

**POLICY AND GUIDELINES FOR PLANNING AND COORDINATING RECOVERY OF
ENDANGERED AND THREATENED SPECIES**

A guide for planning and coordinating the recovery of endangered and threatened species, involving the U.S. Fish and Wildlife Service, State and Federal agencies, and other parties, as required by the Endangered Species Act of 1973, as amended.

U.S. Department of the Interior

Fish and Wildlife Service

May 1990

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**POLICY AND GUIDELINES FOR PLANNING AND COORDINATING
RECOVERY OF ENDANGERED AND THREATENED SPECIES:
EXECUTIVE SUMMARY**

These "Policy and Guidelines for Planning and Coordinating Recovery of Endangered and Threatened Species," dated May 1990, revise and supersede previous guidance on recovery planning. Changes are in response to: (1) the 1988 Amendments to the Endangered Species Act, (2) the General Accounting Office's December 1988 report, "Endangered Species Management: Improvements Could Enhance Recovery Program," and (3) the desire of the Service to make the guidance more useful and consistent with current policy.

Section I discusses major changes in recovery activities required by the Endangered Species Act Amendments of 1988. Section II reflects the Amendments in its discussion of the preparation and processing of Recovery Plans. Section III includes a discussion of new reporting systems for tracking expenditures and species status trends, which will set the stage for the Service to maintain centralized databases. Service guidance on Recovery Plan preparation puts new emphasis on developing: (1) measurable criteria for recovery goals and (2) recovery tasks for which implementation can be readily tracked. Recovery Plans are expected to more specifically state what the Service is trying to accomplish through recovery, more precisely describe the on-the-ground work involved in implementing the Recovery Plan, and provide estimates of the time and costs needed to achieve recovery.

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I. INTRODUCTION

A. Background and Context

Section 4(f) of the Endangered Species Act (Act) of 1973 (16 U.S.C. 1531 et. seq.), as amended, directs the Secretary of the Interior and the Secretary of Commerce to develop and implement recovery plans for species of animals and plants listed as endangered or threatened unless such plans will not promote the conservation of the species. The Fish and Wildlife Service (Service) and the National Marine Fisheries Service have been delegated the responsibility of administering the Act. The National Marine Fisheries Service is generally responsible for most marine species (except birds), and the Service is generally responsible for birds and terrestrial and freshwater species. Exceptions include the West Indian manatee, sea turtles (on land), and sea otters, which are under the Service's jurisdiction.

The Director, Fish and Wildlife Service has delegated the responsibility for preparing and implementing recovery plans to the Regional Directors. Decisions involving species that cross Regional boundaries will be coordinated among appropriate Regional Directors. Although developing recovery plans is usually appropriate, it is not always needed. The Regional Director has a choice to make.

These guidelines describe the procedures established by the Service to implement and coordinate recovery programs for federally listed species occurring in the United States. The objectives of these guidelines are to: (1) provide guidance for implementing the Endangered Species Act Amendments of 1988 and (2) improve the planning process so that substantial effort can be spent on recovery actions. These guidelines are intended to be used by Service managers and by prospective authors and reviewers of recovery plans, whether or not they are employed by the Service or have had previous exposure to recovery plans.

Recovery is the process by which the decline of an endangered or threatened species is arrested or reversed, and threats to its survival are neutralized, so that its long-term survival in nature can be ensured. The goal of this process is the maintenance of secure, self-sustaining wild populations of species with the minimum necessary investment of resources. A recovery plan delineates, justifies, and schedules the research and management actions necessary to support recovery of a species, including those that, if successfully undertaken, are likely to permit reclassification or delisting of the species.

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Coordination among Federal, State, and local agencies, academic researchers, conservation organizations, private individuals, and major land users is perhaps the most essential ingredient for the development and implementation of an effective recovery program. In its role as coordinator of the recovery process, the Service must emphasize cooperation and teamwork among all involved parties.

Although recovery plans do not, of themselves, commit manpower or funds, they are used in setting regional and national funding priorities. They also justify Service and other Federal agency recovery appropriations to Congress. Therefore, recovery plans must be as specific as possible in identifying: (1) recovery goals, (2) recovery tasks, (3) the duration and cost of recovery actions, and (4) responsible parties and interests.

B. The Endangered Species Act Amendments of 1988

The 1988 Amendments, and their relation to recovery planning and implementation, are discussed below.

1. Public Review of Recovery Plans

Section 4(f) of the amended Act requires public review of all new or revised recovery plans prior to approval. The intent is to inform the public, promote public involvement in the recovery planning process, and increase the information available to all involved Federal agencies. At a minimum, the Service will publish a notice in the Federal Register notifying the public of the availability of a technical/agency draft or agency draft recovery plan. The notice will open a formal public comment period. Notices or press releases in newspapers within the range of the species will also be considered as appropriate. The Regional Director of the lead Region is responsible for deciding if additional methods, such as public meetings, are warranted. (See guidance in Section II and Appendix III of these guidelines.) Any relevant comments received during the public comment period that require coordination with other agencies in order to address the issue in the final plan should be forwarded to that agency for consideration prior to plan approval. Otherwise, any other comments received may be summarized in the final approved plan.

2. Recovery Plan Status Report

Section 4(f) of the Act was also amended to require the Service to report every 2 years to Congress on the preparation and implementation of recovery plans and on the status of each listed species with a recovery plan. The first report is due in October 1990. The intent is to: (1) measure progress in developing and implementing recovery plans, and (2)

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provide information on the status of each listed species with a recovery plan. (See guidance in Section II of these guidelines.)

3. Monitoring of Recovered Species

Section 4(g) of the Endangered Species Act was amended to require a system for monitoring (for a period of not less than 5 years) all species that have been recovered and delisted, and to provide for emergency re-listing of any species that may again become in danger. (See guidance in Section II of these guidelines.)

4. Section 6 Amendments

Congress recognizes that States bear much of the responsibility for managing Federally listed species and that the expertise of State conservation agencies is essential to the endangered species program. Section 6 of the Act was amended to clarify that States may use Section 6 grants to monitor the status of recovered (delisted) species and Notice of Review Category 1 and 2 candidate species. However, priorities for Section 6 allocations should be: (1) implementation of recovery actions, (2) candidate monitoring, and (3) monitoring of recovered species.

Although monitoring candidate species is not directly related to recovery, it does provide an opportunity for Federal and State agencies to conduct prelisting habitat protection and management actions, and ensures that species awaiting listing are not lost through inattention to their status.

5. Annual Reporting of Recovery Expenditures

A new section (18) of the Act requires an annual reporting, on a species-by-species basis, of all "reasonably identifiable" Federal or State expenditures made primarily for the conservation of endangered or threatened species pursuant to the Act. The intent of this amendment is to provide additional cost information to Congress and to examine the distribution of funds. (Follow guidance in Section II of these guidelines.)

6. Recovery Plan Requirements

In the 1988 amendments, Congress made it clear that a recovery plan is to be an action-oriented document. There are four issues that must be addressed in every recovery plan.

- o To the maximum extent feasible, a recovery plan must identify site-specific management actions as may be necessary to achieve the plan's goal for the conservation and survival of the

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species. Action-oriented tasks designed to achieve specific recovery goals are appropriate.

- o A recovery plan must estimate the time frame required for accomplishing recovery, assuming that sufficient funds are provided and in accordance with the schedule in the plan. Estimates of time to recovery must be based on known biological factors and a determination of the likelihood that other management programs, including regulatory and law enforcement programs, might facilitate or detract from task accomplishment. If they are uncertain, the nature of the uncertainty must be discussed in the plan. If unknown, discuss recovery tasks that will make it practical to outline tasks and time frames in future plan revisions.
- o A recovery plan must estimate the cost of complete recovery of the species. If the estimate is uncertain, the nature of the uncertainty must be discussed in the plan. In the past, some recovery plans have given only the Service's recovery costs. However, Congress now requires that all recovery plans estimate the total cost for all Federal and State agencies and private organizations involved.
- o A recovery plan must set forth precise, measurable criteria and/or identify research needs that will allow the Service and others to objectively determine when recovery has been achieved when it is, in fact, achievable.

With this information in the recovery plans, all interested parties will have a better idea of the funds necessary for recovery. These documents then can be used to support Service budget initiatives.

C. Recovery Priority System and Policies

The Service recognizes the necessity to assign priorities to listing, delisting, and recovery actions in order to most appropriately use the limited resources available to implement the Act. The December 1988 General Accounting Office report to Congress criticized the Service for not following its own priority system and for devoting an inordinate amount of resources on either high-profile, low priority species or on low priority tasks for high priority species.

Two priority systems guide species recovery. The first is the Species Recovery Priority System (See Appendix IV.) This numerical system assigns species a rank of 1 to 18 according to the degree of threat, recovery potential, taxonomic distinctness, and presence of an actual or imminent

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conflict between the species' conservation and development or other economic activities (the latter factor doubles the number of levels: 1C, 1, 2C, 2, 3C, 3 ...). Each listed species is assigned a priority by the lead Region at the time of listing. In general, the lower the numerical value, the greater the likelihood of extinction and the greater the justification for the Service to expend recovery resources on that species.

The second is the Recovery Task Priority System. In developing a recovery plan, recovery tasks are assigned numerical priorities of 1, 2, or 3 according to the relative contribution they may make to species recovery. (See definitions under Implementation Schedule: Appendix I).

In concept, resources should be allocated first to accomplishing priority-1 recovery tasks for species with a recovery priority number of 1 and last to priority-3 tasks for a species with recovery priority of 18 (lowest priority delineated in the current system). Actual funding allocations, however, may not follow this formula strictly in all cases. Some otherwise low priority species that need only one or two low priority tasks to complete recovery might receive resources to expedite their downlisting or delisting.

In practice, Congress sometimes mandates that funds be spent on species or tasks that would otherwise not yet be funded by a strict application of the two priority systems. Also, a Regional Director must often be flexible enough to take advantage of special opportunities provided by shifting social, political, or economic circumstances. Therefore, the two formal priority systems, used in tandem, serve as a guide rather than a mold to which all actions must conform. When appropriate, Service managers may practice the art of management in deft and imaginative ways to get the greatest conservation benefits for resources expended. Other agencies, groups, and individuals can and should become involved in the coordinated recovery effort.

Service policies with direct application to recovery include those on vertebrate populations, captive propagation or cultivation, land acquisition, hybrids, reintroduction, experimental populations, and termination of recovery. These policies are described in Appendix IV. Plan preparers should be familiar with these policies to ensure consistency of the recovery plan tasks they write.

II. RECOVERY PLAN PREPARATION AND PROCESSING

The method to be used for plan preparation is based on several factors, including the range (limited vs. extensive), or ecosystem (simple vs. complex), of the species, the complexity of the recovery actions

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contemplated, the number of organizations responsible for the implementation of the recovery tasks, the cooperation of private landowners, the availability and expertise of personnel, and the availability of funds. Lead Regions for endangered species activities have been identified to guide coordination of listing and recovery assignments. A discussion of the concept and Regional responsibilities is found in Appendix II. Some recovery plans are prepared by Service biologists. The Service also may use outside expertise in the form of recovery teams, other Federal agencies, State personnel, private conservation organizations, or private contractors in the development and implementation of recovery plans. A detailed discussion of the options available for recovery plan preparation and the roles of prospective participants is found in Appendix II.

The Service need not prepare National Environmental Policy Act (NEPA) documents on the lead Regional Director's decision to prepare a recovery plan. Recovery plan development is categorically excluded from complying with NEPA based on the consultative and technical assistance nature of recovery planning. However, implementation of a specific task in a plan may require NEPA compliance if that task constitutes a major federal action. (See Memo from the Director to the Regional Directors, "NEPA Categorical Exclusion for Recovery Plans," dated 11/5/86, in Appendix IV.)

A. Preliminary Steps and Regional Responsibilities

The recovery planning process begins when or just before a species is listed. Some management actions may have occurred prior to listing a species in an effort to begin reversing its decline or minimizing the threats to its existence. If the species was previously a candidate, some management actions may have already taken place. The Regional Director responsible for preparation of the original listing package is normally designated the lead for preparing and signing the recovery plan, unless the affected Regional Directors agree otherwise. The Director reserves the right to approve recovery plans of national significance.

A lead Regional Director is required to submit a recovery outline to the Director within 60 days of the final listing rule publication briefly explaining the actions the Region intends to take. This is a one-page document in which the Regional Director indicates the species recovery priority number, whether or not a recovery plan will be prepared, the estimated date of its completion, whether or not a recovery team will be appointed, and what immediate or major recovery actions are anticipated. (See Memo from the Director and Recovery Outline format in Appendix II.)

For a species found in more than one Region, the designated lead Region will determine the method of plan preparation and coordinate recovery plan

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development and implementation in cooperation with other affected Regions. Regions are encouraged to develop multi-species recovery plans for listed species that share the same ecosystem or for taxonomically related species facing similar threats. In some instances, it may be advantageous to develop separate plans for each major population of a widespread species (e.g., the bald eagle).

B. Recovery Plan Processing

Following regional review, the Regional Director may opt to produce a technical draft for review by the professional community (e.g. academic, law enforcement, other Federal contacts, etc.). This draft need not include an Implementation Schedule. Comments received are incorporated into a subsequent agency draft, which is made available for review by all interested agencies and parties (including the general public). Alternatively, the Regional Director may choose to produce a combined technical/agency draft, to be reviewed simultaneously by all interested parties. The latter approach is recommended because it saves time, effort, and money; however, the decision on whether to have separate drafts or one combined draft belongs to the lead Regional Director.

Once the agency (or technical/agency) draft or a significant revision to a previously approved plan is prepared, the following actions will be taken to comply with the 1988 Amendments:

- 1) The lead Region will distribute this draft to the Assistant Director - Fish and Wildlife Enhancement (ADFWE), the Assistant Director - Refuges and Wildlife (ARW), the Assistant Director - Fisheries (AF), the Regional Director for Research and Development, other affected Regions, all affected Service field offices, cooperating agencies, species experts, and other interested and/or affected public or private parties. Comments will be transmitted to the lead Region within 60 days.
- 2) The lead Region will prepare a Notice of Availability for publication in the Federal Register requesting public comments within a specified time. The lead Region also may develop a public notice and/or press release to be published in, or provided to, local newspapers in each major geographical area where the species is known or believed to occur (See Appendix III for examples of such documents.) The lead Region will absorb the cost of press releases and other forms of public notification.
- 3) The Federal Register notice, press releases, and/or public notices should be published at the same time. However, the Regional

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Director may, as a courtesy, distribute the technical/agency draft or agency draft to cooperating agencies and other affected parties shortly before the general public is invited to review and comment on the draft. This advance distribution is appropriate if the Regional Director wishes to allow cooperating agencies and other affected parties some lead time to deal more effectively with inquiries from the general public.

- 4) The Regional Director of the lead Region will decide whether or not to hold public meetings on the draft recovery plan. If a public meeting is to be held in a Region other than the lead Region, that Regional Director is responsible for organizing and holding the meeting but should do so in close cooperation with the lead Region. (See Appendix III for further guidance on public meetings.)

Public comments must be sent to the lead Region for consideration prior to approval of the plan. The lead Region decides whether to address the comments and the Service's response in, or separately from, the recovery plan. The Region has substantial discretion in this area. If only a few comments are received, it may be simple to append them to the approved recovery plan. However, numerous comments could be very unwieldy, and the Region may choose to merely summarize the comments. The Service's administrative record must show that all comments received during the public comment period have been considered and, if not addressed individually, addressed in summary form. Since the 1988 Amendments also require other affected Federal agencies to consider public comments, the lead Region must provide copies of all comments to appropriate agencies for consideration, prior to their address in the approved recovery plan.

Comments can be accepted at any time during recovery plan preparation. Those received outside the designated public comment period need not be addressed in a formal fashion, but the Service and cooperating agencies are free to use any significant information so provided.

A recovery plan is considered "Approved" only after being signed by the lead Regional Director or Director. After approval, the plan is reproduced by the Regional Office and distributed. The distribution list is found in Appendix III. A copy of the signed approval page must be sent to the Director (ATTN: FWE/DES) within 15 days after the approval.

