant to general plans approved by the agencies concerned. The amendments make provision to permit the construction agencies to turn over to conservation agencies lands acquired specifically for conservation purposes and other purposes.

Provide authority to construction agencies to acquire lands for fish and wildlife conservation purposes at Federal water projects, subject to approval by the Congress for individual projects.

H. R. 12371 contains language in several subsections which clarifies application of section 3 and proposes certain restrictions and requirements as follows:

Subsection 3 (b)

A proviso in this subsection points out that section 3 is not intended to interfere with the existing authority of the Secretary of Agriculture to enter directly into agreements with State conservation agencies for the management of fish and wildlife resources on national forest or other lands administered by the Secretary of Agriculture and to make such lands available to the States for such purposes. This proviso restricts application of the terms of subsections 3 (b) and 3 (e).

Subsection 3 (c)

A provision in this subsection spells out the type of information to be contained in water-use reports going to the Congress which contain recommendations for land acquisition for fish and wildlife management purposes. In the case of recommendations for land acquisition in connection with a previously authorized water-use project, a specific authorization from the Congress is required, if specific authority for the acquisition of the land is recommended by the construction agency. If specific authority is not so recommended, land acquisition for fish and wildlife purposes on these previously authorized projects would be generally authorized by the bill.

Subsection 3 (d)

This new subsection points out that lands acquired specifically for fish and wildlife purposes are not to be subject to exchange or other transactions, under the general land exchange authorities of the several affected Federal departments, if such exchange or transaction would defeat the initial purpose of their acquisition.

Subsection 3 (e)

This new subsection spells out that Federal lands acquired or withdrawn for Federal water-use projects and made available to the States or the Secretary of the Interior for wildlife management purposes are to be made available in accordance with this act and no other law.

Subsection 3 (f)

This new subsection allows Federal construction agencies to transfer those private lands, which are acquired for fish and wildlife purposes, to a national forest for administration if the lands lie within the exterior boundaries of a national forest. However, such transfer would not be made if the lands were of value to the national migratory bird management program. In this case administration would be in accordance with subsection 3 (b) and section 4.

Section 4 of the revised Coordination Act

Similar to the present Coordination Act, H. R. 12371 contains two additional provisos which (1) simplify the assumption of management of a State fish and game department of lands valuable for migratory waterfowl where the Secretary of the Interior determines that this arrangement is in the public interest and (2) insure that management of such lands may be taken over by the Department of the Interior if a State agency, for any reason, is no longer in a position to continue their management for migratory-bird conservation.

SECTION 2

Section 2 of H. R. 12371 (beginning on p. 12; it probably should be renumbered as sec. 3) is not a proposed amendment to the Coordination Act, but an amendment to the Watershed Protection and Flood Prevention Act, as amended. This new section (sec. 12) provides for the application of the principles of the Coordination Act to the small-watershed program administered by the Department of Agriculture, while leaving full control of the program with local groups and the Secretary of Agriculture. Sets up procedures for surveys of small-watershed projects by the United States Fish and Wildlife Service and for full consideration, by the Secretary of Agriculture, of the recommendations of the Secretary of the Interior. Opportunity is provided for planning measures not only to mitigate possible losses but to enhance benefits to fish and wildlife resources. Inclusion of measures for the conservation and development of wildlife resources in the works of improvement is left to the discretion of the Secretary of Agriculture and local groups.

Insures that reports of the Secretary of the Interior, at the latter's request, will accompany the plan for works of improvement when these are submitted to the Secretary of Agriculture for approval or are further transmitted to the Congress.

Costs of all surveys and preparation of fish and wildlife reports will be borne from funds appropriated to the Department of the Interior.

Mr. BOYKIN. Mr. Van Pelt.

Mr. VAN PELT. I have no questions.

Mr. BOYKIN. Are there any further questions?

We want to thank you very much, and want the record to show that the Secretary was accompanied by Mr. Daniel H. Janzen, Director of the Bureau of Sport Fisheries and Wildlife, and Mr. James T. McBroom, Chief of the Branch of River and Basin Studies, Bureau of Sport Fisheries and Wildlife. Also available for questioning were Mr. Daniel V. McCarthy, Chief, Program and Coordination Branch of the Division of Project Development, Bureau of Reclamation, and also Mr. Earl L. Struwe, Chief, Economics and Statistics Branch, Division of Irrigation, Bureau of Reclamation.

Mr. MILLER. We might ask those people if they have anything they would like to say.

Mr. BOYKIN. I think that is a good suggestion.

Would you gentlemen like to tell us anything about this which has not been said by the Secretary and Mr. McBroom? Do you have a statement you would like to put in the record? If so, we would like to hear from you and like to have your statement.

STATEMENT OF EARL L. STRUWE, CHIEF, ECONOMICS AND STATISTICS BRANCH, DIVISION OF IRRIGATION, BUREAU OF RECLAMATION, DEPARTMENT OF THE INTERIOR

Mr. STRUWE. Mr. Chairman, my name is Earl Struwe. I believe that I have no further comments over those that have been made by Mr. Chilson.

Mr. BOYKIN. Thank you so much.

STATEMENT OF DANIEL V. McCARTHY, CHIEF, PROGRAMS AND COORDINATION BRANCH, DIVISION OF PROJECT DEVELOPMENT, BUREAU OF RECLAMATION, DEPARTMENT OF THE INTERIOR

Mr. McCARTHY. I am Mr. McCarthy, and I would like to say that the Bureau of Reclamation fully supports this legislation as indicated in the statement that was read by Mr. Chilson.

Mr. MILLER. I would like to put on the record that most of the cooperation of these agencies is due to you, Secretary Chilson.

Mr. DINGELL. You have done a very good job, and Secretary Leffler is the best conservationist in the country.

Mr. CHILSON. Thank you.

Mr. BOYKIN. How about any other place? Do you mean just this country?

Mr. ALLEN?

Mr. ALLEN. Mr. Secretary, I am rather seriously curious, for the record, as to whether the reorganization of the Fish and Wildlife Service has facilitated in any way the ability of one or the other of the departments or bureaus within the Fish and Wildlife Service to accomplish some objective in legislation such as this.

Mr. CHILSON. Well, I can answer that in general terms only.

I think Secretary Leffler could give you a much better idea of what the reorganization has done, but, as Under Secretary, we are quite proud of the reorganization of the Fish and Wildlife Service, the way it has operated and what it is accomplishing. I think there is no question but that the organization was a very healthy move.

Fish and Wildlife Service now has an Assistant Secretary to speak for it. The Bureau of Reclamation has an Assistant Secretary to speak for it, and we have the Assistant Secretary for Land Management, and so on. I think it makes for a much better balance.

There is no doubt in my mind that the reorganization has made great strides in the effectiveness of the Fish and Wildlife Service.

Mr. ALLEN. Thank you, sir.

Mr. BOYKIN. Mr. Van Pelt?

Mr. VAN PELT. I have no questions.

Mr. BOYKIN. Are there any other questions?

Mr. DINGELL. I have no further questions.

Mr. BOYKIN. Gentlemen, the Department of Agriculture say that they will stand on their report. They will have no witnesses, but no objection.

The Department of Defense will have no witness. They will stand on their report, and have no objections.

Mr. Robert Jenkins, Sport Fishing Institute.

**STATEMENT OF ROBERT M. JENKINS, ASSISTANT EXECUTIVE VICE
PRESIDENT, SPORT FISHING INSTITUTE**

Mr. JENKINS. Mr. Chairman and members of the subcommittee, I am Robert M. Jenkins, assistant executive vice president of the Sport Fishing Institute.

In the interest of conserving the valuable time of this committee, I will merely state that the Sport Fishing Institute strongly urges the passage of House Resolution 13138.

I would like to submit a formal statement further amplifying the institute's stand.

Mr. BOYKIN. Thank you very much.

Are there any questions?

Mr. TOLLEFSON. 13138 was the bill introduced by Mr. Boykin.

Mr. JENKINS. Yes, sir; identical to the other bills.

Thank you.

(The statement referred to follows:)

**STATEMENT OF ROBERT M. JENKINS, ASSISTANT EXECUTIVE VICE PRESIDENT, SPORT
FISHING INSTITUTE, WITH REFERENCE TO H. R. 13138 (JUNE 27, 1958)**

Mr. Chairman and members of the subcommittee, my name is Robert M. Jenkins. I am assistant executive vice president of the Sport Fishing Institute, a private, nonprofit scientific and educational fish conservation agency. As you know from previous representations before this committee, the institute draws its chief financial support from a broad representation of manufacturers in the outdoor recreational industries which depend directly or indirectly upon the sport-fishery resources.

The institute is nationally recognized in fish-conservation matters as the spokesman for an important segment of the \$2 billion sport-fishing industry. In addition, a large portion of the 25 million people who fish for sport look to the Sport Fishing Institute for national guidance in fish conservation matters.

Our objective is to improve sport fishing to the fullest extent possible through encouraging the rapid development and application of sound fish conservation practices. Or, as often phrased, our objective is "to shorten the time between bites" for the angler.

The Sport Fishing Institute appreciates this opportunity to speak in support of H. R. 12371. The institute regards this bill, which provides for badly needed amendments to the Coordination and Watershed Protection and Flood Prevention Acts, as one of the most important legislative matters affecting fish conservation undertaken by the Congress during this session.

Recognition by Congress of the vital contribution of our fishery resources to the Nation through passage of this amendment, with its provision that fish and wildlife conservation shall receive equal consideration and be coordinated with other features of water resource-development programs, will be highly acclaimed by the country's 25 million fishermen.

Clarification of agency responsibilities and obligations, and proper and equitable consideration of the possibilities of increasing fish, wildlife, and recreation potentialities at Federal reservoirs constitute the outstanding features of the amendment. The angling public benefits greatly from the provisions which strengthen the present capabilities of construction agencies to provide for the enhancement as well as protection of fishery resources.

Soaring public use at civil-works projects underlines the need for immediate implementation of conservation and recreation planning and action at these Federal installations. Attendance figures at Corps of Engineers reservoirs alone have increased fivefold in the past 7 years. Almost 85 million visitors were recorded on the 3 million acres of Corps impoundments in 1957, and no end to the use spiral is in sight.

This amendment represents many days of hard work, conferences, compromises, and endeavors in the broad public interest by personnel of all affected agencies, national nongovernmental conservation organizations, and the members of this subcommittee, and its counterpart in the Senate. The present form of this vital legislation has been approved by the Departments of Interior, Agriculture, Army,

and Commerce, and by the Federal Power Commission. It deserves your unqualified support. Passage will mark a high point in conservationists' efforts to obtain adequate recognition of the fish and wildlife resources in all federally sponsored water developments.

This amendment will have a very salutary effect on the national economy, as is recognized in the stated purpose of the bill—"the increasing public interest in and significance of our wildlife resources due to expansion of our national economy and other factors." The present economic importance of sport fishing is enormous. A recent national survey showed that the Nation's anglers spent \$2 billion in 1955 for all goods and services they needed out fishing. About \$5 is spent per day by each angler pursuing his favorite sport. Any increase in public-use facilities to alleviate presently overcrowded and inadequate conditions will concretely stimulate and expand recreation businesses. Through every citizen contributes to water development construction costs, the direct, tangible benefits to each of these taxpayers seems remote unless his opportunity to utilize the reservoir for recreation is guaranteed. We anticipate that this amendment will constitute such a guaranty.

The Sport Fishing Institute believes that H. R. 12371, the 1958 amendment to the Coordination Act, will provide a consistent Federal policy which fittingly recognizes the increasing importance of fish, wildlife, and recreation in the American way of life, by safeguarding and enhancing these vital renewable resources on federally created waters.

Thank you for this opportunity to appear before your committee. The Sport Fishing Institute is ready to cooperate with you in every way possible.

Mr. BOYKIN. We have our old friend, Mr. Suomela, here. I wonder if he has a statement or something he would like to put in the record. We are always glad to see him and he has certainly been helpful to us down through the years.

STATEMENT OF ARNIE J. SUOMELA, COMMISSIONER OF FISH AND WILDLIFE, FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR

Mr. SUOMELA. Mr. Chairman, I have no statement to add further than what our Under Secretary has given. Also I would like to endorse his comments on the progress of the reorganization and what it has done for the Fish and Wildlife program. Other than that, Mr. Chairman and gentlemen, I will just stand on what has been said before.

Mr. BOYKIN. Thank you very much.

We have Mr. Kenneth B. Pomeroy, chief forester, of the American Forestry Association, of Washington.

STATEMENT OF KENNETH B. POMEROY, CHIEF FORESTER, THE AMERICAN FORESTRY ASSOCIATION, WASHINGTON, D. C.

Mr. POMEROY. Mr. Chairman, I have a very brief one-page statement. If you would permit me to do so, I would like to read it because intitially we were opposed to this proposition and we have now changed our minds.

Mr. BOYKIN. We would be glad to have you read it.

Are you kin to the Pomeroy's in Alabama?

Mr. POMEROY. No, sir. I am one of the lost Pomeroy's from Michigan.

Mr. BOYKIN. Most of them are coming down that way and we are glad to have them.

Mr. DINGELL. I would like to say, Mr. Chairman, that if Mr. Pomeroy comes from Michigan, he is obviously not lost.

Mr. POMEROY. I am Kenneth Pomeroy, the chief forester of the American Forestry Association.

The American Forestry Association is opposed to the specific provisions of H. R. 8631 which place administrative authority over the actions of the Forest Service in a different bureau and department.

As we understand H. R. 8631, it provides that—

whenever the waters of any stream or other body of water are to be modified for any purpose whatever by any agency of the United States, such agency first shall consult with the Fish and Wildlife Service * * *

This proviso to our mind nullifies the responsibility already assigned the Forest Service for the protection, administration, and multiple use of the national forests. Its restrictive implications are of particular concern as they affect the timing, location, and design of access road construction through control of drainage features.

These objections appear to have been met in H. R. 12371 and in the Secretary of the Interior's recommendations of April 1, 1958.

Therefore, the American Forestry Association endorses the present provisions of H. R. 12371.

Mr. BOYKIN. Thank you so much, Mr. Pomeroy.

Are there any questions, gentlemen?

Mr. MILLER. I have no questions.

Mr. RIVERS. Mr. Chairman, I have been in attendance at another committee.

Mr. BOYKIN. Thank you so much, Congressman Rivers. We have gotten along pretty well, but we are glad you are here.

We have Dr. Spencer M. Smith, Jr., secretary of the Citizens Committee on Natural Resources.

STATEMENT OF DR. SPENCER M. SMITH, JR., SECRETARY, CITIZENS COMMITTEE ON NATURAL RESOURCES

Dr. SMITH. I wish to say that our organization supports the resolution entirely, and with that remark we will retire.

Mr. BOYKIN. I think there is wonderful teamwork shown here.

Mr. RIVERS. I think we ought to have all these people indicate their favor of the bill and present their statements.

Mr. BOYKIN. We have Mr. Daniel A. Poole, Wildlife Management Institute.

Mr. Poole?

STATEMENT OF DANIEL A. POOLE, WILDLIFE MANAGEMENT INSTITUTE

Mr. POOLE. Mr. Chairman, with your permission, I would like to submit our statement for the record.

The institute supports your bill and Mr. Dingell's bill and the identical bill of Mr. Curtis.

We think that the need for this is evidenced by both the wholehearted support that it has from the governors and fish and wildlife leaders and also from actual observation of practices in the field.

Mr. BOYKIN. Thank you very much.

Mr. RIVERS. Let me ask the witness a question.

Are you from the organization that puts out those fine pictures?

Mr. POOLE. No; I am not.

Mr. RIVERS. What institute is that?
 Mr. POOLE. That is the National Wildlife Federation.
 Mr. RIVERS. Both of you are pretty good folks.
 Mr. POOLE. We think so.
 Mr. RIVERS. That is all, Mr. Chairman.
 Mr. POOLE. Thank you, Congressman Rivers.
 (The statement referred to follows:)

STATEMENT OF DANIEL A. POOLE ON H. R. 12371, H. R. 13138, AND H. R. 13139

Mr. Chairman, I am Daniel A. Poole, editor of the Outdoor News Bulletin, a conservation news service of the Wildlife Management Institute. The institute is one of the older national conservation organizations and its program has been devoted to the improved management of natural resources in the public interest since 1911.

The institute endorses and supports the objectives of H. R. 13138 and companion bills and S. 3725 as approved by the Senate Committee on Interstate and Foreign Commerce. Experience has shown that water-development projects, whether undertaken by Federal agencies, under Federal permit, or with Federal technical and financial assistance, can have a significant effect on the fish and game resources that exist in practically every area where work is undertaken. These projects need not be destructive of wildlife and their habitat; oftentimes they could provide the means whereby wildlife habitat and recreational opportunity can be enhanced considerably.

In all too many cases, however, little has been done either to prevent the destruction of essential wildlife habitat or to improve conditions for public enjoyment when the opportunity presented itself. This situation has developed because of inherent weakness in the Coordination Act and the interpretation of the act by Federal construction agencies, particularly the Army Corps of Engineers.

Under the existing law the United States Fish and Wildlife Service and the game agencies of the States involved may study Federal water development projects and those covered by Federal permit to determine the effect each may have on fish and game resources, and recommendations may be advanced for modification of the projects and operating plans for the mitigation of fish and wildlife losses. It is not mandatory that the construction agencies heed the recommendations, however. As a result many opportunities are lost for the improvement of habitat for fish and wildlife at project sites as well as in the watersheds affected by the construction and operation of projects.

The principal dissatisfaction with the present application of the Coordination Act has resulted from the interpretation of the act by the Corps of Engineers. The corps maintains that no such studies need be made of projects that were authorized prior to the enactment of the 1946 amendment. One needs only to scan the imposing list of corps projects that were authorized before 1946, and upon which construction has not been started, to realize that the Army engineers could keep circumventing the Coordination Act for many years to come. Authorizations exist for projects dating back to World War I. Local, regional, and national conditions and needs have changed considerably in recent years, and it is believed that studies also should be made of those old projects regardless of the date of their authorization—especially those on which no significant construction work has been performed. The national recreational demands upon fish and game have mounted fantastically in the past two decades, and studies should be made of all projects that could have an impact on important wildlife resources.

The Fish and Wildlife Service and the State game departments know that many of the projects will have a deleterious effect on wildlife. Slight modifications in the plans could minimize the damage to fish and wildlife resources, and even enhance those values. In all too many instances, however, the Federal construction agencies have brushed aside the recommendations and suggestions of the Fish and Wildlife Service and the State agencies.

A 1955 national survey disclosed that more than 25 million persons hunt and fish for recreation. They spend at least \$3 billion annually in pursuit of these sports. The survey report does not include the many others who depend upon fish and game resources for their livelihood. Federal water development projects have had devastating effects on fish and wildlife resources of national significance in many areas. Surely, the sympathetic treatment of these resource

values is as important to the people of this Nation as many of the factors that have been considered.

H. R. 13138 proposes to restore fish and wildlife resources to their rightful status as a public resource of magnitude. Power production, flood control, navigation, and irrigation long have been considered as public necessities. The Fish and Wildlife Service, State game departments, and the Nation's millions of sportsmen contend that fish and game are precious resources that are worthy of the same consideration and interest. The habitat for fish and game is under constant pressure for all sorts of land and water uses, and conservationists believe that every effort should be made to improve conditions for those resources whenever opportunities are available.

The provision in H. R. 13138 that would authorize the Federal construction agencies to acquire land for fish and wildlife purposes at project sites complements a recent unanimous recommendation of the House Committee on Government Operations (Rept. No. 1185, 85th Cong., 1st sess.) following an exhaustive investigation of the Army-Interior joint land acquisition policy at Federal water projects. The committee recommended:

"The joint policy has a detrimental effect upon conservation and public recreation, and so markedly reduces the ability of the Corps of Engineers to make fully available to the public the conservation and recreation values of the project area as to constitute an evasion of the mandates of Congress expressed in section 4 of the Flood Control Act of 1944, as amended, and section 3 of the Coordination Act of August 14, 1946."

Early enactment of H. R. 13138 would assure that this important objective is accomplished. It would authorize the acquisition of necessary lands for fish and wildlife purposes, and the construction agencies undoubtedly would be able to use anticipated wildlife benefits in computing the overall project cost-benefit ratios.

The committee is aware, I am sure, that an early draft of H. R. 13138 was submitted for comment to the governors of all the States. The fact that favorable replies were received from all the governors or their respective game departments emphasizes the national interest in this matter. This latest draft of the proposal reflects agreement between the Departments of Interior, Agriculture, Army, and Commerce, and the Federal Power Commission.

The present move to amend and clarify the Coordinated Act was initiated by a 1956 resolution of the International Association of Game, Fish, and Conservation Commissioners that requested the Secretary of the Interior to seek the perfecting changes. The State fish and game administrators, who compose the international association, are seeking the changes because of their personal experience with the obvious shortcomings of the present law. Their position is supported by all the major conservation, sportsmen, and commercial fishing organizations.

The inroads on fish and game habitat from the normal expansion of human activities and endeavors are cited daily. Progress cannot be impeded, and public demands must be met, but the conservationists do not agree that fish and wildlife habitat must necessarily be destroyed whenever water development projects are undertaken. Many of those losses can be prevented, and there is no excuse for not making sensible modifications in construction plans and operating schedules when fish and wildlife values can be preserved and enhanced.

Opportunities exist for improvements rather than destruction. Enactment of H. R. 13138 would make it possible, and conservationists everywhere are hopeful that this committee will take early and favorable action on this measure.

Mr. BOYKIN. We have scheduled as our next witness Mr. Charles Callison of the National Wildlife Federation.

STATEMENT OF LOUIS CLAPPER, NATIONAL WILDLIFE FEDERATION

Mr. CLAPPER. Mr. Chairman, I am Louis Clapper, with the National Wildlife Federation. Mr. Callison is unable to be here.

I would like permission to introduce in the record his statement as well as the statement of Mr. John A. Biggs, president of the International Association of Game, Fish, and Conservation Commissioners. It is in support of the bill.

Mr. BOYKIN. Without objection, so ordered.
(The statements referred to follow:)

STATEMENT BY JOHN A. BIGGS, PRESIDENT OF THE INTERNATIONAL ASSOCIATION OF GAME, FISH, AND CONSERVATION COMMISSIONERS, ON H. R. 12371, PROVIDING FOR AMENDMENTS TO THE COORDINATION ACT

Mr. Chairman, I am John A. Biggs, president of the International Association of Game, Fish, and Conservation Commissioners. This association is the principal organization of the directors and commissioners of the fish and game departments of all the 48 States. We speak, therefore, for the viewpoint of all the official organizations of the separate States having jurisdiction over fish and game resources.

The association appreciates very much this opportunity to testify before your committee on behalf of proposed amendments to the Fish and Wildlife Coordination Act. We feel that it is one of the most important legislative proposals affecting conservation and development of natural resources in this country that has come before the Congress in many years.

The fish and wildlife resources of this Nation, with the exception of migratory waterfowl which are a Federal responsibility under international treaties and Federal law, are under the jurisdiction and control of the State governments. The management of these resources is vested in the fish and game departments of the 48 States.

America is a country of vast natural resources, even today over a century and a half after our Nation was founded. However, we have long passed the point where these resources can be either exploited or developed for any single interest or group of interests without impairing the resource base on which other important interest must depend. In no field is this more obvious than in the field of water development.

We are currently much concerned with the place of fish and wildlife resources in the national water-development program.

The legal and engineering framework of Federal water-development projects is formulated by Federal agencies and the Congress itself in project-authorizing legislation. These projects may result in severe damage to fish and wildlife resources unless adequate consideration is given to fish and wildlife conservation in the planning, authorization, and construction of these projects. By and large, this consideration has not been adequate, principally because of the weaknesses of the present Coordination Act.

Many of these project authorizations involve huge construction developments which extend far beyond State lines and may affect as many as 10 or 11 States. The preservation of fish and wildlife on such projects, therefore, is beyond the capabilities of any one State or even a group of States. It is an undertaking which must be handled by the Federal Government working in close cooperation with the State fish and game departments.

The State fish and game departments are not equipped to deal with Federal water programs and their effects on fish and wildlife resources without adequate authority in Federal law to assure that fish and wildlife conservation get full consideration in the planning and construction of Federal water projects.

The present Coordination Act provides by law an opportunity for participation by State fish and game departments in the investigations of Federal water projects. It also requires that Federal agencies who propose water projects first must consult with State fish and game departments as well as with the United States Fish and Wildlife Service. This requirement also applies to private and public agencies whose projects are subject to Federal permit, for example, hydroelectric dams licensed by the Federal Power Commission. We are gratified to note this recognition of State responsibility in water-resource planning, and urge that this concept be strengthened and extended as it would be under the proposed amendments.

The States have a very close partnership on fish and wildlife matters with the Department of the Interior. Nowhere is this partnership closer than in the investigation of water projects under Federal aegis or permit. Investigations of these projects are closely coordinated between the Federal and State Governments, and normally the final reports on these project investigations have the concurrence of both the Federal and State fish and wildlife agencies involved.

The present Coordination Act of 1946 has provided for consideration of fish and wildlife affected by Federal water projects to a much greater extent than

was possible before its enactment. In many instances, it has permitted the preservation or replacement of many of these resources. Studies and reports made during the past several years under this act have brought out certain weaknesses in it, unforeseen at the time of its enactment, which prevent the realization of all of the benefits envisioned by the sponsors of the 1946 act. The present Coordination Act, therefore, is a weak reed upon which to lean in adequately providing for the preservation and propagation of important State fish and wildlife resources.

The traditional objectives and purposes of Federal water development, such as flood control, irrigation, navigation, and hydroelectric power, too often have been permitted to assume divine rights in the development of our Nation's river basins to the detriment of development for other purposes and objectives. We think it is time to abrogate these divine rights and recognize the importance to the people of the States and the Nation of the fish and wildlife resources of the areas affected by these Federal projects.

The amendments proposed to the Coordination Act would establish in several important ways the equal partnership of fish and wildlife in the Federal water resource development program of this Nation. They would provide clear authority for construction agencies to plan and construct project features for the enhancement and improvement of fish and wildlife resources as well as for prevention of loss and mitigation of damages to these resources. They would make the act and its statutory conservation authorities applicable to the tremendous backlog of Federal projects authorized, but not yet constructed, where here was little or no investigation of effects on fish and wildlife prior to authorization. They would provide authority to construction agencies to acquire project lands specifically for fish and wildlife management purposes, the key to many conservation purposes. They would make easier and simpler the assumption of management by the State fish and game departments of project lands valuable for migratory waterfowl where the Secretary of the Interior determines that such an arrangement is in the public interest.

These and other objectives of the amendments represent a valid and much-needed contribution to the legal fish and wildlife management tools of the State fish and game departments. They also represent a sound and reasonable addition to the body of water-resource development law of the Federal Government.

We commend very highly the action of Secretary of the Interior Seaton in submitting his proposal for the amendments of the Coordination Act to the governors of all States for review, responsive to a request made by the International Association of Game, Fish, and Conservation Commissioners, in 1956. This action by Secretary Seaton was wholly appropriate in our view, because of the facts that are brought out in this presentation, regarding the responsibility of the States for most fish and wildlife resources, and the opportunity provided in the present Coordination Act for State review of Federal water projects.

We are advised by the Department of the Interior that all of the 48 State governors or their authorized representatives signified endorsement of the proposed amendments. All national wildlife-conservation organizations have done the same. Under these circumstances, we urge that this committee report favorably and unanimously on the amendments under consideration and recommend early enactment of H. R. 12371 by the Congress. In addition to all of the State fish and game directors from all parts of the Nation, I make this request on behalf of the millions of sportsmen who look to the State fish and game departments for dynamic leadership in preserving and developing fish and wildlife resources, and who look to us—and demand of us—timely actions to maintain adequate hunting and fishing opportunities in the face of increasing competition for the water and related land resources on which fish and game must depend.

STATEMENT BY CHARLES H. CALLISON, CONSERVATION DIRECTOR, NATIONAL WILDLIFE FEDERATION, WASHINGTON, D. C., ON H. R. 12371 FOR AMENDING THE COORDINATION ACT

The National Wildlife Federation is a nonprofit citizens' organization made up of affiliated State wildlife federations and sportsmen's leagues in the various States, Alaska, Hawaii, and the District of Columbia. The State and Territorial affiliates, through their own member clubs and local chapters, represent collectively a total of some 2 million members making the federation the Nation's largest conservation organization.

The National Wildlife Federation urges the enactment of H. R. 12371. The National Wildlife Federation for years has been alarmed at the destructive efforts of water resource projects on fish and wildlife. These effects are significant to a tremendous segment of our human population and their way of life.

We have campaigned hard against some of the big water projects which we felt were badly planned from the conservation standpoint and which would do needless damage to fish and wildlife. At the same time, the federation does not stand for a negative attitude opposed to a sound water resource program by the Federal construction agencies and agencies under Federal permit. We recognize the need for such water resource development and sincerely believe that the objectives of the water development program and those for the conservation and development of fish and wildlife are not necessarily incompatible.

We have, however, been greatly concerned at the second-class status which frequently has been accorded fish and wildlife conservation in the water project construction programs of the Federal agencies.

It is our view that project purposes such as flood control, navigation, drainage, hydroelectric, and the interests which they serve are not superior to fish and wildlife and outdoor recreation and the interests which they serve. We hold that there are more people directly affected and directly interested in outdoor activities based on fish and wildlife resources than there are people directly affected by and interested in most flood control, irrigation, and hydroelectric projects, particularly those which are strictly local in nature.

Under the present Coordination Act of 1946, there has been a serious lack of opportunity for conservation interests and for the Congress itself to provide adequately for fish and wildlife conservation in the water program of the Government. The conservationists of the country have felt deep frustration in trying to see that fish and wildlife are adequately considered in the planning of these projects, despite the best efforts of the United States Fish and Wildlife Service and the State fish and game departments under the authorities of the present act. The water program has been too big and too powerful, and the related statutory authorities for fish and wildlife too limited for the conservation interests to be appropriately recognized.

The proposed amendments would go far toward remedying the situation. They would not force conservation concepts on the big construction agencies of the Federal Government; instead, they would provide those agencies with the necessary positive authorities to give adequate recognition to the conservation of fish and wildlife. Most important, the amendments would shift emphasis from the prevention or mitigation of damage to fish and wildlife to the enhancement or improvement of these resources, and thus provide for both of these needs.

We recognize and give credit to the very great contributions to outdoor recreation, including fishing and hunting, which have been made by water-storage and water-development programs in the Nation. In scores of places around the country, hunting and, particularly, fishing opportunities have been made available by these Federal reservoirs where none or few existed before. However, in many cases, the creation of these opportunities just happened by circumstance—like Topsy, they just grew—rather than by design or through coordinated planning.

Recreation and outdoor activities based on fish and wildlife are sufficiently important, not only for the physical and spiritual welfare of the people, but also in terms of hard dollars of business profits and wages created by expenditures of fishermen, hunters, and others, to deserve a place in the sun of the planning and construction of these projects. In order that maximum advantage can be taken of the fishing and hunting opportunities that might be provided by these projects, there must be sufficient authority to provide for these opportunities.

We must get away from unilateral, narrow planning.

The proposed amendments would permit, in a genuine way, the equal consideration of fish and wildlife conservation in the water-development program of this country, along with flood control, navigation, hydroelectric power, and other purposes. We think that fish and wildlife conservation is eminently entitled to this consideration. The proposed amendments would open the door, in a permissive way, to allow this kind of consideration by the planning agencies. There would be no veto power, direct or implied, forcing adoption of conservation recommendations by the construction agencies.

For every individual project which is placed before the Congress for authorization, in the event these amendments are adopted, the Congress itself will still be the judge as to how much in the way of fish and wildlife conservation is to be adopted as part of project plans, and who will pay the bill for conservation costs. In a very real sense, the amendments are designed to provide the Congress and

its committees which consider these projects with far better information on proposals for fish and wildlife conservation. They will provide the construction agencies of the Federal Government with permissive authority to present to the Congress proposed plans for this construction which will provide for continued progress in the Nation's water-resource program, and yet take advantage of all sound opportunities for the conservation and improvement of fish and wildlife resources.

The 2 million sportsmen and conservationists affiliated with the National Wildlife Federation urgently request that this committee and the Congress give favorable consideration to the amendment of the Wildlife Coordination Act along the lines proposed in H. R. 12371. We also support S. 3725 in the amended form in which it was ordered to be reported by the Senate Committee on Interstate and Foreign Commerce. The Senate committee amendments to S. 3725 delete the provision that "any acquisition, withdrawal, administration, or transfer of water resources, or water rights necessary to carry out provisions of the bill shall be accomplished in accordance with the water laws of the State or States in which such action is taken."

Thank you for the privilege of appearing here today.

Mr. BOYKIN. Our next witness is one of our old and dear friends, Mr. Charlie Jackson. I see he is going to submit a statement. He is usually here, Charlie on the spot.

Without objection, we will put his statement in the record, and the letter of the National Fisheries Institute.

(The documents referred to follow:)

NATIONAL FISHERIES INSTITUTE, INC.,
Washington, D. C., June 24, 1958.

HON. HERBERT C. BONNER,
Chairman, House Committee on Merchant Marine and Fisheries,
House Office Building, Washington, D. C.

DEAR CONGRESSMAN BONNER: Prior to leaving Washington to attend an international conference in Geneva, Switzerland, Mr. Charles E. Jackson, our general manager, prepared the enclosed statement concerning amendments to the Coordination Act.

We understand your committee will begin hearings on Friday, June 27, on H. R. 12371, to amend the Coordination Act, and we will appreciate your including Mr. Jackson's statement as part of the record.

Very truly yours,

MAL XAVIER,
Acting General Manager.

STATEMENT OF CHARLES E. JACKSON, GENERAL MANAGER, NATIONAL FISHERIES INSTITUTE, INC., ON H. R. 12371, TO AMEND THE COORDINATION ACT OF AUGUST 14, 1946

Mr. Chairman and members of the committee, my name is Charles E. Jackson. I am general manager of the National Fisheries Institute, Washington, D. C., a trade organization composed of approximately 500 firms located throughout the United States and Alaska. Our membership encompasses producers, boatowners, processors, canners, freezers, smokers, wholesalers, and brokers of fish and shellfish, including producers, processors, and distributors of fishery byproducts used principally for feeding poultry and livestock.

The subject matter of this legislation was considered at our annual convention held in San Francisco, Calif., during April 1958, and at that time our membership unanimously adopted the attached resolution and went on record in support of amendments to strengthen the Coordination Act.

H. R. 12371 is designed for this purpose, and represents one step in implementing the Fish and Wildlife Act of 1956 (16 U. S. C. 742a). In a policy pronouncement, the Congress stated, among other things, that the fishery segment of the national economy should be strengthened and not unwisely exploited. That act directs the Secretary of the Interior to take such steps as may be required for the "development, advancement, management, conservation, and protection of the fisheries resources."

The impact of dams and irrigation diversions on the anadromous fishery (salmon and steelhead trout) of the Columbia River is a well-known and continuing threat to the welfare of commercial fishing interests of the Pacific

Northwest. Less well known is the increasing demand for dams and other water diversions in Alaska which can jeopardize the Territory's No. 1 resource—its commercial fishery. Also, there is terrific expansion of water-use development on streams leading to the sea or in their estuaries along all the Nation's gulf and Atlantic coastline. An increasing number of dams are disrupting migration and spawning of striped bass, shad, and river herring. Inshore waters are extremely important to many of our great fisheries. The diking, draining, dredging, and filling of our estuarine waters and related marsh areas by Federal agencies or under Federal permit spells destruction to vital spawning and nursery grounds of many species of fish and shellfish, such as menhaden, shrimp, oysters, shad, striped bass, croakers, and flounders. Loss of these nursery grounds through such effects as silting, bottom disruption, and salinity changes can mean loss of employment to the fishing industry and a diminution of the available supply of animal protein foods that are essential for the welfare of the American people and their domestic animals.

The present Coordination Act isn't broad enough or strong enough to keep pace with the expanding water-development programs of the present day. Therefore, revision of the act is needed.

One proposed amendment provides for the enhancement of fish and wildlife resources, instead of a mere lessening of damages, and authorizes construction agencies to spend funds to carry out enhancement or improvement measures.

Another amendment would require construction agencies to give greater consideration to conservation recommendations of the State fish and game agencies and the United States Fish and Wildlife Service. In this connection, commercial fishery agencies would have opportunity to determine more effectively the probable impact of water-use projects on commercial fishery resources in advance of dam construction or the dredging and filling of coastal waters and a better chance of insuring that conservation measures are included in project plans.

The present act does not clearly apply to navigation projects of the Corps of Engineers or to dredging and filling activities carried on by private agencies in navigable waters under permit from the Corps of Engineers. The primary purpose of the present act is to provide for review of projects to impound or control water. The proposed amendment would make the act clearly applicable to dredging and other similar activities carried out by private or other non-Federal entities in navigable waters under permit from the Corps of Engineers, and give conservation agencies authority to study them and make recommendations for fishery conservation measures in such project plans.

Another amendment would make the provisions of the act clearly applicable to the vast number of Federal water-use projects authorized prior to August 14, 1946, the date the present act became law, but on which construction has not yet started or is not yet substantially completed. Many of these projects are in coastal waters or adjacent marshes where spawning and nursery grounds for fish and shellfish lie.

The proposals to strengthen the Coordination Act will not give the Service or the States any veto power or authority to force project modifications. Amendments carry no mandatory requirement beyond that in the present act which simply directs that construction agencies consult with fish and game agencies with a view to conserving fish and wildlife at Federal water developments. However, a strengthened act would tend to insure that recommendations of fish and game agencies receive serious and fuller consideration in water-resource programs.

As the situation now stands, the big construction agencies of the Federal Government have a virtual veto power over the conservation recommendations of the United States Fish and Wildlife Service and the State fishery conservation departments. We think this is highly improper. The proposed amendment to the 1946 act would have the effect of giving the Congress control over the fishery conservation measures in water projects where this control belongs.

The National Fisheries Institute and the commercial fishing industry generally endorse the objectives of H. R. 12371.

RESOLUTION No. 5

RESOLUTION ON AMENDMENTS TO THE FISH AND WILDLIFE COORDINATION ACT

Whereas the welfare of the commercial fishing industry depends significantly on the avoidance of destruction of fish habitat in the coastal bays and estuaries and in the inland streams and lakes of the Nation, including Alaska; and

Whereas these fishery habitats may be needlessly destroyed and damaged by Federal water-resource projects and those carried on under Federal permit; and

Whereas the Fish and Wildlife Coordination Act of August 14, 1946, was enacted to provide for the conservation of fish and wildlife in these water-resource programs, but is in urgent need of revision and strengthening; and

Whereas Secretary of the Interior Fred A. Seaton has submitted to committees of the Congress a proposal to amend the Fish and Wildlife Coordination Act, after careful consultation with the States, other Federal agencies, and with the private fish and wildlife conservation organizations; and

Whereas the National Fisheries Institute strongly endorses this proposal by Secretary Seaton.

Now, therefore, the National Fisheries Institute, at its 13th Annual Convention in San Francisco, Calif., on April 23, 1958, resolves that:

(1) The National Fisheries Institute, representing the commercial fishing industry of the Nation, heartily commends Secretary of the Interior Fred A. Seaton for his effective efforts in this matter;

(2) The Honorable Warren G. Magnuson, as chairman of the Senate Committee on Interstate and Foreign Commerce, is requested to schedule hearings on Secretary Seaton's proposal at the earliest possible date, so that the legislation may have time to be considered and passed by both Houses of Congress during the current 2d session of the 85th Congress;

(3) The Honorable Herbert C. Bonner, chairman of the House Merchant Marine and Fisheries Committee, is also requested to give early consideration to this proposal; and

(4) Copies of this resolution be transmitted to Secretary of the Interior Fred A. Seaton, Senator Warren G. Magnuson, and Congressman Herbert C. Bonner.

**STATEMENT OF J. W. PENFOLD, CONSERVATION DIRECTOR, THE
IZAAK WALTON LEAGUE OF AMERICA, INC.**

Mr. PENFOLD. Mr. Chairman, I am J. W. Penfold, conservation director of the Izaak Walton League of America.

I do not have a prepared statement but a letter in which we express our complete and hearty support of the legislation and our wish that you can push this through as quickly as did the Senate committee last week.

Mr. BOYKIN. Thank you. We will do that.
(The document referred to follows:)

THE IZAAK WALTON LEAGUE OF AMERICA, INC.,
Chicago, Ill., June 26, 1958.

HON. FRANK W. BOYKIN,
Chairman, Subcommittee on Fisheries and Wildlife,
House of Representatives, Washington, D. C.

DEAR MR. BOYKIN: You are aware, I am sure, of the long-time interest of the Izaak Walton League in securing amendments to the Coordination Act which would increase its value for fish, wildlife, and related public recreation.

The proposed amendments before your committee in H. R. 12371 are the result of painstaking study and endless conference among all the Federal, State, and private conservation agencies and organizations concerned. The amendments have met the challenge of all these points of view and will prove workable and practicable.

The strengthened Coordination Act which these amendments will provide will go a long, long way toward assuring that in all federally authorized or licensed river-basin projects, fish, wildlife, and related recreation values will be preserved, protected, mitigated, and enhanced as the resources of the area and the primary purpose of the project permit.

We appreciate the speedy action of the Senate committee in favorably reporting S. 3725, the identical, companion measure, and trust that your committee will find it possible to do the same.

Looking toward the vastly increased populations of the future and their needs for fish and wildlife recreation, this measure, if enacted, will be a most significant milestone.

Sincerely,

J. W. PENFOLD, *Conservation Director.*

Mr. RIVERS. Is not the Izaak Walton League the league that takes care of all the wildlife?

Mr. PENFOLD. I would not say that we have the full responsibility.

Mr. RIVERS. You do your best.

Mr. PENFOLD. Yes, sir.

Mr. BOYKIN. Are there any further witnesses?

We will hold this record open, ladies and gentlemen, for 10 days, to give everybody a chance to put their statements in the record.

In the meantime, as Mr. Rivers said, all in favor of the bill raise your hands.

Gentlemen, we will go into executive session.

Thank you very much for coming. We have enjoyed having you.

(Whereupon, at 11:10 a. m., the committee proceeded to executive session.)

(The following was furnished for insertion:)

STATEMENT OF CONGRESSMAN THOMAS B. CURTIS BEFORE THE SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION OF THE HOUSE COMMITTEE ON MERCHANT MARINE AND FISHERIES

Gentlemen, I appreciate this opportunity to testify before this subcommittee. You have under consideration some very important bills relating to the protection and preservation of our fish and wildlife resources. At this time, I would like to discuss my own bill, H. R. 12371, which, if enacted, would amend the first 4 sections of the Fish and Wildlife Coordination Act of March 10, 1934, as amended by the act of August 14, 1946 (60 Stat. 1080). It would also add a related section to the Watershed Protection and Flood Prevention Act, as amended (68 Stat. 666, 70 Stat. 1088). This bill provides for a more effective integration of a fish and wildlife conservation program with Federal water-resource developments, and other purposes. It is my opinion that this proposed legislation will bring the Nation's natural resources into better balance.

The daily demands on our recreational and wildlife resources are growing with incredible intensity. I read some statistics recently which indicate that the cities, roadways, and industrial plants are taking about 1 million acres a year, or an area larger than the State of Rhode Island. This, coupled with the fantastic population growth of our country, estimates of which indicate that by 1968 it may exceed 200 million, emphasizes the necessity for long-range plans for the development and preservation of our natural resources. It is encouraging to note that, since 1953, the Government has added almost 50,000 acres to the Federal wildlife refuges as part of the effort to meet future needs. It is my understanding that the Department of Interior is investing approximately \$57 million in sports fisheries and wildlife programs this year, which amounts to about a 60-percent increase over the amount spent in 1953 for similar purposes. These statistics are encouraging.

H. R. 12371 is very much in the public interest. This bill will provide for more effective integration of a fish and wildlife conservation program with Federal water-resource developments. It will establish clearly the authority of project-construction agencies to provide for the enhancement of fish and wildlife resources as an integral part of water-project development. It will also continue and strengthen the present authority of these agencies to provide for the mitigation of damage to these important resources.

This bill, if enacted, will further the following purposes, to wit:

- (1) Provide authority for the withdrawal of public lands to provide areas for fishing purposes (present law contains such authority for hunting purposes). The proposed amendment would also provide for the development of access to hunting and fishing areas over public lands.

- (2) Authorize the acceptance of donations of land and contribution of funds for furtherance of the purposes of this act.
- (3) Clarify the application of the act to navigation and dredging projects, whether these are undertaken by the Federal Government or by non-Federal interests under permit from the United States Corps of Engineers.
- (4) Authorize the acquisition of land by project-construction agencies for fish and wildlife conservation purposes in connection with Federal water-project development, subject to review and approval of the Congress of such acquisition proposals for the individual projects; this authority is particularly needed to carry out most fish and wildlife conservation measures.
- (5) Make the act clearly applicable to previously authorized projects, provided that the construction of these projects is not substantially completed.
- (6) Simplify the procedures under which Federal project lands, that are found to be valuable for the national migratory-bird program, can be assigned to State fish and game departments for management.
- (7) Amend the Watershed Protection and Flood Prevention Act (68 Stat. 666, 70 Stat. 1088) to provide for the application of the principles of the Wildlife Coordination Act to the small-watershed program, while leaving full control of the program with local groups and the Secretary of Agriculture.

The present Coordination Act has been an effective act. It has been of real benefit to the Nation. The amendments contained in H. R. 12371 will make the present Coordination Act an even more effective one in protecting and preserving our fish and wildlife resources. The Department of Interior published a report in early February of last year which contained some very revealing statistics. This report indicates that approximately 25 million persons, 12 years of age or over, hunted or fished in 1955. This is 1 out of every 5 in that age group. The report further indicated that these people spend approximately \$3 billion, conservatively estimated, in their hunting and fishing activities. These statistics help us to better understand the great significance of fish and wildlife resources in our economy and the life of the Nation.

Congress has given increased recognition to the fish and wildlife resources of this country through enactment of the Fish and Wildlife Act of August 8, 1956 (70 Stat. 1119). This legislation enhanced the position of fish and wildlife activities in the Federal Government, and incorporated a declaration of policy by the Congress noting the importance of fish and wildlife resources to the national economy and food supply and to the health, recreation, and well-being of our citizens. The act also stressed the need to maintain and increase these resources through proper development and management. Congress directed the Secretary of the Interior, among other things, to take such steps as may be required for the development of management, advancement, conservation, and protection of the fisheries and wildlife resources, and to make such recommendations for additional legislation as deemed necessary. The amendments contained in this bill are, certainly, consonant with these congressional directives and policy, and, if enacted, will provide for more effective integration of our fish and wildlife conservation program with Federal water-resources developments for the fuller enjoyment of our natural resources by all our citizens.

AMERICAN PULPWOOD ASSOCIATION,
New York, N. Y., July 8, 1958.

HON. HERBERT C. BONNER,
Chairman, Committee on Merchant Marine and Fisheries,
House of Representatives, Washington, D. C.

DEAR MR. BONNER: The American Pulpwood Association, in behalf of the pulpwood, pulp and paper, and paperboard industries as a whole, will appreciate very much having this letter made part of the record of the hearings on H. R. 8631 and H. R. 12371, since the short notice of the hearings precluded our appearance to testify. These bills deal with amendment to the Coordination Act of March 10, 1934.

The pulpwood industry is opposed to H. R. 8631 and similar bills because they could have detrimental effects upon this industry. Section 2 would broaden existing authority of the Fish and Wildlife Service to give that agency veto power over other agencies, and give fish and wildlife a dominant status in water-

COORDINATION ACT AMENDMENTS

development projects. If this section were to be literally interpreted and rigidly enforced, it would impose serious restrictions or controls by the Fish and Wildlife Service upon land improvements made by the pulpwood industry in its ordinary course of operations. The competitive demands for land and water in our rapidly expanding economy will no longer permit the development of fish and wildlife resources being given priority over the development of other resources, although we agree that fish and wildlife resources should be protected and enhanced whenever this will be consistent with well-balanced, multiple-use development. Section 3 of H. R. 8631 would authorize the acquisition of lands in connection with the conservation and development of wildlife resources, regardless of whether the cost can be justified by the benefits of such acquisition.

It is our understanding that H. R. 12371 has been drafted by mutual agreement of the Federal agencies concerned, as a substitute for the original bill. It appears that our basic objections to section 2, as stated above, have been removed in this revision of the original bill, and we have no further objections to offer. We recommend that section 3 be amended to include provisions for a cost-benefit study to be a part of the project justification for acquisition of lands. With this amendment, we would have no further objection to section 3.

We wish to take this opportunity of congratulating the Federal agencies concerned for drafting a mutual satisfactory bill which largely answers the objections raised by the agencies themselves and by resource industries such as the pulpwood industry.

Copies of this letter are being transmitted to all members of your committee for their information, as well as to the Departments of Agriculture, Interior, and Defense, and to the Bureau of the Budget.

Sincerely,

HARRY S. MOSEBROOK.

NATIONAL LUMBER MANUFACTURERS ASSOCIATION,
Washington, D. C., June 27, 1958.

Hon. FRANK W. BOYKIN,
Chairman, Subcommittee on Fisheries and Wildlife Conservation, Committee on Merchant Marine and Fisheries, House of Representatives,
Washington, D. C.

DEAR MR. BOYKIN: We have been informed that your subcommittee plans to hold hearings on H. R. 8631 and H. R. 12371 on June 27 and 30. These bills deal with amendment of the Coordination Act of March 10, 1934. We are not requesting an opportunity to testify before your subcommittee but will appreciate very much having this letter made part of the record of the hearings.

Certain provisions contained in sections 2 and 3 of H. R. 8631 could have a serious effect on operations in the lumber industry. Section 2 would broaden existing authority of the United States Fish and Wildlife Service relating to water resources development. We believe this section could be liberally interpreted and rigidly enforced to impose unintended serious and expensive restrictions or controls by the Service over land improvements made by the lumber industry in its normal course of operations. Section 3 would extend considerably the authority for Federal acquisition of lands in connection with Federal water projects if such lands were useful for wildlife purposes. The authority provided is so broad as to represent a potential danger to necessary ownership of land by the lumber industry in areas that would be affected by the legislation.

It is our understanding that H. R. 12371 is a modification of H. R. 8631 and that such modification resulted from careful review and consultation among the Federal agencies concerned. Our study of H. R. 12371 indicates that section 2 has been sufficiently modified to meet our basic objections to section 2 of the earlier bill, referred to above. Section 3 of the new bill, however, appears still to be an unnecessarily broad authorization for land acquisition. We feel that this section should be modified so that the cost of and benefits from lands proposed to be acquired for wildlife conservation and development purposes would be reflected in the project justification.

It is suggested, therefore, that the following language "the estimated costs and benefits of such acquisition and," be inserted between the words "with" and "other" in line 12 on page 10 of H. R. 12371, and the words "justification and" be inserted between the words "project" and "authorization" in line 13. If these changes are made, our objection to section 3 would be satisfied and we believe the bill would be much improved.

We are sending copies of this letter to the members of your subcommittee for their information. Copies are also being transmitted to the Departments of Interior, Agriculture, and Defense, and to the Bureau of the Budget.

Sincerely,

A. Z. NELSON,
Director, Forestry, Economics and Statistics Division.

SEAFOOD PRODUCERS ASSOCIATION,
New Bedford, Mass., June 26, 1958.

Mr. W. B. WINFIELD,
*Chief Clerk, Committee on Merchant Marine and Fisheries,
House Office Building, Washington, D. C.*

DEAR MR. WINFIELD: Thank you very much for your letter of June 24, notifying me of the hearings that will be held before the Subcommittee on Fisheries and Wildlife Conservation on H. R. 12371 and similar measures.

I shall not be able to present testimony at the hearings but would appreciate it very much if you would record me in favor of those bills that are before the subcommittee at that time. I am acquainted with the contents of the bills and support the measures.

If it would be convenient for you to have one of your office staff send me two copies I would appreciate it very much.

Sincerely yours,

JOHN F. LINEHAN, *General Manager.*

STATEMENT OF AMERICAN NATIONAL CATTLEMEN'S ASSOCIATION, DENVER, COLO.,
WITH RESPECT TO H. R. 12371, AND RELATED BILLS

The American National Cattlemen's Association was organized in 1898. It is a voluntary association of commercial cattlemen and cattlemen's associations. Twenty-nine State cattlemen's associations are affiliated in the American National.

Last January the American National Cattlemen's Association held its 61st annual convention in Oklahoma City, Okla. During that convention the following resolutions were approved without a dissenting vote:

"RESOLUTION NO. 16—MULTIPLE-USE PRINCIPLE

"Whereas national legislation and regulations establishing wilderness preservation areas and recreational areas are contrary to the multiple-use principle in management of Federal lands; and

"Whereas enactment of special-interest legislation and regulations would seriously handicap multiple-use management of Federal lands: Therefore be it

Resolved, That we oppose all legislation and regulations not in accord with the multiple-use principle.

"RESOLUTION NO. 19—LAND WITHDRAWALS

"Whereas in almost every issue of the Federal Register there appear applications by either the Defense Department, the Fish and Wildlife Service, or some other of the various Federal agencies for withdrawal of land from the public domain; and

"Whereas many of the current withdrawals are not being used to the fullest extent; and

"Whereas these withdrawals are foreclosing on multiple use, to the detriment of the economy of the western public-land States: Therefore be it

Resolved, That we petition Congress to enact legislation requiring all Federal agencies to obtain the approval of Congress for withdrawal of any area of land."

These resolutions were approved in general session of the convention following a detailed study of the matter by the staff and officers of the association, a thorough and complete discussion in the Public Lands Committee meeting and further consideration by the resolution committee of the association.

We believe certain phases of this legislation would hamper the sound, proper, and efficient administration of these lands by the public agencies now charged with that responsibility.

The great bulk of the lands under consideration in this legislation are located in the 11 Western States which are to a considerable extent still in the process of attaining full economic development. Much time and effort has been spent on the perfection of the multiple-use principle of obtaining maximum economic benefits for all concerned from the natural resources of the area. The principal users involved have each been attempting to integrate their needs with those of the others. They have attempted to understand the problems of other users and of the general public and to adapt operations so that all may have a fair share of the values these lands are capable of producing.

We therefore urge the Congress to give due consideration to the multiple-use values of all public lands and not to enact for the benefit of a few hunters and fishermen legislation that will prevent full and proper use of the natural resources in the production of food and fiber for the benefit of all the citizenry.

X

DEPARTMENT OF THE INTERIOR**Fish and Wildlife Service****U.S. Fish and Wildlife Service
Mitigation Policy; Notice of Final Policy**

AGENCY: U.S. Fish and Wildlife Service, Department of the Interior.

ACTION: Notice of Final Policy.

SUMMARY: This Notice establishes final policy guidance for U.S. Fish and Wildlife Service personnel involved in making recommendations to protect or conserve fish and wildlife resources. The policy is needed to: (1) ensure consistent and effective Service recommendations; (2) allow Federal and private developers to anticipate Service recommendations and plan for mitigation needs early; and (3) reduce Service and developer conflicts as well as project delays. The intended effect of the policy is to protect and conserve the most important and valuable fish and wildlife resources while facilitating balanced development of the Nation's natural resources.

EFFECTIVE DATE: January 23, 1981.

ADDRESS: Comments submitted on the proposed policy may be inspected in Room 738, 1375 K Street, N.W., Washington, D.C. 20005, between 9 a.m. and 3 p.m. on business days.

FOR FURTHER INFORMATION CONTACT: John Christian, Policy Group Leader—Environment, U.S. Fish and Wildlife Service, Department of the Interior, Washington, D.C. 20240, (202) 343-7151.

SUPPLEMENTARY INFORMATION:**BACKGROUND**

The development and use of the Nation's natural resources continues in an effort to provide people with their basic needs and to improve their lives. Fish and wildlife and the intricate fabric of natural resources upon which they depend provide benefits to people in many ways. Fishing, hunting, and bird watching are basic benefits that come to mind immediately. These activities involve the direct use of these renewable "natural resources." Perhaps a greater benefit, although more difficult for some to understand, is the maintenance of the structure and function of the ecosystem that comprises all living species, including people. The presence of diverse, healthy fish and wildlife populations generally signals a healthy ecosystem which contains those elements necessary for human survival, including unpolluted air and productive land.

That fabric of natural resources called habitat is the supply for fish and wildlife renewal. The life requirements for plant

and animal species are varied and complex. Each species requires a different set of environmental conditions for survival and vigorous growth. These conditions form the habitat of the various species. The development and use of natural resources leads to changes in environmental conditions that can redefine habitat and thus change the mix and abundance of plant and animal species.

A given change in habitat might increase or decrease overall habitat productivity or result in gains or losses of species that are valuable to people or ecosystems. In some cases, habitat modifications can also increase the numbers of species considered undesirable, and create a nuisance to people or crowd out more valuable species. Therefore, development actions can cause habitat changes that are considered either beneficial or adverse depending on the intended wildlife management objectives.

When professional biologists determine that a given development action will cause a change that is considered adverse, it is appropriate to consider ways to avoid or minimize and compensate for such adverse change or loss of public resources. This is commonly referred to as mitigation.

