

APPENDIX G

Planning Reports and Programs

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APPENDIX G

Planning Reports and Programs

G-1. Purpose. This appendix provides guidance and procedures for the management and conduct of planning studies, activities and programs.

SECTION I - Types of Studies and Reports

G-2. Types of Studies and Reports.

a. Reconnaissance Studies (Phase). The objective of reconnaissance studies is to determine whether or not planning to develop a project should proceed to the more detailed feasibility stage. These studies are 100% Federally funded.

b. Feasibility Studies (Phase). The objective of feasibility studies is to investigate and recommend solutions to water resources problems. These studies are 50% Federally funded and 50% funded by a non-federal sponsor.

c. Reports. Reports prepared for initial authorization are based on the studies discussed above.

(1) Section 905(b). Section 905(b) Analysis documents the reconnaissance study, and provides a basis for determining whether a study should proceed to the feasibility phase.

(2) Feasibility Reports. Feasibility reports document the feasibility study, and provide the basis for a decision on construction authorization of a project. The feasibility report includes either an environmental assessment (EA) or an environmental impact statement (EIS) to comply with the National Environmental Policy Act (NEPA) (see [ER 200-2-2](#)).

d. General Reevaluation Studies. These studies are to affirm, reformulate or modify a plan, or portions of a plan, under current planning criteria. General reevaluation studies frequently are similar to feasibility studies in scope and detail.

e. Limited Reevaluation Studies. The scope for Limited Reevaluation Studies is limited when compared to the General Reevaluation Study. For example, a Limited Reevaluation Study may address only economic justification, environmental effects, effects of revised policy or (more rarely) project formulation. Limited Reevaluation Studies ordinarily should require only

modest resources and documentation. If any part of the reevaluation will be complex, or will require substantial resources, or if the recommended plan will change in any way, a General Reevaluation is required.

f. Other Types of Studies and Reports.

(1) Legislative Studies. Various Water Resources Development Acts have authorized specifically named projects. Studies under these authorities are to be conducted in accordance with this regulation, and reports are to be similar to a feasibility report.

(2) Reallocation Studies. See Appendix E.

(3) Postauthorization Changes.

(4) Flood Insurance Studies. See paragraph G-23.

(5) Section 22 Studies. See Section VI.

(6) Continuing Authorities Program Studies. See Appendix F.

(7) Review of Completed Projects Studies. This type of study is in response to the standing authority of Section 216 of the Flood Control Act of 1970, which authorizes studies to review the operation of completed Federal projects and recommend project modifications “when found advisable due to significantly changed physical or economic conditions...and for improving the quality of the environment in the overall public interest”. An initial appraisal is conducted using Operation and Maintenance (O&M) General funds to determine whether or not a study is warranted. If it is determined that further study is warranted, these studies are conducted using the two-phase study process described for feasibility studies.

G-3. Classification of Studies and Reports. In order to keep an accounting of the status of authorized studies and projects, they are classified into several categories as discussed below.

a. Studies. Division commanders may approve classification of authorized studies according to the categories listed below. If studies are not funded for five full fiscal years, they are deauthorized.

(1) Active. These are authorized studies that are funded or authorized but not funded having significant non-Federal support and reasonable prospects for a Federal project.

(2) Inactive. These are authorized studies that are not funded and have no non-Federal

support, or have few prospects for a Federal project.

b. Projects. Uncompleted authorized projects are classified in three categories as listed below. Division commanders may approve reclassification to a lower category. Upward reclassification requires approval of HQUSACE (RIT). Additional information is contained in [ER 11-2-240](#). Projects for which no funds have been obligated within the times specified in Section 1001, WRDA '86, shall be submitted to Congress for deauthorization.

(1) Active. Projects which are: funded; economically justified; engineeringly feasible without requiring modification of the authorized plan beyond the discretionary authority of the Chief of Engineers; supported by a non-Federal sponsor as evidenced by recent statements of ability and willingness by responsible bodies to provide local cooperation; and with no anticipated major problems of compliance with requirements of local cooperation.

(2) Deferred.

(a) Projects with doubtful or marginal economic justification, and for which a restudy is necessary to determine whether an economically justified and locally supported plan of authorized scope can be developed.

(b) Projects not generally opposed by non-Federal interests, but having sponsors currently unable to furnish the required cooperation, where it is expected the cooperation difficulties will be resolved in the near future.

(c) Projects that could be significantly affected by an ongoing feasibility study, and which should not be undertaken pending the outcome of Congressional action based on the feasibility study.

(3) Inactive.

(a) Economically unjustified projects where a restudy would not develop an economically justified plan.

(b) Projects which, as authorized, no longer meets current and prospective needs, and which require such substantial modifications and involve such increased costs to obtain an adequate project that they cannot proceed without new authorization.

(c) Projects without a non-Federal sponsor.

(d) Projects, or parts thereof, which have been accomplished by local interests or another

agency, or which have been superseded by another project, or for other reasons are no longer required.

c. **Reclassification.** Reclassification of studies and projects is accomplished as the need develops. An annual review of classifications is required by [ER 11-2-220](#) (studies) and [ER 11-2-240](#) (projects) to determine whether studies and projects are appropriately classified. A change in classification of a project may be accomplished by one of the following methods.

(1) By means of a restudy, funded with GI funds. The procedure for obtaining funds for this purpose and accomplishing the necessary restudy is contained in [ER 11-2-220](#).

(2) Where an ongoing reconnaissance or feasibility study investigating associated improvements develops sufficient information on which to base the reclassification of the authorized project, a recommendation for such reclassification is to be made on that basis, without further separate study.

(3) Where a desirable change in project classification can be determined at such nominal cost that a specific allocation of funds is not required, a brief investigation may be undertaken. For example, where a project was classified as deferred or inactive based on opposition to the project, or on the lack of willingness or ability of the non-Federal sponsor to furnish the required cooperation, and where the situation changes such that the non-Federal sponsor desires the work and demonstrates willingness and ability to participate as required, a letter supporting a new classification will suffice.

(4) **Review.** Whenever it becomes apparent that a study or project in the active category no longer meets the qualifications for retention in that status, a letter supporting a recommendation that the project be reclassified will suffice.

G-4. Naming of Studies and Projects. The study or project title shall generally be based on the name of a nearby geographic feature (e.g., town, river, mountain). HQUSACE provides the official name for the study or project in the assignment letter. Impounded bodies of water shall be referred to as lakes instead of reservoirs. Whenever the name of a project is established by separate legislation, that designation shall be used exactly as stated in the law.

SECTION II - Study Procedures and Reports

G-5. Purpose. This section provides guidance for conducting reconnaissance and feasibility studies and preparing studies; it applies to all two-phase studies, cost shared or not.

G-6. General Requirements for Reconnaissance and Feasibility Phases.

a. Study Conduct. Studies conducted in accordance with all applicable laws and policies.

b. Study Conversion. If, upon completion of the reconnaissance phase or during the feasibility phase, it appears one or more projects could be pursued more efficiently under the Continuing Authorities Program (CAP), that approach is encouraged. The MSC commander may approve transfer of an ongoing specifically authorized study to the CAP.

c. Study Management. Per [ER 5-1-11](#), Division commanders shall establish, in a standard operating procedure or regulation, appropriate uniform procedures for managing two phase studies. As a minimum, a system should be early established that monitors actual versus scheduled performance and costs. Prospective sponsor(s) for the anticipated feasibility study should be identified early enough during the reconnaissance study to establish a well defined study management structure. Although the Corps is responsible for the reconnaissance study, efficient execution of the feasibility study requires a cooperative effort during the reconnaissance phase as well. Therefore, the time to begin assembling the study management structure should be as early in the reconnaissance phase as possible. The management structure will be finalized in the FCSA. Project management must be initiated during the reconnaissance study period to permit smooth implementation into subsequent phases to the extent it establishes accountability for study and project costs and schedules, and more effectively reconciles Corps performance with the concerns and expectations of the non-Federal sponsor.

d. Study Documentation. Commanders will maintain complete documentation of coordination, negotiations, and agreements between the Corps and study sponsor, and any subsequent changes in those agreements. The documentation must show how consideration was given to the desires and capabilities of the non-Federal interests and that they were advised of the Corps procedures and policies.

e. No Implementable Plan. A letter report will ordinarily be adequate. The report will rely on information developed up to the time further study was terminated; additional work is not required simply to satisfy a reporting requirement. However, the report must clearly describe the reasons why the study was terminated in view of the criteria in the previous subparagraph. Terminated interim studies are excepted from this reporting and processing

requirement; they will continue to be incorporated into the final report of their parent study.

f. Issue Resolution Conference (IRC) and In-Progress Review (IPR). The objective of these meetings is to ensure orderly progress of the study or preparation of a report. This is accomplished by identifying, discussing and resolving technical and policy questions before they unduly affect the progress of the study.

g. General Evaluation Guidelines. The general evaluation guidelines, presented in Exhibit G-1, describe the information to be included in reports and in other materials which are provided to ensure agency endorsement of the reconnaissance and feasibility study findings. These guidelines will also be used by reviewers at the IRCs for the reconnaissance and feasibility phases as well as for policy review. Adaptations of these guidelines may also be useful in conducting studies, particularly in conjunction with requirements for report content in Exhibits G-2 and G-3.

Exhibit G-1. General Evaluation Guidelines	
1. Formulation/Design Criteria	a. The water resource related problems and opportunities addressed in the study will be fully and clearly described.
	b. The key assumptions underlying the forecasted without project condition over time will be explained and documented as the most likely without project parameters.
	c. The feasibility report will document that all reasonable alternatives for addressing the identified problems, including non-structural measures and measures beyond the authority of the Corps to implement, have been systematically formulated and evaluated in accordance with the P&G. A well-documented formulation process is essential to ensure that the scale (level of output) and scope (geographic extent) of the project are appropriate and that the cost effective means of providing the recommended level of output or service is identified.
	d. For each alternative project, the key assumptions underlying the predicted with project conditions over time will be documented and justified as the most likely with project parameters.
	e. Federal participation in the proposed project is not to be recommended unless the outputs used in comparing the benefit to cost ratio, or the (environmental) outputs when justification is not dollar benefit based, are in accord with

Exhibit G-1. General Evaluation Guidelines	
	departmental policies governing Federal participation.
2. Sensitivity Analysis	The sensitivity of project justification to key with and without project assumptions should be displayed. As a minimum, the benefit to cost ratio (BCR) for the recommended plan, assuming conditions projected to prevail in the first year of project operation, is to be displayed
3. Economic, Financial, And Effectiveness Criteria	a. Scaling and scoping of the recommended project must be determined using NED criteria, except as modified by non-Federal financial resource limitations or other explicitly stated criteria in accordance with the P&G, including consistency with protecting the Nation's environment. Explain any deviation from incremental analysis of separable elements. Scaling and scoping of ecosystem restoration projects are supported by cost effectiveness and incremental cost analysis, combined with subjective estimates of output value.
	b. Provide adequate supporting documentation to allow reviewers to understand the models and assumptions used to estimate benefits and costs. For commercial navigation studies, the systems models used in the estimates of navigation benefits are to be fully described and their strengths and limitations presented. For flood damage reduction studies, the source of the depth damage relationships is to be provided. If approved generic curves are not used or the source of the relationships is not actual damage data for the study area, the rationale for using other relationships must be provided. For ecosystem restoration studies, both inventory and forecasting of past, present and future environmental conditions require that some form of quantitative measurement be used and defined in the report. Where indicators or other units of measure of ecosystem function or structure are used, the models used to develop them, along with their strengths and weaknesses must be fully described.
	c. Identification of the NED plan is to be based on consideration of the most effective plans for providing

Exhibit G-1. General Evaluation Guidelines	
	different levels of output or service. Where two cost-effective plans produce no significantly different levels of net benefits, the less costly plan is to be the NED plan, even though the level of outputs may be less. For ecosystem restorations studies, project costs and outputs are measured in both monetary and non-monetary terms. Restoration plans must be justified through a determination that the plan is the most cost-effective for a given level of outputs and that the benefits (outputs), or losses restored or prevented, justify the cost of the last increment added.
	d. If Secretarial exception is sought to recommend a plan other than the NED or NER plan, the basis for the request is to be fully documented.
	e. For projects having non-Federal sponsors, a preliminary financial analysis must be included that shows the sponsor's current and projected ability to finance its share of the project cost and to carry out project implementation, operation, maintenance, repair, replacement and rehabilitation responsibilities.
4. Cost Estimates	a. For economic analysis, project first cost estimates are to be developed on a constant dollar basis. Costs and benefits are to be compared on the same, current price levels. For financial analysis, an inflated dollar basis is to be used for the sponsor's information.
	b. Life cycle project cost estimates in appropriate Code of Accounts format are to include all financial outlays associated with preconstruction engineering and design, construction and operation, maintenance, repair, replacement and rehabilitation costs. This will include cash expenditures previously incurred. (Note that some costs included in the economic analysis may not be part of the project implementation expenditures. The converse also may be true. Examples include the economic costs of unmitigated losses and current market value of lands previously acquired by the sponsor.)
	c. Contingency factors are to be consistent with extent of detail in estimating procedure and physical investigations to ensure high probability of achieving implementation within

Exhibit G-1. General Evaluation Guidelines	
	estimated costs.
	d. Tradeoffs between risk and costs are to be explicitly identified as areas for detailed evaluation in project design. For example, for flood damage reduction, relationships between the design reliability and costs; and for navigation, tradeoffs between channel dimensions and cost.
	e. Cost estimates consistent with efficient project implementation are to be projected so information can be incorporated into cost performance monitoring system.
5. Legal/Institutional Criteria	a. The non-Federal sponsor's acceptance of, or desired departures from, the terms of the applicable model PCA must be presented, including: 1) applicable cost sharing and financial policies; 2) policies regarding provision and valuation of non-Federal lands, easements, rights-of-way, and disposal areas provided by non-Federal sponsors; 3) policies governing non-Federal project construction; and, 4) other provisions required by law and policy for new start construction projects.
	b. The non-Federal sponsor must either state that it possesses all authorities necessary to implement its responsibilities under the PCA or submit a plan to obtain those authorities.
	c. The preliminary cost allocation for a multipurpose project is to be presented.
	d. Legal and institutional problems to project implementation are to be identified, and a plan to resolve them is to be presented.
	e. Physical criteria for satisfactory project performance that can be used as a basis for establishing the non-Federal sponsor's operation, maintenance, repair, replacement, rehabilitation and land use management responsibilities must be identified. These responsibilities may include preservation of the structural integrity of complementary structures such as highway embankments to ensure successful performance of the total functional project.
6. Environmental Criteria	a. Compliance with the NEPA process and other applicable

Exhibit G-1. General Evaluation Guidelines	
	Federal and State environmental laws and regulations is to be fully documented; specific issues that require resolution before the feasibility study is completed are to be identified; and any environmental compliance matters that may remain and need resolution in preconstruction engineering and design must be specified.
	b. Ecosystem restoration and fish and wildlife habitat mitigation measures are to be formulated incrementally, and an explicit justification for the recommended amount and type of mitigation or restoration is to be presented. Required coordination with other concerned Federal and State agencies on mitigation and other ecological, cultural and historical preservation matters, is to be documented.

h. Reports.

(1) Two basic reports are produced in the two phase planning process: the reconnaissance phase Preliminary Analysis and the feasibility phase Feasibility report. Their similarities are discussed here; unique requirements are covered in Reconnaissance Study and Section 905(b) Analysis and Feasibility Studies sections. Report objectives are to:

(a) Present study results and findings so that the readers can reach independent conclusions regarding the reasonableness of the recommendations.

(b) Document compliance with applicable statutes and policies; and ,

(c) Provide a sound basis for decision makers to initiate feasibility phase studies, or make recommendations to Congress; or, in the case of Congress, to enact legislation authorizing project construction.

(2) The District Commander to whose District a particular study is assigned shall be responsible for the required reports. The Division Commander may recommend, and the Director of Civil Works may designate, another District to assume study and reporting responsibility. The District Commander or other designated person shall sign and date the report, prior to reproduction, immediately below the recommendations.

(3) The District Commander shall transmit the reports to the Division Commander, except for reports on the Mississippi River and Tributaries (MR&T) project or features thereof,

in which case the report shall be transmitted to the President, Mississippi River Commission (MRC).

(4) Reports shall provide direct, concise, and orderly presentations. Narratives generally shall be in the active voice; use tabular and graphic displays for support. Narratives shall have adequate paragraphing, with headings and subheadings that are descriptive of the subject matter. Text formats will conform to the requirements of AR 335-15.

(5) Displays, such as maps, graphs, tables, drawings, photographs, and other graphics shall be used to facilitate the presentations.

G-7. Reconnaissance Study and Section 905(b) Analysis.

a. Purpose. The reconnaissance study and Section 905(b) Analysis are components of the reconnaissance phase. The study and report shall accomplish the following six essential tasks:

(1) Determine if the water resource problem(s) warrant Federal participation in feasibility studies. Defer comprehensive review of other problems and opportunities to feasibility studies;

(2) Define the Federal interest based on a preliminary appraisal consistent with Army policies, costs, benefits, and environmental impacts of identified potential project alternatives;

(3) Complete a 905(b) Analysis (Reconnaissance Report);

(4) Prepare a Project Management Plan (PMP);

(5) Assess the level of interest and support of non-Federal entities in the identified potential solutions and cost-sharing of feasibility phase and construction. A letter of intent from the local sponsor stating the willingness to pursue the cost shared feasibility study described in the PMP and to share in the costs of construction is required; and

(6) Negotiate and execute a Feasibility Cost Sharing Agreement (FCSA).

b. Cost Sharing. The entire reconnaissance phase is conducted at full Federal expense, exclusive of any costs incurred by non-Federal interests in volunteered work or services during the phase. Costs incurred by non-Federal interests during the reconnaissance phase are not creditable toward the non-Federal sponsors share of the feasibility phase.

c. Basic Requirements.

(1) The Expedited Reconnaissance Study will address the requirements of Section 905(b) of the WRDA of 1986, as amended. This provision requires that the reconnaissance study will include an analysis of the Federal interest, costs, benefits, environmental impacts of proposed action(s), and an estimate of the costs of preparing the feasibility report.

(2) The expedited reconnaissance study normally will cost no more than \$100,000 and should be completed as expeditiously and efficiently as possible. By law, the duration of the reconnaissance phase shall normally be no more than 12 months and in all cases is to be limited to 18 months.

(3) The development of a PMP is an essential task in the Expedited Reconnaissance Study. The PMP shall be developed in accordance with guidance provided by CECW-CB.

(4) Existing, readily available data should be used during the Expedited Reconnaissance Study. Sponsor, other agency, State, and local government sources of available data must be used to the maximum extent possible.

(5) The accomplishment of the tasks under G-7a.(1)(2), shall be based on professional and technical judgment, utilizing an experienced study team. Special attention must be given to identifying the problem, project purposes, types of outputs, and whether the intended project purpose and/or likely outputs are consistent with Army/ Corps implementation and budgetary policies. While sound judgment and limited analytical approaches should be employed during the Expedited Reconnaissance Study, the detailed procedures for conducting economic and environmental analyses outlined in [Principles and Guidelines](#) (P&G), and in Corps regulations based on P&G, will not be required. However, the principles of P&G justification will be followed. Economic and environmental investigations should be limited to qualitative assessments of benefits and costs of a limited number of potential solutions in sufficient detail to indicate that a solution to the water resource problem will likely warrant Corps participation. The economic assessment should describe the existing conditions, and potential magnitude and types of benefits from proposed solutions. Likewise, the environmental evaluation should describe existing conditions, effects of potential measures, and the likely requirement for mitigation.

(6) To keep the Expedited Reconnaissance Study focused, cost low, and duration short, the following items should not be included for these studies: (1) development and formalized displays of detailed cost estimates (such as MCACES); (2) detailed engineering and design studies and data gathering; (3) detailed environmental resources evaluations; (4) optimization and benefit-cost analyses; (5) detailed real estate information; (6) report preparation; (7) formal coordination with other Federal and state agencies and; (8) other studies not directly needed to support the essential tasks. There is no need to quantify benefits and costs. Meaningful qualitative descriptions of likely benefits and costs are sufficient to support Federal interest in feasibility studies.

(7) As part of the Section 905(b) (WRDA of 1986) Analysis, the District will describe the major feasibility phase assumptions that will provide the basis for the study, discussion of alternatives that will be considered, and estimate of feasibility study cost and schedule. The Section 905(b) (WRDA of 1986) Analysis format enclosed in Exhibit G-2 provides the minimum requirements for MSC review and approval, and a sample set of assumptions.

(8) A Section 905(b) (WRDA of 1986) Analysis, as described above, is to be used as the basis for making the decision to proceed or to not proceed into the feasibility phase. The Section 905(b) (WRDA of 1986) Analysis should be submitted to HQUSACE for review and approval as early as possible in the reconnaissance phase. The PMP discussions with the non-Federal sponsor should be initiated at the start of the study phase and should be continuous throughout the study phase.

