LOWER ALAMEDA CREEK
FISH PASSAGE IMPROVEMENTS
ALAMEDA COUNTY, CA

DPR PHASE
PROJECT MANAGEMENT PLAN

San Francisco District
South Pacific Division

Date:
As members of the San Francisco District Project Review Board, we the undersigned, concur in the project management plan, dated January 2003, for the Lower Alameda Creek Fish Passage Improvements. We understand that the project management plan is a living management document that will be updated throughout the course of the study.

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As members of the San Francisco District Project Review Board, we the undersigned, concur in the Project Management Plan dated January 2003, for the Lower Alameda Creek Fish Passage Improvement Section 1135 Aquatic Ecosystem Restoration Study, Alameda County, California. We understand that the Project Management plan is a living management document that will be updated throughout the course of the study.

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CHAPTER I
PURPOSE AND SCOPE

1. DEFINITION OF A PROJECT MANAGEMENT PLAN:

a. The project management plan for the Detailed Project Report (DPR), herein after referred to as the PMP, defines the planning approach, activities to be accomplished, schedule, and associated costs that the Federal Government and the local sponsor(s) will be supporting financially. The PMP therefore defines a contract between the Corps and the local Sponsor(s), and reflects a "buy in" on the part of the financial backers, as well as those who will be performing, and reviewing, the activities involved in the DPR study. The PMP describes the initial tasks of the DPR phase, continues through the preparation of the final DPR, the project management plan for project implementation and design agreement, and concludes with support during the Washington-level review of the final DPR.

b. The PMP is a basis for change. Because planning is an iterative process without a predetermined outcome, more or less costs and time may be required to accomplish reformulation and evaluations of the alternatives. Changes in scope will occur as the technical picture unfolds. With clear descriptions of the scopes and assumptions outlined in the PMP, deviations are easier to identify. The impact in either time or money is easily assessed and decisions can be made on how to proceed. The PMP provides a basis for change.

c. The PMP is a basis for the review and evaluation of the DPR. Since the PMP represents a contract among study participants, it will be used as the basis to determine if the draft DPR has been developed in accordance with established procedures and previous agreements. The PMP reflects mutual agreements of the district, division, sponsor and HQUSACE into the scope, critical assumptions, methodologies, and level of detail for the studies that are to be conducted during the DPR study. Review of the draft report will be to ensure that the study has been developed consistent with these agreements. The objective is to provide early assurance that the project is developed in a way that can be supported by higher headquarters.

d. The PMP is a management tool. It includes scopes of work that are used for funds allocation by the project manager. It forms the basis for identifying commitments to the non-Federal sponsor and serves as a basis for performance measurement.

2. SUMMARY OF PROJECT MANAGEMENT PLAN CONTENTS:

This PMP is comprised of the following chapters:

- Chapter 1 - Purpose and Scope. This chapter includes the definition of the PMP and a summary of the PMP requirements.
- Chapter 2 - Identification of Procedures and Criteria: This chapter identifies references to the regulations and other guidance that covers the planning process and reporting procedures.
- Chapter 3 - Preliminary Restoration Plan (PRP) Summary. This chapter summarizes the approved PRP and includes an overview of the PRP study findings, the plan formulation rationale and proposed streamlining initiatives. Includes reference to provisional approval of the PRP.
- Chapter 4 - Work Breakdown Structure, Study Schedule, and Cost Estimate. A product based Work Breakdown Structure (WBS) defines the tasks that will be accomplished through the study, task durations, and cost estimate. The Study Schedule is also included in this chapter.
• Chapter 5 - Scopes of Work. A detailed scope of the tasks and activities that describe the work to be accomplished, in narrative form, that answers the questions: "what, how, and how much".

• Chapter 6 - Quality Control Plan: This chapter supplements the district’s Quality Management Plan. It highlights any deviations to the district’s plan and lists the members of the study team and the independent review team.

• Chapter 7 – Risk and Change Management Plans: This chapter discusses the procedure by which project risks will be assessed and how changes to the project will be implemented.

• Chapter 8 – Public Communication Plan: This chapter outlines the procedure with which the Project Delivery Team will create a Public Communication Plan.
CHAPTER II
IDENTIFICATION OF PROCEDURES AND CRITERIA

1. EVOLUTION OF THE PMP

The PMP describes all activities from the initial tasks of the DPR phase through the preparation of the final DPR, the project management plan for project implementation and design agreement, and concludes with the district's support during the Division-level review. As the PMP is based primarily on existing information, it will be subject to scope changes as the technical picture unfolds. While this PMP includes tasks through the completion of the DPR study, the level of detail in the scopes of work are greater for those tasks that occur prior to the first milestone conference. This plan will be reviewed at the first milestone conference and additional detail will be added to the scopes of work for the subsequent tasks. During the DPR phase of the study, the current PMP, including the documentation of agreements on changes to the conduct of the study, will be addressed at each of the CESPD milestone conferences and at the formal issue resolution conferences with Division, including the Alternative Review Conference.