Fish and wildlife resources are public in nature. The Service has provided Federal leadership for over 40 years to protect and conserve fish and wildlife and their habitat for the benefit of the people of the United States. Under its legal authorities, the Service conducts fish and wildlife impact investigations and provides mitigation recommendations on development projects of all kinds. These efforts have been conducted through a full partnership with State agencies responsible for fish and wildlife resources, and since 1970, with the National Marine Fisheries Service of the U.S. Department of Commerce. The recommendations of the Service are considered by the Federal development and regulatory agencies for their adoption as permitted by law.

Over the years, the Service has reviewed innumerable project and program plans with the potential to adversely affect fish and wildlife resources. The mitigation recommended in recent years by Service personnel to prevent or ameliorate adverse impacts has been governed primarily by a broad policy statement on mitigation promulgated in 1974 and by specific guidelines issued as needed. Recent events have prompted the Service to make known its mitigation objectives and policies. Specific management needs include:

(1) Recent legislative, executive and regulatory developments concerning the environment which have led to a need to update and expand the advice within the 1974 Service policy statement;

(2) Increasing Service review responsibilities which require issuance of comprehensive guidance on mitigation to maintain the quality and consistency of Service mitigation recommendations;

(3) An explicit summary of Service mitigation planning goals and policies to be disclosed to developers and action agencies to aid their earliest planning efforts; and

(4) Finally, the current national need to accelerate development of energy resources which requires that early planning decisions be made that can minimize conflict between important environmental values and energy development.

For these reasons, it was determined to be necessary to fully outline the overall mitigation policy of the U.S. Fish and Wildlife Service. The final Service policy statement integrates and outlines the major aspects of current Service mitigation efforts. Intended as an overview document, its guidance is based on an analysis of current Service field recommendations and on the guidance contained in recent Service management documents.

This policy conditions only the actions of Service employees involved in providing mitigation recommendations. It does not dictate actions or positions that Federal action agencies or individuals must accept. However, it is hoped that the policy will provide a common basis for mitigation decisionmaking and facilitate earlier consideration of fish and wildlife values in project planning activities.

Finally, it should be stressed that this Service policy outlines mitigation needs for fish and wildlife, their habitat and uses thereof. Others interested in mitigation of project impacts on other aspects of the environment such as human health or heritage conservation may find the Service policy does not fully cover their needs. There was no intent to develop a mitigation policy that covers all possible public impacts except those stated. However, the Service strongly believes that preservation and conservation of natural resources is a necessary prerequisite to human existence.

DISCUSSION

The following items are included to provide a better understanding of the policy's relationship to other guidance and to improve the understanding of its technical basis.

1. Relationship of Service Mitigation Policy to Other Service Planning Activities.

The final policy is designed to stand on its own. However, for a clearer perspective of the relationship of the policy to the goals and objectives of the U.S. Fish and Wildlife Service, it can be read with the Service Management Plan and the Habitat Preservation Program Management Document.

The Service Management Plan describes the overall direction of the Service and the interrelationships of the four major categories, including Habitat Preservation, Wildlife Resources, Fishery Resources, and Federal Aid-Endangered Species.

The Habitat Preservation Program Management Document outlines what the Service will do over a one- to five-year period to ensure the conservation and proper management of fish and wildlife habitat. It provides guidance to Service personnel and other interested parties on the goals, objectives, policies, and strategies of the Habitat Preservation Category of the U.S. Fish and Wildlife Service. It includes a discussion of important resource problems that the Service believes require priority attention.

2. Relationship of the Mitigation Policy to any future Fish and Wildlife Coordination Act (FWCA) Regulations and the National Environmental Policy Act (42 U.S.C. 4321-4347) (NEPA).

The Service mitigation policy outlines internal guidance for Service personnel for all investigations and recommendations for mitigation under relevant Service authorities, including the FWCA and NEPA. However, the coverage of the policy is basically different from that of any future FWCA regulations as was explained in the preamble to the proposed policy (September 9, 1980) (45 FR 59486-59494). Any future FWCA regulations will principally recommend procedures for all affected agencies to ensure compliance with that Act before and after they receive fish and wildlife agency recommendations. In contrast, the Service mitigation policy only applies to Service personnel and outlines mitigation planning goals and policies for impact analyses and recommendations.

The relationship of the mitigation policy to NEPA requirements is also a complementary one. The regulations implementing NEPA (43 FR 55978-56007) recognize "appropriate" mitigation recommendations as an important element of the rigorous analysis and display of alternatives including the

proposed action (40 CFR Part 1502.14). The NEPA regulations later specify that Service impact analyses and mitigation recommendations shall be used as input to preparation of draft environmental impact statements (DEIS) as follows:

"To the fullest extent possible, agencies shall prepare draft environmental impact statements concurrently with and integrated with environmental impact analyses and related surveys and studies required by the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), the National Historic Preservation Act of 1966 (16 U.S.C. 470 et seq.), the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.), and other environmental review laws and executive orders." (40 CFR 1502.25(a)).

These provisions provide clear direction that NEPA requirements are not duplicative of or substitute for mitigation recommendations developed under the Fish and Wildlife Coordination Act and other Service authorities. In fact, the NEPA regulations require that Service recommendations be fully integrated into the NEPA process as vital information necessary to comply with NEPA.

3. Focus of the Policy on Habitat Value.

The policy covers impacts to fish and wildlife populations, their habitat and the human uses thereof. However, the primary focus in terms of specific guidance is on the mitigation of losses of habitat value. Population estimates are considered by many to be unreliable indicators for evaluating fish and wildlife impacts. Sampling errors, cyclic fluctuations of populations and the lack of time series data all contribute to the problem. Therefore, the Service feels that habitat value, by measuring carrying capacity, is a much better basis for determining mitigation requirements. However, the use of population information is not foreclosed by the policy. In fact, concern for population losses led to formulation of the "General Policy" section to ". . . seek to mitigate all losses of fish, wildlife, their habitat and uses thereof . . ." The Service agrees that mitigation of population losses is a necessary aspect of this policy, for example, when habitat value is not affected but migration routes are blocked off as in the case of dam construction on a salmon river.

Mitigation of human use losses of fish and wildlife resources is also a necessary aspect of the policy. However, if mitigation of habitat value occurs, then in the majority of cases, losses of human use are also minimized. But, in some cases, public access to the

resource may be cut off by the project and significant recreational or commercial benefits may be lost.

In those cases where mitigation of habitat value is not deemed adequate for losses of fish and wildlife populations or human uses, the Service will seek to mitigate such losses in accordance with the general principles and concepts presented in the policy. However, in the majority of cases, the Service feels that mitigation of impacts on habitat values will assure a continuous supply of fish and wildlife populations and human use opportunities.

The Service has recently revised and updated its *Habitat Evaluation Procedures* (HEP). It can be used, where appropriate, to determine mitigation needs based on habitat value losses. In some cases, the project may not be deemed appropriate for applying the methodology as in the case of activities conducted on the high seas under the Outer Continental Shelf (OCS) leasing program. In such cases, the use of other methods to describe habitat value impacts is clearly acceptable, including the best professional judgment of Service biologists. Other limitations related to the use of HEP are outlined in the *Ecological Services Manual* (100 ESM 1). The HEP are available upon request from the Chief, Division of Ecological Services, U.S. Fish and Wildlife Service, Department of the Interior, Washington, D.C. 20240.

4. Acre for Acre Loss Replacement Is Not Necessarily Recommended by the Policy.

As explained above, the policy focuses on habitat value. The habitat value of an acre of habitat can vary considerably depending on the type of vegetation and other physical, biological or chemical features. Service recommendations, therefore, will be based on the habitat value adversely impacted, as opposed to strictly acreage. For example, loss of one acre of a specific type of wetland might result in recommendations for replacement of less than one acre of a different type of wetland of greater habitat value. If the habitat value of the wetland available for replacement was equal to that lost, then recommendations could be on an acre-for-acre basis.

5. Rationale for Mitigation Planning Goals.

In developing this policy, it was agreed that the fundamental principles guiding mitigation are: 1) that avoidance or compensation be recommended for the most valued resources; and 2) that the degree of mitigation requested

correspond to the value and scarcity of the habitat at risk. Four Resource Categories of decreasing importance were identified, with mitigation planning goals of decreasing stringency developed for these categories. Table 1 summarizes all categories and their goals.

Table 1: Resource Categories and Mitigation Planning Goals

Resource category	Designation criteria	Mitigation planning goal
1	High value for evaluation species and unique and irreplaceable.	No loss of existing habitat value.
2	High value for evaluation species and scarce or becoming scarce.	No net loss of in-kind habitat value.
3	High to medium value for evaluation species and abundant.	No net loss of habitat value while minimizing loss of in-kind habitat value.
4	Medium to low value for evaluation species.	Minimize loss of habitat value.

POLICY HISTORY

The policy statement integrates and outlines the major aspects of current Service mitigation efforts. Intended as an overview document, its guidance is based on an analysis of over 350 Service field recommendations and on the guidance contained in recent Service management documents. The proposed policy was published in the Federal Register on September 9, 1980 (45 FR 59486-59494). A correction notice which corrected insignificant formatting and typographical errors was published on September 19, 1980 (45 FR 62564). A notice extending the comment period on the proposed policy to November 10, 1980, was published on October 8, 1980 (45 FR 66878). The final publication is based on full and thorough consideration of the public comments as discussed below.

RESPONSE TO COMMENTS

Over 90 sets of comments were received on the proposed policy. All comments were thoroughly analyzed and cataloged and considered. Many commentors expressed agreement with Service publication of the policy, sensing a more consistent and predictable Service approach to mitigation recommendations and a resultant decrease in the degree of conflict with developers. Many felt the policy represented a rational approach to fish and wildlife resource management, and that it would provide for adequate protection and conservation of the Nation's fish and wildlife resources. The underlying concept that the degree of mitigation requested should correspond to the importance and scarcity of the habitat at

risk was also supported by many commentors. Numerous commentors also praised its scope, cohesiveness and clarity, and stressed that it should provide valuable guidance for Government personnel providing technical and project planning assistance.

Detailed responses to significant comments follow:

GENERAL COMMENTS ON THE PROPOSED SERVICE MITIGATION POLICY

Comment: Although the Service prepared an Environmental Assessment and, from its findings, concluded that policy issuance did not constitute a major Federal action which would significantly affect the quality of the human environment within the meaning of Section 102(2)(C) of the National Environmental Policy Act (NEPA), a few commentors disagreed with the Service's conclusion that an Environmental Impact Statement (EIS) was not necessary for the proposed action.

Response: During policy development, the Service took action to determine if preparation of an environmental impact statement under NEPA was required. Although section 1508.18 of the Council on Environmental Quality's (CEQ) Regulations for implementing the procedural provisions of NEPA classified adoption of an official policy as a "Federal action," it remained unclear as to whether this action was "major," or whether it would "significantly" affect the quality of the human environment, since policy implementation would not result in or substantially alter agency programs. As was stated in the preamble, this policy is basically a distillation of approaches and policy currently being practiced by Service field personnel in providing mitigation recommendations.

In order to resolve this uncertainty, an Environmental Assessment was prepared for the proposed and final policy. By doing so, the Service has complied with one of the major purposes of the NEPA regulations, which is to have NEPA applied early in the decisionmaking process.

The NEPA regulations do not, in the opinion of the Service, require that the agency speculate on future, possible events without any relation to actual, existing impacts of an action. Section 1502.2 of the NEPA regulations directs that an EIS is to be analytical, however, the Service action simply does not create any impacts capable of such analysis. Thus, there is no reasonable or scientific way for the Service to analyze any environmental impacts, significant

or otherwise, as discussed in §§ 1502.16 and 1508.27.

This problem is particularly vexsome when those impacts depend on future contingencies and can be more appropriately analyzed when those contingencies occur. Even § 1502.4, which discussed EIS's in terms of broad agency actions, does so in the context of specific impacts caused by the action. In the opinion of the Service, it has fully complied with the letter and spirit of NEPA and its regulations.

Comment: One commentor felt that the preamble statement that an EIS would be premature at this time contradicted a finding of no significant impact.

Response: The Service sees no contradiction with a finding of no significant impact and the statement that an EIS is premature. The finding of no significant impact derives from an analysis showing that the policy has no significant impacts amenable to analysis at the present time. However, when in the future the Service does apply the policy in developing mitigation recommendations for a major Federal action which might significantly affect the quality of the human environment, then the environmental impacts associated with implementing those recommendations which are considered justifiable by the development agency can be analyzed by that development agency. The Service has no way of predicting which of its recommendations will be accepted by the developer; therefore, analysis of impacts of accepted mitigation recommendations is the responsibility of the developer.

Comment: One commentor was of the opinion that an EIS "should be prepared for the Service's proposed mitigation recommendations on each project." Moreover, the commentor felt that a significant portion of these EIS's should be devoted to analysis of economic impacts.

Response: Mitigation recommendations and actions cannot be meaningfully analyzed except in the context of the development action initiating them. And, since an EIS would be required for any major Federal action which would significantly affect the quality of the human environment and whose alternatives would include consideration of mitigation, a separate EIS would not be necessary for mitigation actions.

Under the FWCA, the action agency which makes the ultimate decision is to include all "justifiable mitigation means and measures" in project formulation. The burden of analyzing the economic impacts of "justifiable" mitigation measures therefore rests primarily with

the project sponsor, who will likely use the Water Resources Council's Principles and Standards to assist in the analysis.

Comment: The substantive requirements of the Service mitigation policy should be consistent with the requirements of the National Environmental Policy Act's implementing regulations and the Water Resources Council's Principles and Standards.

Response: We agree. The proposed and final policy have been developed consistent with the substantive and procedural requirements of these regulations.

Comment: The Environmental Assessment identifies as one of the advantages of the proposed mitigation policy the establishment of " . . . minimum performance standards for FWS recommendations (which) would serve as benchmarks by which the FWS and developers or action agencies . . . could assess individual Service mitigation proposals." However, neither the Federal Register notice nor the Environmental Assessment identify or discuss these "benchmarks."

Response: The term "benchmarks" referred to the mitigation goals and planning procedures. Both the proposed policy preamble and its Environmental Assessment discussed these guidelines, explaining their derivation and importance to policy purposes. However, a point of clarification is needed regarding these guidelines. It is the recommendations made by Service personnel that would be measured against these standards, not the mitigation implemented by an action agency. The final policy makes this point explicit.

Comment: Many commentors argued that the proposed policy goes beyond that authorized by law. Specific concern was expressed over the use of words that were mandatory in tone (e.g., "require" and "must") as opposed to advisory. In addition, some commented that the Service has no authority to support or oppose projects as stated in the policy.

Response: The Service agrees that the legal authorities for the mitigation policy do not authorize the Service to exercise veto power over land and water development activities. That understanding was implicit in the proposed policy. Appropriate changes have been made in the policy to more explicitly recognize and signify the advisory nature of the Service responsibility.

However, it should be clearly noted that the Fish and Wildlife Coordination Act places clear mandatory

requirements on Federal development agencies falling under that Act's authority to (1) consult with the Service, National Marine Fisheries Service (NMFS) and State agencies responsible for fish and wildlife resources; (2) incorporate such reports and recommendations in one overall project report; (3) provide "full consideration" of the "reports and recommendations;" (4) include in the project plan "such justifiable means and measures for wildlife purposes as the reporting agency finds should be adopted to obtain overall maximum project benefits;" and (5) other requirements related to funding and land acquisition.

The clear intent of Congress was that recommendations developed by the U.S. Fish and Wildlife Service, NMFS, and State agencies responsible for fish and wildlife resources be taken seriously, and we know of no law which prohibits the Service from taking a position for or against a project when making mitigation recommendations.

Comment: The policy will adversely impact developmental interests.

Response: The goal of the policy is to provide for equal consideration of fish and wildlife conservation while facilitating development.

Congress has clearly stated that "wildlife conservation shall receive equal consideration and be coordinated with other features of water-resource development programs" (Pub. L. 85-624, Fish and Wildlife Coordination Act). This advice is further amplified in Senate Report 1981 on the FWCA (84th Congress, 2nd Session (1958)). The Congress recognized that in some instances, the level of dollar benefits to some purposes might have to be diminished "in some slight degree" in order to accomplish the fish and wildlife conservation objectives of the Act.

However, policy issuance should benefit developmental interests. By providing developers with a clear picture of Service mitigation concerns and priorities, the policy will allow developers to anticipate Service mitigation recommendations prior to final decisions on project design and location. By reducing a developer's planning uncertainties, the policy will result in lowered project costs and fewer project delays and conflicts.

Comment: Does the policy present general guidance or minimum required standards? The Service appears to be trying to establish required standards.

Response: The final policy sets out mitigation goals and planning guidance to guide the development of Service mitigation recommendations. It does not require absolute strict adherence to a

required standard. Changes have been made to reflect this.

Comment: No mention is made of the State role in mitigation planning to assure a compatible approach. The States' authorities and decisionmaking prerogatives with respect to fish and wildlife resources should be denoted and the States' roles in mitigation should be emphasized further.

Response: A compatible approach is desirable. We have included appropriate changes. However, the policy is solely for Service personnel. There is no intent to infringe on the States' prerogatives.

Comment: The policy should require full public disclosure of Service mitigation analyses, determinations, and recommendations.

Response: We agree that full disclosure of Service analyses, determinations and recommendations during the mitigation process would serve the public interest. All public documents associated with Service recommendations for mitigation on specific land and water developments are available for review in Ecological Services field offices. No change in the policy is necessary.

Comment: The Service should specifically address the acid rain problem in its policy. In particular, the policy should address the impact of Federal policies and programs that support power plant conversions to c.

Response: The Service currently reviews such Federal actions under NEPA, since these policies and programs are likely to require an EIS. Because acid rain has been highlighted as an Important Resource Problem (IRP) by the Service, environmental analyses which do not adequately address acid rain problems will receive particular attention by Service reviewers. Our comments will be technically reinforced by Service research already being conducted in this area. Since the policy already covers this issue, no change is necessary.

Comment: Could the mitigation policy call for a recommendation as extreme as reflooding of the Mississippi River Valley?

Response: The mitigation policy would not lead to so extreme a recommendation because it does not apply to development actions complete prior to enactment of Service authority or exempted by those authorities. In those situations where the policy does apply, there will be no recommendation for mitigation over and above the level of impacts associated with a project. This policy acts to minimize impacts projects, not reverse them.

Comment: Which agency enforces the policy and what power does it have?

Response: This is a policy that applies only to Service personnel. It does not predetermine the actions of other Federal agencies, nor the actions of State agencies or developers. Although the policy statement is not judicially enforceable, the Service will administer the policy by monitoring the mitigation recommendations made by its own personnel.

Comment: Too often land acquired for mitigation does not provide the spectrum of resource values previously available because the managing agency's philosophy prevents it from managing the land for a mix of goals.

Response: Lands acquired for mitigation purposes must provide the specific mitigation benefits for which they were intended. Secondary land uses, such as provision of timber, oil and gas exploration, or recreational benefits, should be attempted where these uses are compatible with the mitigation lands' primary purpose. This concept has been added to the policy.

SPECIFIC COMMENTS ON THE MITIGATION POLICY

(These comments are keyed to sections of the proposed policy.)

I. Purpose

Comment: Why is this policy apparently unconcerned with flora?

Response: Mitigating for fish and wildlife losses necessarily means dealing with the plant communities on which all animal life indirectly depends. When habitat is preserved, it is the plant communities that are the vast bulk of the living material of that habitat.

Plants *per se* are addressed by other authorities of the Service which are not within the scope of this policy, such as the Endangered Species Act and associated regulations.

II. Authority

No significant comments.

III. Scope

Comment: How does the policy affect projects already completed or under construction?

Response: Appropriate changes in the Scope section have been made to clarify policy coverage with regard to completed projects or projects under construction.

Comment: Since Federal permit renewals will result in no new effects on the environment, they should be exempt from the policy.

Response: The permit or license renewal process provides an opportunity to re-evaluate the project. Depending on new scientific information concerning impacts, the adequacy of past developer mitigation efforts, or new

authorities, new mitigation recommendations may be necessary.

Not infrequently, permit or license holders use the renewal process as a convenient occasion to seek changes in their permits. Any changes in permit or license holders' activities have to be evaluated to determine whether or not they necessitate new mitigation recommendations.

This policy, therefore, will be used by the Service in permit or license renewal proceedings, keeping in mind that Service recommendations are advisory to action agencies. Appropriate changes were made in the policy to reflect this position.

Comment: Does this policy apply to man-induced wetlands?

Response: Where the Service has the authority and responsibility to recommend mitigation for these habitats, the tenets of the policy shall apply.

Comment: There is a need for a mechanism for evaluating enhancement and a means to differentiate it from mitigation.

Response: Although enhancement is an important concern of the Service, the Service mitigation policy should not serve as the primary vehicle for discussing enhancement. The final policy does differentiate between enhancement and mitigation recommendations by defining enhancement to include measures which would improve fish and wildlife resources beyond that which would exist without the project and which cannot be used to satisfy the appropriate mitigation planning goal. As for evaluating enhancement, it would appear likely that many of the procedures that can be used to evaluate mitigation can be used to evaluate enhancement.

Comment: What is the basis for the policy position that enhancement cannot occur until all losses are compensated? There is no legislative history for this.

Response: Unfortunately, the term "enhancement" suffers from wide differences in semantic usage. The proposed policy used the term to be synonymous with improvements beyond the achievement of full mitigation. This strict interpretation appeared to spark controversy.

The final policy incorporates a different usage of the term. Enhancement is used to describe measures not necessary to accomplish mitigation purposes.

Comment: The policy should credit towards mitigation goals those habitat value increases associated with areas of the habitat which are enhanced by the project. Habitat value should be

computed for enhancement activities, and the inclusion of habitat enhancement factors would provide for a more accurate estimate of the project's impact on the environment.

Response: Use of the term "habitat enhancement" to describe development or improvement efforts is confused by this comment. The mitigation policy does not cover enhancement as we have described it. However, where habitat improvement or development caused by a project will result in habitat value increases, it may be considered as mitigation when consistent with the resource category designation criteria and the appropriate mitigation planning goal.

Comment: There should be a clear statement that all opportunities for enhancement of fish and wildlife resources be thoroughly considered and included in project plans to the extent feasible.

Response: We agree. Appropriate changes were made.

IV. Definition of Mitigation

Comment: Some commentators indicated concern over the definition of mitigation as used in the policy. Specific concern was expressed that those aspects of project planning that include avoidance or actions to minimize impacts should be considered good project planning and that mitigation should be confined solely to actions to compensate for resource losses.

Response: The Service agrees that avoidance or actions to minimize impacts should be part of the early design of projects and not just an afterthought. Some consider mitigation to be a separate and distinct process that occurs after project planning has been completed. The legally binding definition of mitigation as used in the regulations to implement the National Environmental Policy Act (NEPA) can have the effect of altering this notion through incorporation of all those actions that can lessen project impacts throughout the planning process.

The policy has been modified to more clearly state that the Service supports and encourages incorporation of features that will reduce adverse impacts on fish and wildlife resources as part of early planning and project design in order to avoid delays or conflicts. But without the emphasis on avoidance and minimization provided by the NEPA regulations' definition, there would be little incentive for development agencies to incorporate such features. The Service, therefore, supports and adopts that definition.

V. Mitigation Policy of the U.S. Fish and Wildlife Service

Comment: A number of documents are referred to in the draft policy. They are essential to the functioning of the policy and should be published as an appendix and otherwise made available for public comment, including public hearings.

Response: The preamble to the proposed policy clearly indicated that the policy was designed to stand on its own. The referenced documents are not essential to the functioning of the policy. For instance, even though Service field personnel will rely basically on the *Habitat Evaluation Procedures* in conducting project analyses, the policy indicates that other methods can be used where appropriate and available. The concept of habitat value has been recognized throughout the history of fish and wildlife management. It is not new.

Regardless of the fact that the policy stands on its own, the referenced documents have undergone varying degrees of public scrutiny independent of the mitigation policy. For instance, a notice of availability and request for public comment was published in the *Federal Register* for the Service Management Plan and Program Management Document on September 29, 1980 (45 FR 64271-64272). A habitat-based evaluation methodology has been under active development in the Service since 1973. The first document officially called the *Habitat Evaluation Procedures* was published in 1976 with the most recent revision in 1980. During this 7 year period, the Nation's top wildlife biologists have been consulted, both within the government and outside. The procedures have been presented at numerous public conferences and have been the subject of intense scrutiny.

Finally, the referenced documents were made available to reviewers. Over 75 requests were made and immediately filled to allow commentors the full benefit of this information in preparing comments, including the group providing this comment. Minor changes were made in the policy to more clearly indicate that the policy can stand on its own.

A. General Principles

Comment: Pursued to its logical conclusion, the concept of fish and wildlife as public trust resources could lead to serious restrictions on the use and management of private lands.

Response: When the concept of personal property rights is exercised in such a way as to jeopardize the interests of the public in fish and wildlife resources on public or private lands, the government may use its authorities to

see that any damage to those interests is prevented or mitigated.

The Service does and will attempt to fulfill its duties within its authorities and in a reasonable manner. It is certainly cognizant of the fact that pursuing any concept to its logical extreme may lead to unreasonableness, and will continue to strive to prevent this from happening in its mitigation activities.

Comment: What does "equal consideration" of wildlife conservation mean within the context of the Fish and Wildlife Coordination Act and this mitigation policy?

Response: "Equal consideration" was not defined in the Act or this policy, and has no particular meaning in the context of this policy. This policy only covers Service recommendations, not action agency requirements.

Comment: The proposed Service policy now absolutely precludes support for non-water dependent projects within or affecting waters of the United States. This should be modified to conform to the requirements of Federal regulatory agencies such as the Army Corps of Engineers (COE) and the Environmental Protection Agency (EPA).

Response: The Service policy clearly does not exercise veto power over development actions. Moreover, the Service will execute its responsibilities fully within the context of existing laws and regulations governing environmental reviews. However, the Service feels that wetlands and shallow water habitats should not be subjected to *needless* development because of the public values of these areas. The Service policy statement does not include water dependency as the "sole" criterion for its recommendations. Other factors, including the likelihood of a significant loss, are considered prior to a Service recommendation for support of a project or the "no project" alternative.

The provisions of the policy have been modified to make such recommendations discretionary.

Comment: Congress, not the Service, is the entity that has the authority to require and fund compensation for Federal projects.

Response: We agree. The policy has been modified.

Comment: Mitigation should not be required for an indefinite period of time.

Response: Mitigation is appropriate for the entire time period that habitat losses persist, which includes the life of the project and as long afterwards as the impacts of the project continue to exist. The policy reflects this position.

Comment: Under "General Principles," the policy should seek and endorse novel or imaginative approaches to mitigation.

Response: The Service fully supports development of novel and imaginative approaches that mitigate losses of fish and wildlife, their habitat, and us thereof, and has been in the forefront of such development. No change is necessary.

Comment: An Indian tribe strongly supports the Department of the Interior's recognition of the role of Indian tribal governments in mitigation planning.

Response: Our national heritage and, in some cases, the livelihood of Indian tribes, can be directly linked with the conservation and use of fish and wildlife resources. Therefore, the U.S. Fish and Wildlife Service will continue to recognize and support Indian tribal governments' efforts to mitigate impacts on these resources.

B. U.S. Fish and Wildlife Service Mitigation Goals by Resource Category

Comment: The mitigation goals for the resource categories were characterized as: reasonable, too strict, or not strict enough.

Response: As was explained in the preamble to the draft policy, the resource categories and their mitigation goals were abstracted from an analysis of actual field recommendations. The designation criteria for the resource categories (replaceability, scarcity, and value for evaluation species) are the basic decision factors used by Service personnel to assess relative mitigation needs. The mitigation goals represent reasonable mitigation expectations for projects, viewed in the light of our two-faceted goal—(1) to conserve, protect and enhance fish and wildlife and their habitats, and (2) to facilitate balanced development of our Nation's natural resources.

Numerous comments were received commending us on the balanced approach embodied in this policy. Since its tenets derive from field recommendations and comments, the credit belongs entirely to our field staff.

Some commentors criticized the mitigation goals. One group felt that one or several of the mitigation goals were too strict. These commentors objected to what they considered to be unreasonably high goals for fish and wildlife mitigation. In contrast to this first group, another set of commentors felt that the goals were not strict enough, and called attention to our legislative responsibility to seek protection for all fish and wildlife resources.

Our response is that the mitigation goals represent the best professional judgment and cumulative experience of Service field supervisors in developing mitigation proposals that would satisfy

our legislative mandates, operate under time and money constraints, and assist in maximizing overall social well-being. The basic concept, therefore, is unchanged in the final policy, although minor changes were made to improve understanding based on the comments.

Comment: Rather than rely on strict inflexible mitigation goals, the Service should use "tradeoff" evaluation procedures in developing mitigation proposals.

Response: It is the responsibility of the Federal action agency to use tradeoff evaluation procedures consistent with the Water Resources Council's Principles and Standards, where applicable, to select a mitigation alternative that will assist in maximizing overall project benefits. The Fish and Wildlife Coordination Act specifies that "the project plan shall include such justifiable means and measures for wildlife purposes as the reporting agency (emphasis added) finds should be adopted to obtain maximum overall project benefits." The role of the Service is to represent those public trust resources under its jurisdiction. The proposed policy outlined a system wherein the highest valued resources would be subject to the most protective mitigation recommendations. Few, if any, commentors have disagreed with this valuation perspective. Therefore, no changes were made.

However, many commentors have questioned the reasonableness of a seemingly uncompromising system that did not appear to allow occasional deviations from these goals.

The system is not rigid. As stated in the Purpose section of the policy, the policy advice will be used as guidance for Service personnel, but variations appropriate to individual circumstances are permitted.

Comment: Numerous commentors raised the issue of the somewhat subjective nature of identifying certain species as "important" for the purposes of the policy. In addition, commentors indicated that such distinctions could lead to mis-classification of habitats in terms of resource categories and that clear criteria were needed. Finally, many commentors felt that the artificial distinction of certain species as "important" was both a violation of the public trust and Service legal authorities.

Response: People perceive some species to be more important than others. In the context of biology and ecology, all species are important, serving a useful purpose within the confines of their biological niche. The mitigation policy must address both the needs and desires of human society and

the ecosystem perspective. This is a difficult task. But human decisions concerning fish and wildlife resources in the face of a development action require judgment about the values of what will be lost and the need to avoid or minimize and compensate for loss of such values.

The specific criteria for such determinations are also exceedingly difficult to frame in a National policy context. The importance of a species to society depends on a complex, changing mix of factors. The importance of a species within an ecosystem is also subject to many dynamic factors. But human decisions about the level and type of mitigation necessary for development actions must be made in the absence of perfect information concerning these factors. In addition, the Service biologist reviewing project impacts has severe constraints on the number of species and ecosystem linkages that can be analyzed given funding, personnel and time limitations. Somehow, choices must be made.

We have deleted the term "important species" from the policy and replaced it with a more precise term, "evaluation species." The criteria for selection of evaluation species still includes those species of high resource value to humans or that represent a broader ecological perspective of an area. Other changes have been made related to the determination of resource categories to allow for additional public input and resource agency coordination into such determinations, where appropriate.

The effect of this change is not intended and shall not be interpreted to broaden the scope or extent of application of this policy. But it does remove the implication that species can be ranked against each other in terms of their overall importance to society, which many considered quite beyond the capability of human beings.

Comment: The wording of the policy should clearly indicate that species selected for analysis should only be those demonstrated to actually utilize an area.

Response: We agree, except for situations where fish and wildlife restoration or improvement plans have been approved by State or Federal resource agencies. In that case the analysis will include species identified in such plans. Appropriate clarification has been added to the definition of evaluation species.

Comment: The proper focus of the policy should be the ecosystem rather than particular species.

Response: Aside from the very real technical problems of applying a complex concept such as the ecosystem

to mitigation planning, the authorities underlying this policy deal with fish and wildlife and their habitat, rather than ecosystems.

Ecosystems are addressed under this policy in two ways. First, one criterion in the selection of an evaluation species is the biological importance of the species to the functioning of its ecosystem. Secondly, when habitat loss is mitigated, the part of the ecosystem comprising that habitat is itself protected. No changes have been made.

Comment: Recreational use losses may at times have to be directly mitigated. The goal statements should reflect this need.

Response: We agree. Appropriate changes were made.

Comment: In addition to assessing conditions of scarcity from a biogeographical viewpoint, i.e., ecoregions, the policy should also use geopolitical subdivisions, e.g., state boundaries.

Response: As a Federal agency, the Service perceives its major responsibility to be to protect those fish and wildlife and their habitat that are valuable and scarce on a national level, whether or not they transcend state boundaries. However, should State resource agencies wish to outline relative scarcity on a more local basis, Service personnel would certainly assist, whenever practicable. This point has been added to the policy.

Comment: The policy should scale the relative need to achieve a particular mitigation goal to the degree a particular habitat will be impacted. For example, if a half-acre of important habitat is affected by a project and it is part of a one-acre plot, this circumstance should lead to a mitigation recommendation different from the situation where the same half-acre is part of a ten thousand acre area. As drafted, the policy does not reflect the differences in these situations.

Response: The Purpose section of the policy states that it will be used as guidance for Service personnel, but variations appropriate to individual circumstances will be permitted. The relative need to achieve a particular mitigation goal depends primarily on the perceived value of the habitat, its scarcity, and the replaceability of the threatened habitat. Other factors, such as scaling considerations, can combine to modify this general Service perspective on what constitutes appropriate mitigation.

Comment: The resource categories and mitigation goals are general, lack definition, and provide no guidance on habitat value. These categories are all

subject to interpretation by the Service field personnel.

Response: It would be counterproductive, if not impossible, for a national policy to be worded as precisely as the commentor suggests and still be implemented in a reasonable manner under numerous and diverse local circumstances. Words used to describe resource categories and mitigation goals do have generally understood meanings. It is essential that field personnel be allowed to exercise professional judgment in applying resource categories and mitigation goals to specific activities. However, numerous clarifying changes were made based on the comments to increase comprehension and understanding.

Comment: It is essential to other agencies' review to know what general types of habitat will be most important in the U.S. Fish and Wildlife Service mitigation policy. At a minimum, some examples of the types of habitat within each category should be given.

Response: The final policy does give guidance on areas that will be generally considered for Resource Category 1 or 2. Providing examples for all resource categories could be misleading since the same type of habitat may fall into several different resource categories, depending on, among other factors, its relative scarcity and quality from one locale to another across the nation.

On the other hand, field professionals are generally familiar with the quality and abundance of a given type of habitat that is in their area, so it is preferable not to burden them with potentially inappropriate guidelines of this nature.

Comment: The policy should clearly distinguish between upland habitats and the more valuable wetland habitats.

Response: In some cases, upland habitats may be determined to have resource values equal to or greater than wetland habitats, so a policy that solely favored one habitat type over the other would not be in the best public interest. However, the policy has been changed to indicate that certain habitats within Service-identified Important Resource Problems (IRPs) and special aquatic sites should be given special consideration as Resource Category 1 or 2. The IRPs contain a predominance of wetland coastal areas.

Comment: If you build something in a habitat, it just changes it to another habitat that some other animal or fish lives in—including the human being, although the Service does not seem to appreciate that. For example, if you build a highway, it is bad for dogs, rabbits, opossums and field rats and such that get run over by cars and

trucks, but it is good for crows and buzzards that eat dead meat.

Response: The Service has not come across many instances where crows and buzzards could be considered scarce, but when such a circumstance can be documented and verified, the Service will certainly try to protect and enhance valuable highway habitat.

• Resource Category 1

Comment: A literal interpretation of the Resource Category 1 mitigation goal would require absolutely no habitat loss—not even a nature trail. Resource Category 1 should be deleted.

Response: Not all environmental changes are adverse to the habitat of a fish and wildlife resource. If a nature trail resulted in an insignificant impact on habitat value that was determined not to be adverse, then the Service would not recommend against it. The policy has been clarified to reflect this point.

Comment: Endangered and threatened species should be included as part of Resource Category 1.

Response: It would be inappropriate to expand the scope of the Mitigation Policy to include threatened and endangered species. The treatment of these species is addressed in an extensive body of complex and detailed legislation and regulation. The Congress has legislated very specific and precise law with regard to threatened and endangered species. Inclusion of these species under this policy would only confuse the issue and compound the difficulties involved in implementation of the Endangered Species Act and its associated regulations. Other reasons are discussed in the scope section of the final policy.

Comment: For all practical purposes, Resource Categories 1 and 2 adopt a "no growth" policy.

Response: The U.S. Fish and Wildlife Service is not advocating a "no growth" mitigation policy. The means and measures to achieve mitigation for Resource Categories 1 and 2 are designed to provide some flexibility so that limited growth can occur in an environmentally prudent manner. The policy reflects the national consensus that some habitats are of exceptional public value and should be carefully conserved, as evidenced in the Wild and Scenic Rivers Act (Pub. L. 90-542), the Wilderness Act (Pub. L. 88-577), and the National Trails System Act (Pub. L. 94-527).

• Resource Category 2

Comment: It is ill-advised to support in-kind replacement involving trading habitat for lesser value habitat which is

then improved to support the species affected by the project. It takes too long, and in the meantime, populations supported by the habitat on the project site are lost.

Response: If the period required for improving the replacement habitat to the appropriate condition was exceedingly long, this may be one indication that the habitat at risk was unique or irreplaceable and actually belonged in Resource Category 1. In that case in-kind replacement through improvement of lesser quality habitat would be an inappropriate mitigation recommendation. Also, additional measures aimed at population restoration could be recommended to restock the area, provided suitable habitat was available to support the stocked species. No changes were made.

Comment: One commentor was perturbed by an apparently rigid insistence by the policy of in-kind replacement of lost habitat. The commentor pointed out that there could be occasions in which in-kind habitat was not available to a project sponsor.

Response: The policy guideline for Resource Category 2 includes an exception when "in-kind replacement is not physically or biologically attainable". No change was necessary.

Comment: The policy appears to upon "acre-for-acre" replacement of kind habitat.

Response: The policy does not insist on "acre-for-acre" replacement of in-kind habitat. The mitigation planning goals involving in-kind replacement specifically ask for replacement of in-kind habitat value. This point has been further clarified in the definitions section, throughout the policy, and in the policy preamble.

• Resource Category 3

Comment: The mitigation goal for Resource Category 3 is not authorized by law and will be difficult to implement due to professional disagreement on satisfactory achievement.

Response: Under the Fish and Wildlife Coordination Act, the Service has the responsibility to recommend compensation for the loss of fish and wildlife resources. The Act does not restrict compensation to in-kind compensation. By recommending out-of-kind compensation under certain circumstances, the Service increases the range of options that developers may use to mitigate project impacts to include development and improvement of marginal resources different from those lost. However, modifications been made in the policy to indicate that

in-kind replacement is preferred for Resource Category 3.

Comment: The mitigation goal for Resource Category 3 should emphasize that in-kind habitat value replacement is preferable to out-of-kind replacement.

Response: We agree. This point has been brought out in the final policy statement.

Comment: Although out-of-kind replacement is acceptable for Resource Category 3 losses and, under certain circumstances, may be accepted for Resource Category 2 losses, the policy should advise against replacement of rare habitat types for more common habitat types.

Response: We agree with the commentator's point and expect that Service field personnel will recommend mitigation alternatives that incorporate this concept, to the extent practicable. The Service is entirely in favor of preserving and/or promoting habitat diversity. No changes were necessary.

• *Resource Categories 4 and 5*

Comment: Compensation should be included as a means for satisfying the mitigation goal for Resource Category 4.

Response: Appropriate language changes have been made to allow for such recommendations.

Comment: Habitats encompassed by Resource Categories 4 and 5 are the only areas wherein significant increases in fish and wildlife can be realized through habitat improvement. Yet, the mitigation goals for these categories allow continual loss of these areas which possess great potential for improvements in carrying capacity.

Response: The Service appreciates the significance of areas with relatively low existing habitat values with respect to their potential for carrying capacity improvements. In fact, the Service may recommend improvement of these areas' habitat values to mitigate for unavoidable losses in Resource Categories 2 and 3. In addition, where these areas are included in a project planning area and are not appropriate for mitigation efforts, the Service will recommend that all opportunities for enhancement of these areas be thoroughly considered and included in project plans, where practicable.

We have amended the policy to include the above guidance.

Comment: Resource Category 5 is confusing and unnecessary. All habitat has some value, no matter how low. It should be redefined or deleted.

Response: We agree. This resource category has been deleted from the final policy.

C. Mitigation Planning Procedures

1. *Mitigation Goals*

Comment: Developers, Federal resource agencies, and the public should participate with the Service and State agencies in making Resource Category determinations and in developing mitigation proposals.

Response: Developers, as well as other members of the public, may provide information that will assist the Service in making Resource Category determinations. This opportunity has been noted in the final policy statement. Moreover, where these parties' inputs will significantly aid in development of mitigation proposals that will adequately satisfy mitigation planning goals, the Service will welcome their input.

Comment: It is hoped that reclassification of habitats in Resource Category 3 to Resource Categories 2 or 1 can be readily employed if and when certain habitats become more scarce.

Response: Resource Category determinations are made on the basis of conditions likely to occur without the project. If those conditions later change, the Resource Category of a given habitat can be redetermined.

However, once a mitigation plan in connection with a given project has been agreed upon, the U.S. Fish and Wildlife Service will not provide new or additional recommendations except under limited circumstances as outlined in the policy under the scope section.

2. *Impact Assessment Methods*

Comment: The policy does not appear to recognize that development activities may also show positive environmental effects. For example, cleared spaces beneath power lines can provide browsing areas for wildlife. Such positive effects should be factored into the mitigation assessment process.

Response: We agree. This point has been included in the final policy statement. The final policy further indicates that the Service and other State and Federal resource agencies shall make the determination of whether a biological change constitutes a beneficial or adverse impact. However, when determining mitigation needs for a planning area, the Service will utilize these policy guidelines to determine whether these positive effects can be applied towards mitigation.

Comment: The draft policy indicates "no net loss" as a goal for certain Resource Categories but it is unclear in defining the time period allowed to restore the land to its original value as in the case of strip mining operations. Maintenance of "no net loss" throughout

the life of a long-term operation is not possible.

Response: The policy states that the net biological impact of a specific project proposal is the difference in predicted habitat value between the future with the action and the future without the action. This is based on the procedures established by the Water Resources Council's Principles and Standards. The future with the project determination includes consideration of losses during the life of the project. Under the policy, if the disturbed habitat is of sufficient value for evaluation species to warrant a Resource Category 2 or 3 level determination, the Service will provide recommendations for "no net loss" over the life of the project. The ability of the project sponsor to achieve this goal depends on many factors that cannot be predicted in advance. In many cases, it will be possible to achieve this goal. No change was necessary.

Comment: The with and without analyses should make allowances for human activities and natural species successions which can reasonably be expected to take place in the project area.

Response: We agree. Appropriate changes have been made in this policy.

Comment: Many commentators disagreed with the emphasis placed on the *Habitat Evaluation Procedures* (HEP) within the Service policy statement. Some commentators felt it should be de-emphasized, whereas others felt it deserved further emphasis.

Response: Although references to the more technical aspects of HEP have been deleted, the methodology itself remains one of the Service's more important impact assessment tools. The policy does not recommend exclusive use of HEP, since time or resource constraints may, in some cases, show alternative methods to be more practical. Where HEP habitat value assessments do not fully capture important biological characteristics within a planning area, Service personnel will use supplemental data, methodologies, and/or professional judgment to develop appropriate mitigation proposals.

Comment: What are the "other habitat evaluation systems" alluded to in the policy's section on impact assessment methods? This reference is very vague.

Response: Other systems can include the Habitat Evaluation System (HES) developed by the Department of the Army, and the Instream Flow Incremental Methodology (IFIM) of the U.S. Fish and Wildlife Service. Additional systems are referenced by the Water Resources Council in a draft document entitled, "Analysis of

Wetland Evaluation Procedures" and other publications. This information is not appropriate for inclusion into the policy so no change was made.

Comment: If other methodologies are found to be more appropriate for use than the Instream Flow Incremental Methodology (IFIM) for measuring flow impacts, they should be used.

Response: We agree. The final policy does state, however, that consideration should be given to the use of the IFIM.

Comment: Hopefully, this policy will stop the piecemeal destruction of valuable habitat, especially in areas like the Florida Keys where insidious lot-by-lot development continues in low wetland sites with the concurrence of the U.S. Fish and Wildlife Service.

Response: The Service does not concur with piecemeal development where significant resource losses will occur. Cumulative impacts are addressed by this policy. The Service is sensitive to this loss of habitat and will seek mitigation consistent with this policy. No change was necessary.

Comment: Population information should be included as an additional factor in determining mitigation requirements.

Response: We agree. Although population mitigation was an implicit part of the proposed policy, further language clarifying this point has been added to the final policy statement.

Comment: Professional judgment should be used as an alternative method for assessing project impacts.

Response: We agree that this is a valuable method that has been in use for many years. It is difficult to improve on informed and considered scientific judgment by an expert. The Service will continue to rely heavily on this approach. The policy was changed to reflect this emphasis.

3. Mitigation Recommendations

Comment: Service recommendations should be timely.

Response: The proposed and final policy specifically require Service personnel to present mitigation recommendations " . . . at the earliest possible stage of project planning to assure maximum consideration." This point has been echoed throughout Service management documents. Service personnel can generally provide timely guidance provided developers make a point of notifying them of proposed projects still in the planning stage and provided Federal action agencies supply sufficient transfer funding with which to conduct environmental investigations. Under Section 2(e) of the Fish and Wildlife Coordination Act, Federal action agencies are authorized to

transfer funds to the Service " . . . as may be necessary to conduct all or part of the investigations required to carry out the purposes of " . . . (Section 2 of the Act)." The Service uses these transfer funds to conduct project-specific investigations.

Comment: Requiring field biologists to consider cost-effectiveness in providing mitigation recommendations is beyond their capability and may conflict with the lead agencies' role as the determiner of overall public interest. Habitat protection should be a higher priority than cost-effectiveness.

Response: The proposed policy did not require a cost-effectiveness analysis by Service biologists in a formal sense. We fully agree that Service personnel must perceive their responsibility to be analysis and recommendations based on the biological aspects of project proposals. There is no intent to require Service biologists to do a formal economic analysis for which they are not trained nor for which there is clear legislative direction. However, the Service has a responsibility to the public to give consideration to cost while recommending ways to conserve fish and wildlife. The policy has been changed to reflect this need for consideration of other factors.

Comment: The Federal action agency should have the option of non-Service expertise to develop mitigation measures in those instances where the Service cannot meet lead agency program requirements.

Response: Although the Service cannot prevent other agencies from utilizing biological expertise from non-Federal sources to develop mitigation plans, the Fish and Wildlife Coordination Act specifically authorizes the Secretary of the Interior to prepare a report and recommendations on the fish and wildlife aspects of projects, including mitigation. This report and recommendations are to receive "full consideration" by the development agency. If the Federal action agency involves the Service early and provides sufficient transfer funds, then the Service should be able to meet their needs. No change in the policy was necessary.

Comment: Several mitigation proposals should be prepared for each alternative structural or non-structural plan.

Response: The Service is willing to prepare multiple proposals provided funds and time are available.

Comment: Some commentators felt that concurrent and proportionate funding of mitigation may not always lead to optimal mitigation and should not be a rigid requirement. Other commentators

strongly supported concurrent and proportionate funding.

Response: The Water Resources Council's Principles and Standards require " . . . at least concurrent a proportionate implementation with other major project features, except where such concurrent and proportionate mitigation is physically impossible" (emphasis added).

We agree with the Council, and endorse expenditure of funds at an earlier stage of project planning when this will lead to more effective mitigation. Appropriate changes to the policy on this matter have been made.

Comment: Mitigation costs should include the cost of managing the acquired land for the life of the project, and the value of present and future timber and crops on acquired land. In addition, an environmental benefit/cost analysis should be developed for each project, and Congress should not authorize a project unless the project plan includes the proposed mitigation program and all its costs, including the cost of lost timber productivity and other resources.

Response: Costing of projects is determined by the Water Resource Council's Principles and Standards and is therefore beyond the jurisdiction of this policy. We point out that Service policy does not preclude timber harvest or other resource recovery operation mitigation lands when the activity is compatible with fish and wildlife management objectives.

Comment: The Service mitigation policy should more clearly note that fee-simple land acquisition should be a measure of last resort.

Response: The policy statement has undergone further modification to more clearly stress the conditions when land acquisition is to be recommended by Service personnel. In the future, the Service will place far greater emphasis on developing mitigation recommendations that avoid, minimize, or rectify impacts in order to reduce the need for compensation lands. Amplification of this point may be seen in the section on mitigation planning procedures.

Comment: If some interest in land must be acquired, areas of marginal productivity should be considered first. Such underdeveloped land would benefit from better management of its productive capacity and respond more vigorously than land already at higher levels of production.

Response: We agree that special consideration should be given to marginal lands, and have changed policy accordingly.

Comment: Who owns land acquired for mitigation purposes?

Response: Depending on the individual circumstances of the project, land acquired through fee-simple title is usually owned either by the Federal or State government and administered by appropriate Federal or State resource agencies. Where wildlife easements are acquired, the land belongs to the property owner, and the easement right to the Federal or State government.

Comment: The policy should require Service personnel to identify the authority to be used in implementing any mitigation recommendations that are made.

Response: The final policy clearly identifies the legal authorities under which the Service is expected to develop mitigation recommendations. In addition, the policy only applies to Service recommendations and is not an instrument directing legal research in individual circumstances. It would be inappropriate to instruct our personnel to identify the implementing authority for the development agencies which are fully aware of the authorities available to implement Service recommendations. In the case of projects to be authorized by Congress, authorities to implement mitigation can be, and increasingly have been, spelled out.

Comment: The policy neglects to indicate the necessary process if an agency does not agree with Service mitigation recommendations.

Response: This process has already been established for most Federal agencies. If the project planners and the Service field office cannot agree on a modified or substitute proposal for mitigation, the matter often is referred upwards to the next highest level. Higher management levels are then generally able to resolve the issue quickly, although the Federal action agency has the final say. No change was necessary.

Comment: Mitigation recommendations should ensure that habitats which are preserved are adequate in size and contiguous to ensure species survival and ecosystem functioning.

Response: We agree. This point has not, however, been added to the policy since it is standard operating procedure at the field level.

Comment: Improvement of public use prospects within a project area should not be considered mitigation for habitat value losses. Development of public access is legitimate mitigation only when public uses are lost as a result of project action.

Response: We agree. Construction of public access facilities does not replace

habitat lost or degraded and may even reduce wildlife habitat and invite degradation by making an area more accessible to more people. Construction of public use facilities may be in the public interest but should not be disguised as mitigation for loss or degradation of wildlife habitat. This point has been added to the policy.

4. Follow-up

Comment: The Service should initiate post-project evaluation studies, as well as encourage, support, and participate in these studies.

Response: We agree and will do so within the constraints of time, personnel and cost. The Service will initiate additional follow-up studies when funds are provided by the Federal action agency. The policy has been changed to reflect this.

Comment: Follow-up studies must be designed so as to separate the effects on fish and wildlife populations of implementing mitigation recommendations from other causes of changes in species numbers. This has not been the case in past studies.

Response: We agree in principle, but point out that this is a very difficult task technically, and that the conclusions in this regard rarely withstand vigorous analysis.

Nonetheless, distinguishing the true causes of population changes should be one of the goals of the follow-up study.

Comment: The policy should indicate what actions would occur if post-project evaluation shows mitigation recommendations are not being achieved as agreed to by the developer.

Response: We agree. The policy now includes provisions instructing Service personnel to recommend corrective action in such situations.

Appendix A

No significant comments.

Appendix B

Comment: Why not include more intensive management of remaining habitat as a way of reducing net habitat loss?

Response: We agree, and have modified the policy accordingly in the Means and Measures section, which has since been integrated into the body of the final policy.

The section clearly places priority on increased habitat management as a means of replacing habitat losses, and additionally stresses use of existing public lands to accomplish these ends.

Comment: A mitigation recommendation of "No project" is not logical or valid as a mitigation measure.

Response: The Council on Environmental Quality's definition of

mitigation, which has been adopted in this policy, clearly states that mitigation includes "... avoiding the impact altogether by not taking a certain action or parts of an action. ..." Obviously, a mitigation recommendation of "No project" falls under this subset of the definition, since a project's impact can be avoided *altogether* by a decision not to construct a project.

Appendix C

Comment: The definition of the word "practicable" should be amended to denote that the burden of identifying alternative mitigation measures and of conducting a searching inquiry into their practicability rests with the Service as well as the Federal action agency.

Response: The policy indicates that the Service will strive to provide mitigation recommendations that represent the best judgment of the Service on the most effective means and measures to achieve the mitigation goal, including consideration of cost.

Comment: A definition for "developments" (as used in Section V.A., "General Principles") should be provided in Appendix C.

Response: "Development" is a general-purpose term encompassing those activities falling under the scope of Service mitigation authorities cited within this policy. For example, if timber harvesting activities require preparation of an EIS, or involves waters of the U.S. and requires the issuance of a Federal permit or license, the Service would provide mitigation recommendations consistent with the policy.

NATIONAL ENVIRONMENTAL POLICY ACT REQUIREMENTS

The Service has prepared an Environmental Assessment of this final policy. Based on an analysis of the Environmental Assessment, the Director of the U.S. Fish and Wildlife Service has concluded that the final action is not a major Federal action which would significantly affect the quality of the human environment within the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347). Thus the policy does not require an Environmental Impact Statement (EIS).

The Environmental Assessment and Finding of No Significant Impact will be furnished upon request.

REGULATORY ANALYSIS

This policy statement has been issued in conformity with the Department of the Interior's rulemaking requirements, which apply to actions meeting the broad definition of a rule set forth in the Administrative Procedures Act, 5 U.S.C.

551(4) and 43 CFR Part 14.2(e) (1980). This statement is not intended to be judicially enforceable. It will not be codified. It does not create private rights. It only guides internal Service administration and is not to be inflexibly applied by Service personnel. The Department had previously determined that the proposed policy was not a significant rule and did not require a regulatory analysis under Executive Order 12044 and 43 Part 14. No significant changes were made in the final policy that required a new determination.

ACKNOWLEDGEMENTS

The primary author of this final policy is John Christian, Leader, Policy Group—Environment, U.S. Fish and Wildlife Service, (202) 343-7151. Primary support for policy development was provided by policy analysts Nancy Chu, Scott Cameron, and Peter Ciborowski; and Ecological Services Washington Office and field personnel. Manuscript preparation was accomplished by Roberta Hissey, Karen Baker, Carol Prescott, and Jinethel Baynes.

Accordingly, the mitigation policy of the U.S. Fish and Wildlife Service is set forth as follows:

U.S. FISH AND WILDLIFE SERVICE MITIGATION POLICY

I. PURPOSE

This document establishes policy for U.S. Fish and Wildlife Service recommendations on mitigating the adverse impacts of land and water developments on fish, wildlife, their habitats, and uses thereof. It will help to assure consistent and effective recommendations by outlining policy for the levels of mitigation needed and the various methods for accomplishing mitigation. It will allow Federal action agencies and private developers to anticipate Service recommendations and plan for mitigation measures early, thus avoiding delays and assuring equal consideration of fish and wildlife resources with other project features and purposes. This policy provides guidance for Service personnel but variations appropriate to individual circumstances are permitted.

This policy supersedes the December 18, 1974, policy statement entitled "Position Paper of the Fish and Wildlife Service Relative to Losses to Fish and Wildlife Habitat Caused by Federally Planned or Constructed Water Resource Developments" and the Service River Basin Studies Manual Release 2.350 entitled "General Bureau Policy on River Basin Studies."

II. AUTHORITY

This policy is established in accordance with the following major authorities: (See Appendix A for other authorities.)

Fish and Wildlife Act of 1956 (16 U.S.C. 742(a)-754). This Act authorizes the development and distribution of fish and wildlife information to the public, Congress, and the President, and the development of policies and procedures that are necessary and desirable to carry out the laws relating to fish and wildlife including: (1) "... take such steps as may be required for the development, advancement, management, conservation, and protection of the fisheries resources;" and (2) "... take such steps as may be required for the development, management, advancement, conservation, and protection of wildlife resources through research . . . and other means."

Fish and Wildlife Coordination Act (16 U.S.C. 661-667(e)). This Act authorizes the U.S. Fish and Wildlife Service, National Marine Fisheries Service (NMFS), and State agencies responsible for fish and wildlife resources to investigate all proposed Federal undertakings and non-Federal actions needing a Federal permit or

license which would impound, divert, deepen, or otherwise control or modify a stream or other body of water and to make mitigation and enhancement recommendations to the involved Federal agency. "Recommendations . . . shall be as specific as practicable with respect to features recommended for wildlife conservation and development, lands to be utilized or acquired for such purposes, the results expected, and shall describe the damage to wildlife attributable to the project and the measures proposed for mitigating or compensating for these damages." In addition, the Act requires that wildlife conservation be coordinated with other features of water resource development programs.

Determinations under this authority for specific projects located in estuarine areas constitute compliance with the provisions of the Estuary Protection Act. (See Appendix A.)

Watershed Protection and Flood Prevention Act (16 U.S.C. 1001-1009). This Act allows the Secretary of the Interior to make surveys, investigations, and "... prepare a report with recommendations concerning the conservation and development of wildlife resources . . ." on small watershed projects.