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An approved plan should be reviewed periodically to determine if updates or revisions are needed. Changes in an approved plan will be processed in the following manner:

o Update - This involves changes in the Implementation Schedule or other minor revisions (e.g., identification of recovery tasks that have been initiated since the last printing and are either ongoing or have been completed). Tasks that have been completed should be indicated as such in the comments column of the Implementation Schedule, along with actual costs (for example, "complete FY 1989" or "ongoing \$20K FY 1989 with Section 6 funds"). The Division of Endangered Species (DES) will be informed of an Update by the Species Recovery Status Report that will be sent to ADFWE on an annual basis (see Section III and Appendix I). Copies of the updated pages should be forwarded to cooperators. No public review and comment is required for updates, but the lead Regional Director may choose to solicit such comment.

o Revision - This involves substantially rewriting some portion(s) of the plan. A revision is necessary when significant changes are needed in Parts I or II, and/or when major conceptual changes are required. Existing approved plans need not be revised merely for reformatting to these guidelines; however, when a revision is undertaken, the opportunity to conform the plan should be taken.

In some cases revisions or updates can be handled by replacing whole pages in the original plan with new versions. Such pages should be dated to indicate the time of revision/update.

Significant revisions of approved plans require a review with public involvement. The Region that prepared the original recovery plan is responsible for preparing the revised recovery plan, unless the affected Regions agree otherwise or the Director provides other instructions.

All updates and revisions should be carefully analyzed to ensure that the task priorities are valid. As in an original plan, the narrative description in Part II for any priority 1 task in a revised plan should include explanation of why the action is necessary to prevent extinction. A revised recovery plan must be identified as such on the title sheet and cover along with the date of the original approved recovery plan and the revision.

C. Summary of Service Responsibilities

The Regional Director has the responsibility to:

1. Provide a Recovery Outline (see format in Appendix II) for any listed species for which the Region has lead responsibility to the Director within 60 days subsequent to publication of the final rule listing a species.
2. Prepare and approve all recovery plans for which the Region prepared the original listing package unless the affected Regions agree otherwise. These plans will generally be for species that occur solely or largely within the affected Region. The Director retains the discretion to approve any plan or to delegate approval to the responsible Region.
3. Take emergency actions, with appropriate permits, necessary for the protection of any listed species regardless of plan status or task priority.
4. Establish recovery teams, if appropriate, to develop the recovery plan or oversee its implementation.
5. Modify or terminate recovery teams and their activities.
6. Appoint, remove, and replace recovery team members as appropriate (Under special circumstances, the Regional Director may wish to have the Director announce these actions.)
7. Inform the appropriate Public Affairs Office of actions conducted under the above items 4, 5, and 6.
8. Assist those preparing plans by providing technical, advisory, fiscal, and other assistance as needed.
9. Complete the Implementation Schedule, Part III. (This may be done instead by the plan preparer, at the discretion of the Regional Director.)
10. Review all drafts of the recovery plan and accept, modify, or return them to the preparer for further modification. Distribute drafts for review and comment in accordance with Appendix III.
11. Arrange for the publication of a Federal Register notice informing the public of an opportunity to review the recovery plan and provide comments.

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12. Distribute a press release and/or publish (in a newspaper of local distribution) a public notice of availability of the agency or technical/agency draft of new or revised recovery plans and the opportunity to comment, hold public meetings on recovery plans as the Regional Director finds necessary, and address any significant public comments associated with the recovery plan. The lead Region is responsible for bearing the costs of publishing Notice(s) outside its region.
13. Print and disseminate approved plans to the appropriate parties listed in Appendix III. Printing of plans will be accomplished within 90 days after approval; distribution within 120 days, subject to availability of funds (See Appendix III).
14. Immediately upon printing, provide three copies of each new or revised Recovery Plan to the Director through the Assistant Director - Fish and Wildlife Enhancement.
15. Periodically review each recovery plan, and update and revise as required.
16. Notify appropriate Federal agencies, in writing, of the statutory requirement that they consider all information presented during the public comment period and provide copies of such comments to those agencies prior to approval and implementation of new or revised plans.
17. Direct and coordinate recovery plan implementation.
18. Develop budget proposals to implement recovery plans and prepare Annual Work Activity Guidance for current year funding.
19. Review progress of plan implementation and report on accomplishments and progress of species' recovery (including recovered species) as requested by the Director.
20. Terminate recovery efforts once plan objectives have been accomplished. The Regional Director may continue management actions even after a recovery plan's objectives have been met.
21. Recommend delisting or reclassification of listed species as appropriate.
22. Inform all cooperators of modifications in the plan and other actions, including emergencies, problems, needs, progress, etc.

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The Region 9 Division of Endangered Species has the responsibility to:

1. Provide guidelines and training on National policy, new legal requirements, and the preparation of plans through written materials and workshops.
2. Review, evaluate, and provide comments on the technical/agency or agency drafts of new or revised plans regarding adherence to the recovery guidelines and other Fish and Wildlife Service policies.
3. Compile Regional reports on recovery implementation progress, species status (including status of recovered species), and status of draft, revised, or approved recovery plans for Director's submission to Congress.

III. REPORTING AND TRACKING OF RECOVERY ACCOMPLISHMENTS

A recovery plan benefits a species only if it is implemented. As a general rule, one person in the lead Region should be assigned the oversight of each recovery plan. This individual should be responsible for coordination with all parties participating in the species recovery efforts and for preparing species-specific input for any required reports.

Three report requirements exist to ensure compliance with the Endangered Species Act. These include: (1) Species Status Report (biennial), (2) Recovery Expenditures Report (annual), and (3) Recovered Species Status Report (annual). ADFWE will provide specific requirements for each report to the Regions, along with any changes, each time a report is required. These reports serve as the basis for a system to track recovery progress and expenditures. The following guidance should be followed within each Region.

A. Species Status Report

The Service is required, by Congress, to 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 Section 4 of the Act and on the status of all species for which such plans have been developed. The status of each listed species will be tracked using a centralized database (developed by the Region 9 Division of Endangered Species (DES)). Beginning in Fiscal Year 1990, each Region is responsible for sending to the ADFWE, on an biennial basis, a Species Status Report (Parts I, II, and III) on each listed species for which it has lead responsibility (See format, Appendix II). This Status Report will include a tabular report (Parts I and II) and individual species

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summary status reports (Part III). The species summary status will be no longer than one page. It will include a one-line statement regarding the current status of the species based on information readily available to the staff. A species' status will be categorized as: Improving (Increasing), Stable, Declining, Unknown, or Extinct. The summary should compare the species' current status with its condition at the previous status review. The report should also describe the recovery actions that have been implemented and/or completed during the previous year (including consultations, incidental take authorizations, law enforcement activities, etc). The purpose of this report is to track the status of each species and the implementation of recovery plans, as required by Congress.

B. Species Expenditures Report

On or before January 15, 1990 and each January 15 thereafter, the Service, in accordance with Section 18 of the Act, will submit to Congress an annual report covering the preceding fiscal year which provides an accounting on a species by species basis of all reasonably identifiable Federal and State expenditures made primarily for the conservation of endangered and threatened species pursuant to the Act. DES will develop a list of reasonably identifiable categories (by species or cluster of species), such as listing, recovery, consultation, research and development, acquisition, law enforcement, and Section 6 grants, for the Regions to use in reporting on species expenditures. In addition, DES will develop a simple reporting system for use in identifying expenditures of other Federal agencies and States. The Regions are required to provide ADFWE with an annual expenditure report in advance of the required date for submission to Congress. Coordination through the International Association of Fish and Wildlife Agencies for State expenditures will be accomplished by DES. The Director will then provide Congress with a nationwide Recovery Expenditures Report by January 15th of each year.

C. Recovered Species Status Report

For at least five years after delisting, the Service is required to implement a system in cooperation with the States to monitor the status of all species which have recovered to the point at which the measures provided pursuant to the Act are no longer necessary. The Lead Regions must provide ADFWE with an annual Recovered Species Status Report for each recovered and delisted species, describing the monitoring methods used and the results of the previous fiscal year's monitoring efforts by October 31st of each year.

IV. REFERENCES:

- General Accounting Office. 1979. Endangered Species - A Controversial Issue Needing Resolution. Washington, D.C.
- General Accounting Office. 1988. Endangered Species - Management Improvements Could Enhance Recovery Program. Washington, D.C.
- Lande, Russell. 1988. Genetics and Demography in Biological Conservation. Science 24(1):1455-1460.
- Shaffer, Mark L. 1981. Minimum Population Sizes for Species Conservation, Bioscience 43(2):131-134.
- U.S. Fish and Wildlife Service. 1973. Tactical Planning in Fish and Wildlife Management and Research. Resource Publication 123. Washington, D.C.
- U.S. Fish and Wildlife Service. 1980. Appendix I. Priority System. pp. i-iv. In: Endangered Species Program Management Document. Washington, D.C.
- U.S. Fish and Wildlife Service. 1981. Service prepares guidelines for ranking candidate species. Endangered Species Technical Bulletin 6(8):1.
- U.S. Fish and Wildlife Service. 1983. Endangered and Threatened Species Listing and Recovery Priority Guidelines. Federal Register, 48(184):43098 and 51985.
- U.S. Fish and Wildlife Service. 1988. Recovery 2000. Endangered Species Division, Federal Building, Fort Snelling, Twin Cities, Minnesota.

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APPENDIX I

RECOVERY PLAN FORMAT

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RECOVERY PLAN FORMAT

Title/Approval Page

Should be in the following general format:
(Technical, Technical/Agency, or Agency Draft - as appropriate)

SPECIES X

(Revised, Second Revision, etc.)*

RECOVERY PLAN

(Original Approved: October 1, 1976)*
(First Revision Approved, etc.)*

Prepared by the Species X Recovery Team

John Doe, Leader
U.S. Fish and Wildlife Service
Region 1
Portland, Oregon

Jim Johnson**
Oregon Wildlife Commission
Forest Grove, Oregon

Mary Smith
Cornell University
Ithaca, New York

for
Region 1
U.S. Fish and Wildlife Service
Portland, Oregon

Approved: _____
Regional Director, U.S. Fish and Wildlife Service

Date: _____

(Include date, but not signature line on drafts)

*Include this line if the approval page is for a revision.

** If more names than space exists, list all members on a page following.

DISCLAIMER PAGE*

Recovery plans delineate reasonable actions which are believed to be required to recover and/or protect listed species. Plans are published by the U.S. Fish and Wildlife Service, sometimes prepared with the assistance of recovery teams, contractors, State agencies, and others. Objectives will be attained and any necessary funds made available subject to budgetary and other constraints affecting the parties involved, as well as the need to address other priorities. Recovery plans do not necessarily represent the views nor the official positions or approval of any individuals or agencies involved in the plan formulation, other than the U.S. Fish and Wildlife Service. They represent the official position of the U.S. Fish and Wildlife Service only after they have been signed by the Regional Director or Director as approved. Approved recovery plans are subject to modification as dictated by new findings, changes in species status, and the completion of recovery tasks.

* Can indicate uncertainty of costs of cost estimates identified for task implementation and/or time estimates for achievement of recovery, if applicable, in the Disclaimer.

LITERATURE CITATIONS

Literature Citations should read as follows:

U.S. Fish and Wildlife Service. 19__ . _____ Recovery Plan. City,
State. __ pp.

Additional copies may be purchased from:

Fish and Wildlife Reference Service:

5430 Grosvenor Lane, Suite 110
Bethesda, Maryland 20814
301/492-6403
or
1-800-582-3421

The fee for the Plan varies depending on the number of pages of the Plan.

ACKNOWLEDGEMENTS PAGE

Acknowledgments Page (Optional)

The inclusion of an Acknowledgments page is at the discretion of the Region responsible for preparing the plan. If included, it should recognize individuals that contributed significant information/assistance during plan preparation.

EXECUTIVE SUMMARY

The Executive Summary should not exceed 1 single-spaced page. Arrange to print extra copies of the Executive Summary for distribution to interested parties. It should include:

Current Species Status: Status, population level/distribution (if known), and vulnerability to threats. (Let the reader know up front the condition of the species.)

Habitat Requirements and Limiting Factors: List any specialized habitat requirements and major threats to be addressed under Actions Needed.

Recovery Objective: Choose among delisting, downlisting, or protection of existing populations for a specific time period or for the foreseeable future. Be ambitious, but do not set an unobtainable objective (obtained from Part II of the recovery plan).

Recovery Criteria: Indicate the number and arrangement of viable populations, protection and management procedures needed, and what threats should be resolved. Only by being specific in terms of numbers, distribution, amount of habitat, level of protection/enforcement, etc., will the Service and the public be able to assess progress toward the recovery objective.

Actions Needed: Present a numbered list of the major steps needed to satisfy recovery criteria or at least make a significant improvement in species status.

Total Estimated Cost of Recovery: A cost table may be provided as follows. The bottom right-hand figure should reflect the total estimated cost of recovery (e.g. consultations, permits, law enforcement activities, land management activities, personnel requirements, etc). Costs may be summarized if more applicable.

<u>Year</u>	<u>Need 1</u>	<u>Need 2</u>	<u>Need 3</u>	<u>Total</u>
1990	\$	\$	\$	\$
1991	\$	\$	\$	\$
1992	\$	\$	\$	\$
Total	\$	\$	\$	\$

Date of Recovery: Indicate the anticipated year objectives will be completed. This may or may not be the last year listed in the above cost table.

(See attached example(s), pages 6 and 7.)

EXECUTIVE SUMMARY OF THE RECOVERY PLAN FOR THE OZARK CAVEFISH

Current Status: This species is listed as threatened. Fourteen populations are known from the three states of Missouri (7), Oklahoma (3) and Arkansas (4). Historically, the species occurred in 24 caves of the same region.

Habitat Requirements and Limiting Factors: The Ozark cavefish inhabits cave streams of the Springfield Plateau in southwest Missouri, northeast Oklahoma and northern Arkansas. Habitat loss and decreasing water quality, due to urbanization, are the principal threats. Declining bat populations, which provide an energy source to the caves, and normal low reproductive rates of the cavefish also threaten the species' survival.

Recovery Objective: Delisting.

Recovery Criteria: To establish and/or maintain viable populations of the Ozark at twelve locations.

Actions Needed:

1. Monitor existing and experimental populations.
2. Establish five new populations and augment selected existing populations.
3. Determine recharge zones for caves of existing and experimental populations.
4. Develop and implement protection of recharge zones for each site of existing and experimental populations.
5. Eliminate threats/habitat degradation through a combination of consultation/permitting/cooperative programs.

Costs (\$000's):

<u>Year</u>	<u>Need 1</u>	<u>Need 2</u>	<u>Need 3</u>	<u>Need 4</u>	<u>Total</u>
1990	3.0	.0	15.0	5.0	23.0
1991	3.0	60.0	10.0	5.0	78.0
1992	3.0	20.0	.0	5.0	28.0
1993	3.0	20.0	.0	5.0	28.0
1994	3.0	20.0	.0	5.0	28.0
1995	3.0	20.0	.0	.0	23.0
1996	3.0	20.0	.0	.0	23.0
1997	3.0	20.0	.0	.0	23.0
1998	3.0	20.0	.0	.0	23.0
1999	3.0	.0	.0	.0	3.0
2000	3.0	.0	.0	.0	3.0

Total Cost of Recovery 33.0 220.0 25.0 25.0 283.0

Date of Recovery: Delisting should be initiated in 2000, if recovery criteria are met.

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EXECUTIVE SUMMARY OF THE RECOVERY PLAN FOR FASSETT'S LOCOWEED

Current Status: This species is listed as threatened. During a 1988 survey, Fassett's locoweed has been relocated at four of eight historical stations. Three of the sites are currently on the market or were recently sold to new private owners. Only eight plants were found at the fourth station, which is a highly developed lake shoreline.

Habitat Requirements and Limiting Factors: None of the four known sites of Fassett's locoweed are in protected ownership. Shoreline development is the largest threat to the species. Plants are located on sandy shorelines of land-locked seepage lakes where water levels fluctuate regularly in response to rainfall patterns. The species may depend upon a persistent seed bank to survive during periods of high water, then germinating soon after a shoreline is exposed during low levels.