(9) MSCs have delegated authority to approve policy compliant 905(b) analysis. (Refer to Exhibit G-6 for determination of policy sensitive areas.) Section 905(b) analysis that are not in accordance with Corps policy will be coordinated with the respective Headquarters Regional Integration Team (RIT) prior to the MSC taking action on the report. A copy of the approval and report will be provided to the RIT. After approval of the 905(b) analysis and letter of intent and upon completion of PMP negotiation and approval by Headquarters of any requested deviations to the model FCFA, the District may execute the Feasibility Cost Sharing Agreement, which would then conclude the reconnaissance phase and initiate the feasibility phase.

(10) Cost Limits. The \$100,000 expedited reconnaissance study is an important means to initiate quality feasibility studies more quickly and at less cost. However, the \$100,000 expedited reconnaissance studies may not be the most effective means to initiate every feasibility study. Districts may request exceptions to the \$100,000 cost limit of the Expedited Reconnaissance Study. The justifications for exceptions must be submitted with the request to the appropriate RIT for review and approval.

(11) The following language is required in correspondence from the District Commander to the study sponsor in transmitting the proposed FCSA prior to submission for certification.

"It is recognized and understood that upon completion of this feasibility study, extensive review is required at several levels in the Executive Branch of the Federal Government and may also be required at state and local levels. Consequently, the recommendations made in this report may be changed. The following paragraph is required in my recommendations. The recommendations contained herein reflect the policies governing formulation of individual projects and the information available at this time. They do not necessarily reflect program and budgeting priorities inherent in the local and state programs or the formulation of a national Civil Works construction program. Consequently, the recommendations may be modified at higher review levels within the Executive Branch before they are transmitted to the Congress as proposals for authorization and implementation funding. However, prior to transmittal to the Congress, the sponsor, the state(s), interested Federal agencies, and other parties will be advised of any modifications and will be afforded an opportunity to comment further."

d. Special Cases. Studies with large geographic areas, or having multiple objectives or sponsors, may present special management problems which require case-by-case guidance. In instances where there are several separable problem areas and several potential non-Federal sponsors, or where a study will address multiple purposes, and there are likely to be study components for which costs are not easily allocated to the separate areas or sponsors. In instances where the complexity of the study dictates significant revision of the model FCSA, the Division Commander should request an IRC with HQUSACE (RIT) and non-Federal sponsors to consider the appropriate way to proceed.

e. Study Conduct.

(1) A study team shall be organized as a multi-disciplinary group, consisting at least of the affected functional elements in the District. The potential non-Federal study sponsor should be invited and encouraged to participate at their expense. Given the increased emphasis in the planning phase on cost estimating, scheduling, real estate, ability to construct, and operation of proposed plans, the composition of the study team must ensure that these areas are addressed.

(2) District commanders will ensure that experienced and qualified personnel are assigned to the study team for the reconnaissance phase. Due to the short time available to conduct the study, many decisions will necessarily be based primarily upon professional judgment, without all the desirable information available.

(3) During the reconnaissance study, the study team will scope the problems, the planning setting, and the potential solutions. It will establish members' roles and interests, and

focus on the issues to be addressed. The team will recommend to the executive committee (defined in (4)) the tasks to be conducted and the extent of planning to be carried out in the feasibility study.

(4) When the reconnaissance study progresses sufficiently, an executive committee structure and participants will be identified. The potential executive committee participants will serve as the coordination points of contact for the remainder of the reconnaissance study, including development of the draft FCSEA (see paragraph G-8). The executive committee membership normally includes the District Engineer, the District's chief planner (or designate), and a representative of the non-Federal sponsor(s) with commensurate decision making authority. The District Engineer and the non-Federal sponsor's counterpart will co-chair the committee.

f. Cost Estimating and Scheduling.

(1) During the reconnaissance study, a project management plan (PMP) will be developed in task detail to the first major decision point or IPR.

(2) Section 905(b) (WRDA of 1986) Preliminary Analysis should be submitted to HQUSACE for review and approval prior to completing the negotiation of the PMP. PMP discussions with the non-Federal sponsor should be initiated at the start of the study phase and should be continuous throughout the study phase.

g. Section 905(b) Analysis.

(1) The requirement for a traditional Reconnaissance Report is waived. A Section 905(b) (WRDA of 1986) Analysis is to be used. It will define the value of proceeding with a feasibility cost sharing agreement. The Section 905(b) Analysis shall address, as a minimum, the subject matter outline in Exhibit G-2.

(2) Additional information should be included in the analysis when needed for unusual situations. Generally the test for including such information is whether or not it is necessary for either the Federal or non-Federal decision maker to reach a conclusion on proceeding to the feasibility phase.

h. Fish and Wildlife Resources Considerations. Fish and wildlife resources considerations during the reconnaissance stage of planning shall be of sufficient scope and detail to:

- (1) Identify the presence and general location of known fish and wildlife resources within the study area that should be approached with care;
- (2) Make preliminary determinations of the likely impacts that potential alternative plans would have on these fish and wildlife resources;
- (3) Briefly describe potential mitigation features that would address these impacts; and,
- (4) Develop the scope of fish and wildlife resources surveys, studies and analyses to be conducted during the feasibility study stage.

Exhibit G-2. Section 905(b) WRDA of 1986 Analysis Outline and Sample Assumptions for an Ecosystem Restoration Feasibility Study
OUTLINE
1. STUDY AUTHORITY. Include the full text of principle resolution(s) and/or other study authorities. Provide summary of study funding including budget and appropriation history.
2. STUDY PURPOSE
3. LOCATION OF PROJECT/CONGRESSIONAL DISTRICT
4. DISCUSSION OF PRIOR STUDIES, REPORTS AND EXISTING WATER PROJECTS
5. PLAN FORMULATION
a. Identified Problems. Provide assessment of water and related land resource problems and opportunities specific to the study area. The following information is required: (1) existing conditions; (2) expected future conditions; and, (3) concise statement of specific problems and opportunities with emphasis on problems warranting Federal participation in the feasibility study.
b. Alternative Plans. Description and discussion of the likely array of alternatives to be developed and the environmental impacts and outputs for each alternative analyzed.
c. Preliminary Evaluation of Alternatives. Description and discussion of the likely benefits, costs and environmental impacts and outputs for each alternative analyzed.
6. FEDERAL INTEREST. Define the Federal interest, consistent with Army policies, based on a preliminary appraisal, costs, benefits and environmental impacts of identified potential project alternatives.
7. PRELIMINARY FINANCIAL ANALYSIS. The 905(b) Analysis must be accompanied by a letter of intent from the non-Federal sponsor stating their willingness to pursue the feasibility study described in the PMP and to share in the costs of construction.
8. SUMMARY OF FEASIBILITY STUDY ASSUMPTIONS. The summary will describe the normal assumptions used for the formulation, evaluation, coordination and reporting procedures described in this regulation, ER 200-2-2 and related planning phase guidance. The summary should highlight any anticipated deviations from the normal feasibility phase requirements.
9. FEASIBILITY PHASE MILESTONES

Exhibit G-2. Section 905(b) WRDA of 1986 Analysis Outline and Sample Assumptions for an Ecosystem Restoration Feasibility Study
10. FEASIBILITY PHASE COST ESTIMATE
11. RECOMMENDATIONS. Recommend whether to continue to a feasibility study or not, based on consistency with Army and budgetary policies and likelihood of a project meeting criteria for Federal participation in project implementation.
12. POTENTIAL ISSUES EFFECTING INITIATION OF FEASIBILITY PHASE. Discuss any potential issues which may affect the initiation of the feasibility phase or project implementation.
13. VIEWS OF OTHER RESOURCE AGENCIES (if known)
14. PROJECT AREA MAP
<i>District Engineer Signature Block</i>
SAMPLE ASSUMPTIONS FOR ECOSYSTEM RESTORATION STUDY
1. The resulting document will be a combined EIS/EIR prepared by the local sponsor combined (but not integrated) with the Feasibility Report prepared by the Corps. The Feasibility Report will rely heavily on the NEPA/CEQA document as a reference.
2. The document will address the project as an independent project that does not rely on other projects (describe), but which could benefit from other projects through an accelerated realization of the anticipated environmental outputs.
3. The schedule assumes that ongoing activities (describe) will result in a clean enough site for R/E to assign a land value appropriate for some type of highest and best use in order to predict how the properties will ultimately be zoned.
4. The schedule assumes that the property will be available for wetland restoration (as scheduled) by January 2000.
5. The Feasibility Report will be based on a package of engineering information provided by the Local Sponsor. An Engineering Appendix will not be prepared by the Corps. The engineering information provided by the Local Sponsor will be reviewed by the relevant district sections. The schedule assumes that no additional engineering analysis will be necessary, and that no major revision to the engineering package will be needed.
6. A Draft Coordination Act Report may not be ready by August 1. The Fish and Wildlife Service may be able to prepare a Planning Aid Letter, in which F&W issues and concerns are identified, in time for circulation with the draft report. A HEP analysis will be conducted by FWS and the resulting Habitat Units will be used by the Corps to quantify the environmental

Exhibit G-2. Section 905(b) WRDA of 1986 Analysis Outline and Sample Assumptions for an
Ecosystem Restoration Feasibility Study

output of the proposed project.

7. An MCACES will be performed on the selected plan providing an analysis suitable for a feasibility level study.
8. An approved real estate gross appraisal will not be required for the draft feasibility report.
9. There will be only one conference before the AFB. Due to the need for expedited reviews. The AD FR/EIS/EIR will be provided to HQ before the District and sponsor completes their review of the documents. Issues from the conference will be provided to HQ before the AFB.
10. QC certification of the AFB package (AD FR/EIS/EIR) will not be provided prior to the AFB conference, but will be provided at the conference.
11. The FCSA will be signed after the Public Meeting.
12. There will be no AFB Decision Conference as the decision to have an AFB conference has already been made.
13. An incremental analysis of some sort will be performed by the Corps on information provided by the local sponsor in order to display cost vs. ecological output (benefits). The Feasibility Report will not contain a detailed economics analysis as there are no traditional economic outputs anticipated.
14. Four increments will be analyzed:
 - a. Wetland restoration without the use of dredged material.
 - b. Placement of dredged material to accelerate wetland restoration.
 - c. Wetland restoration at the project site and State Lands properties without the use of dredged material.
 - d. Placement of dredged material at the State Lands property using dredged material to accelerate wetland restoration.
15. All alternatives except the no action alternative will have a goal of creating a mix of 20 percent seasonal wetland and 80 percent tidal marsh. This ratio is a result of interagency input.
16. The report will assume that construction will last a maximum of ten years, after which the levee will be breached regardless of remaining capacity.
17. The report will not address the costs or impacts of the transportation of dredged material

Exhibit G-2. Section 905(b) WRDA of 1986 Analysis Outline and Sample Assumptions for an Ecosystem Restoration Feasibility Study

into the site. Those costs will be addressed for specific dredging projects. Because the cost of transportation to the site (including unloading) will be less than the cost of ocean disposal, the transportation and unloading costs will be funded by the specific dredging projects. The report will address the site preparation, placement of material, and the levee breaching, as well as O&M and monitoring of the completed project.

18. The schedule assumes that the local sponsor is willing to go along with it and they do not have their own list of conditions that conflict with ours. Discussions on this issue are currently underway.

19. The schedule assumes that the FCSA will be signed prior to HQ approval of the PSP. HQ concurrence on this is needed ahead of time. The local sponsor is willing to sign the FCSA at this stage provided they agree with the conditions of the draft PSP. At this time we are requesting permission to proceed in this manner.

G-8. Feasibility Cost Sharing Agreement (FCSA).

a. Partnership. The FCSA (see www.hq.usace.army.mil/cecc/ccpca.htm for model agreement) is intended to promote a partnership for the conduct of the feasibility study. The Department of the Army remains responsible for representing the Federal interest by following Federal policies and budgetary priorities. Both parties will conduct planning within the framework established by the P&G and additional guidance provided in this regulation. The model FCSA shall be followed for all agreements, but minor adaptations may be made to accommodate individual study circumstances. The District Commander shall be satisfied that the non-Federal sponsor has authority to enter into the agreement and that the FCSA is legally sufficient.

b. Negotiations with Potential Non-Federal Sponsor.

(1) While developing the PMP, which will be incorporated in the FCSA, the District Commander must discuss with the prospective non-Federal sponsor(s) the objectives of the feasibility study, necessary level of detail, cost of studies, and scheduling of activities for the feasibility study. If desired and acceptable to the non-Federal sponsor, various project detail studies normally achieved after completion of the feasibility phase could be scheduled for the feasibility study to reduce uncertainties in areas such as design and cost.

(2) During negotiations, the prospective non-Federal sponsor must be informed that the level of accuracy of alternative plan evaluation and cost estimates to be developed in the

feasibility study will depend on the extent of uncertainties and the depth of investigations made during the feasibility study.

c. Project Management Plan (PMP).

(1) A PMP, negotiated between the Corps and the non-Federal sponsor, will ensure that the work required for the feasibility phase has been carefully developed and considered. The PMP forms the basis for estimating the total study cost and local share. It also is the basis for assigning tasks between the Corps and the sponsor and for establishing the value of in-kind services. The responsibility for the preparation of the PMP rests with the study manager, in coordination with the project manager. During the feasibility phase, significant changes to the PMP, may require a modification of the FCSA.

(2) The PMP will be completed during the Reconnaissance phase and will be revised and updated, as appropriate, based on discussions, resolution of issues and agreements on actions at the Feasibility Scoping Meeting.

(3) The determination of the dollar value of in-kind products or services will be negotiated, based on a detailed government estimate and sponsor proposal, between the Federal Government and the non-Federal sponsor as fixed fee items, applying applicable Federal regulations, including OMB Circular A-87. The dollar value of the in-kind effort will be established prior to the initiation of the in-kind effort. Acceptance of the product will be as called for in the PMP.

(4) The PMP should include the costs for the tasks which non-Federal sponsors have historically accomplished without charge, such as: supervision and administration; study management; attendance at meetings, both public and technical; and overhead and indirect costs which are directly related to the feasibility study. It is expected that detailed scopes of work may be needed for individual items in the PMP. Work items will also include those tasks typically necessary to support the review process from the signing of the report through the ASA(CW)'s request to OMB for the views of the Administration. These items could include answering comments, attending Washington level meetings (including the non-Federal sponsor), and report revisions as a result of review by higher authority.

(5) The PMP will guide the allocation of study funds among tasks to assure that all interests are given adequate attention. As a minimum, the PMP should address: work tasks, and their milestones and negotiated costs, and responsibility for their accomplishment; Corps and other professional criteria used to assess the adequacy of the completed work effort; procedures for reviewing and accepting the work of both parties, which can be audited; the schedule of performance; the coordination mechanism between the Corps and non-Federal sponsor; and

references to regulations and other guidance that will be followed in conducting the tasks.

(6) The PMP will address the appropriate level of engineering detail required for the feasibility phases. Engineering studies and analysis should be scoped to the minimum level needed to establish project features and elements that will form an adequate basis for the project construction schedules and cost estimate. Uncertainties should be reflected in contingencies which will be resolved during feasibility and/or PED.

(7) To ensure that the sponsor is afforded the opportunity to participate in any significant effort as a result of Washington level policy review, review support will be included as a work item in the PMP for District and non-Federal sponsor costs only. These costs, including any necessary travel, will be limited to those reasonable costs associated with the review and processing of the feasibility report. This item will be 5 percent of the total study cost or \$50,000, whichever is less, and will be cost shared equally.

(8) During the feasibility phase, significant changes to the PMP may require a modification of the FCSA.

d. Feasibility Phase Cost.

(1) The total cost of the feasibility phase will be established through negotiations of the PMP. The cost estimate in appropriate Code of Accounts format will identify major costs by task and by type (i.e., labor, materials, equipment, indirect cost, etc.), and be fully supported and documented. Procedures will be established for tracking expenses and cost accounting, including the allocation of costs between the Federal government and non-Federal sponsor. These procedures will include the ability to review costs incurred during the study, and will provide the basis for the annual cost accounting and the final cost settlement. All parties to the FCSA must agree to the funding schedule established in the PMP.

(2) Should the review support costs exceed the limit of 5 percent of the total study cost or \$50,000, whichever is less, the FCSA will be modified to provide for 50-50 sharing of those additional costs. Any costs relating to the feasibility report that are incurred following completion of the feasibility phase will be 100 percent Federal.

e. Disclosure of Lobbying Activities. The FCSA will be accompanied by a signed Certification Regarding Lobbying and, if applicable a completed Disclosure of Lobbying Activities. These forms must be thoroughly discussed with sponsors prior to their signature. Completed forms will be attached to the FCSA prior to its signature by the District Commander, and kept on file by the District for later submittal to HQUSACE, if requested.

G-9. Feasibility Studies.

a. Purpose. The purpose of the feasibility study is to identify, evaluate and recommend to decision makers an appropriate, coordinated, implementable solution to the identified water resources problems and opportunities. The resulting report should be a complete decision document, referred to as a feasibility report. It presents the results of both study phases. The report will:

(1) Provide a complete presentation of study results and findings, including those developed in the reconnaissance phase so that readers can reach independent conclusions regarding the reasonableness of recommendation;

(2) Indicate compliance with applicable statutes, executive orders and policies; and

(3) Provide a sound and documented basis for decision makers at all levels to judge the recommended solutions(s).

b. Cost Sharing.

(1) The cost of the feasibility phase will be shared equally between the Federal government and the non-Federal sponsors during the study. The non-Federal sponsor's share, 50 percent of the total feasibility phase cost, may be in-kind products and services.

(2) Section 105(a)(1) of WRDA of 1986 requires the sponsor to contribute 50 percent of the study costs during the period of such study. No credit may be given to the non-Federal sponsor for work prior to the start of the feasibility phase or after its completion.

(3) Cost sharing is not applicable to single purpose inland navigation studies on the Nation's inland waterways system. For studies where inland navigation is the primary purpose and there are other purposes being considered, request additional guidance from the appropriate RIT for feasibility phase cost sharing procedures.

c. No Implementable Plan. If the District Commander determines that a feasibility study should be terminated, but the non-Federal sponsor wishes to continue the feasibility study under the terms of the FCSA, continuation will be considered on a case-by-case basis. Normally, an exception to termination will not be granted. However, consideration will be given to those cases where there are compelling reasons to complete the feasibility report. Such situations might occur when the feasibility report is very near completion and there is a strong likelihood that non-Federal interest would implement one of the alternatives. Requests for an exception to termination shall be submitted to HQUSACE (RIT) for decision.

d. Monitoring and Tracking. The Division Commander shall establish a procedure for accomplishing an annual reconciliation of study costs between the Federal government and the non-Federal sponsor. No adjustments in the non-Federal contributions are required until the final accounting required in ARTICLE IV of the FCSA.

e. Project Cost Estimating and Scheduling.

(1) A baseline estimate will be developed for the selected plan and NED plan if it is not the selected plan, in accordance with [ER 5-1-11](#).

(2) Two project cost estimates shall be displayed in the feasibility report; one based on constant dollars and one based on projected inflation rates. Inflation rates utilized shall be those published in Engineer Manual [EM 1110-2-1304](#), Civil Works Construction Cost Index. The cost estimate based on constant dollars is the one used for authorization purposes.

f. Review Process. Feasibility reports must undergo both technical and policy compliance review. Technical review, which is the District's responsibility, is accomplished at the district level, in accordance with their quality management control regulations. Policy compliance review, which is Headquarters responsibility, unless it has been delegated, is intended to identify and resolve policy concerns that might otherwise delay or preclude approval of feasibility reports. The policy compliance review process provides for early Headquarters involvement and participation in the study process and in the review of the feasibility reports and other decision documents. General requirements for review and approval of decision documents and specific procedures for review of draft and final feasibility reports are described in Appendix H. Prior to preparation of the draft feasibility report, Headquarters policy compliance review is required at two points in the feasibility study - the Feasibility Scoping Meeting (FSM) and the Alternative Formulation Briefing (AFB). If there are additional requirements for Headquarters involvement in the study that are not met by the FSM and/or the AFB, an Issue Resolution Conference (IRC) or In-Progress Review (IPR) may be held. Additional information on the purposes and procedures for conducting FSMs, AFBs, and IRCs/IPRs is provided in Exhibit G-3 through G-6.

Exhibit G- 3. Procedures for Conducting Feasibility Scoping Meetings, Alternative Formulation Briefings, and Issue Resolution Conferences/In-Progress Reviews for Feasibility and Post Authorization Studies and Reports
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<u>Purpose.</u> This exhibit describes procedures and requirements for conducting the Feasibility

Exhibit G- 3. Procedures for Conducting Feasibility Scoping Meetings, Alternative Formulation Briefings, and Issue Resolution Conferences/In-Progress Reviews for Feasibility and Post Authorization Studies and Reports

Scoping Meeting (FSM), Alternative Formulation Briefing (AFB), and other Issue Resolution Conferences/ In-Progress Reviews (IRCs/ IPRs) in conjunction with feasibility and post authorization studies and reports generally covered in ER 1105-2-100.