National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347). This Act and its implementing regulations (40 CFR Part 1500-1508) requires that the U.S. Fish and Wildlife Service be notified of all major Federal actions affecting fish and wildlife resources and their views and recommendations solicited. Upon completion of a draft Environmental Impact Statement, the Service is required to review it and make comments and recommendations, as appropriate. In addition, the Act provides that "the Congress authorizes and directs that, to the fullest extent possible . . . all agencies of the Federal Government shall . . . identify and develop methods and procedures . . . which will ensure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations."

III. SCOPE

A. Coverage

This policy applies to all activities of the Service related to the evaluation of impacts of land and water developments and the subsequent recommendations to mitigate those adverse impacts except as specifically excluded below. This includes: (1) investigations and recommendations for all actions

requiring a federally issued permit or license that would impact waters of the U.S.; (2) all major Federal actions significantly affecting the quality of the human environment; and (3) other Federal actions for which the Service has legislative authority or executive direction for involvement including, but not limited to: coal, minerals, and outer continental shelf lease sales or Federal approval of State permit programs for the control of discharges of dredged or fill material.

B. Exclusions

This policy does not apply to threatened or endangered species. The requirements for threatened and endangered species are covered in the Endangered Species Act of 1973 and accompanying regulations at 50 CFR Parts 17, 402, and 424. Under Section 7 of the Endangered Species Act, as amended, all Federal agencies shall ensure that activities authorized, funded, or carried out by them are not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. Mitigating adverse impacts of a project would not in itself be viewed as satisfactory agency compliance with Section 7. Furthermore, it is clear to the Service that Congress considered the traditional concept of mitigation to be inappropriate for Federal activities impacting listed species or their critical habitat.

This policy does not apply to Service recommendations for Federal projects completed or other projects permitted or licensed prior to enactment of Service authorities (unless indicated otherwise in a specific statute) or specifically exempted by them and not subject to reauthorization or renewal. It also does not apply where mitigation plans have already been agreed to by the Service, except where new activities or changes in current activities would result in new impacts or where new authorities, new scientific information, or developer failure to implement agreed upon recommendations make it necessary. Service personnel involved in land and water development investigations will make a judgment as to the applicability of the policy for mitigation plans under development and not yet agreed upon as of the date of final publication of this policy.

Finally, this policy does not apply to Service recommendations related to the enhancement of fish and wildlife resources. Recommendations for measures which improve fish and wildlife resources beyond that which would exist without the project and which cannot be used to satisfy the

appropriate mitigation planning goal should be considered as enhancement measures. The Service strongly supports enhancement of fish and wildlife resources. The Service will recommend that all opportunities for fish and wildlife resource enhancement be thoroughly considered and included in project plans, to the extent practicable.

IV. DEFINITION OF MITIGATION

The President's Council on Environmental Quality defined the term "mitigation" in the National Environmental Policy Act regulations to include: "(a) avoiding the impact altogether by not taking a certain action or parts of an action; (b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (c) rectifying the impact by repairing, rehabilitating, or restoring the affected environment; (d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and (e) compensating for the impact by replacing or providing substitute resources or environments." (40 CFR Part 1508.20(a-e)).

The Service supports and adopts this definition of mitigation and considers the specific elements to represent the desirable sequence of steps in the mitigation planning process. (See Appendix B for definitions of other important terms necessary to understand this policy.)

V. MITIGATION POLICY OF THE U.S. FISH AND WILDLIFE SERVICE

The overall goals and objectives of the Service are outlined in the Service Management Plan and an accompanying Important Resource Problems document which describes specific fish and wildlife problems of importance for planning purposes. Goals and objectives for Service activities related to land and water development are contained in the Habitat Preservation Program Management Document. The mitigation policy was designed to stand on its own; however, these documents will be consulted by Service personnel to provide the proper perspective for the Service mitigation policy. They are available upon request from the Director, U.S. Fish and Wildlife Service, Washington, D.C. 20240.

A. General Policy

The mission of the U.S. Fish and Wildlife Service is to:

PROVIDE THE FEDERAL LEADERSHIP TO CONSERVE, PROTECT AND ENHANCE FISH AND WILDLIFE AND THEIR HABITATS FOR THE CONTINUING BENEFIT OF THE PEOPLE.

The goal of Service activities oriented toward land and water development responds to Congressional direction that fish and wildlife resource conservation receive equal consideration and be coordinated with other features of Federal resource development and regulatory programs through effective and harmonious planning, development, maintenance and coordination of fish and wildlife resource conservation and rehabilitation in the United States, its territories and possessions. The goal is to:

CONSERVE, PROTECT AND ENHANCE FISH AND WILDLIFE AND THEIR HABITATS AND FACILITATE BALANCED DEVELOPMENT OF THIS NATION'S NATURAL RESOURCES BY TIMELY AND EFFECTIVE PROVISION OF FISH AND WILDLIFE INFORMATION AND RECOMMENDATIONS.

Fish and wildlife and their habitats are public resources with clear commercial, recreational, social, and ecological value to the Nation. They are conserved and managed for the people by State, Federal and Indian tribal Governments. If land or water developments are proposed which may reduce or eliminate the public benefits that are provided by such natural resources, then State and Federal resource agencies and Indian tribal agencies have a responsibility to recommend means and measures to mitigate such losses. Accordingly:

IN THE INTEREST OF SERVING THE PUBLIC, IT IS THE POLICY OF THE U.S. FISH AND WILDLIFE SERVICE TO SEEK TO MITIGATE LOSSES OF FISH, WILDLIFE, THEIR HABITATS, AND USES THEREOF FROM LAND AND WATER DEVELOPMENTS.

In administering this policy, the Service will strive to provide information and recommendations that fully support the Nation's need for fish and wildlife resource conservation as well as sound economic and social development through balanced multiple use of the Nation's natural resources. The Service will actively seek to facilitate needed development and avoid conflicts and delays through early involvement in land and water development planning activities in advance of proposals for specific projects or during the early planning and design stage of specific projects.

This should include early identification of resource areas containing high and low habitat values for important species and the

development of ecological design information that outlines specific practicable means and measures for avoiding or minimizing impacts. The former can be used by developers to locate projects in the least valuable areas. This could possibly lower total project costs to development interests. These actions are part of good planning and are in the best public interest.

The early provision of information to private and public agencies in a form which enables them to avoid or minimize fish and wildlife losses as a part of initial project design is the preferred form of fish and wildlife conservation.

B. U.S. Fish and Wildlife Service Mitigation Planning Goals by Resource Category

The planning goals and guidelines that follow will be used to guide Service recommendations on mitigation of project impacts. Four Resource Categories are used to indicate that the level of mitigation recommended will be consistent with the fish and wildlife resource values involved.

The policy covers impacts to fish and wildlife populations, their habitat and the human uses thereof. However, the primary focus in terms of specific guidance is on recommendations related to habitat value losses. In many cases compensation of habitat value losses should result in replacement of fish and wildlife populations and human uses. But where it does not, the Service will recommend appropriate additional means and measures.

RESOURCE CATEGORY 1

a. Designation Criteria

Habitat to be impacted is of high value for evaluation species and is unique and irreplaceable on a national basis or in the ecoregion section.

b. Mitigation Goal

No Loss of Existing Habitat Value.

c. Guidelines

The Service will recommend that all losses of existing habitat be prevented as these one-of-a-kind areas cannot be replaced. Insignificant changes that do not result in adverse impacts on habitat value may be acceptable provided they will have no significant cumulative impact.

RESOURCE CATEGORY 2

a. Designation Criteria

Habitat to be impacted is of high value for evaluation species and is relatively scarce or becoming scarce on a national basis or in the ecoregion section.

b. Mitigation Goal

No Net Loss of In-Kind Habitat Value.

c. Guideline

The Service will recommend ways to avoid or minimize losses. If losses are likely to occur, then the Service will recommend ways to immediately rectify them or reduce or eliminate them over time. If losses remain likely to occur, then the Service will recommend that those losses be compensated by replacement of the same kind of habitat value so that the total loss of such in-kind habitat value will be eliminated.

Specific ways to achieve this planning goal include: (1) physical modification of replacement habitat to convert it to the same type lost; (2) restoration or rehabilitation of previously altered habitat; (3) increased management of similar replacement habitat so that the in-kind value of the lost habitat is replaced, or (4) a combination of these measures. By replacing habitat value losses with similar habitat values, populations of species associated with that habitat may remain relatively stable in the area over time. This is generally referred to as in-kind replacement.

Exceptions: An exception can be made to this planning goal when: (1) different habitats and species available for replacement are determined to be of greater value than those lost, or (2) in-kind replacement is not physically or biologically attainable in the ecoregion section. In either case, replacement involving different habitat kinds may be recommended provided that the total value of the habitat lost is recommended for replacement (see the guideline for Category 3 mitigation below).

RESOURCE CATEGORY 3**a. Designation Criteria**

Habitat to be impacted is of high to medium value for evaluation species and is relatively abundant on a national basis.

b. Mitigation Goal

No Net Loss of Habitat Value While Minimizing Loss of In-Kind Habitat Value.

c. Guideline

The Service will recommend ways to avoid or minimize losses. If losses are likely to occur, then the Service will recommend ways to immediately rectify them or reduce or eliminate them over time. If losses remain likely to occur, then the Service will recommend that those losses be compensated by replacement of habitat value so that the total loss of habitat value will be eliminated.

It is preferable, in most cases, to recommend ways to replace such habitat value losses in-kind. However, if the Service determines that in-kind replacement is not desirable or possible, then other specific ways to achieve this planning goal include: (1) substituting different kinds of habitats, or (2) increasing management of different replacement habitats so that the value of the lost habitat is replaced. By replacing habitat value losses with different habitats or increasing management of different habitats, populations of species will be different, depending on the ecological attributes of the replacement habitat. This will result in no net loss of total habitat value, but may result in significant differences in fish and wildlife populations. This is generally referred to as out-of-kind replacement.

RESOURCE CATEGORY 4**a. Designation Criteria**

Habitat to be impacted is of medium to low value for evaluation species.

b. Mitigation Goal

Minimize Loss of Habitat Value.

c. Guideline

The Service will recommend ways to avoid or minimize losses. If losses are likely to occur, then the Service will recommend ways to immediately rectify them or reduce or eliminate them over time. If losses remain likely to occur, then the Service may make a recommendation for compensation, depending on the significance of the potential loss.

However, because these areas possess relatively low habitat values, they will likely exhibit the greatest potential for significant habitat value improvements. Service personnel will fully investigate these areas' potential for improvement, since they could be used to mitigate Resource Category 2 and 3 losses.

C. Mitigation Planning Policies**1. State-Federal Partnership**

a. The U.S. Fish and Wildlife Service will fully coordinate activities with those State agencies responsible for fish and wildlife resources, the National Marine Fisheries Service (NMFS) and the Environmental Protection Agency (EPA) related to the investigation of project proposals and development of mitigation recommendations for resources of concern to the State, NMFS or EPA.

b. Service personnel will place special emphasis on working with State agencies responsible for fish and wildlife resources, NMFS and EPA to

develop compatible approaches and to avoid duplication of efforts.

2. Resource Category Determinations

a. The Service will make Resource Category determinations as part of the mitigation planning process. Such determinations will be made early in the planning process and transmitted to the Federal action agency or private developer to aid them in their project planning, to the extent practicable.

b. Resource Category determinations will be made through consultation and coordination with State agencies responsible for fish and wildlife resources and other Federal resource agencies, particularly the National Marine Fisheries Service and the Environmental Protection Agency, whenever resources of concern to those groups are involved. Where other elements of the public, including development groups, have information that can assist in making such determinations, the Service will welcome such information.

c. All Resource Category determinations will contain a technical rationale consistent with the designation criteria. The rationale will: (1) outline the reasons why the evaluation species were selected; (2) discuss the value of the habitat to the evaluation species; and (3) discuss and contrast the relative scarcity of the fish and wildlife resource on a national and ecoregion section basis.

Note.—If the State agency responsible for fish and wildlife resources wishes to outline scarcity on a more local basis, U.S. Fish and Wildlife Service personnel should assist in developing such rationale, whenever practicable.

d. When funding, personnel, and available information make it practicable, specific geographic areas or, alternatively, specific habitat types that comprise a given Resource Category should be designated in advance of development. Priority for predesignation will be placed on those areas that are of high value for evaluation species and are subject to development pressure in the near future. Such predesignations can be used by developers or regulators to determine the least valuable areas for use in project planning and siting considerations.

e. The following examples should be given special consideration as either Resource Category 1 or 2:

- (1) Certain habitats within Service-identified Important Resource Problem (IRP) areas. Those IRPs dealing with threatened or endangered species are not covered by this policy. (See Scope)
- (2) Special aquatic and terrestrial sites including legally designated or set-aside

areas such as sanctuaries, fish and wildlife management areas, hatcheries, and refuges, and other aquatic sites such as floodplains, wetlands, mudflats, vegetated shallows, coral reefs, riffles and pools, and springs and seeps.

3. Impact Assessment Principles

a. Changes in fish and wildlife productivity or ecosystem structure and function may not result in a biologically adverse impact. The determination as to whether a biological change constitutes an adverse impact for which mitigation should be recommended is the responsibility of the Service and other involved Federal and State resource agencies.

b. The net biological impact of a development proposal (or alternatives) is the difference in predicted biological conditions between the future with the action and the future without the action. If the future without the action cannot be reasonably predicted and documented by the project sponsor, then the Service analysis should be based on biological conditions that would be expected to exist over the planning period due to natural species succession or implementation of approved restoration/improvement plans or conditions which currently exist in the planning area.

c. Service review of project impacts will consider, whenever practicable:

(1) The total long-term biological impact of the project, including any secondary or indirect impacts regardless of location; and (2) any cumulative effects when viewed in the context of existing or anticipated projects.

d. The *Habitat Evaluation Procedures* will be used by the Service as a basic tool for evaluating project impacts and as a basis for formulating subsequent recommendations for mitigation subject to the exemptions in the *Ecological Services Manual* (100 ESM 1). When the *Habitat Evaluation Procedures* do not apply, then other evaluation systems may be used provided such use conforms with policies provided herein.

e. In those cases where instream flows are an important determinant of habitat value, consideration should be given to the use of the Service's *Instream Flow Incremental Methodology* to develop instream flow mitigation recommendations, where appropriate.

f. Where specific impact evaluation methods or mitigation technologies are not available, Service employees shall continue to apply their best professional judgment to develop mitigation recommendations.

4. Mitigation Recommendations

a. The Service may recommend support of projects or other proposals when the following criteria are met:

- (1) They are ecologically sound;
- (2) The least environmentally damaging reasonable alternative is selected;
- (3) Every reasonable effort is made to avoid or minimize damage or loss of fish and wildlife resources and uses;
- (4) All important recommended means and measures have been adopted with guaranteed implementation to satisfactorily compensate for unavoidable damage or loss consistent with the appropriate mitigation goal; and
- (5) For wetlands and shallow water habitats, the proposed activity is clearly water dependent and there is a demonstrated public need.

The Service may recommend the "no project" alternative for those projects or other proposals that do not meet all of the above criteria and where there is likely to be a significant fish and wildlife resource loss.

b. Recommendations will be presented by the Service at the earliest possible stage of project planning to assure maximum consideration. The Service will strive to provide mitigation recommendations that represent the best judgment of the Service, including consideration of cost, on the most effective means and measures of satisfactorily achieving the mitigation planning goal. Such recommendations will be developed in cooperation with the Federal action agency or private developer responsible for the project, whenever practicable, and will place heavy reliance on cost estimates provided by that Federal action agency or private developer.

c. The Service will recommend that the Federal action agency include designated funds for all fish and wildlife resource mitigation (including, but not limited to, Service investigation costs, initial development costs and continuing operation, maintenance, replacement, and administrative costs) as part of the initial and any alternative project plans and that mitigation funds (as authorized and appropriated by Congress for Federal projects) be spent concurrently and proportionately with overall project construction and operation funds throughout the life of the project.

Note.—Prevention of losses may necessitate expenditure of funds at an earlier stage of project planning. This is acceptable and preferred.

d. Service mitigation recommendations will be made under an explicit expectation that these means and measures: (1) would be the ultimate

responsibility of the appropriate Federal action agency to implement or enforce; and (2) would provide for a duration of effectiveness for the life of the project plus such additional time required for the adverse effects of an abandoned project to cease to occur.

e. Land acquisition in fee title for the purpose of compensation will be recommended by the Service *only* under one or more of the following three conditions:

- (1) When a change in ownership is necessary to guarantee the future conservation of the fish and wildlife resource consistent with the mitigation goal for the specific project area; or
- (2) When other means and measures for mitigation (see Section 5 below) will not compensate habitat losses consistent with the mitigation goal for the specific project area; or
- (3) When land acquisition in fee title is the most cost-effective means that may partially or completely achieve the mitigation goal for the specific project area.

Service recommendations for fee title land acquisition will seek to identify mitigation lands with marginal economic potential.

f. First priority will be given to recommendation of a mitigation site within the planning area. Second priority will be given to recommendation of a mitigation site in proximity to the planning area within the same ecoregion section. Third priority will be given to recommendation of a mitigation site elsewhere within the same ecoregion section.

g. Service personnel will fully support a variety of uses on mitigation lands where such uses are compatible with dominant fish and wildlife uses and, for Federal wildlife refuges, are consistent with the provisions of the *Refuge Recreation Act* and the *National Wildlife Refuge Administration Act*. However, it may be in the best public interest to recommend limiting certain uses that would significantly decrease habitat value for species of high public interest. In such cases, the Service may recommend against such incompatible uses.

h. Measures to increase recreation values will not be recommended by Service personnel to compensate for losses of habitat value. Recreation use losses not restored through habitat value mitigation will be addressed through separate and distinct recommended measures to offset those specific losses.

i. The guidelines contained in this policy do not apply to threatened or endangered species. However, where both habitat and endangered or threatened species impacts are involved,

Service personnel shall fully coordinate Environment efforts with Endangered Species efforts to provide timely, consistent, and unified recommendations for resolution of fish and wildlife impacts, to the extent possible. More specifically, Environment and Endangered Species personnel shall coordinate all related activities dealing with investigations of land and water developments. This includes full use of all provisions that can expedite Service achievement of "one-stop shopping," including coordinated early planning involvement, shared permit review activities, consolidated permit reporting, and consolidated flow of pre-project information to developers, consistent with legislative mandates and deadlines.

j. The Service will place high priority on and continue to develop and implement procedures for reducing delays and conflicts in permit related activities. Such procedures will include, but not be limited to:

- (1) Joint processing of permits.
- (2) Resource mapping.
- (3) Early provision of ecological design information.
- (4) Involvement in Special Area Management Planning.

k. The Service will encourage predevelopment compensation actions by Federal action agencies which can be used to offset future unavoidable losses for lands or waters not adequately protected by an existing law, policy, or program.

Banking of habitat value for the express purpose of compensation for unavoidable future losses will be considered to be a mitigation measure and not an enhancement measure. Withdrawals from the mitigation "bank" to offset future unavoidable losses will be based on habitat value replacement, not acreage or cost for land purchase and management.

5. Mitigation Means and Measures

Mitigation recommendations can include, but are not limited to, the types of actions presented below. These means and measures are presented in the general order and priority in which they should be recommended by Service personnel with the exception of the "no project" alternative. (See Section 4(a)).

a. Avoid the impact

(1) Design project to avoid damage or loss of fish and wildlife resources including management practices such as timing of activities or structural features such as multiple outlets, passage or avoidance structures and water pollution control facilities.

(2) Use of nonstructural alternative to proposed project.

(3) No project.

b. Minimize the impact

(1) Include conservation of fish and wildlife as an authorized purpose of Federal projects.

(2) Locate at the least environmentally damaging site.

(3) Reduce the size of the project.

(4) Schedule timing and control of initial construction operations and subsequent operation and maintenance to minimize disruption of biological community structure and function.

(5) Selective tree clearing or other habitat manipulation.

(6) Control water pollution through best management practices.

(7) Time and control flow diversions and releases.

(8) Maintain public access.

(9) Control public access for recreational or commercial purposes.

(10) Control domestic livestock use.

c. Rectify the impact

(1) Regrade disturbed areas to contours which provide optimal fish and wildlife habitat or approximate original contours.

(2) Seed, fertilize and treat areas as necessary to restore fish and wildlife resources.

(3) Plant shrubs and trees and other vegetation to speed recovery.

(4) Control polluted spoil areas.

(5) Restock fish and wildlife resources in repaired areas. Fish stocking or introductions will be consistent with the Service Fish Health Policy (January 3, 1978).

d. Reduce or eliminate the impact over time

(1) Provide periodic monitoring of mitigation features to assure continuous operation.

(2) Assure proper training of project personnel in the operations of the facility to preserve existing or restored fish and wildlife resources at project sites.

(3) Maintain or replace equipment or structures so that future loss of fish and wildlife resources due to equipment or structure failure does not occur.

e. Compensate for impacts

(1) Conduct wildlife management activities to increase habitat values of existing areas, with project lands and nearby public lands receiving priority.

(2) Conduct habitat construction activities to fully restore or rehabilitate previously altered habitat or modify existing habitat suited to evaluation

species for the purpose of completely offsetting habitat value losses.

(3) Build fishery propagation facilities.

(4) Arrange legislative set-aside or protective designation for public lands.

(5) Provide buffer zones.

(6) Lease habitat.

(7) Acquire wildlife easements.

(8) Acquire water rights.

(9) Acquire land in fee title.

6. Follow-up

The Service encourages, supports, and will initiate, whenever practicable, post-project evaluations to determine the effectiveness of recommendations in achieving the mitigation planning goal. The Service will initiate additional follow-up studies when funds are provided by the Federal action agency.

In those instances where Service personnel determine that Federal agencies or private developers have not carried out those agreed upon mitigation means and measures, then the Service will request the responsible Federal action agency to initiate corrective action.

APPENDIX A—OTHER AUTHORITIES AND DIRECTION FOR SERVICE MITIGATION RECOMMENDATIONS LEGISLATIVE

Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.). The 1977 amendments require the Fish and Wildlife Service ". . . upon request of the Governor of a State, and without reimbursement, to provide technical assistance to such State in developing a Statewide (water quality planning) program and in implementing such program after its approval." In addition, this Act requires the Service to comment on proposed State permit programs for the control of discharges of dredged or fill material and to comment on all Federal permits within 90 days of receipt.

Federal Power Act of 1920, as amended (16 U.S.C. 791(a), 803, 811). This Act authorizes the Secretary of the Interior to impose conditions on licenses issued for hydroelectric projects within specific withdrawn public lands. The Secretary is given specific authority to prescribe fishways to be constructed, maintained, and operated at the licensee's expense.

Estuary Protection Act (16 U.S.C. 1221-1228). This Act requires the Secretary of the Interior to review all project plans and reports for land and water resource development affecting estuaries and to make recommendations for conservation, protection, and enhancement.

Coastal Zone Management Act of 1972 (16 U.S.C. 1451-1464). This Act

requires the Secretary of Commerce to obtain the views of Federal agencies affected by the program, including the Department of the Interior, and to ensure that these views have been given adequate consideration before approval of Coastal Zone Management Plans. The Service provides the Department's views about fish and wildlife resources. Pursuant to the Coastal Zone Management Act Amendments of 1980 (Pub. L. 96-464) the Department of Interior provides comments on Federal grants to help States protect and preserve coastal areas because of their "... conservation, recreational, ecological or aesthetic values." The 1980 Amendments also authorize the Department of Interior to enter into Special Area Management Planning to "... provide for increased specificity in protecting natural resources, reasonable coast dependent economic growth . . . and improved predictability in government decisionmaking."

Water Bank Act (16 U.S.C. 1301-1311). This Act requires that the Secretary of Agriculture "... shall consult with the Secretary of Interior and take appropriate measures to insure that the program carried out . . . is in harmony with wetlands programs administered by the Secretary of the Interior."

Wild and Scenic Rivers Act (16 U.S.C. 1271-1287). This Act requires the Secretary of the Interior to comment on such proposals. The Fish and Wildlife Service provides the Department's views with regard to fish and wildlife resources.

Geothermal Steam Act of 1970 (30 U.S.C. 1001-1025). This Act requires that the Fish and Wildlife Service recommend to the Secretary those lands that shall not be leased for geothermal development by reason of their status as "... a fish hatchery administered by the Secretary, wildlife refuge, wildlife range, game range, wildlife management area, waterfowl production area, or for lands acquired or reserved for the protection and conservation of fish and wildlife that are threatened with extinction."

Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1201 et seq.). This Act requires the Department of the Interior to regulate surface mining and reclamation at existing and future mining areas. The Fish and Wildlife Service provides the Department with technical assistance regarding fish and wildlife aspects of Department programs on active and abandoned mine lands, including review of State regulatory submissions and mining plans, and comments on mining and reclamation plans.

Outer Continental Shelf Lands Act Amendments of 1978 (43 U.S.C. 1801). This Act requires the Secretary of the Interior to manage an environmentally sound oil and natural gas development program on the outer continental shelf. The Fish and Wildlife Service provides recommendations for the Department regarding potential ecological impacts before leasing in specific areas and contributes to environmental studies undertaken subsequent to leasing.

Mineral Leasing Act of 1920, as amended (30 U.S.C. 185). This Act authorizes the Secretary of the Interior to grant rights-of-way through Federal lands for pipelines transporting oil, natural gas, synthetic liquids or gaseous fuels, or any other refined liquid fuel. Prior to granting a right-of-way for a project which may have a significant impact on the environment, the Secretary is required by this Act to request and review the applicant's plan for construction, operation, and rehabilitation of the right-of-way. Also, the Secretary is authorized to issue guidelines and impose stipulations for such projects which shall include, but not be limited to, "... requirements for restoration, revegetation and curtailment or erosion of surface land; . . . requirements designed to control or prevent damage to the environment (including damage to fish and wildlife habitat); and . . . requirements to protect the interests of individuals living in the general area of the right-of-way or permit who rely on the fish, wildlife and biotic resources of the area for subsistence purposes."

Cooperative Unit Act (16 U.S.C. 753(a)-753(b)). This Act provides for cooperative programs for research and training between the Fish and Wildlife Service, the States, and universities.

Airport and Airway Development Act (49 U.S.C. 1716). This Act requires the Secretary of Transportation to "... consult with the Secretary of the Interior with regard to the effect that any project . . . may have on natural resources including, but not limited to, fish and wildlife, natural, scenic, and recreation assets, water and air quality, and other factors affecting the environment . . ."

Department of Transportation Act (49 U.S.C. 1653(f)). This Act makes it national policy that "... special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites . . ." and requires that the Secretary of Transportation "... cooperate and consult with the Secretary of the Interior in developing transportation plans and programs that include measures to maintain or enhance the natural beauty

of the lands traversed." The Department of Transportation projects using protected lands cannot be approved unless there are no feasible and prudent alternatives to avoid such use and, if none, all possible measures to minimize harm have been considered.

EXECUTIVE

President's Water Policy Message (June 6, 1978). This Message directs the Secretary of the Interior to promulgate procedures for determination of measures to mitigate losses of fish and wildlife resources.

Water Resources Council's Final Rules; Principles and Standards for Water and Related Land Resources Planning—Level C (September 29, 1980). These rules reiterate the importance of participation in the development planning process by interested Federal agencies, including the Department of the Interior. This participation includes review, coordination, or consultation required under various legislative and executive authorities. Under these rules, "Consideration is to be given to mitigation (as defined in 40 CFR 1508.20) of the adverse effects of each alternative plan. Appropriate mitigation is to be included where suitable as determined by the agency decisionmaker. Mitigation measures included are to be planned for at least concurrent and proportionate implementation with other major project features, except where such concurrent and proportionate mitigation is physically impossible. In the latter case, the reasons for deviation from this rule are to be presented in the planning report, and mitigation is to be planned for the earliest possible implementation. Mitigation for fish and wildlife and their habitat is to be planned in coordination with Federal and State fish and wildlife agencies in accordance with the Fish and Wildlife Coordination Act of 1958 (16 U.S.C. 661-664) (sic)."

Executive Order 11990—Protection of Wetlands (May 24, 1977). This Executive Order requires that each Federal agency "... take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities for: (1) acquiring, managing and disposing of Federal lands and facilities; and (2) providing federally undertaken, financed or assisted construction and improvements; and (3) conducting Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulation and licensing activities." Relevant wetland concerns and values include, but are not

limited to, maintenance of natural systems and long-term productivity of existing flora and fauna, habitat diversity, hydrological utility, fish, wildlife, timber, and food. Under this Order, a developmental project in a wetland may proceed only if no practicable alternatives can be ascertained and if the proposal . . . includes all practicable measures to minimize harm to the wetland that may result from its use."

Executive Order 11988—Floodplain Management (May 24, 1977). This Executive Order requires that Federal agencies take floodplain management into account when formulating or evaluating water or land use plans and that these concerns be reflected in the budgets, procedures, and regulations of the various agencies. This Order allows developmental activities to proceed in floodplain areas only when the relevant agencies have ". . . considered alternatives to avoid adverse effects and incompatible development in the floodplains . . ." or when, in lieu of this, they have ". . . designed or modified their actions in order to minimize potential harm to or within the floodplain . . .".

Executive Order 11987—Exotic Organisms (May 24, 1977). This Executive Order requires that Federal agencies shall restrict, to the extent permitted by law, the introduction of exotic species into the lands or waters which they own, lease, or hold for purposes of administration, and encourage the States, local governments, and private citizens to do the same. This Executive Order also requires Federal agencies to restrict, to the extent permitted by law, the importation of exotic species and to restrict the use of Federal funds and programs for such importation. The Secretary of the Interior, in consultation with the Secretary of Agriculture, is authorized to develop by rule or regulation a system to standardize and simplify the requirements and procedures appropriate for implementing this Order.

NATIONAL/INTERNATIONAL TREATIES

Federal Trust Responsibility to Indian Tribes. This responsibility is reflected in the numerous Federal treaties with the Indian tribes. These treaties have the force of law. Protection of Indian hunting and fishing rights necessitates conservation of fish and wildlife and their habitat.

Convention Between the United States and Japan (September 19, 1974). This Treaty endorses the establishment of sanctuaries and fixes preservation and enhancement of migratory bird

habitat as a major goal of the signatories.

Convention Between the United States and the Union of Soviet Socialist Republics Concerning the Conservation of Migratory Birds and Their Environments (November 8, 1978). This Treaty endorses the establishment of sanctuaries, refuges, and protected areas. It mandates reducing or eliminating damage to all migratory birds. Furthermore, it provides for designation of special areas for migratory bird breeding, wintering, feeding, and molting, and commits the signatories to ". . . undertake measures necessary to protect the ecosystems in these areas . . . against pollution, detrimental alteration and other environmental degradation."

Implementing legislation, Pub. L. 95-616, was passed in the United States in 1978.

Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere (April 15, 1941). This Treaty has several provisions requiring parties to conserve certain wildlife resources and their habitats.

Convention Between the United States and Great Britain (for Canada) for Protection of Migratory Birds (August 1, 1916, as amended January 30, 1979). This Treaty provides for a uniform ". . . system of protection for certain species of birds which migrate between the United States and Canada, in order to assure the preservation of species either harmless or beneficial to man." The Treaty prohibits hunting insectivorous birds, but allows killing of birds under permit when injurious to agriculture. The 1979 amendment allows subsistence hunting of waterfowl outside of the normal hunting season.

APPENDIX B—OTHER DEFINITIONS

"*Compensation*," when used in the context of Service mitigation recommendations, means full replacement of project-induced losses to fish and wildlife resources, provided such full replacement has been judged by the Service to be consistent with the appropriate mitigation planning goal.

"*Ecoregion*" refers to a large biogeographical unit characterized by distinctive biotic and abiotic relationships. An ecoregion may be subclassified into domains, divisions, provinces, and sections. A technical explanation and map is provided in the "*Ecoregions of the United States*" by Robert G. Bailey, published by the U.S. Forest Service, 1976.

"*Ecosystem*" means all of the biotic elements (i.e., species, populations, and communities) and abiotic elements (i.e., land, air, water, energy) interacting in a given geographic area so that a flow of

energy leads to a *clearly* defined trophic structure, biotic diversity, and material cycles. (Eugene P. Odum, 1971. *Fundamentals of Ecology*)

"*Evaluation species*" means those fish and wildlife resources in the planning area that are selected for impact analysis. They must currently be present or known to occur in the planning area during at least one stage of their life history except where species not present (1) have been identified in fish and wildlife restoration or improvement plans approved by State or Federal resource agencies, or (2) will result from natural species succession over the life of the project. In these cases, the analysis may include such identified species not currently in the planning area.

There are two basic approaches to the selection of evaluation species: (1) selection of species with high public interest, economic value or both; and (2) selection of species to provide a broader ecological perspective of an area. The choice of one approach in lieu of the other may result in a completely different outcome in the analysis of a proposed land or water development. Therefore, the objectives of the study should be clearly defined before species selection is initiated. If the objectives of a study are to base a decision on potential impacts to an entire ecological community, such as a unique wetland, then a more ecologically based approach is desirable. If, however, a land or water use decision is to be based on potential impacts to a public use area, then species selection should favor animals with significant human use values. In actual practice, species should be selected to represent social, economic and broad ecological views because mitigation planning efforts incorporate objectives that have social, economic, and ecological aspects. Species selection always should be approached in a manner that will optimize contributions to the stated objectives of the mitigation planning effort.

Most land and water development decisions are strongly influenced by the perceived impacts of the proposed action on human use. Since economically or socially important species have clearly defined linkages to human use, they should be included as evaluation species in all appropriate land and water studies. As a guideline, the following types of species should be considered:

- Species that are associated with Important Resource Problems as designated by the Director of the Fish and Wildlife Service (except for threatened or endangered species).

- Other species with monetary and non-monetary benefits to people accruing from consumptive and nonconsumptive human uses including, but not limited to, fishing, hunting, bird-watching and educational, aesthetic, scientific or subsistence uses.

An analysis based only on those species with directly identifiable economic or social value may not be broad enough to adequately describe all of the ramifications of a land and water use proposal. If it is desirable to increase the ecological perspective of an assessment, the following types of species should be considered:

- Species known to be sensitive to specific land and water use actions. The species selected with this approach serve as "early warning" or indicator species for the affected fish and wildlife community.

- Species that perform a key role in a community because of their role in nutrient cycling or energy flows. These species also serve as indicators for a large segment of the fish and wildlife community, but may be difficult to identify.

- Species that represent groups of species which utilize a common environmental resource (guilds). A representative species is selected from each guild and predicted environmental impacts for the selected species are extended with some degree of confidence to other guild members.

"Federal action agency" means a department, agency or instrumentality of the United States which plans, constructs, operates or maintains a project, or which plans for or approves a permit, lease, or license for projects or manages Federal lands.

"Fish and wildlife resources" means birds, fishes, mammals, and all other classes of wild animals and all types of aquatic and land vegetation upon which wildlife is dependent.

"Habitat" means the area which provides direct support for a given species, population, or community. It includes all environmental features that comprise an area such as air quality, water quality, vegetation and soil characteristics and water supply (including both surface and groundwater).

"Habitat value" means the suitability of an area to support a given evaluation species.

"Important Resource Problem" means a clearly defined problem with a single important population or a community of similar species in a given geographic area as defined by the Director of the Fish and Wildlife Service.

"In-kind replacement" means providing or managing substitute

resources to replace the habitat value of the resources lost, where such substitute resources are physically and biologically the same or closely approximate those lost.

"Loss" means a change in fish and wildlife resources due to human activities that is considered adverse and:

- (1) reduces the biological value of that habitat for evaluation species;

- (2) reduces population numbers of evaluation species;

- (3) increases population numbers of "nuisance" species;

- (4) reduces the human use of those fish and wildlife resources; or

- (5) disrupts ecosystem structure and function.

Changes that improve the value of existing habitat for evaluation species are not to be considered losses, i.e., burning or selective tree harvesting for wildlife management purposes. In addition, reductions in animal populations for the purpose of harvest or fish and wildlife management will not be considered as losses for the purpose of this policy.

"Minimize" means to reduce to the smallest practicable amount or degree.

"Mitigation banking" means habitat protection or improvement actions taken expressly for the purpose of compensating for unavoidable losses from specific future development actions. It only includes those actions above and beyond those typically taken by Congress for protection of fish and wildlife resources.

"Out-of-kind replacement" means providing or managing substitute resources to replace the habitat value of the resources lost, where such substitute resources are physically or biologically different from those lost.

"Planning area" means a geographic space with an identified boundary that includes:

- (1) The area identified in the study's authorizing document;

- (2) The locations of resources included in the study's identified problems and opportunities;

- (3) The locations of alternative plans, often called "project areas;" and

- (4) The locations of resources that would be directly, indirectly, or cumulatively affected by alternative plans, often called the "affected area."

"Practicable" means capable of being done within existing constraints. The test of what is practicable depends upon the situation and includes consideration of the pertinent factors, such as environment, cost, or technology.

"Project" means any action, planning or approval process relating to an action

that will directly or indirectly affect fish and wildlife resources.

"Replacement" means the substitution or offsetting of fish and wildlife resource losses with resources considered to be of equivalent biological value. However, resources used for replacement represent loss or modification of another type of habitat value. Replacement actions still result in a loss of habitat acreage and types which will continually diminish the overall national resource base. It should be clearly understood that replacement actions never restore the lost fish and wildlife resource—that is lost forever.

Dated: January 13, 1981.

Cecil Andrus,

Secretary of the Department of the Interior.

(FR Doc. 81-1885 Filed 1-22-81; 8:45 am)

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ENDANGERED SPECIES ACT OF 1973

ENDANGERED SPECIES ACT OF 1973¹

AN ACT To provide for the conservation of endangered and threatened species of fish, wildlife, and plants, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Endangered Species Act of 1973".

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FINDINGS, PURPOSES, AND POLICY

SEC. 2. (a) FINDINGS.—The Congress finds and declares that—

(1) various species of fish, wildlife, and plants in the United States have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation;

(2) other species of fish, wildlife, and plants have been so depleted in numbers that they are in danger of or threatened with extinction;

(3) these species of fish, wildlife, and plants are of esthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people;

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent

¹ As amended by P.L. 94-325, June 30, 1976; P.L. 94-359, July 12, 1976; P.L. 95-212, December 19, 1977; P.L. 95-632, November 10, 1978; P.L. 96-159, December 28, 1979; 97-304, October 13, 1982; P.L. 98-327, June 25, 1984; and P.L. 100-478, October 7, 1988; P.L. 100-653, November 14, 1988; and P.L. 100-707, November 23, 1988.

² Bracketed material does not appear in Act. Sec. 1012 of P.L. 100-478, 102 Stat. 2314, October 7, 1988, added sec. 18 of the Act but did not conform the table of contents of the Act.

practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

- (A) migratory bird treaties with Canada and Mexico;
- (B) the Migratory and Endangered Bird Treaty with Japan;
- (C) the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere;
- (D) the International Convention for the Northwest Atlantic Fisheries;
- (E) the International Convention for the High Seas Fisheries of the North Pacific Ocean;
- (F) the Convention on International Trade in Endangered Species of Wild Fauna and Flora; and
- (G) other international agreements; and

(5) encouraging the States and other interested parties, through Federal financial assistance and a system of incentives, to develop and maintain conservation programs which meet national and international standards is a key to meeting the Nation's international commitments and to better safeguarding, for the benefit of all citizens, the Nation's heritage in fish, wildlife, and plants.

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section.

(c) POLICY.—(1) It is further declared to be the policy of Congress that all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this Act.

(2) It is further declared to be the policy of Congress that Federal agencies shall cooperate with State and local agencies to resolve water resource issues in concert with conservation of endangered species.

(16 U.S.C. 1531)

DEFINITIONS

SEC. 3. For the purposes of this Act—

(1) The term "alternative courses of action" means all alternatives and thus is not limited to original project objectives and agency jurisdiction.

(2) The term "commercial activity" means all activities of industry and trade, including, but not limited to, the buying or selling of commodities and activities conducted for the purpose of facilitating such buying and selling: *Provided, however,* That it does not include exhibitions of commodities by museums or similar cultural or historical organizations.

(3) The terms "conserve," "conserving," and "conservation" mean to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are

no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

(4) The term "Convention" means the Convention on International Trade in Endangered Species of Wild Fauna and Flora, signed on March 3, 1973, and the appendices thereto.

(5)(A) The term "critical habitat" for a threatened or endangered species means—

(i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of this Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and

(ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of this Act, upon a determination by the Secretary that such areas are essential for the conservation of the species.

(B) Critical habitat may be established for those species now listed as threatened or endangered species for which no critical habitat has heretofore been established as set forth in subparagraph (A) of this paragraph.

(C) Except in those circumstances determined by the Secretary, critical habitat shall not include the entire geographical area which can be occupied by the threatened or endangered species.

(6) The term "endangered species" means any species which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined by the Secretary to constitute a pest whose protection under the provisions of this Act would present an overwhelming and overriding risk to man.

(7) The term "Federal agency" means any department, agency, or instrumentality of the United States.

(8) The term "fish or wildlife" means any member of the animal kingdom, including without limitation any mammal, fish, bird (including any migratory, nonmigratory, or endangered bird for which protection is also afforded by treaty or other international agreement), amphibian, reptile, mollusk, crustacean, arthropod or other invertebrate, and includes any part, product, egg, or offspring thereof, or the dead body or parts thereof.

(9) The term "foreign commerce" includes, among other things, any transaction—

(A) between persons within one foreign country;

(B) between persons in two or more foreign countries;

(C) between a person within the United States and a person in a foreign country; or

(D) between persons within the United States, where the fish and wildlife in question are moving in any country or countries outside the United States.

(10) The term "import" means to land on, bring into, or introduce into or attempt to land on, bring into, or introduce into, any place subject to the jurisdiction of the United States, whether or not such landing, bringing, or introduction constitutes an importation within the meaning of the customs laws of the United States.

[(11) Repealed by section 4(b) of P.L. 97-304, 96 Stat. 1420.]

(12) The term "permit or license applicant" means, when used with respect to an action of a Federal agency for which exemption is sought under section 7, any person whose application to such agency for a permit or license has been denied primarily because of the application of section 7(a) to such agency action.

(13) The term "person" means an individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of the Federal Government, of any State, municipality, or political subdivision of a State, or of any foreign government; any State, municipality, or political subdivision of a State; or any other entity subject to the jurisdiction of the United States.

(14) The term "plant" means any member of the plant kingdom, including seeds, roots and other parts thereof.

(15) The term "Secretary" means, except as otherwise herein provided, the Secretary of the Interior or the Secretary of Commerce as program responsibilities are vested pursuant to the provisions of Reorganization Plan Numbered 4 of 1970; except that with respect to the enforcement of the provisions of this Act and the Convention which pertain to the importation or exportation of terrestrial plants, the term also means the Secretary of Agriculture.

(16) The term "species" includes any subspecies of fish or wildlife or plants, and any distinct population segment of any species or vertebrate fish or wildlife which interbreeds when mature.

(17) The term "State" means any of the several States, the District of Columbia, the Commonwealth of Puerto Rico, American Samoa, the Virgin Islands, Guam, and the Trust Territory of the Pacific Islands.

(18) The term "State agency" means any State agency, department, board, commission, or other governmental entity which is responsible for the management and conservation of fish, plant, or wildlife resources within a State.

(19) The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

(20) The term "threatened species" means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

(21) The term "United States," when used in a geographical context, includes all States.

(16 U.S.C. 1532)

DETERMINATION OF ENDANGERED SPECIES AND THREATENED SPECIES

SEC. 4. (a) GENERAL.—(1) The Secretary shall by regulation promulgated in accordance with subsection (b) determine whether any species is an endangered species or a threatened species because of any of the following factors:

(A) the present or threatened destruction, modification, or curtailment of its habitat or range;

(B) overutilization for commercial, recreational, scientific, or educational purposes;

(C) disease or predation;

(D) the inadequacy of existing regulatory mechanisms; or

(E) other natural or manmade factors affecting its continued existence.

(2) With respect to any species over which program responsibilities have been vested in the Secretary of Commerce pursuant to Reorganization Plan Numbered 4 of 1970—

(A) in any case in which the Secretary of Commerce determines that such species should—

(i) be listed as an endangered species or a threatened species, or

(ii) be changed in status from a threatened species to an endangered species, he shall so inform the Secretary of the Interior, who shall list such species in accordance with this section;

(B) in any case in which the Secretary of Commerce determines that such species should—

(i) be removed from any list published pursuant to subsection (c) of this section, or

(ii) be changed in status from an endangered species to a threatened species, he shall recommend such action to the Secretary of the Interior, and the Secretary of the Interior, if he concurs in the recommendation, shall implement such action; and

(C) the Secretary of the Interior may not list or remove from any list any such species, and may not change the status of any such species which are listed, without a prior favorable determination made pursuant to this section by the Secretary of Commerce.

(3) The Secretary, by regulation promulgated in accordance with subsection (b) and to the maximum extent prudent and determinable—

(A) shall, concurrently with making a determination under paragraph (1) that a species is an endangered species or a threatened species, designate any habitat of such species which is then considered to be critical habitat; and

(B) may, from time-to-time thereafter as appropriate, revise such designation.

(b) BASIS FOR DETERMINATIONS.—(1)(A) The Secretary shall make determinations required by subsection (a)(1) solely on the basis of the best scientific and commercial data available to him after conducting a review of the status of the species and after taking into account those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species, whether by predator control, protection of habitat and food supply, or other conservation practices, within any area under its jurisdiction, or on the high seas.

(B) In carrying out this section, the Secretary shall give consideration to species which have been—

(i) designated as requiring protection from unrestricted commerce by any foreign nation, or pursuant to any international agreement; or

(ii) identified as in danger of extinction, or likely to become so within the foreseeable future, by any State agency or by any agency of a foreign nation that is responsible for the conservation of fish or wildlife or plants.

(2) The Secretary shall designate critical habitat, and make revisions thereto, under subsection (a)(3) on the basis of the best scientific data available and after taking into consideration the economic impact, and any other relevant impact, of specifying any particular area as critical habitat. The Secretary may exclude any area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned.

(3)(A) To the maximum extent practicable, within 90 days after receiving the petition of an interested person under section 553(e) of title 5, United States Code, to add a species to, or to remove a species from, either of the lists published under subsection (c), the Secretary shall make a finding as to whether the petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted. If such a petition is found to present such information, the Secretary shall promptly commence a review of the status of the species concerned. The Secretary shall promptly publish each finding made under this subparagraph in the Federal Register.

(B) Within 12 months after receiving a petition that is found under subparagraph (A) to present substantial information indicating that the petitioned action may be warranted, the Secretary shall make one of the following findings:

(i) The petitioned action is not warranted, in which case the Secretary shall promptly publish such finding in the Federal Register.

(ii) The petitioned action is warranted in which case the Secretary shall promptly publish in the Federal Register a general notice and the complete text of a proposed regulation to implement such action in accordance with paragraph (5).

(iii) The petitioned action is warranted but that—

(I) the immediate proposal and timely promulgation of a final regulation implementing the petitioned action in accordance with paragraphs (5) and (6) is precluded by pending proposals to determine whether any species is an endangered species or a threatened species, and

(II) expeditious progress is being made to add qualified species to either of the lists published under subsection (c) and to remove from such lists species for which the protections of the Act are no longer necessary.

in which case the Secretary shall promptly publish such finding in the Federal Register, together with a description and evaluation of the reasons and data on which the finding is based.

(C)(i) A petition with respect to which a finding is made under subparagraph (B)(iii) shall be treated as a petition that is resubmitted to the Secretary under subparagraph (A) on the date of such finding and that presents substantial scientific or commercial information that the petitioned action may be warranted.

(ii) Any negative finding described in subparagraph (A) and any finding described in subparagraph (B)(i) or (iii) shall be subject to judicial review.

(iii) The Secretary shall implement a system to monitor effectively the status of all species with respect to which a finding is made under subparagraph (B)(iii) and shall make prompt use of the authority under paragraph 7¹ to prevent a significant risk to the well being of any such species.

(D)(i) To the maximum extent practicable, within 90 days after receiving the petition of an interested person under section 553(e) of title 5, United States Code, to revise a critical habitat designation, the Secretary shall make a finding as to whether the petition presents substantial scientific information indicating that the revision may be warranted. The Secretary shall promptly publish such finding in the Federal Register.

(ii) Within 12 months after receiving a petition that is found under clause (i) to present substantial information indicating that the requested revision may be warranted, the Secretary shall determine how he intends to proceed with the requested revision, and shall promptly publish notice of such intention in the Federal Register.

(4) Except as provided in paragraphs (5) and (6) of this subsection, the provisions of section 553 of title 5, United States Code (relating to rulemaking procedures), shall apply to any regulation promulgated to carry out the purposes of this Act.

(5) With respect to any regulation proposed by the Secretary to implement a determination, designation, or revision referred to in subsection (a)(1) or (3), the Secretary shall—

(A) not less than 90 days before the effective date of the regulation—

(i) publish a general notice and the complete text of the proposed regulation in the Federal Register, and

(ii) give actual notice of the proposed regulation (including the complete text of the regulation) to the State agency in each State in which the species is believed to occur, and to each county or equivalent jurisdiction in which the species is believed to occur, and invite the comment of such agency, and each such jurisdiction, thereon;

(B) insofar as practical, and in cooperation with the Secretary of State, give notice of the proposed regulation to each foreign nation in which the species is believed to occur or whose citizens harvest the species on the high seas, and invite the comment of such nation thereon;

(C) give notice of the proposed regulation to such professional scientific organizations as he deems appropriate;

¹ So in original. Probably should be paragraph "(7)".

(D) publish a summary of the proposed regulation in a newspaper of general circulation in each area of the United States in which the species is believed to occur; and

(E) promptly hold one public hearing on the proposed regulation if any person files a request for such a hearing within 45 days after the date of publication of general notice.

(6)(A) Within the one-year period beginning on the date on which general notice is published in accordance with paragraph (5)(A)(i) regarding a proposed regulation, the Secretary shall publish in the Federal Register—

(i) if a determination as to whether a species is an endangered species or a threatened species, or a revision of critical habitat, is involved, either—

(I) a final regulation to implement such determination,

(II) a final regulation to implement such revision or a finding that such revision should not be made,

(III) notice that such one-year period is being extended under subparagraph (B)(i), or

(IV) notice that the proposed regulation is being withdrawn under subparagraph (B)(ii), together with the finding on which such withdrawal is based; or

(ii) subject to subparagraph (C), if a designation of critical habitat is involved, either—

(I) a final regulation to implement such designation, or

(II) notice that such one-year period is being extended under such subparagraph.

(ii) If a proposed regulation referred to in subparagraph (A)(i) is not promulgated as a final regulation within such one-year period (or longer period if extension under clause (i) applies) because the Secretary finds that there is not sufficient evidence to justify the action proposed by the regulation, the Secretary shall immediately withdraw the regulation. The finding on which a withdrawal is based shall be subject to judicial review. The Secretary may not propose a regulation that has previously been withdrawn under this clause unless he determines that sufficient new information is available to warrant such proposal.

(B)(i) If the Secretary finds with respect to a proposed regulation referred to in subparagraph (A)(i) that there is substantial disagreement regarding the sufficiency or accuracy of the available data relevant to the determination or revision concerned, the Secretary may extend the one-year period specified in subparagraph (A) for not more than six months for purposes of soliciting additional data.

(iii) If the one-year period specified in subparagraph (A) is extended under clause (i) with respect to a proposed regulation, then before the close of such extended period the Secretary shall publish in the Federal Register either a final regulation to implement the determination or revision concerned, a finding that the revision should not be made, or a notice of withdrawal of the regulation under clause (ii), together with the finding on which the withdrawal is based.

(C) A final regulation designating critical habitat of an endangered species or a threatened species shall be published concurrently with the final regulation implementing the determination

that such species is endangered or threatened, unless the Secretary deems that—

(i) it is essential to the conservation of such species that the regulation implementing such determination be promptly published; or

(ii) critical habitat of such species is not then determinable, in which case the Secretary, with respect to the proposed regulation to designate such habitat, may extend the one-year period specified in subparagraph (A) by not more than one additional year, but not later than the close of such additional year the Secretary must publish a final regulation, based on such data as may be available at that time, designating, to the maximum extent prudent, such habitat.

(7) Neither paragraph (4), (5), or (6) of this subsection nor section 553 of title 5, United States Code, shall apply to any regulation issued by the Secretary in regard to any emergency posing a significant risk to the well-being of any species of fish and wildlife or plants, but only if—

(A) at the time of publication of the regulation in the Federal Register the Secretary publishes therein detailed reasons why such regulation is necessary; and

(B) in the case such regulation applies to resident species of fish or wildlife, or plants, the Secretary gives actual notice of such regulation to the State agency in each State in which such species is believed to occur.

Such regulation shall, at the discretion of the Secretary, take effect immediately upon the publication of the regulation in the Federal Register. Any regulation promulgated under the authority of this paragraph shall cease to have force and effect at the close of the 240-day period following the date of publication unless, during such 240-day period, the rulemaking procedures which would apply to such regulation without regard to this paragraph are complied with. If at any time after issuing an emergency regulation the Secretary determines, on the basis of the best appropriate data available to him, that substantial evidence does not exist to warrant such regulation, he shall withdraw it.

(8) The publication in the Federal Register of any proposed or final regulation which is necessary or appropriate to carry out the purposes of this Act shall include a summary by the Secretary of the data on which such regulation is based and shall show the relationship of such data to such regulation; and if such regulation designates or revises critical habitat, such summary shall, to the maximum extent practicable, also include a brief description and evaluation of those activities (whether public or private) which, in the opinion of the Secretary, if undertaken may adversely modify such habitat, or may be affected by such designation.

(c) LISTS.—(1) The Secretary of the Interior shall publish in the Federal Register a list of all species determined by him or the Secretary of Commerce to be endangered species and a list of all species determined by him or the Secretary of Commerce to be threatened species. Each list shall refer to the species contained therein by scientific and common name or names, if any, specify with respect to such species over what portion of its range it is endangered or threatened, and specify any critical habitat within such range.

The Secretary shall from time to time revise each list published under the authority of this subsection to reflect recent determinations, designations, and revisions made in accordance with subsections (a) and (b).

(2) The Secretary shall—

(A) conduct, at least once every five years, a review of all species included in a list which is published pursuant to paragraph (1) and which is in effect at the time of such review; and

(B) determine on the basis of such review whether any such species should—

(i) be removed from such list;

(ii) be changed in status from an endangered species to a threatened species; or

(iii) be changed in status from a threatened species to an endangered species.

Each determination under subparagraph (B) shall be made in accordance with the provisions of subsection (a) and (b).

(d) PROTECTIVE REGULATIONS.—Whenever any species is listed as a threatened species pursuant to subsection (c) of this section, the Secretary shall issue such regulations as he deems necessary and advisable to provide for the conservation of such species. The Secretary may by regulation prohibit with respect to any threatened species any act prohibited under section 9(a)(1), in the case of fish or wildlife, or section 9(a)(2) in the case of plants, with respect to endangered species; except that with respect to the taking of resident species of fish or wildlife, such regulations shall apply in any State which has entered into a cooperative agreement pursuant to section 6(c) of this Act only to the extent that such regulations have also been adopted by such State.

(e) SIMILARITY OF APPEARANCE CASES.—The Secretary may, by regulation of commerce or taking, and to the extent he deems advisable, treat any species as an endangered species or threatened species even through it is not listed pursuant to section 4 of this Act if he finds that—

(A) such species so closely resembles in appearance, at the point in question, a species which has been listed pursuant to such section that enforcement personnel would have substantial difficulty in attempting to differentiate between the listed and unlisted species;

(B) the effect of this substantial difficulty is an additional threat to an endangered or threatened species; and

(C) such treatment of an unlisted species will substantially facilitate the enforcement and further the policy of this Act.

(f)(1) RECOVERY PLANS.—The Secretary shall develop and implement plans (hereinafter in this subsection referred to as "recovery plans") for the conservation and survival of endangered species and threatened species listed pursuant to this section, unless he finds that such a plan will not promote the conservation of the species. The Secretary, in development and implementing recovery plans, shall, to the maximum extent practicable—

(A) give priority to those endangered species or threatened species, without regard to taxonomic classification, that are most likely to benefit from such plans, particularly those spe-

cies that are, or may be, in conflict with construction or other development projects or other forms of economic activity;

(B) incorporate in each plan—

(i) a description of such site-specific management actions as may be necessary to achieve the plan's goal for the conservation and survival of the species;

(ii) objective, measurable criteria which, when met, would result in a determination, in accordance with the provisions of this section, that the species be removed from the list; and

(iii) estimates of the time required and the cost to carry out those measures needed to achieve the plan's goal and to achieve intermediate steps toward that goal.

(2) The Secretary, in developing and implementing recovery plans, may procure the services of appropriate public and private agencies and institutions and other qualified persons. Recovery teams appointed pursuant to this subsection shall not be subject to the Federal Advisory Committee Act.

(3) The Secretary shall report every two years to the Committee on Environment and Public Works of the Senate and the Committee on Merchant Marine and Fisheries of the House of Representatives on the status of efforts to develop and implement recovery plans for all species listed pursuant to this section and on the status of all species for which such plans have been developed.

(4) The Secretary shall, prior to final approval of a new or revised recovery plan, provide public notice and an opportunity for public review and comment on such plan. The Secretary shall consider all information presented during the public comment period prior to approval of the plan.

(5) Each Federal agency shall, prior to implementation of a new or revised recovery plan, consider all information presented during the public comment period under paragraph (4).