Recovery Objective: Delisting

Recovery Criteria: Protect and maintain ten separate and self-sustaining populations of Fassett's locoweed. These should include all known extant colonies as well as introduced populations. Introduced colonies will not be considered successfully established until after a lapse of fifteen years.

Actions Needed:

1. Survey suitable habitat for additional populations, and acquire known populations.
2. Monitor existing populations.
3. Conduct research on the biology of the species.
4. Establish new populations of Fassett's locoweed.
5. Investigate and conduct necessary management activities at all key sites.

Costs (000's):

<u>Year</u>	<u>Need 1</u>	<u>Need 2</u>	<u>Need 3</u>	<u>Need 4</u>	<u>Need 5</u>	<u>Total</u>
1990	0.0	2.5	2.0	5.0	1.5	11.0
1991	20.0	2.5	0.0	5.0	1.5	29.0
1992	20.0	2.5	2.0	5.0	11.5	41.0
1993	20.0	2.5	0.0	.0	11.5	34.0
1994	20.0	2.5	2.0	.0	1.5	26.0
1995	50.0	2.5	0.0	.0	1.5	54.0
1996	0.0	2.5	2.0	.0	1.5	6.0
1997	0.0	2.5	0.0	.0	1.5	4.0
1998	0.0	2.5	2.0	.0	1.5	6.0
1999	0.0	2.5	0.0	.0	1.5	4.0
2000	0.0	2.5	0.0	.0	1.5	4.0
<u>Recovery Cost</u>	130.0	27.5	10.0	15.0	36.5	219.0

Date of Recovery: Delisting should be initiated in 2007, if recovery criteria have been met.

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RECOVERY PLAN DEVELOPMENT

OUTLINE

A Table of Contents should follow the Executive Summary and include:

- I. Introduction
(List major headings)
- II. Recovery
 - A. Objective
 - B. Narrative Outline for Recovery Actions Addressing Threats
 - C. Literature Cited
- III. Implementation Schedule
- IV. Appendix
(Individual appendix numbers may be listed for lengthy or complicated plans).

If the plan contains separate outlines for different populations or management units then required to serve as the basis of jeopardy/adverse modification determinations, then these major divisions should be included in the Table of Contents, Sections II and III above.

In all narrative sections of the plan, avoid using "boiler-plate" language or copying parts of other plans. Tailor each plan to the needs of the individual species. When writing the plan, keep in mind those subsections that will likely require changes in future revisions so that they can be handled most efficiently (e.g. by whole page replacement).

I. INTRODUCTION

This section of the recovery plan serves several important purposes. First, it acquaints the reader with the species, its status, and the threats it faces. Second, because it is a source document for land managers, economic interests, and other interested individuals, it should touch on all relevant information. This does not mean that the Introduction should be a dissertation on the species; rather it should be more of a review or summary document. No topic should be covered in tremendous depth, but all major aspects of the species' biology should be mentioned, with appropriate citations for further information. When dealing with less known species, particularly invertebrates and plants, a few-word description of its class/family affinities would provide a reference point for the non-taxonomist. All major publications on the species should be referenced in the LITERATURE CITED or REFERENCE section. Third, the introduction will serve as an information source for the interested, but busy, decisionmaker. It should therefore be arranged so that the information it contains is quickly and easily accessible.

The following subsections for the Introduction may be adapted to suit the biology of the species; however, keep in mind that the busy decisionmaker will be thankful if the answers to obvious questions can be found by glancing at the Table of Contents and flipping to an appropriate page.

- A. Description - Give the date listed and Federal Register citation for the final rule. The description should not be extremely technical. Note when the species was described and refer to the best available technical descriptions. You may wish to mention "look-alike" species and note how to differentiate, but the detail should be more on the level of a field guide than a taxonomic treatise. For reference, provide the recovery priority for this species/group/ecosystem assemblage.
- B. Distribution - Give historical and currently occupied range. Include a map of appropriate scale to delineate these generally without disclosing site-specific information. Be sure the map has adequate margins to allow for binding and will reproduce clearly. If appropriate, state the number of known populations (or centers of distribution) and counties of occurrence. This subsection is one that will likely require periodic updating.

- C. Habitat/Ecosystem - This may be a separate subheading or, if little information is available, may be combined with subsection D. Include relevant information, such as soil type (particularly for plants), plant or community associations (do not include an exhaustive species list), elevation, requirements for water quality, flow regimes, etc. Describe critical elements of the species ecosystem that should be considered by persons proposing activities that may affect the species or its recovery. Such elements may include sensitive life stages, symbiotic relationships, cover, food, the effects of actions favoring competitors, predators, etc. This section should be in a format that lends itself to use in information sheets developed for Section 7 consultations, Habitat Conservation Plan(s) developments, or other management programs of major public interest. If known, describe the tolerance of the species to take of individuals or changes in essential elements of its habitat for use in determining incidental take. [The proposal has been made that discrete recovery populations or units of critical habitat be the basis for determinations of effect during Section 7 consultations. If that suggestion is adopted, these guidelines will be further refined to reflect additional data needs].
- D. Life History/Ecology - Include what is known about phenology, pollinators, dispersal, etc. (for plants), breeding habits, litter or clutch size, diet, behavior, etc. (for animals). As in all previous sections, try to focus on brevity without sacrificing thoroughness and be sure to cite relevant literature.
- E. Reasons for Listing - This will include an overview of the species' decline (if appropriate) and the threats it faces. A description of the current land management practices that are affecting or may affect the species should be included, as they may have a direct bearing on decisions regarding the recovery and management of listed species. The description would also give a historical perspective to future management issues or conflicts. Do not repeat information presented in other sections. The intent here is to provide a framework for the reader to understand the tasks specified in Section II. The "Factors Affecting the Species" section of the listing rule is a good starting point for this subsection.
- F. Conservation Measures - For some species, conservation/recovery efforts have been ongoing or will be initiated prior to approval of the recovery plan. Any such activities should be mentioned here. This subsection is the one that will most likely require updating in future revisions.
- G. Strategy of Recovery - This is to provide the reader with a chronological overview of the species ecosystem restoration and maintenance recovery actions. A sentence or two should be

included about all Priority 1 tasks identified in Section II, and major Priority 2 tasks may be mentioned. This section may be omitted from very simple plans, where the overview can be gleaned from the Executive Summary or directly from the Narrative Outline.

II. RECOVERY

A. Objective and Criteria

State the primary objective of the plan. State the recovery criteria in quantitative terms (e.g., number of individuals or populations) whenever possible. If the recovery objective includes removal of the species from endangered status, make it clear whether this means reclassification to threatened status or complete delisting. If the prospect of reclassification is uncertain, a measurable interim objective may be used. The 1988 amendments to the Act require an estimate of the recovery time, which should also be stated in this section and should be based on the assumption that recovery tasks will be implemented as scheduled and that a determination has been made of the probable effect of anticipated human activities on that schedule. The recovery objective and criteria may read as follows:

"Species Y" will be considered for reclassification from endangered to threatened when X geographically distinct, self-sustaining populations are protected in X county(ies) of State Y (or in any other counties where native populations might be discovered in the future) and they have been maintained for Z consecutive years. Delisting the species will be considered when X+ geographically distinct, self-sustaining populations are protected in X counties for another Z consecutive years following reclassification. The estimated date for recovery completion is 2010.

The brevity and apparent simplicity of the recovery objective section is quite deceptive. Quantifying recovery criteria calls for creative thought, and developing the criteria may require educated guesswork. This may be difficult for scientists accustomed to basing their statements on hard data rather than conjecture. However, plan authors should keep in mind that concise and measurable recovery criteria are necessary; they represent the central pillar of the recovery plan. Only explicit, measurable goals will bring the overall recovery effort into focus and promote the necessary funding. If the objective section includes such terms as protected, stable or increasing populations, these should be operationally defined, in light of such factors as generation time and other relevant factors.

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Population viability analysis concepts may prove useful in developing recovery objectives and criteria. Studies to determine probable population viability, and the optimum number and spatial arrangement of populations, may be specified as tasks in the plan.

Although determining the appropriate spatial arrangement and number of populations might require further research, some preliminary targets should be identified. Populations should be defined and located so that a single event, however catastrophic, would be unlikely to eliminate more than one population. Delisting would generally require more viable populations than would be required for downlisting. It might not be necessary for recovery criteria to match any historical population level, if a lower level will ensure the long-term survival of the species as a natural component of its ecosystem. There may be cases where not enough habitat remains to support a population that meets viability criteria. In these cases, full recovery is clearly not achievable, and the plan should clearly state why delisting is not a practical objective. In some cases, evaluating the ability of the ecosystem to support viable populations can be a recovery task.

All plans should state that the reclassification criteria are preliminary, and that they may be revised on the basis of new information (including research specified as recovery tasks).

B. Narrative Outline for Recovery Actions Addressing Threats

This section should be concise and action-oriented. Actions not known to be required for recovery, even though possibly beneficial, may be included. Though most of the tasks included in the outline should be those that are expected to be carried out in the near future, all tasks necessary to achieve full recovery of the species should be identified. Limiting the Narrative Outline to tasks that are expected to be carried out in the near future will sacrifice long-term planning for short-term goals and will not give an accurate assessment of what is necessary to achieve the stated recovery objective. If all tasks known are outlined, time frames can be set as "to be determined" if they are dependent on the outcome of earlier planned tasks.

A stepdown outline is not required; however, plan preparers should be familiar with the stepdown process because it may be a useful tool in task definition. Regional Directors may include stepdown outlines in plans at their discretion.

The narrative outline should step down recovery needs as far as is necessary to reach the task level. Tasks are items that can be funded or permitted independently. For example, under "Gather life history information on Species X," do not list "Study diet" and "Study social

interactions" as separate tasks unless you anticipate that separately funded studies should be conducted. Use judgment in deciding how finely to slice the tasks. In some instances, one aspect of life history may be of higher priority than other aspects and should be designated as a separate task. Any task receiving a Priority 1 designation in the Implementation Schedule must be justified in the Narrative Outline as necessary to prevent extinction.

In the narrative, discuss the uncertainty surrounding cost estimates that might prove inaccurate or imprecise. Indicate the degree of confidence in the estimates, including costs associated with developing and implementing conditions of Section 7 consultation biological opinions and Section 10 Habitat Conservation Plans. Estimates should be in current dollars; do not attempt to adjust for inflation. Estimates from other agencies need to be similarly documented. (Note that Congress may fund other Federal agencies based, in part, on these estimates. It will greatly benefit other agencies' budget requests if they can say ".... as indicated in the Recovery Plan for the species.")

Specifically identify in this section any recommendation for the protection of habitat that is essential to the species. Describe its extent and location (provided this specificity would not increase the risk of take). Available options for land protection (e.g., fee purchase, easement, etc.) should be considered as options. Essential habitat need not be limited to currently occupied habitat or currently suitable habitat if it is deemed important for eventual recovery of the species. (Note that any habitat to be acquired by a Federal agency for endangered species must be identified, at least in general area description, in the recovery plan before the Administration will submit the request to Congress. As a very minimum, land acquisition must be identified as a requirement for recovery.)

The Narrative Outline should include a set of "Strategies" that will, when applied to the known threats, result in achievement of the recovery objective. It is important to consider all strategies that may alleviate known threats, such as research on disease, habitat protection, protection from taking, captive propagation, reintroduction, control of competing species, etc.

C. Literature Cited/References

All citations from Part I and II should be listed here. The AIBS style manual presents the proper format for citations. This section should reference all source documents for the Plan, but it need not be a complete bibliography.

III. IMPLEMENTATION SCHEDULE

This is a very important section of the recovery plan. It will be used to secure and obligate funds, establish associated regulatory and other management priorities, and will provide the basis for tracking plan implementation. The Implementation Schedule should be preceded by a page defining task priorities and acronyms used in the schedule. Several regions have found an introduction to the Implementation Schedule, like the one below, useful to the readers of Recovery Plans:

"The Implementation Schedule that follows outlines actions and estimated costs for the recovery program. It is a guide for meeting the objective discussed in Part II of this Plan. This schedule indicates task priorities, task numbers, task descriptions, duration of tasks, the responsible agencies, and lastly, estimated costs. These actions, when accomplished, should bring about the recovery of the species and protect its habitat. It should be noted that the estimated monetary needs for all parties involved in recovery are identified and, therefore, Part III reflects the total estimated financial requirements for the recovery of this species."

A hypothetical example follows this discussion. Each column of the schedule is discussed below:

A. Task Priority - In contrast to the Narrative Outline, tasks in the Implementation Schedule will be arranged in priority order; thus, all Priority 1 tasks will be listed first, consolidating them and increasing their visibility. Assign task priorities as follows:

Priority 1 - An action that must be taken to prevent extinction or to prevent the species from declining irreversibly in the foreseeable future.

Priority 2 - An action that must be taken to prevent a significant decline in species population/habitat quality, or some other significant negative impact short of extinction.

Priority 3 - All other actions necessary to meet the recovery objectives.

B. Task Number - This should be taken directly from the Narrative Outline. Include only the lowest "stepped down" tasks. As an example, in the following segment:

- 2.0 Protect existing populations of X plant
 - 2.1 Build enclosures to prevent deer browsing at three population sites
 - 2.2 Remove competing vegetation once annually

The step 2.0 would not appear in the Implementation Schedule, but 2.1 and 2.2 would.

C. Task Description - This may be taken verbatim from the Narrative Outline, or slightly modified for the sake of brevity.

D. Duration - Indicate whether the task is "ongoing," whether it needs to be "continuous," and the estimated number of years that will be required for its completion.

E. Responsible Party - Indicate each FWS Region and program that will be actively involved and/or commit funds to the task. If more than one Region or organization is involved, use an asterisk to identify the lead entity. The Service need not be included if it has no financial involvement in a particular task. All other organizations involved and/or committing funds to the task should also be listed, based on coordinated decisions regarding recovery implementation task responsibilities.

F. Cost Estimates - Though ideal to designate each Fiscal Year specifically, beginning with the FY subsequent to that in which the plan is approved, setting up hypothetical "FY 1, 2, 3" format is often necessary. Avoiding the hypothetical format, if at all possible, emphasizes the importance of funding and implementing tasks in a given year. Service costs should be identified separately from those of others and should include all major Service costs associated with management of the species. Although this breakdown requires additional effort and coordination with other agencies, it increases the value of the implementation schedule for Service budgeting, as well as providing an estimate, of the overall cost of the species' recovery. Costs should align with the respective entity in the Responsible Party columns. Dollars should be shown in thousands. Other agencies will also benefit by being able to show in their own budget submittals that their funds are identified in an approved recovery plan and are therefore part of the overall coordinated recovery effort for that species.

G. Comments and Notes - Other relevant information may be included here, such as required person-hours, whether this task is specified in state-level recovery plans, or other documents. This column may be left blank so that users or reviewers may make appropriate notes next to various tasks.