Background. The primary objective of FSMs, AFBs, and IRCs/IPRs is to engage the USACE vertical team (i.e., District, Division, Headquarters) and ASA(CW), if needed, to identify, discuss and resolve policy issues to ensure the study progresses in an orderly manner and that preparation of a final report is not delayed. The FSM and the AFB are required to be held at the appropriate time during the conduct of the study. IRCs and IPRs can be held at any point in time during the study process to provide an update of study findings and progress (IPR) or to identify and resolve potential problems (technical/policy) that could delay study completion (IRC). The District should strongly encourage the non-Federal sponsor and resource agencies to participate in all FSMs, AFBs, and IRCs/IPRs. The end-product of all FSMs, AFBs, and IRCs/IPRs is a formal guidance memorandum from Headquarters that documents issues to be resolved by the district for incorporation in the draft report.

Feasibility Scoping Meeting (FSM).

The purpose of the FSM is to bring the USACE vertical team, the non-Federal sponsor, and resource agencies together to reach agreement on the problems and solutions to be investigated during the feasibility study and the scope of analysis required.

The FSM should be held upon completion of steps 1 and 2 of the planning process (i.e.; Step 1 - Identification of Problems and Opportunities; Step 2 – Inventory and Forecast Resource Conditions) and preliminary plan formulation and evaluation. The FSM is also related to the NEPA scoping process (see ER 200-2-2) which determines the scope of issues to be addressed and identifies the significant issues related to a proposed action. In general, the district should convene a FSM after the NEPA scoping process and the preliminary plan formulation and evaluation have been accomplished and the district is prepared to focus and tailor the feasibility study on key alternatives, to further define the depth of analysis required and to refine study/project constraints.

FSM documentation should include, as a minimum, a detailed description of identified problems and opportunities, statements of specific planning objectives and constraints, a detailed description of future without project conditions, a description of applicable management measures, the results of preliminary plan formulation and evaluation (i.e.; screening), and the results of preliminary coordination and public involvement. Issues that need to be resolved should be identified and fully documented and the district should present its analysis of options considered. FSM documentation will address the general evaluation

Exhibit G- 3. Procedures for Conducting Feasibility Scoping Meetings, Alternative Formulation Briefings, and Issue Resolution Conferences/In-Progress Reviews for Feasibility and Post Authorization Studies and Reports

guidelines presented in Exhibit G-1 to the extent possible at this early stage of the study. Exhibit G-4 is an expanded outline of the information to be included in FSM documentation and addresses the level of detail required. Technical work products that support the FSM documentation (e.g.; surveying & mapping, hydraulics & hydrology, average annual damage computations, etc.) should have been subject to technical review (ITR). Although ITR issues may not have been fully resolved, a status report discussing significant ITR concerns and how these concerns will be resolved must be provided as part of the FSM material. The transmittal of the FSM material to Headquarters should include a document that explains what actions have been taken to address any issues identified by Headquarters in the reconnaissance guidance memorandum.

Upon completion of the process outlined in this exhibit, Headquarters will issue the FSM Guidance Memorandum. The guidance memorandum will identify any changes in the conduct of remaining feasibility study activities agreed to by the USACE vertical team and will be used to revise the PMP, if necessary.

Alternative Formulation Briefing (AFB).

The AFB was established to save time and costs in the preparation and review of feasibility and general reevaluation reports, and to facilitate Headquarters participation in plan formulation. The purpose of the AFB is to confirm that the plan formulation and selection process, the tentatively selected plan, and the definition of Federal and non-Federal responsibilities are consistent with applicable laws, statutes, Executive Orders, regulations and current policy guidance. The goal is to identify and resolve any legal or policy concerns that would otherwise delay or preclude Washington-level approval of the draft report, and to allow the districts to release the draft report to the public concurrent with the Headquarters policy compliance review of the draft report.

An AFB should be held when the District is prepared to present the results of the alternative formulation, evaluation and comparison of plans and has identified a tentatively selected plan. The AFB is concerned with the adequacy of the formulation, evaluation and comparison of alternative plans (steps 3 through 5 of the planning process), the reasonableness of the costs, benefits, and impacts of the final array of plans, and the proper application of cost sharing and other legal and policy requirements in arriving at the tentatively selected plan. The AFB should also provide a current description of problems and opportunities, planning objectives and constraints, and the without-project condition (steps 1 and 2 of the planning

Exhibit G- 3. Procedures for Conducting Feasibility Scoping Meetings, Alternative Formulation Briefings, and Issue Resolution Conferences/In-Progress Reviews for Feasibility and Post Authorization Studies and Reports

process). Issues that need to be resolved should be identified and fully documented and the districts should present their analysis of options considered and its tentatively recommended solution.

AFB documentation should provide all information that is pertinent to the formulation, evaluation, comparison, and selection of the tentatively recommended plan. The AFB documentation will address the general evaluation guidelines presented in Exhibit G-1. Exhibit G-5 is an expanded outline of the information to be included in AFB documentation and addresses the level of detail required. Conceptually, AFB documentation would be comparable to a draft report that is about 75 percent complete. Although not required, if the draft report is available, that report may serve as the AFB documentation. Technical work products that support the AFB documentation (e.g.; surveying & mapping, hydraulics & hydrology, environmental/NEPA documentation, average annual damage and benefit computations, cost estimates, etc.) should have been subject to independent technical review (ITR). Although ITR issues may not have been fully resolved, a status report discussing significant ITR concerns and how these concerns will be resolved must be provided as part of the AFB material. The AFB material must also include a document stating how concerns identified in the Headquarters FSM guidance memorandum have been addressed.

Upon completion of the process outlined in this exhibit, Headquarters will issue the AFB Guidance Memorandum. The AFB Guidance Memorandum will be used by the District to complete all required detailed analyses and prepare the draft feasibility report/NEPA document. Subject to the district presenting its resolution of issues from the AFB Guidance Memorandum and Headquarters approval, the draft feasibility report/NEPA document will be distributed for the required 45-day public review concurrent with transmittal of the draft report to Headquarters for policy compliance review.

Issue Resolution Conferences / In-Progress Reviews (IRCs/ IPRs). The purpose of an IRC is to involve the USACE vertical team in the early identification and resolution of potential problems (technical/policy/legal) that could delay study progress. The purpose of an IPR is to provide the USACE vertical team and others, as needed, an update of study findings and progress. IRCs and IPRs can be held at any time during the study process at the request of any USACE vertical team member (i.e.; District, Division or Headquarters) or the ASA(CW). Documentation should be developed to provide the background and facts appropriate to the purpose and scope of the IRC/IPR. Issues that need to be resolved should be identified and fully documented and the District should present its analysis of options considered and its recommended solution. Prior to an IRC/IPR, the District should have completed and documented independent technical review

Exhibit G- 3. Procedures for Conducting Feasibility Scoping Meetings, Alternative Formulation Briefings, and Issue Resolution Conferences/In-Progress Reviews for Feasibility and Post Authorization Studies and Reports

appropriate to the stage of the study. Upon completion of the process outlined in this exhibit, Headquarters will provide guidance for the resolution of issues or future study activities in the form of an IRC/IPR Guidance Memorandum.

Procedures for Conducting FSMs, AFBs, and IRCs/IPRs.

Document Transmittal. The documentation required for an FSM, AFB, or IRC/IPR is defined in this exhibit and in Exhibits G-4 and G-5. The District will submit 10 copies of documentation to the respective Headquarters MSC Regional Integration Team and two copies to the MSC. The transmittal memorandum will identify and discuss any policy issues requiring resolution and/or significant or potential issues that the MSC/District believes could affect the outcome of the project. Copies of previous Headquarters guidance memoranda, the District's compliance memorandum, and appropriate ITR documentation should be enclosed.

Document Review and Discussion of Issues. Headquarters will review the FSM, AFB, or IRC/IPR documentation and produce policy compliance review comments (see Appendix H) appropriate to the situation. The target time for providing formal, written Headquarters policy review comments is 30 days after receipt of complete documentation. Policy review comments will be transmitted to the District and MSCs with required actions identified to achieve issue resolution. At a minimum, the District will be required to provide formal written responses to the Headquarters policy review comments stating how the issues will be resolved.

The next step in the process is for the USACE vertical team, the non-Federal sponsor, and others as necessary (e.g.; ASA(CW), resource agencies) to discuss the comments and responses and reach consensus on the appropriate actions that will be taken to resolve the issue. The form of this discussion may be a telephone conference, videoconference, or a face-to-face meeting as appropriate. The appropriate MSC RIT should be contacted to discuss the form of the discussion and a range of proposed dates for the discussion and will confirm the acceptability of the final date with other Washington level offices. When deciding the form of the discussion, consideration should be given to the need for a project site visit. A project site visit should be part of the AFB, unless there are extenuating circumstances. If a site visit would be useful but is not practical, slides and/or a video should be presented.

Discussions of policy issues will be chaired by the MSC and should be structured to

Exhibit G- 3. Procedures for Conducting Feasibility Scoping Meetings, Alternative Formulation Briefings, and Issue Resolution Conferences/In-Progress Reviews for Feasibility and Post Authorization Studies and Reports

encourage the surfacing and discussion of concerns and development of consensus on resolution of issues. The sponsor and appropriate Federal and State agencies should be encouraged to participate fully in all discussions. The District participants should be prepared to address the policy issues raised by Headquarters review. Discussions and required actions will be recorded and will be the basis of the draft guidance memorandum developed at the conference.

Headquarters Guidance Documentation. In coordination with the Office of Water Project Review and Headquarters Communities of Practice (CoPs), as appropriate, the respective MSC RIT will be responsible for finalizing the guidance memorandum. The final guidance memorandum will be transmitted to the MSC within 14 calendar days following the discussion of the issues. All subsequent documents submitted for Headquarters review shall be accompanied by a document indicating how compliance with previous Headquarters guidance has been achieved. The FSM Guidance Memorandum will be used to revise the PMP to incorporate the changes agreed to at the meeting. The revised PMP, as a result of the FSM or other IRCs/IPRs, will be followed during the conduct of the feasibility study and will be a primary tool for the review of subsequent products (AFB pre-conference documentation, draft or final report). Outstanding policy and ITR issues must be resolved before subsequent products are forwarded to HQUSACE.

Exhibit G-4. Items to be Addressed in Feasibility Scoping Meeting (FSM) Documentation

1. Study Background.

- a. Study Authority. Include the full text of the study resolution(s) or other authority.
- b. Location. Include a map(s).

2. Future Without Project Condition Problems, Opportunities, Goals, Objectives, and Constraints. Present the results of steps 1 and 2 of the planning process as generally described in Appendix E, paragraph E-3. Specifically identify any key assumptions regarding forecasted without-project conditions. For the project purpose(s) being studied, provide specific information to describe and quantify the problem in accordance with the applicable evaluation procedures presented in Appendix E. Following are references to the specific analyses and information required to describe the problem for several project purposes:

- Urban Flood Damage Reduction. Appendix E, paragraph E-18.
- Deep Draft Navigation. Appendix E, paragraph E-9.
- Ecosystem Restoration. Appendix E, paragraph E-32.

3. Formulation and Evaluation of Preliminary Plans. The FSM documentation will present the results of initial plan formulation, step 3 of the planning process (Appendix E, paragraph E-3).

a. Identification of Management Measures. A management measure is a feature (a structural element that requires construction or assembly on-site) or an activity (a nonstructural action). Management measures are the building blocks of alternative plans. The FSM documentation will describe the full range of management measures that have been considered to address the identified problems and opportunities. Descriptions of management measure will include their purpose, location, composition (e.g., materials, methods), and physical properties (i.e.; scale/sizing) to the extent possible at this early stage of the study. All applicable measures should be considered, including those beyond the authority of the Corps to implement.

b. Evaluation of Management Measures. For each measure identified, discuss its potential to contribute to the planning objectives and its consistency with the planning constraints. Identify measures that will be eliminated from further consideration and document the reasons (e.g.; cost, effectiveness). Identify measures that can be combined to form alternative plans. Identify measures that must be combined due to dependency. Identify measures that are mutually exclusive. Assess the Federal interest in identified potential solutions to the problems based on consistency with Administration budget policy, specific USACE policies for each project purpose (see Appendix E), and Federal laws, regulations, and Executive Orders. Indicate who (i.e.; Corps, other Federal agency, non-Federal interests) has responsibility for addressing

<p>Exhibit G-4. Items to be Addressed in Feasibility Scoping Meeting (FSM) Documentation each problem identified.</p>
<p>c. <u>Plans To Be Studied Further</u>. Identify the conceptual plans that will be studied further and describe the future work that will be accomplished to develop and evaluate preliminary plans.</p>
<p>4. Policy issues or questions to include analysis of options and proposed recommendation(s). A list of sensitive policy areas which require vertical team coordination with MSCs/HQUSACE is enclosed as Exhibit G-6.</p>
<p>5. Independent technical review documentation completed to date, including status of unresolved issues and how they will be resolved</p>
<p>6. List of future study/project milestones and completion dates</p>
<p>7. Proposed Changes to the PMP. Provide a narrative discussion of changes that need to be made to the PMP as a result of the findings of the study to date. Explain significant changes in the scope, schedule, or cost of specific tasks.</p>
<p>8. Headquarters Guidance Memoranda from Reconnaissance Phase or most recent IRC/IPR.</p>
<p>9. Compliance memorandum indicating how compliance with Reconnaissance or most recent IRC/IPR Guidance has been achieved.</p>
<p>The FSM documentation should include but is not limited to the above items. It should include other information pertinent to the project or specific issues.</p>

Exhibit G-5. Items to be Addressed in Alternative Formulation Briefing (AFB) Documentation

1. Study Background.

- a. Study Authority. Include the full text of the study resolution(s) or other authority.
- b. Location. Include a map(s).

2. Current Description of Future Without Project Condition Problems, Opportunities, Goals, Objectives, and Constraints. Present the current, updated results of steps 1 and 2 of the planning process as generally described in Appendix E, paragraph E-3. Specifically identify any key assumptions regarding forecasted without-project conditions. For the project purpose(s) being studied, provide specific information to describe and quantify the problem in accordance with the applicable evaluation procedures presented in Appendix E. Following are references to the specific analyses and information required to describe the problem for several project purposes:

- Urban Flood Damage Reduction. Appendix E, paragraph E-18.
- Deep Draft Navigation. Appendix E, paragraph E-9.
- Ecosystem Restoration. Appendix E, paragraph E-33.

3. Formulation and Evaluation of Alternative Plans. The AFB documentation should confirm that all reasonable alternatives, including non-structural measures and measures beyond the authority of the Corps to implement, have been systematically formulated and evaluated in accordance with the P&G.

a. Plan Formulation, Evaluation, and Comparison. Summarize the screening of applicable management measures, development and evaluation of preliminary plans, and the iterations of plan formulation that led to the final array of detailed plans (steps 3, 4, and 5 of the planning process (Appendix E, paragraph E-3). Tell the plan formulation story.

b. For the final array of plans provide:

(1) Descriptions of the physical features and LERRD requirements. Include maps and sketches.

(2) Implementation costs in appropriate Code of Accounts format to include preconstruction engineering and design, LERRD requirements, construction, and operation, maintenance and repair costs. Implementation costs include mitigation. Identify contingencies. Identify economic cost (e.g.; interest during construction).

(3) Description of models and assumptions used to estimate benefits and costs.

(4) Environmental mitigation requirements including associated LERRD requirements. Document justification for mitigation measures (Appendix C, paragraph C-3)

(5) Discussion of major areas of risk and uncertainty, to include key assumptions regarding forecasted future with-project conditions. Address the sensitivity of project justification to key with- and without-project assumptions

Exhibit G-5. Items to be Addressed in Alternative Formulation Briefing (AFB) Documentation
<ul style="list-style-type: none"> c. Identify the NED, NER or Combined plan d. Identify the Tentatively Recommended Plan. Provide rationale and justification for selection of the plan if it is not the NED/NER/Combined Plan. e. For the Tentatively Recommended Plan provide: <ul style="list-style-type: none"> (1) Allocation of costs to project purposes (2) Apportionment of Federal and non-Federal costs (3) A description of Federal and non-Federal implementation responsibilities.
<p>4. Policy issues or questions to include analysis of options and proposed recommendation(s). A list of sensitive policy areas which require vertical team coordination with MSC/HQUSACE is enclosed as Exhibit G-6.</p>
<p>5. Status of environmental compliance actions, coordination, and NEPA documentation.</p>
<p>6. Independent technical review documentation completed to date, including status of unresolved issues and how they will be resolved.</p>
<p>7. Identification of any legal issues and status of legal review certification.</p>
<p>8. Status of engineering activities. In general, sufficient engineering analysis should be complete to have a reasonably certain estimate of project scope, benefits, and costs. Identify any incomplete items of work that could have a significant effect on project scope, benefits, or costs and an assessment of the likely effect.</p>
<p>9. Identification of any LERRD issues and status of real estate activities. In general, the Real Estate Plan (ER 405-1-12, Chapter 12) should be sufficiently complete so as to have a reasonably certain estimate of project LERRD requirements and, for cost shared projects, a reasonably certain description of the nature and scope of the non-Federal sponsor's responsibilities and estimated LERRD credit amount. Identify any incomplete items of work that could have a significant effect on project scope, benefits, or costs and an assessment of the likely effect.</p>
<p>10. Status of all applicable environmental compliance coordination activities and resource agency views, if known.</p>
<p>11. List of future study/project milestones and completion dates.</p>
<p>12. Status of M-CACES cost estimate.</p>
<p>13. Headquarters Guidance Memoranda from FSM or most recent IRC/IPR.</p>
<p>14. Compliance memorandum indicating how compliance with FSM or most recent IRC/IPR</p>

Exhibit G-5. Items to be Addressed in Alternative Formulation Briefing (AFB) Documentation
guidance has been achieved.
15. Status of non-Federal sponsor support.
Note: The AFB documentation should include but is not limited to items 1 to 15. It should include other information pertinent to the project or specific issues.

Exhibit G-6. Sensitive Policy Areas Which Require Vertical Team Coordination with
MSC/HQUSACE

GENERAL PROJECT INFORMATION:

Project Name: State, County, River Basin/Waterbody under Study

Project Description: Need project description with general details, such as a fact sheet attached. For GRRs, if project is the same as authorization attach a summary, if different provide a description of what differs from original authorization, the authorizing language, and dimensions to give perspective of the change in scope and scale. If there was an authorizing report, state at what level it was approved (i.e., OMB, ASA(CW), HQUSACE). Include date of approval. If no prior reports, give a more detailed description.

Cost Sharing: Describe the cost sharing for the project to be constructed. Describe whether the cost sharing follows general law or if there is other special cost sharing for the project.

Has a NEPA document been completed? If no, coordination through vertical team required. Provide complete description of issues.

Will the NEPA Documentation be more than 5 years old at the time of PCA signing or construction initiation? If yes, coordination through vertical team required. Provide complete description of issues.

Will the ESA Findings be more than 3 years old at the time of PCA signing or construction initiation? [Note: Findings refers to Corps documentation and/or US Fish and Wildlife Service's opinions and recommendations]. If yes, coordination through vertical team required. Provide complete description of issues.

Is ESA coordination complete? If no, coordination through vertical team required. Provide complete description of issues.

If an EIS/EA was completed for the project, has the Record of Decision/Finding of No Significant Impact been signed? If no, coordination through vertical team required. Provide complete description of issues.

Is the proposed project consistent with the ROD/FONSI? If no, coordination through vertical team required. Provide complete description of issues.

Exhibit G-6. Sensitive Policy Areas Which Require Vertical Team Coordination with
MSC/HQUSACE

Have there been any changes in Federal environmental laws or Administration or Corps policy since original project authorization that make updating necessary? [e.g., change to the Clean Air Act status for the project area...going from attainment to non-attainment] If yes, coordination through vertical team required. Provide complete description of issues.

Is there a mitigation plan for fish and wildlife, flood damage, cultural and historic preservation and/or recreation? If yes to any or all, coordination through vertical team required. Identify and describe what is being mitigated and cost shared. Describe the authority for the cost sharing.

Are the mitigation plan(s) that are now being proposed the same as the authorized plan? If no, coordination through vertical team required. Provide complete description of issues.

Is there an incremental analysis/cost effectiveness analysis of the fish and wildlife mitigation features based on an approved method and using an accepted model? If no, coordination through vertical team required. Provide complete description of issues.

Is it expected that the project's fully funded cost would exceed the cost limit of Section 902 of WRDA 1986? (Note: for hurricane and storm damage reduction projects there are two separate 902 limits, one for initial project construction and one for periodic renourishment.) If yes, coordination through vertical team required. Provide the authorized project cost, price level, and current and fully funded project cost estimates and price levels.

Does the project involve HTRW clean-up? If yes, coordination through vertical team required. Provide complete description of issues.

Does the work involve CERCLA covered materials? If yes, coordination through vertical team required. Provide complete description of issues.

Are the project purposes now being proposed different than the authorized project? (Note: different than specifically noted in authorization or noted in Chief's report and is it measured by project outputs.) If yes, coordination through vertical team required. Provide complete description of issues.

Are there any proposed scope changes to the authorized project? If yes, coordination through vertical team required. Describe the authority that would enable the project to proceed without additional Congressional modification.