(g) MONITORING.—(1) The Secretary shall implement a system in cooperation with the States to monitor effectively for not less than five years the status of all species which have recovered to the point at which the measures provided pursuant to this Act are no longer necessary and which, in accordance with the provisions of this section, have been removed from either of the lists published under subsection (c).

(2) The Secretary shall make prompt use of the authority under paragraph 7¹ of subsection (b) of this section to prevent a significant risk to the well being of any such recovered species.

(h) AGENCY GUIDELINES.—The Secretary shall establish, and publish in the Federal Register, agency guidelines to insure that the purposes of this section are achieved efficiently and effectively. Such guidelines shall include, but are not limited to—

(1) procedures for recording the receipt and the disposition of petitions submitted under subsection (b)(3) of this section;

(2) criteria for making the findings required under such subsection with respect to petitions;

¹ So in original. Probably should be paragraph "(7)".

(3) a ranking system to assist in the identification of species that should receive priority review under subsection (a)(1) of the section; and

(4) a system for developing and implementing, on a priority basis, recovery plans under subsection (f) of this section. The Secretary shall provide to the public notice of, and opportunity to submit written comments on, any guideline (including any amendment thereto) proposed to be established under this subsection.

(i) If, in the case of any regulation proposed by the Secretary under the authority of this section, a State agency to which notice thereof was given in accordance with subsection (b)(5)(A)(ii) files comments disagreeing with all or part of the proposed regulation, and the Secretary issues a final regulation which is in conflict with such comments, or if the Secretary fails to adopt a regulation pursuant to an action petitioned by a State agency under subsection (b)(3), the Secretary shall submit to the State agency a written justification for his failure to adopt regulations consistent with the agency's comments or petition.

(16 U.S.C. 1533)

LAND ACQUISITION

SEC. 5. (a) PROGRAM.—The Secretary, and the Secretary of Agriculture with respect to the National Forest System, shall establish and implement a program to conserve fish, wildlife, and plants, including those which are listed as endangered species or threatened species pursuant to section 4 of this Act. To carry out such a program, the appropriate Secretary—

(1) shall utilize the land acquisition and other authority under the Fish and Wildlife Act of 1956, as amended, the Fish and Wildlife Coordination Act, as amended, and the Migratory Bird Conservation Act, as appropriate; and

(2) is authorized to acquire by purchase, donation, or otherwise, lands, waters, or interest therein, and such authority shall be in addition to any other land acquisition vested in him.

(b) ACQUISITIONS.—Funds made available pursuant to the Land and Water Conservation Fund Act of 1965, as amended, may be used for the purpose of acquiring lands, waters, or interests therein under subsection (a) of this section.

(16 U.S.C. 1534)

COOPERATION WITH THE STATES

SEC. 6. (a) GENERAL.—In carrying out the program authorized by this Act, the Secretary shall cooperate to the maximum extent practicable with the States. Such cooperation shall include consultation with the States concerned before acquiring any land or water, or interest therein, for the purpose of conserving any endangered species or threatened species.

(b) MANAGEMENT AGREEMENTS.—The Secretary may enter into agreements with any State for the administration and management of any area established for the conservation of endangered species or threatened species. Any revenues derived from the administra-

tion of such areas under these agreements shall be subject to the provisions of section 401 of the Act of June 15, 1935 (49 Stat. 383; 16 U.S.C. 715s).

(c)(1) COOPERATIVE AGREEMENTS.—In furtherance of the purposes of this Act, the Secretary is authorized to enter into a cooperative agreement in accordance with this section with any State which establishes and maintains an adequate and active program for the conservation of endangered species and threatened species. Within one hundred and twenty days after the Secretary receives a certified copy of such a proposed State program, he shall make a determination whether such program is in accordance with this Act. Unless he determines, pursuant to this paragraph, that the State program is not in accordance with this Act, he shall enter into a cooperative agreement with the State for the purpose of assisting in implementation of the State program. In order for a State program to be deemed an adequate and active program for the conservation of endangered species and threatened species, the Secretary must find, and annually thereafter reconfirm such finding, that under the State program—

(A) authority resides in the State agency to conserve resident species of fish or wildlife determined by the State agency or the Secretary to be endangered or threatened;

(B) the State agency has established acceptable conservation programs, consistent with the purposes and policies of this Act, for all resident species of fish or wildlife in the State which are deemed by the Secretary to be endangered or threatened, and has furnished a copy of such plan and program together with all pertinent details, information, and data requested to the Secretary;

(C) the State agency is authorized to conduct investigations to determine the status and requirements for survival of resident species of fish and wildlife;

(D) the State agency is authorized to establish programs, including the acquisition of land or aquatic habitat or interests therein, for the conservation of resident endangered or threatened species of fish or wildlife; and

(E) provision is made for public participation in designating resident species of fish or wildlife as endangered or threatened, or that under the State program—

(i) the requirements set forth in paragraph (3), (4), and (5) of this subsection are complied with, and

(ii) plans are included under which immediate attention will be given to those resident species of fish and wildlife which are determined by the Secretary or the State agency to be endangered or threatened and which the Secretary and the State agency agree are most urgently in need of conservation programs; except that a cooperative agreement entered into with a State whose program is deemed adequate and active pursuant to clause (i) and this clause and this subparagraph shall not affect the applicability of prohibitions set forth in or authorized pursuant to section 4(d) or section 9(a)(1) with respect to the taking of any resident endangered or threatened species.

(2) In furtherance of the purposes of this Act, the Secretary is authorized to enter into a cooperative agreement in accordance with this section with any State which establishes and maintains an adequate and active program for the conservation of endangered species and threatened species of plants. Within one hundred and twenty days after the Secretary receives a certified copy of such a proposed State program, he shall make a determination whether such program is in accordance with this Act. Unless he determines, pursuant to this paragraph, that the State program is not in accordance with this Act, he shall enter into a cooperative agreement with the State for the purpose of assisting in implementation of the State program. In order for a State program to be deemed an adequate and active program for the conservation of endangered species of plants and threatened species of plants, the Secretary must find, and annually thereafter reconfirm such findings, that under the State program—

(A) authority resides in the State agency to conserve resident species of plants determined by the State agency or the Secretary to be endangered or threatened;

(B) the State agency has established acceptable conservation programs, consistent with the purposes and policies of this Act, for all resident species of plants in the State which are deemed by the Secretary to be endangered or threatened, and has furnished a copy of such plan and program together with all pertinent details, information, and data requested to the Secretary;

(C) the State agency is authorized to conduct investigations to determine the status and requirements for survival of resident species of plants; and

(D) provision is made for public participation in designating resident species of plants as endangered or threatened; or that under the State program—

(i) the requirements set forth in subparagraphs (C) and (D) of this paragraph are complied with, and

(ii) plans are included under which immediate attention will be given to those resident species of plants which are determined by the Secretary or the State agency to be endangered or threatened and which the Secretary and the State agency agree are most urgently in need of conservation programs; except that a cooperative agreement entered into with a State whose program is deemed adequate and active pursuant to clause (i) and this clause shall not affect the applicability of prohibitions set forth in or authorized pursuant to section 4(d) or section 9(a)(1) with respect to the taking of any resident endangered or threatened species.

(d) ALLOCATION OF FUNDS.—(1) The Secretary is authorized to provide financial assistance to any State, through its respective State agency, which has entered into a cooperative agreement pursuant to subsection (c) of this section to assist in development of programs for the conservation of endangered and threatened species or to assist in monitoring the status of candidate species pursuant to subparagraph (C) of section 4(b)(3) and recovered species pursuant to section 4(g). The Secretary shall allocate each annual

appropriation made in accordance with the provisions of subsection (i) of this section to such States based on consideration of—

(A) the international commitments of the United States to protect endangered species or threatened species;

(B) the readiness of a State to proceed with a conservation program consistent with the objectives and purposes of this Act;

(C) the number of endangered species and threatened species within a State;

(D) the potential for restoring endangered species and threatened species within a State;

(E) the relative urgency to initiate a program to restore and protect an endangered species or threatened species in terms of survival of the species;

(F) the importance of monitoring the status of candidate species within a State to prevent a significant risk to the well being of any such species; and

(G) the importance of monitoring the status of recovered species within a State to assure that such species do not return to the point at which the measures provided pursuant to this Act are again necessary.

So much of the annual appropriation made in accordance with provisions of subsection (i) of this section allocated for obligation to any State for any fiscal year as remains unobligated at the close thereof is authorized to be made available to that State until the close of the succeeding fiscal year. Any amount allocated to any State which is unobligated at the end of the period during which it is available for expenditure is authorized to be made available for expenditure by the Secretary in conducting programs under this section.

(2) Such cooperative agreements shall provide for (A) the actions to be taken by the Secretary and the States; (B) the benefits that are expected to be derived in connection with the conservation of endangered or threatened species; (C) the estimated cost of these actions; and (D) the share of such costs to be bore by the Federal Government and by the States; except that—

(i) the Federal share of such program costs shall not exceed 75 percent of the estimated program cost stated in the agreement; and

(ii) the Federal share may be increased to 90 percent whenever two or more States having a common interest in one or more endangered or threatened species, the conservation of which may be enhanced by cooperation of such States, enter jointly into agreement with the Secretary.

The Secretary may, in his discretion, and under such rules and regulations as he may prescribe, advance funds to the State for financing the United States pro rata share agreed upon in the cooperative agreement. For the purposes of this section, the non-Federal share may, in the discretion of the Secretary, be in the form of money or real property, the value of which will be determined by the Secretary whose decision shall be final.

(e) REVIEW OF STATE PROGRAMS.—Any action taken by the Secretary under this section shall be subject to his periodic review at no greater than annual intervals.

(f) CONFLICTS BETWEEN FEDERAL AND STATE LAWS.—Any State law or regulation which applies with respect to the importation or exportation of, or interstate or foreign commerce in, endangered species or threatened species is void to the extent that it may effectively (1) permit what is prohibited by this Act or by any regulation which implements this Act, or (2) prohibit what is authorized pursuant to an exemption or permit provided for in this Act or in any regulation which implements this Act. This Act shall not otherwise be construed to void any State law or regulation which is intended to conserve migratory, resident, or introduced fish or wildlife, or to permit or prohibit sale of such fish or wildlife. Any State law or regulation respecting the taking of an endangered species or threatened species may be more restrictive than the exemptions or permits provided for in this Act or in any regulation which implements this Act but not less restrictive than the prohibitions so defined.

(g) TRANSITION.—(1) For purposes of this subsection, the term “establishment period” means, with respect to any State, the period beginning on the date of enactment of this Act and ending on whichever of the following dates first occurs: (A) the date of the close of the 120-day period following the adjournment of the first regular session of the legislature of such State which commences after such date of enactment, or (B) the date of the close of the 15-month period following such date of enactment.

(2) The prohibitions set forth in or authorized pursuant to sections 4(d) and 9(a)(1)(B) of this Act shall not apply with respect to the taking of any resident endangered species or threatened species (other than species listed in Appendix I to the Convention or otherwise specifically covered by any other treaty or Federal law) within any State—

(A) which is then a party to a cooperative agreement with the Secretary pursuant to section 6(c) of this Act (except to the extent that the taking of any such species is contrary to the law of such State); or

(B) except for any time within the establishment period when—

(i) the Secretary applies such prohibition to such species at the request of the State, or

(ii) the Secretary applies such prohibition after he finds, and publishes his finding, that an emergency exists posing a significant risk to the well-being of such species and that the prohibition must be applied to protect such species. The Secretary's finding and publication may be made without regard to the public hearing or comment provisions of section 553 of title 5, United States Code, or any other provision of this Act; but such prohibition shall expire 90 days after the date of its imposition unless the Secretary further extends such prohibition by publishing notice and a statement of justification of such extension.

(h) REGULATIONS.—The Secretary is authorized to promulgate such regulations as may be appropriate to carry out the provisions of this section relating to financial assistance to States.

(i) APPROPRIATIONS.—(1) To carry out the provisions of this section for fiscal years after September 30, 1988, there shall be depos-

ited into a special fund known as the cooperative endangered species conservation fund, to be administered by the Secretary, an amount equal to five percent of the combined amounts covered each fiscal year into the Federal aid to wildlife restoration fund under section 3 of the Act of September 2, 1937, and paid, transferred, or otherwise credited each fiscal year to the Sport Fishing Restoration Account established under 1016 of the Act of July 18, 1984.

(2) Amounts deposited into the special fund are authorized to be appropriated annually and allocated in accordance with subsection (d) of this section.

(16 U.S.C. 1535)

INTERAGENCY COOPERATION

SEC. 7. (a) FEDERAL AGENCY ACTIONS AND CONSULTATIONS.—

(1) The Secretary shall review other programs administered by him and utilize such programs in furtherance of the purposes of this Act. All other Federal agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species listed pursuant to section 4 of this Act.

(2) Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with affected States, to be critical, unless such agency has been granted an exemption for such action by the Committee pursuant to subsection (h) of this section. In fulfilling the requirements of this paragraph each agency shall use the best scientific and commercial data available.

(3) Subject to such guidelines as the Secretary may establish, a Federal agency shall consult with the Secretary on any prospective agency action at the request of, and in cooperation with, the prospective permit or license applicant if the applicant has reason to believe that an endangered species or a threatened species may be present in the area affected by his project and that implementation of such action will likely affect such species.

(4) Each Federal agency shall confer with the Secretary on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under section 4 or result in the destruction or adverse modification of critical habitat proposed to be designated for such species. This paragraph does not require a limitation on the commitment of resources as described in subsection (d).

(b) OPINION OF SECRETARY.—(1)(A) Consultation under subsection (a)(2) with respect to any agency action shall be concluded within the 90-day period beginning on the date on which initiated or, subject to subparagraph (B), within such other period of time as is mutually agreeable to the Secretary and the Federal agency.

(B) In the case of an agency action involving a permit or license applicant, the Secretary and the Federal agency may not mutually agree to conclude consultation within a period exceeding 90 days unless the Secretary, before the close of the 90th day referred to in subparagraph (A)—

(i) if the consultation period proposed to be agreed to will end before the 150th day after the date on which consultation was initiated, submits to the applicant a written statement setting forth—

(I) the reasons why a longer period is required;

(II) the information that is required to complete the consultation; and

(III) the estimated date on which consultation will be completed; or

(ii) if the consultation period proposed to be agreed to will end 150 or more days after the date on which consultation was initiated, obtains the consent of the applicant to such period. The Secretary and the Federal agency may mutually agree to extend a consultation period established under the preceding sentence if the Secretary, before the close of such period, obtains the consent of the applicant to the extension.

(2) Consultation under subsection (a)(3) shall be concluded within such period as is agreeable to the Secretary, the Federal agency, and the applicant concerned.

(3)(A) Promptly after conclusion of consultation under paragraph (2) or (3) of subsection (a), the Secretary shall provide to the Federal agency and the applicant, if any, a written statement setting forth the Secretary's opinion, and a summary of the information on which the opinion is based, detailing how the agency action affects the species or its critical habitat. If jeopardy or adverse modification is found, the Secretary shall suggest those reasonable and prudent alternatives which he believes would not violate subsection (a)(2) and can be taken by the Federal agency or applicant in implementing the agency action.

(B) Consultation under subsection (a)(3), and an opinion based by the Secretary incident to such consultation, regarding an agency action shall be treated respectively as a consultation under subsection (a)(2), and as an opinion issued after consultation under such subsection, regarding that action if the Secretary reviews the action before it is commenced by the Federal agency and finds, and notifies such agency, that no significant changes have been made with respect to the action and that no significant change has occurred regarding the information used during the initial consultation.

(4) If after consultation under subsection (a)(2) of this section, the Secretary concludes that—

(A) the agency action will not violate such subsection, or offers reasonable and prudent alternatives which the Secretary believes would not violate such subsection;

(B) the taking of an endangered species or a threatened species incidental to the agency action will not violate such subsection; and

(C) if an endangered species or threatened species of a marine mammal is involved, the taking is authorized pursuant to section 101(a)(5) of the Marine Mammal Protection Act of 1972. the Secretary shall provide the Federal agency and the applicant concerned, if any, with a written statement that—

(i) specifies the impact of such incidental taking on the species,

(ii) specifies those reasonable and prudent measures that the Secretary considers necessary or appropriate to minimize such impact,

(iii) in the case of marine mammals, specifies those measures that are necessary to comply with section 101(a)(5) of the Marine Mammal Protection Act of 1972 with regard to such taking, and

(iv) sets forth the terms and conditions (including, but not limited to, reporting requirements) that must be complied with by the Federal agency or applicant (if any), or both, to implement the measures specified under clauses (ii) and (iii).

(c) BIOLOGICAL ASSESSMENT.—(1) To facilitate compliance with the requirements of subsection (a)(2) each Federal agency shall, with respect to any agency action of such agency for which no contract for construction has been entered into and for which no construction has begun on the date of enactment of the Endangered Species Act Amendments of 1978, request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action. If the Secretary advises, based on the best scientific and commercial data available, that such species may be present, such agency shall conduct a biological assessment for the purpose of identifying any endangered species or threatened species which is likely to be affected by such action. Such assessment shall be completed within 180 days after the date on which initiated (or within such other period as in mutually agreed to by the Secretary and such agency, except that if a permit or license applicant is involved, the 180-day period may not be extended unless such agency provides the applicant, before the close of such period, with a written statement setting forth the estimated length of the proposed extension and the reasons therefor) and, before any contract for construction is entered into and before construction is begun with respect to such action. Such assessment may be undertaken as part of a Federal agency's compliance with the requirements of section 102 of the National Environmental Policy Act of 1969 (42 U.S.C. 4332).

(2) Any person who may wish to apply for an exemption under subsection (g) of this section for that action may conduct a biological assessment to identify any endangered species or threatened species which is likely to be affected by such action. Any such biological assessment must, however, be conducted in cooperation with the Secretary and under the supervision of the appropriate Federal agency.

(d) LIMITATION ON COMMITMENT OF RESOURCES.—After initiation of consultation required under subsection (a)(2), the Federal agency and the permit or license applicant shall not make any irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formula-

tion or implementation of any reasonable and prudent alternative measures which would not violate subsection (a)(2).

(e)(1) ESTABLISHMENT OF COMMITTEE.—There is established a committee to be known as the Endangered Species Committee (hereinafter in this section referred to as the "Committee").

(2) The Committee shall review any application submitted to it pursuant to this section and determine in accordance with subsection (h) of this section whether or not to grant an exemption from the requirements of subsection (a)(2) of this section for the action set forth in such application.

(3) The Committee shall be composed of seven members as follows:

- (A) The Secretary of Agriculture.
- (B) The Secretary of the Army.
- (C) The Chairman of the Council of Economic Advisors.
- (D) The Administrator of the Environmental Protection Agency. ¹
- (E) The Secretary of the Interior.
- (F) The Administrator of the National Oceanic and Atmospheric Administration.

(G) The President, after consideration of any recommendations received pursuant to subsection (g)(2)(B) shall appoint one individual from each affected State, as determined by the Secretary, to be a member of the Committee for the consideration of the application for exemption for an agency action with respect to which such recommendations are made, not later than 30 days after an application is submitted pursuant to this section.

(4)(A) Members of the Committee shall receive no additional pay on account of their service on the Committee.

(B) While away from their homes or regular places of business in the performance of services for the Committee, members of the Committee shall be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in the Government service are allowed expenses under section 5703 of title 5 of the United States Code²

(5)(A) Five members of the Committee or their representatives shall constitute a quorum for the transaction of any function of the Committee, except that, in no case shall any representative be considered in determining the existence of a quorum for the transaction of any function of the Committee if that function involves a vote by the Committee on any matter before the Committee.

(B) The Secretary of the Interior shall be the Chairman of the Committee.

(C) The Committee shall meet at the call of the Chairman or five of its members.

(D) All meetings and records of the Committee shall be open to the public.

(6) Upon request of the Committee, the head of any Federal agency is authorized to detail, on a nonreimbursable basis, any of

¹ So in law. At the end of section 7(e)(3)(D) of the Endangered Species Act of 1973, the second "Agency." should had been stricken.

² So in law. At the end of section 7(e)(4)(B) of the Endangered Species Act of 1973, the period at end of the paragraph was omitted.

the personnel of such agency to the Committee to assist it in carrying out its duties under this section.

(7)(A) The Committee may for the purpose of carrying out its duties under this section hold such hearings, sit and act at such times and places, take such testimony, and receive such evidence, as the Committee deems advisable.

(B) When so authorized by the Committee, any member or agent of the Committee may take any action which the Committee is authorized to take by this paragraph.

(C) Subject to the Privacy Act, the Committee may secure directly from any Federal agency information necessary to enable it to carry out its duties under this section. Upon request of the Chairman of the Committee, the head of such Federal agency shall furnish such information to the Committee.

(D) The Committee may use the United States mails in the same manner and upon the same conditions as a Federal agency.

(E) The Administrator of General Services shall provide to the Committee on a reimbursable basis such administrative support services as the Committee may request.

(8) In carrying out its duties under this section, the Committee may promulgate and amend such rules, regulations, and procedures, and issue and amend such orders as it deems necessary.

(9) For the purpose of obtaining information necessary for the consideration of an application for an exemption under this section the Committee may issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents.

(10) In no case shall any representative, including a representative of a member designated pursuant to paragraph (3)(C) of this subsection, be eligible to cast a vote on behalf of any member.

(f) REGULATIONS.—Not later than 90 days after the date of enactment of the Endangered Species Act Amendments of 1978, the Secretary shall promulgate regulations which set forth the form and manner in which applications for exemption shall be submitted to the Secretary and the information to be contained in such applications. Such regulations shall require that information submitted in an application by the head of any Federal agency with respect to any agency action include but not be limited to—

(1) a description of the consultation process carried out pursuant to subsection (a)(2) of this section between the head of the Federal agency and the Secretary; and

(2) a statement describing why such action cannot be altered or modified to conform with the requirements of subsection (a)(2) of this section.

(g) APPLICATION FOR EXEMPTION AND REPORT TO THE COMMITTEE.—(1) A Federal agency, the Governor of the State in which an agency action will occur, if any, or a permit or license applicant may apply to the Secretary for an exemption for an agency action of such agency if, after consultation under subsection (a)(2), the Secretary's opinion under subsection (b) indicates that the agency action would violate subsection (a)(2). An application for an exemption shall be considered initially by the Secretary in the manner provided for in this subsection, and shall be considered by the Committee for a final determination under subsection (h) after a report

is made pursuant to paragraph (5). The applicant for an exemption shall be referred to as the "exemption applicant" in this section.

(2)(A) An exemption applicant shall submit a written application to the Secretary, in a form prescribed under subsection (f), not later than 90 days after the completion of the consultation process; except that, in the case of any agency action involving a permit or license applicant, such application shall be submitted not later than 90 days after the date on which the Federal agency concerned takes final agency action with respect to the issuance of the permit or license. For purposes of the preceding sentence, the term "final agency action" means (i) a disposition by an agency with respect to the issuance of a permit or license that is subject to administrative review, whether or not such disposition is subject to judicial review; or (ii) if administrative review is sought with respect to such disposition, the decision resulting after such review. Such application shall set forth the reasons why the exemption applicant considers that the agency action meets the requirements for an exemption under this subsection.

(B) Upon receipt of an application for exemption for an agency action under paragraph (1), the Secretary shall promptly (i) notify the Governor of each affected State, if any, as determined by the Secretary, and request the Governors so notified to recommend individuals to be appointed to the Endangered Species Committee for consideration of such application; and (ii) publish notice of receipt of the application in the Federal Register, including a summary of the information contained in the application and a description of the agency action with respect to which the application for exemption has been filed.

(3) The Secretary shall within 20 days after the receipt of an application for exemption, or within such other period of time as is mutually agreeable to the exemption applicant and the Secretary—

(A) determine that the Federal agency concerned and the exemption applicant have—

(i) carried out the consultation responsibilities described in subsection (a) in good faith and made a reasonable and responsible effort to develop and fairly consider modifications or reasonable and prudent alternatives to the proposed agency action which would not violate subsection (a)(2);

(ii) conducted any biological assessment required by subsection (c); and

(iii) to the extent determinable within the time provided herein, refrained from making any irreversible or irretrievable commitment of resources prohibited by subsection (d); or

(B) deny the application for exemption because the Federal agency concerned or the exemption applicant have not met the requirements set forth in subparagraph (A)(i), (ii), and (iii).

The denial of an application under subparagraph (B) shall be considered final agency action for purposes of chapter 7 of title 5, United States Code.

(4) If the Secretary determines that the Federal agency concerned and the exemption applicant have met the requirements set

forth in paragraph (3)(A) (i), (ii) and (iii) he shall, in consultation with the Members of the Committee, hold a hearing on the application for exemption in accordance with sections 554, 555, and 556 (other than subsection (b) (1) and (2) thereof) of title 5, United States Code, and prepare the report to be submitted pursuant to paragraph (5).

(5) Within 140 days after making the determinations under paragraph (3) or within such other period of time as is mutually agreeable to the exemption applicant and the Secretary, the Secretary shall submit to the Committee a report discussing—

(A) the availability and reasonable and prudent alternatives to the agency action, and the nature and extent of the benefits of the agency action and of alternative courses of action consistent with conserving the species of the critical habitat;

(B) a summary of the evidence concerning whether or not the agency action is in the public interest and is of national or regional significance;

(C) appropriate reasonable mitigation and enhancement measures which should be considered by the Committee; and

(D) whether the Federal agency concerned and the exemption applicant refrained from making any irreversible or irretrievable commitment of resources prohibited by subsection (d).

(6) To the extent practicable within the time required for action under subsection (g) of this section, and except to the extent inconsistent with the requirements of this section, the consideration of any application for an exemption under this section and the conduct of any hearing under this subsection shall be in accordance with sections 554, 555, and 556 (other than subsection (b)(3) of section 556) of title 5, United States Code.

(7) Upon request of the Secretary, the head of any Federal agency is authorized to detail, on a nonreimbursable basis, any of the personnel of such agency to the Secretary to assist him in carrying out his duties under this section.

(8) All meetings and records resulting from activities pursuant to this subsection shall be open to the public.

(h) EXEMPTION.—(1) The Committee shall make a final determination whether or not to grant an exemption within 30 days after receiving the report of the Secretary pursuant to subsection (g)(5). The Committee shall grant an exemption from the requirements of subsection (a)(2) for an agency action if, by a vote of not less than five of its members voting in person—

(A) it determines on the record, based on the report of the Secretary, the record of the hearing held under subsection (g)(4), and on such other testimony or evidence as it may receive, that—

(i) there are no reasonable and prudent alternatives to the agency action;

(ii) the benefits of such action clearly outweigh the benefits of alternative courses of action consistent with conserving the species or its critical habitat, and such action is in the public interest;

(iii) the action is of regional or national significance; and

(iv) neither the Federal agency concerned nor the exemption applicant made any irreversible or irretrievable commitment of resources prohibited by subsection (d); and

(B) it establishes such reasonable mitigation and enhancement measures, including, but not limited to, live propagation, transplantation, and habitat acquisition and improvement, as are necessary and appropriate to minimize the adverse effects of the agency action upon the endangered species, threatened species, or critical habitat concerned.

Any final determination by Committee under this subsection shall be considered final agency action for purposes of chapter 7 of title 5 of the United States Code.

(2)(A) Except as provided in subparagraph (B), an exemption for an agency action granted under paragraph (1) shall constitute a permanent exemption with respect to all endangered or threatened species for the purposes of completing such agency action—

(i) regardless whether the species was identified in the biological assessment; and

(ii) only if a biological assessment has been conducted under subsection (c) with respect to such agency action.

(B) An exemption shall be permanent under subparagraph (A) unless—

(i) the Secretary finds, based on the best scientific and commercial data available, that such exemption would result in the extinction of a species that was not the subject of consultation under subsection (a)(2) or was not identified in any biological assessment conducted under subsection (c), and

(ii) the Committee determines within 60 days after the date of the Secretary's finding that the exemption should not be permanent.

If the Secretary makes a finding described in clause (i), the Committee shall meet with respect to the matter within 30 days after the date of the finding.

(i) REVIEW BY SECRETARY OF STATE.—Notwithstanding any other provision of this Act, the Committee shall be prohibited from considering for exemption any application made to it, if the Secretary of State, after a review of the proposed agency action and its potential implications, and after hearing, certifies, in writing, to the Committee within 60 days of any application made under this section that the granting of any such exemption and the carrying out of such action would be in violation of an international treaty obligation or other international obligation of the United States. The Secretary of State shall, at the time of such certification, publish a copy thereof in the Federal Register.

(j) Notwithstanding any other provision of this Act, the Committee shall grant an exemption for any agency action if the Secretary of Defense finds that such exemption is necessary for reasons of national security.

(k) SPECIAL PROVISIONS.—An exemption decision by the Committee under this section shall not be a major Federal action for purposes of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.): *Provided*, That an environmental impact statement which discusses the impacts upon endangered species or threatened species or their critical habitats shall have been pre-

viously prepared with respect to any agency action exempted by such order.

(l) COMMITTEE ORDERS.—(1) If the Committee determines under subsection (h) that an exemption should be granted with respect to any agency action, the Committee shall issue an order granting the exemption and specifying the mitigation and enhancement measures established pursuant to subsection (h) which shall be carried out and paid for by the exemption applicant in implementing the agency action. All necessary mitigation and enhancement measures shall be authorized prior to the implementing of the agency action and funded concurrently with all other project features.

(2) The applicant receiving such exemption shall include the costs of such mitigation and enhancement measures within the overall costs of continuing the proposed action. Notwithstanding the preceding sentence the costs of such measures shall not be treated as project costs for the purpose of computing benefit-cost or other ratios for the proposed action. Any applicant may request the Secretary to carry out such mitigation and enhancement measures. The costs incurred by the Secretary in carrying out any such measures shall be paid by the applicant receiving the exemption. No later than one year after the granting of an exemption, the exemption applicant shall submit to the Council on Environmental Quality a report describing its compliance with the mitigation and enhancement measures prescribed by this section. Such report shall be submitted annually until all such mitigation and enhancement measures have been completed. Notice of the public availability of such reports shall be published in the Federal Register by the Council on Environmental Quality.

(m) NOTICE.—The 60-day notice requirement of section 11(g) of this Act shall not apply with respect to review of any final determination of the Committee under subsection (h) of this section granting an exemption from the requirements of subsection (a)(2) of this section.

(n) JUDICIAL REVIEW.—Any person, as defined by section 3(13) of this Act, may obtain judicial review, under chapter 7 of title 5 of the United States Code, of any decision of the Endangered Species Committee under subsection (h) in the United States Court of Appeals for (1) any circuit wherein the agency action concerned will be, or is being, carried out, or (2) in any case in which the agency action will be, or is being, carried out outside of any circuit, the District of Columbia, by filing in such court within 90 days after the date of issuance of the decision, a written petition for review. A copy of such petition shall be transmitted by the clerk of the court to the Committee and the Committee shall file in the court the record in the proceeding, as provided in section 2112, of title 28, United States Code. Attorneys designated by the Endangered Species Committee may appear for, and represent the Committee in any action for review under this subsection.

(o) EXEMPTION AS PROVIDING EXCEPTION ON TAKING OF ENDANGERED SPECIES.—Notwithstanding sections 4(d) and 9(a)(1)(B) and (C) of this Act, sections 101 and 102 of the Marine Mammal Protection Act of 1972, or any regulation promulgated to implement any such section—

(1) any action for which an exemption is granted under subsection (h) of this section shall not be considered to be a taking of any endangered species or threatened species with respect to any activity which is necessary to carry out such action; and

(2) any taking that is in compliance with the terms and conditions specified in a written statement provided under subsection (b)(4)(iv) of this section shall not be considered to be a prohibited taking of the species concerned.

(p) EXEMPTIONS IN PRESIDENTIALLY DECLARED DISASTER AREAS.—In any area which has been declared by the President to be a major disaster area under the Disaster Relief and Emergency Assistance Act, the President is authorized to make the determinations required by subsections (g) and (h) of this section for any project for the repair or replacement of a public facility substantially as it existed prior to the disaster under section 405 or 406 of the Disaster Relief and Emergency Assistance Act, and which the President determines (1) is necessary to prevent the recurrence of such a natural disaster and to reduce the potential loss of human life, and (2) to involve an emergency situation which does not allow the ordinary procedures of this section to be followed. Notwithstanding any other provision of this section, the Committee shall accept the determinations of the President under this subsection.

(16 U.S.C. 1536)

INTERNATIONAL COOPERATION

SEC. 8. (a) FINANCIAL ASSISTANCE.—As a demonstration of the commitment of the United States to the worldwide protection of endangered species and threatened species, the President may, subject to the provisions of section 1415 of the Supplemental Appropriation Act, 1953 (31 U.S.C. 724), use foreign currencies accruing to the United States Government under the Agricultural Trade Development and Assistance Act of 1954 or any other law to provide to any foreign country (with its consent) assistance in the development and management of programs in that country which the Secretary determines to be necessary or useful for the conservation of any endangered species or threatened species listed by the Secretary pursuant to section 4 of this Act. The President shall provide assistance (which includes, but is not limited to, the acquisition, by lease or otherwise, of lands, waters, or interests therein) to foreign countries under this section under such terms and conditions as he deems appropriate. Whenever foreign currencies are available for the provision of assistance under this section, such currencies shall be used in preference to funds appropriated under the authority of section 15 of this Act.

(b) ENCOURAGEMENT OF FOREIGN PROGRAMS.—In order to carry out further the provisions of this Act, the Secretary, through the Secretary of State shall encourage—

(1) foreign countries to provide for the conservation of fish or wildlife and plants including endangered species and threatened species listed pursuant to section 4 of this Act;

(2) the entering into of bilateral or multilateral agreements with foreign countries to provide for such conservation; and

(3) foreign persons who directly or indirectly take fish or wildlife or plants in foreign countries or on the high seas for importation into the United States for commercial or other purposes to develop and carry out with such assistance as he may provide, conservation practices designed to enhance such fish or wildlife or plants and their habitat.

(c) PERSONNEL.—After consultation with the Secretary of State, the Secretary may—

(1) assign or otherwise make available any officer or employee of his department for the purpose of cooperating with foreign countries and international organizations in developing personnel resources and programs which promote the conservation of fish or wildlife or plants, and

(2) conduct or provide financial assistance for the educational training of foreign personnel, in this country or abroad, in fish, wildlife, or plant management, research and law enforcement and to render professional assistance abroad in such matters.

(d) INVESTIGATIONS.—After consultation with the Secretary of State and the Secretary of the Treasury, as appropriate, the Secretary may conduct or cause to be conducted such law enforcement investigations and research abroad as he deems necessary to carry out the purposes of this Act.

(16 U.S.C. 1537)

CONVENTION IMPLEMENTATION

SEC. 8A. (a) MANAGEMENT AUTHORITY AND SCIENTIFIC AUTHORITY.—The Secretary of the Interior (hereinafter in this section referred to as the "Secretary") is designated as the Management Authority and the Scientific Authority for purposes of the Convention and the respective functions of each such Authority shall be carried out through the United States Fish and Wildlife Service.

(b) MANAGEMENT AUTHORITY FUNCTIONS.—The Secretary shall do all things necessary and appropriate to carry out the functions of the Management Authority under the Convention.

(c) SCIENTIFIC AUTHORITY FUNCTIONS.—(1) The Secretary shall do all things necessary and appropriate to carry out the functions of the Scientific Authority under the Convention.

(2) The Secretary shall base the determinations and advice given by him under Article IV of the Convention with respect to wildlife upon the best available biological information derived from professionally accepted wildlife management practices; but is not required to make, or require any State to make, estimates of population size in making such determinations or giving such advice.

(d) RESERVATIONS BY THE UNITED STATES UNDER CONVENTION.—If the United States votes against including any species in Appendix I or II of the Convention and does not enter a reservation pursuant to paragraph (3) of Article XV of the Convention with respect to that species, the Secretary of State, before the 90th day after the last day on which such a reservation could be entered, shall submit to the Committee on Merchant Marine and Fisheries

of the House of Representatives, and to the Committee on the Environment and Public Works of the Senate, a written report setting forth the reasons why such a reservation was not entered.

(e) WILDLIFE PRESERVATION IN WESTERN HEMISPHERE.—(1) The Secretary of the Interior (hereinafter in this subsection referred to as the "Secretary"), in cooperation with the Secretary of State, shall act on behalf of, and represent, the United States in all regards as required by the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere (56 Stat. 1354, T.S. 982, hereinafter in this subsection referred to as the "Western Convention"). In the discharge of these responsibilities, the Secretary and the Secretary of State shall consult with the Secretary of Agriculture, the Secretary of Commerce, and the heads of other agencies with respect to matters relating to or affecting their areas of responsibility.

(2) The Secretary and the Secretary of State shall, in cooperation with the contracting parties to the Western Convention and, to the extent feasible and appropriate, with the participation of State agencies, take such steps as are necessary to implement the Western Convention. Such steps shall include, but not be limited to—

(A) cooperation with contracting parties and international organizations for the purpose of developing personnel resources and programs that will facilitate implementation of the Western Convention;

(B) identification of those species of birds that migrate between the United States and other contracting parties, and the habitats upon which those species depend, and the implementation of cooperative measures to ensure that such species will not become endangered or threatened; and

(C) identification of measures that are necessary and appropriate to implement those provisions of the Western Convention which address the protection of wild plants.

(3) No later than September 30, 1985, the Secretary and the Secretary of State shall submit a report to Congress describing those steps taken in accordance with the requirements of this subsection and identifying the principal remaining actions yet necessary for comprehensive and effective implementation of the Western Convention.

(4) The provisions of this subsection shall not be construed as affecting the authority, jurisdiction, or responsibility of the several States to manage, control, or regulate resident fish or wildlife under State law or regulations.

(16 U.S.C. 1537a)

PROHIBITED ACTS

SEC. 9. (a) GENERAL.—(1) Except as provided in sections 6(g)(2) and 10 of this Act, with respect to any endangered species of fish or wildlife listed pursuant to section 4 of this Act it is unlawful for any person subject to the jurisdiction of the United States to—

(A) import any such species into, or export any such species from the United States;

(B) take any such species within the United States or the territorial sea of the United States;

(C) take any such species upon the high seas;

(D) possess, sell, deliver, carry, transport, or ship, by any means whatsoever, any such species taken in violation of subparagraphs (B) and (C);

(E) deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of a commercial activity, any such species;

(F) sell or offer for sale in interstate or foreign commerce any such species; or

(G) violate any regulation pertaining to such species or to any threatened species of fish or wildlife listed pursuant to section 4 of this Act and promulgated by the Secretary pursuant to authority provided by this Act.

(2) Except as provided in sections 6(g)(2) and 10 of this Act, with respect to any endangered species of plants listed pursuant to section 4 of this Act, it is unlawful for any person subject to the jurisdiction of the United States to—

(A) import any such species into, or export any such species from, the United States;

(B) remove and reduce to possession any such species from areas under Federal jurisdiction; maliciously damage or destroy any such species on any such area; or remove cut, dig up, or damage or destroy any such species on any other area in knowing violation of any law or regulation of any state or in the course of any violation of a state criminal trespass law;

(C) deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of a commercial activity, any such species;

(D) sell or offer for sale in interstate or foreign commerce any such species; or

(E) violate any regulation pertaining to such species or to any threatened species of plants listed pursuant to section 4 of this Act and promulgated by the Secretary pursuant to authority provided by this Act.

(b)(1) SPECIES HELD IN CAPTIVITY OR CONTROLLED ENVIRONMENT.—The provisions of subsections (a)(1)(A) and (a)(1)(G) of this section shall not apply to any fish or wildlife which was held in captivity or in a controlled environment on (A) December 28, 1973, or (B) the date of the publication in the Federal Register of a final regulation adding such fish or wildlife species to any list published pursuant to subsection (c) of section 4 of this Act: *Provided*, That such holding and any subsequent holding or use of the fish or wildlife as not in the course of a commercial activity. With respect to any act prohibited by subsections (a)(1)(A) and (a)(1)(G) of this section which occurs after a period of 180 days from (i) December 28, 1973, or (ii) the date of publication in the Federal Register of a final regulation adding such fish or wildlife species to any list published pursuant to subsection (c) of section 4 of this Act, there shall be a rebuttable presumption that the fish or wildlife involved in such act is not entitled to the exemption contained in this subsection.

(2)(A) The provisions of subsections (a)(1) shall not apply to—

(i) any raptor legally held in captivity or in a controlled environment on the effective date of the Endangered Species Act Amendments of 1978; or

(ii) any progeny of any raptor described in clause (i); until such time as any such raptor or progeny is intentionally returned to a wild state.

(B) Any person holding any raptor or progeny described in subparagraph (A) must be able to demonstrate that the raptor or progeny does, in fact, qualify under the provisions of this paragraph, and shall maintain and submit to the Secretary, on request, such inventories, documentation, and records as the Secretary may by regulation require as being reasonably appropriate to carry out the purposes of this paragraph. Such requirements shall not unnecessarily duplicate the requirements of other rules and regulations promulgated by the Secretary.

(c) VIOLATION OF CONVENTION.—(1) It is unlawful for any person subject to the jurisdiction of the United States to engage in any trade in any specimens contrary to the provisions of the Convention, or to possess any specimens traded contrary to the provisions of the Convention, including the definitions of terms in article I thereof.

(2) Any importation into the United States of fish or wildlife shall, if—

(A) such fish or wildlife is not an endangered species listed pursuant to section 4 of this Act but is listed in Appendix II of the Convention;

(B) the taking and exportation of such fish or wildlife is not contrary to the provisions of the Convention and all other applicable requirements of the Convention have been satisfied;

(C) the applicable requirements of subsection (d), (e), and (f) of this section have been satisfied; and

(D) such importation is not made in the course of a commercial activity;

be presumed to be an importation not in violation of any provision of this Act or any regulation issued pursuant to this Act.

(d) IMPORTS AND EXPORTS.—

(1) IN GENERAL.—It is unlawful for any person, without first having obtained permission from the Secretary, to engage in business—

(A) as an importer or exporter of fish or wildlife (other than shellfish and fishery products which (i) are not listed pursuant to section 4 of this Act as endangered species or threatened species, and (ii) are imported for purposes of human or animal consumption or taken in waters under the jurisdiction of the United States or on the high seas for recreational purposes) or plants; or

(B) as an importer or exporter of any amount of raw or worked African elephant ivory.

(2) REQUIREMENTS.—Any person required to obtain permission under paragraph (1) of this subsection shall—

(A) keep such records as will fully and correctly disclose each importation or exportation of fish, wildlife, plants, or African elephant ivory made by him and the

subsequent disposition, made by him with respect to such fish, wildlife, plants, or ivory;

(B) at all reasonable times upon notice by a duly authorized representative of the Secretary, afford such representative access to his place of business, an opportunity to examine his inventory of imported fish, wildlife, plants, or African elephant ivory and the records required to be kept under subparagraph (A) of this paragraph, and to copy such records; and

(C) file such reports as the Secretary may require.

(3) REGULATIONS.—The Secretary shall prescribe such regulations as are necessary and appropriate to carry out the purposes of this subsection.

(4) RESTRICTION ON CONSIDERATION OF VALUE OF AMOUNT OF AFRICAN ELEPHANT IVORY IMPORTED OR EXPORTED.—In granting permission under this subsection for importation or exportation of African elephant ivory, the Secretary shall not vary the requirements for obtaining such permission on the basis of the value or amount of ivory imported or exported under such permission.

(e) REPORTS.—It is unlawful for any person importing or exporting fish or wildlife (other than shellfish and fishery products which (1) are not listed pursuant to section 4 of this Act as endangered or threatened species, and (2) are imported for purposes of human or animal consumption or taken in waters under the jurisdiction of the United States or on the high seas for recreational purposes) or plants to fail to file any declaration or report as the Secretary deems necessary to facilitate enforcement of this Act or to meet the obligations of the Convention.

(f) DESIGNATION OF PORTS.—(1) It is unlawful for any person subject to the jurisdiction of the United States to import into or export from the United States any fish or wildlife (other than shellfish and fishery products which (A) are not listed pursuant to section 4 of this Act as endangered species or threatened species, and (B) are imported for purposes of human or animal consumption or taken in waters under the jurisdiction of the United States or on the high seas for recreational purposes) or plants, except at a port of ports designated by the Secretary of the Interior. For the purposes of facilitating enforcement of this Act and reducing the costs thereof, the Secretary of the Interior, with approval of the Secretary of the Treasury and after notice and opportunity for public hearing, may, by regulation, designate ports and change such designations. The Secretary of the Interior, under such terms and conditions as he may prescribe, may permit the importation or exportation at nondesignated ports in the interest of the health or safety of the fish or wildlife or plants, or for other reasons if, in his discretion, he deems it appropriate and consistent with the purpose of this subsection.

(2) Any port designated by the Secretary of the Interior under the authority of section 4(d) of the Act of December 5, 1969 (16 U.S.C. 666cc-4(d)), shall, if such designation is in effect on the day before the date of the enactment of this Act, be deemed to be a port designated by the Secretary under paragraph (1) of this subsection until such time as the Secretary otherwise provides.

(g) VIOLATIONS.—It is unlawful for any person subject to the jurisdiction of the United States to attempt to commit, solicit another to commit, or cause to be committed, any offense defined in this section.

(16 U.S.C. 1538)

EXCEPTIONS

SEC. 10. (a) PERMITS.—(1) The Secretary may permit, under such terms and conditions as he shall prescribe—

(A) any act otherwise prohibited by section 9 for scientific purposes or to enhance the propagation or survival of the affected species, including, but not limited to, acts necessary for the establishment and maintenance of experimental populations pursuant subsection (j); or

(B) any taking otherwise prohibited by section 9(a)(1)(B) if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

(2)(A) No permit may be issued by the Secretary authorizing any taking referred to in paragraph (1)(B) unless the applicant therefor submits to the Secretary a conservation plan that specifies—

(i) the impact which will likely result from such taking;

(ii) what steps the applicant will take to minimize and mitigate such impacts, and the funding that will be available to implement such steps;

(iii) what alternative actions to such taking the applicant considered and the reasons why such alternatives are not being utilized; and

(iv) such other measures that the Secretary may require as being necessary or appropriate for purposes of the plan.

(B) If the Secretary finds, after opportunity for public comment, with respect to a permit application and the related conservation plan that—

(i) the taking will be incidental;

(ii) the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking;

(iii) the applicant will ensure that adequate funding for the plan will be provided;

(iv) the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; and

(v) the measures, if any, required under subparagraph (A)(iv) will be met;

and he has received such other assurances as he may require that the plan will be implemented, the Secretary shall issue the permit. The permit shall contain such terms and conditions as the Secretary deems necessary or appropriate to carry out the purposes of this paragraph, including, but not limited to, such reporting requirements as the Secretary deems necessary for determining whether such terms and conditions are being complied with.

(C) The Secretary shall revoke a permit issued under this paragraph if he finds that the permittee is not complying with the terms and conditions of the permit.

(b) **HARDSHIP EXEMPTIONS.**—(1) If any person enters into a contract with respect to a species of fish or wildlife or plant before the date of the publication in the Federal Register of notice of consideration of that species as an endangered species and the subsequent listing of that species as an endangered species pursuant to section 4 of this Act will cause undue hardship to such person under the contract, the Secretary, in order to minimize such hardship, may exempt such person from the application of section 9(a) of this Act to the extent the Secretary deems appropriate if such person applies to him for such exemption and includes with such application such information as the Secretary may require to prove such hardship; except that (A) no such exemption shall be for a duration of more than one year from the date of publication in the Federal Register of notice of consideration of the species concerned, or shall apply to a quantity of fish or wildlife or plants in excess of that specified by the Secretary; (B) the one-year period for those species of fish or wildlife listed by the Secretary as endangered prior to the effective date of this Act shall expire in accordance with the terms of section 3 of the Act of December 5, 1969 (83 Stat. 275); and (C) no such exemption may be granted for the importation or exportation of a specimen listed in Appendix I of the Convention which is to be used in a commercial activity.

(2) As used in this subsection, the term "undue economic hardship" shall include, but not be limited to:

(A) substantial economic loss resulting from inability caused by this Act to perform contracts with respect to species of fish and wildlife entered into prior to the date of publication in the Federal Register of a notice of consideration of such species as an endangered species;

(B) substantial economic loss to persons who, for the year prior to the notice of consideration of such species as an endangered species, derived a substantial portion of their income from the lawful taking of any listed species, which taking would be made unlawful under this Act; or

(C) curtailment of subsistence taking made unlawful under this Act by persons (i) not reasonably able to secure other sources of subsistence; and (ii) dependent to a substantial extent upon hunting and fishing for subsistence; and (iii) who must engage in such curtailed taking for subsistence purposes.

(3) The Secretary may make further requirements for a showing of undue economic hardship as he deems fit. Exceptions granted under this section may be limited by the Secretary in his discretion as to time, area, or other factor of applicability.

(c) **NOTICE AND REVIEW.**—The Secretary shall publish notice in the Federal Register of each application for an exemption or permit which is made under this section. Each notice shall invite the submission from interested parties, within thirty days after the date of the notice, of written data, views, or arguments with respect to the application; except that such thirty-day period may be waived by the Secretary in an emergency situation where the health or life of an endangered animal is threatened and no reasonable alternative is available to the applicant, but notice of any such waiver shall be published by the Secretary in the Federal Register within ten days following the issuance of the exemption or permit. Infor-

mation received by the Secretary as part of any application shall be available to the public as a matter of public record at every stage of the proceeding.

(d) PERMIT AND EXEMPTION POLICY.—The Secretary may grant exceptions under subsections (a)(1)(A) and (b) of this section only if he finds and publishes his finding in the Federal Register that (1) such exceptions were applied for in good faith, (2) if granted and exercised will not operate to the disadvantage of such endangered species, and (3) will be consistent with the purposes and policy set forth in section 2 of this Act.

(e) ALASKA NATIVES.—(1) Except as provided in paragraph (4) of this subsection the provisions of this Act shall not apply with respect to the taking of any endangered species or threatened species, or the importation of any such species taken pursuant to this section, by—

(A) any Indian, Aleut, or Eskimo who is an Alaskan Native who resides in Alaska; or

(B) any non-native permanent resident of an Alaska native village;

if such taking is primarily for subsistence purposes. Non-edible by-products of species taken pursuant to this section may be sold in interstate commerce when made into authentic native articles of handicrafts and clothing; except that the provisions of this subsection shall not apply to any non-native resident of an Alaskan native village found by the Secretary to be not primarily dependent upon the taking of fish and wildlife for consumption or for the creation and sale of authentic native articles of handicrafts and clothing.

(2) Any taking under this subsection may not be accomplished in a wasteful manner.

(3) As used in this subsection—

(i) The term "subsistence" includes selling any edible portion of fish or wildlife in native villages and towns in Alaska for native consumption within native villages or towns; and

¹(ii) The term "authentic native articles of handicrafts and clothing" means items composed wholly or in some significant respect to natural materials, and which are produced, decorated or fashioned in the exercise of traditional native handicrafts without the use of pantographs, multiple carvers, or other mass copying devices. Traditional native handicrafts include, but are not limited to, weaving, carving, stitching, sewing, lacing, beading, drawing, and painting.

(4) Notwithstanding the provisions of paragraph (1) of this subsection, whenever the Secretary determines that any species of fish or wildlife which is subject to taking under the provisions of this subsection is an endangered species or threatened species, and that such taking materially and negatively affects the threatened or endangered species, he may prescribe regulations upon the taking of such species by any such Indian, Aleut, Eskimo, or non-native Alaskan resident of an Alaskan native village. Such regulations may be established with reference to species, geographical descrip-

¹ So in law. Section 10(e)(3)(ii) of the Endangered Species Act of 1973 paragraph indention is incorrect. Indention should be same as 10(e)(3)(i)

tion of the area included, the season for taking, or any other factors related to the reason for establishing such regulations and consistent with the policy of this Act. Such regulations shall be prescribed after a notice and hearings in the affected judicial districts of Alaska and as otherwise required by section 103 of the Marine Mammal Protection Act of 1972, and shall be removed as soon as the Secretary determines that the need for their impositions has disappeared.

(f)(1) As used in this subsection—

(A) The term "pre-Act endangered species part" means—

(i) any sperm whale oil, including derivatives thereof, which was lawfully held within the United States on December 28, 1973, in the course of a commercial activity; or

(ii) any finished scrimshaw product, if such product or the raw material for such product was lawfully held within the United States on December 28, 1973, in the course of a commercial activity.

(B) The term "scrimshaw product" means any art form which involves the substantial etching or engraving of designs upon, or the substantial carving of figures, patterns, or designs from, any bone or tooth of any marine mammal of the order Cetacea. For purposes of this subsection, polishing or the adding of minor superficial markings does not constitute substantial etching, engraving, or carving.

(2) The Secretary, pursuant to the provisions of this subsection, may exempt, if such exemption is not in violation of the Convention, any pre-Act endangered species part from one or more of the following prohibitions.

(A) The prohibition on exportation from the United States set forth in section 9(a)(1)(A) of this Act.

(B) Any prohibition set forth in section 9(a)(1) (E) or (F) of this Act.

(3) Any person seeking an exemption described in paragraph (2) of this subsection shall make application therefor to the Secretary in such form and manner as he shall prescribe, but no such application may be considered by the Secretary unless the application—

(A) is received by the Secretary before the close of the one-year period beginning on the date on which regulations promulgated by the Secretary to carry out this subsection first take effect;

(B) contains a complete and detailed inventory of all pre-Act endangered species parts for which the applicant seeks exemption;

(C) is accompanied by such documentation as the Secretary may require to prove that any endangered species part or product claimed by the applicant to be a pre-Act endangered species part is in fact such a part; and

(D) contains such other information as the Secretary deems necessary and appropriate to carry out the purposes of this subsection.

(4) If the Secretary approves any application for exemption made under this subsection, he shall issue to the applicant a certificate of exemption which shall specify—

(A) any prohibition in section 9(a) of this Act which is exempted;

(B) the pre-Act endangered species parts to which the exemption applies;

(C) the period of time during which the exemption is in effect, but no exemption made under this subsection shall have force and effect after the close of the three-year period beginning on the date of issuance of the certificate unless such exemption is renewed under paragraph (8); and

(D) any term or condition prescribed pursuant to paragraph (5) (A) or (B), or both, which the Secretary deems necessary or appropriate.

(5) The Secretary shall prescribe such regulations as he deems necessary and appropriate to carry out the purposes of this subsection. Such regulations may set forth—

(A) terms and conditions which may be imposed on applicants for exemptions under this subsection (including, but not limited to, requirements that applicants register, inventories, keep complete sales records, permit duly authorized agents of the Secretary to inspect such inventories and records, and periodically file appropriate reports with the Secretary); and

(B) terms and conditions which may be imposed on any subsequent purchaser of any pre-Act endangered species part covered by an exemption granted under this subsection; to insure that any such part so exempted is adequately accounted for and not disposed of contrary to the provisions of this Act. No regulation prescribed by the Secretary to carry out the purposes of this subsection shall be subject to section 4(f)(2)(A)(i) of this Act.

(6)(A) Any contract for the sale of pre-Act endangered species parts which is entered into by the Administrator of General Services prior to the effective date of this subsection and pursuant to the notice published in the Federal Register on January 9, 1973, shall not be rendered invalid by virtue of the fact that fulfillment of such contract may be prohibited under section 9(a)(1)(F).

(B) In the event that this paragraph is held invalid, the validity of the remainder of the Act, including the remainder of this subsection, shall not be affected.

(7) Nothing in this subsection shall be construed to—

(A) exonerate any person from any act committed in violation of paragraphs (1)(A), (1)(E), or (1)(F) of section 9(a) prior to the date of enactment of this subsection; or

(B) immunize any person from prosecution for any such act.

(8)(A)(i) Any valid certificate of exemption which was renewed after October 13, 1982, and was in effect on March 31, 1988, shall be deemed to be renewed for a 6-month period beginning on the date of enactment of the Endangered Species Act Amendments of 1988. Any person holding such a certificate may apply to the Secretary for one additional renewal of such certificate for a period not to exceed 5 years beginning on the date of such enactment.

(B) If the Secretary approves any application for renewal of an exemption under this paragraph, he shall issue to the applicant a certificate of renewal of such exemption which shall provide that all terms, conditions, prohibitions, and other regulations made ap-

plicable by the previous certificate shall remain in effect during the period of the renewal.

(C) No exemption or renewal of such exemption made under this subsection shall have force and effect after the expiration date of the certificate of renewal of such exemption issued under this paragraph.

(D) No person may, after January 31, 1984, sell or offer for sale in interstate or foreign commerce, and pre-Act finished scrimshaw product unless such person holds a valid certificate of exemption issued by the Secretary under this subsection, and unless such product or the raw material for such product was held by such person on October 13, 1982.

(g) In connection with any action alleging a violation of section 9, any person claiming the benefit of any exemption or permit under this Act shall have the burden of proving that the exemption or permit is applicable, has been granted, and was valid and in force at the time of the alleged violation.

(h) CERTAIN ANTIQUE ARTICLES.—(1) Sections 4(d), 9(a), and 9(c) do not apply to any article which—

(A) is not less than 100 years of age;

(B) is composed in whole or in part of any endangered species or threatened species listed under section 4;

(C) has not been repaired or modified with any part of any such species on or after the date of the enactment of this Act; and

(D) is entered at a port designated under paragraph (3).