RECOVERY PLAN IMPLEMENTATION SCHEDULE

PRIORITY #	TASK #	TASK DESCRIPTION	TASK DURATION (YRS)	RESPONSIBLE PARTY			COST ESTIMATES (\$000)			COMMENTS
				Reg.	Program	Other	FY1990	FY1991	FY1992	
1	1.1	Population dynamics analysis	3	8	NERC		100	100	100	
1	2.1	Reduce incidental take of adults	ongoing	1	LE	BIA NMFS* CAF&G	9 50 50 15	9 50 50 15	9 50 50 15	
1	3.1	Improve, operate fish ladder	ongoing	1	FWE DEN MA*		20 20 20	20 20 20	20 20 20	
1	4.1	Secure adequate streamflows	ongoing	1	FWE*	BPA BR	20 10 10	20 10 10	20 10 10	
2	1.2	Determine optimum spawning run	2	8	NFRS	CAF&G*		20 15	20 15	
2	1.3	Predator/prey studies	2	8	NFRS			18	18	
2	1.4	Identify limiting contaminants	2	1	EC*	EPA		35 20	35 20	
2	2.2	Reduce tribal harvest	ongoing	1	MA	BIA*	10 25	10 25	10 25	
2	2.3	Initiate contact with Mexico	1/2	9	IA				5	

RECOVERY PLAN IMPLEMENTATION SCHEDULE (continued)

PRIORITY #	TASK #	TASK DESCRIPTION	TASK DURATION (YRS)	RESPONSIBLE PARTY			COST ESTIMATES (\$000)			COMMENTS
				Reg.	FWS Program	Other	FY1990	FY1991	FY1992	
2	2.4	Develop multi-state agreement	2	1	FWE			10	20	
2	5.1	Operate hatchery successfully	ongoing	1	FH		200	200	200	
3	1.5	Study disease in other populations	2	8	NFRL				50	
3	1.6	Intraspecific competition studies	2	8	NERC				25	
3	2.5	Monitor tribal harvest	ongoing			BIA	10	10	10	
3	3.2	Improve upstream migrant survival	ongoing	1	FWE*		25	25	25	
						BPA	10	15	25	
						COE	10	15	25	
3	4.2	Acquire critical habitat easement	2	1	RF				125	
3	4.3	Rehabilitate spawning habitat	5	1	FWE				10	
						BLM			50	
						FS*			50	
3	5.2	Improve hatchery disease status	1	1					35	
3	5.3	Compare survival stocked fry vs. fingerlings	2	1	FH			15	15	

RECOVERY PLAN IMPLEMENTATION SCHEDULE (continued)

PRIOR- ITY #	TASK #	TASK DESCRIPTION	TASK DURA- TION (YRS)	RESPONSIBLE PARTY			COST ESTIMATES (\$000)			COMMENTS
				Reg.	Program	Other	FY1990	FY1991	FY1992	
3	6.1	Produce pamphlets	1/2	1	PA			3		
3	6.2	Meet with groups of sportsmen	ongoing	1	FWE	5	5	5		
3	6.3	Inform state/fed elected reps	ongoing	1 9	PA* LS	5 1	5 1	5 1		
3	6.4	Set up volunteer program	2	1	PA* FWE			15 5		
						625	768	1,171		

* Denotes lead responsibility for a given task.

SAMPLE DEFINITIONS AND ACRONYMS PAGE

Priorities in column one of the following implementation schedule are assigned as follows:

1. **Priority 1** - An action that must be taken to prevent extinction or to prevent the species from declining irreversibly in the foreseeable future.
2. **Priority 2** - An action that must be taken to prevent a significant decline in species population/habitat quality or some other significant negative impact short of extinction.
3. **Priority 3** - All other actions necessary to meet the recovery objective.

Key to Acronyms used in Implementation Schedule

- BIA - Bureau of Indian Affairs
- BLM - Bureau of Land Management
- BR - Bureau of Reclamation
- CAF&G - California Fish and Game
- COE - Corps of Engineers
- EPA - Environmental Protection Agency
- FS - Forest Service
- FWS - Fish and Wildlife Service

- EC - Environmental Contaminants
- DEN - Engineering
- MA - Fish and Wildlife Management Assistance
- FH - Fish Hatcheries
- FWE - Fish and Wildlife Enhancement
- IA - International Affairs
- LE - Law Enforcement
- LS - Legislative Services
- NERC - National Ecology Research Center
- NFRL - National Fisheries Research Laboratory
- NFRS - National Fisheries Research Seattle
- PA - Public Affairs
- RF - Refuge

- NMFS - National Marine Fisheries Service

IV. APPENDIX

Completed plans should contain a list of reviewers. All letters of comment should be kept on file as part of the administrative record. Substantive letters or comments may be included in the Plan at the discretion of the Regional Director. Other pertinent material such as referenced policy statements or agency documents should be included. If the appendix is particularly lengthy, it should be preceded by a title page and a definitive, paginated list of the contents.

All significant comments that are not printed in the appendix should be made available to other Federal agencies that will use the recovery plan.

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APPENDIX II

ORGANIZING THE RECOVERY EFFORT: ROLES AND OPTIONS

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ORGANIZING THE RECOVERY EFFORT--PERSONNEL CONSIDERATIONS**A. Service Biologists**

Service biologists may write recovery plans or act as technical editors, working with either the recovery team or the individual(s) contracted to write the recovery plan. In addition, Service biologists coordinate, or may actually conduct both management and research-oriented recovery tasks. It is the responsibility of these individuals to collaborate as appropriate with Federal, State, and independent personnel. Service biologists submit budget proposals for recovery activities, they assist State agencies with recovery proposals for Section 6 funds, and ensure coordination of project funding among other agencies. Service biologists knowledgeable of consultation requirements can advise on the likely effects of development or other human activities on the species. Such a person could also serve as a future point of contact for persons conducting regulatory programs related to this species/ecosystem group. Service biologists, also often members of the recovery team, may act as the liaison between the Service and the recovery team.

B. Species Recovery Coordinators

Species recovery coordinators have been established for several listed species with high public visibility or unusually complex recovery programs. A species coordinator serves under the Regional Director as the Service's focal point for all matters relating to recovery of the species. The responsibilities include coordinating research and recovery actions among all involved agencies and individuals and working with Region 9, Division of Endangered Species and/or the Regional Public Affairs Officers to provide a continuing source of public information on the Service's activities and the species' recovery progress.

C. Recovery Teams**1. Description**

A recovery team provides biological advice to a lead Regional Director. A team can be established as a species-specific recovery team, such as the Whooping Crane Recovery Team, or as a group or ecosystem-specific recovery team, such as the New Mexico Plant Recovery Team. The recovery team serves only in an advisory capacity to the Service. The Regional Director, not the recovery team, exercises the Service's authority and responsibility with respect to all recovery actions.

A team may write the recovery plan for a species or provide technical editing. In appointing a recovery team, a Regional Director should clearly indicate the role it is to play and the products expected of it. A team

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responsible for more than one plan may divide its members into working groups for the separate plans. Recovery teams may also be formed to serve strictly in an advisory capacity to the Regional Director, leaving the plan preparation to a different party.

2. Selection and Appointment

Factors for selection of team members are: 1) expertise with respect to the species or the ecosystem in which it is or may once again become a part; 2) current involvement with the species or closely related species; and 3) special knowledge of one or more threats contributing to the listed status of the species. Within size constraints, teams should include individuals of as many disciplinary perspectives as practical and appropriate. However, recovery teams are exempted from the Federal Advisory Committee Act, which would otherwise allow any individual or group to request to be placed on such an advisory group. Teams often include representatives of State, Tribal, or Federal agencies, academic institutions, conservation organizations, and other constituencies with an interest in the species and its recovery.

The size of recovery teams is at the discretion of the Regional Director. In certain cases, they may be as small as one or two people; however, a more broadly based team will usually be advantageous. The Regional Director may designate the team leader or allow the team to make the selection. Though in general, it is preferable for the team leader to be a Service employee, the team leader should be selected for his/her knowledge of the species and its related concerns or because of leadership ability. If the team is divided into working groups to prepare more than one plan, a team member is appointed by the team leader to take charge of each group. Teams may also use consultants who offer special expertise but are technically not members of the team. In addition, a team may invite observers from interested organizations, other agencies, universities, and foreign governments to attend team meetings.

Recovery team members and consultants are appointed by lead Regional Directors with the approval of the prospective team member's employer, and in consultation with the States, other cooperating organizations or foreign governments, and the Director (through Region 9, Division of Endangered Species). Potential nominees should be fully informed by the Regional Director of the implications of team membership such as costs, workload, and time constraints. The appointment letter should explain these items in detail. (A sample appointment letter appears on the following page.) After the recovery plan has been completed, the recovery team may continue to serve indefinitely in an advisory capacity to the Regional Director, and at the Regional Director's request may take an active role in coordinating recovery activities.

Public announcements on the selection of recovery team leaders, members, and consultants may be made by the lead Regional Director. A joint, simultaneous announcement of a recovery team appointment by the Service

and a State wildlife agency director may occur where appropriate and if requested. This is especially appropriate for species for which a State plays a central role.

SAMPLE RECOVERY TEAM APPOINTMENT LETTER

If the team member is employed by a public agency, the letter should be addressed to the head of the agency and request the services of the employee. Minor wording changes will be necessary. Verbal concurrences from the prospective team member should be obtained before the letter is sent. Discussion of travel expenses should be tailored to the specific situation.

Dear :

The (common name, followed by scientific name) was recently listed by the U.S. Fish and Wildlife Service as (threatened or endangered) under the Endangered Species Act of 1973, as amended. This Regional Office has the responsibility to develop a Recovery Plan for this species. To accomplish this task, we are forming a recovery team comprised of persons who have experience with the species or the threats it faces. Members of a recovery team serve at the pleasure of the Fish and Wildlife Service Regional Director who has lead responsibility for recovering a listed species. Although the role of recovery team member is strictly advisory in nature, the team's recommendations normally guide the Service, other Federal agencies, and even State governments in recovery activities.

I would like to appoint (name of appointee) to be a member of the recovery team for (state species). His/Her expertise would be invaluable in the development of a recovery plan. Other prospective team members are:

(list the individuals, and their affiliations, if any)

The recovery team is expected to complete a first draft of a recovery plan by (state date), with the final plan completed by (state date). I expect that approximately (state number and duration) team meetings will be necessary during preparation of the plan. The team will have substantial latitude in setting the time and location of these meetings. Once the recovery plan is complete, the team may periodically asked to advise me on various matters until the species is recovered.

I hope to schedule the first meeting of the recovery team, a one-day session, on or before (state date). The Service's liaison to the team is (state name and phone number), who will be contacting (him/her) shortly. Please feel free to call (him/her) or me at any time if you have any questions. I hope you will be able to make this contribution to the preservation of our nation's biological heritage.

Sincerely,

Regional Director

05/25/90

3. Fish and Wildlife Service Oversight

The Service lead Regional Director directs teams through:

- a. Establishing and terminating teams when appropriate;
- b. Appointing, removing, and replacing team members and consultants as necessary;
- c. Approving recovery plans (and their subsequent revisions and updates);
- d. Developing the team's operating and planning guidelines; and
- e. Appointing a Service employee as an active team member or team liaison.

4. Communications

Teams may meet as frequently as necessary. Experience indicates the need for each team to prepare minutes of each meeting and submit them to the Regional Director for distribution to cooperating parties and affected States and other agencies. Reports on accomplishments, such as inventory work, are often presented at team meetings and should be included in the minutes.

Unless the team leader is a Service employee, Service letterhead and franked enveloped should not be used for team business. To do so could imply that the team is expressing Service policy or positions. Official Service letters to a team are directed to the team leader. For species that occur in more than one Region, the lead Region will keep the other involved Region(s) fully informed of team activities. When more than one Region has a team for a given species, the Region with lead recovery responsibility must carefully coordinate among the teams.

5. Funding

Although salary, per diem, and travel costs associated with recovery team activities are normally borne by the members' employing agencies, routine business expenses are borne by the Regional Director. The Regional Director has the discretion of also furnishing travel and related funds for the expense of team members. Service personnel serving on a recovery team are supported by their own station funds. Travel expenses of consultants on team business, clerical and drafting services, supplies, printing costs, and other special services for team business are funded by the lead Region. Observers, however, will cover their own expenses.

If the team leader is not a Federal employee, a contract or purchase order may be used for financing routine team business. This agreement can remain in force as long as necessary. As soon as it is determined that

funds are available for the next fiscal year, the Regional Director will provide the team leader, in writing, with an allotment available to support the team. If the team leader is replaced by another non-government employee, a new agreement must be prepared and signed by the Regional Director and newly appointed team leader.

6. Responsibilities of A Recovery Team

In addition to the activities described in the above guidelines, a recovery team may solely at the request of the Regional Director, provide assistance on other aspects of Service responsibilities toward the species (e.g., Section 7 consultation, identification of critical habitat, and research proposals). In consultation with the Regional Director, the team also may provide requested assistance to other participating agencies but if, and only if, the team is willing to do so. Should the team provide any policy analysis or recommendations, the recipient must be cautioned that this information represents the team's views, not necessarily the views of the Service or any other agency.

Recovery teams also may inform interested parties of its activities, as the team considers appropriate. When outside contacts occur, the team must from the beginning accurately describe its relationship to the Fish and Wildlife Service.

For the protection of the recovery team members, and in the best interests of species recovery, the recovery team should be mindful of a number of situations that it should avoid. Specifically, it is inappropriate for a recovery team to:

- Represent itself as speaking for any agency.
- Distribute draft plans. The Regional Director will obtain the views of cooperators, other Federal and State agencies, and the public.
- Independently implement recovery actions. This remains the job of the individual cooperating agencies, although recovery teams may participate in recovery actions with the approval of the Regional Director and appropriate officials of relevant cooperating agencies.
- Act as an official consulting group to anyone other than the Regional Director on socio-economic, political, or administrative issues.
- Designate Critical Habitat in the context of Section 4 of the Endangered Species Act. This is the responsibility of the Secretary of the Interior. The team may be requested, or may volunteer, to identify such habitat for the Regional Director.
- Call to the attention of offending parties any actions it judges to be adverse to the species. This is the responsibility of the Secretary of the Interior or other Federal or State agencies, as appropriate. The

team should bring any such actions to the attention of the Regional Director.

-- Act through the news media, conservation organizations, State or Federal legislators, or other parties to influence any agency decisions, except in so far as the lead Regional Director advises them, in advance.

-- Reallocate agency responsibilities with respect to the assigned species or assign responsibilities beyond those approved in the plan.

-- Prepare Environmental Impact Statements or accept other responsibilities outside its planning assistance roles without the prior concurrence of the Regional Director.

-- Lobby for funds without the concurrence of the Regional Director.

-- Interject itself in litigation or regulatory actions.

-- Pressure cooperating agencies to accept the team's viewpoint.

-- Take any action or represent any concept, either as individuals or as a team, that would adversely affect its professional integrity.

These rules are not intended to limit the ability of individuals to perform duties associated with their usual occupation, but are only intended to guide behavior with respect to their roles as members of a recovery team.

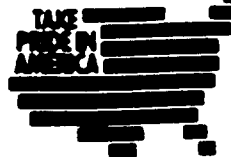
7. Contracting

The Service may use private contractors to write recovery plans. These individuals may be employees of State conservation agencies, universities, museums, private conservation organizations, or private contracting businesses with relevant expertise. Contractors may also be used to conduct recovery task projects under separate contracts.



United States Department of the Interior

FISH AND WILDLIFE SERVICE
WASHINGTON, D.C. 20240



ADDRESS ONLY THE DIRECTOR
FISH AND WILDLIFE SERVICE

In Reply Refer To:
FWS/EHC/BLR

FEB 2 1989

Memorandum

To: Regional Director, Regions 1, 2, 3, 4, 5, 6, 7, and 8

From: Director

Subject: Early Planning for Recovery of Endangered and Threatened Species
(Due Date: 60 Days)

For several years I have been concerned about the Fish and Wildlife Service's (Service) effectiveness in managing the recovery of listed species. During reauthorization of the Endangered Species Act, Congress expressed an interest in effective recovery programs for listed species, and the General Accounting Office has recently issued a report on the effectiveness of the Service's recovery activities, outlining areas for improvement.

It is important that the Service not only pursue conservation goals, but that it be able to report to Congress and to the public on the status of its recovery progress. Consequently, I am instituting a means of encouraging early attention to planning recovery efforts. Whenever a species is listed, the responsible lead Regional Director will submit to me, within 60 days of publication of the final rule, a recovery outline that briefly explains the Region's intended course of action with respect to how the species' needs will be addressed. The outline will not be a recovery plan, but should explain whether a plan will be prepared and the estimated time of its completion, whether a recovery team will be appointed, and whatever other recovery actions are anticipated for the species. An outline format is attached for your use. The Division of Endangered Species and Habitat Conservation will maintain a file of recovery outlines for purposes of information and tracking. The Division will also provide me with policy review, as needed, of outlines. The first recovery outlines are due to me 60 days after the date of this memorandum and should cover all species listed since January 1, 1989. Regional progress towards development of recovery plans will be monitored by the Division using the copies of cover pages that are submitted for all draft and approved plans.