Exhibit G-6. Sensitive Policy Areas Which Require Vertical Team Coordination with
MSC/HQUSACE

Is Non-Federal work-in-kind included in the project? (Note: Credit to a non-Federal sponsor for work-in-kind must be based upon having an existing authority. Need to identify the authority and if not a general authority such as Sec 215, provide a copy of the authority.) If yes, coordination through vertical team required. Provide complete description of issues.

Does project have work-in-kind authority? (Note: If there is no existing authority, as determined in conjunction with District Counsel, the only other vehicle is to propose work-in-kind and rationale in the decision document and submit to HQUSACE for specific Congressional authorization.) If no, coordination through vertical team required. Provide complete description of issues.

Are there multiple credit authorities (e.g., Sec. 104 & 215) including LERRDS, Work-In-Kind and Ability to Pay? (Note: See App. B of ER 1165-2-131. Describe the authority for work-in-kind and if authority exists, the PM should submit a completed App. B through the vertical team.) If yes, coordination through vertical team required. Provide complete description of issues.

Is an Ability to Pay cost sharing reduction included in the proposed project? If yes, coordination through vertical team required. Fully describe the proposal, citing how this authority is applicable. Include a table showing the cost sharing by project purpose and expected Ability to Pay reductions.

Is the recommended plan different from the NED plan? If yes, coordination through vertical team required. State whether plan is less costly than NED plan, more costly with the same cost sharing the same as NED plan (exception), more costly with all costs exceeding the cost of the NED plan at 100% non-Federal cost, or if ASA(CW) has already granted an exception.

Was a standard accepted Corps methodology/model used to calculate NED benefits? If no, coordination through vertical team required. Provide complete description of methodology/model used and issues.

Are there non-standard benefit categories? [Reference ER 1105-2-100]. If yes, coordination through vertical team required. Provide complete description of non-standard benefit category and procedure/model used to estimate the benefits.

Exhibit G-6. Sensitive Policy Areas Which Require Vertical Team Coordination with
MSC/HQUSACE

NAVIGATION COMPONENT (INLAND OR HARBOR)

For projects with a navigation component, answering yes to any of the following questions will require coordination through the vertical team. A complete description of the issues will need to be provided in each case.

Is there land creation?

Is there a single owner and/or beneficiary which is not a public body? (Public body as defined by Section 221 of WRDA 1970)

For harbor projects, will removals or deep draft utility relocation be necessary?

Are there proposals for Federal cost sharing of Local Service Facilities (e.g., dredging of non-Federal berthing areas) work?

Is there sediment remediation proposed under Sec. 312 authority? (i.e., Section 312 of WRDA 1990 as amended by Section 205 of WRDA 1996)

Is there dredged material placement on beaches where the use is not the least costly environmentally acceptable plan?

Will the dredged material be used for ecosystem restoration where the recommended plan is not the least costly environmentally acceptable plan?

Does the project have recreation navigation benefits?

Does the project involve inland navigation harbor development?

Can the resale or lease of lands used for disposal of excavated material recover the cost of the improvements?

Will acquisition of land outside the navigation servitude be necessary for construction of the improvements (either the project or non-Federal facilities that will use or benefit from the project) and will this permit local entities to control access to the project. (The latter case is assumed to exist where the proposed improvement consists of a new channel cut into lands.)

FLOOD DAMAGE REDUCTION COMPONENT

Exhibit G-6. Sensitive Policy Areas Which Require Vertical Team Coordination with
MSC/HQUSACE

For projects with a flood damage reduction component, answering yes to any of the following questions will require coordination through the vertical team. A complete description of the issues will need to be provided in each case.

Is the project for protection of a single property or beneficiary?

Is the project producing land development opportunities/benefits? (If land creation benefits are expected to occur, describe whether special cost sharing should apply.)

Is there any recommendation to cost share any interior drainage facilities?

Are there any windfall benefits that would accrue to the project sponsor or other parties? (If windfall benefits are expected to occur, describe whether special cost sharing should apply.)

Are there non-structural buyout or relocation recommendations? If yes list the authority and describe what is proposed.

Are the reallocation studies likely to change the existing allocated storage in lake projects?

HURRICANE AND STORM DAMAGE REDUCTION COMPONENT

For projects with a hurricane and storm damage reduction component, answering yes to any of the following questions will require coordination through the vertical team required. A complete description of the issues will need to be provided in each case.

Does the project provide for protection of privately owned shores?

Does the project provide for protection of undeveloped lands? Does the project provide for protection of Federally owned shoreline at Federal cost? (If yes, describe what is to be protected and who bears the federal cost)

Does the project involve tidal or fluvial flooding, i.e.; is it clear what the project purpose is and has the project been formulated as a hurricane and storm damage reduction or flood damage reduction project?

Exhibit G-6. Sensitive Policy Areas Which Require Vertical Team Coordination with
MSC/HQUSACE

Is there any recommendation to cost share any interior drainage facilities?

Is recreation > 50 percent of total project benefits needed to justify the project?

Are there any parking or public access issues (no public access or none provided within
½ mile increments)?

Are easements being provided to ensure public use and access?

Is there a Section 934 of WRDA 86 extension of the period of authorized Federal
participation?

Are there any Section 111 of Rivers and Harbors Act of 1958, as amended, proposals?

ECOSYSTEM RESTORATION COMPONENT

For projects with an ecosystem restoration component, answering **no** to any of the following
questions will require coordination through the vertical team. A complete description of the
issues will need to be provided in each case.

Has the project been formulated using cost effectiveness and incremental analysis
techniques?

Was "IWR Plan" used to do cost effectiveness/incremental analysis?

Are all the benefits aquatic?

Has the significance of the habitat been clearly identified? Describe the basis for
determining the significance.

Are all the proposed recreation features in accord with ER 1105-2-100, Appendix E,
Exhibit E-3?

Has the restoration project been formulated for biological/habitat values as opposed
to, for example, water quality?

For projects with an ecosystem restoration component, answering **yes** to any of the following
questions will require coordination through the vertical team. A complete description of the

Exhibit G-6. Sensitive Policy Areas Which Require Vertical Team Coordination with
MSC/HQUSACE

issues will need to be provided in each case.

Is the project purpose for restoration of cultural or historic resources as opposed to ecosystem restoration?

Is there mitigation authorized or recommended?

Are there recommendations for other than restoring a degraded ecosystem ([e.g., creating new habitat where it has never been])?

Is the project on non-public lands?

Does the project involve land values > 25% of total project cost?

Are there recommendations to include water quality improvements?

Is the monitoring and adaptive management period proposal beyond 5 years after completion of construction?

Does the proposal involve land acquisition in other than fee title?

Are there recommendations for non-native species?

Does the project propose the use of navigation servitude?

RECREATION COMPONENT

For projects with a recreation component, answering yes to any of the following questions will require coordination through the vertical team. A complete description of the issues will need to be provided in each case.

Is the cost of proposed recreation development > 10 % of the Federal project cost without recreation, (except for nonstructural flood damage reduction and hurricane and storm damage projects)? Describe the proposal and whether ASA(CW) approval has been granted.

Does the proposal involve land acquisition in other than fee title?

Are there recreation features located on other than project lands?

Exhibit G-6. Sensitive Policy Areas Which Require Vertical Team Coordination with MSC/HQUSACE
<p>Does the project involve/provide for waterfront development?</p> <p>Does the project involve the need to reallocate authorized storage (Sec III, App E, ER 1105-2-100)?</p> <p>Does the project include non-standard recreation facilities? (refer to ER 1105-2-100, Appendix E, Exhibit E-2)</p>
<p><u>WATER SUPPLY COMPONENT</u></p> <p>For projects with a water supply component, answering yes to any of the following questions will require coordination through the vertical team. A complete description of the issues will need to be provided in each case.</p> <p>Does the project use non-standard pricing for reallocated storage?</p> <p>Are there exceptions to model contract/agreement language?</p>

g. Feasibility Report

(1) Content

(a) Feasibility phase procedures and study results shall be documented in a feasibility report. Report requirements are generally the same regardless of whether or not Federal action is recommended. The following requirements are generally applicable to all reports. Requirements for NEPA are in Appendix C.

(b) The report will present the recommended plan and, if applicable, the degree of and rationale for departure from the NED Plan, the NER Plan, or the Combined NED/NER Plan and the sponsor's preference, if none of these are the recommended plan. Should the District Commander find that the NED Plan, the NER Plan or the Combined NED/NER Plan or a justifiable departure is not acceptable to the sponsor, a locally preferred plan may be considered for Federal participation. If there is no acceptable plan, the study should be terminated and guidance obtained from the appropriate RIT.

(c) As required by Section 904 of the WRDA of 1986, the report shall address the

following matters in the formulation and evaluation of alternative plans:

(1) Enhancing national economic development (including benefits to particular regions that are not transfers from other regions);

(2) Protecting and restoring the quality of the total environment;

(3) The well-being of the people of the United States;

(4) The prevention of loss of life; and

(5) The preservation of cultural and historical values.

(d) In accordance with Section 905 of the WRDA of 1986, the report will also describe, with reasonable certainty, the economic, environmental, social, and engineering (including hydrologic and geologic information) benefits and costs of the recommended and alternative plans. A nonstructural alternative to the recommended plan will be described, including Federal and non-Federal participation, when the recommended plan does not have significant non-structural features. The report will also describe the purposes, scope, scale, public acceptability, and Federal and non-Federal participation for the recommended plan. The report will document that the affected states, other non-Federal interests, and Federal agencies have been consulted in the development of the recommended plan. In accordance with the provisions of Section 905 of the WRDA of 1986, benefits to Indian tribes, if any, shall be considered in the analyses and documented in the report.

(e) In accordance with Section 928 of the WRDA of 1986, any report describing a project having recreation benefits will include a brief description of the competing facilities and their existing and expected future use with and without the proposed project. For clarity and ease of understanding a tabular display of the facilities with uses by categories may be desirable. The impact description should distinguish between them and describe the impacts on peak versus average use in the with and without proposed project conditions.

(f) The report will include, for the recommended plan, a discussion of the uncertainty associated with significant cost features and how this uncertainty is expected to be reduced during the future project development.

(g) A preliminary draft PCA is not to be included in the report.

(h) The report shall also include a discussion of PCA responsibilities. The discussion should demonstrate that all parties have a complete understanding of the ultimate requirements for

implementation of the plan. If the non-Federal sponsor is in basic agreement with the appropriate model PCA, so state. If the non-Federal sponsor has requested special conditions different than provisions in the model, and these conditions are agreed to by HQUSACE and ASA(CW) at the IRC or in the subsequent PGM, these conditions should be included in the report along with the reporting officers recommendation. A preliminary financing plan and statement of financial capability are also required to establish implementability as required by the P&G. [ER 1165-2-131](#) contains guidance on the development of PCAs; Appendix D contains guidance on financial plans and statements.

(i) Provisions which address non-Federal responsibilities for hazardous substances in, on, or under project lands and encourage responsible management of hazardous substances by ensuring that Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) costs do not become a cost of constructing, operating, maintaining, repairing, replacing and rehabilitating Federal projects must be included in the report.

(j) For alternatives which include impoundment(s), the report shall address the requirements of Section 1202 of the WRDA of 1986 by including information on the consequences of failure, and geologic or design factors which could contribute to the possible failure of such facility.

(k) An ability to pay analysis shall be included for projects addressing flood control or agricultural water supply as required by Section 103 (m) of the WRDA of 1986 in accordance with ER 1165-2-121 and in the Federal Register (60 FR 5133, January 26, 1995). The 1995 rule maintains the two tests included in ER 1165-2-121 but adds a third test designed to provide a reduction for unusually high non-Federal per capita construction costs.

(l) The text of the report shall contain the major subject matter elements (not necessarily to be used as headings) presented in Exhibit G-7 (Feasibility Report Content).

(a) The report cover shall contain a concise title which shall be the official report title, and indicate: the type of report; whether the report contains an EA or an EIS; whether the report is a draft or final; the name of the District and Division; and the month and year.

(b) A title sheet on the District's letterhead stating the official report title shall be included as the first page inside the front cover.

(c) A syllabus shall be placed immediately after the title sheet when there is an EIS and a project is being recommended for authorization. A sentence shall be included as follows: "The requirements of Section 404(r) of Public Law 92-500, as amended, have been met."

(d) A table of contents including tables, figures, and any appendixes will be placed after

the syllabus.

(e) An EA or EIS will be included.

(f) Appendixes may be used when information must be a part of the report and cannot be relegated to supporting documentation. These appendixes may be bound in a separate volume but are an integral part of the report.

Exhibit G-7. Feasibility Report Content
1. Study Authority. Include the full text principle resolution(s) or other authority.
2. Study Purpose and Scope. State whether the report is an interim or final response to study authority.
3. Concise Discussion of Prior Studies, Reports and Existing Water Projects.
4. Plan Formulation. (Include the results of public involvement). <ul style="list-style-type: none"> a. Assessment of water and related land resources problems and opportunities specific to the study area: <ul style="list-style-type: none"> 1. Existing conditions 2. Future without project conditions; and 3. Concise statement of specific problems and opportunities b. Planning Constraints c. Alternative plans <ul style="list-style-type: none"> 1. Measures that address identified problems and opportunities 2. Reasons for selecting and combining measures to formulate alternative plans that meet identified problems and opportunities 3. Screening of alternative plans; and, 4. Reformulation of alternative plans, as necessary. d. Presentation and evaluation of final array of alternative plans e. Trade-off analysis f. Selection of the final plan, to include rationale for selection and a discussion of sensitivity analysis and risks and uncertainties.
5. Description of Selected Plan <ul style="list-style-type: none"> a. Plan components; including mitigation, b. Design and construction considerations, c. LERRD considerations, d. Operation and maintenance considerations, e. Plan accomplishments; and, f. Summary of economic, environmental and other social effects.
6. Plan Implementation <ul style="list-style-type: none"> a. Institutional requirements;

Exhibit G-7. Feasibility Report Content
b. Division of plan responsibilities, cost sharing and other non-Federal responsibilities; and, c. Views of non-Federal sponsor(s) and any other agencies having implementation responsibilities
7. Summary of Coordination, Public Views and Comments
8. Recommendations (including disclaimer).

(g) Displays, such as maps, graphs, tables, drawings, photographs, and other graphics shall be used to facilitate the presentation of information.

h. Supporting Documentation. The following supporting documentation will be prepared and reproduced separately for technical review of feasibility studies, and shall contain the technical information prescribed by the Division Commander. This documentation is not an integral part of, and shall not duplicate descriptive material contained in the feasibility report or appendixes. However, it shall be provided in a logical readable format.

(1) Engineering design data will be provided to supplement the plan formulation and the plan selection process. The material shall contain, as applicable, a description of the existing and modified hydrology and hydraulics of the detailed plans; geotechnical and other technical data; designs; and the results of geologic investigations pertinent to plan implementation and related public safety. High-volume technical data, such as boring logs, and back-up data for alternatives that were eliminated during plan formulation is not to be included. If any of this work has been contracted out, it shall be so acknowledged.

(2) Description of formulation process showing justification of each separable project element and the scale of the project that maximizes net benefits.

(3) Detailed economic data and any derivations from that data to support plan formulation, forecasts, and detailed explanations of benefits should be provided. Describe the with and without project physical, biological and economic conditions of the study area and how each category of benefits was computed.

(4) Supplemental environmental material required by the applicable environmental protection statutes such as correspondence with other Federal agencies regarding actions taken to comply with the Fish and Wildlife Coordination Act, the Endangered Species Act and The National Historic Preservation Act.

(5) Any other specific subject matter of a complex, voluminous or unique nature necessary to support planning; e.g., cost estimates should be summarized as much as possible. A

few copies of the complete data package should be prepared for interested readers.

(6) The revised and updated Policy Compliance Checklist that was initiated with the 905 (b) report. This list should be a living document that is updated and completed more fully at each stage of the project, including both the draft and final report submittals.

i. Report Recommendations.

(1) When a project is authorized by Congress, the recommendations contained in the feasibility report become the basis for proceeding with the project as a Federal undertaking. Authorizing legislation normally references the "recommendations" of the Chief of Engineers, which are derived from the recommendations of the District Commander. The provisions of the recommendations thus provide a legislative basis that will not change unless modified by Congress through applicable general legislation or by specific legislative action for the particular authorization in question. Accordingly, the wording of recommendations, incorporated by reference in the authorizing act, has the force of law for the project, and therefore requires special attention.

(2) Federal laws and policies applicable to all plans recommended for implementation as a Federal project need not be cited in the recommendations section as a requirement of local cooperation or a requirement of the Federal Government. Exhibit G-8 lists the most commonly applicable laws and policies. In writing report recommendations care must be taken to ensure that a law, or section of law, is not erroneously made applicable to the entire project when in fact it is applicable to only a portion, or particular aspect or purpose of the project.

(3) The recommendation(s) shall be prefaced with an appropriate statement, in the first person, indicating that the District Commander has given consideration to all significant aspects in the overall public interest. Those aspects considered shall include environmental, social, and economic effects; engineering feasibility; and any other elements bearing on the decision.

(4) The recommendation(s), in first-person, active voice, shall contain the following, as applicable:

(a) A clear reference to the plan being recommended for implementation, including appropriate mitigation;

(b) A phrase stating that the plan is being recommended "with such modifications thereof as in the discretion of the Commander, HQUSACE, may be advisable";

(c) A listing of local cooperation requirements, which shall be prefaced by a statement

that the non-Federal sponsors shall, prior to implementation, agree to perform the required items of cooperation.

Exhibit G-8. Federal Laws and Policies Applicable to all Recommended Plans	
Title of Public Law	US CODE
Abandoned Shipwreck Act of 1987	43 USC 2101
American Indian Religious Freedom Act	42 USC 1996
Agriculture and Food Act (Farmland Protection Policy Act) of 1981	7 USC 4201 et seq.
American Folklife Preservation Act of 1976, As Amended	20 USC 2101
Anadromous Fish Conservation Act of 1965, As Amended	16 USC 757 a et seq.
Antiquities Act of 1906, As Amended	16 USC 431
Archeological and Historic Preservation Act of 1974, As Amended	16 USC 469
Archeological Resources Protection Act of 1979, As Amended	16 USC 470
Bald Eagle Act of 1972	16 USC 668
Buy American Act	41 USC 102
Civil Rights Act of 1964 (Public Law 88-352)	6 USC 601
Clean Air Act of 1972, As Amended	42 USC 7401 et seq.
Clean Water Act of 1972, As Amended	33 USC 1251 et seq.
Coastal Barrier Resources Act of 1982	16 USC 3501-3510
Coastal Zone Management Act of 1972, As Amended	16 USC 1451 et seq.
Comprehensive Environmental Response, Compensation and Liability Act of 1980	42 USC 9601
Conservation of Forest Lands Act of 1960	16 USC 580 mn
Contract Work Hours	40 USC 327
Convict Labor	18 USC 4082
Copeland Anti-Kickback	40 USC 276c
Davis Bacon Act	40 USC 276
Deepwater Port Act of 1974, As Amended	33 USC 1501
Emergency Flood Control Funds Act of 1955, As Amended	33 USC 701m
Emergency Wetlands Resources Act	16 USC 3901-3932
Endangered Species Act of 1973	16 USC 1531
Estuary Program Act of 1968	16 USC 1221 et seq.
Equal Opportunity	42 USC 2000d
Farmland Protection Policy Act	7 USC 4201 et seq.
Federal Environmental Pesticide Act of 1972	7 USC 136 et seq.
Federal Water Project Recreation Act of 1965, As Amended	16 USC 4601
Fish and Wildlife Coordination Act of 1958, As Amended	16 USC 661
Flood Control Act of 1944, As Amended, Section 4	16 USC 460b

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Exhibit G-8. Federal Laws and Policies Applicable to all Recommended Plans	
Title of Public Law	US CODE
Food Security Act of 1985 (Swampbuster)	16 USC 3811 et seq.
Hazardous Substance Response Revenue Act of 1980, As Amended	26 USC 4611
Historic and Archeological Data Preservation	16 USC 469
Historic Sites Act of 1935	16 USC 461
Jones Act	46 USC 292
Land and Water Conservation Fund Act of 1965	46 USC 4601
Magnuson Fishery Conservation and Management Act	16 USC 1801
Marine Mammal Protection Act of 1972, As Amended	16 USC 1361
Marine Protection, Research and Sanctuaries Act of 1972	33 USC 1401
Migratory Bird Conservation Act of 1928, As Amended	16 USC 715
Migratory Bird Treaty Act of 1918, As Amended	16 USC 703
National Environmental Policy Act of 1969, As Amended	42 USC 4321 et seq.
National Historic Preservation Act of 1966, As Amended	16 USC 470
National Historic Preservation Act Amendments of 1980	16 USC 469a
Native American Religious Freedom Act of 1978	42 USC 1996
Native American Graves Protection and Repatriation Act	25 USC 3001
Native American Religious Freedom Act of 1978	16 USC 469a
National Trails System Act	16 USC 1241
Noise Control Act of 1972, As Amended	42 USC 4901 et seq.
Rehabilitation Act (1973)	29 USC 794
Reservoir Salvage Act of 1960, As Amended	16 USC 469
Resource Conservation and Recovery Act of 1976	42 USC 6901-6987
River and Harbor Act of 1888, Sect 11	33 USC 608
River and Harbor Act of 1899, Sections 9, 10, 13	33 USC 401-413
River and Harbor and Flood Control Act of 1962, Section 207	16 USC 460
River and Harbor and Flood Control Act of 1970, Sections 122, 209 and 216	33 USC 426 et seq.
Safe Drinking Water Act of 1974, As Amended	42 USC 300f
Shipping Act	46 USC 883
Submerged Lands Act of 1953	43 USC 1301 et seq.
Superfund Amendments and Reauthorization Act of 1986	42 USC 9601
Surface Mining Control and Reclamation Act of 1977	30 USC 1201-1328
Toxic Substances Control Act of 1976	15 USC 2601
Uniform Relocation and Assistance and Real Property Acquisition Policies Act of 1970, As Amended	43 USC 4601 et seq.
Utilization of Small Business	15 USC 631, 644
Vietnam Veterans	38 USC 2012

Exhibit G-8. Federal Laws and Policies Applicable to all Recommended Plans	
Title of Public Law	US CODE
Water Resources Development Act of 1974, As Amended	88 Stat 12
Water Resources Development Act of 1976, Section 150	90 Stat 2917
Water Resources Development Act of 1986	33 USC 2201 et seq.
Water Resources Development Act of 1988	33 USC 3301 note
Water Resources Development Act of 1990	33 USC 3301 note
Water Resources Development Act of 1992	33 USC 3301 note
Water Resources Development Act of 1996	33 USC 3301 note
Watershed Protection and Flood Control Act of 1954, As Amended	16 USC 1001 et seq.
Wild and Scenic Rivers Act of 1968, As Amended	16 USC 1271 et seq.
Wilderness Act	16 USC 1131
Walsh-Healy	41 USC 35 et seq.
Executive Orders	
11593, Protection and Enhancement of the Cultural Environment, May 13, 1979	36 FR 8921; May 15, 1971
11988, Floodplain Management, May 24, 1977	42 FR 26951; May 25, 1977
11990, Protection of Wetlands	42 FR 26961; May 25, 1977
11514, Protection and Enhancement of Environmental Quality, March 5, 1970, as amended by Executive Order 11991, May 24, 1977	
12088, Federal Compliance with Pollution Control Standards, October 13, 1978	
12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, February 11, 1994	
Other Federal Policies	
Council on Environmental Quality Memorandum of August 11, 1980: Analysis of Impacts on Prime and Unique Agricultural Lands in Implementing the National Environmental Policy Act	
Council on Environmental Quality Memorandum of August 10, 1980: Interagency Consultation to Avoid or Mitigate Adverse Effects on Rivers in the Nationwide Inventory.	
Migratory Bird Treaties and other international agreements listed in	

Exhibit G-8. Federal Laws and Policies Applicable to all Recommended Plans	
Title of Public Law	US CODE
the Endangered Species Act of 1973, as amended, Section 2(a)(4)	

j. Reporting for Fish and Wildlife.