(2) Any person who wishes to import an article under the exemption provided by this subsection shall submit to the customs officer concerned at the time of entry of the article such documentation as the Secretary of the Treasury, after consultation with the Secretary of the Interior, shall by regulation require as being necessary to establish that the article meets the requirements set forth in paragraph (1) (A), (B), and (C).

(3) the Secretary of the Treasury, after consultation with the Secretary of the Interior, shall designate one port within each customs region at which articles described in paragraph (1) (A), (B), and (C) must be entered into the customs territory of the United States.

(4) Any person who imported, after December 27, 1973, and on or before the date of the enactment of the Endangered Species Act Amendments of 1978, any article described in paragraph (1) which—

(A) was not repaired or modified after the date of importation with any part of any endangered species or threatened species listed under section 4;

(B) was forfeited to the United States before such date of the enactment, or is subject to forfeiture to the United States on such date of enactment, pursuant to the assessment of a civil penalty under section 11; and

(C) is in the custody of the United States on such date of enactment;

may, before the close of the one-year period beginning on such date of enactment make application to the Secretary for return of the article. Application shall be made in such form and manner, and

contain such documentation, as the Secretary prescribes. If on the basis of any such application which is timely filed, the Secretary is satisfied that the requirements of this paragraph are met with respect to the article concerned, the Secretary shall return the article to the applicant and the importation of such article shall, on and after the date of return, be deemed to be a lawful importation under this Act.

(i) NONCOMMERCIAL TRANSSHIPMENTS.—Any importation into the United States of fish or wildlife shall, if—

(1) such fish or wildlife was lawfully taken and exported from the country of origin and country of reexport, if any;

(2) such fish or wildlife is in transit or transshipment through any place subject to the jurisdiction of the United States en route to a country where such fish or wildlife may be lawfully imported and received;

(3) the exporter or owner of such fish or wildlife gave explicit instructions not to ship such fish or wildlife through any place subject to the jurisdiction of the United States, or did all that could have reasonably been done to prevent transshipment, and the circumstances leading to the transshipment were beyond the exporter's or owner's control;

(4) the applicable requirements of the Convention have been satisfied; and

(5) such importation is not made in the course of a commercial activity,

be an importation not in violation of any provision of this Act or any regulation issued pursuant to this Act while such fish or wildlife remains in the control of the United States Customs Service.

(j) EXPERIMENTAL POPULATIONS.—(1) For purposes of this subsection, the term "experimental population" means any population (including any offspring arising solely therefrom) authorized by the Secretary for release under paragraph (2), but only when, and at such times as, the population is wholly separate geographically from nonexperimental populations of the same species.

(2)(A) The Secretary may authorize the release (and the related transportation) of any population (including eggs, propagules, or individuals) of an endangered species or a threatened species outside the current range of such species if the Secretary determines that such release will further the conservation of such species.

(B) Before authorizing the release of any population under subparagraph (A), the Secretary shall by regulation identify the population and determine, on the basis of the best available information, whether or not such population is essential to the continued existence of an endangered species or a threatened species.

(C) For the purposes of this Act, each member of an experimental population shall be treated as a threatened species; except that—

(i) solely for purposes of section 7 (other than subsection (a)(1) thereof), an experimental population determined under subparagraph (B) to be not essential to the continued existence of a species shall be treated, except when it occurs in an area within the National Wildlife Refuge System or the National Park System, as a species proposed to be listed under section 4; and

(ii) critical habitat shall not be designated under this Act for any experimental population determined under subparagraph (B) to be not essential to the continued existence of a species.

(3) The Secretary, with respect to population of endangered species or threatened species that the Secretary authorized, before the date of the enactment of this subsection, for release in geographical areas separate from the other populations of such species, shall determine by regulation which of such populations are an experimental population for the purposes of this subsection and whether or not each is essential to the continued existence of an endangered species or a threatened species.

(16 U.S.C. 1539)

PENALTIES AND ENFORCEMENT

SEC. 11. (a) CIVIL PENALTIES.—(1) Any person who knowingly violates, and any person engaged in business as an importer or exporter of fish, wildlife, or plants who violates, any provision of this Act, or any provision of any permit or certificate issued hereunder, or of any regulation issued in order to implement subsection (a)(1)(A), (B), (C), (D), (E), or (F), (a)(2)(A), (B), (C), or (D), (c), (d), (other than regulation relating to recordkeeping or filing or reports), (f), or (g) of section 9 of this Act, may be assessed a civil penalty by the Secretary of not more than \$25,000 for each violation. Any person who knowingly violates, and any person engaged in business as an importer or exporter of fish, wildlife, or plants who violates, any provision of any other regulation issued under this Act may be assessed a civil penalty by the Secretary of not more than \$12,000 for each such violation. Any person who otherwise violates any provision of this Act, or any regulation, permit, or certificate issued hereunder, may be assessed a civil penalty by the Secretary of not more than \$500 for each such violation. No penalty may be assessed under this subsection unless such person is given notice and opportunity for a hearing with respect to such violation. Each violation shall be a separate offense. Any such civil penalty may be remitted or mitigated by the Secretary. Upon any failure to pay a penalty assessed under this subsection, the Secretary may request the Attorney General to institute a civil action in a district court of the United States for any district in which such person is found, resides, or transacts business to collect the penalty and such court shall have jurisdiction to hear and decide any such action. The court shall hear such action on the record made before the Secretary and shall sustain his action if it is supported by substantial evidence on the record considered as a whole.

(2) Hearings held during proceedings for the assessment of civil penalties by paragraph (1) of this subsection shall be conducted in accordance with section 554 of title 5, United States Code. The Secretary may issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents, and administer oaths. Witnesses summoned shall be paid the same fees and mileage that are paid to witnesses in the courts of the United States. In case of contumacy or refusal to obey a subpoena served upon any person pursuant to this para-

graph, the district court of the United States for any district in which such person is found or resides or transacts business, upon application by the United States and after notice to such person, shall have jurisdiction to issue an order requiring such person to appear and give testimony before the Secretary or to appear and produce documents before the Secretary, or both, and any failure to obey such order of the court may be punished by such court as a contempt thereof.

(3) Notwithstanding any other provision of this Act, no civil penalty shall be imposed if it can be shown by a preponderance of the evidence that the defendant committed an act based on a good faith belief that he was acting to protect himself or herself, a member of his or her family, or any other individual from bodily harm, from any endangered or threatened species.

(b) CRIMINAL VIOLATIONS.—(1) Any person who knowingly violates any provision of this Act, of any permit or certificate issued hereunder, or of any regulation issued in order to implement subsection (a)(1)(A), (B), (C), (D), (E), or (F); (a)(2)(A), (B), (C), or (D), (c), (d) (other than a regulation relating to recordkeeping, or filing of reports), (f), or (g) of section 9 of this Act shall, upon conviction, be fined not more than \$50,000 or imprisoned for not more than one year, or both. Any person who knowingly violates any provision of any other regulation issued under this Act shall, upon conviction, be fined not more than \$25,000 or imprisoned for not more than six months, or both.

(2) The head of any Federal agency which has issued a lease, license, permit, or other agreement authorizing a person to import or export fish, wildlife, or plants, or to operate a quarantine station for imported wildlife, or authorizing the use of Federal lands, including grazing of domestic livestock, to any person who is convicted of a criminal violation of this Act or any regulation, permit, or certificate issued hereunder may immediately modify, suspend, or revoke each lease, license, permit, or other agreement. The Secretary shall also suspend for a period of up to one year, or cancel, any Federal hunting or fishing permits or stamps issued to any person who is convicted of a criminal violation of any provision of this Act or any regulation, permit, or certificate issued hereunder. The United States shall not be liable for the payments of any compensation, reimbursement, or damages in connection with the modification, suspension, or revocation of any leases, licenses permits stamps, or other agreements pursuant to this section.

(3) Notwithstanding any other provision of this Act, it shall be a defense to prosecution under this subsection if the defendant committed the offense based on a good faith belief that he was acting to protect himself or herself, a member of his or her family, or any other individual, from bodily harm from any endangered or threatened species.

(c) DISTRICT COURT JURISDICTION.—The several district courts of the United States; including the courts enumerated in section 460 of title 28, United States Code, shall have jurisdiction over any actions arising under this Act. For the purpose of this Act, American Samoa shall be included within the judicial district of the District Court of the United States for the District of Hawaii.

(d) REWARDS AND CERTAIN INCIDENTAL EXPENSES.—The Secretary or the Secretary of the Treasury shall pay, from sums received as penalties, fines, or forfeitures of property for any violations of this chapter or any regulation issued hereunder (1) a reward to any person who furnishes information which leads to an arrest, a criminal conviction, civil penalty assessment, or forfeiture of property for any violation of this chapter or any regulation issued hereunder, and (2) the reasonable and necessary costs incurred by any person in providing temporary care for any fish, wildlife, or plant pending the disposition of any civil or criminal proceeding alleging a violation of this chapter with respect to that fish, wildlife, or plant. The amount of the reward, if any, is to be designated by the Secretary or the Secretary of the Treasury, as appropriate. Any officer or employee of the United States or any State or local government who furnishes information or renders service in the performance of his official duties is ineligible for payment under this subsection. Whenever the balance of sums received under this section and section 6(d) of the Act of November 16, 1981 (16 U.S.C. 3375(d)) as penalties or fines, or from forfeitures of property, exceed \$500,000, the Secretary of the Treasury shall deposit an amount equal to such excess balance in the cooperative endangered species conservation fund established under section 6(i) of this Act.

(e) ENFORCEMENT.—(1) The provisions of this Act and any regulations or permits issued pursuant thereto shall be enforced by the Secretary, the Secretary of the Treasury, or the Secretary of the Department in which the Coast Guard is operating, or all such Secretaries. Each such Secretary may utilize by agreement, with or without reimbursement, the personnel, services, and facilities of any other Federal agency or any State agency for purposes of enforcing this Act.

(2) The judges of the district courts of the United States and the United States magistrates may within their respective jurisdictions, upon proper oath or affirmation showing probable cause, issue such warrants or other process as may be required for enforcement of this Act and any regulation issued thereunder.

(3) Any person authorized by the Secretary, the Secretary of the Treasury, or the Secretary of the Department in which the Coast Guard is operating, to enforce this Act may detain for inspection and inspect any package, crate, or other container, including its contents, and all accompanying documents, upon importation or exportation. Such persons may make arrests without a warrant for any violation of this Act if he has reasonable grounds to believe that the person to be arrested is committing the violation in his presence or view and may execute and serve any arrest warrant, search warrant, or other warrant or civil or criminal process issued by any officer or court of competent jurisdiction for enforcement of this Act. Such person so authorized may search and seize, with or without a warrant, as authorized by law. Any fish, wildlife, property, or item so seized shall be held by any person authorized by the Secretary, the Secretary of the Treasury, or the Secretary of the Department in which the Coast Guard is operating pending disposition of civil or criminal proceedings, or the institution of an action in rem for forfeiture of such fish, wildlife, property, or item

pursuant to paragraph (4) of the subsection; except that the Secretary may, in lieu of holding such fish, wildlife, property, or item, permit the owner or consignee to post a bond or other surety satisfactory to the Secretary, but upon forfeiture of any such property to the United States, or the abandonment or waiver of any claim to any such property, it shall be disposed of (other than by sale to the general public) by the Secretary in such a manner, consistent with the purposes of this Act, as the Secretary shall by regulation prescribe.

(4)(A) All fish or wildlife or plants taken, possessed, sold, purchased, offered for sale or purchase, transported, delivered, received, carried, shipped, exported, or imported contrary to the provisions of this Act, any regulation made pursuant thereto, or any permit or certificate issued hereunder shall be subject to forfeiture to the United States.

(B) All guns, traps, nets, and other equipment, vessels, vehicles, aircraft, and other means of transportation used to aid the taking, possessing, selling, purchasing, offering for sale or purchase, transporting, delivering, receiving, carrying, shipping, exporting, or importing of any fish or wildlife or plants in violation of this Act, any regulation made pursuant thereto, or any permit or certificate issued thereunder shall be subject to forfeiture to the United States upon conviction of a criminal violation pursuant to section 11(b)(1) of this Act.

(5) All provisions of law relating to the seizure, forfeiture, and condemnation of a vessel for violation of the customs laws, the disposition of such vessel or the proceeds from the sale thereof, and the remission or mitigation of such forfeiture, shall apply to the seizures and forfeitures incurred, or alleged to have been incurred, under the provisions of this Act, insofar as such provisions of law are applicable and not inconsistent with the provisions of this Act; except that all powers, rights, and duties conferred or imposed by the customs laws upon any officer or employee of the Treasury Department shall, for the purposes of this Act, be exercised or performed by the Secretary or by such persons as he may designate.

(6) The Attorney General of the United States may seek to enjoin any person who is alleged to be in violation of any provision of this Act or regulation issued under authority thereof.

(f) REGULATIONS.—The Secretary, the Secretary of the Treasury, and the Secretary of the Department in which the Coast Guard is operating, are authorized to promulgate such regulations as may be appropriate to enforce this Act, and charge reasonable fees for expenses to the Government connected with permits or certificates authorized by this Act including processing applications and reasonable inspections, and with the transfer, board, handling, or storage of fish or wildlife or plants and evidentiary items seized and forfeited under this Act. All such fees collected pursuant to this subsection shall be deposited in the Treasury to the credit of the appropriation which is current and chargeable for the cost of furnishing the services. Appropriated funds may be expended pending reimbursement from parties in interest.

(g) CITIZEN SUITS.—(1) Except as provided in paragraph (2) of this subsection any person may commence a civil suit on his own behalf—

(A) to enjoin any person, including the United States and any other governmental instrumentality or agency (to the extent permitted by the eleventh amendment to the Constitution), who is alleged to be in violation of any provision of this Act or regulation issued under the authority thereof; or

(B) to compel the Secretary to apply, pursuant to section 6(g)(2)(B)(ii) of this Act, the prohibitions set forth in or authorized pursuant to section 4(d) or section 9(a)(1)(B) of this Act with respect to the taking of any resident endangered species or threatened species within any State; or

(C) against the Secretary where there is alleged a failure of the Secretary to perform any act or duty under section 4 which is not discretionary with the Secretary.

The district courts shall have jurisdiction, without regard to the amount in controversy or the citizenship of the parties, to enforce any such provision or regulation or to order the Secretary to perform such act or duty, as the case may be. In any civil suit commenced under subparagraph (B) the district court shall compel the Secretary to apply the prohibition sought if the court finds that the allegation that an emergency exists is supported by substantial evidence.

(2)(A) No action may be commenced under subparagraph (1)(A) of this section—

(i) prior to sixty days after written notice of the violation has been given to the Secretary, and to any alleged violator of any such provision or regulation;

(ii) if the Secretary has commenced action to impose a penalty pursuant to subsection (a) of this section; or

(iii) if the United States has commenced and is diligently prosecuting a criminal action in a court of the United States or a State to redress a violation of any such provision or regulation.

(B) No action may be commenced under subparagraph (1)(B) of this section—

(i) prior to sixty days after written notice has been given to the Secretary setting forth the reasons why an emergency is thought to exist with respect to an endangered species or a threatened species in the State concerned; or

(ii) if the Secretary has commenced and is diligently prosecuting action under section 6(g)(2)(B)(ii) of this Act to determine whether any such emergency exists.

(C) No action may be commenced under subparagraph (1)(C) of this section prior to sixty days after written notice has been given to the Secretary; except that such action may be brought immediately after such notification in the case of an action under this section respecting an emergency posing a significant risk to the well-being of any species of fish or wildlife or plants.

(3)(A) Any suit under this subsection may be brought in the judicial district in which the violation occurs.

(B) In any such suit under this subsection in which the United States is not a party, the Attorney General, at the request of the Secretary, may intervene on behalf of the United States as a matter of right.

(4) The court, in issuing any final order in any suit brought pursuant to paragraph (1) of this subsection, may award costs of litigation (including reasonable attorney and expert witness fees) to any party, whenever the court determines such award is appropriate.

(5) The injunctive relief provided by this subsection shall not restrict any right which any person (or class of persons) may have under any statute or common law to seek enforcement of any standard or limitation or to seek any other relief (including relief against the Secretary or a State agency).

(h) COORDINATION WITH OTHER LAWS.—The Secretary of Agriculture and the Secretary shall provide for appropriate coordination of the administration of this Act with the administration of the animal quarantine laws (21 U.S.C. 101–105, 111–135b, and 612–614) and section 306 of the Tariff Act of 1930 (19 U.S.C. 1306). Nothing in this Act or any amendment made by this Act shall be construed as superseding or limiting in any manner the functions of the Secretary of Agriculture under any other law relating to prohibited or restricted importations or possession of animals and other articles and no proceeding or determination under this Act shall preclude any proceeding or be considered determinative of any issue of fact or law in any proceeding under any Act administered by the Secretary of Agriculture. Nothing in this Act shall be construed as superseding or limiting in any manner the functions and responsibilities of the Secretary of the Treasury under the Tariff Act of 1930, including, without limitation, section 527 of that Act (19 U.S.C. 1527), relating to the importation of wildlife taken, killed, possessed, or exported to the United States in violation of the laws or regulations of a foreign country.

(16 U.S.C. 1540)

ENDANGERED PLANTS

SEC. 12. The Secretary of the Smithsonian Institution, in conjunction with other affected agencies, is authorized and directed to review (1) species of plants which are now or may become endangered, or threatened and (2) methods of adequately conserving such species, and to report to Congress, within one year after the date of the enactment of this Act, the results of such review including recommendations for new legislation or the amendment of existing legislation.

(16 U.S.C. 1541)

CONFORMING AMENDMENTS

SEC. 13. (a) Subsection 4(c) of the Act of October 15, 1966 (80 Stat. 928, 16 U.S.C. 668dd(c)), is further amended by revising the second sentence thereof to read as follows: "With the exception of endangered species and threatened species listed by the Secretary pursuant to section 4 of the Endangered Species Act of 1973 in States wherein a cooperative agreement does not exist pursuant to section 6(c) of that Act, nothing in this Act, shall be construed to authorize the Secretary to control or regulate hunting or fishing of resident fish and wildlife on lands not within the system."

(b) Subsection 10(a) of the Migratory Bird Conservation Act (45 Stat. 1224, 16 U.S.C. 715i(a)) and subsection 401(a) of the Act of June 15, 1935 (49 Stat. 383, 16 U.S.C. 715s(a)) are each amended by striking out "threatened with extinction," and inserting in lieu thereof the following: "listed pursuant to section 4 of the Endangered Species Act of 1973 as endangered species or threatened species."

(c) Section 7(a)(1) of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 4601-9(a)(1)) is amended by striking out:

"THREATENED SPECIES.—For any national area which may be authorized for the preservation of species of fish or wildlife that are threatened with extinction," and inserting in lieu thereof the following:

"ENDANGERED SPECIES AND THREATENED SPECIES.—For lands, waters, or interests therein, the acquisition of which is authorized under section 5(a) of the Endangered Species Act of 1973, needed for the purpose of conserving endangered or threatened species of fish or wildlife or plants.

(d) The first sentence of section 2 of the Act of September 28, 1962, amended (76 Stat. 653, 16 U.S.C. 460k-1), is amended to read as follows:

"The Secretary is authorized to acquire areas of land, or interests therein, which are suitable for—

"(1) incidental fish and wildlife-oriented recreational development;

"(2) the protection of natural resources;

"(3) the conservation of endangered species or threatened species listed by the Secretary pursuant to section 4 of the Endangered Species Act of 1973; or

"(4) carrying out two or more of the purposes set forth in paragraphs (1) through (3) of this section, and are adjacent to, or within, the said conservation areas, except that the acquisition of any land or interest therein pursuant to this section shall be accomplished only with such funds as may be appropriated therefor by the Congress or donated for such purposes, but such property shall not be acquired with funds obtained from the sale of Federal migratory bird hunting stamps."

(e) The Marine Mammal Protection Act of 1972 (16 U.S.C. 1361-1407) is amended—

(1) by striking out "Endangered Species Conservation Act of 1969" in section 3(1)(B) thereof and inserting in lieu thereof the following: "Endangered Species Act of 1973";

(2) by striking out "pursuant to the Endangered Species Conservation Act of 1969" in section 101(a)(3)(B) thereof and inserting in lieu thereof the following: "or threatened species pursuant to the Endangered Species Act of 1973".

(3) by striking out "endangered under the Endangered Species Conservation Act of 1969" in section 102(b)(3) thereof and inserting in lieu thereof the following: "an endangered species or threatened species pursuant to the Endangered Species Act of 1973"; and

(4) by striking out "of the Interior and revisions of the Endangered Species List, authorized by the Endangered Species Conservation Act of 1969," in section 202(a)(6) thereof and in-

serting in lieu thereof the following: "such revisions of the endangered species list and threatened species list published pursuant to section 4(c)(1) of the Endangered Species Act of 1973".

(f) Section 2(1) of the Federal Environmental Pesticide Control Act of 1972 (Public Law 92-516) is amended by striking out the words "by the Secretary of the Interior under Public Law 91-135" and inserting in lieu thereof the words "or threatened by the Secretary pursuant to the Endangered Species Act of 1973".

REPEALER

SEC. 14. The Endangered Species Conservation Act of 1969 (sections 1 through 3 of the Act of October 15, 1966, and sections 1 through 6 of the Act of December 5, 1969; 16 U.S.C. 668aa-668cc-6), is repealed.

AUTHORIZATION OF APPROPRIATIONS

SEC. 15. (a) IN GENERAL.—Except as provided in subsection (b), (c), and (d), there are authorized to be appropriated—

(1) not to exceed \$35,000,000 for fiscal year 1988, \$36,500,000 for fiscal year 1989, \$38,000,000 for fiscal year 1990, \$39,500,000 for fiscal year 1991, and \$41,500,000 for fiscal year 1992 to enable the Department of the Interior to carry out such functions and responsibilities as it may have been given under this Act;

(2) not to exceed \$5,750,000 for fiscal year 1988, \$6,250,000 for each of fiscal years 1989 and 1990, and \$6,750,000 for each of fiscal year 1991 and 1992 to enable the Department of Commerce to carry out such functions and responsibilities as it may have been given under this Act; and

(3) not to exceed \$2,200,000 for fiscal year 1988, \$2,400,000 for each of fiscal years 1989 and 1990, and \$2,600,000 for each of fiscal years 1991 and 1992, to enable the Department of Agriculture to carry out its functions and responsibilities with respect to the enforcement of this Act and the Convention which pertain to the importation or exportation of plants.

(b) EXEMPTIONS FROM ACT.—There are authorized to be appropriated to the Secretary to assist him and the Endangered Species Committee in carrying out their functions under sections¹ 7 (e), (g), and (h) not to exceed \$600,000 for each for fiscal year 1988, 1989, 1990, 1991, and 1992.

(c) CONVENTION IMPLEMENTATION.—There are authorized to be appropriated to the Department of the Interior for purposes of carrying out section 8A(e) not to exceed \$400,000 for each of fiscal years 1988, 1989, and 1990, and \$500,000 for each of fiscal years 1991 and 1992, and such sums shall remain available until expended.

(16 U.S.C. 1542)

EFFECTIVE DATE

SEC. 16. This Act shall take effect on the date of its enactment.

¹ So in original. Probably should be "section".

MARINE MAMMAL PROTECTION ACT OF 1972

SEC. 17. Except as otherwise provided in this Act, no provision of this Act shall take precedence over any more restrictive conflicting provision of the Marine Mammal Protection Act of 1972.

(16 U.S.C. 1543)

ANNUAL COST ANALYSIS BY THE FISH AND WILDLIFE SERVICE

SEC. 18. On or before January 15, 1990, and each January 15 thereafter, the Secretary of the Interior, acting through the Fish and Wildlife Service, shall submit to the Congress an annual report covering the preceding fiscal year which shall contain—

(1) an accounting on a species by species basis of all reasonably unidentifiable Federal expenditures made primarily for the conservation of endangered or threatened species pursuant to this Act; and

(2) an accounting on a species by species basis for all reasonably identifiable expenditures made primarily for the conservation of endangered or threatened species pursuant to this Act by states receiving grants under section 6.

(16 U.S.C. 1544)

APPENDIX

Section 216 Rivers and Harbors Act of 1970 P.L. 91-611, 84 Stat. 1830

Sec. 216. The Secretary of the Army, acting through the Chief of Engineers, is authorized to review the operation of projects the construction of which has been completed and which were constructed by the Corps of Engineers in the interest of navigation, flood control, water supply, and related purposes, when found advisable due [to] the significantly changed physical or economic conditions, and to report thereon to Congress with recommendations on the advisability of modifying the structures or their operation, and for improving the quality of the environment in the overall public interest.

CORPS OF ENGINEERS ENVIRONMENTAL AUTHORITIES FROM
WATER RESOURCE DEVELOPMENT ACTS (WRDA)
1986 THROUGH 2000
AS FOUND IN THE UNITED STATES CODE

Prepared April, 2001

This document contains the provisions of a majority of the major environmental authorities of the Corps of Engineers as found in the United States Code. All but two are located in Title 33, Chapter 36, of the Code:

Title 33 - Navigation and Navigable Waters
Chapter 36 - Water Resources Development
Subchapter I - Cost Sharing
Subchapter II - Harbor Development
Subchapter III - Inland Waterway Transportation System
Subchapter IV - Water Resources Studies
Subchapter V - General Provisions

Chapter 36 contains the Water Resources Development Act (WRDA) of 1986, as amended, and most of the other environmental authorities contained in subsequent WRDAs.

The sections are listed below by their titles in WRDAs. Thus, the U.S. Code sections are not always sequentially numbered and not all Code sections are included, as not all deal with this subject. Several of the sections of WRDAs subsequent to 1986 have amended Subchapter V sections or added new ones. Where subsequent WRDAs have amended existing Code sections, these WRDA sections are not listed separately. The material below also does not include authorities that have terminated. They also do not include authorities that are not at least partially national in scope. A few of the listed authorities are found elsewhere in Title 33, as indicated.

At the time of preparation of this summary, changes made by WRDA 1999 and WRDA 2000 had not yet been incorporated into the U.S. Code sections. Changes made by WRDA 1999 and WRDA 2000 are included in this this summary, but are not specifically noted in the "Amended" sections.

The US Code on line can be accessed at: <http://law2.house.gov> or <http://www.access.gpo.gov/congress/cong013.html>

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Section 202, WRDA 2000 ---- not added to U.S. Code as of Feb. 2001

Section 704, Water Resources Development Act of 1986, as amended

Study of Corps Capability to Conserve Fish and Wildlife

TITLE 33 - NAVIGATION AND NAVIGABLE WATERS
CHAPTER 36 - WATER RESOURCES DEVELOPMENT
SUBCHAPTER IV - WATER RESOURCES STUDIES

Section 2263. Study of Corps Capability to Conserve Fish and Wildlife

(a) The Secretary shall investigate and study the feasibility of utilizing the capabilities of the United States Army Corps of Engineers to conserve fish and wildlife (including their habitats) where such fish and wildlife are indigenous to the United States, its possessions, or its territories. The scope of such study shall include the use of engineering or construction capabilities to create alternative habitats, or to improve, enlarge, develop, or otherwise beneficially modify existing habitats of such fish and wildlife. The study shall be conducted in consultation with the Director of the Fish and Wildlife Service of the Department of the Interior, the Assistant Administrator for Fisheries of the National Oceanic and Atmospheric Administration, and the Administrator of the Environmental Protection Agency, and shall be transmitted within the 30-month period beginning on November 17, 1986, by the Secretary to Congress, together with the findings, conclusions, and recommendations of the Chief of Engineers. The Secretary, in consultation with the Federal officers referred to in the preceding sentence, shall undertake a continuing review of the matters covered in the study and shall transmit to Congress, on a biennial basis, any revisions to the study that may be required as a result of the review, together with the findings, conclusions, and recommendations of the Chief of Engineers.

(b) The Secretary is further authorized to conduct projects of alternative or beneficially modified habitats for fish and wildlife, including but not limited to man-made reefs for fish. There is authorized to be appropriated not to exceed \$20,000,000 to carry out such projects. Such projects shall be developed, and their effectiveness evaluated, in consultation with the Director of the Fish and Wildlife Service and the Assistant Administrator for Fisheries of the National Oceanic and Atmospheric Administration. Such projects shall include -

- (1) the construction of a reef for fish habitat in Lake Erie in the vicinity of Buffalo, New York;
- (2) the construction of a reef for fish habitat in the Atlantic Ocean in the vicinity of Fort Lauderdale, Florida;

(3) the construction of a reef for fish habitat in Lake Ontario in the vicinity of the town of Newfane, New York; and

(4) the construction of reefs and related clean shell substrate for fish habitat, including manmade 3-dimensional oyster reefs, in the Chesapeake Bay and its tributaries in Maryland and Virginia if the reefs are preserved as permanent sanctuaries by the non-Federal interests, consistent with the recommendations of the scientific consensus document on Chesapeake Bay oyster restoration dated June 1999.

The non-Federal share of the cost of any project under this section shall be 25 percent. In carrying out paragraph (4), the Chief of Engineers may solicit participation by and the services of commercial watermen in the construction of the reefs.

SOURCE

(Pub. L. 99-662, title VII, Sec. 704, Nov. 17, 1986, 100 Stat. 4157; Pub. L. 104-303, title V, Sec. 505, Oct. 12, 1996, 110 Stat. 3757.)

AMENDMENTS

1996 - Subsec. (b). Pub. L. 104-303 substituted "\$7,000,000" for "\$5,000,000" in introductory provisions and inserted "and Virginia" after "Maryland" in par. (4).

Section 906, Water Resources Development Act of 1986, as amended

Fish and Wildlife Mitigation

TITLE 33 - NAVIGATION AND NAVIGABLE WATERS
CHAPTER 36 - WATER RESOURCES DEVELOPMENT
SUBCHAPTER V - GENERAL PROVISIONS

Sec. 2283. Fish and Wildlife Mitigation

(a) Steps to be taken prior to or concurrently with construction

(1) In the case of any water resources project which is authorized to be constructed by the Secretary before, on, or after November 17, 1986, construction of which has not commenced as of November 17, 1986, and which necessitates the mitigation of fish and wildlife losses, including the acquisition of lands or interests in lands to mitigate losses to fish and wildlife, as a result of such project, such mitigation, including acquisition of the lands or interests -

(A) shall be undertaken or acquired before any construction of the project (other than such acquisition) commences, or

(B) shall be undertaken or acquired concurrently with lands and interests in lands for project purposes (other than mitigation of fish and wildlife losses),

whichever the Secretary determines is appropriate, except that any physical construction required for the purposes of mitigation may be undertaken concurrently with the physical construction of such project.

(2) For the purposes of this subsection, any project authorized before November 17, 1986, on which more than 50 percent of the land needed for the project, exclusive of mitigation lands, has been acquired shall be deemed to have commenced construction under this subsection.

(b) Acquisition of lands or interests in lands for mitigation

(1) After consultation with appropriate Federal and non-Federal agencies, the Secretary is authorized to mitigate damages to fish and wildlife resulting from any water resources project under his jurisdiction, whether completed, under construction, or to be constructed. Such mitigation may include the acquisition of lands, or interests therein, except that -

(A) acquisition under this paragraph shall not be by condemnation in the case of projects completed as of November 17, 1986, or on which at least 10 percent of the physical construction on the project has been completed as of November 17, 1986; and

(B) acquisition of water, or interests therein, under this paragraph, shall not be by condemnation.

The Secretary, shall, under the terms of this paragraph, obligate no more than \$30,000,000 in any fiscal year. With respect to any water resources project, the authority under this subsection shall not apply to measures that cost more than \$7,500,000 or 10 percent of the cost of the project, whichever is greater.

(2) Whenever, after his review, the Secretary determines that such mitigation features under this subsection are likely to require condemnation under subparagraph (A) or (B) of paragraph (1) of this subsection, the Secretary shall transmit to Congress a report on such proposed modification, together with his recommendations.

(c) Allocation of mitigation costs

Costs incurred after November 17, 1986, including lands, easements, rights-of-way, and relocations, for implementation and operation, maintenance, and rehabilitation to mitigate damages to fish and wildlife shall be allocated among authorized project purposes in accordance with applicable cost allocation procedures, and shall be subject to cost sharing or reimbursement to the same extent as such other project costs are shared or reimbursed, except that when such costs are covered by contracts entered into prior to November 17, 1986, such costs shall not be recovered without the consent of the non-Federal interests or until such contracts are complied with or renegotiated.

(d) Mitigation plans as part of project proposals

(1) In General, after November 17, 1986, the Secretary shall not Submit any proposal for the authorization of any water resources project to the Congress unless such report contains

(A) a recommendation with a specific plan to mitigate fish and wildlife losses created by such project, or

(B) a determination by the Secretary that such project will have negligible adverse impact on fish and wildlife.

Specific mitigation plans shall ensure that impacts to bottomland hardwood forests are mitigated in-kind, to the extent possible. In carrying out this subsection, the Secretary shall consult with appropriate Federal and non-Federal agencies.

(2) DESIGN OF MITIGATION PROJECTS-The Secretary shall design mitigation projects to reflect contemporary understanding of the science of mitigating the adverse environmental impacts of water resources projects. [NOTE: per P.L. 106-541, sec. 224,

(b) CONCURRENT MITIGATION-

(1) INVESTIGATION-

(A) IN GENERAL- The Comptroller General shall conduct an investigation of the effectiveness of the concurrent mitigation

requirements of section 906 of the Water Resources Development Act of 1986 (33 U.S.C. 2283). In carrying out the investigation, the Comptroller General shall determine--

(i) whether or not there are instances in which less than 50 percent of required mitigation is completed before initiation of project construction and the number of such instances; and

(ii) the extent to which mitigation projects restore natural hydrologic conditions, restore native vegetation, and otherwise support native fish and wildlife species.

(B) SPECIAL RULE- In carrying out subparagraph (A)(ii), the Comptroller General shall--

(i) establish a panel of independent scientists, comprised of individuals with expertise and experience in applicable scientific disciplines, to assist the Comptroller General; and

(ii) assess methods used by the Corps of Engineers to monitor and evaluate mitigation projects, and compare Corps of Engineers mitigation project design, construction, monitoring, and evaluation practices with those used in other publicly and privately financed mitigation projects.

(2) REPORT- Not later than 1 year after the date of enactment of this Act, the Comptroller General shall transmit to Congress a report on the results of the investigation.

(e) First enhancement costs as Federal costs

In those cases when the Secretary, as part of any report to Congress, recommends activities to enhance fish and wildlife resources, the first costs of such enhancement shall be a Federal cost when -

(1) such enhancement provides benefits that are determined to be national, including benefits to species that are identified by the National Marine Fisheries Service as of national economic importance, species that are subject to treaties or international convention to which the United States is a party, and anadromous fish;

(2) such enhancement is designed to benefit species that have been listed as threatened or endangered by the Secretary of the Interior under the terms of the Endangered Species Act, as amended (16 U.S.C. 1531, et seq.), or

(3) such activities are located on lands managed as a national wildlife refuge.

When benefits of enhancement do not qualify under the preceding sentence, 25 percent of such first costs of enhancement shall be provided by non-Federal interests under a schedule of reimbursement determined by the Secretary. Not more than 80 percent of the non-Federal share of such first costs may be satisfied through in-kind contributions, including facilities, supplies, and services that are necessary to carry out

the enhancement project. The non-Federal share of operation, maintenance, and rehabilitation of activities to enhance fish and wildlife resources shall be 25 percent.

(f) National benefits from enhancement measures for Atchafalaya Floodway System and Mississippi Delta Region projects

Fish and wildlife enhancement measures carried out as part of the project for Atchafalaya Floodway System, Louisiana, authorized by Public Law 99-88, and the project for Mississippi Delta Region, Louisiana, authorized by the Flood Control Act of 1965, shall be considered to provide benefits that are national for purposes of this section.

(g) Fish and Wildlife Coordination Act supplementation

The provisions of subsections (a), (b), and (d) of this section shall be deemed to supplement the responsibility and authority of the Secretary pursuant to the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), and nothing in this section is intended to affect that Act.

SOURCE

(Pub. L. 99-662, title IX, Sec. 906, Nov. 17, 1986, 100 Stat. 4186; Pub. L. 102-580, title III, Sec. 333(a), Oct. 31, 1992, 106 Stat. 4852.)

REFERENCES IN TEXT

The Endangered Species Act, as amended, referred to in subsec. (e)(2), probably means the Endangered Species Act of 1973, Pub. L. 93-205, Dec. 28, 1973, 87 Stat. 884, as amended, which is classified generally to chapter 35 (Sec. 1531 et seq.) of Title 16, Conservation. For complete classification of this Act to the Code, see Short Title note set out under section 1531 of Title 16 and Tables.

Public Law 99-88, referred to in subsec. (f), is Pub. L. 99-88, Aug. 15, 1985, 99 Stat. 293, known as the Supplemental Appropriations Act, 1985. Provisions of Pub. L. 99-88 authorizing the project for the Atchafalaya Floodway System, Louisiana, are not classified to the Code. For complete classification of this Act to the Code, see Tables.

The Flood Control Act of 1965, referred to in subsec. (f), is title II of Pub. L. 89-298, Oct. 27, 1965, 79 Stat. 1073. Provisions of that Act authorizing the project for Mississippi Delta Region, Louisiana, are not classified to the Code. For complete classification of this Act to the Code, see Tables.

The Fish and Wildlife Coordination Act referred to in subsec. (g), is act Mar. 10, 1934, ch. 55, 48 Stat. 401, as amended, which is classified generally to sections 661 to 666c of Title 16,

Conservation. For complete classification of this Act to the Code, see Short Title note set out under section 661 of Title 16 and Tables.

AMENDMENTS

1992 - Subsec. (c). Pub. L. 102-580 inserted ", including lands, easements, rights-of-way, and relocations," before "for implementation and operation".

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in sections 652, 2211, 2213 of this title.

Section 907, Water Resources Development Act of 1986, as amended

Benefits and Costs Attributable to Environmental Measures

TITLE 33 - NAVIGATION AND NAVIGABLE WATERS
CHAPTER 36 - WATER RESOURCES DEVELOPMENT
SUBCHAPTER V - GENERAL PROVISIONS

Sec. 2284. Benefits and Costs Attributable to Environmental Measures

In the evaluation by the Secretary of benefits and costs of a water resources project, the benefits attributable to measures included in a project for the purpose of environmental quality, including improvement of the environment and fish and wildlife enhancement, shall be deemed to be at least equal to the costs of such measures.

SOURCE

(Pub. L. 99-662, title IX, Sec. 907, Nov. 17, 1986, 100 Stat. 4188.)

Section 908, Water Resources Development Act of 1986

Environmental Protection and Mitigation Fund

**TITLE 33 - NAVIGATION AND NAVIGABLE WATERS
CHAPTER 36 - WATER RESOURCES DEVELOPMENT
SUBCHAPTER V - GENERAL PROVISIONS**

Sec. 2285. Environmental Protection and Mitigation Fund

There is established an Environmental Protection and Mitigation Fund. There is authorized to be appropriated to such fund \$35,000,000 for fiscal years beginning after September 30, 1986. Amounts in the fund (FOOTNOTE 1) shall be available for undertaking, in advance of construction of any water resources project authorized to be constructed by the Secretary, such measures authorized as part of such project, including the acquisition of lands and interests therein, as may be necessary to ensure that project-induced losses to fish and wildlife production and habitat will be mitigated. The Secretary shall reimburse the Fund for any amounts expended under this section for a water resources project from the first appropriations made for construction, including planning and designing, of such project.

(FOOTNOTE 1) So in original. Probably should be capitalized.

-SOURCE-

(Pub. L. 99-662, title IX, Sec. 908, Nov. 17, 1986, 100 Stat. 4188.)

Section 924, Water Resources Development Act of 1986, as amended

Office of Environmental Policy

**TITLE 33 - NAVIGATION AND NAVIGABLE WATERS
CHAPTER 36 - WATER RESOURCES DEVELOPMENT
SUBCHAPTER V - GENERAL PROVISIONS**

Sec. 2294. Office of Environmental Policy

The Secretary shall establish in the Directorate of Civil Works of the Office of the Chief of Engineers an Office of Environmental Policy. Such Office shall be responsible for the formulation, coordination, and implementation of all matters concerning environmental quality and policy as they relate to the water resources program of the United States Army Corps of Engineers. Such Office shall, among other things, develop, and monitor compliance with, guidelines for the consideration of environmental quality in formulation and planning of water resources projects carried out by the Secretary, the preparation and coordination of environmental impact statements for such projects, and the coordination with Federal, State, and local agencies of environmental aspects of such projects and regulatory responsibilities of the Secretary.

SOURCE

(Pub. L. 99-662, title IX, Sec. 924, Nov. 17, 1986, 100 Stat. 4194.)

Section 943, Water Resources Development Act of 1986, as amended

Historical Properties

TITLE 33 - NAVIGATION AND NAVIGABLE WATERS
CHAPTER 36 - WATER RESOURCES DEVELOPMENT
SUBCHAPTER V - GENERAL PROVISIONS

Sec. 2303. Historical Properties

The Secretary is authorized to preserve, restore, and maintain those historic properties located on water resource development project lands under the jurisdiction of the Department of the Army if such properties have been entered into the National Register of Historic Places.

SOURCE

(Pub. L. 99-662, title IX, Sec. 943, Nov. 17, 1986, 100 Stat. 4200.)

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Section 1135, Water Resources Development Act of 1986, as amended

Project Modifications for Improvement of Environment

TITLE 33 - NAVIGATION AND NAVIGABLE WATERS
CHAPTER 36 - WATER RESOURCES DEVELOPMENT
SUBCHAPTER V - GENERAL PROVISIONS

Sec. 2309a. Project Modifications for Improvement of Environment

(a) Determination of need

The Secretary is authorized to review water resources projects constructed by the Secretary to determine the need for modifications in the structures and operations of such projects for the purpose of improving the quality of the environment in the public interest and to determine if the operation of such projects has contributed to the degradation of the quality of the environment.

(b) Authority to make modifications

The Secretary is authorized to carry out a program for the purpose of making such modifications in the structures and operations of water resources projects constructed by the Secretary which the Secretary determines (1) are feasible and consistent with the authorized project purposes, and (2) will improve the quality of the environment in the public interest.

(c) Restoration of environmental quality

(1) IN GENERAL- if the Secretary determines that construction of a water resources project by the Secretary or operation of a water resources project constructed by the Secretary has contributed to the degradation of the quality of the environment, the Secretary may undertake measures for restoration of environmental quality and measures for enhancement of environmental quality that are associated with the restoration, through modifications either at the project site or at other locations that have been affected by the construction or operation of the project, if such measures do not conflict with the authorized project purposes.

(2) CONTROL OF SEA LAMPREY - Congress finds that-

(A) the Great Lakes navigation system has been instrumental in the spread of sea lamprey and the associated impacts on its fishery; and

(B) the use of the authority under this subsection for control of sea lamprey at any Great Lakes basin location is appropriate.

(d) Non-Federal share; limitation on maximum Federal expenditure

The non-Federal share of the cost of any modifications or measures carried out or undertaken pursuant to subsection (b) or (c) of this section shall be 25 percent. Not more than 80 percent

of the non-Federal share may be in kind, including a facility, supply, or service that is necessary to carry out the modification or measure. Not more than \$5,000,000 in Federal funds may be expended on any single modification or measure carried out or undertaken pursuant to this section.

(e) Coordination of actions

The Secretary shall coordinate any actions taken pursuant to this section with appropriate Federal, State, and local agencies.

(f) Biennial report

Beginning in 1992 and every 2 years thereafter, the Secretary shall transmit to Congress a report on the results of reviews conducted under subsection (a) of this section and on the programs conducted under subsections (b) and (c) of this section.

(g) NONPROFIT ENTITIES.-

Notwithstanding section 221 of the Flood Control Act of 1970 (42 U.S.C. 1962d-5b), for any project carried out under this section, a non-Federal interest may include a nonprofit entity with the consent of the affected local government.

(h) Authorization of appropriations

There is authorized to be appropriated not to exceed \$25,000,000 annually to carry out this section.

(i) Definition

In this section, the term "water resources project constructed by the Secretary" includes a water resources project constructed or funded jointly by the Secretary and the of any other Federal agency (including the Natural Resources Conservation Service).

SOURCE

(Pub. L. 99-662, title XI, Sec. 1135, Nov. 17, 1986, 100 Stat. 4251; Pub. L. 100-676, Sec. 41, Nov. 17, 1988, 102 Stat. 4040; Pub. L. 101-640, title III, Sec. 304, Nov. 28, 1990, 104 Stat. 4634; Pub. L. 102-580, title II, Sec. 202, Oct. 31, 1992, 106 Stat. 4826; Pub. L. 104-303, title II, Sec. 204, Oct. 12, 1996, 110 Stat. 3678.)

CODIFICATION

Section was formerly set out as a note under section 2294 of this title.

AMENDMENTS

1996 - Subsec. (a). Pub. L. 104-303, Sec. 204(a), struck out "the operation of" after "to review" and inserted before period at end "and to determine if the operation of such projects has contributed to the degradation of the quality of the environment".

Subsec. (b). Pub. L. 104-303, Sec. 204(b), struck out at end "The non-Federal share of the cost of any modifications carried out under this section shall be 25 percent. No modification shall be carried out under this section without specific authorization by Congress if the estimated cost exceeds \$5,000,000."

Subsecs. (c), (d). Pub. L. 104-303, Sec. 204(c)(2), added subsecs. (c) and (d). Former subsecs. (c) and (d) redesignated (e) and (f), respectively.

Subsec. (e). Pub. L. 104-303, Sec. 204(c)(1), redesignated subsec. (c) as (e). Former subsec. (e) redesignated (g).

Subsec. (f). Pub. L. 104-303, Sec. 204(c)(1), (3), redesignated subsec. (d) as (f) and substituted "programs conducted under subsections (b) and (c) of this section" for "program conducted under subsection (b) of this section".

Subsec. (g). Pub. L. 104-303, Sec. 204(c)(1), redesignated subsec. (e) as (g).

Subsec. (h). Pub. L. 104-303, Sec. 204(d), added subsec. (h).

1992 - Subsec. (b). Pub. L. 102-580, Sec. 202(1), inserted at end "No modification shall be carried out under this section without specific authorization by Congress if the estimated cost exceeds \$5,000,000."

Subsec. (e). Pub. L. 102-580, Sec. 202(2), substituted "\$25,000,000" for "\$15,000,000".

1990 - Subsec. (a). Pub. L. 101-640, Sec. 304(a), struck out "before the date of enactment of this Act" after "constructed by the Secretary".

Subsec. (b). Pub. L. 101-640, Sec. 304(b), substituted "program" for "demonstration program in the 5-year period beginning on the date of enactment of this Act" and struck out "before the date of enactment of this Act" after "constructed by the Secretary".

Subsec. (d). Pub. L. 101-640, Sec. 304(c), amended subsec. (d) generally. Prior to amendment, subsec. (d) read as follows: "Not later than 5 years after the date of enactment of this Act, the Secretary shall transmit to Congress a report on the results of the review conducted under subsection (a) and on the demonstration program conducted under subsection (b). Such report shall contain any recommendations of the Secretary concerning modification and extension of such program."

Subsec. (e). Pub. L. 101-640, Sec. 304(d), substituted "\$15,000,000 annually to carry out this section" for "\$25,000,000 to carry out this section".

1988 - Subsec. (b). Pub. L. 100-676, Sec. 41(a), substituted "5-year period" for "two-year period".

Subsec. (d). Pub. L. 100-676, Sec. 41(b), substituted "5 years"

for "two years".

Section 8, Water Resources Development Act of 1988, as amended

Innovative Technology

TITLE 33 - NAVIGATION AND NAVIGABLE WATERS CHAPTER 36 - WATER RESOURCES DEVELOPMENT SUBCHAPTER V - GENERAL PROVISIONS

Sec. 2314. Innovative Technology

(a) Use

The Secretary shall, whenever feasible, seek to promote long- and short-term cost savings, increased efficiency, reliability, and safety, and improved environmental results through the use of innovative technology in all phases of water resources development projects and programs under the Secretary's jurisdiction. To further this goal, Congress encourages the Secretary to -

- (1) use procurement and contracting procedures that encourage innovative project design, construction, rehabilitation, repair, and operation and maintenance technologies;
- (2) frequently review technical and design criteria to remove or modify unnecessary impediments to innovation;
- (3) increase timely exchange of technical information with universities, private companies, government agencies, and individuals;
- (4) foster design competition; and
- (5) encourage greater participation by non-Federal project sponsors in the development and implementation of projects.

(b) Accelerated adoption of innovative technologies for management of contaminated sediments

(1) Test projects

The Secretary shall approve an appropriate number of projects to test, under actual field conditions, innovative technologies for environmentally sound management of contaminated sediments.

(2) Demonstration projects

The Secretary may approve an appropriate number of projects to demonstrate innovative technologies that have been pilot tested under paragraph (1).

(3) Conduct of projects

Each pilot project under paragraph (1) and demonstration project under paragraph (2) shall be conducted by a university with proven expertise in the research and development of contaminated sediment treatment technologies and innovative applications using waste materials.

(4) Location

At least 1 of the projects under this subsection shall be conducted in New England by the University of New Hampshire.

(c) Reports

Within 2 years after November 17, 1988, and thereafter at the

Secretary's discretion, the Secretary shall provide Congress with a report on the results of, and recommendations to increase, the development and use of innovative technology in water resources development projects under the Secretary's jurisdiction. Such report shall also contain information regarding innovative technologies which the Secretary has considered and rejected for use in water resources development projects under the Secretary's jurisdiction.

(d) "Innovative technology" defined

For the purpose of this section, the term "innovative technology" means designs, materials, or methods which the Secretary determines are previously undemonstrated or are too new to be considered standard practice.

SOURCE

(Pub. L. 100-676, Sec. 8, Nov. 17, 1988, 102 Stat. 4023; Pub. L. 106-53, title V, Sec. 503(b), Aug. 17, 1999, 113 Stat. 337.)

CODIFICATION

Section was enacted as part of the Water Resources Development Act of 1988, and not as part of the Water Resources Development Act of 1986 which comprises this chapter.

AMENDMENTS

1999 - Subsecs. (b) to (d). Pub. L. 106-53 added subsec. (b) and redesignated former subsecs. (b) and (c) as (c) and (d), respectively.

REVIEW OF INNOVATIVE DREDGING TECHNOLOGIES

Pub. L. 106-53, title V, Sec. 503(a), Aug. 17, 1999, 113 Stat. 337, provided that:

"(1) In general. - Not later than June 1, 2001, the Secretary shall complete a review of innovative dredging technologies designed to minimize or eliminate contamination of a water column upon removal of contaminated sediments.

"(2) Testing. -

"(A) Selection of technology. - After completion of the review

under paragraph (1), the Secretary shall select, from among the technologies reviewed, the technology that the Secretary determines will best increase the effectiveness of removing contaminated sediments and significantly reduce contamination of the water column.

"(B) Agreement. - Not later than December 31, 2001, the Secretary shall enter into an agreement with a public or private entity to test the selected technology in the vicinity of Peoria Lakes, Illinois.

"(3) Authorization of appropriations. - There is authorized to be appropriated to carry out this subsection \$2,000,000.'

BENEFICIAL USE OF WASTE TIRE RUBBER

Pub. L. 106-53, title V, Sec. 561, Aug. 17, 1999, 113 Stat. 355, provided that:

"(a) In General. - The Secretary shall, when appropriate, encourage the beneficial use of waste tire rubber (including crumb rubber and baled tire products) recycled from tires.

"(b) Included Beneficial Uses. - Beneficial uses under subsection (a) may include marine pilings, underwater framing, floating docks with built-in flotation, utility poles, and other uses associated with transportation and infrastructure projects receiving Federal funds.

"(c) Use of Waste Tire Rubber. - The Secretary shall encourage the use, when appropriate, of waste tire rubber (including crumb rubber) in projects described in subsection (b)."

"SECRETARY" DEFINED

Secretary means the Secretary of the Army, see section 2 of Pub. L. 100-676, set out as a note under section 2201 of this title.

Section 306 of the Water Resources Development Act of 1990, as amended.

Environmental Protection Mission

TITLE 33 - NAVIGATION AND NAVIGABLE WATERS
CHAPTER 36 - WATER RESOURCES DEVELOPMENT
SUBCHAPTER V - GENERAL PROVISIONS

Sec. 2316. Environmental Protection Mission

(a) General rule

The Secretary shall include environmental protection as one of the primary missions of the Corps of Engineers in planning, designing, constructing, operating, and maintaining water resources projects.

(b) Limitation

Nothing in this section affects -

- (1) existing Corps of Engineers' authorities, including its authorities with respect to navigation and flood control;
- (2) pending Corps of Engineers permit applications or pending lawsuits involving permits or water resources projects; or
- (3) the application of public interest review procedures for Corps of Engineers permits.

SOURCE

(Pub. L. 101-640, title III, Sec. 306, Nov. 28, 1990, 104 Stat. 4635.)

CODIFICATION

Section was enacted as part of the Water Resources Development Act of 1990, and not as part of the Water Resources Development Act of 1986 which comprises this chapter.

"SECRETARY" DEFINED

Secretary means the Secretary of the Army, see section 2 of Pub. L. 101-640, set out as a note under section 2201 of this title.

Section 307, Water Resources Development Act of 1990, as amended.

Wetlands

TITLE 33 - NAVIGATION AND NAVIGABLE WATERS
CHAPTER 36 - WATER RESOURCES DEVELOPMENT
SUBCHAPTER V - GENERAL PROVISIONS

Sec. 2317. Wetlands

(a) Goals and action plan

(1) Goals

There is established, as part of the Corps of Engineers water resources development program, an interim goal of no overall net loss of the Nation's remaining wetlands base, as defined by acreage and function, and a long-term goal to increase the quality and quantity of the Nation's wetlands, as defined by acreage and function.

(2) Use of authorities

The Secretary shall utilize all appropriate authorities, including those to restore and create wetlands, in meeting the interim and long-term goals.

(3) Action plan

(A) Development

The Secretary shall develop, in consultation with the Environmental Protection Agency, the Fish and Wildlife Service, and other appropriate Federal agencies, a wetlands action plan to achieve the goals established by this subsection as soon as possible.

(B) Contents

The plan shall include and identify actions to be taken by the Secretary in achieving the goals and any new authorities which may be necessary to accelerate attainment of the goals.

(C) Completion deadline

The Secretary shall complete the plan not later than 1 year after November 28, 1990.

(b) Constructed wetlands for Mud Creek, Arkansas

Notwithstanding any other provision of law, the Secretary is authorized and directed to establish and carry out a research and pilot project to evaluate and demonstrate -

(1) the use of constructed wetlands for wastewater treatment, and

(2) methods by which such projects contribute -

(A) to meeting the objective of the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.) to restore and maintain

the physical, chemical, and biological integrity of the Nation's waters, and

(B) to attaining the goals established by subsection (a) of this section.

The project under this subsection shall be carried out to improve the quality of effluent discharged from publicly owned treatment works operated by the city of Fayetteville, Arkansas, into Mud Creek or its tributaries.

(c) Non-Federal responsibilities

For the project conducted under subsection (b) of this section, the non-Federal interest shall agree -

(1) to provide, without cost to the United States, all lands, easements, rights-of-way, relocations, and dredged material disposal areas necessary for construction and subsequent research and demonstration work;

(2) to hold and save the United States free from damages due to construction, operation, and maintenance of the project, except damages due to the fault or negligence of the United States or its contractors; and

(3) to operate and maintain the restored or constructed wetlands in accordance with good management practices; except that nothing in this paragraph shall be construed as precluding a Federal agency from agreeing to operate and maintain the restored or reconstructed wetlands.

The value of the non-Federal lands, easements, rights-of-way, relocations, and dredged material disposal areas provided by the non-Federal interest shall be credited toward the non-Federal share of project design and construction costs. The non-Federal share of project design and construction costs shall be 25 percent.

(d) Wetlands restoration and enhancement demonstration program

(1) Establishment and implementation

The Secretary, in consultation with the Administrator, is authorized to establish and implement a demonstration program for the purpose of determining the feasibility of wetlands restoration, enhancement, and creation as a means of contributing to the goals established by subsection (a) of this section.

(2) Goal

The goal of the program under this subsection shall be to establish a limited number of demonstration wetlands restoration, enhancement, and creation areas in districts of the Corps of Engineers for the purpose of evaluating the technical and scientific long-term feasibility of such areas as a means of contributing to the attainment of the goals established by subsection (a) of this section. Federal and State land-owning agencies and private parties may contribute to such areas.

(3) Factors to consider

In establishing the demonstration program under this subsection, the Secretary shall consider -

- (A) past experience with wetlands restoration, enhancement, and creation;
- (B) the appropriate means of measuring benefits of compensatory mitigation activities, including enhancement or restoration of existing wetlands or creation of wetlands;
- (C) the appropriate geographic scope for which wetlands loss may be offset by restoration, enhancement, and creation efforts;
- (D) the technical feasibility and scientific likelihood that wetlands can be successfully restored, enhanced, and created;
- (E) means of establishing liability for, and long-term ownership of, wetlands restoration, enhancement, and creation areas; and
- (F) responsibilities for short- and long-term project monitoring.