Attachment

RECOVERY OUTLINE FORMAT

1. Species Name

Common:
Scientific:

2. Date Listed

3. Recovery Priority Number:

4. Anticipated Recovery Action include information from applicable items below.

Appoint recovery team (indicate expected time of appointment)
Prepare recovery plan (indicate expected date for draft)
Acquire habitat (describe briefly, if known)
Consult with Federal Agencies (indicate which ones)
Consult with private interest (give names)
Develop habitat conservation plan (indicate participants)
Develop other agreements (describe and indicate participants)
Enforce trade/taking restrictions (explain need and means)
Undertake research (indicate questions to be addressed)
Other (as appropriate to particular species)

4. Date/Signature of Regional Director

LEAD REGION(S)

FOR ENDANGERED SPECIES ACTIVITIES



United States Department of the Interior

FISH AND WILDLIFE SERVICE
WASHINGTON, D.C. 20240



ADDRESS ONLY THE DIRECTOR,
FISH AND WILDLIFE SERVICE

In Reply Refer To:
FWS/EHC/BLR

ADD 17 1989

Memorandum

To: Regional Director, Regions 1, 2, 3, 4, 5, 6, 7 and 8

From: Deputy Assistant Secretary for Fish and Wildlife and Parks

Subject: Lead Regions for Endangered Species Activities
(Response due June 1, 1989)

Effective April 15, 1989, the attached document will guide assignment of lead Regions for endangered species activities within the Service. It is based on the draft circulated in December 1988, as modified to ensure consistency with the planned delegation of permits to Regions and to respond to Regional comments on the earlier version. An evaluation will be conducted in approximately 6 months to determine whether further modifications are warranted.

The procedures described in the document depend on cooperation among Regional Offices in deciding lead responsibilities and authority. Thus, rigid formulas have been avoided in preference to mutual agreement in assigning leads. Some responses to the draft questioned the degree to which lead Regions would be responsible for activities occurring in other Regions or the extent of coordination necessary between lead and other Regions undertaking initiatives. Such matters should be decided by mutual arrangement among the Regions involved; it is not intended that the document will specify the details of these agreements.

The Division of Endangered Species and Habitat Conservation is developing a database to track lead listing and recovery assignments; a draft is attached reflecting Regional comments on the preliminary list of recovery leads circulated in December. Please note that inclusion of Region 8 in the range of a species reflects the species' occurrence outside U.S. territory, rather than the existence of a research program directed at its recovery. Recovery leads for three listed species (American peregrine

falcon, Olive ridley sea turtle, and piping plover) remain to be determined. In these cases, Regions involved should coordinate lead agreements and transmit the results to me by June 1, 1989, for incorporation into the tracking database.

Juan P. Lamson

Attachments

ASSIGNMENT OF LEAD REGIONS
FOR ENDANGERED AND THREATENED SPECIES

This document is intended to guide the assignment of lead responsibility for endangered and threatened species listing, recovery, consultation, and permit issuance when the range of a species or scope of an activity is not confined to a single Region. The essential concept embodied in the following guidance is that lead responsibility and authority and the degree and character of any subsequent coordination between lead and non-lead Regions are matters appropriately decided by mutual agreement among Regions. The Washington Office will not make lead assignments or prescribe the nature of inter-regional relations unless there is a failure among affected Regions to reach agreement.

Lead Region Database

The Washington Office will maintain a database of lead Regions by species for listing (including candidate monitoring and assessment) and recovery. It is expected that in most cases a single Region will function as lead for all such activities regarding a species. In exceptional circumstances, functional leads for a given species may be divided among Regions so that, for example, one Region would have the lead for listing a species and another Region have the lead for recovery. Such divided responsibilities will be noted in the database.

Reporting Agreements and Resolving Disagreements

Any agreement reached among Regions regarding lead listing or recovery responsibility for a species will be promptly communicated to the Director in a memorandum from the agreed-upon lead Region so that lead responsibility can be tracked in the database. Any inability to reach agreement will also be referred to the Director, along with an explanation of the substance of the disagreement, for resolution.

Listing and Recovery

1. As a general rule, when the range of a species crosses Regional boundaries, lead responsibility for candidate assessment, petition findings, listing, and development of a recovery plan will be determined by agreement among the Regions involved.
2. In the cases of some relatively wide-ranging species, it may be necessary to divide lead responsibility so that different Regions have responsibility for different geographic segments of the species' range (in which case the database will treat each segment as a separate entry) or for different aspects of the Service's involvement with the species. Such fragmentation of responsibility is expected to be necessary only rarely

and should be avoided when possible because of the increased coordination required to assure range-wide compatibility in the way species are treated.

3. A lead Region is responsible for keeping all other Regions that share portions of the species' range aware of the state of its involvement with the species. When a Region with lead responsibility for a species undertakes a significant action such as listing, reclassification, or approval of a recovery plan, it is responsible for circulating draft documents to other involved Regions and obtaining their written concurrence before undertaking the action. A rule submitted by a lead Region for approval will be accompanied by evidence of concurrence by other involved Regions. Non-lead Regions are responsible for providing the lead Region with any information available to them that bears on the species' status and for responding promptly to lead-Region requests for information or evaluation regarding the species.

4. Except for cooperative programs with States funded under Section 6 of the Endangered Species Act, or by documented mutual agreement between the concerned Regions, a Region with lead recovery responsibility for a species will also be responsible for coordinating any funding, research, or management initiative for the species, even if the initiative originates with another Region having current or historical range for the species or with Region 8. Section 6 initiatives by a non-lead Region will be that Region's responsibility in consultation with the recovery lead Region. Thus for instance, Region 2 has overall responsibility in consultation with the other Regions involved for defining research needs, formulating a budget, and developing a recovery strategy for the whooping crane, although Regions 4 and 8 may be the principal recipients of funds for establishing a non-migratory flock in the Southeast. Region 4, however, has primary responsibility for cooperative programs with its States on sea turtles, and will consult with Region 2 in order to ensure consistency between those programs and overall conservation goals for these species.

Permit Issuance

1. In general, the lead Region for issuance of permits to take native endangered species will be the Region in which the permitted activity is to take place, except that the Office of Management Authority, in consultation with Region 8, will retain lead responsibility for issuance of export, import, and interstate and foreign commerce permits.

2. When an application applies to activities that would occur in more than one Region, the affected Regions will mutually agree upon which Region will take the lead in processing the application. If one of the Regions is the lead recovery Region for the species, that Region should take the lead in processing the application.

3. In general, all Regions in the range of a species should be offered an opportunity to comment on an application dealing with that species, and where recommendations differ, there should be discussion among the Regions

to attempt to resolve them. Special consideration should be given to comments of the Region having the lead for recovery of the species.

4. An application directed to any Regional Office or to the Washington Office will be referred internally to the Office with issuing responsibility and authority. The applicant will not be required to know beforehand which Region has issuing responsibility and authority.

Consultation

1. When an action takes place in more than one Region, generally the lead Region will be the one in which the greatest impact or the largest number of affected species occurs. When there is a question on this point, the Regions involved will agree on a lead. If agreement cannot be achieved, the case will be referred to the Director for resolution. If a Federal agency initiating consultation has a question as to which Region should have the lead, it should seek the advice of the Washington Office.

2. Lead responsibility for a consultation will be determined independently of lead recovery responsibilities for the species involved. When a Region consults on a species for which it does not have lead recovery responsibility, it will be responsible for coordinating with the recovery lead Region to ensure consistency between consultation results and other activities relating to the species. The level of coordination necessary is subject to mutual agreement between Regions, and a recovery lead Region may release other Regions from the obligation to coordinate on non-jeopardy opinions. The Regional Director that signs a biological opinion is fully responsible for its contents and has full authority for any jeopardy finding or other element of the opinion.

3. The Service may enter into agreements with agencies requiring consultation on programs with geographically broad effects in order to establish a framework for assigning lead responsibilities among Regions.

Page No. 1
12/21/89

LEAD REGIONS FOR LISTED SPECIES

Species	Range (asterisk indicates lead -- extirpated in parentheses)
Bat, gray	2,3*,4,5,6
Bat, Indiana	2,3*,4,5,6
Bat, Ozark big-eared	2*,4
Bat, Virginia big-eared	4,5*
Bear, grizzly or brown	1,6*,(2,3)
Caribou, woodland	1*,8,(3,5,6,7)
Cougar, eastern	5*,8,(3,4)
Dugong	1*,8
Ferret, black-footed	6*,(2,8)
Jaguarundi	2*,8
Manatee, West Indian (Florida)	2,4*,8
Ocelot	2*,8
Otter, southern sea	1*,8
Seal, Caribbean monk	(4*,8,NMFS)
Seal, Guadalupe fur	1*,8,NMFS
Wolf, gray	3*,6,8(1,2,4,5)
Wolf, red	4*,(2,3,5)
Crane, whooping	1,2*,6(3,4)
Curlew, eskimo	1,2,3,4,5,6,7*8
Eagle, bald	1,2,3*,4,5,6,
Falcon, American peregrine (eastern)	3,4,5*,8
Falcon, American peregrine (western)	1*,2,6,8
Falcon, American peregrine (Alaska)	7*
Falcon, Arctic peregrine	1,2,3,4,5,6,7*8
Falcon, northern aplomado	2*,8
Goose, Aleutian Canada	1,7*
Pelican, brown	1*,2,4,8
Plover, piping (Atlantic coastal)	2,3,4,5,6,8
Piping plover (interior)	2,3*,4,6,8
Rail, Yuma clapper	1,2*
Tern, least	2,3*,4,6
Tern, roseate	4,5*,8
Vireo, black-capped	2*,8,(6)
Vireo, least Bell's	1*,8
Warbler (wood), Kirtland's	3*,4,8
Woodpecker, ivory-billed	8,(2,4*)
Woodpecker, red-cockaded	2,4*,5,(3)
Alligator, American	2,4*
Boa, Virgin Islands tree	4*,8
Rattlesnake, New Mexican ridge-nosed	2*,8
Tortoise, desert	1*,2,6
Turtle, green sea	1,2*,4,5,8,NMFS
Turtle, hawksbill sea (=carey)	1,2*,4,8,NMFS
Turtle, Kemp's (Atlantic) ridley sea	2*,4,5,8,NMFS
Turtle, leatherback sea	1,2*,4,5,8,NMFS
Turtle, loggerhead sea	1,2*,4,5,8,NMFS
Turtle, olive (Pacific) ridley sea	1,2*,4,8,NMFS
Toad, Puerto Rican	4*,(8)
Catfish, Yaqui	2*,8

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12/21/89

LEAD REGIONS FOR LISTED SPECIES

Species	Range (asterisk indicates lead -- extirpated in parentheses)
Cavefish, Ozark	2,3,4*
Chub, bonytail	1,2,6*
Chub, Chihuahua	2*,8
Chub, humpback	1,2,6*
Chub, slender	4*,5
Chub, Sonora	2*,8
Chub, spotfin	4*,5
Chub, Virgin River	1,2,6*
Chub, Yaqui	2*,8
Darter, leopard	2*,4
Madtom, yellowfin	4*,5
Minnow, loach	2*,8
Pupfish, desert	1,2*,8
Shiner, beautiful	2*,8
Spikedace	2*,8
Squawfish, Colorado River	1,2,6*,(8)
Sturgeon, shortnose	4,5,8,NMFS*
Trout, Lahontan cutthroat	1*,6
Woundfin	2,6*
Pearly mussel, Appalachian monkeyface	4*,5
Pearly mussel, birdwing	4*,5
Pearly mussel, cracking	3,4*
Pearly mussel, Cumberland monkeyface	4*,5
Pearly mussel, dromedary	4*,5
Pearly mussel, green-blossom	4*,5
Pearly mussel, Higgins' eye	3*,(6)
Pearly mussel, little-wing	3,4*,5
Pearly mussel, orange-footed	3,4*,5
Pearly mussel, pale lilliput	4*,5
Pearly mussel, pink mucket	3,4*,5
Pearly mussel, tubercled-blossom	3,4*,5
Pearly mussel, turgid-blossom	3,4*
Pearly mussel, white wartyback	3,4*
Pigtoe, fine-rayed	4*,5
Pigtoe, rough	3,4*,5
Pigtoe, shiny	4*,5
Pocketbook, fat	3,4*
Riffle shell, tan	4*,5
Beetle, American burying	2,3,4,5*,6,8
Bird's-beak, salt marsh	1*,8
Cactus, Cochise pincushion	2*,8
Cactus, Key tree	4*,8
Cactus, Knowlton	2*,6
Cactus, Kuenzler hedgehog	2*,8
Cactus, Lloyd's Mariposa	2*,8
Cactus, Mesa Verde	2*,6
Cactus, Siler pincushion	1,2*,6
Cactus, bunched cory	2*,8
Clover, running buffalo	3*,4,5,(6)

Page No. 3
12/21/89

LEAD REGIONS FOR LISTED SPECIES

Species	Range (asterisk indicates lead -- extirpated in parentheses)
Cycladenia, Jones	2,6*
Daisy, lakeside	3*,8
Dropwort, Canby's	4*,5
Fern, American hart's-tongue	3,4*,5
Frankenia, Johnston's	2*,8
Geocarpon minimum (=Sci. Name)	3,4*
Globe-berry, Tumamoc	2*,8
Goldenrod, Houghton's	3*,8
Harperella	4*,5
Iris, dwarf lake	3*,8
Lousewort, Furbish	5*,8
Milk-vetch, Mancos	2*,6
Milkweed, Mead's	3*,6
Monkshood, northern wild	3*,5
Orchid, eastern prairie fringed	3*,4,5,8
Orchid, western prairie fringed	2,3*,6,8
Pink, swamp	4,5*
Pogonia, small whorled	3,4,5*,8
Pondberry	3,4*
Thistle, Pitcher's	3*,8

II-19

SPECIES STATUS REPORT

(PARTS I, II, AND III)

05/25/90

Species Status Report - (Part I)

STATUS OF EACH LISTED SPECIES WITH APPROVED RECOVERY PLANS

Listed
Species:

Lead
Region:

Status:*

Species list to
be provided by DES
for each report data
call.

*Please report status with a single letter.

I=Improving (Increasing)

S=Stable

D=Declining

U=Unknown

E=Extinct

Date of Report: _____

05/25/90

Species Status Report - (Part II)

STATUS OF DEVELOPMENT AND IMPLEMENTATION OF RECOVERY PLANS

Listed Lead Recovery Plan Recovery
Species: Region: Plan:* Stage:** Achieved:***

* Does the species have an approved recovery plan? Please answer with either Y (Yes) or N (No). If a recovery plan is not anticipated as necessary, please respond with NA (Not Applicable).

** What is the stage of the plan? Please respond with F (Final-Approved), Rev (Revised), A (Agency Draft), T (Technical Draft), T/A (Technical/Agency Draft), U (Under Development), R (Under Revision), or NA (Not Applicable).

*** What percentage of the species recovery objective has been met? Please respond with an integer from 1 to 4.

- 1= 0%-25% achieved
- 2= 26%-50% achieved
- 3= 51%-75% achieved
- 4= 76%-100% achieved

Date of Report: _____

Date of Report: _____

Species Status Report - (Part III)

INDIVIDUAL SPECIES RECOVERY PROGRESS*

1. Species:
2. Group:
3. Listing/Date:
4. Species Status:
5. Recovery Priority:
6. Recovery Plan Title:
7. Lead Region/Region Responsible for Recovery Plan:
8. Recovery Plan Stage/Date:
9. Recovery Objective/Criteria:

10. Major Activity Since Last Report:

11. Major Activity Over Next Reporting Period:

12. Recovery Achieved (%): _____

13. Information Current as of: _____ (date)

Completed by : _____ (name)

Phone Number : _____

* To be completed for each listed species.