(1) General. Feasibility reports shall describe specific considerations given to fish and wildlife conservation and other environmental resources during the study. All factors which the reporting officer considered as contributing to the justification of the expenditures recommended for mitigation, conservation and restoration features shall be explicitly described. Specifically, the report shall:

(a) Describe fish and wildlife resource features included in the recommended plan, including the basis for justification, consistent with guidance set forth in this section;

(b) Include appropriate letters and reports furnished by the FWS/NMFS and State agencies;

(c) Describe recommendations furnished by the FWS/NMFS and affected States in compliance with the FWCA and Section 7 of the ESA, discuss specifically how each recommendation was addressed in appropriate alternative plans, and provide reasons for adoption or non-adoption of each recommendation;

(d) Include, as appropriate, provisions for monitoring mitigation features included in the recommended plan;

(e) Describe consideration given to the protection and conservation of wetland resources, including the establishment of wetlands in connection with recommended plans that include the disposal of dredged material, as set forth in [ER 1165-2-27](#);

(f) Include the necessary letters of intent from agencies and non-Federal sponsors participating in fish and wildlife mitigation features; and,

(g) Describe how such features will be operated, managed and funded.

(2) Mitigation. Reports seeking authorization or approval of any water resources development project shall contain either a determination that such project will have negligible adverse impacts on fish and wildlife; or, a recommendation with a specific plan to mitigate fish and wildlife resource losses created by such project.

(3) PCA Environmental Compliance Checklist. The checklist of environmental compliance (in www.hq.usace.army.mil/inet/functions/cw/cecwa/branches/guidance/chklst.htm) contains information which must be addressed in documentation accompanying Project Cooperation Agreements.

k. Disclaimer. Draft and final feasibility reports recommending authorization or implementation funding, accompanying public notice, correspondence which may be disseminated apart from those documents, and HQUSACE endorsements shall all include the following paragraph immediately following each reporting officer's recommendations:

"The recommendations contained herein reflect the information available at this time and current Departmental policies governing formulation of individual projects. They do not reflect program and budgeting priorities inherent in the formulation of a national Civil Works construction program nor the perspective of higher review levels within the Executive Branch. Consequently, the recommendations may be modified before they are transmitted to the Congress as proposals for authorization and implementation funding." However, prior to transmittal to the Congress, the sponsor, the States, interested Federal agencies, and other parties will be advised of any modifications and will be afforded an opportunity to comment further.

l. Provision of Current Estimates of Project Benefits. Benefit-cost ratio computations, where required in support of funding requests, will be developed based on the benefits in the latest approved detailed economic analysis, annualized at the specified discount rates, if necessary. Appendix D provides the requirements and procedures to update project benefits.

m. Maintenance of Project Justification Documentation. Records documenting the data, conduct, analyses and results of Feasibility studies recommending project authorization, and similar information for any subsequent re-evaluations, shall be maintained in files until either project construction is completed or the project is deauthorized. Documentation will be in sufficient detail to support the basis used to compute benefits and costs.

n. Fact Sheets. The Division Commander shall submit a fact sheet in the Corps of Engineers word processing standard (currently Microsoft WORD) by e-mail to the appropriate RIT when the Division Commander's public notice is issued. The fact sheet format is furnished in Exhibit G-9. A map in electronic format showing the location and the recommended plan of improvement shall be included.

G-10. NEPA Documentation. The documents which must be prepared as documentation of the NEPA process are required at the same time that the feasibility report is prepared. The EA or EIS, as appropriate, may either be a self supporting document combined with and bound within the feasibility report or integrated with the report. The EIS should be integrated with the report

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unless complex environmental impacts preclude this alternative. Detailed guidance on the organization and content of the EIS for each of the cases is in Appendix C, 40 CFR Parts 500-1508, and [ER 200-2-2](#). The Division Commander is delegated the authority to determine the most appropriate presentation. This authority may be further delegated to District commanders.

Exhibit G-9. General Investigation Study Fact Sheet

(Date) _____

SUMMARY OF CORPS FEASIBILITY REPORT
(or SUMMARY OF CORPS POST AUTHORIZATION CHANGE REPORT)

1. Name of Report: (Complete Name)
State(s): _____ Congressional District(s): _____
2. Type of Report: (Name from budget category and class/interim or final)
3. Location of Study Area: (Brief narrative sentence with reference to nearest city)
4. Authority for Report: (Cite legislation or committee resolutions)
5. Dates of Corps Reports:
 - a. Division Engineer's Report/Public Notice or Post Authorization Change Report
 - b. Chief of Engineers' Report
6. Problems and Opportunities Identified in Study: (Brief narrative of those stemming from the study authority and those from the planning process and an indication of any recent events or conditions which highlight the problems or opportunities.)
7. Alternative Plans Considered. (Brief narrative description of the final array of alternative plans considered to alleviate the problems and take advantage of the opportunities in the planning area.)
8. Description of Recommended Plan. (Brief narrative in non-technical terms without detailed quantitative data.)
9. Physical Data on Project Features. (Brief description of each significant component and expected performance/outputs from those features.)
10. New Policy Directions Recommended

Exhibit G-9. General Investigation Study Fact Sheet

11. Views of States, Non-Federal Interest and other Countries. (Discuss views and indicate responses to proposed CoE report and final EIS; give date and type of support from non-Federal interests for recommended cost sharing.)

12. Views of Federal and Regional Agencies. (Discuss any unresolved issues associated with the Reporting Officer's recommendations/proposed CoE report/ Final EIS; as applicable.)

13. Status of NEPA Document:

14. Estimated Implementation Costs: (Month/Year price level)

Federal (Agency/Purpose)	Cost-sharing
_____	_____
_____	_____
_____	_____
Non-Federal (State/sponsors)	
_____	_____
_____	_____
_____	_____
Total _____	

15. Description of Non-Federal Implementation Costs: (Briefly describe the nature of non-Federal costs identified in item 14 and separately list any other significant non-Federal costs identified in the report.)

16. Estimated Annual O&M Costs: (month/year price level)

Federal (Agency/Purpose)	Cost-sharing
_____	_____
_____	_____
_____	_____
Non-Federal (State/sponsors)	
_____	_____
_____	_____
_____	_____

Exhibit G-9. General Investigation Study Fact Sheet

Total _____

17. Description of non-Federal O&M Costs: (Briefly describe the nature of the non-Federal O&M costs.)

18. Estimated Effects:

Account Effects	Average Annual Equivalent Beneficial Effects (\$1000)	Average Annual Equivalent Adverse Effects (\$1000)
NED (include employment and incidental)	_____	_____
Total	_____	_____

Project economic life: (years)

Benefit-cost ratio: (Current discount rate)

NED plan recommended?: (Yes/No) (If no, describe NED plan and reasons why this plan was not selected.)

19. Direct Beneficiaries: (Identify major direct beneficiaries of the project. Use general terms unless there are definable, limited beneficiaries.)

(Items 20 and 21 are to be completed only if report is a modification of an authorized project, or requires authorization and/or construction of elements not included in the features being recommended.)

20. Relationship to Other Plans: (Brief narrative description of how recommended plan fits into related plans. Include status of other plans, e.g.. not authorized, completed, under construction, preconstruction planning and engineering.)

21. Cumulative Funds Expended to Date on Previous/Related Project(s): (Show Federal and non-Federal expenditures for each project identified.)

22. Current Status of Chief of Engineers Report: (To be completed by HQUSACE)

SECTION III - Post-Authorization Changes

G-11. Purpose. This section provides guidance for making changes to uncompleted authorized projects.

G-12. Definitions.

a. Authorized Project. An authorized project means a project specifically authorized by Congress for construction, generally through language in an authorization or appropriation act, or a project authorized pursuant to Section 201, of the Flood Control Act of 1965.

b. Changes in Price Levels. For purposes here changes in price levels are changes in the general level of money prices in the economy, or in sectors of the economy. Changes in price levels may be measured by appropriate price indices, or by observation of changes in particular unit prices, as appropriate.

c. Changes in Scope. Changes in scope are increases or decreases in the outputs for the authorized purposes of a project. Outputs are the projects physical effects which (usually) have associated benefits (hence, project purpose). Change in the degree of reduction in flood stages is a change in a project outputs. It would be a change in scope if it resulted from formulation, or from design changes. Changes in the value of outputs (benefits) resulting from price level changes, or from other purely economic phenomena, are not considered changes in scope.

G-13. Approval Authorities.

a. Approval Authority Delegated to Division Commander. Division commanders may approve changes to authorized projects, or elements thereof, if such changes meet all of the criteria listed below. Such changes shall be reported to HQUSACE through the Project Review Board process. Division commanders should submit doubtful or controversial cases to HQUSACE (RIT) for a determination of the proper approval authority, reports, and report processing.

(1) For projects authorized by the WRDA of 1986, and subsequent legislation, an increase in total project cost no greater than increases in price level changes and cost of modifications required by subsequent legislation. For projects authorized prior to the WRDA of 1986, an increase in total baseline project cost estimate no greater than increases in price level changes and the cost of modifications required by subsequent legislation.

(2) Increase or decrease in scope no greater than 20 percent of the scope authorized by Congress. If the scope can be defined by several parameters, (for example, storage capacity, outputs, environmental impacts) and the change in any one parameter exceeds 20 percent, the change must be approved by the Commander USACE.

(3) Change in the location or the design of the project to the extent that the location and magnitude of the impacts of the change are determined to be insignificant compared to the impacts assessed for the authorized project.

(4) Change does not add or delete a project purpose, except deletion of water quality where the benefits attributed to water quality are less than fifteen percent of the total project benefits, pursuant to Section 65, of the WRDA of 1974.

b. Approval Authority Reserved by the Commander USACE. Any change to an authorized, uncompleted project that does not meet all of the criteria listed in paragraph G-13a and which does not require authorization by Congress pursuant to one or more of the criteria in paragraph G-13c shall be approved by the Director of Civil Works, HQUSACE, or specifically delegated by the Director to the Division Commander for approval.

c. Changes Requiring Authorization by Congress. The Chief of Engineers' discretionary authority to approve changes to authorized projects must not be abused. Changes in scope, including reduction in scope, beyond those listed in paragraph G-13a. should serve as an alert that the change may exceed the Chief of Engineers' discretionary authority. After review, the Commander USACE, in consultation with the ASA(CW), will determine whether the change can be made under discretionary authority or whether additional Congressional authorization is required. In addition, the following always require authorization by Congress:

(1) Addition or deletion of a project purpose, unless permitted under existing general authorities as discussed in paragraph G-14.

(2) Where Section 906(b) of WRDA 1986, as amended, is used as the authority to mitigate damages to fish and wildlife resulting from a water resources project:

(a) acquisition of lands, or interests therein, by condemnation for projects on which at least 10 percent of the physical construction of the project was complete as of 17 November 1986; and

(b) acquisition of water, or interests therein, by condemnation.

(3) Change in the local cooperation requirements specifically referenced in the

authorizing language, unless required by:

- (a) Subsequent legislation; or,
- (b) Addition of a project purpose within the general authority of the Chief of Engineers.

(4) Exceedence of the \$10 million Federal cost, exclusive of price level changes, if the project was authorized under Section 201, prior to 22 October 1976; or \$15 million Federal cost if authorized under Section 201, as amended by Section 131, of the WRDA of 1976, on or after 22 October 1976.

- (5) Deepening of navigation channels.

(6) For projects authorized by WRDA '86 and subsequent authorizations, an increase in total project cost, exclusive of price level changes, of more than twenty percent of the total project cost stated in the authorizing legislation.

G-14. Authority and Procedures for Additional Project Purposes.

a. Water Supply.

(1) Legislative Authority. The Water Supply Act of 1958 allows the addition of water supply as a project purpose without the approval of Congress, if such modification does not seriously affect the purpose for which the project was authorized, surveyed, planned, or constructed, or which would not involve major structural or major operational changes

(2) Procedures for Implementation of Legislative Authority.

(a) The Chief of Engineers, in consultation with the ASA(CW), shall determine whether addition of water supply is within discretionary authority to approve or must be transmitted to Congress for authorization.

(b) A deletion of water supply specifically authorized by Congress as a project purpose requires authorization by Congress. The deletion of water supply added by the Chief of Engineers under the Water Supply Act of 1958 may be approved by the Chief of Engineers prior to the initiation of construction of the project.

b. Water Quality.

(1) Legislative Authorities. There is no general authority available for adding water

quality to an authorized project. Section 65 of the WRDA of 1974, provides a reporting process for the deletion or modification of water storage in reservoir projects for the regulation of stream flow to improve water quality. The provision applies to all authorized projects not funded for construction on the date of enactment of the act (7 March 1974).

(2) Procedures for Deletion or Modification of Reservoir Storage Under the Authority of Section 65. The purpose of Section 65, Public Law 93-251, is to delineate authorities and procedures for modifying projects not funded for construction which included authorized reservoir storage for water quality, when the Administrator, EPA, determines that such storage is no longer required, or is required in a reduced amount. Such determinations are made by the Administrator pursuant to Section 102(b), Public Law 92-500. The provisions of Section 65 are not applicable if the benefits allocated to water quality exceed 25 percent of the total project benefits. In such cases, deletion or modification of water quality storage will require authorization by Congress. Where water quality benefits are equal to or greater than fifteen percent, but less than 25 percent of the total project benefits, deletion or modification of water quality storage requires Congressional approval. ASA(CW) will obtain approval for such recommended changes by resolutions from the Senate Committee on Environment and Public Works, and the House Committee on Public Works and Transportation. If water quality benefits are less than 15 percent of the total project benefits, deletion or modification of water quality storage can be approved by the Division Commander for the Chief of Engineers.

(a) Required Field Coordination. Pursuant to Section 102(b), Public Law 92-500, reports recommending a project with reservoir storage allocated to stream flow regulation for water quality shall be coordinated with the appropriate regional office of EPA prior to submission to HQUSACE. Views of the EPA regional administrator will be included with report submission and be fully considered by the reporting officer in developing recommendations.

(b) Reallocation of Reservoir Storage for Water Quality. When a project is modified to delete or reduce the amount of reservoir storage allocated to water quality, the deleted or reduced amount may be reallocated to other authorized purposes of the project, as appropriate. Reallocation to a new purpose may require Congressional authorization.

(3) Procedures for Deletion or Modification of Reservoir Storage Not Subject to the Authority of Section 65. Completed projects and projects which were funded for construction on or before 7 March 1974, are not subject to the reporting requirements of Section 65 of Public Law 93-251. In these cases, when the Administrator, EPA, pursuant to Public Law 92-500, determines that water quality storage is no longer required, or is required in a reduced amount, the reporting requirements will follow those required by the purpose that will be utilizing the deleted water quality storage space. Should the project modification reducing water quality

storage involve more than one other purpose, a report to Congress under Section 216 or other outstanding study authority might be necessary, depending on whether the modification exceeds the Chief of Engineers' discretionary authority.

c. Recreation

(1) Legislative Authorities.

(a) Public Law 89-72, Federal Water Project Recreation Act, 9 July 1965, as amended.

(b) Section 4, Public Law 534, Flood Control Act of 1944, December 22, 1944, as amended by Section 207 of the River and Harbor and Flood Control Act of 1962, and Section 234 of the River and Harbor and Flood Control Act of 1970.

(c) Section 103(c)(4) and Section 926, WRDA of 1986.

(2) Procedures for Implementation of Legislative Authorities on Lake Projects. The following discussion provides guidance on procedures for processing of changes in recreation or features at lake projects.

(a) Recreation Not Authorized as a Project Purpose.

(1) Where joint costs are not to be allocated such change shall be approved by HQUSACE, in consultation with ASA(CW).

(2) If recreation was not specifically authorized by Congress for the project, and is added to the project, such change will require authorization by Congress if project joint costs are allocated to the added purpose. After initiation of construction, project joint costs are normally not allocated to recreation unless storage is added or reallocated to that purpose. Costs may not be reallocated without authorization by Congress.

(b) Recreation Authorized as a Project Purpose but No Local Assurances Provided at Time of Authorization.

(1) Projects authorized prior to the Federal Water Project Recreation Act-Uniform Policies, but not yet under construction, require cost sharing in accordance with that act, unless authorizing legislation specified other requirements.

(2) If the District Commander is unable to enter into an agreement for recreation prior to initiation of construction, only minimum facilities for public health and safety may be provided

where public use warrants. Provision for such minimum facilities should be included in post-authorization planning documents.

(3) If an agreement is entered into for development of recreation prior to initiation of construction, the scope shall be approved by HQUSACE.

(c) Recreation Authorized as a Project Purpose For Which Local Assurances Were Provided at the Time of Authorization. If the project is unjustified with the level of recreation benefits expected to be realized with provision of only minimum facilities, preconstruction planning should be terminated and HQUSACE notified.

(3) Procedures for Implementation of Legislative Authorities on Non-Lake Projects. The following discussion provides guidance on changes in recreation features at non-lake projects.

(a) Recreation Not Specifically Authorized as a Project Purpose. Division commanders shall process the addition of recreation as a change for HQUSACE approval.

(b) Fish and Wildlife Enhancement Not Specifically Authorized as a Project Purpose. District commanders shall consider the addition of fish and wildlife enhancement as a change for HQUSACE approval.

(c) Recreation or Fish and Wildlife Enhancement Specifically Authorized as Project Purpose. Deletion of recreation or fish and wildlife enhancement as project purposes shall be processed as a change for authorization by Congress if joint costs previously allocated to these purposes are to be reallocated to other purposes.

d. Low-flow Augmentation For Purposes Other Than Water Quality.

(1) Legislative Authority. Section 102(b), Public Law 92-500 Federal Water Pollution Control Act Amendments of 1972, 18 October 1972 (33 U.S.C. 1251).

(2) Procedures for Implementation of Legislative Authority.

(a) Low-flow augmentation storage for purposes other than water quality may be added as a project purpose if determined feasible by the Chief of Engineers. Recommended changes which include the addition of such storage shall be reported and processed in accordance with paragraph G-13.

(b) Reports recommending deletion of water storage for streamflow regulation for

project purposes other than water quality low-flow augmentation shall be processed to Congress for authorization.

e. Provision for Future Hydroelectric Power at Authorized Dams.

(1) Legislative Authority. Section 4 of the Flood Control Act of 1938, Public Law 75-761, as amended.