(4) Reporting

(A) To the Chief of Engineers

The district engineer for each district of the Corps of Engineers in which a wetlands restoration, enhancement, and creation area is established under this subsection shall transmit annual reports to the Chief of Engineers describing the amount and value of wetlands restored, enhanced, and created for the area and a summary of whether the area is contributing to the goal established in paragraph (2).

(B) To Congress

Not later than 3 years after November 28, 1990, the Secretary shall transmit to Congress a report evaluating the use of wetlands restoration, enhancement, and creation areas in fulfilling the goal established by paragraph (2), together with recommendations on whether or not to continue use of such areas as a means of meeting the goals established by subsection (a) of this section.

(5) Effect on other laws

Nothing in this subsection affects any requirements under section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344) or section 403 of this title.

(e) Training and certification of delineators

(1) In general

The Secretary is authorized to establish a program for the training and certification of individuals as wetlands delineators. As part of such program, the Secretary shall carry out demonstration projects in districts of the Corps of

Engineers. The program shall include training and certification of delineators and procedures for expediting consideration and acceptance of delineations performed by certified delineators.

(2) Reports

The Secretary shall transmit to Congress periodic reports concerning the status of the program and any recommendations on improving the content and implementation of the Federal Manual for Identifying and Delineating Jurisdictional Wetlands.

SOURCE

(Pub. L. 101-640, title III, Sec. 307, Nov. 28, 1990, 104 Stat. 4635.)

REFERENCES IN TEXT

The Federal Water Pollution Control Act, referred to in subsec. (b)(2)(A), is act June 30, 1948, ch. 758, as amended generally by Pub. L. 92-500, Sec. 2, Oct. 18, 1972, 86 Stat. 816, which is classified generally to chapter 26 (Sec. 1251 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 1251 of this title and Tables.

CODIFICATION

Section was enacted as part of the Water Resources Development Act of 1990, and not as part of the Water Resources Development Act of 1986 which comprises this chapter.

WETLANDS ENHANCEMENT OPPORTUNITIES

Section 409 of Pub. L. 101-640 provided that: "Not later than January 20, 1992, the Secretary shall transmit to Congress a list which specifically identifies opportunities of enhancing wetlands in connection with construction and operation of water resource projects."

"SECRETARY" DEFINED

Secretary means the Secretary of the Army, see section 2 of Pub. L. 101-640, set out as a note under section 2201 of this title.

Section 312, Water Resources Development Act of 1990, as amended.

Environmental Dredging

TITLE 33 - NAVIGATION AND NAVIGABLE WATERS
CHAPTER 26 - WATER POLLUTION PREVENTION AND CONTROL
SUBCHAPTER I - RESEARCH AND RELATED PROGRAMS

Sec. 1272. Environmental Dredging

(a) Operation and maintenance of navigation projects

Whenever necessary to meet the requirements of the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), the Secretary, in consultation with the Administrator of the Environmental Protection Agency, may remove and remediate, as part of operation and maintenance of a navigation project, contaminated sediments outside the boundaries of and adjacent to the navigation channel.

(b) Nonproject specific

(1) In general

The Secretary may remove and remediate contaminated sediments from the navigable waters of the United States for the purpose of environmental enhancement and water quality improvement if such removal and remediation is requested by a non-Federal sponsor and the sponsor agrees to pay 35 percent of the cost of such removal and remediation.

(2) Maximum amount

The Secretary may not expend more than \$50,000,000 in a fiscal year to carry out this subsection.

(c) Joint plan requirement

The Secretary may only remove and remediate contaminated sediments under subsection (b) of this section in accordance with a joint plan developed by the Secretary and interested Federal, State, and local government officials. Such plan must include an opportunity for public comment, a description of the work to be undertaken, the method to be used for dredged material disposal, the roles and responsibilities of the Secretary and non-Federal sponsors, and identification of sources of funding.

(d) Disposal costs

Costs of disposal of contaminated sediments removed under this section shall be a shared as a cost of construction.

(e) Limitation on statutory construction

Nothing in this section shall be construed to affect the rights and responsibilities of any person under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq.).

(f) Priority work

In carrying out this section, the Secretary shall give priority to work in the following areas:

- (1) Brooklyn Waterfront, New York.
- (2) Buffalo Harbor and River, New York.
- (3) Ashtabula River, Ohio.
- (4) Mahoning River, Ohio.
- (5) Lower Fox River, Wisconsin.
- (6) Passaic River and Neward Bay, New Jersey.
- (7) Snake Creek, Bixby, Oklahoma
- (8) Willamette River, Oregon
- (g) Nonprofit Entities.

Notwithstanding section 221 of the Flood Control Act of 1970 (42 U.S.C. 1962d-5b), for any project carried out under this section, a non-Federal sponsor may include a nonprofit entity, with the consent of the affected local government.

SOURCE

(Pub. L. 101-640, title III, Sec. 312, Nov. 28, 1990, 104 Stat. 4639; Pub. L. 104-303, title II, Sec. 205, Oct. 12, 1996, 110 Stat. 3679.)

REFERENCES IN TEXT

The Federal Water Pollution Control Act, referred to in subsec. (a), is act June 30, 1948, ch. 758, as amended generally by Pub. L. 92-500, Sec. 2, Oct. 18, 1972, 86 Stat. 816, which is classified generally to this chapter (Sec. 1251 et seq.). For complete classification of this Act to the Code, see Short Title note set out under section 1251 of this title and Tables.

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980, referred to in subsec. (e), is Pub. L. 96-510, Dec. 11, 1980, 94 Stat. 2767, as amended, which is classified principally to chapter 103 (Sec. 9601 et seq.) of Title 42, The Public Health and Welfare. For complete classification of this Act to the Code, see Short Title note set out under section 9601 of Title 42 and Tables.

CODIFICATION

Section was formerly set out as a note under section 1252 of this title.

Section was enacted as part of the Water Resources Development Act of 1990, and not as part of the Federal Water Pollution Control

Act which comprises this chapter.

AMENDMENTS

1996 - Subsec. (a). Pub. L. 104-303, Sec. 205(1), inserted "and remediate" after "remove".

Subsec. (b)(1). Pub. L. 104-303, Sec. 205(1), (2)(A), inserted "and remediate" after "remove" and inserted "and remediation" after "removal" in two places.

Subsec. (b)(2). Pub. L. 104-303, Sec. 205(2)(B), substituted "\$20,000,000" for "\$10,000,000".

Subsec. (c). Pub. L. 104-303, Sec. 205(1), inserted "and remediate" after "remove".

Subsec. (f). Pub. L. 104-303, Sec. 205(3), added subsec. (f) and struck out heading and text of former subsec. (f). Text read as follows: "This section shall not be effective after the last day of the 5-year period beginning on November 28, 1990; except that the Secretary may complete any project commenced under this section on or before such last day."

Section 313, Water Resources Development Act of 1990, as amended.

Protection of Recreational and Commercial Uses

TITLE 33 - NAVIGATION AND NAVIGABLE WATERS
CHAPTER 36 - WATER RESOURCES DEVELOPMENT
SUBCHAPTER V - GENERAL PROVISIONS

Sec. 2320. Protection of Recreational and Commercial Uses

(a) General rule

In planning any water resources project, the Secretary shall consider the impact of the project on existing and future recreational and commercial uses in the area surrounding the project.

(b) Maintenance

Whenever the Secretary maintains, repairs, rehabilitates, or reconstructs a water resources project which will result in a change in the configuration of a structure which is a part of such project, the Secretary, to the maximum extent practicable, shall carry out such maintenance, repair, rehabilitation, or reconstruction in a manner which will not adversely affect any recreational use established with respect to such project before the date of such maintenance, repair, rehabilitation, or reconstruction.

(c) Mitigation

(1) In general

If maintenance, repair, rehabilitation, or reconstruction of a water resources project by the Secretary results in a change in the configuration of any structure which is a part of such project and has an adverse effect on a recreational use established with respect to such project before the date of such maintenance, repair, rehabilitation, or reconstruction, the Secretary, to the maximum extent practicable, shall take such actions as may be necessary to restore such recreational use or provide alternative opportunities for comparable recreational use.

(2) Maximum amount

The Secretary may not expend more than \$2,000,000 in a fiscal year to carry out this subsection.

(3) Termination date

This subsection shall not be effective after the last day of the 5-year period beginning on November 28, 1990; except that the Secretary may complete any restoration commenced under this

subsection on or before such last day.

(d) Applicability

(1) General rule

Subsections (b) and (c) of this section shall apply to maintenance, repair, rehabilitation, or reconstruction for which physical construction is initiated after May 1, 1988.

(2) Limitation

Subsections (b) and (c) of this section shall not apply to any action of the Secretary which is necessary to discontinue the operation of a water resources project.

(e) Cost sharing

Costs incurred by the Secretary to carry out the objectives of this section shall be allocated to recreation and shall be payable by the beneficiaries of the recreation.

SOURCE

(Pub. L. 101-640, title III, Sec. 313, Nov. 28, 1990, 104 Stat. 4640.)

CODIFICATION

Section was enacted as part of the Water Resources Development Act of 1990, and not as part of the Water Resources Development Act of 1986 which comprises this chapter.

"SECRETARY" DEFINED

Secretary means the Secretary of the Army, see section 2 of Pub. L. 101-640, set out as a note under section 2201 of this title.

Section 203, Water Resources Development Act of 1992, as amended.

Voluntary Contributions for Environmental and Recreation Projects

TITLE 33 - NAVIGATION AND NAVIGABLE WATERS
CHAPTER 36 - WATER RESOURCES DEVELOPMENT
SUBCHAPTER V - GENERAL PROVISIONS

Sec. 2325. Voluntary Contributions for Environmental and Recreation Projects

(a) Acceptance

In connection with carrying out a water resources project for environmental protection and restoration or a water resources project for recreation, the Secretary is authorized to accept contributions of cash, funds, materials, and services from persons, including governmental entities but excluding the project sponsor.

(b) Deposit

Any cash or funds received by the Secretary under subsection (a) of this section shall be deposited into the account in the Treasury of the United States entitled "Contributions and Advances, Rivers and Harbors, Corps of Engineers (8862)" and shall be available until expended to carry out water resources projects described in subsection (a) of this section.

SOURCE

(Pub. L. 102-580, title II, Sec. 203, Oct. 31, 1992, 106 Stat. 4826; Pub. L. 104-303, title II, Sec. 236(a), Oct. 12, 1996, 110 Stat. 3705.)

CODIFICATION

Section was enacted as part of the Water Resources Development Act of 1992, and not as part of the Water Resources Development Act of 1986 which comprises this chapter.

AMENDMENTS

1996 - Subsec. (b). Pub. L. 104-303 substituted "(8862)" for "(8662)".

"SECRETARY" DEFINED

Secretary means the Secretary of the Army, see section 3 of Pub. L. 102-580, set out as a note under section 2201 of this title.

Section 204, Water Resources Development Act of 1992, as amended.

Beneficial Uses of Dredged Material

TITLE 33 - NAVIGATION AND NAVIGABLE WATERS
CHAPTER 36 - WATER RESOURCES DEVELOPMENT
SUBCHAPTER V - GENERAL PROVISIONS

Sec. 2326. Beneficial Uses of Dredged Material

(a) In general

The Secretary is authorized to carry out projects for the protection, restoration, and creation of aquatic and ecologically related habitats, including wetlands, in connection with dredging for construction, operation, or maintenance by the Secretary of an authorized navigation project.

(b) Secretarial findings

Subject to subsection (c) of this section, projects for the protection, restoration, or creation of aquatic and ecologically related habitats may be undertaken in any case where the Secretary finds that -

- (1) the environmental, economic, and social benefits of the project, both monetary and nonmonetary, justify the cost thereof; and
- (2) the project would not result in environmental degradation.

(c) Cooperative agreement

Any project undertaken pursuant to this section shall be initiated only after non-Federal interests have entered into a Binding agreement with the Secretary in which the non-Federal interests agree to -

- (1) provide 25 percent of the cost associated with construction of the project for the protection, restoration, and creation of aquatic and ecologically related habitats, including provision of all lands, easements, rights-of-way, and necessary relocations; and
- (2) pay 100 percent of the operation, maintenance, replacement, and rehabilitation costs associated with the project for the protection, restoration, and creation of aquatic and ecologically related habitats.

(d) Determination of construction costs

Costs associated with construction of a project for the protection, restoration, and creation of aquatic and ecologically related habitats shall be limited solely to construction costs which are in excess of those costs necessary to carry out the

dredging for construction, operation, or maintenance of the authorized navigation project in the most cost effective way, consistent with economic, engineering, and environmental criteria.

(e) Selection of dredged material disposal method

In developing and carrying out a project for navigation involving the disposal of dredged material, the Secretary may select, with the consent of the non-Federal interest, a disposal method that is not the least-cost option if the Secretary determines that the incremental costs of such disposal method are reasonable in relation to the environmental benefits, including the benefits to the aquatic environment to be derived from the creation of wetlands and control of shoreline erosion. The Federal share of such incremental costs shall be determined in accordance with subsection (c) of this section.

(f) Authorization of appropriations

There is authorized to be appropriated not to exceed \$15,000,000 annually to carry out this section. Such sums shall remain available until expended.

(g) NONPROFIT ENTITIES.--

Notwithstanding section 221 of the Flood Control Act of 1970 (42 U.S.C. 1962d-5b), for any project carried out under this section, a non-Federal interest may include a nonprofit entity, with the consent of the affected local government.

SOURCE

(Pub. L. 102-580, title II, Sec. 204, Oct. 31, 1992, 106 Stat. 4826; Pub. L. 104-303, title II, Sec. 207, Oct. 12, 1996, 110 Stat. 3680.)

CODIFICATION

Section was enacted as part of the Water Resources Development Act of 1992, and not as part of the Water Resources Development Act of 1986 which comprises this chapter.

AMENDMENTS

1996 - Subsecs. (e), (f). Pub. L. 104-303 added subsec. (e) and redesignated former subsec. (e) as (f).

"SECRETARY" DEFINED

Secretary means the Secretary of the Army, see section 3 of Pub. L. 102-580, set out as a note under section 2201 of this title.

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 2326a of this title.

Section 225, Water Resources Development Act of 1992, as amended.

Challenge Cost-sharing Program for Management of Recreation Facilities

TITLE 33 - NAVIGATION AND NAVIGABLE WATERS
CHAPTER 36 - WATER RESOURCES DEVELOPMENT
SUBCHAPTER V - GENERAL PROVISIONS

Sec. 2328. Challenge Cost-sharing Program for Management of
Recreation Facilities

(a) In general

The Secretary is authorized to develop and implement a program to share the cost of managing recreation facilities and natural resources at water resource development projects under the Secretary's jurisdiction.

(b) Cooperative agreements

To implement the program under this section, the Secretary is authorized to enter into cooperative agreements with non-Federal public and private entities to provide for operation and management of recreation facilities and natural resources at civil works projects under the Secretary's jurisdiction where such facilities and resources are being maintained at complete Federal expense.

(c) Contributions

For purposes of carrying out this section the Secretary may accept contributions of funds, materials, and services from non-Federal public and private entities. Any funds received by the Secretary under this section shall be deposited into the account in the Treasury of the United States entitled "Contributions and Advances, Rivers and Harbors, Corps of Engineers (8862)" and shall be available until expended to carry out the purposes of this section.

SOURCE

(Pub. L. 102-580, title II, Sec. 225, Oct. 31, 1992, 106 Stat. 4838; Pub. L. 104-303, title II, Sec. 236(b), Oct. 12, 1996, 110 Stat. 3705.)

CODIFICATION

Section was enacted as part of the Water Resources Development Act of 1992, and not as part of the Water Resources Development Act of 1986 which comprises this chapter.

AMENDMENTS

1996 - Subsec. (c). Pub. L. 104-303 substituted "(8862)" for "(8662)".

RECREATION PARTNERSHIP INITIATIVE

Section 519 of Pub. L. 104-303 provided that:

"(a) In General. - The Secretary shall promote Federal, non-Federal, and private sector cooperation in creating public recreation opportunities and developing the necessary supporting infrastructure at water resources projects of the Corps of Engineers.

"(b) Infrastructure Improvements. -

"(1) Recreation infrastructure improvements. - In determining the feasibility of the public-private cooperative under subsection (a), the Secretary shall provide such infrastructure improvements as are necessary to support a potential private recreational development at the Raystown Lake Project, Pennsylvania, generally in accordance with the Master Plan Update (1994) for the project.

"(2) Agreement. - The Secretary shall enter into an agreement with an appropriate non-Federal public entity to ensure that the infrastructure improvements constructed by the Secretary on non-project lands pursuant to paragraph (1) are transferred to and operated and maintained by the non-Federal public entity.

"(3) Authorization of appropriations. - There is authorized to be appropriated to carry out this subsection \$3,000,000.

"(c) Report. - Not later than December 31, 1998, the Secretary shall transmit to Congress a report on the results of the cooperative efforts carried out under this section, including the improvements required by subsection (b)."

"SECRETARY" DEFINED

Secretary means the Secretary of the Army, see section 3 of Pub. L. 102-580, set out as a note under section 2201 of this title.

Section 503, Water Resources Development Act of 1992, as amended.

Sediment Survey and Monitoring

**TITLE 33 - NAVIGATION AND NAVIGABLE WATERS
CHAPTER 26 - WATER POLLUTION PREVENTION AND CONTROL
SUBCHAPTER I - RESEARCH AND RELATED PROGRAMS**

Sec. 1271. Sediment Survey and Monitoring

(a) Survey

(1) In general

The Administrator, in consultation with the Administrator of the National Oceanic and Atmospheric Administration and the Secretary, shall conduct a comprehensive national survey of data regarding aquatic sediment quality in the United States. The Administrator shall compile all existing information on the quantity, chemical and physical composition, and geographic location of pollutants in aquatic sediment, including the probable source of such pollutants and identification of those sediments which are contaminated pursuant to section 501(b)(4).

(FOOTNOTE 1) See References in Text note below.

(2) Report

Not later than 24 months after October 31, 1992, the Administrator shall report to the Congress the findings, conclusions, and recommendations of such survey, including recommendations for actions necessary to prevent contamination of aquatic sediments and to control sources of contamination.

(b) Monitoring

(1) In general

The Administrator, in consultation with the Administrator of the National Oceanic and Atmospheric Administration and the Secretary, shall conduct a comprehensive and continuing program to assess aquatic sediment quality. The program conducted pursuant to this subsection shall, at a minimum -

(A) identify the location of pollutants in aquatic sediment;

(B) identify the extent of pollutants in sediment and those sediments which are contaminated pursuant to section 501(b)(4);

(FOOTNOTE 1)

(C) establish methods and protocols for monitoring the physical, chemical, and biological effects of pollutants in aquatic sediment and of contaminated sediment;

(D) develop a system for the management, storage, and dissemination of data concerning aquatic sediment quality;

(E) provide an assessment of aquatic sediment quality trends

over time;

(F) identify locations where pollutants in sediment may pose a threat to the quality of drinking water supplies, fisheries resources, and marine habitats; and

(G) establish a clearing house for information on technology, methods, and practices available for the remediation, decontamination, and control of sediment contamination.

(2) Report

The Administrator shall submit to Congress a report on the findings of the monitoring under paragraph (1) on the date that is 2 years after the date specified in subsection (a)(2) of this section and biennially thereafter.

SOURCE

(Pub. L. 102-580, title V, Sec. 503, Oct. 31, 1992, 106 Stat. 4865.)

REFERENCES IN TEXT

Section 501(b)(4), referred to in subsecs. (a)(1) and (b)(1)(B), means section 501(b)(4) of Pub. L. 102-580, which is set out below.

CODIFICATION

Section was enacted as part of the Water Resources Development Act of 1992 and also as part of the National Contaminated Sediment Assessment and Management Act, and not as part of the Federal Water Pollution Control Act which comprises this chapter.

AVAILABILITY OF CONTAMINATED SEDIMENTS INFORMATION

Section 327 of Pub. L. 102-580 directed Secretary to conduct national study on information that was currently available on contaminated sediments of surface waters of United States and compile information obtained for the purpose of identifying location and nature of contaminated sediments and, not later than 1 year after Oct. 31, 1992, to transmit to Congress a report on the results of the study.

NATIONAL CONTAMINATED SEDIMENT ASSESSMENT AND MANAGEMENT; SHORT TITLE; DEFINITIONS; TASK FORCE

Sections 501 and 502 of title V of Pub. L. 102-580 provided that:

"SEC. 501. SHORT TITLE AND DEFINITIONS.

"(a) Short Title. - This title (enacting this section, amending sections 1412 to 1416, 1420, and 1421 of this title, and enacting provisions set out below) may be cited as the 'National

Contaminated Sediment Assessment and Management Act'.

"(b) Definitions. - For the purposes of sections 502 and 503 of this title (enacting this section and provisions set out below) -

"(1) the term 'aquatic sediment' means sediment underlying the navigable waters of the United States;

"(2) the term 'navigable waters' has the same meaning as in section 502(7) of the Federal Water Pollution Control Act (33 U.S.C. 1362(7));

"(3) the term 'pollutant' has the same meaning as in section 502(6) of the Federal Water Pollution Control Act (33 U.S.C. 1362(6)); except that such term does not include dredge spoil, rock, sand, or cellar dirt;

"(4) the term 'contaminated sediment' means aquatic sediment which -

"(A) contains chemical substances in excess of appropriate geochemical, toxicological or sediment quality criteria or measures; or

"(B) is otherwise considered by the Administrator to pose a threat to human health or the environment; and

"(5) the term 'Administrator' means the Administrator of the Environmental Protection Agency.

"SEC. 502. NATIONAL CONTAMINATED SEDIMENT TASK FORCE.

"(a) Establishment. - There is established a National Contaminated Sediment Task Force (hereinafter referred to in this section as the 'Task Force'). The Task Force shall -

"(1) advise the Administrator and the Secretary in the implementation of this title;

"(2) review and comment on reports concerning aquatic sediment quality and the extent and seriousness of aquatic sediment contamination throughout the Nation;

"(3) review and comment on programs for the research and development of aquatic sediment restoration methods, practices, and technologies;

"(4) review and comment on the selection of pollutants for development of aquatic sediment criteria and the schedule for the development of such criteria;

"(5) advise appropriate officials in the development of guidelines for restoration of contaminated sediment;

"(6) make recommendations to appropriate officials concerning practices and measures -

"(A) to prevent the contamination of aquatic sediments; and

"(B) to control sources of sediment contamination; and

"(7) review and assess the means and methods for locating and

constructing permanent, cost-effective long-term disposal sites for the disposal of dredged material that is not suitable for ocean dumping (as determined under the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1401 et seq.) (also 16 U.S.C. 1431 et seq., 1447 et seq.; 33 U.S.C. 2801 et seq.)).

"(b) Membership. -

"(1) In general. - The membership of the Task Force shall include 1 representative of each of the following:

"(A) The Administrator.

"(B) The Secretary.

"(C) The National Oceanic and Atmospheric Administration.

"(D) The United States Fish and Wildlife Service.

"(E) The Geological Survey (now United States Geological Survey).

"(F) The Department of Agriculture.

"(2) Additional members. - Additional members of the Task Force shall be jointly selected by the Administrator and the Secretary, and shall include -

"(A) not more than 3 representatives of States;

"(B) not more than 3 representatives of ports, agriculture, and manufacturing; and

"(C) not more than 3 representatives of public interest organizations with a demonstrated interest in aquatic sediment contamination.

"(3) Cochairmen. - The Administrator and the Secretary shall serve as cochairmen of the Task Force.

"(4) Clerical and technical assistance. - Such clerical and technical assistance as may be necessary to discharge the duties of the Task Force shall be provided by the personnel of the Environmental Protection Agency and the Army Corps of Engineers.

"(5) Compensation for additional members. - The additional members of the Task Force selected under paragraph (2) shall, while attending meetings or conferences of the Task Force, be compensated at a rate to be fixed by the cochairmen, but not to exceed the daily equivalent of the base rate of pay in effect for grade GS-15 of the General Schedule under section 5332 of title 5, United States Code, for each day (including travel time) during which they are engaged in the actual performance of duties

vested in the Task Force. While away from their homes or regular places of business in the performance of services for the Task Force, such members shall be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in the Government service are allowed expenses under section 5703(b) of title 5, United States Code.

"(c) Report. - Within 2 years after the date of the enactment of this Act (Oct. 31, 1992), the Task Force shall submit to Congress a report stating the findings and recommendations of the Task Force."

AUTHORIZATION OF APPROPRIATIONS

Section 509(b) of Pub. L. 102-580 provided that: "There is authorized to be appropriated to the Administrator to carry out sections 502 and 503 (enacting this section and provisions set out above) such sums as may be necessary."

"SECRETARY" DEFINED

Secretary means the Secretary of the Army, see section 3 of Pub. L. 102-580, set out as a note under section 2201 of this title.

Section 206, Water Resources Development Act of 1996, as amended.

Aquatic Ecosystem Restoration

TITLE 33 - NAVIGATION AND NAVIGABLE WATERS
CHAPTER 36 - WATER RESOURCES DEVELOPMENT
SUBCHAPTER V - GENERAL PROVISIONS

Sec. 2330. Aquatic Ecosystem Restoration

(a) General authority

The Secretary may carry out an aquatic ecosystem restoration and protection project if the Secretary determines that the project -

- (1) will improve the quality of the environment and is in the public interest; and
- (2) is cost-effective.

(b) Cost sharing

- (1) IN GENERAL, Non-Federal interests shall provide 35 percent of the cost of construction of any project carried out under this section, including provision of all lands, easements, rights-of-way, and necessary relocations.
- (2) FORM- Before October 1, 2003, the Federal share of the cost of a project under this section may be provided in the form of reimbursements of project cost.

(c) Agreements

- (1) IN GENERAL- Construction of a project under this section shall be Initiated only after a non-Federal interest has entered into a binding agreement with the Secretary to pay the non-Federal share of the costs of construction required by this section and to pay 100 percent of any operation, maintenance, and replacement and rehabilitation costs with respect to the project in accordance with regulations prescribed by the Secretary.
- (2) NONPROFIT ENTITIES- Notwithstanding section 221 of the Flood Control Act of 1970 (42 U.S.C. 1962d-5b), for any project carried out under this section, a non-Federal interest may include a nonprofit entity, with the consent of the affected local government.

(d) Cost limitation

Not more than \$5,000,000 in Federal funds may be allotted under this section for a project at any single locality.

(e) Funding

There is authorized to be appropriated to carry out this section \$25,000,000 for each fiscal year.

SOURCE

(Pub. L. 104-303, title II, Sec. 206, Oct. 12, 1996, 110 Stat.

3679.)

CODIFICATION

Section was enacted as part of the Water Resources Development Act of 1996, and not as part of the Water Resources Development Act of 1986 which comprises this chapter.

"SECRETARY" DEFINED

Secretary means the Secretary of the Army, see section 2 of Pub. L. 104-303, set out as a note under section 2201 of this title.

Section 212, Water Resources Development Act of 1996, as amended.

Engineering and Environmental Innovations of National Significance

**TITLE 33 - NAVIGATION AND NAVIGABLE WATERS
CHAPTER 36 - WATER RESOURCES DEVELOPMENT
SUBCHAPTER V - GENERAL PROVISIONS**

Sec. 2313a. Engineering and Environmental Innovations of National Significance

(a) Surveys, plans, and studies

To encourage innovative and environmentally sound engineering solutions and innovative environmental solutions to problems of national significance, the Secretary may undertake surveys, plans, and studies and prepare reports that may lead to work under existing civil works authorities or to recommendations for authorizations.

(b) Funding

(1) Authorization of appropriations

There is authorized to be appropriated to carry out this section \$1,000,000 for each of fiscal years 1997 through 2000.

(2) Funding from other sources

The Secretary may accept and expend additional funds from other Federal agencies, States, or non-Federal entities for purposes of carrying out this section.

SOURCE

(Pub. L. 104-303, title II, Sec. 212, Oct. 12, 1996, 110 Stat. 3684.)

CODIFICATION

Section was enacted as part of the Water Resources Development Act of 1996, and not as part of the Water Resources Development Act of 1986 which comprises this chapter.

"SECRETARY" DEFINED

Secretary means the Secretary of the Army, see section 2 of Pub. L. 104-303, set out as a note under section 2201 of this title.

Section 234, Water Resources Development Act of 1996

Interagency and International Support Authority

TITLE 33 - NAVIGATION AND NAVIGABLE WATERS CHAPTER 36 - WATER RESOURCES DEVELOPMENT SUBCHAPTER V - GENERAL PROVISIONS

Sec. 2323a. Interagency and International Support Authority

(a) In general

The Secretary may engage in activities in support of other Federal agencies or international organizations to address problems of national significance to the United States.

(b) Consultation

The Secretary may engage in activities in support of international organizations only after consulting with the Secretary of State.

(c) Use of Corps' expertise

The Secretary may use the technical and managerial expertise of the Corps of Engineers to address domestic and international problems related to water resources, infrastructure development, and environmental protection.

(d) Funding

There is authorized to be appropriated \$1,000,000 to carry out this section. The Secretary may accept and expend additional funds from other Federal agencies or international organizations to carry (FOOTNOTE 1) this section.

(FOOTNOTE 1) So in original. Probably should be followed by "out".

SOURCE

(Pub. L. 104-303, title II, Sec. 234, Oct. 12, 1996, 110 Stat. 3704.)

CODIFICATION

Section was enacted as part of the Water Resources Development Act of 1996, and not as part of the Water Resources Development Act of 1986 which comprises this chapter.

"SECRETARY" DEFINED

Secretary means the Secretary of the Army, see section 2 of Pub. L. 104-303, set out as a note under section 2201 of this title.

Section 212, Water Resources Development Act of 1999

Flood Mitigation and Riverine Restoration Program

TITLE 33 - NAVIGATION AND NAVIGABLE WATERS CHAPTER 36 - WATER RESOURCES DEVELOPMENT SUBCHAPTER V - GENERAL PROVISIONS

Sec. 2332e. Flood Mitigation and Riverine Restoration Program

(a) In general

The Secretary may undertake a program for the purpose of conducting projects to reduce flood hazards and restore the natural functions and values of rivers throughout the United States.

(b) Studies and projects

(1) Authority

In carrying out the program, the Secretary may conduct studies to identify appropriate flood damage reduction, conservation, and restoration measures and may design and implement projects described in subsection (a) of this section.

(2) Consultation and coordination

The studies and projects carried out under this section shall be conducted, to the maximum extent practicable, in consultation and coordination with the Federal Emergency Management Agency and other appropriate Federal agencies, and in consultation and coordination with appropriate State and local agencies and tribes.

(3) Nonstructural approaches

The studies and projects shall emphasize, to the maximum extent practicable and appropriate, nonstructural approaches to preventing or reducing flood damages.

(4) Participation

The studies and projects shall be conducted, to the maximum extent practicable, in cooperation with State and local agencies and tribes to ensure the coordination of local flood damage reduction or riverine and wetland restoration studies with projects that conserve, restore, and manage hydrologic and hydraulic regimes and restore the natural functions and values of floodplains.

(c) Cost-sharing requirements

(1) Studies

Studies conducted under this section shall be subject to cost sharing in accordance with section 2215 of this title.

(2) Environmental restoration and nonstructural flood control projects

(A) In general

The non-Federal interests shall pay 35 percent of the cost of any environmental restoration or nonstructural flood control project carried out under this section.

(B) Items provided by non-Federal interests

The non-Federal interests shall provide all land, easements, rights-of-way, dredged material disposal areas, and relocations necessary for such projects.

(C) Credit

The value of such land, easements, rights-of-way, dredged material disposal areas, and relocations shall be credited toward the payment required under this paragraph.

(3) Structural flood control projects

Any structural flood control projects carried out under this section shall be subject to cost sharing in accordance with section 2213(a) of this title.

(4) Operation and maintenance

The non-Federal interests shall be responsible for all costs associated with operating, maintaining, replacing, repairing, and rehabilitating all projects carried out under this section.

(d) Project justification

(1) In general

Notwithstanding any other provision of law or requirement for economic justification established under section 1962-2 of title 42, the Secretary may implement a project under this section if the Secretary determines that the project -

(A) will significantly reduce potential flood damages;

(B) will improve the quality of the environment; and

(C) is justified considering all costs and beneficial outputs of the project.

(2) Establishment of selection and rating criteria and policies

(A) In general

Not later than 180 days after August 17, 1999, the Secretary, in cooperation with State and local agencies and tribes, shall-

(i) develop, and submit to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Environment and Public Works of the Senate, criteria for selecting and rating projects to be carried out under this section; and

(ii) establish policies and procedures for carrying out the studies and projects undertaken under this section.

(B) Criteria

The criteria referred to in subparagraph (A)(i) shall include, as a priority, the extent to which the appropriate

State government supports the project.

(e) Priority areas

In carrying out this section, the Secretary shall examine appropriate locations, including -

(1) Pima County, Arizona, at Paseo De Las Iglesias and Rillito

River;

(2) Coachella Valley, Riverside County, California;

(3) Los Angeles and San Gabriel Rivers, California;

(4) Murrieta Creek, California;

(5) Napa River Valley watershed, California, at Yountville, St. Helena, Calistoga, and American Canyon;

(6) Santa Clara basin, California, at Upper Guadalupe River and Tributaries, San Francisquito Creek, and Upper Penitencia Creek;

(7) Pond Creek, Kentucky;

(8) Red River of the North, Minnesota, North Dakota, and South Dakota;

(9) Connecticut River, New Hampshire;

(10) Pine Mount Creek, New Jersey;

(11) Southwest Valley, Albuquerque, New Mexico;

(12) Upper Delaware River, New York;

(13) Briar Creek, North Carolina;

(14) Chagrin River, Ohio;

(15) Mill Creek, Cincinnati, Ohio;

(16) Tillamook County, Oregon;

(17) Willamette River basin, Oregon;

(18) Blair County, Pennsylvania, at Altoona and Frankstown

Township;

(19) Delaware River, Pennsylvania;

(20) Schuylkill River, Pennsylvania;

(21) Providence County, Rhode Island;

(22) Shenandoah River, Virginia;

(23) Lincoln Creek, Wisconsin; and

(24) Perry Creek, Iowa;

(25) Lester, ST. Louis, East Savanna, and Floodwood Rivers, Duluth, Minnesota;

(26) Lower Hudson River and tributaries, New York;

(27) Susquehanna River watershed, Bradford County, Pennsylvania; and

(28) Clear Creek, Harris, Galveston, and Brazoria Counties, Texas.

(f) Program review

(1) In general

The program established under this section shall be subject to an independent review to evaluate the efficacy of the program in achieving the dual goals of flood hazard mitigation and riverine restoration.

(2) Report

Not later than April 15, 2003, the Secretary shall submit to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Environment and Public Works of the Senate a report on the findings of the review conducted under this subsection with any recommendations concerning continuation of the program.

(g) Maximum Federal cost per project

Not more than \$30,000,000 may be expended by the United States on any single project under this section.

(h) Procedure

(1) All projects

The Secretary shall not implement any project under this section until -

(A) the Secretary submits to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a written notification describing the project and the determinations made under subsection (d)(1) of this section; and

(B) 21 calendar days have elapsed after the date on which the notification was received by the committees.

(2) Projects exceeding \$15,000,000

(A) Limitation on appropriations

No appropriation shall be made to construct any project under this section the total Federal cost of construction of which exceeds \$15,000,000 if the project has not been approved by resolutions adopted by the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Environment and Public Works of the Senate.

(B) Report

For the purpose of securing consideration of approval under this paragraph, the Secretary shall submit a report on the proposed project, including all relevant data and information on all costs.

(i) Authorization of appropriations

(1) In general

There are authorized to be appropriated to carry out this section -

(A) \$20,000,000 for fiscal year 2001;

(B) \$30,000,000 for fiscal year 2002; and

(C) \$50,000,000 for each of fiscal years 2003 through 2005.

(2) Full funding

All studies and projects carried out under this section from Army Civil Works appropriations shall be fully funded within the program funding levels provided in this subsection.

SOURCE

(Pub. L. 106-53, title II, Sec. 212, Aug. 17, 1999, 113 Stat. 288.)

CODIFICATION

Section was enacted as part of the Water Resources Development Act of 1999, and not as part of the Water Resources Development Act of 1986 which comprises this chapter.

"SECRETARY" DEFINED

Secretary means the Secretary of the Army, see section 2 of Pub. L. 106-53, set out as a note under section 2201 of this title.

SEC. 729. WATERSHED AND RIVER BASIN ASSESSMENTS.

NOTE: This section contained in Section 202 of the Water Resources Development Act of 2000 and had not been added to the U.S. Code as of the time of preparation of this list.

Section 729 of the Water Resources Development Act of 1986 (100 Stat. 4164) is amended to read as follows:

“SEC. 729. WATERSHED AND RIVER BASIN ASSESSMENTS.

“(a) IN GENERAL.—The Secretary may assess the water resources needs of river basins and watersheds of the United States, including needs relating to—

- “(1)** ecosystem protection and restoration;
- “(2)** flood damage reduction;
- “(3)** navigation and ports; **“(4)** watershed protection;
- “(5)** water supply; and
- “(6)** drought preparedness.

“(b) COOPERATION.—An assessment under subsection (a) shall be carried out in cooperation and coordination with—

- “(1)** the Secretary of the Interior;
- “(2)** the Secretary of Agriculture;
- “(3)** the Secretary of Commerce;
- “(4)** the Administrator of the Environmental Protection Agency; and
- “(5)** the heads of other appropriate agencies.

“(c) CONSULTATION.—In carrying out an assessment under sub-section (a), the Secretary shall consult with Federal, tribal, State, interstate, and local governmental entities.

“(d) PRIORITY RIVER BASINS AND WATERSHEDS.—In selecting river basins and watersheds for assessment under this section, the Secretary shall give priority to—

- “(1)** the Delaware River basin;
- “(2)** the Kentucky River basin;
- “(3)** the Potomac River basin;
- “(4)** the Susquehanna River basin; and
- “(5)** the Willamette River basin.

“(e) ACCEPTANCE OF CONTRIBUTIONS.—In carrying out an assessment under subsection (a), the Secretary may accept contributions, in cash or in kind, from Federal, tribal, State, interstate, and local governmental entities to the extent that the Secretary determines that the contributions will facilitate completion of the assessment.

“(f) COST-SHARING REQUIREMENTS.—

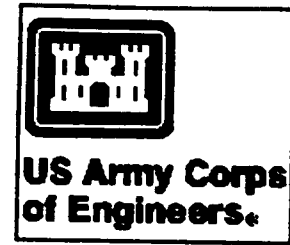
“(1) NON-FEDERAL SHARE.—The non-Federal share of the costs of an assessment carried out under this section shall be 50 percent.

“(2) CREDIT.—

“(A) IN GENERAL.—Subject to subparagraph (B), the Secretary may credit toward the non-Federal share of an assessment under this section the cost of services, materials, supplies, or other in-kind contributions provided by the non-Federal interests for the assessment.

“(B) MAXIMUM AMOUNT OF CREDIT.—The credit under subparagraph (A) may not exceed an amount equal to 25 percent of the costs of the assessment.

“(g) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section \$15,000,000.”.



PARTNERSHIP AGREEMENT FOR WATER RESOURCES AND FISH AND WILDLIFE

PURPOSE

To work together to improve the development of this Nation's water resources and to conserve, protect, and restore its fish and wildlife resources.


OUR MISSIONS

U.S. FISH AND WILDLIFE SERVICE:
The U.S. Fish and Wildlife Service's mission is, working with others, to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people.

U.S. ARMY CORPS OF ENGINEERS:
The U.S. Corps of Engineers' mission is to provide quality, responsive engineering and environmental services to the Nation.

GOALS AND OBJECTIVES

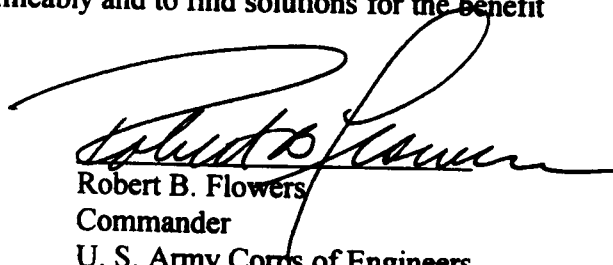
- To express our joint commitment to the conservation and restoration of fish and wildlife resources while ensuring environmental sustainability of our Nation's water resources.
- To encourage a spirit of cooperation and synergy between our agencies at the national, regional, and field office levels.
- To commit to the development of close partnerships through joint training and interagency developmental assignments.
- To ensure that we discuss our differences amicably and to find solutions for the benefit of the American public.



Steve Williams
Director
U. S. Fish and Wildlife Service

1/22/03

Date



Robert B. Flowers
Commander
U. S. Army Corps of Engineers

22 JAN 2003

Date

MEMORANDUM OF AGREEMENT BETWEEN THE U.S. FISH AND WILDLIFE SERVICE AND THE U.S. ARMY CORPS OF ENGINEERS

ARTICLE I - PURPOSE AND AUTHORITY

This two-way Memorandum of Agreement (MOA) is entered into by and between the U.S. Army Corps of Engineers (Corps) and the U.S. Fish and Wildlife Service (Service) (collectively "parties") for the purpose of establishing a framework governing the respective responsibilities for the provision of goods and services as described in ARTICLE II below. This MOA is entered into pursuant to the Economy in Government Act (31 U.S.C. § 1535) and the Fish and Wildlife Act of 1956 (16 U.S.C. § 742 et seq.).

ARTICLE II - SCOPE

a. Goods and services that the Corps may provide under this MOA include planning, design, construction, and also environmental restoration, hazardous or toxic materials removal, engineering or technical assistance, training, and such other related goods or services as may be agreed upon in the future.

b. Goods and services that the Service may provide under this MOA include environmental management, fish and wildlife resource management, training, and such other related goods or services as may be agreed upon in the future. These services may be ordered for both Civil Works projects and military installations for a variety of tasks such as those relating to operations and maintenance.

c. Nothing in this MOA shall be construed to require either party to use the other party or to require either party to provide any goods or services to the other party, except as may be set forth in Support Agreements (SA(s)).

ARTICLE III - INTERAGENCY COMMUNICATIONS

To provide for consistent and effective communication between the Corps and the Service, each party shall appoint a Principal Representative to serve as its central point of contact on matters relating to this MOA. Additional representatives may also be appointed to serve as points of contact on SAs.

ARTICLE IV - SUPPORT AGREEMENTS

a. In response to requests from one party (the "Ordering Agency") for the other party's (the "Servicing Agency") goods and services, the parties will develop mutually agreed upon written SAs that detail the specific tasks to be completed. Those SAs must be on either Engineer

Form 4914-R or a similar document containing the same information as Department of Defense Form 1144. SAs must include:

- a detailed scope of work statement;
- schedules;
- funding arrangements, including whether payment shall be in advance or by reimbursement;
- the amount of funds required and available to accomplish the scope of work;
- the Ordering Agency's fund citation and the date upon which the cited funds expire for obligation purposes;
- the names of individual project managers;
- the types of contracts to be used (if known);
- the types and frequencies of reports;
- identification of which party is to be responsible for government-furnished equipment; contract administration; records maintenance; rights to data, software, and intellectual property; and contract audits;
- procedures for amending or modifying the SA; and
- other information needed to describe clearly the obligations of the parties.

b. Goods or services shall be provided under this MOA only after an appropriate SA has been signed by a representative of each party authorized to execute that SA. After signature, a SA shall constitute a valid Economy in Government Act order. In the case of conflict between this MOA and a SA, this MOA shall control.

ARTICLE V - RESPONSIBILITIES OF THE PARTIES

a. Responsibilities of the Servicing Agency under each SA

(1) The Servicing Agency shall provide goods or services in accordance with the purpose, terms, and conditions of this MOA and with specific requirements set forth in SAs and implementing arrangements.

(2) The Servicing Agency shall ensure that only authorized Servicing Agency representatives sign SAs.

(3) The Servicing Agency shall use its best efforts to provide goods or services either by contract or in-house effort.

(4) The Servicing Agency shall provide detailed periodic progress, financial, and other reports as outlined in the SA. Financial reports shall include information on all funds received, obligated, and expended, and on forecast obligations and expenditures.

(5) The Servicing Agency shall inform the Ordering Agency of all contracts entered into under each SA.

b. Responsibilities of the Ordering Agency under each SA

(1) The Ordering Agency shall certify, prior to the execution of each SA under this MOA, that the SA complies with the requirements of the Economy in Government Act.

(2) The Ordering Agency shall pay all costs associated with the Servicing Agency's provision of goods or services under this MOA and shall certify, at the time of signature of a SA, the availability of funds necessary to accomplish that SA.

(3) The Ordering Agency shall ensure that only authorized Ordering Agency representatives sign SAs.

(4) The Ordering Agency shall develop draft SAs to include scope of work statements.

(5) The Ordering Agency shall obtain for the Servicing Agency all necessary real estate interests and access to all work sites and support facilities, and shall perform all coordination with and obtain any permits from State and local agencies, as necessary during the execution of each SA.

ARTICLE VI - FUNDING

a. The Ordering Agency shall pay all costs associated with the Servicing Agency's provision of goods or services under this MOA. For SAs estimated to cost more than \$250,000 total in contracts and in-house services or \$50,000 in contracts, the Servicing Agency shall bill the Ordering Agency in advance using the Intra-governmental Payments and Collection System (IPAC), and the Ordering Agency shall provide the necessary funds in advance using ENG Form 4914-R, Sep 97 or a similar form. For SAs valued at less than these amounts, the Ordering Agency may reimburse the Servicing Agency for the goods or services. For these lesser requirements, the Servicing Agency shall bill the Ordering Agency monthly for costs incurred using IPAC, and the Ordering Agency shall reimburse the Servicing Agency within 30 days of receipt of the IPAC transaction.

b. If the Servicing Agency forecasts its actual costs under a SA to exceed the amount of funds available under that SA, it shall promptly notify the Ordering Agency of the amount of additional funds necessary to complete the work under that SA. The Ordering Agency shall either provide the additional funds to the Servicing Agency, require that the scope of work be limited to that which can be paid for by the then-available funds, or direct termination of the work.

c. Within 90 days of completing the work under a SA, the Servicing Agency shall conduct an accounting to determine the actual costs of the work. Within 30 days of completion of this accounting, the Servicing Agency shall return to the Ordering Agency any funds advanced in excess of the actual costs as then known, or the Ordering Agency shall provide any

additional funds necessary to cover the actual costs as then known. Such an accounting shall in no way limit the Ordering Agency's duty in accordance with Article X to pay for any costs, such as contract claims or other liability, which may become known after the final accounting.

ARTICLE VII - APPLICABLE LAWS

The applicable statutes, regulations, directives, and procedures of the United States shall govern this MOA and all documents and actions pursuant to it. Unless otherwise required by law, all contract work undertaken by the Corps shall be governed by Corps policies and procedures and all contract work undertaken by the Service shall be governed by Service policies and procedures.

ARTICLE VIII - CONTRACT CLAIMS AND DISPUTES

a. Corps of Engineers Contracting

(1) All claims and disputes by contractors arising under or relating to contracts awarded by the Corps shall be resolved in accordance with Federal law and the terms of the individual contract. The Corps shall have dispute resolution authority for these claims. Any contracting officer's final decision may be appealed by the contractor pursuant to the Contract Disputes Act of 1978 (41 U.S.C. § 601-613). The Armed Services Board of Contract Appeals (ASBCA) is designated as the appropriate board of contract appeals. In lieu of appealing to the ASBCA or its successor, the contractor may bring an action directly to the United States Court of Federal Claims.

(2) The Corps shall be responsible for handling all litigation involving disputes and appeals, and for coordinating with the Department of Justice as appropriate. The Corps shall notify the Service of any such litigation and afford the Service an opportunity to review and comment on the litigation proceedings and any resulting settlement negotiations.

b. Fish and Wildlife Service Contracting

(1) All claims and disputes by contractors arising under or relating to contracts awarded by the Service shall be resolved in accordance with Federal law and the terms of the individual contract. The Service shall have dispute resolution authority for these claims. Any contracting officer's final decision may be appealed by the contractor pursuant to the Contract Disputes Act of 1978 (41 U.S.C. § 601-613).

(2) The Service shall be responsible for handling all litigation involving disputes and appeals, and for coordinating with the Department of Justice as appropriate. The Service shall notify the Corps of any such litigation and afford the Corps an opportunity to review and comment on the litigation proceedings and any resulting settlement negotiations.

ARTICLE IX - DISPUTE RESOLUTION

The parties agree that, in the event of a dispute between the parties, the Service and the Corps shall use their best efforts to resolve that dispute in an informal fashion through consultation and communication, or other forms of non-binding alternative dispute resolution. The parties agree that, in the event such measures fail to resolve the dispute, they shall refer it for resolution to the Office of Management and Budget.

ARTICLE X - RESPONSIBILITY FOR COSTS

a. If liability of any kind is imposed on the United States relating to the Servicing Agency's provision of goods or services under this MOA, the Servicing Agency will accept accountability for its actions, but the Ordering Agency shall remain responsible as the program proponent for providing such funds as are necessary to discharge the liability and all related costs. This obligation extends to all funds legally available to discharge this liability, including funds that may be made legally available through transfer, reprogramming, or other means. Should the Ordering Agency have insufficient funds legally available, including funds that may be made legally available through transfer, reprogramming or other means, it remains responsible for seeking additional funds from Congress for such purpose, although nothing in this MOA shall be construed to imply that Congress will appropriate funds sufficient to meet the liability.

b. Notwithstanding the above, this MOA does not confer any liability upon the Ordering Agency for claims payable by the Servicing Agency under the Federal Torts Claims Act. Nothing in this Agreement is intended or will be construed to create any rights or remedies for any third party, and no third party is intended to be a beneficiary of this Agreement.

ARTICLE XI - PUBLIC INFORMATION

a. Justification and explanation of the Service's programs before Congress and other agencies, departments, and offices of the Federal Executive Branch shall be the responsibility of the Service. The Corps may provide, upon request, any assistance necessary to support the Service's justification or explanations. In general, the Service is responsible for all public information. The Corps may make public announcements and respond to all inquiries relating to the ordinary procurement and contract award and administration process. The Service or the Corps shall make its best efforts to give the other party advance notice before making any public statement regarding work contemplated, undertaken, or completed pursuant to SAs under this MOA.

b. Justification and explanation of the Corps programs before Congress and other agencies, departments, and offices of the Federal Executive Branch shall be the responsibility of the Corps. The Service may provide, upon request, any assistance necessary to support the Corps justification or explanations. In general, the Corps is responsible for all public

information. The Service may make public announcements and respond to all inquiries relating to the ordinary procurement and contract award and administration process. The Corps or the Service shall make its best efforts to give the other party advance notice before making any public statement regarding work contemplated, undertaken, or completed pursuant to SAs under this MOA.

ARTICLE XII - MISCELLANEOUS

a. Other Relationships or Obligations

(1) This MOA shall not affect any pre-existing or independent relationships or obligations between the Service and the Corps.

b. Survival

(1) The provisions of this MOA that require performance after the expiration or termination of this MOA shall remain in force notwithstanding the expiration or termination of this MOA.

c. Severability


(1) If any provision of this MOA is determined to be invalid or unenforceable, the remaining provisions shall remain in force and unaffected to the fullest extent permitted by law and regulation.

ARTICLE XIII - AMENDMENT, MODIFICATION, AND TERMINATION

This MOA may be modified or amended only by written, mutual agreement of the parties. Either party may terminate this MOA by providing written notice to the other party. The termination shall be effective upon the sixtieth calendar day following notice, unless a later date is set forth. In the event of termination, in all circumstances the Ordering Agency shall continue to be responsible for all costs incurred by the Servicing Agency under this MOA, and for the costs of closing out or transferring any on-going contracts.

ARTICLE XIV - EFFECTIVE DATE

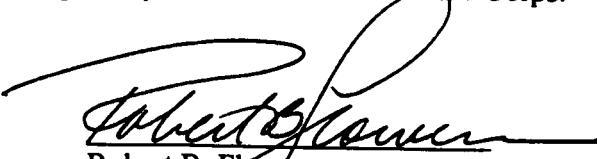
This MOA shall become effective when signed by both the Service and the Corps.



Steve Williams
Director
U.S. Fish and Wildlife Service

1/22/03

Date



Robert B. Flowers
Commander
U.S. Army Corps of Engineers

22 JAN 2003

Date

**AGREEMENT BETWEEN THE
U.S. FISH AND WILDLIFE SERVICE AND THE
U.S. ARMY CORPS OF ENGINEERS FOR CONDUCTING
FISH AND WILDLIFE COORDINATION ACT ACTIVITIES**

ARTICLE I - INTRODUCTION

a. Section 1 of the Fish and Wildlife Coordination Act, as amended, (FWCA), (16 U.S.C. §§ 661 et seq.), states the general policy that fish and wildlife conservation shall receive equal consideration with other project purposes and will be coordinated with other features of water resources development projects. To accomplish this, section 2(a) of the FWCA establishes that preconstruction planning on project development shall be coordinated with the U.S. Fish and Wildlife Service (FWS). Section 2(b) of the FWCA authorizes the FWS to conduct surveys and investigations to determine the possible damage of proposed developments on wildlife resources; to make recommendations for preventing their loss or damage; and to offer measures for developing and improving them. Section 2(e) of the FWCA authorizes construction agencies to transfer funds to the FWS to conduct investigations and prepare the reports necessary to carry out the purposes of the Act.

b. The provisions of this Agreement have been developed to ensure the FWS is involved in U.S. Army Corps of Engineers (Corps) projects as an active planning team member to help find solutions to water resources development problems that avoid, minimize, or mitigate impacts to fish and wildlife. A major goal of this Agreement is to ensure the FWS is invited and funded, when applicable, to participate early in and throughout the planning process to facilitate the FWCA's equal consideration provision.

c. In compliance with section 2(a), (b) and (e) of the FWCA, the Corps and the FWS have established coordination procedures and policy for obtaining FWS input concerning the fish and wildlife resources associated with water and related land resources development activities. Accordingly, this Agreement provides guidance and establishes uniform procedures for all Corps and FWS offices to follow in implementing field-level negotiations for funding FWS efforts on Corps water resources study and development programs. Specifically:

(1) This Agreement contains provisions for the transfer of funds from the Corps to the FWS for activities pursuant to the FWCA.

(2) This Agreement applies to General Investigations, Special Studies, Continuing Authorities, Preconstruction Engineering and Design studies, Construction projects involving fish and wildlife habitat, coordination on new dredged material placement sites, and Post Authorization Modifications requiring FWCA involvement. This Agreement applies to Corps planning, engineering, design, and construction activities, including post-construction monitoring.

(3) This Agreement does not apply to the transfer of funds for FWS review of National Environmental Policy Act (NEPA) documents, Section 7 consultations under the Endangered Species Act (ESA), Operations and Maintenance, or general interagency coordination on matters unrelated to FWCA activities. Funds will not be transferred under this Agreement for fish and wildlife investigations associated with emergency actions, Corps regulatory responsibilities, or operating Corps projects. Funding for these activities may be available using existing or new cooperative agreements and other funding mechanisms, where appropriate. Further, funds will not be transferred under this Agreement for FWS activities associated with annual program coordination for FWCA activities. Funds cannot be transferred to State resource agencies for participation in FWCA activities. Generally, reconnaissance phase studies leading to a 905(b) report have limited funds and, as a result, funds will not be provided to the FWS to support its participation. However, funds for FWS involvement on large projects may be provided for participation during the reconnaissance phase.

d. This Agreement supersedes the May 1980 Agreement (amended in September 1982) between the Corps and FWS. Commitments made in compliance with the previous Agreement will be honored.

e. Procedures and obligations stated in this Agreement shall apply to all Corps districts and FWS offices and will be amended only following review and mutual agreement at the Washington level. Either agency may request review of this Agreement. Corps districts and FWS field offices may mutually agree to develop local operating procedures to facilitate effective implementation of their agreements, provided those procedures are fully consistent with this Agreement.