Species Status Report - (Part III)

INDIVIDUAL SPECIES RECOVERY PROGRESS

1. Species = Common name, followed by scientific name
2. Group = Choose one: Mammals, Birds, Reptiles, Amphibians, Fishes, Snails, Clams, Crustaceans, Insects, Arachnids, Plants
3. Listing/Date = Candidate, Threatened, or Endangered/Date final rule published if Threatened or Endangered
4. Species Status = Choose one: Stable, Improving, Declining, Extinct, Unknown.
5. Recovery Priority= Ranking from 1C to 18.
6. Recovery Plan Title =

For listed species with more than one recovery plan, a separate report should be completed for each recovery plan. For species with no recovery plan and none intended, write N/A. If no recovery plan has been initiated but one will be written at some point, write Pending.

7. Lead Region/Region Responsible for Recovery Plan =

If the lead Region for the species is different from the Region responsible for the plans named above, list each Region. Otherwise, there will only be one number here.

8. Recovery Plan Stage/Date =

For Stage, write F (Final-Approved), A (Agency Draft), T (Technical Draft), T/A (Technical/Agency Draft, U (Under Development), R (Under Revision), or NA (Not Applicable). If the plan has been updated, indicated with -Rev. (Revised) after the date.

9. Recovery Objective/Criteria =

Choose Recovery Objectives among: Delist, Downlist, Stabilize, and then summarize the Criteria in the Narrative portion of the recovery plan. Include quantitative information.

10. Major Activity Since Last Report:

Describe progress on highest priority recovery tasks, indicating actions initiated and any discernable effects on species status.

11. Major Activity Over Next Reporting Period:

Describe high priority tasks to be continued or initiated over a stated period, and their intended result.

12. Recovery Achieved:

Indicate on a fractional scale the progress toward recovery, with "1" signifying 0-25% of the total recovery objective being met, "2" signifying 26-50%, "3" signifying 51-75%, "4" signifying 76-100%.

13. Information Current as of:

Indicate the Date (month/year), of the information presented on each individual species report.

APPENDIX III

PUBLIC INVOLVEMENT

05/25/90

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SAMPLE NEWSPAPER PUBLIC NOTICE

The U.S. Fish and Wildlife Service, an agency of the Department of the Interior, is seeking public comments on a recovery plan written for (common and scientific name of species), which was listed in (month and year of listing) as a (threatened or endangered) species under the Endangered Species Act of 1973, as amended. This species occurs (give geographic description in general terms). (Describe the circumstances that pose a threat to the species and warranted its listing).

The recovery goal is to restore the species to a secure status in its natural setting. The recovery plan is being developed to provide a guide for Federal and State agencies and other parties interested in helping the species and identifies species and habitat factors of concern for those considering activities that may affect the species. The plan describes tasks that, when accomplished, should ensure the species' survival, and thereby justify its removal from the endangered and threatened species list.

The draft recovery plan is available for public inspection during (state duration of regular business hours) at (local address and phone number). A copy of the draft recovery plan and additional information can be obtained from the Fish and Wildlife Service's Regional Office at (provide address and phone number). Public comments on the draft recovery plan are invited, and should be sent to the Fish and Wildlife Service at either address by (state date 60 days from date of publication in the Federal Register). (If there is to be a public meeting on the plan, indicate the day, time, place and any necessary procedures prospective participants need to know).

SAMPLE PRESS RELEASE ON PUBLIC REVIEW OF A RECOVERY PLAN

The U.S. Fish and Wildlife Service announced today that it is seeking public input on a plan to bring about the recovery of the (common name of the species), which was listed on (date) as (endangered or threatened).

The (common name of species) lives in (types of habitat) of (geographic region) and faces extinction due to (state maximum of two primary threats facing species). (Include a sentences or two on the life history of the species; what it looks like, what it eats, what eats it, any notable interaction with man, etc.)

The recovery plan released today resulted from a year-long effort by scientists from State and Federal agencies and leading universities. It calls for (state recovery objective and criteria) by (state two or three major tasks proposed in plan). Once finished, it will guide the actions of all Federal and State agencies whose actions affect the conservation of the (species common name). The ultimate goal is to restore the species to a secure status in its native ecosystem.

"It is very important for us to know what the public thinks about our approach to recovering this species," indicated the Service's Regional Director (name). The Service will collect written public comments on its recovery plan over the next 60 days and, in addition, will conduct an open public meeting on the plan at (state time, day, place, if appropriate). Copies of the proposed plan can be obtained from the Service by writing (state address) or calling (state phone number).

MODEL FEDERAL REGISTER NOTICE OF RECOVERY PLAN AVAILABILITY

Billing Code 4310-55

Department of the Interior
Fish and Wildlife Service¹

Notice of Availability of a Draft Recovery Plan for (give title, capitalize major words) for Review and Comment (no period)

AGENCY: Fish and Wildlife Service, Interior
ACTION: Notice of document availability
SUMMARY: The U. S. Fish and Wildlife Service announces the availability for public review of a draft recovery plan for (give title). (It/they) occur on (private/etc.) lands in (mention general areas likely to be affected by recommendations in the plan). The Service solicits review and comment from the public on this draft plan.

DATES: Comments on the draft recovery plan must be received on or before (60 days from publication in the Federal Register)² to receive consideration by the Service.

ADDRESSES: Persons wishing to review the draft recovery plan may (purchase/examine/obtain - details to be worked out) a copy by contacting (give names, addresses, and phone numbers). Written comments and materials regarding the plan should be addressed to (give appropriate name at the above or other address). Comments and materials received are available on request for public inspection, by appointment, during normal business hours at the (latter/above) address.

FOR FURTHER INFORMATION CONTACT: Give name, address, and telephone number (commercial and FTS) of most appropriate staff person (or refer to ADDRESSES section, if same address).

¹ This is a notice to be published in the Notice Section of the Federal Register. As such it has no 50 CFR Part 17 line, "Endangered and Threatened Wildlife and Plants" reference in the title, or "List of Subjects" section before the "Authority" citation.

² 30 days is the allowed minimum. The Departmental Manual strongly recommends 60-day comment periods.

SUPPLEMENTARY INFORMATION:**Background**

Restoring an endangered or threatened animal or plant to the point where it is again a secure, self-sustaining member of its ecosystem is a primary goal of the U.S. Fish and Wildlife Service's endangered species program. To help guide the recovery effort, the Service is working to prepare recovery plans for most of the listed species native to the United States. Recovery plans describe actions considered necessary for conservation of the species, establish criteria for the recovery levels for downlisting or delisting them, and estimate time and cost for implementing the recovery measures needed.

The Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 et seq.) requires the development of recovery plans for listed species unless such a plan would not promote the conservation of a particular species. Section 4(f) of the Act, as amended in 1988, requires that public notice and an opportunity for public review and comment be provided during recovery plan development. The Service will consider all information presented during a public comment period prior to approval of each new or revised Recovery Plan. The Service and other Federal agencies will also take these comments into account in the course of implementing approved recovery plans.

(Provide a brief paragraph of introduction to the specific plan being developed. Mention the species covered by the plan, the reasons for listing, the specific areas likely to be affected by measures proposed in the plan, and the approval stage of the plan).

Public Comments Solicited

The Service solicits written comments on the recovery plan described. All comments received by the date specified above will be considered prior to approval of the plan.

Authority

The authority for this action is Section 4(f) of the Endangered Species Act, 16 U.S.C. 1533(f).

Dated: _____

Regional Director

05/25/90

SAMPLE TECHNICAL/AGENCY REVIEW DRAFT TRANSMITTAL LETTER

Dear :

Attached is the Technical/Agency Draft of the _____ Recovery Plan (Plan). This Plan has already gone through an internal technical review dealing primarily with the biological accuracy and sufficiency of the Plan. We are now expanding the Plan review to allow government agencies and the public to comment on all aspects.

"Responsible" agencies are designated for all of the recovery tasks in the Implementation Schedule. While the U.S. Fish and Wildlife Service has no specific legislative mandate to require other Federal and State agencies to carry out specific actions for endangered species recovery, we believe the designated agencies have the necessary authority to carry out the identified tasks. The Implementation Schedule serves to alert those agencies to the need for these actions and to justify seeking funds to carry out the actions.

Comments should be submitted to the U.S. Fish and Wildlife Service, Region _____ Division of Endangered Species, to the attention of _____ . All comments should be received by _____ so that they can be considered in production of the final Recovery Plan. All comments will be made available to all affected Federal agencies for their consideration prior to approval and implementation of any Plan task.

We thank you in advance for your assistance.

Sincerely,

Regional Director

05/25/90

PUBLIC MEETING GUIDANCE FOR RECOVERY PLAN REVIEW

At the discretion of the lead Regional Director, a public meeting may be held in the general area where the species occurs. If such a meeting is to be held, an announcement of the location and time must be published in the Federal Register and local newspapers. Any party having expressed an interest in such a meeting or in the recovery plan should be notified by letter. The meeting should be announced far enough in advance to allow adequate notice. The Regional public affairs officer's advice should be sought with regard to scheduling and public notification. A minimum of 15 days should be allowed between the Federal Register announcement and the meeting. The public comment period must be open during and for some time after the public meeting. Schedule and hold the meeting expeditiously.

Participation in the meeting should involve as many employees as necessary to make presentations and to serve as door attendants, parliamentarians, legal advisors, etc. A Regional or Washington Office Solicitor should be in attendance, particularly if controversy is expected. If more than one meeting is to take place, each meeting should be run the same way. Hiring a court reporter to prepare a record of the meeting is recommended.

A suggested agenda for meetings follows:

Introduction. Discussion of the purpose, introduction of participants, and explanation of agenda and rules for the record.

Service presentation. The presentation should summarize the biological information upon which the listing was based and discuss how the species can be recovered.

The use of slides, large maps, handouts, or similar visual aid material should be considered in the presentation. In particular, maps of any critical habitats showing precise boundary lines can ensure a better understanding. Where possible, the boundaries should be submitted for the meeting record in writing. Do not overwhelm the audience with highly technical information. Past and current distribution and population sizes are important to communicate, along with a discussion of known threats and limiting factors. Discussion should be centered on how the Recovery Plan addresses these factors. Non-Service employees also can be asked to make presentations.

Floor Statements. Allow attendees to make statements for the record. If there is a large attendance and statement time is limited, be sure to state the ground rules in the beginning of the meeting (e.g., time limit for oral presentation, no limit on written statement, etc.). Statements are usually taken in the following order: Federal elected officials; State and local elected officials; Federal, State, and local agency personnel; and then others in alphabetical order or order of arrival. Copies of all statements given at the meeting should be collected after the presentation

of each statement, and should be retained for the record. The public notice should clearly state that a copy of the statement should be available at the start of the meeting, particularly if you anticipate the need to limit time allotted to oral presentations. (Written copies of oral statements are not required, but should be encouraged in the public notice). Explain that written and oral statements are given equal consideration, and that additional written comment may be submitted for a period of time following the meeting (give cutoff date and mailing addresses).

The introduction, Service presentations, and public statements should be part of the record. A court reporter can be employed to prepare a record of the meeting. Hiring such an individual is recommended if the meeting is expected to be controversial, and doing so will usually provide the quickest and most accurate record preparation. If a reporter is employed, an agreement should be obtained for timely delivery (e.g., 2 weeks) of the record following the meeting. As an alternative, a Service employee can tape the meeting for later transcription, but this usually is quite time-consuming. If this latter method is chosen, use a "fool-proof" tape recording system operated by someone with the appropriate technical expertise.

Approach meetings in a positive manner and be as cooperative, informative, and courteous to attendees as possible. Avoid commitments (e.g., "absolutely, no effect on your project").

Question and Answer Period. (This is optional and will depend on time availability and preference of the hearing officer). Allow questions from the floor and provide answers from Service employees. This can be conducted on or off the record, and the hearing officer should clearly state which is the case. The Service prefers this to be on the record unless there is some compelling reason to the contrary. If attendees wish their questions to be part of the record, then they should be. Requesting attendees to fill out cards (printed name, address, affiliation and whether they wish to make an oral statement) at the door, or to merely sign-in, serves as a record of total attendance and is recommended.

Do not let this develop into a free-for-all debate; an impartial but firm meeting officer is a must for a question and answer session.

RECOVERY PLAN DISTRIBUTION LIST

Technical Draft

1. Send one copy, as appropriate to the following:

Plants -

Dr. Bob Cook
Arnold Arboretum
125 Arborway
Jamaica Plain, Massachusetts 02130

2. **Animals (with international distribution)**

Lawrence Mason
Office of International Affairs (IA, Mail Stop 860 ARLSQ)
U.S. Fish and Wildlife Service
Washington, D.C. 20240

3. **Other knowledgeable individuals, such as taxa and population specialists.**

Technical/Agency or Agency Draft

Same as above, plus the following:

1. **Fish and Wildlife Service Washington Offices at the following mail stops:**

Division of Endangered Species (Mail Stop 452 ARLSQ)

Office of Public Affairs (PA, 3447 MIB)

Division of Refuges (Mail Stop 670 ARLSQ)

Office of Research Support (RD-8/ORS, Mail Stop 725 ARLSQ)

Division of Fish Hatcheries (FH, Mail Stop 820 ARLSQ) - Fish species only

Affected Regional offices

Affected Service field offices

2. **Environmental Protection Agency**
Hazard Evaluation Division - EEB (TS769C)
401 M Street, S.W.
Washington, D.C. 20460
3. **All cooperating and/or affected agencies and countries.** Include a courtesy copy of the cover letter in Spanish to Mexico (see Memorandum of Understanding between U.S., Canada, and Mexico, dated April 22, 1988).

Approved Plan

Upon signature, immediately send copy of the title page to Division of Endangered Species.

As soon as possible, send copies to the above addresses (except 3 copies to the Assistant Director - Fish and Wildlife Enhancement) plus the following:

1. **Department of the Interior Library**
- Information on Products Branch (PMO,MS 2258 MIB) - 3 copies
2. **National Fish and Wildlife Foundation**
Washington (NFWF, 2725 MIB)
3. **Fish and Wildlife Reference Service**
5430 Grosvenor Lane, Suite 110
Bethesda, Maryland 20814
4. **Plants -**

International Union for Conservation
of Nature and Natural Resources
Conservation Monitoring Center (KEW)
The Herbarium, Royal Botanic Gardens
Kew, Richmond
Surrey TW9 3AB
ENGLAND, U.K.
5. **Animals, except birds -**

International Union for Conservation
of Nature and Natural Resources
Species Conservation Monitoring Unit
219C Huntingdon Road
Cambridge CB3 0DL
ENGLAND, U.K.

6. Birds -

International Council for Bird Preservation
219C Huntington Road
Cambridge CB3 0DL
ENGLAND, U.K.

7. Cave species -

National Speleological Society
Cave Avenue
Huntsville, Alabama 35810

8. Other Washington Offices of cooperating and/or affected agencies, such as the following:

Endangered Species Program Manager
Office of Marine Mammals and Endangered Species
NOAA-National Marine Fisheries Service
1825 Connecticut Avenue
Room 805
Washington, D.C. 20235

Department of the Army (Military)
Natural Resources Program Manager
CEHSC-FN
U.S. Army Engineering & Housing Support Center
Fort Belvoir, VA 22060-5516

Department of the Army (Director of Civil Works)
Environmental Programs Branch
CECW-PP
Pulaski Building
20 Massachusetts Avenue
Washington, D.C. 20314-1000

Department of the Navy
Natural Resources Program Manager
Navy Facilities Engineering Command
Code 2042
200 Stovall Street
Alexandria, Virginia 22332-2300

Marine Corps
Natural Resource Program Manager
HQMC-LFL
Washington, D.C. 20380-0001

Department of the Air Force
Chief, Environmental Division
Engineering and Services Directorate
HQ, Air Force
Bolling Air Force Base
Washington, D.C. 20332-5000

Chief, Division of Project Compliance and Administration
Federal Energy Regulatory Commission
825 North Capitol Street, N.E., Room 308
Washington, D.C. 20426

Director, Office of Environment and Energy
Room 7154, HUD Building
451 Seventh Street, S.W.
Washington, D.C. 20410-3000

U.S. Forest Service
Wildlife and Fisheries, Room 605
Endangered Species Program Manager
P.O. Box 96090
Washington, D.C. 20013-6090

Chief, Wildlife and Vegetation Division (490)
National Park Service
P.O. Box 37127
Washington, D.C. 20410-3000

Fish and Wildlife Resource Specialist
Office of Trust and Economic Development
Bureau of Indian Affairs
Mail Stop 4513-MIB
Interior Building
Washington, D.C. 20240

III-13

Wildlife Management Biologist
Division of Wildlife and Fisheries (BC 240)
Bureau of Land Management
Mail Stop 903-Premier
Washington, D.C. 20240

Director, Office of Environmental Affairs
Bureau of Reclamation
Mail Stop 7518-MIB
Interior Building
Washington, D.C. 20240

Assistant Director - Program Policy
Office of Surface Mining Reclamation and Enforcement
(LSM)
Mail Stop 228-SIB
1951 Constitution Avenue, N.W.
Washington, D.C. 20245

Federal Highway Administration
Office of Environmental Policy
Environmental Analysis Division
400 Seventh Street, S.W., Room 3240
Washington, D.C. 20590

Directorate for Biological, Behavioral,
and Social Sciences
National Science Foundation
1800 G Street, N.W., Room 215
Washington, D.C. 20550

Director, Office of Nuclear Reactor Regulation
U.S. Nuclear Regulation Commission
Washington, D.C. 20555

05/25/90

APPENDIX IV

FISH AND WILDLIFE SERVICE POLICIES RELATING TO RECOVERY

05/25/90

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SERVICE POLICIES RELATING TO RECOVERY

The following discussion briefly summarizes Service policies relevant to recovery activities. References are provided for people wanting more information, and these reference documents should be available in each Regional Office.