(2) Procedures for Implementation of Authority. To facilitate later installation of hydroelectric power at projects constructed by the Department of the Army, penstocks and other similar facilities (collectively, "minimum facilities") may be included in the initially constructed projects on the recommendations of the Chief of Engineers and the Federal Energy Regulatory Commission (FERC), and with the approval of the ASA(CW). Recommendations to include the addition of such facilities must be reported to HQUSACE for approval by the ASA(CW). Recommendations shall be coordinated with FERC at the field level, and a report must contain technical, and economic justification, analyses of environmental impacts, and an assessment of anticipated interest accruing on the investment to a projected power-on-line date. The additional costs of minimum facilities will be reimbursed to the Corps of Engineers. Army policy is for these costs to be reimbursed during construction. If future facilities are developed under a FERC license, the costs of minimum facilities will be reimbursed to the Corps of Engineers prior to the start of construction of the future facilities. The costs to be reimbursed shall be the costs incurred by the Federal government for installation of the minimum facilities, with interest.

f. Endangered Species.

(1) Legislative Authority.

(a) Endangered Species Act of 1973, Public Law 93-205, as amended.

(b) Fish and Wildlife Coordination Act of 1958, Public Law 85-624, as amended.

(c) Water Resources Development Act of 1986, Public Law 99-662, Section 906.

(2) Procedures for Implementation of Legislative Authority.

(a) Section 7 of the Endangered Species Act requires the Fish and Wildlife Service or the National Marine Fisheries Service to issue a biological opinion following consultation with the Corps of Engineers. The Chief of Engineers is authorized to acquire lands for the preservation and conservation of habitat for endangered and threatened species using the project

land acquisition authorities. The Act (Section 7(b)) states that Federal agencies shall not make any irreversible or irretrievable commitments of resources to the project which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures defined in the biological opinion.

(b) The scope and extent of the land requirement will influence the decision of whether land acquisition for endangered and threatened species requires approval by ASA(CW).

(c) Factors to be considered are:

(1) Status of project.

(2) Amount of land required by the terms of the biological opinion.

(3) Authorization, acquisition, habitat comparability, and status of land that may be authorized for fish and wildlife mitigation.

(4) Completion of biological opinion features required by the Endangered Species Act.

(5) Alternatives.

(d) All cases involving land acquisition for endangered and threatened species will be coordinated early with HQUSACE and approved by the Chief of Engineers.

(e) Project modifications, exclusive of land acquisition, will be considered under the general guidance for changes.

g. Fish and Wildlife Mitigation.

(1) Legislative Authority. Section 906(b), Public Law 99-662, the Water Resources Development Act of 1986, 17 November 1986.

(2) Procedures for Implementation of Legislative Authority.

(a) After consultation with appropriate agencies, the Secretary is authorized to mitigate damages to fish and wildlife resulting from any water resources project under his jurisdiction. Mitigation may include acquisition of lands, except that acquisition may not be by condemnation in the case of projects completed or at least 10 percent completed on 17 November 1986. Further, acquisition of water, or interests therein, cannot be by condemnation under this authority.

(b) This authority does not apply to measures that cost more than \$7,500,000 or 10 percent of the project cost, whichever is greater. No more than \$30,000,000 may be obligated in any year under this authority.

(c) Costs for implementation and operation, maintenance, and rehabilitation for mitigation measures will be allocated among authorized project purposes and will be cost shared accordingly.

(d) Mitigation which requires condemnation of land for projects at least ten percent complete as of 17 November, 1986, or condemnation of water rights requires Congressional authorization.

h. Applicability of FWCA and ESA to Postauthorization Activities.

(1) FWCA Applicability. The FWCA applies to postauthorization activities if the activity meets the threshold test outlined in Section 2(a) of the FWCA, i.e., the authorized plan is modified or supplemented, and these changes relate to Federal construction which would divert, modify, impound, or otherwise control a waterway.

(2) Section 2(b) Report and Section 2(e) Funding. Sections 2(b) and (e) of the FWCA normally apply during post-authorization activities for Federal projects where the Section 2(a) threshold test has been met.

(a) Mandatory Compliance. Section 2(b) of the FWCA is mandatory when changes to the authorized plan meets the Section 2(a) threshold test and the proposed changes to the authorized plan or project require a report to Congress, or the approval of the Chief of Engineers, or above.

(b) Discretionary Compliance. In all other instances where Section 2(a) applies, compliance with Section 2(b) requirements would be discretionary. However, it is Corps policy to fund the FWS for its FWCA Section 2(b) activities associated with Corps studies and projects, consistent with procedures set forth in the 1980 Transfer Funding Agreement, as amended effective 21 September 1982. The following criteria are considered appropriate for District commanders to use for determining when Section 2(b) and (e) of the FWCA applies to postauthorization project activities. First, the proposed activity must meet the Section 2(a) threshold test. Second, a project document must be under preparation that requires approval by at least the Division Commander, or above, and any of the following factors exist:

(1) The acknowledgment by the Corps in the feasibility report, or accompanying NEPA

document, that sufficient uncertainty exists concerning impacts the recommended plan could have on fish or wildlife resources to warrant further investigations and analysis during postauthorization planning, engineering and design activities;

(2) Modification or supplementation of the authorized plans require the development of a supplement to the FEIS;

(3) New information or factors are identified during postauthorization project activities that appreciably change the extent to which the authorized project would or could impact upon fish and wildlife resources beyond what was documented in the feasibility report;

(4) The authorized project contains major fish and wildlife mitigation or enhancement features, and the further planning, siting, designing and construction of such features would benefit from involving the FWS, NMFS or State resources agencies in these activities; or,

(5) District and Division professional staff determine that continued involvement of the FWS, NMFS or State resources agencies during postauthorization project activities would better assure public and agency acceptance of the water resources development project, including authorized fish and wildlife features included in the project.

(6) The new or supplemented Section 2(b) report, planning aid letter, etc., shall accompany the project document throughout the decision-making process.

(4) ESA Applicability. Section 7 of the ESA is applicable for any project, or unit thereof, regardless of when the project was authorized or completed.

G-15. Authorized Maximum Cost of Projects.

a. Determining the Section 902 Limit.

(1) The maximum project cost limit imposed by Section 902 is a numerical value specified by law which must be computed in a legally supportable manner. It is not an estimate of the current cost of the project. The limit on project cost must be computed including an allowance for inflation through the construction period. This limit will then be compared to the current project estimate including inflation through the construction period. For beach nourishment projects authorized with an initial cost and a cost for future nourishment, there are two limits. There is a limit on initial construction the same as other projects, and a limit on total cumulative cost of nourishment.

(2) The authorized cost may be increased from the price level in the authorizing

document to include inflation. The construction component of the authorized cost will be updated to account for historical inflation using the Civil Works Construction Cost Index System ([EM 1110-2-1304](#)). The real estate component of the authorized cost will be updated to account for historical inflation based on changes to the Consumer Price Index, specifically, the unadjusted percentage changes reflected under the "Rent, residential" expenditure category.

(3) The maximum project cost includes the authorized cost (adjusted for inflation), the current cost of any studies, modifications, and action authorized by WRDA '86 or any later law, and 20 percent of the authorized cost (without adjustment for inflation). The cost of modifications required by law is to be kept separate and added to the other allowable costs. These three components equal the maximum project cost allowed by Section 902.

(4) Exhibit G-10 provides a detailed discussion of the method used to compute the maximum project cost allowed by Section 902. The method outlined in Exhibit G-10 for escalating the authorized cost to current price levels is based on the currently estimated project schedule which includes actual obligations to date. The Project Cost Fact Sheet in Exhibit G-11 should be used to display the Section 902 maximum cost limit and to compare the current project cost estimate to the maximum project cost limit. For projects involving beach nourishment, there are two limits. A maximum cost for the first placement, as well as a maximum cost for future nourishment will be computed following the procedure in Exhibit G-10.

b. Procedures When Cost Exceeds Limit. Upon determination that project cost estimates will exceed the maximum cost limitation, as determined in accordance with Exhibit G-10, work on the phase of the project underway at that time should continue until notification otherwise by HQUSACE, unless continuation of work will result in obligation of funds exceeding the authorized limitation. The determination of when to continue work on the project will be based generally on the criteria given in the matrix in Exhibit G-10. In general, work may continue on a separable element or a single contract if that unit of work will not incur obligations over the legal limitation. The intent will be to honor current PCA's and current contracts where possible. The computation sheets and the Project Cost Increase Fact Sheet will be submitted within 30 days after it is determined that the project cost exceeds the cost limit. When a firm estimate of the cost to complete the project is available, a report will be prepared and submitted.

Exhibit G-10. Maximum Cost of Projects
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<u>Background.</u>

Section 902 allows for increases due to modifications which do not materially alter the scope or function of a project. Project modifications may encompass further engineering and design refinements to project features that are identified in project authorizing documents, as

Exhibit G-10. Maximum Cost of Projects

well as the construction of new project features that are not identified in authorizing documents. In most instances further engineering and design refinements will be necessary to construct project features that are only generally described in authorizing documents. In such cases the maximum cost of the project can be increased by up to 20 percent to pursue the engineering and design refinements. However, in those instances where no further engineering and design refinements are necessary to construct the improvements in the authorizing documents, the amount specified in the authorizing legislation will be the maximum cost of the project, except for other cost adjustments appropriate under the law.

The total project cost is the cost of all work associated with preconstruction engineering and design and construction, including real estate and appropriate credit provisions of Section 104 of the WRDA of 1986 and Section 215 of Public Law 90-483. The cost of the entire project as authorized will be the cost used for comparison. If, subsequent to authorization, it is determined that a separable increment of the project is no longer desired and will not be built, the cost of that separable element should be included as a part of the project cost when computing the maximum cost. If the authorization is for a modification to a project authorized prior to the WRDA of 1986, only the cost of the identified modification is subject to the limitation of Section 902.

Cost Increase Indexes. The construction component of the authorized cost will be updated to account for historical inflation using the Civil Works Construction Cost Index System (CWCCIS) in [EM 1110-2-1304](#). The appropriate state index or average of two state indexes may be used. The same index method must be used for all subsequent adjustments to the authorized cost. The real estate component of the authorized cost will be updated to account for historical inflation based on changes to the Consumer Price Index as published monthly by the U.S. Department of Labor, Bureau of Labor Statistics, (BLS). Specifically, the unadjusted percentage changes reflected under the "Rent, residential" expenditure category from the tables containing the Consumer Price Index for All Urban Consumers: U.S. city average, will be used. For projects located in the metropolitan areas specifically identified in Table 17 of the BLS publication (Consumer Price Index for All Urban Consumers: Selected Areas), the percentage change reflected under the "Rent, residential" category will be the appropriate index. It is also permissible to use the index in Table 17 for a project proximate to, but not located in, a specifically identified area if, due to tangible market influences, it is more reasonable to do so. However, once a table is selected, it must be used for all subsequent adjustments to the authorized cost. Tables G-1 and G-2 provide worksheets for computing the historic cost increase indexes for both construction and real estate components of the authorized cost. Entries are needed from the date of the authorized cost to the current date. These tables will be added to each year as the current date becomes available. Use actual indexes from the referenced publications.

Project Cost Increase Computation. The steps to compute the maximum project cost are

Exhibit G-10. Maximum Cost of Projects

outlined below. The computation starts with the creation of a tabulation as in Table G-3. The table needs vertical columns for years starting with the year of the authorized estimate and continuing through the current year.

Maximum Cost Including Inflation Through Construction. Table G-4 would contain the computation of the maximum project cost, including inflation through the construction period.

Project Cost Limits for Beach Nourishment Projects. For all new project authorizations which include periodic nourishment as a part of project construction, the authorized cost will be given as an initial total cost, and an average annual cost for periodic beach nourishment over the life of the project. Projects thus authorized would be subject to two cost limits in accordance with Section 902. Projects authorized in P.L. 99-662 and in P.L. 100-676 are authorized at a single total cost. This cost, in most cases, includes an initial construction cost and the present worth of the cost of future nourishment. The present worth was computed at the appropriate Federal discount rate over a 50-year project life. For these projects, the cost number in the authorizing document will have to be examined to determine the amount which is for initial construction and the amount which is the present worth of future nourishment. These will then be used to compute two Section 902 limits.

1. The project first cost would be limited to the initial cost increased as allowable under Section 902. This would be a one time cost limitation like any other project, computed as discussed in the preceding paragraphs.

2. Total periodic nourishment cost would be limited by the total amount estimated for future nourishment, increased as allowable in accordance with this Appendix. The present worth amount for nourishment needs to be converted to a total cost over the life of the project. In general, the present worth computation is based on an average annual cost, which in turn is based on the estimated cost of each nourishment event divided by the years anticipated between events. The average annual cost (at the appropriate price level: Oct 97 or Oct 99) is to be multiplied by the years of project life. This cost is then used as the authorized cost of beach nourishment. It is the total cost to use in column f of Table G-3. In Table G-3, the current project cost would be the cost to date in the year it was expended, plus a current estimate of the nourishment required for the remainder of the project, at current price levels. The Section 902 limit would be computed using the procedure in the preceding paragraphs. The actual cost of each nourishment would be treated as a cost in the year in which it occurs. In this way, a cumulative record would be kept, and it would be readily apparent when total cost reaches the limit.

Project Cost Increase Fact Sheet. The Project Cost Increase Fact Sheet is a comparison of the project cost to the maximum project cost as limited by Section 902. The information in line 3 is from the computations described in the preceding paragraphs. The number in line 3e is the

Exhibit G-10. Maximum Cost of Projects

same as line 4 of Table G-4. Line 4 is the current total project cost estimate and must include all separable elements. This is the same as line 1b of Table G-4. It includes engineering and design, construction, supervision and administration, contract dispute settlements or awards, value of lands, easements and rights-of-way, utility and facility relocations, and dredged material disposal areas provided by the sponsor. This cost does not include costs for betterments, operation, repair, maintenance, replacement or rehabilitation. The current cost estimate may be the result of engineering and design studies, preparation of plans and specifications, or further adjustments to the project cost.

The Section 902 cost limit has been exceeded if the current estimate on line 4 exceeds the limit as shown on line 3e. The computation on line 5 allows a determination of the percentage of the current estimate increase over the authorized cost.

Cost Limitation Action Matrix. The matrix in Table G-5 will be used as a guide for determining what actions may be undertaken while waiting for new authorization for a project when the cost estimate exceeds the limit. The intent is to honor current PCAs and contracts to the extent possible.

Table G-1. CWCCIS Index(s)

		Total Allowed Inflation (g)							
		<u>Index</u>	<u>Rate</u>	<u>Yearly Inflat</u>	<u>Cumulative Inflation</u>	<u>Cumulative Rate to</u>	<u>One Half Rate of Infl</u>	<u>Total Allowed Inflation</u>	
(b)	(c)	(d)	(e)	(f)	(g)	(h)	(I)	(j)	
<i>Date of Price Level, Authorized Estimate:</i>									
<i>First Fiscal Year:</i>	_____	_____	_____	_____	_____	x	_____	=	
<i>1st Quarter, 2nd Yr:</i>	_____								
<i>Second Fiscal Year:</i>	_____	_____	_____	_____	_____	x	_____	=	
<i>1st Quarter, 3rd Yr:</i>	_____								
<i>Third Fiscal Year:</i>	_____	_____	_____	_____	_____	x	_____	=	
<i>1st Quarter, 4th Yr:</i>	_____								
<i>Fourth Fiscal Year:</i>	_____	_____	_____	_____	_____	x	_____	=	
<i>1st Quarter, 5th Yr:</i>	_____								
<i>Fifth Year:</i>			_____	_____			_____	x	_____ =

Notes:

- b. Enter the date of the authorized cost and the beginning date of following fiscal years.
- c. These entries are the fiscal years.

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d. These are the index numbers from the referenced publications and must all be expressed with the same base year (base year price equals 100).

e. This column equals the index at the beginning of the next year, divided by the index at the beginning of the year, minus one.

f. The cumulative inflation rate equals the index (column (d)) at the beginning of the year divided by the index of the first line of the table.

g. The allowed inflation rates equal the cumulative rate through the beginning of the FY (equals one for the first FY after project authorization) times one plus 1/2 of the rate of inflation for the FY. For the remaining balance, it equals the cumulative rate to the beginning of the next fiscal year.

h. These are the cumulative rates through the beginning of the FY. They are the amounts in column (f) one-half line above.

i. This is one plus 1/2 the rate of inflation during the fiscal year, $1 + 1/2 \times$ column (e).

j. The total inflation is the product of the last two entries.

k. The inflation rate for the remaining balance is the last entry in column (f).

Table G- 2 CPI Index(s)

			<u>Total Allowed Inflation (g)</u>					
		<u>Index</u>	<u>Yearly</u> <u>Inflat</u> <u>Rate</u>	<u>Cumulative</u> <u>Inflation</u> <u>Rate</u>	<u>Cumulative</u> <u>Inflation</u> <u>Begin FY</u>	<u>One Half</u> <u>Rate of Infla</u> <u>For FY</u>	<u>Total Allowed</u> <u>Inflation</u> <u>For FY</u>	
	(b)	(c)	(d)	(e)	(f)	(h)	(I)	
							(j)	
<i>Date of Price Level, Authorized Estimate:</i>	_____		_____					
<i>First Fiscal Year:</i>		_____	_____		_____ X _____ =			
<i>1st Quarter, 2nd Yr:</i>	_____		_____					
<i>Second Fiscal Year:</i>		_____	_____		_____ X _____ =			
<i>1st Quarter, 3rd Yr:</i>	_____		_____					
<i>Third Fiscal Year:</i>		_____	_____		_____ X _____ =			
<i>1st Quarter, 4th Yr:</i>	_____		_____					
<i>Fourth Fiscal Year:</i>		_____	_____		_____ X _____ =			
<i>1st Quarter, 5th Yr:</i>	_____		_____					
<i>Fifth Year:</i>		_____	_____	_____	_____ X _____ =			

Notes:

- b. Enter the date of the authorized cost and the beginning date of following fiscal years.
- e. These entries are the fiscal years.
- f. These are the index numbers from the referenced publications and must all be expressed with the same base year (base year price equals 100).
- e. This column equals the index at the beginning of the next year, divided by the index at the beginning of the year, minus one.
- f. The cumulative inflation rate equals the index (column (d)) at the beginning of the year divided by the index of the first line of the table.
- g. The allowed inflation rates equal the cumulative rate through the beginning of the FY (equals one for the first FY after project authorization) times one plus 1/2 of the rate of inflation for the FY. For the remaining balance, it equals the cumulative rate to the beginning of the next fiscal year.
- h. These are the cumulative rates through the beginning of the FY. They are the amounts in column (f) one-half line above.
- i. This is one plus 1/2 the rate of inflation during the fiscal year, $1 + 1/2 \times$ column (e).
- j. The total inflation is the product of the last two entries.
- k. The inflation rate for the remaining balance is the last entry in column (f).

Table G- 3 Authorized Cost Increase Computation

<i>FY</i>	<i>Current Project Cost (Price Level)</i>			<i>Current Schedule (%)</i>		<i>Authorized Cost Schedule</i>		<i>Auth. Cost Inflat.</i>	
	<i>Total</i>	<i>Constr.</i>	<i>R.E.</i>	<i>Constr.</i>	<i>R.E.</i>	<i>Constr.</i>	<i>R.E.</i>	<i>Constr.</i>	<i>R.E.</i>
	<i>(a)</i>	<i>(b)</i>	<i>(c)</i>	<i>(d)</i>	<i>(e)</i>	<i>(f)</i>	<i>(g)</i>	<i>(h)</i>	<i>(I)</i>
99									
00									
01									
02									
03									
<i>Balance to Complete</i>									
<i>Total</i>				<i>100%</i>	<i>100%</i>				

Notes:

a. The total of column (a) is the current working estimate of project cost at the current price level, less the cost of any modifications

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required by law. The entries for all years from authorization to the current year are the actual obligations made that year. The balance to complete is the remaining cost at current price levels.

b. Column (b) is the construction component of the cost in column (a).

c. Column (c) is the real estate component of column (a). Column (b) plus column (c) must equal column (a).

d. Column (d) is the percent distribution of the construction cost in column (b). It must total 100 percent.

e. Column (e) is the percent distribution of the real estate cost in column (c). It must total 100 percent.

f. The total of column (f) is the construction component of the authorized cost, from the authorizing legislation. The yearly entries are the distribution of the total by the percentage distributions in column (d).

g. The total of column (g) is the real estate component of the authorized cost. The yearly entries are the distribution of the total by the percentage distributions in column (e). The total of column (f) and the total of column (g) must equal the cost in the authorizing legislation.

h. The entries in column (h) are the amounts in column (f) increased by the appropriate inflation factor which is derived from the Corps of Engineers CWCCIS index. Table G-1 would contain a computation of appropriate construction inflation factors .

i. The entries in column (i) are the amounts in column (g) increased by the appropriate real estate inflation factor, which is derived from the CPI index. Table G-2 would contain a computation of the appropriate real estate inflation factors.