ARTICLE II - GENERAL

a. For purposes of this Agreement, the term "FWCA activities" means FWS involvement early and throughout the Corps process of project development and implementation, including the reconnaissance phase. The FWS participates as an active planning team member to conduct studies and investigations on fish and wildlife aspects of Corps water resources projects, as FWS staffing and workload constraints allow. In carrying out the purposes of the FWCA, FWS personnel shall attend scoping meetings and review project documents. In addition, FWS personnel may visit sites; survey, investigate, map, and evaluate wildlife resources; and determine the relative quality and quantity of terrestrial habitat and aquatic resources potentially impacted by project construction and operation. FWS personnel shall assist in Corps development of project alternatives and projections of future conditions both with and without the project. The FWS may also help the Corps develop incremental analyses of features designed to mitigate or restore wildlife resources, and monitor post project conditions to determine the effectiveness of mitigation and restoration features. This will help to assess the need for project changes and adaptive management. As appropriate, the FWS will provide information to the Corps through FWCA reports, planning aid letters, studies, and other documents, as well as through participation in workshops, meetings, and public hearings.

b. The Corps will invite FWS involvement as an active planning team member throughout the planning, construction, monitoring, and adaptive management of water resources development projects. Each Corps district and FWS field office will designate a primary point of contact by title (and an alternate) to serve as the lead person to manage all activities required under this Agreement. The point of contact for each agency will: be a senior manager or senior staff; coordinate (act as liaisons) with their counterpart and others involved; remain up-to-date on the general status of each study/project; and serve as a trouble shooter working in partnership to resolve problems that may arise.

c. The FWS will be the Federal agency through which the Corps district will first negotiate for fish and wildlife investigations in compliance with FWCA requirements. This negotiation, which includes a discussion of the feasibility study plan, schedule, and budget, will take place during development of the project management plan (PMP). The PMP will describe the data the Corps will give the FWS; when it will be delivered; the level of analyses needed for all FWCA activities; and time schedules for the completion of both agencies' actions. A Statement of Work (SOW) will be developed using the PMP or as soon as sufficient information is available. The Corps and FWS will agree on the appropriate level of cost breakdown for each SOW. Additionally, the FWCA requires the Corps to coordinate with the appropriate State fish and wildlife agencies. Corps policy, based on Government Reorganization Plan No. 4, dated August 4, 1970, also requires Corps offices to coordinate with the National Marine Fisheries Service (NMFS) in connection with activities that involve resources for which NMFS has statutory responsibility. This Agreement does not remove or alter these responsibilities.

d. The FWS has 30 calendar days from the notification date (notification could be by e-mail or telephone) of the signing of the Feasibility Cost Sharing Agreement (FCSA) to notify the Corps (which also could be by e-mail or telephone) that it will conduct the fish and/or wildlife investigations on a particular study. If the FWS determines it cannot perform all or a portion of the work itself, and so notifies the Corps within 30 days, the Corps may then use an alternate contracting source following consultation between the two agencies. Alternate contracting sources may be obtained through the Corps or FWS. All documents prepared by the alternate source contractor will be forwarded to both parties for use in preparation of their respective reports. Alternative source contractor selection shall not occur prior to coordination between both agencies, as outlined in Article VI. If the FWS contracts for the fish and wildlife investigations, the district will assist in the preparation of the contractor's SOW. If the district contracts elsewhere, as a result of notification from the FWS within the 30-day time period that it cannot perform the work, the FWS may assist in developing the contractor's SOW and review the data and analyses to ensure their adequacy. If the district contracts elsewhere, due to a lack of response from FWS regarding their ability to conduct the work within the 30-day time period, the FWS may help develop the contractor's SOW and review the data and analyses to ensure their adequacy. The FWS will be given the opportunity to help develop the contractor's SOW.

e. Non-Federal sponsors may, with FWS and Corps concurrence, be able to perform some of the tasks pertaining to fish and wildlife evaluations for projects outlined in Article I(c)(2) as part of their cost-sharing responsibilities. Corps district offices and points of contact will ensure the non-Federal sponsors understand the section 2(b) requirements for the Corps to coordinate with the responsible FWS office to prepare FWCA reports and studies.

ARTICLE III - SCOPE OF WORK FOR FWCA COORDINATION ACTIVITIES

a. Each fiscal year, the Corps district and the FWS field office(s) will jointly prepare a SOW with a schedule and estimate of funds needed to fulfill FWCA requirements for each project or study, or group of projects and/or studies. Both agencies recognize the SOW for a large project or study is much different than for a small one with very limited funds and expedited schedules. For this reason, a letter that includes FWS comments and recommendations may be acceptable in fulfilling FWCA requirements for small projects, especially for those in the Continuing Authority Program. The need for such planning aid reports is a matter of mutual agreement between the Corps and FWS and is determined on a project-by-project basis.

b. The FWS activities to be covered by transfer funding should be clearly indicated in the detailed SOW. This SOW will describe the data and information needed; specific work to be accomplished, including the FWS document required and dates for completion; detail and effort required; conditions of contracts and subcontract(s) (if appropriate); estimated cost for investigations; specific, periodic FWS and Corps progress reviews needed for billing; schedule and milestones of study activities; and time tables for information sharing between the Corps and the FWS. This includes a schedule for collecting and exchanging data and the dates of coordination meetings, public hearings, and workshops. The Corps and FWS will agree on the appropriate level of cost breakdown for each SOW.

c. Each SOW will include activities that are agreed upon by the Corps and FWS to be necessary to satisfy the study and reporting provisions of section 2(b), and that provide the Corps with fish and wildlife resources data, information, and recommendations. The amount, quality, and scale of data, as well as the data analysis included in the SOW must be consistent with the complexity of decisions for which the data will be used, limitations in funding and time, and the significance of the fish and wildlife resources involved. The data and analyses from these activities will be used by the Corps to consider fish and wildlife resources at each stage of water resources development projects requiring FWCA involvement; serve as a basis for FWS assessment and evaluation of proposed alternative measures and plans for fish and wildlife resources; and provide a substantive basis for the recommendations the FWS and Corps may deem appropriate to preserve, mitigate, or restore these resources. The SOW will include provisions, as needed, for the FWS to attend public hearings, meetings, and workshops scheduled in conjunction with the Corps planning process.

d. The SOW for each project or study negotiated by the Corps district and the FWS field office will be forwarded by the District Engineer to the Regional Director of the FWS or their designees for approval. A copy of the SOW will be sent concurrently to the appropriate Corps district and FWS field offices. Approval of the SOW may either be prior to, or concurrent with transmittal of the funding document for the study. Agreed upon revisions will be displayed as supplements to the SOW.

e. Environmental resources data and information may be available for the study area. Every effort will be made to use relevant existing information from all available sources and to reach a consensus on the appropriateness of their use.

f. The methods of analyses, techniques, and required specialized expertise for fish and wildlife studies conducted by the FWS will be set forth in the SOW. Accordingly, reports submitted to the Corps will include data collected and analytical procedures used, meeting time constraints outlined in the SOW. Districts will provide the FWS with copies of all appropriate reports and appendices, including reports recommending no Federal action or the termination of a study, as set forth in the SOW.

g. The district and field office will coordinate throughout the year, and information on each study or project will be exchanged in a timely manner. Formal study or project-specific coordination meetings will be scheduled in the SOW at least twice a year, and more frequently if mutually agreeable to both agencies. These meetings can be in the form of project-specific technical committee meetings, where all interested and involved agencies and parties are in attendance. Meetings may also be in the form of conference calls or video teleconferences, as appropriate. The Corps will provide the FWS with copies of transcripts recorded (if any) at project/study-related meetings.

ARTICLE IV - PROCEDURES

a. In budget submittals and requests, each District Engineer will include funds to support FWCA study and reporting requirements, as set forth in SOWs.

b. Corps budgetary guidance is provided around March of each year (about 18 months before the start of the fiscal year) through program development guidance. Corps and FWS coordination must be early enough to provide meaningful input into the budget process.

c. Formal programmatic meetings will be held between the two agencies at least annually to review all upcoming and ongoing Corps activities requiring FWS coordination, and to identify needed fish and wildlife information and studies. Other formal or informal programmatic meetings will be held as required. The Corps and the FWS points of contact will jointly lead these programmatic meetings.

d. Early in the fiscal year, the District Engineer or their designee will, in coordination with the Regional Director or their designee, review the status of each study

or project requiring FWS input for the current fiscal year. Adjustments to previously negotiated work may be required due to changes in the study or project, including schedules and funding levels. In addition, the agencies will review the portion of the district's anticipated Civil Works program for each of the next two fiscal years that is covered by the FWCA. These items will be discussed at the formal programmatic meetings held between the two agencies. As appropriate, scoping and funding negotiations for future work may be included in this programmatic meeting. These negotiations are beneficial to both offices and should take place as early as practicable. The FWS current fiscal year program may also be reviewed at this programmatic meeting, which should be held after the Corps submits its budget request to the Office of Management and Budget (OMB), typically in September. All parties will treat budgetary data as privileged information. No office shall reveal any budgetary data prior to release of the President's budget.

e. After the Corps submits its budget request to the OMB, districts will give FWS field offices a list of studies and projects along with the proposed amount for the FWS for each. The list of studies and proposed amounts of funding should be considered only a very rough approximation, since they are subject to change as they go through the funding process.

f. After transmittal of the President's budget to Congress and official release to the public (typically February), the district will give FWS Regional and field offices an updated list of all projects or studies included in the President's budget and the tentative amounts proposed for FWS FWCA activities. Upon budget enactment, the district will give the FWS Regional and field offices an updated list of all the projects included in the enacted budget and the amount proposed for FWS FWCA.

ARTICLE V - AGENCY RESPONSIBILITIES

a. Corps Responsibility. The following are the responsibilities of Corps District Engineers, their designees, and points of contact for the administration of this Agreement. District Engineers or their designees will:

(1) Ensure that controls are in place for proper administration of the Agreement. The district will ensure the FWS is provided the opportunity to participate in determining FWS FWCA activities and is funded to support active planning team membership in studies/projects, including early involvement in reconnaissance phase, other early planning efforts, and throughout the study/project planning process.

(2) Ensure that, at a minimum, annual meetings and other meetings, both formal and informal, on the administration of this Agreement take place.

(3) Ensure that budget requests include the amounts needed for the FWS to conduct fish and wildlife resources studies and analyses, prepare reports, and complete other related FWCA activities for each study or project requiring FWCA involvement.

(4) Ensure the Corps' fiscal year budget information that is given to OMB on studies or projects requiring FWCA coordination, and the proposed amount for transfer to the FWS for each, is sent to the FWS field office point of contact promptly.

(5) Ensure that FWS field offices are given a list of studies and projects requiring FWCA coordination and the amount proposed for the FWS after the President's budget is released, and after the budget is enacted. The Corps will also provide copies of completed Feasibility Cost Sharing Agreements, if requested. After funds are appropriated and have been allocated to the Corps districts, they will make every effort to transmit funds (using ENG FORM 4914-R, Sep 97) for all projects as soon as possible.

(6) Ensure SOWs are prepared in adequate detail for each study/project and are approved for all studies or projects that require coordination under the FWCA pursuant to this Agreement.

(7) Ensure that Corps districts transfer information needed by the FWS for FWCA activities as jointly agreed to in the study schedule and SOW. This includes information that has been jointly determined to be necessary to conduct studies and analyses, including available fish and wildlife information and maps of the study area; engineering, hydrologic, survey, and alternative futures data; and real estate and land-use information.

(8) Keep the FWS field office(s) informed of any changes during the budgetary process, deviations from milestone schedules, and modifications in project details (e.g., alternative changes or modifications) and other factors that may affect FWS FWCA activities and responsibilities. The schedule in the SOW should be adjusted accordingly.

(9) Establish a system with the FWS point of contact so that problems in the timely submission of studies and reports can be resolved quickly and amicably, or elevated to higher authority if necessary.

(10) Provide a written response to the comments and recommendations contained in the draft FWCA report. Ensure FWCA documents are included in or attached to all studies or reports prepared by the district, which will help determine requests for authorization and funding. Provide FWS with copies of all study reports and appendices.

(11) Facilitate a better understanding of the missions and responsibilities of the Corps through regular exchanges of information and inclusion of the FWS in all appropriate projects and project delivery team meetings. The Corps should facilitate opportunities for the FWS to participate in Civil Works water resources development-related training, such as planning, environmental restoration, and FWCA. FWS participation in Civil Works water resources development-related training will not be funded by the Corps under this Agreement.

b. FWS Responsibility. The following are the responsibilities of the FWS Regional Directors, their designees, and field office points of contact for the administration of this Agreement. Regional Directors or their designees will:

- (1) Ensure that controls are in place for proper administration of the Agreement.
- (2) Ensure FWS field offices conduct fish and wildlife investigations and provide fish and wildlife analyses, planning aid letters, and draft and final FWCA reports in accordance with the established schedules and level of analyses discussed in the SOW.
- (3) Provide reports whose length is commensurate with the complexity of the project.
- (4) Ensure FWS field offices transmit bills to the Corps Finance Center in Millington, Tennessee, and the Corps district point of contact in a timely manner (but no less than monthly) consistent with the agreements in the funding documents (ENG FORM 4914-R, Sep 97).
- (5) Ensure that FWS field offices, within 30 days of FCSA execution, notify the district point of contact of any lack of capability to complete requested work within the milestone schedules established in the SOW or of any need to reschedule deadlines.
- (6) Ensure that FWS field offices, within 30 days of FCSA execution, negotiate, select, and identify any portions of work that need to be contracted; help develop SOWs (e.g., tasks, products, time schedules, and estimated costs); and provide input on contractor selection.
- (7) Ensure that FWS field offices provide the necessary consultation and conduct the necessary review whenever a fish and wildlife study or portion thereof is contracted by the district or the FWS, or is accomplished by the non-Federal sponsor.
- (8) Ensure that FWS field offices establish a system with the district point of contact so problems in the management, timing, analysis, and preparation of studies and reports can be resolved quickly and amicably or elevated to a higher authority.
- (9) Facilitate a better understanding of the missions and responsibilities of the FWS through regular exchanges of information and inclusion of the Corps in appropriate FWS projects. The FWS will facilitate opportunities for the Corps to participate in training on the FWCA. Corps participation in FWS-related training will not be funded by the FWS under this Agreement.

(10) Ensure that, at a minimum, the FWS field offices and Corps districts convene annual meetings and other meetings, both formal and informal, on the administration of this Agreement.

(11) Provide a response to Corps comments on the draft FWCA report, which delineates how and where the comments were addressed in the revised or final FWCA report, to complete the administrative record.

ARTICLE VI - PERFORMANCE

Both the Corps and FWS should strive to honor the commitments made by both parties in each SOW. In the event that either party cannot meet a commitment, the Corps and FWS will proactively work together to make any adjustments, including the use of an alternative source to complete the work, if necessary. Alternate contracting sources may be obtained through the Corps or FWS. All documents prepared by that source will be forwarded to both parties for use in preparation of their respective reports. Alternate source contractor selection shall not occur prior to coordination between both agencies. The use of an alternative contracting source should be the exception rather than the rule. Lack of planning is not a suitable reason for using a contractor.

ARTICLE VII - COST ESTIMATES AND INDIRECT COSTS FOR FWCA ACTIVITIES

a. The cost estimate for FWCA study activities will include 38 percent of field expenditures for indirect costs for each fish and wildlife study and/or report, and will reflect the costs in the Regional and central offices of the FWS for their activities. However, when a fish and wildlife study, or a portion thereof, is subcontracted by the FWS, the agency will receive 15 percent (not 38 percent) indirect costs for the subcontracted portion of the fish and wildlife investigations.

b. FWCA cost estimates for each project and/or subcontract will consist of labor costs by category, material, equipment, and other costs for the FWS field office or subcontractor involved.

c. Cost estimates for FWCA activities will include a lump sum person-day cost (8 hour day) per task, and the cost of any special material or equipment required for a particular project on a field office basis. Field office person-day costs will include support services such as material and supplies, leave, office equipment, telephone, travel, and training. The percent of support services charged to transfer funds will be on a prorated basis.

d. Cost estimates for FWCA activities in conjunction with the study will include provisions required for FWS attendance at planning study team meetings, public hearings, and other meetings and workshops, as appropriate.

ARTICLE VIII - METHOD OF PAYMENT AND BILLING PROCEDURES

a. Funding of FWS activities under this Agreement will be performed using an ENG FORM 4914-R, Sep 97. Funding will be provided for each individual study or project using this form. The ENG FORM 4914-R, Sep 97 will include the negotiated amount of funds required to complete each FWCA activity and the SOW (or a copy of the previously executed SOW if it has already been approved) for each study or project. When appropriate, individual SOWs can include the FWCA activities that are expected over a number of years. The signed ENG FORM 4914-R, Sep 97 obligates Corps funds and provides FWS authority to obligate funds and bill the Corps for work accomplished. The ENG FORM 4914-R, Sep 97 will show the Corps district as the ordering office and the appropriate FWS field office as the performing office.

b. At the beginning of each fiscal year, or at other times as appropriate during the fiscal year, the Corps will transmit a signed ENG FORM 4914-R, Sep 97 with a SOW for each study or project to the Regional Director for signature. Once signed, the Regional Budget and Finance Officer will give the FWS Denver Finance Center copies of each signed ENG FORM 4914-R, Sep 97 containing billing instructions.

c. Billing will be conducted under the Intra-governmental Payments and Collection System (IPAC), and will show the district as the debtor (office billed), and the applicable FWS office as the creditor (billing office). The Corps will be billed by the FWS Finance Center on at least a monthly basis. The Corps must receive the bills no later than 21 calendar days after the last day of the month. The bills will reflect direct costs incurred plus 38 percent for indirect costs (or 15 percent for indirect costs on subcontract work) and will be itemized consistent with the negotiated cost estimate for each study.

ARTICLE IX - OBLIGATION AUTHORITY

If there is not a new Appropriations Act signed by the President prior to the start of the fiscal year, and carry-over funds are not available, spending authority for ongoing studies will be given to the FWS based on the previously developed SOW if that authority is received by the Corps. In the event the Corps does not receive the authority, the Corps will notify the FWS promptly.

ARTICLE X - SUSPENSION OR TERMINATION OF STUDIES

a. Delays in project starts at the beginning of the fiscal year, other starts and stops of projects, and delays in funding make it difficult for the FWS to plan its workload and staffing needs. Therefore, every effort will be made to avoid interrupting the funding that has been negotiated. When such interruptions become necessary, the FWS will be

contacted immediately and efforts will be made to minimize the impact on FWS staff and their ability to provide needed services to the Corps.

b. In the event of rescission, revocation, lack of sufficient appropriations, or a determination that the water resources study will have unfavorable findings, and with concurrence of higher authority, the Corps district may suspend or terminate work on any fish and wildlife study, including subcontracts, and may withdraw the remaining funds. In this event, the Corps shall immediately notify the FWS field office in writing via SF30 with a copy given to the Regional Director.

c. Upon receipt of written suspension or termination of a study by the district where an ENG FORM 4914-R, Sep 97 has been signed, and where work by the FWS has been initiated but not completed, the FWS will bill the Corps, including the 38 percent for indirect costs (or 15 percent for indirect costs on subcontract work) for work accomplished as of that date. If the suspended or terminated study or project is reactivated and rescheduled, a new SOW, cost estimate, and schedule for FWS studies will be negotiated. The Corps will forward the new ENG FORM 4914-R, Sep 97 and SOW to the Regional Director for signature.

ARTICLE XI - DISPUTE RESOLUTION

In carrying out the above Agreement, every effort will be made to resolve all problems at the Corps district and FWS field office level. The FWS and the Corps points of contact have the lead on problem resolution. If this cannot be achieved, points of contact should refer the problem to the appropriate Corps Division and FWS Regional Office. Unresolved problems that impair either agency's abilities to carry out its mandated responsibilities should be referred to the Director of Civil Works, U.S. Army Corps of Engineers, and Director, U.S. Fish and Wildlife Service for resolution. Any referrals to the Washington level shall document the specific nature of the problems and efforts taken at the field level to resolve the disagreement.

ARTICLE XII - EFFECTIVE DATE

This Agreement revision shall become effective when signed by both the Service and the Corps.



Steve Williams
Director
U.S. Fish and Wildlife Service

1/22/03

Date



Robert B. Flowers
Commander
U.S. Army Corps of Engineers

22 JAN 2003

Date

. AMENDMENT TO:
AGREEMENT
BETWEEN THE
U.S. FISH AND WILDLIFE SERVICE
AND THE
U.S. WATER AND POWER RESOURCES SERVICE
FOR
FUNDING OF FISH AND WILDLIFE COORDINATION ACT
ACTIVITIES

Effective the date of the last signature hereto, the above agreement dated April 7, 1981, is amended as follows:

NAME CHANGE

All references to the Water and Power Resources Service (LWP) are to be changed to Bureau of Reclamation (BR).

INTRODUCTION

No change

GENERAL

No change

REGIONAL AGREEMENTS

Regional arrangements to conduct fish and wildlife studies will be negotiated prior to the beginning of each fiscal year. BR will confirm these arrangements by preparing a concise Memorandum of Agreement (MOA) between the BR Regional Office and FWS Regional Office. One MOA will be prepared between each FWS Regional Office and BR Regional Office and will cover all studies and projects to be funded in that fiscal year, as well as the agreed-upon level of funding. There will be a separate enclosure which will delineate each study or project to be funded. The enclosure will set forth the scope of work (SOW), specify milestones for information to be furnished to FWS, data and planning input from FWS to be received by BR, and the negotiated level of funds for FWS to complete the study.

Amendments may be made by mutual agreement if new studies or projects need to be added, additional funds needed, or if those already funded are terminated or modified. Between January and May of each year, funding negotiations will be held and a SOW developed for the budget fiscal year (current FY plus 2). This SOW will be as specific as is needed to meet the appropriate planning stage or study requirements. See Appendix A for further explanation of this procedure.

FWS RESPONSIBILITY

No change

LWP RESPONSIBILITY

No change

JOINT RESPONSIBILITY

No change

PERFORMANCE

No change

ALLOWABLE COSTS

Allowable FWS costs for each study or project will include basic field costs, other direct costs, prorated percentage of support services, and 38 percent for overhead. Costs associated with work requested by BR, but done outside the FWS, will include 15 percent for overhead.

SUSPENSION, TERMINATION, OR COMPLETION OF STUDIES

In the event of recession, revocation, Congressional failure to appropriate funds, or a determination that the project will have unfavorable findings, the BR Regional Director may suspend or terminate work on any study or project. If a suspended or terminated study or project is reactivated, funding for FWS studies will be renegotiated.

SCHEDULE OF PAYMENT

On the first of October of each fiscal year, or as soon as funds are available, the total amount of funds listed in Regional MOA will be committed to FWS for that fiscal year.

METHOD OF PAYMENT

At the beginning of each fiscal year or upon initiation of a study/project, a separate enclosure will be attached to the MOA between FWS Regional office and BR Regional Office. Among other items the enclosure will reflect the negotiated amount of funds required to complete tasks identified in the MOA. This enclosure will also give the FWS authority to bill the BR Regional office for work accomplished in accordance with the MOA.

On a quarterly basis, the FWS Finance Center will bill each BR Regional office for work accomplished during that quarter. Each Regional office will receive a bill for each MOA it has with the FWS region. The bill will reflect one amount plus the 38 percent overhead and will have a billing report attached which breaks down the billing amount by project covered by the MOA.

OPERATING UNDER TEMPORARY OBLIGATIONAL AUTHORITY

Delete

ACCOUNTING

The FWS will provide the BR Regional office, on a monthly basis, or as otherwise agreed, with a copy of the Ecological Services Cost Recoverable Project Report which will indicate actual funds expended for each study or project. Similar data will be provided by FWS for subcontracts they monitor. Additional, specified accounting information will be furnished to the BR Regional office upon request. The FWS will notify the BR Regional office immediately when it appears that additional funding will be required for an individual study/project.

AGREEMENT REVIEW

No change

Robert N. Broadbent 10/9/52
 Robert N. Broadbent Date
 Commissioner
 Bureau of Reclamation
 Department of the Interior

Robert A. Jantzen 10/26/52
 Robert A. Jantzen Date
 Director
 U.S. Fish and Wildlife Service
 Department of the Interior

AGREEMENT
BETWEEN THE
U.S. FISH AND WILDLIFE SERVICE
AND THE
U.S. WATER AND POWER RESOURCES SERVICE
FOR
FUNDING OF FISH AND WILDLIFE COORDINATION ACT
ACTIVITIES

INTRODUCTION

Section 2 of the Fish and Wildlife Coordination Act of 1958 (FWCA) states the general policy that fish and wildlife conservation shall receive equal consideration with other project purposes and will be coordinated with other features of water resources development projects. To accomplish the above stated objective, Section 2(a) of the FWCA establishes that preconstruction planning on project development shall be coordinated with the U.S. Fish and Wildlife Service (FWS). Section 2(b) of the FWCA provides for FWS to conduct surveys and investigations to determine the possible damage of proposed developments on wildlife resources, and for making recommendations to the construction agency that set forth means and measures to prevent the loss of or damage to wildlife resources, as well as to provide concurrently for the development and improvement of such resources. Section 2(e) of the FWCA authorizes construction agencies to transfer funds to FWS to conduct such investigations and to prepare reports necessary to carry out the purposes of the Act where construction of a project by a Federal agency is involved.

In compliance with Section 2(a), (b) and (e) of the FWCA, the Water and Power Resources Service (LWP) and FWS have established coordination procedures and policy for funding of FWS input concerning fish and wildlife resources associated with proposed water and related land resources development activities. Accordingly, this Agreement provides guidance and establishes uniform procedures for all LWP and FWS offices to follow in implementing field-level LWP negotiations for funding of FWS planning and study efforts on water resources study and development programs to meet requirements of the FWCA.

GENERAL

FWS will participate with LWP in the development of its budget-year and program-year budgets to determine the level of funding necessary to support FWS planning and study efforts on LWP water resources study and development programs. LWP and FWS will jointly determine the scope, level of effort, funding, and time-frame required to:

1. allow LWP to meet its schedule;
2. allow FWS to meet its responsibilities under the FWCA through early participation in project planning, providing fish and wildlife data, and reviewing project documents; and

3. ensure the appropriate involvement of the FWS in multidisciplinary planning under the Water Resources Council's Principles and Standards for Planning.

Close coordination between LWP Regional Offices and FWS Field Offices will ensure that data, information, and analyses set forth in the scope of work (SOW) are appropriate to satisfy FWCA requirements and provide a substantive basis for such recommendations as FWS may deem appropriate to preserve, mitigate, compensate, or enhance these resources.

This Agreement supersedes the 1977 Agreement signed by WPRS and FWS. However, commitments made in compliance with the 1977 Agreement will be honored through Fiscal Year 1981.

REGIONAL AGREEMENTS

Regional arrangements to conduct fish and wildlife studies will be negotiated prior to the beginning of each fiscal year. LWP will confirm these arrangements by preparing a concise Memorandum of Agreement between the LWP Regional Office and FWS Regional Office. One Memorandum of Agreement will be prepared between each FWS Regional Office and LWP Regional Office and will cover all studies and projects to be funded in that fiscal year, as well as the agreed-upon level of funding. There will be a separate enclosure which will delineate each study or project to be funded. The enclosure will set forth the scope of work, specify milestones for information to be furnished to FWS, data and planning input from FWS to be received by LWP, and the estimated annual costs for FWS to complete the study. Upon execution of the Regional Memorandum of Agreement, funds will be made available in accordance with the terms of this Agreement.

Amendments may be made by mutual agreement if new studies or projects need to be added, additional funds needed, or if those already funded are terminated or modified. Between January and May of each year, funding negotiations will be held and a SOW developed for the budget fiscal year (current FY plus 2). This SOW will be as specific as is needed to meet the appropriate planning stage or study requirements. See Appendix A for further explanation of this procedure.

FWS RESPONSIBILITY

FWS will provide fish and wildlife information or reports for inclusion with LWP feasibility reports and data or reports required for appraisal, basin, special studies, advance planning reports, and data for environmental statements. In general, the studies will include plans for FWS to satisfy the requirements of the FWCA data for the draft environmental statement when appropriate, and other reports as required. All data, reports, evaluations, etc., provided by FWS will be to a level of detail which is appropriate for the specific reports. Details of specific project requirements will be included in the scope of work attached to the Regional Memorandum of Agreement. FWS will provide detailed data such as: (1) description of habitats and fish and wildlife resources; (2) species considered to be important; (3) evaluation of habitats and

associated resources with each alternative plan; (4) use of important species in user-days and estimated user-day values; and (5) compensation and enhancement plans.

When requested, copies of the data and information collected and the analytical procedures used will be provided to LWP. FWS will provide LWP with a draft copy of the final report on each project including the conclusions and recommendations of the FWS for review and comment prior to the release of the report.

LWP RESPONSIBILITY

LWP will initially negotiate with FWS Offices for obtaining fish and wildlife data and input. If FWS determines that they cannot perform all or portions of the work in-house, LWP may (a) contract elsewhere for the fish and wildlife data, or (b) consent to FWS's subcontracting for the required information. If FWS subcontracts for the information, LWP will assist in the subcontract. If LWP elects to contract elsewhere, FWS will assist in developing the SOW and in selecting the appropriate contractor. LWP will retain its option to consult with the National Marine Fisheries Service on matters within their expertise. LWP will provide maps and engineering, remote sensing imagery, hydrologic, real estate, land use, and other data that have been jointly determined to be necessary for FWS to conduct its studies.

LWP will keep the FWS Regional Director and appropriate field office(s) informed of any changes during the budgetary process, any deviations from schedules, and project details and project status that may impact on FWS responsibility.

JOINT RESPONSIBILITY

As mutually determined, LWP and FWS will schedule and hold coordination meetings, as necessary, for the purpose of discussing and coordinating schedules, progress, and problems associated with ongoing and anticipated studies and projects (see Appendix A). In accordance with terms of the Regional Memorandum of Agreement, FWS and LWP will exchange quarterly progress reports for each project or study. FWS will participate jointly with LWP in the planning process to include scoping meetings; public hearings, and multiobjective planning activities. In carrying out the Agreement, every effort will be made to resolve problems at the appropriate level in each agency.

PERFORMANCE

Should the FWS fail to meet the provisions of the Agreement schedule, LWP will reschedule the work if schedules acceptable to the Regional Directors (LWP) and (FWS) can be negotiated. If not, LWP may terminate the Agreement for that particular study or project, withdraw the remaining funds, and LWP will obtain the required information from another source. The second source will be selected in consultation with the FWS. Should the LWP fail to meet the provisions of the Agreement schedule, the work will be rescheduled with the concurrence of the FWS. Adjustments in the schedule as a result of delays will be coordinated by both agencies so that work and reporting schedules can be adjusted accordingly.

ALLOWABLE COSTS

Allowable FWS costs for each study or project will include basic field costs, other direct costs, prorated percentage of support services, and 38 percent for overhead. Costs associated with work requested by LWP, but done outside the FWS, will include 15 percent for overhead. If FWS does not have the capability to initiate or complete a study, the unexpended funds, including a prorated share of overhead costs, will be promptly returned to LWP. If LWP terminates a study, FWS will return the unexpended funds but not the amount included for overhead.

SUSPENSION, TERMINATION, OR COMPLETION OF STUDIES

In the event of recession, revocation, Congressional failure to appropriate funds, or a determination that the project will have unfavorable findings, the LWP Regional Director may suspend or terminate work on any study or project, and FWS may refund the remaining funds (excluding overhead) on any study or project so terminated or suspended. If a suspended or terminated study or project is reactivated, funding for FWS studies will be renegotiated. Upon completion of a study or project by FWS, all funds remaining in the account will be returned to LWP.

SCHEDULE OF PAYMENT

On the first of October of each fiscal year, or as soon as funds are available, the total amount of funds listed in Regional Memoranda of Agreement will be committed to FWS for that fiscal year. To advance funds to FWS, LWP will process an SF-1081 referencing the signed Regional Memorandum of Agreement.

METHOD OF PAYMENT

At the beginning of the fiscal year (1 October), or as soon as funds are available, LWP will obligate 100 percent of the funds for which Letters of Agreement and appropriate supplements have been signed for the particular fiscal year. For schedules showing work planned throughout the year, 75 percent of the obligated funds will be initially advanced. To the extent FWS estimates that the remaining 25 percent of obligated funds need to be provided during the last quarter, these funds will be advanced by LWP at the beginning of the eighth month. For work scheduled for completion prior to June 30, total agreed funding will be transferred at the beginning of the fiscal year.

OPERATING UNDER TEMPORARY OBLIGATIONAL AUTHORITY

If funds are not available for advances in accordance with the previous sections, obligational authority for ongoing studies will be furnished the FWS provided that similar authority has been provided by law to LWP.

ACCOUNTING

FWS will notify LWP monthly of its actual costs which have been applied to advances, and the balance, if any, of advances. At the end of a fiscal year, LWP will have the option of allowing any balance to be applied to reduce the advance for the next fiscal year.

AGREEMENT REVIEW

This Agreement may be reviewed, terminated, or renegotiated at the option of either party at any time.

J. Eugene Hester 3-17-81
Signature Date

Robert N. Bunker Date
Signature APR 7 1981

APPENDIX A

In order to fund for FWS planning and study activities in connection with LWP programs, it is necessary for LWP and FWS to closely coordinate their program schedules. Listed below are key months in which coordination meetings should take place. Development of the Fiscal Year 1981 budget and the Fiscal Year 1982 program year are used as an example.

Budget Year 1982

Between January 1980 and May 1980, the LWP Regional Office and FWS Regional Office will coordinate alternative levels of funding for Fiscal Year 1982 LWP activities which will be developed for each study or project. At the time the target budget requests are sent to the Office of the Secretary (about 15 May), the LWP Regional Office will furnish the FWS Regional Director a list of projects included in LWP by request along with the amount proposed for FWS studies for each study or project. In September 1980 when estimates are sent to OMB and in January 1981, each LWP Regional Office will furnish the FWS Regional Director an updated list of all projects or studies included in the President's Budget and show the tentative amounts proposed for FWS studies.

Program Year 1981

Between May 1980 and September 1980, study plans and funding levels for Fiscal Year 1981 LWP activities will be finalized based upon Congressional appropriations. The FWS should receive funds in accordance with previous agreements, unless adjustments are required as a result of appropriations or overall study progress. A letter or Memorandum of Agreement for Fiscal Year 1981 LWP activities should be prepared and signed by appropriate officials of both agencies by October so that there will be a continuum of FWS effort.



United States Department of the Interior

FISH AND WILDLIFE SERVICE
WASHINGTON, D.C. 20240

FEB - 4 1985

ADDRESS ONLY THE DIRECTOR
FISH AND WILDLIFE SERVICE

Instructional Memorandum No. 53
(Revised January 1985)

Memorandum

To: Regional Directors (ARD-HR), Field Supervisors (ES),
and Division of Ecological Services Personnel

From: Associate Director - Habitat Resources

Subject: Instructional Memorandum No. 53 -- Transfer Funds for
Fish and Wildlife Coordination Act Activities with
the Bureau of Reclamation and the U.S. Army Corps
of Engineers

This instructional memorandum (IM) was developed to provide guidance to Field Supervisors and other ES personnel relative to negotiations for transfer funds with the Corps of Engineers (Corps) and Bureau of Reclamation (Bureau). It should be considered a supplement to the national agreements we have with these agencies regarding transfer funding.

The need for adopting a standard method of cost calculation has become increasingly evident in the last few years because of inquiries from both the Corps and Bureau Washington offices concerning wide discrepancies in staff costs among field stations. Therefore, a standard method is presented herein that will be used by all field stations.

The IM refers to an explanation of the key steps in the Corps planning process found in 210 ESM 1. It should be noted that this part of the Ecological Services Manual has not been released. It is still under development due to recent changes in Corps and Bureau planning guidelines.

Any problems encountered with the basic points of the transfer fund agreements or agency adherence to the agreements should be addressed to the Branch of Federal Projects in Washington, D.C. In the case of problems of agency adherence, documentation of the issue is important.

Donald J. Conroy

ES Instructional Memorandum No. 53
TRANSFER FUNDS FOR FISH AND WILDLIFE COORDINATION ACT ACTIVITIES
WITH THE BUREAU OF RECLAMATION AND THE
U.S. ARMY CORPS OF ENGINEERS
(Revised January 1985)

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TRANSFER FUNDS FOR FISH AND WILDLIFE COORDINATION ACT ACTIVITIES

Introduction

In August of 1958, the Act of March 10, 1934, was amended "to provide for more effective integration of a fish and wildlife conservation program with Federal water resource developments, and for other purposes." With these amendments, the 1934 Act became the Fish and Wildlife Coordination Act (FWCA), providing that "wildlife conservation shall receive equal consideration and be coordinated with other features of water resource development programs."

The original 1934 Act required construction and permitting agencies to consult with the Bureau of Fisheries (later to become the Fish and Wildlife Service) regarding provisions for fish passage devices at dams, and to give what is now the U.S. Fish and Wildlife Service (Service) the opportunity to use the impoundments for fish-culture stations and migratory bird resting and nesting areas. However, the conditions under which these uses would be permitted were quite narrow, and environmental considerations, in general, were not included.

Section 2 of the 1946 amendments to the 1934 Act added the requirement for Federal construction agencies to consult with the Service and the appropriate State before a water resource development project is undertaken. Section 2 also required that construction agencies make FWCA an "integral part" of their reports to Congress requesting authorization to construct or modify water resource development projects. That section further authorized Federal construction agencies to transfer to the Service, "out of appropriations or other funds made available for investigations, engineering, or construction, such funds as may be necessary to conduct all or part of the investigations required to carry out the purposes of this section." These provisions became Subsections 2a, 2b, and 2e, respectively, in the 1958 amendments. Thus, the negotiations that result in funding to conduct investigations and prepare FWCA Reports are one of the most important activities of the Division of Ecological Services (ES).

Between the mid-1960's and 1978, funding transfers were usually accomplished at the Washington level. Funds received by ES Field Offices often did not provide the capability for adequate and timely planning input to the construction agencies. However, early in Fiscal Year 1978, the Corps of Engineers (Corps) of the Department of the Army, and the Bureau of Reclamation (Bureau) of the Department of the Interior, entered into formal agreements with the Service, outlining, in general, a method for negotiating funds at the field level to fulfill FWCA requirements.

These two agreements provide for funds to be transferred to the Service for investigations of specific studies or projects, and require that the Service keep records and report on how these transfer funds are expended

in fulfillment of Service responsibilities under the FWCA. The agreement with the Corps was subsequently revised on June 16, 1980, and the agreement with the Bureau was revised on April 7, 1981, to address modifications to improve the efficiency of the process. Amendments were added in 1982 to reflect requirements for reimbursable funding implemented by the Office of Management and Budget (OMB).

This Instructional Memorandum provides guidelines for Field Supervisors and ES personnel in Regional Offices relative to funding negotiations with Corps District Engineers and Bureau Regional Planning Officers.

Scope of Transfer Funding

Transfer funds are normally provided for fish and wildlife investigations during planning and construction stages by both construction agencies. Investigations associated with completed projects, with the exception of maintenance dredging projects, normally will not be funded under provisions of the national agreements. Special cases requiring transfer funds must be approved by the Corps' Chief of Engineers or the Bureau's Commissioner of Reclamation. Funds will not be transferred under the Corps' agreement for investigations involving emergency actions or review of EIS's. However, transfer funds can be used to provide information to the agencies for use in the development of EIS's.

Schedule

Negotiations should be initiated between January and May of each year for projects to be studied two fiscal years in advance. Development of the Fiscal Year 1986 budget and the Fiscal Year 1987 program year are used for the following description of the process.

Budget Year 1987. Between January and May 1985, funding negotiations will be held with the Corps and Bureau, and Scopes of Work (SOW) will be developed for the budget fiscal year (current fiscal year, plus two). The SOW should be as specific as necessary to meet the appropriate planning stage or study requirement. At the time the Bureau target budget requests are sent to the Office of the Secretary (about May 15), the Bureau Regional Office should provide the Service Regional Director a list of projects included in the Bureau request along with the amount proposed for each Service study or project. In September 1985, when estimates are sent to OMB, and in January 1986, each Bureau Regional Office and Corps District Office will provide the Service Regional Director and Field Office, respectively, with an updated list of all projects or studies included in the President's budget and show the tentative amounts proposed for Service activities.

Program Year 1986. Between May 1985 and September 1985, study plans and funding levels for Fiscal Year 1986 Bureau activities will be finalized based on congressional appropriations. Corps funding levels will be

finalized between June and September. The Service should receive funds in accordance with previous agreements, unless adjustments are required as a result of appropriations or overall study progress. A Letter or Memorandum of Agreement for Fiscal Year 1986 Corps or Bureau activities should be prepared and signed by appropriate officials of the agencies by October 1, 1985, to ensure a continuum of Service effort.

Meetings

Negotiation meetings will be held between the Field Supervisor and the Corps District Engineer or Bureau Regional Planning Officer, whenever deemed necessary by any of the involved parties. The first meeting should be held shortly after the President's Budget Message on Civil Works has been submitted to Congress and the two construction agencies have testified on the various projects proposed. Items to be discussed at this meeting should include:

1. The project work schedules for the upcoming fiscal year;
2. Any necessary revisions to cost estimates and overall schedules for the upcoming fiscal year; and
3. Preliminary estimates of funding levels for the following year.

An earlier meeting may be held prior to submission of the preliminary list of projects to OMB by the construction agency, if deemed appropriate.

Funding negotiations will cover projects in various stages of planning and construction. Documentation supplied by the construction agency will reflect the planning status of each project. Projects in the earliest phases of planning will require only a general description of the proposed project and Service activities must be planned according to information developed. As planning proceeds, the construction agency will prepare a Plan of Study with input from the Service. This document should be provided by the construction agency as soon as completed for use in other detailed studies required as planning progresses. Only preliminary negotiations can be conducted at this stage because neither the project list nor the funding level is final. A second negotiation meeting should be held prior to the beginning of the new fiscal year (August or September). At this meeting, final details should be resolved for the Service's participation in construction agency planning and construction activities. Letters of Agreement or Regional Memoranda of Agreement are prepared in final form at this time. If necessary appropriation bills have not been enacted, the construction agency will insert the phrase "subject to availability of funds" in the agreement.

Documentation of Negotiations

The formal document resulting from negotiations with the Corps is a Letter of Agreement. Each Letter of Agreement may contain one study or

project, or several studies and projects may be covered by one agreement, whichever is mutually acceptable to the Field Supervisor and the District Engineer involved.

One Regional Memorandum of Agreement will be prepared to cover all Bureau projects under the jurisdiction of one Service Region and one Bureau Region. When parts of more than one Bureau Region fall within the boundaries of one Service Region, a Regional Memorandum of Agreement will be required for each Bureau Region within that Service Region.

Content of Agreement

Each Corps study or project will require an SOW and estimated costs for the work to be conducted by the Service during the fiscal year. This information may be summarized in the agreement and separate attachments prepared for each study or project, or it may be contained in the agreement, whichever is mutually acceptable to the Field Supervisor and District Engineer. These agreements should be project-specific and not reiterate the terms of the national agreement.

Only one agreement will be required between each Service Regional Office and Bureau Regional Office, regardless of how many projects may be involved. Individual Scopes of Work and agreed-upon levels of funding required for Service participation during a fiscal year will be negotiated by the Field Supervisor and Bureau Planning Officer. They will then be forwarded to the Assistant Regional Director, Habitat Resources, for consolidation with other field office SOW's into one Regional Memorandum of Agreement, as appropriate.

All SOW's and funding agreements prepared for Corps or Bureau studies or projects will specify the type of information to be furnished the Service by either construction agency, and scheduled completion dates for reports and other planning input to the construction agency.

The terms of both the Corps and the Bureau national agreements provide for additional negotiations if new studies or projects need to be added, or if planned studies or projects are modified or terminated.

Costs of Negotiations

Expenses of Service participation in negotiations for transfer funds with the Corps and Bureau will be charged against those respective accounts.

Summary of Negotiation Process

The formal agreements with the Corps and Bureau provide that funds for project investigations be negotiated for each project on a yearly basis. In the case of Corps studies or projects, formal agreements are signed by the District Engineer and the appropriate Service Regional Director. Similar agreements on Bureau projects are signed by the respective Regional Directors.

Field Supervisors will develop the cost estimates in dollars and staff-days for each project. They will also prepare the descriptions of work (Scopes of Work) to be performed. In conjunction with the Corps District Engineer or Bureau Planning Officer, Field Supervisors will negotiate funds for each study or project. When negotiations have been concluded, the funding arrangements in the form of Letters of Agreement and Regional Memoranda of Agreement will be submitted to the Regional Director of the Service.

Scopes of Work

An SOW must be prepared for each project during transfer fund negotiations. However, very small studies should be combined into one SOW to keep bookkeeping at a manageable level. Scopes of Work may be individual Letters/Memoranda of Agreement, or a number of SOW's may be attached to a covering Letter/Memorandum of Agreement, as preferred by the individual District Engineer or Regional Planning Officer. These documents will be prepared by the Corps or Bureau in cooperation with the Field Supervisor.

Content: SOW's should address the entire period from initial planning through construction and describe anticipated funding levels and staff-days required to provide compliance with the FWCA. They will also contain a concise statement of the geographic area the investigations will be covering and the project purposes to be addressed. This information should give a general idea of the extent and complexity of the study being undertaken. There also should be an indication of the expected length or duration of the study.

Each SOW should briefly describe the work the Service believes will be necessary over the entire study or construction period to fulfill its responsibilities under the Fish and Wildlife Coordination Act. However, more detail should be included for the task to be done in the fiscal year under consideration for funding. The work for the forthcoming fiscal year should be described in sufficient detail so that each task, schedule, and product agreed to is clearly defined.

Data Required by the Service from Construction Agencies: In order to perform the necessary investigations for any proposed water resource development study, the following engineering and hydrologic data should be supplied by the construction agency whenever appropriate for the type of project being considered:

1. The specific authorizing documents for conducting the investigation;
2. Project name and location, including Corps District or Bureau Region, State, counties, and congressional districts in the study area;

3. A listing and brief description of all project purposes (flood control, navigation, M&I water supply, irrigation, etc.);
4. Length of study, especially if it will span more than 1 year;
5. Maps showing location of project features such as proposed project real estate acquisition, dredging area, levees, conveyance facilities, dams, reservoir pools, borrow and spoil areas, relocation of roads, railroads, bridges, towns, proposed recreation development, power plants, etc.;
6. Aerial photos and maps showing various habitat types present;
7. USGS topographic maps;
8. The water surface elevation, surface area (acres), and storage (acre-feet) of the maximum, flood control, average annual, minimum pools; silt storage (acre-feet), stage-frequency and stage duration curves, and streambed elevations;
9. Pre-project hydrologic conditions, existing flow regimes, etc. (These may also be obtained from U.S. Geological Survey if unavailable from the Corps);
10. A reservoir operation study showing monthly operation, preferably for at least a 50-year period including inflow to the reservoir, diversions, downstream releases (for water quality control and to meet downstream water rights), distribution facility losses, net evaporation, end-of-month storage, spills, pumpback operations, etc.;
11. The schedule for, and the quantity of, project water to be released downstream and exported out of the basin, as well as the points of downstream diversion for exported project water;
12. The predicted land-use changes for the study area;
13. Description and location of water control structures such as multilevel outlets;
14. An estimate of land costs in the reservoir area;
15. Description of plans to implement aesthetic measures with the project;
16. Description of depths and velocities resulting from different flow schedules in project canals or channel works, as well as a description of channel bottom configurations;
17. Description of land status—(acquired, easement, etc.) within project boundaries; and

18. Names, addresses, and phone numbers of the Corps or Bureau Study/Project Manager.

If desired, appropriate items from the above list may be included in the SOW as required documents. Other information the Service deems necessary also may be included in the SOW. If information is not available at the time of negotiations, its need can still be formally recognized in the SOW, and a date for delivery of the information indicated.

Level of Service Activities: Activities to be undertaken by the Service should be geared to the type of study being conducted, the particular stage of planning for any given project, and the scope of the construction agency's study. During the initial investigations, the lead agency will usually request a level of effort from the Service commensurate with the available engineering and economic data. Service level of effort should increase as the project planning progresses from the initial investigations into the formulation of alternative stages, final selection of the recommended plan, and construction. Estimates of transfer funds needed should be based on this concept.

Corps regulations concerning the planning process are identified and explained in 210 ESM 1. It should be possible to anticipate the progress of a study through the various planning iterations and identify the appropriate points for Service input. The environmental aspects of the Bureau's planning process are outlined in its Planning Instruction 83-22, and milestones that need Service input are identified. A Service ESM is being developed on the subject of the Bureau planning process.

Preparation of Funding Estimates: Funding estimates beyond the next fiscal year, though tentative, are important in Corps/Service programming. The Corps tracks 5 years in advance. For this reason, a rough estimate of reimbursable funds required in succeeding years should be included in all estimates for projects that are expected to extend past the next fiscal year.

The Bureau planning process requires funding projections for 2 years in advance. Supplying this advance information may make it easier to obtain reimbursable funds in future years. When estimating costs in future years, it is necessary to include estimates of cost increase due to expected inflation.

In planning funding estimates, the Field Supervisor should consider the following:

1. How much travel and field work will be involved;
2. How much coordination will be required with local interests and other governmental agencies;
3. How much work will be required to "start up" (If the project has extensive files, a new planner may require extensive review time);

4. If the project is to be completed during the forthcoming fiscal year, how much should be anticipated for "shut-down" costs--should funds be programmed for post-construction actions such as responding to public questions and comments on the FWCA Report;
5. Will the Service have to purchase planning aids such as maps, aerial photographs, etc., or will these aids be supplied by the construction agency;
6. Study requirements, i.e., the type and level of detailed information required by the construction agency from the Service;
7. Costs of printing, photos, and reproduction of the FWCA reporting documents (how many photographs, pages, etc.--printing costs escalate rapidly);
8. Is there sufficiently trained staff on board so that completion dates can be met, or will additional staff be required during the year;
9. Are funds required to pay for assistance by non-ES Divisions of the Service, such as Engineering, Realty, Coop Units, etc.; and
10. How much follow-up work will be required? For example, how many staff-days will be required to determine disposition of Service recommendations and to negotiate for their adoption and implementation.

Preliminary Project List: This list is contained in the construction agency's budget submission to OMB. It will contain a tentative list of projects for which study or construction funds are being sought. The Service may be requested to provide very preliminary fish and wildlife data on projects for which study authorization is to be sought from Congress. If several such requests are anticipated, it may be possible to negotiate for a lump sum to cover these requests.

Both national agreements on transfer funding require that the construction agency provide the Service a list of the projects included in its budget submission. The agreements specify the appropriate times for these lists to be delivered.

IMPORTANT: These lists are to be considered privileged information and must not be revealed to anyone outside the Service until the President's Budget Message has been submitted to Congress.

Public Works Bills: Public Works Bills may originate in either the House of Representatives or the Senate. Hearings are held by the respective Public Works Committees that prepare the language of the bill to be reported out of committee for debate and vote. Technically, upon passage by either house, a bill becomes an "Act" that may or may not be passed by the other house. However, it is commonly referred to as a bill. If the second house does not pass the Act, or passes a different version, a conference committee composed of members from each house proposes a compromise. When the compromise bill (Act) has been agreed to by both houses, it is sent to the President for signature. When the Act is signed by the President, it becomes a law (statute).

Public Works Bills or Acts may be given other titles, such as River and Harbor Acts, Flood Control Acts, Water Resource Development Acts, or, in recent years, Energy and Water Development Acts. These statutes authorize specific water resource development projects for study, detailed planning, and/or construction by the Corps or Bureau. These statutes do not appropriate funds for these projects, and in some cases, authorized projects may remain unfunded for several years. The Service may provide comments to the appropriate Public Works Committee on the various projects proposed, if requested to do so by the Committee.

Energy and Water Development Appropriation Bills: These bills appropriate money for Corps and Bureau projects in the upcoming fiscal year and may indicate congressional changes to the budget proposed by the President. Appropriation bills must be introduced in the House of Representatives, but the enactment procedure is the same as that described above for the Public Works Bills.

Letters of Agreement/Regional Memoranda of Agreement: These documents are the formal records of negotiations between Field Supervisors and either District Engineers or Bureau Planning Officers concerning agreed-upon FWCA studies. These documents are signed by the appropriate Service Regional Directors and District Engineers/Bureau Regional Directors. An SOW for each project will be attached and made a part of the formal Letters/Memoranda describing, in detail, the work to be performed by the Service. These agreements set forth milestones, funding levels, and reports to be submitted by the Service to the construction agency.

Funding Transfer Documents - Corps of Engineers: When a Letter of Agreement has been signed, the District Engineer will prepare a Department of the Army Form DA-2544 for each project. These will then be signed in the Regional Office and signed copies plus the annual work plans and Finance Center Form 3-2058 are sent to the Finance Center. A copy is also sent to PDH for inclusion in the next control schedules. Some Corps districts prepare one DA-2544 listing all projects.

Funding Transfer Documents - Bureau of Reclamation: When Regional Memoranda of Agreement have been signed, appropriate information will be transferred to DFC Form 3-2058 that will be sent to the DFC. Denver

Finance Center will then prepare Standard Form (SF) 1081's and submit them to the Bureau for completion and forwarding to Treasury. Treasury will transfer funds from the Bureau to the Service and send the SF-1081's with appropriate notation back to DFC.

Biweekly List of SF-1080/1081's: This procedure no longer applies.

Control Schedule: This accounting document is prepared by PDH and signed by the Program Coordinator and the Program Manager. Control schedules are updated as new SF-1080 or SF-1081 forms become available. These schedules are sent to the appropriate Regional Office by way of the Office of Program Analysis.

Annual Work Plan: This document is prepared by each field office upon receipt of funding advices from the Regional Offices. The plan breaks down the funds received for a particular subactivity into the quarters in which it should be spent. Normally this means the money is split between all four quarters of the fiscal year.

Form 3-2058 - Reimbursable Agreement Accounting Administration: This document is prepared for DFC by the Regional Office from the formal Letter/Regional Memorandum of Agreement and a copy is sent to PDH for control purposes. It identifies funds by project number and title under the appropriate subactivity number (i.e., whether it is Corps or Bureau money, and whether it is for general investigations or construction, general, activities).

Ecological Services Cost-Recoverable Project Reports (01/02): These are computer generated Service management reports showing obligations and expenditures in staff-days and dollars for each funded project. A copy of the monthly summary report (02) should be submitted to the Corps/Bureau by Service Regional Directors. This provides partial fulfillment of Service responsibilities to keep construction agencies apprised of progress under the terms of agreements for transfer funds.

Project Cost Estimates

The amount of funding required for the Service to conduct its investigations on any water resource development study or project will depend upon the number of staff-days required to complete the investigation and prepare the FWCA Report. The negotiated funding will include the biologist's direct project-related costs plus supervisory, clerical and administrative support costs, fringe benefits (i.e., leave and insurance), and administrative costs such as rent, telephone, and utilities for that particular field station on a prorated basis. Expenses and personnel grade structures will vary from field station to field station and thus the average staff-day cost will also vary.

The level of effort (number of staff-days) to be put forth for each study or project will depend, to some degree, on the stage of planning for the study/project as well as its scope. In general, the Service will expend greater efforts on projects in an advanced stage of planning. There are no hard and fast rules as to the number of staff-days required for a study/project. Estimates must be based on past experience with similar projects.

Actual costs will depend on the average cost of a staff-day that will vary for each field office, depending on the salary levels of its staff. Average staff-day costs should be calculated using the method described in Appendix A.

Overhead: In addition to the cost estimates based on field office costs, an overhead surcharge of 38% should be added as provided in agreements with the two construction agencies. Only a flat surcharge of 38% should be shown on the cost estimate provided to the construction agency. It should not be included in average staff-day costs. Overhead funds are distributed to the following offices:

FWS/DFC	12% (31.5% of total overhead)
ES Washington	5% (13.2% of total overhead)
Regional Office	21% (55.3% of total overhead)
Total	38%

When a study, or a portion thereof, is subcontracted by the Service the overhead costs attributed to such work will be 15% (or 8.5% if the reduced overhead rate is sought). This does not apply to any monitoring or the operational aspect of the contract. Funds for those activities should be negotiated separately. Further, because of the limitations of the PFMIS, these funds must be entered as subactivity 1902 as the computer is unable to accept two different overhead rates under the Corps subactivities.

FWS/DFC	2%
ES Washington	5%
Regional Office	8%
Total	15%

Service Responsibilities

Corps of Engineers: The terms of the agreement with the Corps specify that the Service acts as agent for the Corps in supplying fish and wildlife data beyond that provided by Corps personnel. The Service is also responsible for supplying sufficient data to meet the requirements of the FWCA. As provided elsewhere in the agreement, there may be times when the Service will not be able to provide the needed information. In such cases, the Corps will select a second source in consultation with the Fish and Wildlife Service.

As established by the Fish and Wildlife Service Mitigation Policy (Federal Register, Volume 46, Number 15, January 23, 1981), the Habitat Evaluation Procedures will be used by the Service as a basis for

formulating recommendations for mitigation in the FWCA reports, subject to the exemptions in the Ecological Services Manual (100 ESM 1). When the Habitat Evaluation Procedures do not apply, or when the Corps requires additional data to be furnished by the Service, other evaluation systems may be used provided they conform with Service policies.

The Service also is required to provide monthly status reports for each project to the appropriate District Engineer. These reports should show the amount of funds and the number of staff-days expended. In fulfillment of this requirement, the Service's Ecological Services Cost Recoverable Project Report (sometimes called an O2 Report) should be supplied by the Regional Office. Under certain circumstances, less frequent status reporting may be appropriate, if agreeable with the District Engineer. This arrangement should be spelled out in the signed agreement.

Although not specifically set forth in the agreement, data supplied by the Service to the Corps for preparation of environmental statements should be considered when preparing SOW's and estimating costs. Time spent in reviewing environmental impact statements is not an appropriate charge to transfer funds and should not be considered in preparing cost estimates.

Bureau of Reclamation: Fish and wildlife data to be supplied to the Bureau is described in detail in the agreement. Specifically, it calls for the Service to provide the following types of data:

1. Fish and wildlife information or reports for inclusion in special studies;
2. Data or reports required for appraisal, feasibility, or advanced planning reports;
3. Data for environmental statements; and
4. Other reports as required.

It also calls for the Service to provide detailed data on:

1. Species considered important;
2. Use of these species in user-days and estimated user-day values;
3. Compensation and enhancement plans;
4. Populations of important wildlife species;
5. Evaluation of habitats and associated resources with each alternative plan, etc.

In preparing SOW's, these different types of information requirements should be considered. Staff-days spent acquiring these data may also affect cost estimates.

The terms of the agreement also require that the Service provide a draft copy of its FWCA report for review and comment prior to formal release.