1. Captive propagation or cultivation

Captive propagation/cultivation may be a useful tool to facilitate recovery of a species in the wild, but it is not a substitute for reestablishment of viable wild populations. The initiation of significant and costly captive propagation or cultivation programs may be necessary, but should be considered only after all other techniques to maintain or improve a species' status in the wild have failed or are determined as likely to fail. In the case of listed plants, however, seed banking may be relatively simple and inexpensive and need not be delayed.

Emphasis should be on preservation of natural habitats, population management, enforcement of protective regulations, and public education (See Memo from Director to Regional Director, Region 3, Treatment of cultivated material of listed plant species, 1/14/86).

2. Habitat protection/land acquisition

Whenever possible, the first step in habitat protection should be education and involvement of the landowners. Proposals to acquire land or interests therein for the benefit of listed species are appropriate when other means (such as cooperation, exchanges, zoning, or other regulation) of achieving recovery objectives are not available or effective. When property must be acquired, the minimum interest necessary to meet species recovery objectives is to be acquired or retained. Long-term (perpetual) restrictive easements and extended use reservations should be considered as alternatives to outright fee purchase, as a way of lessening impacts on the owner and the community and saving the taxpayers money. Donations of desired lands or interests should be encouraged. The Office of Management and Budget has historically imposed restrictions on the use of the Land and Water Conservation Fund for the purchase of lands not identified as essential habitat in recovery plans. Therefore, in cases where land acquisition is deemed necessary, essential habitat should be identified in the recovery plan. Essential habitat should not be confused with critical habitat, which is defined by regulation. Where habitat acquisition is determined to be necessary prior to completion of the recovery plan, the "Preliminary Project Proposal," for that acquisition will require the Director's approval.

If a recovery plan contemplates land acquisition, it must include a thorough discussion of the extent and location (providing it would not increase the risk of "take" of the species) and an estimate of the cost effectiveness and biological effectiveness of alternative strategies for habitat protection.

3. Hybrids

Hybrids are not protected by the Endangered Species Act. A hybrid is defined as the offspring of two organisms (animal or plant) of different species (as defined pursuant to the Act).

Protection of hybrids is inconsistent with the Act because it may result in the loss of the last remaining "pure" gene pools or the takeover by hybrids of habitat essential for the genome's survival. (See Memo to Deputy Associate Director for Federal Assistance from Assistant Solicitor, Fish and Wildlife, Whether hybrids are covered by the ESA, 8/2/77; Memo to Regional Solicitor, Northeast Region, from Assistant Solicitor, Fish and Wildlife, Status of the hybrid offspring of two endangered species, 9/21/83.)

4. Relocation of listed species

Listed species will not be relocated or transplanted by the Service outside their historic range without specific case-by-case approval from the Director. (Historic range is defined to be those geographic areas which the species was known or believed to occupy in the past. When appropriate, different historic ranges must be defined relative to the life history phase of the species involved in the relocation or transplant.)

The stated purpose of the Endangered Species Act is to conserve the ecosystems upon which Endangered and Threatened species depend [Section 2(b)]. It would therefore be inappropriate to transplant listed species outside their historic range except in special cases. (See Memo from Associate Director to Regional Directors, Reintroduction of endangered and threatened species, 6/25/81; Memo from Director to Associate Solicitor, Conservation and Wildlife, FWS Policy on transplanting listed endangered and threatened species, 7/9/82.)

5. Reintroduction vs. Introduction of listed species

The more local an organism, the more critical the distinction between reintroduction and introduction can become. Reintroduction applies to areas (sites), where the species is or was known or believed to occur. All other placements are introductions (always outside of the historic range).

6. Termination of recovery efforts

In cases where a species' extinction is imminent and inevitable, Service-sponsored recovery efforts will be terminated. The Director will make such a judgement only after careful study and a recommendation for termination is submitted by the responsible Region. If the Service is to use its limited resources productively, then it cannot afford to expend effort on activities that will not produce any long term benefits. (See Memo from Acting Associate Director to Regional Director, Region 6, Endangered Species Policy Handbook, 7/10/84.)

7. Experimental populations

Experimental populations of listed species may be established outside the current range of the species to further species conservation. The "experimental" designation relaxes certain restrictions imposed by Section 9 and, in some cases, Section 7 of the Act. Each member of the experimental population will be treated as a threatened species or as a species proposed for listing, depending on the circumstances. To be considered experimental, a population must be wholly separate geographically from the donor population but within the species' probable historical range (except for unusual situations, which must be approved by the Director).

This treatment of experimental populations allows greater management flexibility under controlled conditions to promote the long-term survival of the species. Flexibility will encourage greater State and local participation in the conservation and recovery of listed species. (See 50 CFR Part 17, Subpart H; Memo from Assistant Solicitor, Fish and Wildlife, to Associate Director for Federal Assistance, Section 10(j) of the ESA and MOU's, 5/23/84; Memo from Assistant Solicitor, Fish and Wildlife, to Associate Director for Federal Assistance, Application of Section 10(j) of the ESA to experimental populations of plants and invertebrates, 3/83.)

The experimental population approach may be used when judged appropriate; however, formal designation is required if reintroductions and/or translocations are to be designated as experimental. The decision on whether or not to use this approach will be made on a species-by-species basis.

8. Listing and Recovery Priority Guidelines

The Service developed guidelines governing the assignment of priorities to species for listing as endangered or threatened under the Endangered Species Act and the development and implementation of recovery actions for species that are listed under the Act. The guidelines aid in determining how to make the most appropriate use of resources available to implement the Act. (See attached guidelines as published in the Federal Register on September 21, 1983).



United States Department of the Interior

FISH AND WILDLIFE SERVICE
WASHINGTON, D.C. 20240

APPROXIMATELY THE DIRECTOR
FISH AND WILDLIFE SERVICE

In Reply Refer To: NOV 5 1986
FWS/OES

Memorandum

To: Regional Director, Regions 1, 2, 3, 4, 5, 6, and 7
(ARD/FA or ARD/AFF)

Through: Assistant Solicitor - Fish and Wildlife

From: Director

Subject: NEPA Categorical Exclusion for Recovery Plans

The question is periodically raised of whether preparation of an Environmental Assessment (EA) or an Environmental Impact Statement (EIS) is required for development or approval of recovery plans. For the following reasons, we have concluded that recovery plans generally are categorically excluded from analysis under the National Environmental Policy Act (NEPA).

Recovery plans are broad planning documents that list all tasks the Service believes may contribute to the recovery of a species. These tasks involve action by the Service, by other Federal agencies, by State or local governments, by the private sector, or by a combination of them. Recovery plans typically do not propose specific actions, but instead set forth general policies for management and treatment of the species. For these reasons, meaningful analysis of the environmental impacts of a recovery plan is usually difficult, if not impossible.

In addition, recovery plans impose no obligations on any agency, entity, or persons to implement the various tasks listed in the plan. In fact, many of the recommendations in any recovery plan are never implemented because of limitations on funding, knowledge about the species, or changes in the species' needs. Finally, any recovery actions set forth in a recovery plan that are to be carried out by Federal agencies will be subjected to NEPA analysis at the time they actually are "proposed" within the meaning of NEPA.

The Departmental Manual (516 DM 2, Appendix 1) (attached) identifies categorical exclusions from NEPA. In particular, Exclusion 1.10 covers:

Policies, directives, regulations, and guidelines of an administrative, financial, legal, technical, or procedural nature; or the environmental effects of which are too broad, speculative or conjectural to

lend themselves to meaningful analysis and will be subject later to the NEPA process, either collectively or case-by-case.

We conclude that recovery plans fit within this exclusion and thus should normally require no NEPA analysis. However, as provided in 461 DM 2.3 A and 2.4 B (attached), exceptional or extraordinary circumstances may warrant the preparation of Environmental Assessment or even Environmental Impact Statements for particular recovery plans.



Assistant Solicitor -
Fish and Wildlife



Director - Fish and Wildlife Service

Attachments (deleted)

Upon disqualification of the apparent high bidder, the next high bid will be honored.

2. The authorized officer may reject the highest qualified bid and release the bidder from his obligation and withdraw the tract for sale, if he determines that consummation of the sale would be inconsistent with the provisions of any existing law or collusive or other activities have hindered or restrained free and open bidding or consummation of the sale would encourage or promote speculation in public lands.

3. All bids will be either returned, accepted, or rejected within 30 days of the sale date.

4. A right-of-way is reserved for ditches and canals constructed by the authority of the United States under the act of August 30, 1890 (26 Stat. 391; 43 U.S.C. 945).

5. The patent will be subject to road right-of-way held by the county and all other valid existing rights.

6. All minerals will be reserved to the United States.

Detailed information concerning the sale, including the environmental assessment, and the decision document is available for review at the Richfield District Office.

For a period of 45 days from the date of this Notice, interested parties may submit comments to the District Manager, Bureau of Land Management, 150 East 900 North, Richfield, Utah 84701. Any adverse comments will be evaluated by the District Manager, who may vacate or modify this notice. In the absence of any action by the District Manager, this realty action will become the final determination of the Department of the Interior.

Dated: September 12, 1983.

Donald L. Pendleton,
District Manager.

[FR Doc. 83-25877 Filed 9-20-83; 8:45 am]
BILLING CODE 4310-04-M

[W-46102]

Wyoming; Proposed Reinstatement of Terminated Oil and Gas Leases

Pursuant to the provisions of Pub. L. 31-245 and Title 43 Code of Federal Regulations, § 3108.2-1(c), and Pub. L. 97-451, a petition for reinstatement of oil and gas lease W-46102 for lands in Natrona County, Wyoming has been timely filed and was accompanied by all the required rentals accruing from their respective dates for termination.

The lessees have agreed to new lease terms for rentals and royalties at rates of \$10.00 per acre, and 16 $\frac{2}{3}$ percent, royalty, computed on a sliding scale

based on average production per well per day.

The lessees have paid the required \$500 administrative fee and will reimburse the Department of the cost of this Federal Register notice.

The lessees having met all the requirements for reinstatement of the leases as set out in Section 31 (d) and (e) of the Mineral Lands Leasing Act of 1920 (30 U.S.C. 188), the Bureau of Land Management is proposing to reinstate lease W-46102 effective August 31, 1979, subject to the original terms and conditions of the lease and the increased rental and royalty rates cited above.

Harold G. Stinchcomb,
Chief, Branch of Fluid Minerals.

[FR Doc. 83-25879 Filed 9-20-83; 8:45 am]
BILLING CODE 4310-04-M

Fish and Wildlife Service

Endangered and Threatened Species Listing and Recovery Priority Guidelines

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice.

SUMMARY: The U.S. Fish and Wildlife Service has developed guidelines governing the assignment of priorities to species for listing as Endangered and Threatened under the Endangered Species Act of 1973, as amended (Act) and development and implementation of recovery plans for species that are listed under the Act. The guidelines aid in determining how to make the most appropriate use of resources available to implement the Act.

EFFECTIVE DATE: The guidelines are adopted as of September 21, 1983.

FOR FURTHER INFORMATION CONTACT: Mr. John L. Spinks, Jr., Chief, Office of Endangered Species, U.S. Fish and Wildlife Service, Washington, D.C. 20240. (703/235-2771).

SUPPLEMENTARY INFORMATION:

General

The Service recognizes that it is necessary to assign priorities to listing, delisting, reclassification, and recovery actions in order to make the most appropriate use of the limited resources available to implement the Act. The following priority systems are based on an analysis of such factors as degree and immediacy of threat faced by a species, needs for further information, and species' recovery potentials. Inasmuch as such assessments are subjective to some degree, and individual species may not be

comparable in terms of all considerations, the priority systems presented must be viewed as guides and should not be looked upon as inflexible frameworks for determining resource allocations. Draft guidelines were published on April 19, 1983 (49 FR 16756). These final guidelines are based on that draft.

Summary of Comments and Recommendations

Comments were received from the following organizations: the Center for Environmental Education (also representing Defenders of Wildlife, Humane Society of the United States, and Natural Resources Defense Council); Chevron U.S.A., Inc.; The Ecological Society of America; Environmental Defense Fund; the law firm of McCarty, Noone and Williams (representing the Colorado River Water Conservation District); Pacific Legal Foundation; Western Timber Association; and Wildlife Legislative Fund of America. Three of the comments expressed general support for the guidelines as proposed, without offering any recommendations for change. Substantive recommendations are addressed below:

Comments on Listing, Delisting, and Reclassification Priorities

Because of the detailed and specific nature of comments on the listing portion of the guidelines, they are addressed individually. The Center for Environmental Education *et al.* (CEE) recommended that the Service emphasize listing of qualified species over delisting of species no longer in need of protection, and also stated that delisting should be undertaken only for species with no present need for protection and unlikely to need such protection in the future. The Service agrees in principal with this comment. It should be recognized, however, that the retention of recovered or extinct species on the lists undermines the overall credibility of the lists, and the Service believes that it is justifiable to devote resources to the removal of such species when they are identified.

CEE also expressed concern that consideration of degree and immediacy of threat be tempered by a consideration of benefit from listing and availability of information. They favored subsuming immediacy within degree of threat and adding the other two considerations as "pragmatic" criteria in the system. The Service continues to believe that separate consideration of immediacy is warranted in order to help ensure that the system is most effective in

discretion to assign appropriate priorities to highly distinct and genetically isolated organisms whether or not they constitute monotypic genera.

Finally, ESA requested a clarification of the applicability of the proposed system to unnamed populations. The Act includes populations of vertebrate animals in its definition of "species." Because this portion of the definition applies only to vertebrates, it appears inadvisable to incorporate it formally into the priority system. The Service intends to generally afford vertebrate populations the same consideration as subspecies, but when a candidate subspecies and a candidate population have the same numerical priority, the candidate subspecies will generally have priority.

The Environmental Defense Fund (EDF) expressed concern that too much time might be devoted to setting of species priorities, and that this might detract from actual implementing of listing tasks. The Service agrees that no more time than is necessary should be devoted to the assigning of priorities. Because of this consideration, the Service has deliberately attempted to formulate a system that is simple and that assigns species priorities in a straightforward manner without the need for complex analysis. EDF also expressed concern over the interrelationship of the three systems contained in Tables 1., 2., and 3. As explained below in the summary of comments on the recovery priority system, Tables 1. and 2. are largely independent of Table 3. Further, it is not possible, in the opinion of the Service, to formulate a direct relationship between the systems in Tables 1. and 2. As is explained in the narrative portion of the guidelines, it is anticipated that the need to delist species or reclassify them from Endangered to Threatened will be identified largely through mandated 5-year reviews or through petitions. Once such actions have been identified and assigned priorities, they will be considered for possible action within the Service's annual planning process.