Table G- 4 Maximum Cost Including Inflation Through Construction

Line 1:

- a. Current project estimate at current price levels:*
- b. Current project cost estimate, inflated through construction:*
- c. Ratio: Line 1b / Line 1a*
- d. Authorized cost at current price levels:
Columns (h) plus (I) from Table G-8.3*
- e. Authorized cost, inflated through construction:
Line c x Line d*

Line 2: Cost of modifications required by law:

*Line 3: 20 percent of authorized cost:
.20 x (Table G-8.3, Columns (f) + (g))*

*Line 4: Maximum cost limited by Section 902:
Line 1e + Line 2 + Line 3*

Notes:

- a. Line 1a is the current project cost estimate.*

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- b. Line 1b requires the current project cost estimate including inflation through the construction period. This is required each year by the annual budget guidance EC. This cost estimate will be developed by the appropriate cost engineering element. The ratio of this inflated project estimate to the current project estimate is used to inflate the totals of column (h) and (i) from Table G-1 to determine the authorized cost including inflation through the construction period.*
- c. Line 1c is the ratio of the current estimate including inflation through construction to the current estimate.*
- d. Line 1d is the authorized cost at current prices. It is the total of columns (h) and (i) from Table G-1.*
- e. Line 1e is the authorized cost including inflation through construction. It is computed as the authorized cost at current price levels times the ratio on line 1c.*
- f. Line 2 is the cost of any modifications required by law. This is the total cost and includes actual obligations and future obligations including inflation through construction.*
- g. Line 3 is 20 percent of the cost specified in the authorizing legislation. The authorized cost is the total of columns (f) and (g) in Table G-8.1.*
- h. Line 4 is the maximum project cost, including inflation through the construction period, allowed by Section 902. It is the total of lines 1e, 2, and 3.*

Exhibit G-11. Project Cost Increase Fact Sheet

1. *Name of Project*
 2. *Section and Law That Authorized or Modified the Project:*
 3. *Section 902 Limit on Project Cost:*
 - a. *Authorized project cost:(W/Price level)*
 - b. *Price level increases from date of authorized cost: **
 - c. *Current cost of modifications required by law: ***
 - d. *20% of line 3a:*
 - e. *Maximum project cost limited by Section 902:*
 4. *Current Project Cost Including Inflation Through Construction: ****
 5. *Computation of Percentage Increase:*
 - a. *Current estimate: (Line 4)*
 - b. *Less total of lines 3a, b, and c:*
 - c. *Subtotal:*
 - d. *Percent increase: (line 5c/3a)*
 6. *Explain cost indexes used in 3b; whether national or regional for real estate, and single state or two state average for construction.*
 7. *Explain increases in 3c; Legislation requiring the modification, and how accommodated.*
 8. *Explain reasons for cost changes other than inflation.*
 9. *Explain any changes in benefits and provide current BCR.*
 10. *Provide detailed explanation of the status of the project.*
- * *Line 1e from Table G-4, less the authorized cost.*
- ** *This includes cost of external credit under Section 104 of WRDA '86, for example. (Integral Section 104 credit is included in the authorized project cost on line 3a.) (See [ER 1165-2-29](#)).*
- *** *Line 1b from Table G-4.*

Table G- 5 Section 902 Cost Limitation Action Matrix

IMPLEMENTATION STATUS AT TIME ESTIMATED TOTAL COSTS EXCEED SEC 902 LIMIT

	<i>PRIOR TO EXECUTION OF THE PCA</i>	<i>PCA EXECUTED, BUT NO CONTRACTS AWARDED</i>	<i>ONE OR MORE CONTRACTS AWARDED, FUTURE CONTRACTS/FUTURE PCA's</i>	<i>UNDER CONSTRUCTION LAST CONTRACT</i>
<i>1. PROJECTS THAT HAVE ONE PCA, AND ONE CONTRACT</i>	<i>1/</i>	<i>1/</i>	<i>N.A.</i>	<i>3/</i>
<i>2. PROJECTS THAT HAVE ONE PCA, AND MULTIPLE CONTRACTS</i>	<i>1/</i>	<i>1/</i>	<i>2/</i>	<i>3/</i>
<i>3. PROJECTS THAT HAVE MULTIPLE PCA's AND MULTIPLE CONTRACTS</i>	<i>1/</i>	<i>1/</i>	<i>2/</i>	<i>3/</i>

- 1. Await new legislation before proceeding with executing the PCA or award of the first contract if a PCA has already been approved.*
- 2. Continue implementation of the project until implementation of the next PCA increment (or award of the next contract when the last PCA increment is already under construction) would require funds in excess of the 902 limit. Submit legislation to permit the authorization committees to consider inclusion of the legislative proposal in a biennial WRDA in time to prevent a break in project implementation whenever possible.*
- 3. If completion of the current contract(s) would require funds in excess of the 902 limit, conclude current contract activities in the most practical and cost effective manner consistent with public safety and to minimize any obligations that exceed the 902 limit.*

G-16. Processing Changes.

a. Post Authorization Change (PAC) Reports. Changes where an authority determination must be made by the Commander USACE, and changes where cost increases exceed the limit established by Section 902 of the WRDA of 1986, will be documented in a General Reevaluation Report, a Limited Reevaluation Report or an Engineering Documentation Report and submitted to HQUSACE (RIT). These reports will support the PCA and will be subsequently referred to as PAC reports. The PAC reports format below is a guide; the PAC reports will be reviewed by the RIT as a feasibility report seeking authorization. The reports will be reviewed by the ASA(CW) and coordinated with OMB as appropriate for submission to the Congress.

(1) Description of Authorized Project. Describe the authorized project, its location, functions, size, land requirements and local cooperation requirements.

(2) Authorization. Identify the authorization Act: section, public law, title, date and statute citation. Identify the House or Senate document number of the project document referenced in the authorization act.

(3) Funding Since Authorization. Provide a funding history, by fiscal year, indicating the category in which funds have been appropriated.

(4) Changes in Scope of Authorized Project. Give a description and rationale of any changes in project scope, using a subparagraph for each. Use tables for comparing authorized numbers with recommended numbers; and indicate percentage of change.

(5) Changes in Project Purpose. Describe and explain reasons for any changes in purposes from those authorized for the project.

(6) Changes in Local Cooperation Requirements. State and explain the reasons for any changes in the local cooperation requirements. Changes include any modification of the wording used in the recommendation language adopted by Congress in the authorization act, or in subsequent legislation applicable to the project, as may be modified by general legislation.

(7) Change in Location of Project. Briefly describe any changes in location of the project, or project elements, including the reasons for the changes. When the change in location requires additional land or change in estate to be acquired, the requirement should be addressed.

(8) Design Changes. Describe design changes and the reasons for the changes.

(9) Changes in Total Project First Costs. Provide a table showing a four column comparison of the estimated cost for the project being recommended, the project as authorized by Congress, the authorized project updated to current price levels, and the project last presented to Congress. In subparagraphs, itemize the reasons for the cost changes so that 100 percent of the cost increase since authorization is explained. Minor changes may be lumped in the table and in the narrative. The total increase due to changes in price levels may be shown under one subparagraph.

(10) Changes in Project Benefits. Provide a table showing a comparison of the benefits given in the project document, the benefits last reported to Congress, and the benefits based on reevaluations which have been done to support the recommended changes to the project. Summarize each type of benefit in a subparagraph, stating any changes in criteria or other factors such as use of current interest rate which resulted in significant changes in the benefit estimates. State the increase in benefits attributed to price level increases.

(11) Benefit-Cost Ratio. State the BCR for the recommended project and the authorized project at current price levels and the current interest rate. Also state the interest rate used in the authorizing document.

(12) Changes in Cost Allocation. Provide a table showing the allocation of cost among the project purposes for the authorized project and the recommended project. Give both the dollar amounts and percentages allocated to each purpose. Discuss any changes which are not the result of simply recomputing the cost allocation based on current benefit and cost estimates.

(13) Changes in Cost Apportionment. Provide a table showing the Federal and non-Federal costs of the authorized project and the recommended project, both at current price levels. Indicate Federal appropriations requirements and reimbursable costs.

(14) Environmental Considerations in Recommended Changes. Discuss any environmental effects of the recommended changes. State whether the EIS currently on file was determined to be adequate. Appropriate NEPA documentation will be included in the PAC or accompanying report.

(15) Public Involvement. Describe the public involvement and coordination effected in formulating the recommended changes to the project and discuss the impact of these activities on the recommendations.

(16) History of Project. Provide a history of the project since authorization including other studies accomplished, directions from Appropriations Committees, any litigation, relationship of project to basin plans and other pertinent information not found elsewhere in the report.

b. Reporting Changes in PB-3s and Justification Sheets. Changes in costs shall be reflected in PB-3s (Project Cost Estimates) and Budget Justification Sheets as soon as they have the concurrence of the Division Commander. New estimates of benefits, costs and project scope shall be footnoted until approved. For changes requiring authorization by Congress, the Budget Justification Sheets will also include information on the change in the "other information" paragraph. See the annual Budget EC for instructions on preparation of these documents.

G-17. Interest Rates for Changes. Interest rates used in formulating project changes through incremental analysis are as follows:

a. General Reevaluation Studies. For general reevaluation studies, use the current interest rate.

b. Limited Reevaluation Studies. For limited reevaluation studies, use the current interest rate.

c. Addition of mitigation. For the addition of mitigation, use of the rate applicable to the authorized project is permissible.

SECTION IV - Study and Project Deauthorization

G-18. Purpose. This section provides guidance for the implementation of Section 710, Water Resources Development Act of 1986 (WRDA of 1986) (study deauthorization), Section 1001, WRDA of 1986 (project deauthorization) and Section 52, WRDA of 1988 (project deauthorization).

G-19. Study Deauthorization

a. Annual Submission. Section 710, WRDA of 1986 requires an annual submission to Congress of a list of authorized but incomplete water resources studies which have not had funds appropriated during the preceding five full fiscal years.

b. Approved Study Data Base. Each Division shall submit electronically to HQUSACE (CECW-I) the consolidated Division approved study database by 15 November each year. The database should be updated through September 30 of the current year.

c. HQUSACE Responsibilities. The RITs will review the overall Division lists (which include all studies), prepare a list of those that meet the criteria for submission to Congress, and submit the list to ASA(CW) for submission to Congress. Following the submission to Congress a copy of the list will be provided to each Division.

d. Appropriate Funds. The list is not a recommendation for deauthorization, but rather a list of studies meeting the legal criteria for deauthorization. Congress has 90 days, after the submission, to appropriate funds for the studies on the list. Studies that are not funded during the 90-day period are no longer authorized.

G-20. Project Deauthorization. Section 1001 of the WRDA of 1986, as amended, provides for the deauthorization of water resources projects on which Federal funds for planning, design or construction have not been obligated for 7 fiscal years. Every two years, the Secretary of the Army is required to submit to Congress a list of projects that meet this eligibility criteria. Affected congressional delegations must be notified of the projects in their districts or states. The projects remain on the list for 30 months, after which they are automatically deauthorized if Federal funds have not been obligated during the 30-month period. Section 1001(c) requires publication of the lists of deauthorized projects in the Federal Register. The project deauthorization process is managed at HQUSACE by CECW-I and that office should be contacted for further information.

SECTION V - Flood Plain Management Services (FPMS)

G-21. The FPMS Program. The FPMS Program is authorized by Section 206 of the Flood Control Act of 1960.

G-22. Flood Plain Management Services. Flood plain management services cover the full range of information, technical services, and planning guidance and assistance on floods and flood plain issues within the broad umbrella of Flood Plain Management (FPM). They include:

a. General Technical Services. Flood and flood plain data are obtained and developed and interpreted.

b. General Planning Guidance. On a broader scale, assistance and guidance in the form of "Special Studies" are provided on all aspects of FPM planning, including the possible impacts of off-flood plain use changes on the physical, socioeconomic and environmental conditions of the flood plain.

c. Guides, Pamphlets and Supporting Studies.

(1) They are disseminated to states, local governments, Federal agencies, and private citizens to convey the nature of flood hazards and to foster public understanding of options for dealing with flood hazards.

(2) Supporting studies are conducted to improve methods and procedures for flood damage prevention, reduction, and abatement. Studies can also be undertaken to illustrate alternative ways of achieving FPM goals.

G-23. National Flood Insurance Program (NFIP) Support. The NFIP is administered by the Federal Emergency Management Agency (FEMA). The Corps provides technical support to the NFIP on a reimbursable basis.

a. Technical assistance and other support are provided for three components of the NFIP: the Flood Insurance Study (FIS) effort, the Limited Map Maintenance Program (LMMP), and the Community Assistance Program.

(1) The FIS and LMMP efforts require detailed hydrologic and hydraulic analyses to determine areas of flood hazards and the degree of flood risk. While FIS efforts are commu-

nity-wide or basin-wide studies, LMMP efforts generally are limited to analysis of a single stream or reach of stream.

(2) The Community Assistance Program assists local officials in the administration of the NFIP for their community. Program tasks include such activities as surveying elevation reference marks, performing community assessment visits, and conducting flood proofing workshops.

b. On a less frequent basis, special investigations are conducted. These investigations, which draw upon the Corps expertise in water resources planning and engineering, generally involve development or review of complex methodology, and are handled in a similar fashion as FIS efforts.

G-24. Management.

a. HQUSACE Role. The FPMS Program and related activities are managed in HQUSACE by CECW-I.

b. Division Commander. The Division Commander will provide guidance on the FPMS Program and related activities to their respective districts, monitor work, and initiate actions necessary to ensure proper implementation, coordination, and conduct of the Program. In addition, Division FPMS Program managers shall review and approve District's T&C estimates for Special Studies, collect and analyze Program data, provide consultation on Flood Plain Management methodology, and participate on FPMS Program related committees and task forces.

c. District Commander. The District Commander shall ensure appropriate organization and staffing to maintain contact with requesting agencies, and for timely, accurate and coordinated responses to requests for FPMS and for NFIP support. Multi-disciplinary expertise within the District shall be used.

G-25. FPMS Program Guidelines. As authorized by section 321 of the Water Resources Development Act of 1990 (PL 101-640), Technical Services and Planning Guidance are (1) provided to states and local governments without charge, and (2) offered to Federal agencies and private persons on a cost recovery basis.

a. Full Federal Cost. Within personnel and funding capabilities, requests for General Technical Services and Special Studies shall be honored from state, regional, or local governments or other non-Federal public agencies and from Indian tribes without charge. However, the requesting entity may provide voluntary contributions for the purpose of

expanding the scope of the requested services, as follows:

(1) The services or assistance must fall within the scope of the FPMS Program.

(2) A "Letter Agreement" similar to the agreements used for FPMS cost-recovery procedures must be executed with the requesting entity. Other types of agreement may be substituted for the "Letter Agreement" if both parties concur.

(3) Funds received as voluntary contributions must be handled in a similar fashion as those collected for FPMS cost-recovery purposes.

(4) Approval authority for the expanded services and the "Letter Agreement" is delegated to the MSC and may be further delegated to the District.

b. **Cost Recovery.** Requests for General Technical Services and Special Studies from Federal agencies and private persons shall be honored on a cost recovery basis within personnel capabilities.

(1) For cost recovery purposes, the term "private persons" is interpreted to mean all entities in the private sector, including but not limited to individuals, private institutions, sole proprietorships, partnerships, and corporations.

(2) Generally, services shall be provided on a first-come, first-served basis either after payment has been received or after arrangements have been made for reimbursement.

(a) Services shall be provided to private persons only after payment has been received.

(b) Services may be provided to Federal agencies on either a pay first or reimbursable basis.

c. Quick Responses. Certain limited requests for services from Federal agencies and private persons may be honored without charge. Services provided to Federal agencies and private persons without charge shall be limited to "Quick Responses" to walk-in or telephone requests, each of which require only ten minutes or less of work by one person to provide. They may include providing general information; on-hand data, materials, and publications; and brief explanations and/or advice on FPM measures, NFIP standards, and EO 11988 requirements. They normally will not include obtaining, developing, or interpreting flood or flood plain data.

d. Program related information and/or available, existing data may be exchanged between the Corps and Federal agencies or Private Persons without charge when it is mutually beneficial

to the parties involved. Note that this is an exchange rather than a provision of services.

e. Services shall be provided only upon request, and generally to entities outside the Corps. Requests for services from within the Corps shall normally be paid from applicable project or study funds rather than FPMS funds. Written requests shall normally be required for responses that take one person more than one day to provide. Generally, responses shall be by letter or by short report.

f. Requests for services that are available under other programs shall be directed to the appropriate source for assistance.

g. Requesters will be encouraged to become involved in FPM activities and to help reduce costs by furnishing field survey data, maps, and historical flood information.

h. Available data shall be used whenever practical. Utilization of data from all sources is encouraged, including hydrologic and hydraulic information developed by not only different elements within the Corps but also other agencies. When non-Corps data are used, the source of the data shall be acknowledged.

i. In establishing priorities for providing services, special consideration shall be given to areas where development pressures are the most significant and where the information is most likely to be used to solve flood related problems.

j. Services normally shall not involve extensive and detailed mapping.

k. Large area, long reach delineation, and floodway studies normally shall be confined to the study of non-Federal public lands, Indian tribal lands, or to areas of counties not mapped in detail under the NFIP. On request, reanalysis of floodways previously studied by the Corps shall be made if local conditions warrant.

l. In cases where assistance on flood warning and preparedness (including flood emergency evacuation) planning may require extensive involvement in plan preparation, the requester shall be informed at the outset that Corps efforts are intended only to support preparation of the plan, and that the plan and its implementation are the responsibility of the requester. Efforts shall be closely coordinated with the National Weather Service.

m. Services relating to flood control works and other flood damage mitigation measures, shall be limited as follows:

(1) Work shall not duplicate efforts which should or are being accomplished under other

Corps authorizations.

(2) Detailed planning and design shall not be done.

(3) Work shall assess the likelihood of success and the identification of pros and cons of measures being considered, but shall not include detailed economic analysis.

n. In cases where the request for services may require a reconnaissance study or could result in a Federal project, the requester shall be advised that services will be terminated if either proves to be the case.

G-26. Program Guidelines for Support to the NFIP.

a. Unless otherwise directed by HQUSACE (CECW-I), reimbursable work in support of the NFIP shall be undertaken at the discretion of the field office performing the work.

b. At the request of FEMA, the field office shall prepare a Time and Cost (T&C) estimate only if there is an interest and capability to do the work. Once a T&C estimate is submitted to FEMA, the Corps has an obligation to perform according to the estimate. In deciding interest, special consideration should be given to locations where Corps studies are current or where studies are expected to be undertaken.

c. FIS and LMMP activities shall be performed based on the requirements described in FEMA's "Statement of Work" and "Guidelines and Specifications for Study Contractors," and the Corps "Instructions for Flood Insurance Studies." Community Assistance Program activities shall be accomplished using the guidance described in FEMA's "Community Assistance Program Manual". These documents are furnished to Division and District offices by HQUSACE (CECW-I). They are periodically reviewed and updated as Program requirements change. Program or study managers shall ensure that the latest guidance is followed during the execution of work.

d. Scopes of work. Scopes of work, time and cost estimates, completed studies, and other pertinent documents are normally coordinated by the performing districts with the requesting FEMA Regional offices. The respective Division offices have the option of conducting a final review and approval of these documents prior to their submission to FEMA.

e. When activities in support of the NFIP involve the study of areas where the Corps has ongoing or completed flood control studies, the appropriate (existing or proposed) levee, channel, and/or other capacities used in the flood control study should also be used in the technical analyses for FEMA.

f. Where the Corps has ongoing flood control studies or projects which could impact on existing NFIP flood maps, coordination is required with FEMA and with the local sponsor.

G-27. Funding.

a. Appropriations for Non-reimbursable FPMS Items. Funding for non-reimbursable FPMS items involves the justification of funds through the budgetary process, the establishment of work allowances for specific items, and the use of funds during the fiscal year.

(1) Divisions review and consolidate districts FPMS requirements and submit them to HQUSACE for review and incorporation as a line item under "Collection and Study of Basic Data" in the overall General Investigations (GI) Program.

(2) After appropriations have been made, Division commanders shall furnish to HQUSACE (CECW-I) a breakdown of FPMS funding requirements by item for each District.

(3) The FPMS item names and related Project Work Item (PWI) numbers to be used in the breakdown for work allowances are assigned below and shall be used by each District and Division.

<u>PWI Number</u>	<u>Item Name</u>	<u>Description</u>
082025	NFPC	Lump-sum amount to fund travel and other activities of the Corps National Flood Proofing Committee members.
082030	FPMS Unit	Lump-sum amount to fund liaison and administrative support by District staff.
082040	Technical Services	Lump-sum amount to fund the provision of general technical services to state and local governments by District staff including general information, hazard reports on spot locations, and general FPM planning guidance.
082045	Quick Responses	Lump-sum amount to fund limited services to Federal agencies and private persons that take

one person ten minutes or less to provide.