Fiscal accounting requirements contained in the Bureau agreement require that the Service provide an advanced program estimate for each study/project and a Quarterly Project Status Report. This Quarterly Project Status Report is a narrative progress report. The monthly 02 reports should also be supplied.

Termination of Projects

The Service's Regional Director is notified in writing by the District Engineer or the Bureau Regional Director, when a project is being terminated. As of that date, no further charges may be made against those project numbers. The Service Regional Director, in turn, will notify DFC that Service activities on that project are being terminated. The Region will amend its Annual Work Plan, reducing the field office's funds by the designated amount.

Modification of Projects

A change in the nature of a project may be made by the construction agency as a result of preliminary studies or because of changes made by Congress in authorizations or appropriations. If these project changes result in a substantial change in the nature of Service investigations requiring either an increase or decrease in transfer funds, the Field Supervisor should notify the District Engineer or Bureau Regional Director of this fact. The appropriate Field Supervisor will then renegotiate transfer funding and modify the SOW accordingly.

Default

The terms of the SOW for each project impose deadlines for certain actions to be accomplished by the Service and the construction agencies alike. Adherence to these deadlines is important.

Default by the Service: Both agreements provide that in the event the Service fails to meet the schedule set forth in the SOW, the construction agencies will reschedule the work if a new schedule acceptable to both the construction agency and the Service can be negotiated. If this cannot be done, then the District Engineer or the Bureau Regional Director will terminate the agreement for that particular project, and obtain the information from another source. This "other source" will be selected in consultation with the Service.

Default by the Construction Agency: In the event of default by the construction agency, a new schedule for the work will be established,

subject to the concurrence of the Service. If this cannot be done, then the District Engineer or the Bureau Regional Director will terminate the agreement for that particular project, and obtain the information from another source. This "other source" will be selected in consultation with the Service.

Delay of Appropriation Bill

If there is no approved Appropriation Bill prior to the start of the fiscal year, obligational authority for continuing appropriations for ongoing studies will be furnished to the Service, if that authority is provided for the Corps or Bureau programs by congressional resolution.

Accounting Number System

For accounting and financial control purposes within the Service's Program Management System, work efforts on Corps and Bureau projects are identified by a series of numbers. These numbers are described below:

<u>Organization Number</u>	<u>Sub-Activity Number</u>	<u>Work Element Number</u>	<u>Project Number</u>
00000	0000	000	00

Organization Numbers: Denote the organization responsible for the expenditure of the funds, i.e., the specific regional office, field office, or Division Headquarters in Washington.

Sub-Activity Numbers: Denote the construction agency and the type of investigation to be made:

1926	Corps of Engineers, General Investigations
1927	Corps of Engineers, Construction, General
1928	Bureau of Reclamation, General Investigations
1929	Bureau of Reclamation, Construction, General

Work Element Numbers: Identify the type of project, and project purpose, e.g., 142-CE Small Flood Control Project, 144-BR Major Project, etc. Where appropriate and pertinent to project work, 100-series work elements also should be assigned.

Project Numbers: Identify the specific project in question. These numbers are assigned by the Denver Finance Center and generally will be carried over from year to year for as long as the project is funded. After the Service's work on a project is complete and the account closed out at the end of the fiscal year, the project number may be reassigned to a new project.

Project numbers 90-97 are used for Regional Office or Washington Headquarters Office overhead and will not be assigned to a project. The

second digit of the 9x overhead number equates to a Region with the 0 (zero) being used by Washington Headquarters.

Useful Reports and Publications:

The following documents will be of assistance in planning, budgeting, and negotiating for transfer funds:

1. Corps/Bureau target budget requests submitted to OMB;
2. President's Budget Message on Public Works;
3. Congressional Reports (House, Senate, Conference Committee);
4. Corps Preliminary Plan of Study/Reconnaissance Report for each project and any other reports that are issued at the end of the various planning stages, including all plans for alternatives;
5. Bureau Field Engineer's Report, Regional Director's Feasibility Report, Commissioner's Report, and any preliminary versions of these reports prepared for review during the Bureau's planning process;
6. Annual Report of the Chief of Engineers (status of authorized project);
7. "Names of Bureau Projects and Major Structures," a computerized list giving a brief account of the status of projects, published annually;
8. Corps Biennial Report on "Water Resources Development" published for each State, giving status of current and completed projects in that State;
9. Corps ER-301-1-1, Index of Office of Chief of Engineers (OCE) Directives and Publications Media (Pamphlet No. 310-1-1), dated January 1980 (among other things, this publication contains a list of the current regulations and other printed material);
10. Bureau Definite Plan Reports (DPR); and
11. Corps General Design Memoranda and Appendices.

*no longer
printed
see www.
usace.org
www/inet/
usace-docs/
pubarchive
htm*

APPENDIX A
CALCULATION OF STAFF-DAY COSTS

Calculation of staff-day cost is an essential part of preparation for negotiations with the construction agencies for transfer funds. These costs are used to determine the funding amount required by the Service to conduct the proposed investigations. In the past, a number of methods have been used, most of them lengthy, with the accompanying opportunity for error in calculations. Another problem was that several field offices, each using a different calculation method, might negotiate with an individual Corps District or Bureau Region. When questions arose as to why each office required a different cost per staff-day, it was difficult to explain. Utilization of a standard method by each field office may not result in the same cost per staff-day, but that difference will be easier to justify.

Obviously, actual charges will vary between field offices, and unforeseen personnel changes will cause actual charges to vary. In any case, actual charges will be made against negotiated estimated costs of a project investigation. Every effort should be made to estimate a sufficient number of staff-days for each project to avoid the need to negotiate for additional funds at a later date.

The first step in developing staff-day costs is to detail total office expenses for the fiscal year in question. Table 1 displays this process.

When negotiating staff-days to complete tasks required for a project investigation, all costs, including supervisory, clerical, and biologist support time, should be reflected.

The 38% overhead charge will be added to each project after the amount to cover field costs has been calculated and should be reflected on the SOW. This will make it easier for the field office to track funding during the annual work planning process.

ES Instructional Memorandum No. 53

TABLE I
EXAMPLE CALCULATION OF OFFICE COSTS^{1/}

<u>Staff</u>	<u>Grade/Step</u>	<u>Base Salary</u>	<u>Plus Compar- ability</u> ^{2/}	<u>Benefits</u> ^{3/}	<u>Total</u>
Supervisor	13/3	31,333	34,184	3,418	37,602
Asst. Supervisor	12/9	31,287	34,134	3,413	37,547
Secretary	6/5	14,203	15,495	1,550	17,045
Clerk-Typist	5/7	13,493	14,720	1,472	16,192
Clerk-Typist	4/7	12,059	13,156	1,316	14,472
Clerk-Typist	4/1	9,663	10,542	1,054	11,596
Clerk-Typist	4/6	5,862	6,395	640	7,035
Senior Field Biologist	12/3	26,349	28,747	2,875	31,622
Senior Field Biologist	12/2	25,526	27,849	2,785	30,634
Senior Field Biologist	12/2	25,526	27,849	2,785	30,634
Senior Field Biologist	12/2	25,526	27,849	2,785	30,634
Field Biologist	11/8	25,420	27,733	2,773	30,506
Field Biologist	11/3	21,985	23,986	2,399	26,385
Field Biologist	11/5	23,359	25,485	2,549	28,034
Field Biologist	11/4	22,672	24,735	2,474	27,209
Field Biologist	11/5	23,359	25,485	2,549	28,034
Field Biologist	11/2	21,298	23,236	2,324	25,560
Field Biologist	11/4	22,672	24,735	2,474	27,209
Field Biologist	11/4	22,672	24,735	2,474	27,209
Field Biologist	11/9	26,107	28,483	2,848	31,331
Field Biologist	9/1	17,035	18,585	1,859	20,444
Field Biologist	9/1	17,035	18,585	1,859	20,444
Field Biologist	5/1	2,810	3,066	307	3,373
					<u>560,751</u>

Salaries and Benefits 560,751
Office and Travel Costs 71,319 ^{4/}
632,070

^{1/} FY81

^{2/} Multiply base by 1 plus comparability increase (this example; 1.091)

^{3/} Approximately 10%

^{4/} Ascertain from prior year object class report and adjust, or can be calculated on straight percentage of total.

ES Instructional Memorandum No. 53

Average Cost per Staff-Day

	Staff-Days	Annual Leave	Sick Leave	Holiday	Supervisor & Clerical	Admin.
Supervisor	260					
Assistant Supervisor	260					
Secretary	260					
Clerk/Typist	260					
"	250					
"	130					
Subtotal	1680				1680	
Senior Field Biologist	260	20	13	9		66
"	260	20	13	9		60
"	260	26	13	9		54
"	260	20	13	9		72
Field Biologist	260	20	13	9		17
"	260	20	13	9		17
"	260	20	13	9		17
"	260	20	13	9		17
"	260	20	13	9		17
"	260	20	13	9		17
"	260	20	13	9		17
"	260	26	13	9		17
"	260	20	13	9		17
"	260	13	13	9		17
"	65	3	3	2		10
Subtotal	3565	308	198	137		249
Total	5645		643		1680	449
		(16% of total) ¹	(11% of Biologist time) ¹		(30% of total) ¹	(11% of Biologist time) ¹

¹These percentages may vary from office to office.

METHOD ONE (cont'd)
 (Average Cost per Man-Day)

Project requires 100 man-days of direct biologist effort.

27% of biologist time (16% leave + 11% Admin.)
 spent on other than direct project effort
 therefore:

$$\frac{.73}{1} = \frac{100}{X} = 137 \quad \text{Total man-days of biologist time}$$

30% of office time goes towards
 support services, therefore:

$$\frac{.70}{1} = \frac{137}{X} = 196 \quad \text{Total man-days}$$

Man-day Cost

Total office cost	\$632,070
Total man/days	5,645
Cost per man-day	\$ 112 ^{1/}

Project Cost

Man-days	196
Cost per man-day	\$ 112
Field Project Cost	\$22,000 ^{2/}
38% OH	8,400 ^{2/}
Total Project Cost	\$30,400

^{1/} Rounded to nearest \$1.

^{2/} Rounded to nearest \$100.

NOTE: This page is taken from the 1981 version of IM 53. It was not included in the 1985 revision. It is believed that this page was accidentally omitted from the 1985 revised IM 53.

Corps of Engineers Agreement

E. Fish and Wildlife Service Responsibility:

FWS will provide CE with fish and wildlife resources data, information, and analyses for use by CE in each planning stage for its water resources development program.

FWS will provide planning aid letters at various stages throughout the study, as set forth in the Scope of Work.

FWS will provide necessary consultation and reviews when a fish and wildlife study, or portion thereof, is contracted by CE.

FWS will provide draft and final Fish and Wildlife Coordination Act Reports, including recommendations to preserve, mitigate, compensate or enhance fish and wildlife resources

FWS will provide copies of information and data collected, and the analytical procedures used

FWS will provide District Engineer with: monthly status report showing funds expended for each study or project additional accounting information on request

Bureau of Reclamation Agreement

E. Fish and Wildlife Service Responsibility:

FWS will provide fish and wildlife information or reports for inclusion in BR feasibility reports, appraisal, basin, special studies, and advance planning reports, and data for environmental statements.

FWS will provide data in Fish and Wildlife Coordination Act Report:

description of habitats and fish and wildlife resources species considered important evaluation of habitats and resources with each alternative plan use of important species in user-days and estimated user-days values compensation and enhancement plans

FWS will provide draft copy of final Fish and Wildlife Coordination Act Report for review and comment prior to its release

FWS will provide BR with:

monthly status report showing funds expended for each study or project quarterly Project Status Report advanced program estimate

F. Construction Agency Responsibility

CE will provide maps engineering data hydrologic data real estate data land use data other data jointly determined to be necessary conduct its studies

F. Construction Agency Responsibility

BR will provide maps engineering data hydrologic data real estate data land use data other data jointly determined to be necessary for FWS to conduct its studies

Corps of Engineers Agreement

District Engineer will schedule and hold coordination meetings as mutually determined -- appropriate CE and FWS staff to attend discuss and coordinate schedules progress problems associated with ongoing and anticipated studies and projects

CE will furnish FWS with list of prospective, new and continuing studies and projects and proposed amounts for study.

- G. Failure by FWS to Meet Provisions of Agreement Schedule G. CE will reschedule work if schedule acceptable to District Engineer can be negotiated
- If schedule cannot be renegotiated, District Engineer can terminate Agreement for that study withdraw remaining funds obtain required information from another source
- Second source must be selected in consultation with FWS

- H. Failure by CE to Meet Provisions of Agreement
- Work will be rescheduled with concurrence of FWS

Bureau of Reclamation Agreement

BR will schedule and hold coordination meetings as mutually determined -- discuss and coordinate schedules progress problems associated with ongoing and anticipated studies and projects

- G. Failure by FWS to Meet Provisions of Agreement Schedule G. BR will reschedule work if schedule acceptable to BR Regional Director can be negotiated
- If schedule cannot be renegotiated, BR may terminate Agreement for that study withdraw remaining funds obtain required information from another source

Second source must be selected in consultation with FWS

- H. Failure by BR to Meet Provision of Agreement
- Work will be rescheduled with concurrence of FWS

Corps of Engineers Agreement

1. Delays in planning will be coordinated by both agencies so work and reporting schedules can be adjusted accordingly.

J. Cost Estimator

basic field costs
30% overhead to be included
15% overhead will be added if fish and wildlife study subcontracted

K. Method of Payment

DA Form 2544

Bureau of Reclamation Agreement

1. Delays in planning will be coordinated by both agencies so work and reporting schedules can be adjusted accordingly.

J. Cost Estimator

basic field costs
30% overhead will be added
15% overhead will be added if fish and wildlife study subcontracted

K. Method of Payment

BR will commit total amount of funds in Regional Memorandum of Agreement at the beginning of the fiscal year.

Corps of Engineers Agreement

Obligational authority for continuing appropriation will be provided FMS if Congress gives same to CE.

- L. Suspension, Revocation, or Completion of Studies
 District Engineer may suspend or terminate work on any study or project in event of recession
 revocation
 Congressional failure to appropriate funds
 determination that study will have unfavorable findings

District Engineer may withdraw remaining obligation.
 If a suspended or terminated project is reactivated, FMS funding will be renegotiated

B. Review of Agreement

Will be amended only following review and mutual agreement at the Washington level.
 Either agency may request review of the Agreement.

B. Signed

E.R. Reiberg III
 Major General, USA
 Director of Civil Works
 U.S. Army Corps of Eng.
 April 23, 1980

Amended:
 September 21, 1982

Lynn A. Greenwalt
 Director
 U.S. Fish and Wildlife Service
 Department of the Interior
 May 13, 1980

September 21, 1982

Bureau of Reclamation Agreement

Obligational authority for continuing appropriations will be provided FMS if Congress gives same to BR.

- L. Suspension, Revocation, or Completion of Studies
 BR Regional Director may suspend or terminate work on any study or project in event of recession
 revocation
 Congressional failure to appropriate funds
 determination that study will have unfavorable findings

BR Regional Director may withdraw remaining obligation.
 If a suspended or terminated project is reactivated, FMS funding will be renegotiated

M. Review of Agreement

May be reviewed, terminated, or renegotiated at the option of either party at anytime.

M. Signed

Robert H. Broadbent
 Commissioner
 Bureau of Reclamation
 Department of the Interior
 April 7, 1981

Amended:
 October 4, 1982

F. Eugene Mester
 Acting Director
 U.S. Fish and Wildlife Service
 Department of the Interior
 March 17, 1981

October 26, 1982



United States Department of the Interior

FISH AND WILDLIFE SERVICE
WASHINGTON, D.C. 20240

ADDRESS ONLY THE DIRECTOR,
FISH AND WILDLIFE SERVICE

NOV 4 1986

Memorandum

To: Service Directorate
From: Director
Subject: General Plans for Fish and Wildlife Management

References:

1. Section 3 of the Fish and Wildlife Coordination Act, as amended (FWCA).
2. Memorandum of Agreement Between the U. S. Fish and Wildlife Service and the Corps of Engineers, finalized August 20, 1954 (copy attached).
3. Interagency agreement, entitled "Procedures for Developing General Plans for Fish and Wildlife Management," finalized April 6, 1955 (copy attached).

The purpose of this memorandum is to clarify the process for development and consummation of General Plans (GP's), and to reaffirm our policies with regard to the purposes of the subject documents. It has come to our attention that there are lands and waters primarily managed for fish and wildlife purposes at a number of Corps of Engineers (CE) and Bureau of Reclamation (BR) projects for which no GP's have been developed. This situation should be corrected in order to comply with the FWCA, and to provide a measure of conservation and protection for the fish and wildlife resources existing on designated Federal lands. In some cases, fish and wildlife lands lack formal designation and/or an approved land use allocation at Federal water resource projects.

The provision for GP's was provided by the 1946 amendments to the legislation that was subsequently named (in 1958) the FWCA. Although the legislative history regarding the purpose for GP's is scanty, in actual practice GP's serve as coordination documents to formalize the determination of which project lands have value for fish and wildlife management purposes. Formulation of a GP also triggers a process for determining if the lands and/or waters involved with the water resource project have value to the National Migratory Bird Program. The existence of a Departmental level agreement on those lands provides a basis for conservation and protection.

GP's are not inviolate agreements in perpetuity. All land use designations and allocations are subject to revision when future conditions mandate reevaluation. As an example, when urban developments adjacent to GP lands significantly degrade the originally identified wildlife management values, the parties to the GP could consider modification of the project land allocation. Likewise, GP's are sometimes modified to include more land than originally designated because of unrealized future recreation use projections or other factors.

In current practice, GP's are formal coordination documents signed by the head of the appropriate State wildlife agency, the Assistant Secretary of the Interior for Fish, Wildlife and Parks, and either the Assistant Secretary of the Army for Civil Works (for CE projects) or the Assistant Secretary of the Interior for Water and Science (for BR projects). An exhibit map(s) is attached to each GP that delineates the categories and locations of the lands designated for fish and wildlife management (see below). Each GP also identifies the total acreage involved, the location, and which agency(ies) can assume conservation and management responsibilities. Detailed management plans (e.g., primary species of interest, operations and maintenance costs, etc.) are not part of the GP format, but should be addressed in other documentation associated with operating agreements for the project (see second paragraph of reference 2).

Traditionally, the recognized format for GP's has included three basic types of documents. We are now including a fourth type to conform to current situations at some completed water resource projects.

- o Type I- Lands and waters to be managed by the Fish and Wildlife Service for migratory birds;
- o Type II- Lands and waters to be managed by the State for migratory birds;
- o Type III- Lands and waters to be managed by State for resident wildlife; and
- o Type IV- Lands and waters to be managed by the Federal construction agency or project sponsor for wildlife purposes.

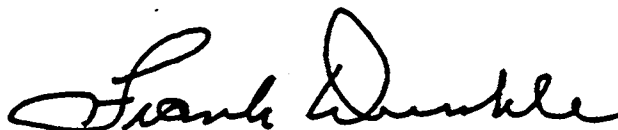
The following statements reaffirm our policies with regard to GP's.

- o GP's should be developed for any and all Federal lands allocated or designated primarily for fish and wildlife management at water resource projects. In practice, the provisions of Section 3 apply mainly to CE and BR projects. [Note: Tennessee Valley Authority projects are exempted from all FWCA requirements by Section 9, and Department of Agriculture lands may be exempted from GP requirements by Subsection 3(b).]

- o The construction agency responsible for the water resource project usually initiates the process for development of a GP. The construction agency is most knowledgeable with regard to the proposed project boundaries, related land acquisition and survey schedules, and projected land uses associated with authorized project purposes.
- o The GP for a water resource project should include and identify, if possible, any of the following three categories of fish and wildlife lands applicable: 1) joint purpose lands acquired in fee title and allocated for fish and wildlife purposes (e.g., lands between the conservation pool and the acquisition boundary of a reservoir); 2) lands acquired specifically for fish and wildlife purposes (i.e., separable mitigation lands); and 3) separable lands acquired specifically for fish and wildlife enhancement pursuant to Public Law 89-72 (Federal Water Project Recreation Act). In cases where water project lands are withdrawn from the public domain (rather than acquired from non-Federal entities) the GP should still identify the appropriate fish and wildlife land categories established for withdrawal.
- o Traditionally, GP's have not been developed for project lands managed primarily for fish and wildlife purposes by Federal construction agencies. However, to be in compliance with Section 3 of the FWCA, Federal construction agencies should be encouraged to consider the development of GP's wherever the "highest and best" use of project lands has been allocated to fish and wildlife management.
- o In some cases, fish and wildlife management on Federal water resource project lands may be performed by a non-Federal entity. The requirement for a GP (Type IV) is still applicable.
- o Although GP's are important coordination agreements, they are not intended to serve as realty or implementation instruments. In cases where management of the lands will be accomplished by the Service, the State, or a local sponsor, an operating agreement (i.e., lease, license, or cooperative agreement) may be required pursuant to regulations of the construction agency. An "interim" operating agreement for fish and wildlife areas may be executed to allow initial management and conservation activities to proceed prior to consummation of a GP.
- o Operating agreements may be modified without renegotiation of the GP. However, if major or significant changes in the land allocation plan for a project are contemplated, a new or supplemental GP may be needed.

- o In accordance with the intentions expressed in the 1955 agreement (reference 3), GP's should consist of: 1) a two-page formal document following the format displayed in the attached examples, and 2) an exhibit map(s) delineating the fish and wildlife lands agreed to by the parties involved. Other pertinent information, such as environmental assessments, management plans, operating agreements, etc., may be attached to the transmittal letter/memorandum for staff review. However, the GP is a Secretarial level document and should not be encumbered with details more appropriately addressed in the separately processed operating agreement.
- o If a Service Regional Director determines that lands at a water resource project have value for the National Migratory Bird Program, the concurrence of the Director should be requested, regardless of the anticipated managing entity. The suitability of those lands for inclusion in the National Wildlife Refuge (NWR) system must also be evaluated. An affirmative decision in this regard triggers additional studies that may result in development of a Type I GP. Service procedures for evaluating lands proposed for the NWR system must be completed prior to development of the Type I GP. The approval of the Director should be obtained before recommendations for establishment of an NWR are proposed to the construction agency.

There are lands utilized primarily for fish and wildlife management at a number of existing Federal water projects that are not formally designated by the GP provisions of the FWCA. Your efforts in identifying those lands and encouraging development of GP's for appropriate areas may provide long-term benefits for future fish and wildlife resources.



Attachments

Procedures for Developing General Plans
for Fish and Wildlife Management

The agreement between the Fish and Wildlife Service and the Corps of Engineers, approved by the Acting Secretary of the Interior on August 6, and by the Secretary of the Army on August 20, 1954, provides in Section 7 that GENERAL PLANS for Fish and Wildlife Management, as specified in Section 3 of the Coordination Act (Public Law 732, 79th Congress, approved August 14, 1946, 60 Stat. 1080) shall be developed jointly by the Corps of Engineers, the Fish and Wildlife Service, and the appropriate State agency for all project lands and waters where management for fish and wildlife purposes is proposed. The agreement further provides, in Section 8, that standard procedures for the development of GENERAL PLANS for Fish and Wildlife Management shall be developed jointly by the Office of the Chief of Engineers and the Fish and Wildlife Service. Section 8 further provides that copies of such procedures will be made available to all field offices of both agencies.

GENERAL PLANS for Fish and Wildlife Management are prepared for the purpose of designating the type of use as between the national migratory bird management program of the Department of the Interior and the wildlife programs of the respective States and therein to define the lands and waters to be administered by each. Such PLANS should be only as detailed in those respects as may be necessary to indicate the agencies, the areas, and the general purposes to be accomplished under each assignment. The PLANS should not be burdened with operating details which are properly a part of the cooperative agreements understood to be necessary between the Corps of Engineers and the Fish and Wildlife Service or the State in making areas available to the latter two agencies subsequent to the completion of the GENERAL PLANS for Fish and Wildlife Management.

In accordance with Section 8 of the August agreement, the following procedures for the development of GENERAL PLANS for Fish and Wildlife Management have been developed jointly by the Office of the Chief of Engineers and the Fish and Wildlife Service.

A. Specific Procedures

1. Reports prepared by the Fish and Wildlife Service in cooperation with the appropriate State fish and game agency, in accordance with Section 2 of the Act of August 14, 1946, shall specify, when appropriate, the necessity for a GENERAL PLAN for Fish and Wildlife Management in the recommendations of the reports. In accordance with previously established procedure, the reports will be transmitted to the District Engineer.

2. Whenever the use of project lands and waters for fish and wildlife management purposes is proposed, the Service or the appropriate State agency may request the preparation of a GENERAL PLAN for Fish and Wildlife Management. The formulation of a GENERAL PLAN for Fish and Wildlife Management shall be a joint cooperative endeavor by the District Engineer, Corps of Engineers; Regional Director of the Service; and the Head of the appropriate State agency, by mutual exchange of information pertaining thereto, discussions, and agreement. Normally the Service or the State will initiate the preliminary draft of a GENERAL PLAN for Fish and Wildlife Management after determining the views of the other agencies. Such draft of a GENERAL PLAN for Fish and Wildlife Management will be submitted concurrently for comment to the other two agencies. Such GENERAL PLAN for Fish and Wildlife Management will be subject to approval by the Secretary of the Army, the Secretary of the Interior, and the Head of the agency exercising administration over the wildlife resources of the State wherein the lands and waters lie.

3. After the field offices of the Corps, the State and the Service have reached agreement as to the form and context of the GENERAL PLAN for Fish and Wildlife Management, signature in triplicate by the appropriate State official will be obtained thereto signifying concurrence, and the signed copies thereof will be forwarded by the Corps through channels to higher authority for approval and execution by the respective Secretaries of the two Departments.

4. After completion, conformed copies of the GENERAL PLAN for Fish and Wildlife Management shall be supplied by the Secretary of the Army to each of the three respective parties.

B. General Provisions

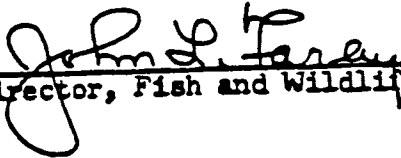
1. Every reasonable effort will be made to reach mutual agreement at an early date with respect to the provisions of a GENERAL PLAN for Fish and Wildlife Management for a project. Where a GENERAL PLAN is to be prepared, wildlife agencies of the affected States and the Fish and Wildlife Service will be consulted by the Corps of Engineers on wildlife matters with a view to reaching tentative agreement on lands and waters to be utilized for wildlife management purposes prior to public hearings on Master Reservoir Management Plans.

2. It is agreed that project lands and waters of particular value for the conduct of the national migratory bird management program made available to the Fish and Wildlife Service may subsequently, through a cooperative agreement, be administered by a State in accordance with Section 4 of the Coordination Act, if such action appears to be in the public interest.


3. It is understood that the Federal and State agencies managing the project lands for wildlife may utilize same for the production of food for the wildlife involved.

Approved: MAR 9 1955

Approved: APR 6 1955



Director, Fish and Wildlife Service



Chief, Corps of Engineers

Type I - Land to be managed by the Department of Interior
Bureau of Sport Fisheries and Wildlife

General Plan
For use of Project Lands and Waters
For Wildlife Conservation & Management
(Name of Project, State)

The Department of the Army, acting through the Corps of Engineers,
under the authority of (legislation) has acquired certain lands in
the State of _____ for the construction, operation and maintenance
of (project) for _____ and _____
purposes; and the Secretary of the Army has determined that approximately
_____ acres of the project land and water areas, as shown on
exhibit(s) _____, attached hereto, are available for fish and
wildlife conservation and management purposes, consistent with the primary
and collateral purposes of the project.

The Secretary of the Interior finds that the project land and water
areas shown on the exhibit(s) attached hereto, do have value in carrying
out the National Migratory Bird Management Program.

THEREFORE, IN ACCORDANCE WITH THE PROVISIONS OF AND UNDER THE
AUTHORITY OF THE FISH AND WILDLIFE COORDINATION ACT (48 Stat. 401, as
amended; 16 U.S.C. 661 et seq.) THE SECRETARY OF THE ARMY, THE SECRETARY
OF THE INTERIOR AND THE (Head of State Agency) DO HEREBY APPROVE THIS
DOCUMENT AS A GENERAL PLAN AND AGREE THAT:

1. The land areas shown on Exhibit(s) _____, dated
(_____) attached hereto and by this reference made a part
hereof will be made available by the Secretary of the Army to the Department
of the Interior for administration for the conservation and management of
17 migratory birds and of other fish and wildlife.

2. Necessary details of agreement between the two agencies shall be covered in a cooperative agreement to be mutually agreed to and signed by the Director of the Bureau of Sport Fisheries and Wildlife and the Chief of Engineers.

3. Further, in order to facilitate proper management and use of the project lands and waters, adjustments may be made in the boundaries of the areas shown on the attached exhibits by addition or deletion of tracts as may be mutually agreed upon by the Director of the Bureau of Sports Fisheries and Wildlife and the Chief of Engineers without amendment to this General Plan. Such adjustments will be made by amendment of the aforementioned agreement.

IN WITNESS WHEREOF, the parties hereto have affixed their signature and date thereof on triplicate copies hereof, as follows:

Date _____

Date _____

Date _____

(Head of State Agency)

(Secretary of the Army)

(Secretary of the Interior)

2. Necessary details of agreement between the two agencies shall be covered in a cooperative agreement to be mutually agreed to and signed by the Director of the Bureau of Sport Fisheries and Wildlife and the Chief of Engineers.

3. Further, in order to facilitate proper management and use of the project lands and waters, adjustments may be made in the boundaries of the areas shown on the attached exhibits by addition or deletion of tracts as may be mutually agreed upon by the Director of the Bureau of Sports Fisheries and Wildlife and the Chief of Engineers without amendment to this General Plan. Such adjustments will be made by amendment of the aforementioned agreement.

IN WITNESS WHEREOF, the parties hereto have affixed their signature and date thereof on triplicate copies hereof, as follows:

Date _____

Date _____

Date _____

(Head of State Agency)

(Secretary of the Army)

(Secretary of the Interior)

Type III - Land to be managed by State (resident wildlife)

General Plan
For use of Project Lands and Waters
For Wildlife Conservation & Management
(Name of Project, State)

The Department of the Army, acting through the Corps of Engineers, under the authority of (legislation) has acquired certain lands in the State of _____ for the construction, operation and maintenance of (project) for _____ and _____ purposes; and the Secretary of the Army has determined that approximately _____ acres of the project land and water areas, as shown on exhibit(s) _____, attached hereto, are available for fish and wildlife conservation and management purposes, consistent with the primary and collateral purposes of the project.

The Secretary of the Interior finds that the project land and water areas shown on the exhibit(s) attached hereto, would have value for the conservation of wildlife other than migratory birds and that the lands do not have value in carrying out the National Migratory Bird Management Program. Further, the Secretary of the Interior and the Director of the (State agency) find that it would be in the public interest for these lands to be managed for fish and wildlife purposes by the (State agency).

THEREFORE, IN ACCORDANCE WITH THE PROVISIONS OF AND UNDER THE AUTHORITY OF THE FISH AND WILDLIFE COORDINATION ACT (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) THE SECRETARY OF THE ARMY, THE SECRETARY OF THE INTERIOR AND THE (Head of State Agency) DO HEREBY APPROVE THIS DOCUMENT AS A GENERAL PLAN AND AGREE THAT:

1. The land areas shown on Exhibit(s) _____, dated
(_____) attached hereto and by this reference made a part
hereof will be made available by the Secretary of the Army to the (State
agency) _____ of the State of _____ (name) _____ for administration for the conser-
vation and management of resident and other wildlife.

2. Necessary details of agreement between the two agencies shall
be mutually agreed to and covered in an instrument (license) issued by
the Department of the Army.

3. Further, in order to facilitate proper management and use of
the project lands and waters adjustments may be made in the boundaries of
the areas shown on the attached exhibits by addition or deletion of tracts
as may be mutually agreed upon by the _____ (State Agency) _____ and
_____ (Corps of Engineers) _____ without amendment to this General Plan. Such
adjustments will be made by amendment of the aforementioned instrument.

IN WITNESS WHEREOF, the parties hereto have affixed their signature
and date thereof on triplicate copies hereof, as follows:

Date _____	_____ (Head of State Agency)
Date _____	_____ (Secretary of the Army)
Date _____	_____ (Secretary of the Interior)

Appendix T

HISTORY OF ECOLOGICAL SERVICES¹

INTRODUCTION

The beginning of the Fish and Wildlife Service (Service) can be traced to February 9, 1871 when Congress established the independent U.S. Commission on Fish and Fisheries. In 1903 this entity was placed in the Department of Commerce and renamed the Bureau of Fisheries. On the wildlife side, in 1885 the Division of Economic Ornithology and Mammalogy was established in the Department of Agriculture. In 1896 it became the Division of Biological Survey and in 1905 the Bureau of Biological Survey. Both organizations matured over the years, and in 1939 the Bureau of Fisheries was transferred from the Department of Commerce to the Department of the Interior (Interior). On the same date the Bureau of Biological Survey was also transferred to Interior. In 1940, the two bureaus were merged and became known as the U. S. Fish and Wildlife Service within Interior.

BIRTH OF THE OFFICE OF RIVER BASIN STUDIES

During this time period several laws made reference to the need for fishery facilities as part of Federal works or federally authorized dams, including the River and Harbor Act of 1899, the General Dam Act of 1906, and the Federal Power Act of 1920. These laws provided that fish related facilities could be constructed where needed but did not require such. The original Coordination Act of 1934 gave the Bureau of Biological Survey and the Bureau of Fisheries the authority to assist agencies in fish and wildlife stocking, combating disease, and developing a nationwide program of wildlife conservation and rehabilitation. It also authorized investigations of the effects of pollutants on fish and wildlife. It provided opportunity to use Bureau of Reclamation (Reclamation) projects for fish and wildlife purposes (as long as original project intent was not affected). The original Coordination Act also stressed the need for Federal dam building agencies to consult with the Bureau of Fisheries on mitigation needs for damage to fish life around dams if economically practicable. This beginning recognized some root causes of fish and wildlife problems in the United States, and formed a basis for further progress in resource conservation. No funding was provided, but several refuges were established at Federal reservoirs in the late 1930's and early 1940's.

The Federal Power Act of 1935 directed the Federal Power Commission (FPC) to require non-Federal entities constructing dams on Federal lands or across navigable waters to construct,

¹ Much of this history is based on "History of the Division of Ecological Services" written by Larry Goldman in 1991, and "History of the Division of Ecological Services in the Southeast Region U.S. Fish and Wildlife Service" by Tom Olds in 1996. To a lesser extent the 1993 "History of the Vicksburg Field Office" was also used.

maintain, and operate at their expense, such fish ways as may be prescribed by the Bureau of Fisheries. Together with the Coordination Act, these two laws led to consultations between water developers and the two bureaus and State fish and wildlife agencies, resulting in fish ways and some fish hatchery facilities. Two areas receiving particular attention were the Columbia River and the Sacramento River basins. However, these agency interactions were in essence ad hoc gatherings with no organization to sustain the interactive process and no funding provided to support it.

Notwithstanding the existence of these two laws directing coordination, fish and wildlife resources were severely impacted as large-scale water development projects were constructed in the 1930's and 40's. Massive losses of anadromous fish habitat took place in the far west and northeast, and thousands of acres of wildlife habitat were inundated without compensation. Fish and wildlife organizations such as the Western Association of State Game and Fish Commissioners became even more concerned as losses mounted. By the mid-40's their voices became a chorus of concern. Resolutions were passed at several annual meetings directed to various political levels from the President on down requesting a strengthened and larger role for Federal and State fish and wildlife agencies in the water development arena.

Meanwhile, the U.S. Army Corps of Engineers (Corps) and Reclamation had been formulating massive water development plans targeted for post-World War II implementation. In 1943 and 1944 the Service became aware of the plans of the two construction agencies. Washington office meetings held with Reclamation in the summer of 1944 revealed that they had formulated plans for extensive water resource projects in 15 basins throughout the west, involving thousands of acres of land and hundreds of stream miles. On July 26, 1944, after a series of "changes of views and general agreements for Service/Reclamation coordination", Acting Director Albert M. Day established Basin Study Committees in each Regional office to interact with the Corps and Reclamation. Day stressed the need for assigning the most competent staff members to prepare reports in a short time frame. The general objective was to protect our existing facilities (e.g., hatcheries and refuges). Where possible, the Service was to seek increased wildlife values by recommending modifications at early project formulation stages. From this harried beginning a formal organization was created in April 1945 with the formation of the Office of River Basin Studies (RBS), located in the Service's war-time headquarters in Chicago, Illinois. So began the first of a series of time honored Ecological Services' traditions – "scrambling" to meet a challenge.

The RBS was organized under the leadership of Rudolph Dieffenbach. Other divisions, particularly Fisheries, were tapped to staff the fledgling office. Also by 1945, all Regional offices had established the function of River Basin Studies. Tremendous progress was made in short order, with RBS organizing and hosting national meetings in 1946 and 1947. Amazingly the original RBS manual was issued in 1945 and revised in 1946. The manual included forward thinking concepts like water rights acquisition and cover type mapping. Extensive field work was conducted initially by Regional employees to evaluate Corps and Reclamation projects authorized by the Flood Control Act of 1944. Reports were prepared with a great sense of urgency, given the speed at which water projects were being built.

Coincidental to the massive planning activities of the Corps and Reclamation, State fish and wildlife agencies together with private conservation organizations organized their forces to redress the lack of coordination/consideration by the construction agencies under the Coordination Act (1934). However, the amendments enacted in 1946 did not provide clear authority for the construction agencies to incorporate the needed measures for the enhancement and improvement of fish and wildlife resources in their project plans. Implementation of the recommendations made under the Coordination Act was left to the discretion of the construction agencies. It also had questionable applicability to previously authorized projects, a serious shortcoming given the magnitude of work that had already occurred.

In July 1948 the first field office was opened in Vicksburg, Mississippi, with Travis S. Roberts as the first field supervisor. Strategically located at the center of the Corps' dam and levee building activities, the area of responsibility included western Mississippi, all of Louisiana, the Sulphur and Cypress drainages of northeast Texas, most of Arkansas, the White River drainage in Missouri, western Tennessee, and a bit of western Kentucky. Today seven field offices cover this same area.

Early River Basin Studies biologists were breaking new ground. They did not have established procedures to follow, but moved forward with the business of habitat protection (not hesitating to try new, creative ways of doing business is another early tradition that continues today). The impact of dam building on the biota was not widely recognized or acknowledged. There were great difficulties gaining entry into the Corps', Reclamation's, and the Soil Conservation Service's (now the Natural Resources Conservation Service) planning processes. Well funded and politically supported, these agencies were ahead of the Fish and Wildlife Service in planning water projects. To their everlasting credit RBS biologists kept pecking away, introducing themselves, explaining their role under the Coordination Act, and asking for planning information on the numerous projects. They were viewed with a certain amount of tolerance in some quarters, suspicion in others, and even animosity in still others. It was no easy task to establish themselves as cooperators and equals in the water project planning process. While great strides were made, the overall effectiveness of RBS efforts with the construction agencies like Reclamation, Corps, Soil Conservation Service (SCS), and the FPC remained at a level deemed less than satisfactory by many both inside and outside the Service. The general RBS attitude was that construction agencies often ignored the Service. But persistence and dedication eventually paid off.

Other path finding work was also underway between 1946 and 1958, including the first National Wetlands Inventory, which from its inception in 1952 to its completion in 1954 was a monumental task, given the technology of the day. Another RBS idea that took hold was the National Survey of Hunting and Fishing Activity, begun in 1955, which to this day is updated on a 5 year basis. Realty activities were also often handled by RBS as the Service began to acquire wetlands, most significantly in the midwest.

In 1956 the Service was reorganized into two bureaus, the Bureau of Sport Fisheries and Wildlife (BSF&W) and the Bureau of Commercial Fisheries (BCF), and the Office of River Basin Studies became the Branch of River Basin Studies in the BSF&W. In the early years,

River Basin Studies was provided a very small annual appropriation and depended on field level transfers of funds from the Federal water development agencies, mostly on a project-by-project basis for detailed studies. Until 1970, the BSF&W transferred dollars to the BCF to support small-scale RBS type investigations (except on the west coast where a larger BCF component existed, and Alaska where BCF handled all RBS related work until 1970). Another pattern taking root in the 1950's was increasing reliance by RBS offices on State fish and wildlife agencies for basic data to formulate Coordination Act Reports. More field stations were established in the 1950's as work loads expanded to other activities beyond traditional RBS type work.

THE 1958 FISH AND WILDLIFE COORDINATION ACT AND A DECADE OF CHANGE

In the mid-50's, State agencies and related associations began to coalesce their points of dissatisfaction with the water resource development agencies and the 1946 Coordination Act. In 1956 the International Association of Fish and Wildlife Agencies passed a resolution requesting that Interior draft amendments to the 1946 Coordination Act that would correct these problems. In early 1957 a draft was prepared and within a matter of months the 48 Governors had provided their support for the amendments.

The amendments to the Coordination Act passed in the summer of 1958 were hailed by many as a solution to the problems of construction agency indifference that had marked Coordination Act relationships since 1945. These amendments were another step to redress the overall problems with water resources development projects and served to set the stage for more complete reforms almost 30 years later through the Water Resources Development Act (WRDA) of 1986. The 1958 Fish and Wildlife Coordination Act (FWCA) significantly strengthened the Service-State fish and wildlife agency partnership and their bargaining position with the construction agencies. Of significance was the fact that the amendments did not give the Service or States a veto power over construction agency projects in that the agencies were not required to adopt State or Service recommendations.

The first national wildlife refuge established under provisions of the 1958 FWCA was Choctaw National Wildlife Refuge along the Tombigbee River in Choctaw County, Alabama. This refuge was authorized by Congress in 1959 as a feature of the Jackson Lock and Dam. The Fish and Wildlife Coordination Act report of January 22, 1959, prepared by the Southeast Region, recommended the fee title acquisition of this 4,218-acre refuge by the Corps of Engineers. Since then several other national wildlife refuges have been established as a result of the Service's recommendations under the FWCA.

The changes set in motion by the FWCA took time to manifest themselves. Larger resource management appropriations were obtained, and more field offices were established. Reclamation and the Corps continued large-scale project development with only slightly diminished speed. However, the winds of change were beginning to stir, a trend that would lead to rapid changes before the decade of the 1960's closed.

Organizational changes continued in the 1960's. In 1965, RBS was made a division. In 1967, responsibilities for nontraditional RBS activities such as highway project review and realty work were taken from RBS and given to Wildlife Services and Wildlife Refuges, respectively. A major trend emerging in the 60's, and continuing to this day, was the development of national policy direction by forces beyond the State fish and wildlife agencies and related groups. Whereas the State-oriented entities had been primarily responsible for changes in RBS work through the early 60's, new groups now came on the scene. These groups represented diverse sectors of the general public such as environmental interests, wilderness advocates, etc. Their work would change the role of RBS forever. As the decade matured, increasing concern about the nation's coastal habitats was heard from professional societies, academia, conservation organizations, and fish and wildlife agencies. Massive habitat losses caused by dredge and fill activities were taking place and conservation forces were clamoring for action.

RBS offices began to use the requirements of the FWCA by filing reports with the Corps on Section 10 River and Harbor Act (RHA) permits, in some cases recommending significant project modifications or denials. The Corps often turned a deaf ear on these requests. Congress became very concerned about the entire condition of coastal areas, establishing study committees and conducting oversight of the Corps permit program. Bills were introduced to establish a separate wetland permit system within Interior. In 1967, the Corps negotiated a Memorandum of Understanding with Interior that would provide a means to elevate disputed section 10 permit actions to the Washington Office if field/district offices had unresolved differences. The process allowed major permit disputes to go all the way to the Secretary of the Interior, providing the RBS comments considerable weight. Corollary to this tacit recognition of the larger FWCA-RBS role, Interior was strongly taken to task by Congress for meddling in Corps/Service coordination on Section 10 permits. All these developments helped RBS develop a very strong coastal focus.

YEARS OF DRASTIC CHANGE 1968-70's

The late 60's and early 70's were tumultuous years for the Service and RBS troops. Massive changes and forces were at work that would affect the organization's entire perspective. The general tenor of the nation during this time was one of increasing concern about environmental issues, which created a wave of positive public opinion that RBS was ready to ride to greater heights

Changes in legislation and government programs were in full swing. Massive oil spills along coastlines heightened public concern. The Federal Water Pollution Control Act Amendments were passed that restructured and redirected the entire clean water programs of the Federal and State governments. Finally, Congress passed the National Environmental Policy Act of 1969 (NEPA). NEPA served as a catalyst that forced massive changes by the big three construction agencies (Corps, Reclamation, and SCS). Citizen lawsuits brought against the agencies forced them to write detailed environmental impact statements (EIS) and in the process boosted the stock of RBS reports on construction projects. Construction projects were changed somewhat, a measure of which may be seen in the 1970's retreat from wholesale channelization/drainage

activities to more environmentally sensitive developments. Since NEPA required public disclosure of the environmental effects of all Federal programs, it expanded the role of RBS as a primary Federal review entity on biological impacts.

Earth Day 1970 highlighted the beginning of a new era, and the government responded by reorganizing. Fledgling water pollution control responsibilities were pulled out of Interior as the independent Federal Water Pollution Control Agency (later known as Environmental Protection Agency, EPA) was formed. The BCF was also removed from Interior and placed in the new National Oceanic and Atmospheric Administration (NOAA) within the Department of Commerce and renamed the National Marine Fisheries Service (NMFS), which has since been renamed NOAA-Fisheries. Not to be left on the bureaucratic sidelines, in 1973 RBS changed its name to Ecological Studies to more adequately reflect its expanded duties and responsibilities, and in 1974 changed again to Ecological Services.

In 1970, a RBS presence was reestablished in Alaska, and a large-scale infusion of new positions and funds took place in 1971 with specific emphasis directed toward addressing coastal problems. ES reports reflected a more direct and forceful attitude on fish and wildlife concerns as the organization became a major player in many Federal agency processes. In July 1972 Region 6, headquartered in Denver, Colorado, was established, and this new region was organized around area offices. Five area offices were established to manage most service operations and move decision making closer to the field level. Those area offices were located in Salt Lake City, Utah; Billings, Montana; Bismarck, North Dakota; Pierre, South Dakota; and Kansas City, Missouri. With area offices in place, the chain of command flowed from the Director, through the Regional Director, to the area manager, and to the field project leaders. This new chain-of-command eliminated the supervisory function of the divisional supervisors in the Regional office. Their positions were reorganized into program management positions and renamed Assistant Regional Directors. In 1977, Director Lynn A. Greenwalt established 13 additional area offices throughout the nation. After numerous studies and evaluations, the Service phased-out area offices effective October 1, 1982, and the supervision of field offices shifted back to the Assistant Regional Director.

Progressively ES became more sophisticated in the methods used to evaluate impacts. For example, methods other than traditional user-day computations for project caused losses and gains were being developed within the Service. Two prominent examples were the Ecological Planning and Evaluation Procedures (EP)², later known as the Habitat Evaluation Procedures (HEP), and the Instream Flow Incremental Methodology (IFIM), designed to deal with habitat loss and streamflow issues, respectively. These methods produced a dramatic improvement in project impact determination. Methods like HEP and IFIM permitted the ES field biologist to assert a leadership role in field investigations associated with project, permit, and license work.

Wetlands began a climb to prominence on the environmental agenda. In 1975, a major court case, NRDC v. Callaway, established that section 404 of the Clean Water Act did indeed apply to many wetlands of the U.S. This caused a major expansion of the Corps' Section 10/404 regulatory program. ES field offices scrambled to deal with the drastically expanded workload.

In 1983 ES was in effect expanded by the addition of two seemingly small programs: (1) the Endangered Species Act (ESA) and (2) the Environmental Contaminants Program. No one recognized that these efforts would become major components of the field efforts by the end of the 80's. While the ESA was passed in 1973, it was almost 1980 before its full impact began to be felt as more species were added to the list, lawsuits paved new ground in establishing programs, and the Service effort began to fully mature. The key change occurred when ESA Section 7 consultation responsibilities were delegated to the field.

The Contaminants Program also started off slow, with many Regions and ES field stations not embracing the need for this effort although Congress was insistent. However, by the end of the 1980's, nobody in ES questioned the need for a Contaminants Program, as agricultural drain water problems threatened waterfowl resources, and contaminant related problems surfaced almost everywhere in the U.S. By 1985 Environmental Contaminants became an operational entity with virtually every field office having at least one contaminants position. The field contaminant staff were thrown into the fray with goals of evaluating these problems and finding solutions the Service could implement.

During this time period one additional major accomplishment was reached. Shortly after the change in administrations in 1981, the Service adopted a Mitigation Policy that had been in the works for over a year. This major accomplishment finally put the intent of FWCA down in black and white for ES field biologists to use. The Mitigation Policy quickly became a cornerstone for the entire ES program, one that was desperately needed at the time as well as into the future.

THE ENVIRONMENTAL REVOLUTION - 1985 TO PRESENT

Change continues in ES, and the more recent changes have been by and large very positive. In many respects the changes reflected a maturation of the ES program, as new activities were added that placed the Service and ES in an environmental leadership position never before faced.

The tenor of public opinion was reflected in major laws enacted by Congress including the Food Security Act of 1985 (FSA), the Electric Consumers Protection Act of 1985, the WRDA's of 1986 and beyond, as well as establishment of the North American Waterfowl Management Plan (NAWMP), Partners In Flight, and the Partners for Fish and Wildlife Program. The FSA, and the subsequent 1990 Food Agriculture Conservation Trade Act, the 1996 Federal Agricultural Improvement and Reform Act, and the 2002 Farm Security and Rural Investment Act, had hand in encouraging wetland conservation. Department of Agriculture programs were now focused much more on wildlife conservation, especially relating to wetlands. ES offices embraced this major change of direction and worked closely with partner agencies to make large-scale habitat improvements on farm lands.

The WRDA of 1986, the first major water project legislation in a decade, amounted to an important milestone for ES, encompassing many reforms in Corps/Reclamation practices. The

WRDA of 1986 authorized a massive backlog of Corps projects, including many major fish and wildlife mitigation programs involving massive land acquisition management elements. Of equal significance were project development reforms that would apply to any new Corps investigations, including accounting for FWCA report recommendations with detailed explanations of why these were or were not included in the proposed project plan.

The WRDA of 1986 also provided authority and funding sources for redressing many earlier Corps project damages to habitat. It also installed new cost sharing requirements for project development that have subsequently served to significantly reduce the number of project investigations carried out by the Corps. The WRDA's through 2000 have continued this trend. The WRDA's major modifications to the Corps methods of doing business finally appeared to bring a balance to the water resources development arena, one that had been anticipated but not realized since 1958.

In 1986 the NAWMP changed the way conservation business is done. Later in 1990 Partners In Flight followed suit in making conservation partnerships a functional reality. Our conservation partners, both inside and outside government, are pulled together to plan and set habitat goals and then work in ever changing cooperative relationships to "put it on the ground." Since then a large number of similar partnership-based efforts have formed and are providing a "grassroots" foundation for 21st century conservation.

Also in 1986 the Service started the Private Lands program, changed to Partners for Wildlife in 1991 and Partners for Fish and Wildlife in 1998. This innovative program together with the new Department of Agriculture programs and the NAWMP and Partners In Flight programs were part of a new trend within the Service that recognized that the future of fish and wildlife resources nationwide would in large part depend on the success of habitat protection and management on private lands. The Service had an obligation to provide technical expertise and direction to make this come about, and Service biologists were in the forefront of the new outreach effort.

Endangered Species Act work became increasingly important at all levels of ES, and greatly increased the public visibility of the program. Workloads escalated rapidly, particularly in the areas of listing species as well as section 7 consultation requests. Many offices found themselves devoting a disproportionate share of time to dealing with these mandated issues that were driven by legal deadlines and court orders. In some cases, traditional ES work was relegated to a lesser priority. The switch in priorities was frequently the result of outside groups attempting to use the ESA to thwart some type of activity.

Interest in wetlands mushroomed in the mid-80's, partly in response to increased knowledge and publicity stemming from the publication of the first wetlands status and trends report prepared by the National Wetlands Inventory indicating a loss of 450,000 acres per year in the 1970's. Interest initially peaked in 1988 with presidential candidate George Bush calling for a national policy of "no net loss of wetlands." The Service and other agencies reacted quickly. A major point of contention in the Corps permit program since 1975, when section 404 jurisdiction had been expanded, was the question of what was or was not a jurisdictional

wetland. Different methods were used by various agencies to make such calls. Disputes raged around the country between ES and the Corps for a decade. After protracted negotiations, a common manual for wetlands delineation was agreed to by Service, Corps, EPA, and SCS in 1989. Soon after the manual was implemented, sharp criticism erupted over the new manual's delineation of areas that some felt were not wetlands. To address these concerns, the manual was reexamined in 1991.

Corollary to the wetlands issue, ES began a Bay-Estuary Program in the 1980's, now called the Coastal Program, starting in Chesapeake Bay and quickly enveloping all coasts, as Congress grappled with continuing declines of coastal environments. Emphasis in this program was on proactive measures to protect and restore coastal areas instead of traditional ES-reactive FWCA activities.

Lastly, the 1980's were marked by another reorganization. In October 1986 Federal Assistance (Divisions of Endangered Species and Federal Aid) and Habitat Resources (Divisions of Ecological Services and Technical Services) functions were combined to form Fish and Wildlife Enhancement; the title "Ecological Services" no longer applied. Each region handled this transition differently. In some the endangered species and traditional Ecological Services functions were performed in separate field offices for several years, while other regions more quickly consolidated these functions into all field offices. In October 1987 the Division of Federal Aid was reassigned from Fish and Wildlife Enhancement to Fisheries to form Fisheries and Federal Aid.

In September 1987 the Division of Ecological Services was no more and in its place was a new Division of Endangered Species and Habitat Conservation. Because of the tremendous workload, complexity, and controversy associated with endangered species, the Division was split in two in 1990. A decade later Endangered Species received even further independence when it was split at the Washington level with its own assistant director. Habitat Conservation was combined with Fisheries under a new assistant director. The regional offices did not follow this reorganization, retaining Endangered Species and Habitat Conservation under the same assistant regional director. The field offices were not directly affected by these changes. In August 1992 another national meeting of Fish and Wildlife Enhancement leaders was held in Aspen, Colorado, where the field supervisors voted to change the name back to Ecological Services.

The Service is constantly looking for better ways to accomplish its resource goals. In the 1990's it became clear that it needed to take a broader perspective at planning and implementing resource actions. Ecosystem Management had achieved high visibility in the academic community and was based on the concepts of holistic resource management and community involvement. The Service implemented Ecosystem Management at the regional office level; the Washington office did not change. Under the Service's version of Ecosystem Management geographic assistant regional directors (GARD) had line authority over all field stations in their geographic area and programmatic assistant regional directors dealt with budgets, policies, and communication with Washington in their program areas (ES, Refuges, Fisheries). Frequently this meant that a field station was supervised by a GARD with no

experience in their program, i.e., an ES field office would have a regional office supervisor who had never been in ES. At the field level, cross program ecosystem teams were established. After a period of great confusion, two primary roles evolved for the ecosystem teams; cross program coordination and establishing priorities that are transmitted to the regional office for funding and staffing actions. Late in the 1990's the regional office dropped Ecosystem Management and reverted to the previous system of only having assistant regional directors with line authority over each program. The field level ecosystem teams continue to function in some regions, but other have also dropped that idea.

The future of what has been known as ES is impossible to predict. One thing seems quite clear though. After many years of mostly routine approaches to doing business, it is apparent that the public demands on the Service and its ES function have changed to necessitate a more proactive approach. For a large part of its existence, the ES function and its outside constituents operated in an arena of reacting to the plans of others. With the expansion of ES work to a more diverse array of activities, plus increased demand by a more knowledgeable and affected public, the need is for more effective leadership. In addition, projects involving partnerships between a variety of stakeholders hold the key to future success for environmental restoration, as well as other types of projects.

Somewhere along the line another time honored ES tradition came about. It is hard to say when it first appeared. This tradition is a passion for fish and wildlife resources and the overwhelming desire to protect them through the individual actions of the ES field biologist. This passion is reflected in the unofficial ES motto, "SAVE THE DIRT." This passion, more than anything else, has contributed to the enormous advancements that are the ES legacy, including the on-the-ground facilities like refuges, hatcheries, and wildlife management areas resulting in many cases from the dedication and determination of ES biologists.

Time Line

- 1934 Original Fish and Wildlife Coordination Act passed
- 1944 Basin Study Committees established in regional offices
- 1945 Office of River Basin Studies formed in central and regional offices
- 1946 Fish and Wildlife Coordination Act amended
- 1948 First field office in Vicksburg, Mississippi
- 1949 Sand County Almanac published
- 1958 Fish and Wildlife Coordination Act amended
- 1962 Silent Spring published
- 1966 First Endangered Species Act passed
- 1969 National Environmental Policy Act passed
- 1970 First Earth Day
- 1973 Expanded Endangered Species Act passed
- 1973 Named Changed to Ecological Studies
- 1974 Name changed to Ecological Services
- 1986 Name changed to Fish and Wildlife Enhancement
- 1988 Endangered Species Act reauthorized with significant revisions
- 1992 Name changed back to Ecological Services