Establishing specific criteria for ranking the priorities of listing proposals versus delisting proposals would take away the flexibility needed by the Service to efficiently apportion its resources. Although the same statutory criteria apply to make the listing and delisting determinations, the factual considerations for setting listing and delisting priorities are quite different. General rules cannot govern this complex mesh of priorities. However, it would generally be found that candidate species facing immediate, critical threats

should have priority for listing over competing delisting proposals under consideration at the time. Likewise, a delisting proposal for a recovered species that would eliminate unwarranted restrictions on significant, identifiable activities may, in appropriate instances, take precedence over listing proposals for species not facing severe, imminent threats. In deciding on which proposals will receive priority, the Service must examine the overall "mix" of potential listings and delisting and assess the relative priorities of the various proposals in light of that "mix." Of course, this assessment process will constantly change as new candidate species are brought to the Service's attention and as listed species attain recovery or become extinct.

EDF also recommended that terms used in the proposed system be more precisely defined and, in particular, recommended that the "degree of threat" criterion be quantified in a way that parallels the standards for finding "jeopardy" under Section 7 of the Act. The Service believes that the circumstances applying to most species are individualistic enough as to be incapable of precise definition or quantification beyond the level proposed. In particular, with regard to determinations of degree of threat, the parallel with considerations under Section 7 of the Act seems faulty. Consultations under Section 7 address known and carefully identified actions that may affect the survival of a species. Degree-of-threat considerations for listing a species may address highly speculative future actions, or more frequently, documented decline of a species for poorly-known or unknown reasons. Such considerations often cannot be quantified, and an attempt to do so might only serve to make priority-setting, rather than listing, the main activity of the program, as feared by EDF (see above). The Service believes that it has access to sufficient biological expertise to permit the admittedly loose definitions of terms to be interpreted appropriately.

EDF also recommended that "degree" be replaced by "magnitude" under "threat." The Service agrees that the latter term is somewhat more precise, and has altered the final guidelines accordingly.

EDF expressed concern that the "immediacy" criterion for threat not be applied so rigidly that Endangered species would always be listed in preference to Threatened species, which might be more recoverable. In general, the Service intends that species judged

Endangered should be listed before those judged Threatened. Once again, it is worth noting that listing is an identification process and, other considerations being equal, should proceed on a "worst-first" basis. Nevertheless, the Service intends that species originally judged to be faced with immediate threats, but which prove not to face such immediate threats when sufficiently complete status information is developed, may be listed nevertheless in order that current status information need not be gathered again later on.

EDF supported the concept of immediacy of threat as a useful addition to the priority system but observed that:

Specifically, we are concerned that the immediacy of threat criterion may ultimately rely on and be distinguished by the availability of scientific information about such threats. Because such threats are not well-known, however, a dearth of information may preclude necessary and expeditious action by the Service. We therefore suggest that the immediacy of threat criterion should be defined and delimited by what are necessarily somewhat subjective best judgments about the expected temporal sequence and realization of a threat: not just the known or unknown occurrence of such threats. We believe the Service recognizes this in its attempt to distinguish two categories ("actual identifiable" versus "potential, intrinsically vulnerable") but falls short in that effort by distinguishing "latent" from "potential" by the presence or absence of information available about such threats (e.g., "known occurrence or lack of * * *"). Hence, to the maximum extent possible, judgments about the immediacy of threat should be guided by how quickly the threat posed by any one of the five statutory factors may affect those populations of a candidate species at risk.

The Service believes that such a recommendation, if adopted, would render the system unworkable. It could make priorities responsive to highly speculative but rapidly-realized threats such as earthquake or volcanic eruption. The Service prefers in setting priorities to rely on known or reasonably predictable threats to a species' survival and known vulnerability to reasonably probable future conditions.

Because they believe that all threats are by definition potential, EDF recommends that "potential" be replaced by "non-imminent" in the system. Inasmuch as a threat in this context is one of extinction, and is only realized when a species is extinct, this is a point well taken by the Service. The final system is altered accordingly.

EDF also recommended that an "ecosystem" criterion be incorporated into the system, similar to the "conflict" criterion in Table 3. This would be intended to identify species of ecologic

potential conflict, has been known to exist, e.g., Northern Rocky Mountain wolf, San Bruno Mountain, San Marcos River Endangered and Threatened species, and the small whorled pogonia. The Service will continue to invite public participation for those species where conflicts or controversies are known to exist.

PLF stated that it is unclear (in Table 3) if there is any differing treatment between Endangered and Threatened species. The distinction between Endangered and Threatened species occurs in the Degree of Threat criterion. It is generally understood that the Degree of Threat is greater for Endangered species than for Threatened species.

PLF also suggested that an additional column be added to Table 3 that would give greater priority in the preparation of recovery plans to those species which are Endangered throughout all their range over those species that are Endangered throughout a portion of their range. Although it is not specifically stated, this concern is reflected in the first criterion (Degree of Threat) of Table 3. A species which is Endangered throughout its range would be listed higher on the degree of threat scale than would be a species Endangered throughout a portion of its range. In reality, most species which are listed are Endangered throughout their ranges. Even though it is legally acceptable to list populations of vertebrates, this practice represents the exception rather than the rule.

ESA recommended that for listing and recovery efforts, populations and named subspecies should have the same priority, since the possession of a name is often based more on tradition than on any meaningful measure of distinctiveness. This issue is addressed in the above Listing Section. In addition, the above reply to a comment from PLF indicates that priority be given to species which are Endangered throughout all their range rather than just to a population. Populations will be addressed when there is sufficient justification, but this is the exception rather than the rule.

EDF expressed the hope that the Service will devote most of its resources to implementing listing and recovery planning efforts and not to prioritizing such tasks. The listing portion of this concern is addressed in the earlier section of this article. The Service is mandated by the Endangered Species Act, as amended, to the preparation of recovery plans giving priority to those species most likely to benefit from such

plans. In doing so, the Service will also focus on those species that are, or may be, in conflict with construction or other development projects or other forms of economic activity. The proposed guidelines are intended to provide a means to identify, and rank, those species most likely to benefit from such plans. It is also necessary that the limited resources for the implementing of recovery actions be allocated in the most judicious fashion possible. This can only be possible by having a sound system for ranking proposed recovery actions.

EDF commented that it remains unclear specifically how the three priority models (Tables 1, 2, and 3) relate to one another. Table 3, Recovery Priority, is independent of Tables 1 and 2. It is to be expected that many species would have a similar ranking when evaluated by Tables 1 and 3. However, differences between species, or recovery potential could reduce these similarities of ranking. This concern is also addressed under listing comments, above.

EDF also found the tasks priority—recovery priority system somewhat confusing. They agreed that the Service's limited resources should be distributed equitably to all listed species, but were not sure specifically how this will be accomplished. They requested clarification of this situation. They commented that, "presumably recovery plans for species facing the highest degree of threat will designate more priority 1 tasks than those plans for species jeopardized by a lower degree of threat."

Generally, plans for species facing the highest degree of threat will designate more Priority 1 tasks than those plans for species jeopardized by a lower degree of threat. However, exceptions may occur. For example, a highly-Threatened isolated desert fish may be in imminent danger from siltation associated with adjacent cattle grazing. Possibly only one task, i.e., fencing, would warrant a Priority 1 designation.

Furthermore, as indicated in the earlier summary of comments on recovery potential and associated costs regardless of the recovery potential, the Service will strive to undertake for every high-threat species those minimum survival efforts which will at least stabilize its status and prevent its extinction. Once such "emergency" measures have been taken, further recovery work designed to eventually lead to delisting of species will be evaluated according to the recovery potential described above. To ensure consistency in the utilization of the

recovery priority system, all draft recovery plans will be reviewed by the same office at the Washington level. Additionally, all funding proposals for implementation of recovery actions will also be reviewed by the same office at the Washington level.

Priority Guidelines

Listing, Delisting, and Reclassification Priorities. In the past, the Service has informally assigned priorities for listing species as Endangered or Threatened on the basis of several different systems. In 1979, a report to Congress (General Accounting Office, 1979) recommended that the Service officially adopt a listing priority system based primarily on consideration of the degree of threat faced by a species. Following this report, the 1979 Amendments to the Endangered Species Act (Pub. L. 96-159, 93 Stat. 1241) required that guidelines be established and published in the Federal Register, including " . . . a ranking system to assist in the identification of species that should receive priority review for listing . . ." Such a system was adopted (U.S. Fish and Wildlife Service, 1980), but not published in the Federal Register. This system was subsequently revised (U.S. Fish and Wildlife Service, 1981) so that priority for listing would be assigned within a given category of Degree of threat so as to generally favor vertebrate animals ("higher life forms") in the following order: mammals, birds, fishes, reptiles, amphibians, vascular plants, invertebrates.

The 1982 Amendments to the Endangered Species Act (Pub. L. 97-304) retained the requirement that guidelines be published. However, the amendments and the accompanying Conference Report necessitated revision of the 1981 system. Specifically, the amended Act requires that the priority system address delisting as well as listing of species and the Conference Report stated opposition to the adoption of any system that would give consideration to whether species were "higher or lower life forms." The present system is intended to satisfy the requirements of the amended Act.

1. *Listing and reclassification from Threatened to Endangered.* In considering species to be listed or reclassified from Threatened to Endangered, three criteria would be applied to establish 12 priority categories as follows (Table 1):

which, if applicable, elevates the species in priority for development of a recovery plan and is to be an additional element in determining what actions are to be implemented for the recovery of a species. This fourth factor gives priority within each category in the preparation of recovery plans to those species that are, or may be, in conflict with construction or other development projects or other forms of economic activity. Thus, the species will retain its numerical rank and will acquire the letter designation of "C" indicating conflict, e.g., priority 7 would become 7C. The categories would be assigned as follows:

TABLE 3.—RECOVERY PRIORITY

Degree of threat and recovery potential	Taxonomy	Priority	Conflict
High	High..... Monotypic genus.....	1	1C, 1.
	High..... Species.....	2	2C, 2.
	High..... Subspecies.....	3	3C, 3.
	Low..... Monotypic genus.....	4	4C, 4.
	Low..... Species.....	5	5C, 5.
	Low..... Subspecies.....	6	6C, 6.
Moderate	High..... Monotypic genus.....	7	7C, 7.
	High..... Species.....	8	8C, 8.
	High..... Subspecies.....	9	9C, 9.
	Low..... Monotypic genus.....	10	10C, 10.
	Low..... Species.....	11	11C, 11.
	Low..... Subspecies.....	12	12C, 12.
Low	High..... Monotypic genus.....	13	13C, 13.
	High..... Species.....	14	14C, 14.
	High..... Subspecies.....	15	15C, 15.
	Low..... Monotypic genus.....	16	16C, 16.
	Low..... Species.....	17	17C, 17.
	Low..... Subspecies.....	18	18C, 18.

Explanation. The first step for the conservation of any species is to prevent its extinction. Thus the species with the highest degree of threat have the highest priority for preparing and implementing recovery plans. A species can be put in either a high, moderate, or low category, which represents the degree of threat. The high category means extinction is almost certain in the immediate future because of a rapid population decline or habitat destruction. Moderate means the species will not face extinction if recovery is temporarily held off, although there is continual population decline or threat to its habitat. A species in the low category is rare, or is facing a population decline which may be a short-term, self-correcting fluctuation, or the impacts of threats of the species' habitat are not fully known.

Within the above categories, resources should be used in the most cost-effective manner. Priority for preparing and implementing recovery plans would go to species with the greatest potential for success. Recovery potential is based on how well biological and ecological limiting factors and threats to the species' existence are

understood, and how much management is needed.

Priority will be given to those species and projects that offer the greatest potential for success. The recovery potential of a species will be determined by consideration of the following criteria:

	High recovery potential	Low recovery potential
Biological and ecological limiting factors.	Well understood	Poorly understood
Threats to species' existence	Well understood easily alleviated.	Poorly understood or pervasive and difficult to alleviate.
Management needed	Intensive management not needed, or techniques well documented with high probability of success.	Intensive management with uncertain probability or techniques unknown or still experimental.

* When possible and biologically feasible, data pertinent to the recovery of a particular taxon will be extrapolated from known ecological requirements or management techniques for closely related taxa.

Taxa that are most genetically distinct should receive priority within any given category of degree of threat. Monotypic genera will be given priority over species, subspecies, or populations. This last criterion is in recognition that the loss of the most genetically distinct taxa is of greater significance than the loss of less genetically distinct taxa. That is, for example, the loss of a full genus is of greater significance than the loss of a single species or population of that species.

The second requirement concerning recovery plans mandated by the 1982 Amendments is that priority be given to those species "that are, or may be, in conflict with construction or other development projects or other forms of economic activity." This requirement will be satisfied by having any listed species or subspecies, lacking a recovery plan, and identified as being, or having a recognizable potential for being, in conflict with a construction or development project, automatically qualify for the conflict column of the matrix. This species would then be considered high priority for having a recovery plan developed.

Conflict with construction or other development projects would be identified in large part by consultations conducted with Federal agencies under Section 7 of the Act. Any species identified through Section 7 consultations as having generated a negative biological opinion which concluded that a given proposed project would violate Section 7(a)(2) of the Endangered Species Act or resulted in the recommendation of reasonable and

prudent alternatives to avoid a negative biological opinion, would be assigned to the conflict category and would be given priority over all other candidates for recovery plan preparation and implementation in the same numerical category not involving a conflict. The Service would also contact other Federal agencies for their identification of listed species that are, or may be, in conflict with construction or other development projects or other forms of economic activity. Any species identified by this process would be assigned to the conflict category and would also be given priority over other candidates for recovery plan preparation and implementation within the same numerical category (see Table 3) not involving a conflict.

A task priority (1-3) is used in conjunction with species recovery numbers (1-18 or 1C-18C) in ranking those tasks that need to be accomplished for the recovery of a species. This combination results in a two-tiered priority system (species recovery number-task priority number) which serves to distribute the resources of the program equitably for all listed species. Recovery tasks will be assigned priorities based on the following:

1. **Priority 1.** An action that must be taken to prevent extinction or to prevent the species from declining irreversibly.
2. **Priority 2.** An action that must be taken to prevent a significant decline in species population/habitat quality, or some other significant negative impact short of extinction.
3. **Priority 3.** All other actions necessary to provide for full recovery of the species. (Recognizing that the ultimate success of the Program is species recovery, priority 3 action likely to lead to full recovery and delisting of a species in the foreseeable future will tend to rank higher than other priority 3 actions.)

The highest priority activity (research proposal, permit proposal, etc.) is a 1C-1 priority (species recovery number 1C; task priority number 1).

This is an action necessary to prevent extinction for a monotypic genus, with a high recovery potential, under a high degree of threat and in conflict with a construction or other development project. If resources were channeled into activities based solely on the recovery priority of a species, these resources would be utilized primarily for species with a recovery priority of 1C to 6. However, when the species' priority is viewed in conjunction with the task priority, we are able to identify the most critical activities for all species. This system would insure that resources are

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Fish and Wildlife Service

Endangered and Threatened Species Listing and Recovery Priority Guidelines

Correction

In FR Doc. 83-25716 beginning on page 43098 of the issue of Wednesday, September 21, 1983, make the following correction: On page 43104, first column, Table 3 should read as set forth below:

Table 3. Recovery Priority

Degree of Threat	Recovery Potential	Taxonomy	Priority	Conflict
High	High	Monotypic genus	1	1C 1
	High	Species	2	2C 2
	High	Subspecies	3	3C 3
	Low	Monotypic genus	4	4C 4
	Low	Species	5	5C 5
	Low	Subspecies	6	6C 6
Moderate	High	Monotypic genus	7	7C 7
	High	Species	8	8C 8
	High	Subspecies	9	9C 9
	Low	Monotypic genus	10	10C 10
	Low	Species	11	11C 11
	Low	Subspecies	12	12C 12
Low	High	Monotypic genus	13	13C 13
	High	Species	14	14C 14
	High	Subspecies	15	15C 15
	Low	Monotypic genus	16	16C 16
	Low	Species	17	17C 17
	Low	Subspecies	18	18C 18