To be assigned by HQUSACE (CECW-I)	SS-(study name or name of significant work)	Individual amounts to fund significant work or special studies for state and local governments by district staff. Includes floodways, reach delineations, hurricane evacuation and flood warning and preparedness studies, and other significant or unique services.
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(4) Program Management. To ensure the most effective and economical application of available funds, division and district commanders are permitted to reallocate FPMS funds within limits during the fiscal year as set forth in Appendix A, [ER 11-2-201](#). Generally, reallocations shall be accomplished through adjustments to work allowances. DD Form 448 (Military Interdepartmental Purchase Request) shall not be used for the internal reallocation of FPMS funds unless specifically authorized by HQUSACE (CECW-I).

b. Cost Recovery for Reimbursable FPMS. Three different procedures shall be used to recover the cost of Technical Services and Planning Guidance provided to Federal agencies and private persons. Two involve the use of negotiated agreements and one involves the use of a non-negotiated "Fee Schedule".

(1) The five levels of fees contained in the following "Fee Schedule" will be used by each District to charge for general information taking more than ten minutes and for site specific technical assistance and advice taking up to one day to provide.

Table G-6. "Fee Schedule" of Standard Corps-wide Charges

<u>Level</u>	<u>Description of Work</u>	<u>Fee</u>
1	Basic information from readily available data that does not require technical evaluation or documentation and is transmitted by form letter.	\$25
2	Information from readily available data that requires minimal technical evaluation which is transmitted by form letter.	\$55
3	Information that requires some file search, brief technical evaluation, and documentation of results by a form letter or by a brief composed letter.	\$105
4	Information and assistance that requires moderate file search, brief technical evaluation, and documentation of results in a composed letter.	\$125
5	Information and assistance that require significant file search or retrieval of archived data, moderate technical evaluation, and documentation of results in a brief letter report.	\$325

(2) Two types of negotiated agreements ("Letter Requests" and signed agreements) will be used to recover the cost of responses that take more than a day to provide.

(a) A "Letter Request" will be negotiated to recover the cost of each response taking more than a day and generally up to one week to provide. However, if requested by the customer, the "Letter Request" may cover work taking more than a week. This will involve providing a description of work and a time and cost estimate to the customer who, in turn, will be required to send in a letter requesting the work and providing payment in full before the work is started.

(b) Signed agreements generally will be used to recover the cost of responses taking more than a week, but may also be used for responses taking less than a week if requested by the customer. The agreements will be in the form of a "Letter of Agreement" with a private person

and either an "Interagency Agreement" or "Memorandum of Agreement" with a Federal agency. They will involve negotiating the time and cost estimate and developing a statement describing the work to be done, setting a completion date, and stipulating how payment will be made (either in advance or by reimbursement). Each agreement will be signed (1) by the FPMS Program manager or other appropriate staff designated by the Commander of the office performing the work and (2) by the requesting party.

(3) To facilitate maximum cost recovery, the office doing the work will charge in accord with its specific cost requirements. Approximately 100% of the total costs of doing business will be recovered, including direct costs, benefits, technical indirect costs, and administrative overhead.

(4) As requests are received, the staff of the office performing the work will determine the appropriate procedure for recovering costs. Payments shall be received prior to the provision of services to private persons and either prior to or after the provision of services to Federal agencies. Funds should be handled in accordance with appropriate procedures.

c. Reimbursements for Support to the NFIP. Funding for reimbursable activities in support of the NFIP is accomplished under the general authority of annual interagency agreements with FEMA.

(1) Specific funds and the schedule for each FIS are documented in Project Orders to each Agreement which are executed at the HQUSACE level with FEMA. Letters authorizing the work and establishing the funding arrangements are prepared by HQUSACE (CECW-I) and transmitted to the appropriate Division.

(2) Funds for each Division or District's level of effort under the LMMP and Community Assistance Program are allocated by Project Orders to the respective Agreements which are executed at the HQUSACE level with FEMA. Letters establishing lump-sum funding are prepared by HQUSACE (CECW-I) and transmitted to the appropriate Division. Specific costs and schedules for individual tasks under these programs are negotiated between the FEMA regional office and the responding Corps Division or District. Tasks are authorized by letters from the FEMA Regional office to the Corps office doing the work.

G-28. Recording and Reporting Requirements.

a. For the FPMS Program. Each District shall furnish, for information, one copy of all bound and covered FPMS reports through the appropriate Division office to HQUSACE (CECW-I) within one week of completion/publication of the report.

b. For NFIP Support.

(1) Quarterly status reports are required for each FIS underway, and quarterly Check Point Summary reports are required from each District having FIS underway. Reports Control Symbol, RCS CECW-P-14 has been established for this reporting requirement. Details for preparing the reports are in the Corps "Instructions for Flood Insurance Studies." The reports shall be forwarded to reach HQUSACE (CECW-I), with a copy to the appropriate Division, as follows:

<u>Period</u>	<u>Due Date</u>
October-December	10 January
January-March	10 April
April-June	10 July
July-September	10 October

(2) FEMA has developed a web-based reporting system, "Monitoring Information on Contracted Studies" (MICS) for documenting progress throughout the flood mapping life cycle. The MICS system is being phased in at this time. The MICS system will include upward reporting capability eliminating the need for the quarterly reports specified in paragraph G-27b(1). Each District having FIS underway should contact the appropriate FEMA Regional Office to request permission to access the MICS system.

G-29. Coordination.

a. Coordination with states shall be in accord with the assignments in Exhibit G-12. Coordination with regional and local governments, other non-Federal public agencies, and Indian tribes, shall be in accord with District and Division boundaries.

b. To ensure proper state coordination, the Division Commander shall designate a lead District to be responsible for coordinating with the assigned states and to cooperate with other districts for the provision of requested services. If appropriate and agreeable to all involved parties, the lead District may serve as the single point-of-contact with the assigned state, provided that each District having jurisdiction within the state is properly represented and is involved, as warranted, in the provision of services.

c. Coordination with state and local governments for the provision of FPMS shall be accomplished at least once a year and well in advance of budget submissions to ensure that their needs and priorities receive appropriate consideration in the budgetary process.

d. NFIP Support. NFIP support activities shall be coordinated with FEMA, other Federal agencies, and state and local officials as required by FEMA's "Statement of Work" and "Guidelines and Specifications for Study Contractors," and the Corps "Instructions for Flood Insurance Studies."

G- 30. Publications.

a. Dissemination. Each District shall disseminate or make available to Federal, state, area-wide, and local planning agencies, libraries, universities, clearing houses, and others as appropriate, copies of all FPMS publications including guides, pamphlets, supporting studies, and reports as well as non-Corps publications furnished by HQUSACE (CECW-I) for dissemination.

b. Information Copy. Each District shall furnish, for information, one copy of all bound and covered FPMS reports through the appropriate Division office to HQUSACE (CECW-I) and one copy to CEHEC-IM-LP within one week after completion/publication of the report.

Exhibit G- 12. Division Assignments

CENAD -	<i>Connecticut Delaware District of Columbia Maine Maryland Massachusetts New Hampshire New Jersey New York Pennsylvania* Rhode Island Vermont Virginia</i>	CENWD -	<i>Idaho Kansas Missouri Montana Nebraska Oregon South Dakota Washington Wyoming</i>
CESAD -	<i>Alabama Florida Georgia North Carolina Puerto Rico South Carolina U.S. Virgin Islands</i>	CESWD -	<i>Arkansas Oklahoma Texas</i>
CELRD -	<i>Indiana Kentucky Michigan Ohio Tennessee West Virginia</i>	CESPD -	<i>Arizona California Colorado New Mexico Nevada Utah</i>
CEMVD -	<i>Illinois* Iowa Louisiana Minnesota* Mississippi* North Dakota Wisconsin*</i>	CEPOD -	<i>Alaska American Samoa Guam Hawaii Commonwealth of Northern Mariana Islands Trust Territory Pacific Islands (Palau only)</i>

* The following states are hereby reassigned for coordination and management when planning assistance is provided in support of the Coastal Zone Management (CZM) Act: Illinois, Minnesota, Wisconsin, and Pennsylvania to CELRD Mississippi to CESAD.

SECTION VI - Planning Assistance to States

G-31. Definitions.

a. Planning Assistance to States. The Planning Assistance to States (PAS) Program is also known as Section 22 Program.

b. Sponsor. Any non-Federal public body that agrees to cooperate with the Corps of Engineers on a planning study identified in the State Water Plan.

c. Drainage Basins. For the purposes of this Section, the term Drainage Basins includes coastal zones and lake shores, as well as riverine drainage areas or any portion thereof located within the boundaries of a state.

d. Planning Assistance. Any effort or service (rather than a grant) pertaining to the planning for water and related resources of a drainage basin or larger region of a state, for which the Corps of Engineers has expertise. The planning process can extend through the functional design process and the preparation of generic structural designs. However, in no case will the term planning assistance extend to the preparation of site-specific structural designs or construction specifications.

e. Lead Division. A Division assigned the primary responsibility for coordinating efforts, approving work requests and cost sharing agreements, and preparing budget data for a given state. Lead Division assignments are given in Exhibit G-11.

f. Coordinating District. A District with responsibility delegated from the Lead Division for detailed coordination with the single point-of-contact in a state government.

g. Performing District. A District that negotiates and executes an agreement with a local sponsor for a work request agreed to by the state single point-of-contact and the Coordinating District.

G-32. Guidelines for Corps Assistance.

a. Types of Agreements. Agreements for studies costing \$100,000 or less should be kept as simple as possible, using less formal "Letters of Agreement." More complicated studies and studies costing in excess of \$100,000 may have to use a more formal "Cost Sharing Agreement." In either case, every effort should be made to keep the negotiation and execution of agreements as simple as possible to conserve the limited Program funds.

b. Approval of Agreements. Once an Agreement has been negotiated, it should be

submitted to the PAS Program Manager in the Lead Division for approval. It is the Lead Division Program Manager's responsibility to ensure that the work requested meets the eligibility requirements and that the terms of the agreement comply with the provisions of this regulation.

c. General Guidance.

(1) Work items should be at least regional and comprehensive in scope or be a part of a regional, comprehensive study or effort being performed by the state.

(2) Planning assistance within one state may not be extended to areas of another state unless all of the involved states agree.

(3) The PAS Program will not be used to supplement efforts under other ongoing or pending Corps programs, such as feasibility studies.

(4) If a study under this Program identifies a potential construction project with Federal interest, the study should be immediately transferred to the appropriate GI study program, unless the state intends to pursue the project solely as a state project.

(5) Planning assistance may be funded under this program and provided to assist states in support of the Coastal Zone Management Act or in flood plain management activities when the primary purpose of the assistance is to supplement basin-wide or regional state planning for the coastal zone or flood plains.

(6) Planning assistance may include, among other activities, review and update of information previously developed by authorized studies that are not currently funded, provided that the assistance is required for preparation of the state water plan.

(7) Planning assistance may include the collection of new data, but only as an integral part of conducting a legitimate planning study. This should not be interpreted as authorizing the use of the PAS Program to conduct large data collection programs.

(8) Planning assistance may not be used to offset any required State contributions to Federal grants programs. Likewise, sponsors may not use any Federal grant funds as their share of a cost sharing agreement, except where the legislation authorizing the Federal grant program allows such use.

(9) Although the primary purpose of the PAS Program is to make Corps expertise available to the states, work may be contracted out under the following conditions: (a) when a

particular task is normally contracted out by the District for cost-effectiveness reasons, or (b) when a District has lost capability in order to respond to an emergency situation and contracting is necessary to meet the agreed-to schedule, or (c) when contracting out is necessary to meet predetermined District contracting goals.

(10) Because the PAS Program was established to provide Corps planning expertise to states, in-kind services will not be accepted for any portion of the sponsor's share of a cost sharing agreement.

(11) Because some work items may require several years effort or because limited funding may force work to be divided among two or more fiscal years, Performing districts and sponsors may write multi-year/multi-phase agreements. However, each phase should be accomplished within one year of the date the agreement for that phase was signed.

G-33. Program Coordination and Budget Development.

a. Budget Guidance. In March of each year, HQUSACE issues budget guidance to divisions and districts for the upcoming Budget Year (BY). Included in that guidance is a revised breakdown of funds for each Division for BY-1 and an initial breakdown for BY.

b. Invitation for Work Requests. In April of each year, Coordinating districts issue an invitation for work requests to state single points-of-contact for final priorities for BY-1, for specific requests for BY, and an initial estimate of potential work in BY+1.

c. Provide the Requested Budget Information. In May of each year, state single points-of-contact provide the requested budget information and an evaluation of work completed in BY-3.

d. Evaluations. In June of each year, Coordinating districts provide copies of work requests and prior year's evaluations from the states and the annual budget submittal for each state to the Lead Division. The budget submittal includes:

- (1) historical summary of work for BY-3,
- (2) summary of ongoing work in BY-2,
- (3) final priority listing of work requests for BY-1,
- (4) the budget request for BY, and

(5) an initial estimate of work likely in BY+1.

e. Budget Submittals. In July of each year, Lead divisions provide copies of the Coordinating District's budget submittals for each state and a prioritization of work within the Division's states for BY-1 and BY to HQUSACE (CECW-PB).

f. Budget Justification Sheets. HQUSACE (CECW-PB) uses the information submitted to prepare Budget Justification Sheets for OMB and Congress, and input for budget testimony of the Director of Civil Works. The PAS Program is included as a separate line item in the line item entitled "Cooperation with Other Federal Agencies, States, and Non-Federal Interests" under the General Investigations Appropriation.

G-34. Budget Execution and Program Accomplishment.

a. After appropriations have been made, Division coordinators shall furnish to HQUSACE (CECW-PB) a prioritized breakdown of PAS funding requirements by item for each District. .

b. Negotiating Agreements. Throughout the fiscal year, the Performing districts negotiate agreements for the current year and the upcoming fiscal year. As agreements are finalized, they are forwarded through the Coordinating District to the PAS Program Manager in the Lead Division.

c. CEFMS Work Item Numbers. CEFMS Work Item numbers (PWI numbers) are assigned by HQUSACE (CECW-PB) for each study when funds are allotted.

d. Monitor Progress. The PAS Program Manager in the Lead Division continues to monitor progress on each agreement and report any problems, excess funds, or need for additional funds, to HQUSACE as necessary.

SECTION VII - Other Planning Assistance

G-35. Purpose and Scope. This section provides information on various authorities by which the Corps may provide planning assistance to Federal agencies, states, Indian tribes and local units of government.

G-36. Authorities.

- Section 219, Flood Control Act of 1965, Public Law 89-298 - See paragraph G-37 for a description of this authority.
- Title III, Intergovernmental Cooperation Act of 1968, Public Law 90-577 – See paragraph G-37 for a description of this authority.
- Technical and Engineering Assistance on Shore and Streambank Erosion, Section 55, Water Resources Development Act of 1974, Public Law 93-251 – See paragraph G-39 for a description of this authority.
- Water Resources Management Planning Service for the Hudson River Basin, Section 49; and Technical Resource Service, Red River Basin, Minnesota and North Dakota, Section 50, Water Resource Development Act of 1988, Public Law 100-676 – See paragraph G-40 for a description of this authority.

G-37. General Reimbursable Work. The intent of the legislation authorizing reimbursable work for others is threefold: to encourage intra- and intergovernmental cooperation and coordination in the conduct of specialized or technical service; to avoid overlapping or duplication of special service functions among Federal agencies, states and local governments; and to make available specialized or technical services in areas of agency expertise. Planning assistance may be provided on a reimbursable basis for Federal agencies and for states and local units of government as set forth in [ER 1140-1-211](#).

G-38. Coastal Zone Management. The Coastal Zone Management Act establishes a national policy to preserve, protect, develop, and where possible, restore or enhance the resources of the U.S. coastal zone. It requires Federal agencies to cooperate and actively participate with states and local governments and regional agencies towards achieving integrated policy and action proposals for managing the coastal zone. Planning assistance may be provided to assist states in coastal management activities in several ways.

a. Available Data. Available data or other information collected in the course of ongoing research, surveys, or studies or regulatory activities should be furnished without cost to the state.

b. Special Data. Special data, information, or studies requested by the state which require significant additional effort in collection, compilation, interpretation, or analysis, including specific research projects, should be furnished by the Corps on a fully reimbursable basis. The state should be informed that requested data or studies will require reimbursement.

c. Special Coastal Zone Related Studies. Special coastal zone related studies may be conducted under the authority provided by Section 22 of Public Law 93-251 (See "Planning Assistance to States", Section VI) when the primary purpose is to complement comprehensive State planning for effective management of its coastal zone.

G-39. Technical and Engineering Assistance on Shore and Streambank Erosion. The purpose of this program is to provide technical and engineering assistance to non-Federal public interests in the development of structural and nonstructural methods for preventing damages attributable to shore and streambank erosion. For information on the provision of planning assistance under this program contact HQUSACE (CECW-CE).

G-40. River Basin Planning Assistance Programs. The Water Resources Development Act of 1988 established two separate planning assistance programs, Section 49 for the Hudson River Basin in New York and New Jersey, and Section 50 for the Red River of the North Basin, Minnesota and North Dakota. The purpose of these programs is to provide a full range of technical services for the development and implementation of state and local water and related land resources initiatives within those river basins within available funds.

G-41. Tribal Partnership Program.

a. Section 203 of WRDA 2000, Public Law 106-541, authorizes the Secretary of the Army, in cooperation with Indian tribes and the heads of other Federal agencies, to study and determine the feasibility of carrying out projects that will substantially benefit Indian tribes. The projects would be undertaken at sites primarily within Indian country, as defined in 18 U.S.C. 1151, or in proximity to Alaska Native villages. Section 203, titled the Tribal Partnership Program (TPP), also establishes cost sharing provisions, defines cooperation and consultation requirements, and authorizes appropriations.

b. Matters to be Studied. The statutory language for the TPP defines the matters to be studied to include flood damage reduction, environmental restoration and protection,

preservation of natural and cultural resources, and, “such other projects as the Secretary, in cooperation with Indian tribes and the heads of other Federal agencies, determines to be appropriate.” The TPP provides an opportunity to assist with water resources projects that address economic, environmental and cultural resources needs.

c. Federal funds may be used to prepare a reconnaissance study in accordance with guidance above. If it is determined that the outputs are not consistent with Army/Corps implementation and budgetary policy, no further studies should be undertaken and a recommendation as to an appropriate course of action should be made to the tribal interests. If it is determined that the outputs are consistent with Army/Corps implementation and budgetary policy, a cost sharing partner must be identified, the scope of the feasibility study would be defined and a Feasibility Cost Sharing Agreement (FCSA) would be negotiated.

d. Section 203 feasibility studies will be cost shared 50/50 and all the sponsor’s share may be provided as in-kind services. The use of other Federal agency funds for the non-Federal share of the feasibility study costs shall be guided by Article II.F. of the model FCSA, which requires approval of the use of those funds by the contributing agency.

e. Section 203 states that any cost sharing agreement for a study under this provision shall be subject to the ability of the non-Federal entity to pay. A draft Ability to Pay rule is currently being developed for coordination with the Office of the Assistant Secretary of the Army (Civil Works) and the Office of Management and Budget. When finalized, this rule will apply to section 203 studies. Until such time as the rule is final, reductions under the section 203 Ability to Pay provision cannot be applied.

f. In accordance with Section 203 (c), all activities undertaken under this authority must be coordinated with the Department of the Interior (DOI) to avoid conflicts and to consider the authorities and programs of DOI as well as other Federal agencies.

SECTION VIII - Flood Mitigation and Riverine Restoration

G-42. Authority. Section 212 of the WRDA of 1999 provides authority for the Secretary of the Army to implement projects that reduce flood hazards and restore the natural function and values of rivers and that meet other specific criteria without seeking individual authorization for each project. The U.S. Army Corps of Engineers sought this authority and referred to the proposal as Challenge 21. The Corps does not currently have appropriations to implement this program. However, the Corps is conducting studies using other authorities and may seek authorization for projects that meet the goals of this program.

G-43. Types of Improvements. As authorized the Flood Mitigation and Riverine Restoration program emphasizes the use of nonstructural approaches to preventing or reducing flood damages and coordination with FEMA and other Federal, State, and local agencies, and Native American (Indian) Nations. Projects carried out under this authority may have structural elements. In accordance with subparagraph (d) of Section 219 of the WRDA of 1999, projects must significantly reduce potential flood damages, improve the quality of the environment and be justified considering all costs and beneficial outputs.

G-44. Cost Sharing Requirements. Each project will require a non-Federal sponsor willing to provide 50 percent of the cost of a study and a minimum of 35 percent of the cost of implementation. The non-Federal interest will provide all land, easements, rights-of-way, dredged material disposal areas, and relocations necessary for the project, the value of which will be credited toward the non-Federal sponsor's share of the project cost. The non-Federal sponsor will also be responsible for all costs associated with the operation and maintenance of the project.

G-45. Funding Limits. Federal spending on an individual project is limited to \$30,000,000. The House and Senate Committees must be notified of each project proposed for implementation and must approve by resolution any project for which the Federal cost for construction exceeds \$15,000,000. Appropriation authority is limited to \$20,000,000 for FY 2001, \$30,000,000 for 2002, and \$50,000,000 for FYs 2003-2005. All projects must be fully funded within these limits.

This amendment was approved by William R. Dawson, CECW-P, (202)761-0115.