2. THE PLANNING PROCESS

The Water Resource Council's Principles and Guidelines (P&G) is the basic planning guidance, which establishes a six-step planning process. This process is a conceptual planning sequence for developing solutions to water resource problems and opportunities. The Planning Manual and Planning Primer, both published by IWR, provide excellent coverage of the planning process. The South Pacific Division also provides training in the six-step process.

3. POLICY

The policies that govern the development of projects are contained in the DIGEST OF WATER RESOURCES POLICIES AND AUTHORITIES, EP 1165-2-1.

4. CORPS REGULATIONS

All of the Corps’s current regulations are included on the HQUSACE homepage. The most important of these regulations is ER 1105-2-100, PLANNING GUIDANCE NOTEBOOK. Policy compliance review is addressed in EC 1165-2-203, TECHNICAL AND POLICY COMPLIANCE REVIEW. Quality control is covered in the CESPD Quality Management Plan, CESPD R 1110-1-8. The review of the DPR products will be accomplished with the review checklist that is provided in EC 1165-2-203 as Appendix B, POLICY COMPLIANCE REVIEW CONSIDERATIONS.

6. PROCESSING REQUIREMENTS

In addition to ER 1105-2-100, the South Pacific Division has provided additional guidance on the processing requirements for each of the milestone submittals. This guidance is contained in CESPD-ET-P memorandum, dated 30 March 2000, subject: Processing of Planning Reports in the South Pacific Division.
CHAPTER III
LOWER ALAMEDA CREEK FISH PASSAGE IMPROVEMENTS
PRELIMINARY RESTORATION PLAN (PRP) SUMMARY

1. STUDY AUTHORITY

The Preliminary Restoration Plan (PRP) was prepared as an initial response to the Water Resources Development Act of 1986, Section 1135, as amended, which reads as follows:

“(a) The Secretary is authorized to review the operation of water resources projects constructed by the Secretary before the date of enactment of this Act to determine the need for modifications in the structures and operations of such projects for the purpose of improving the quality of the environment in the public interest…”

Continuing Authorities Program (CAP):
Section 1135 of the 1986 WRDA is one of the nine legislative authorities under which the Corps of Engineers is authorized to plan, design, and construct certain types of water resource and ecosystem restoration projects that are of limited scope and complexity, without additional and specific Congressional authorization. These authorities are called the Continuing Authorities Program when referred to as a group.

2. STUDY PURPOSE

The objective or purpose of ecosystem restoration authorities is to restore degraded ecosystem structure, function, and dynamic processes to a less degraded, more natural condition. This involves consideration of the ecosystem’s natural integrity, productivity, stability, and biological diversity.

Work conducted during the PRP phase of this project has revealed that the existing Flood Control Project in the study area has contributed to the degradation of the quality of the environment. The DPR study will evaluate and recommend restoration measures that may be implemented at the project site that do not conflict with the congressionally authorized Flood Control Project purpose.

The main restoration objective for this study is to reduce barriers to migration for steelhead trout, a federally listed threatened species, in Alameda Creek (Alameda County, California).

3. LOCATION OF STUDY, NON-FEDERAL SPONSOR AND CONGRESSIONAL DISTRICTS

   a. The study area is a part of the Alameda Creek watershed, located primarily in Alameda and Santa Clara Counties, California. A small part of the watershed extends into Contra Costa County. The Alameda Creek watershed covers almost 700 square miles in these counties, and is the second-largest watershed draining into San Francisco Bay, after the Sacramento-San Joaquin watershed. The watershed of Alameda Creek can be divided into inland and coastal portions, which are connected by Niles Canyon. The study area for this project modification is the portion of the Alameda Creek watershed downstream from major permanent fish barriers such as large dams.

   b. The non-Federal sponsor for the DPR phase of the study is The Alameda Creek Flood Control and Water Conservation District (ACFCWCD).

   c. The study area lies within the jurisdiction of the following Congressional District:

      1) Congressional District #13 (Representative Pete Stark).
4. PRIOR REPORTS AND EXISTING PROJECTS

a. The following reports were being reviewed as a part of this study:

1) *An Assessment of the Potential for Restoring a Viable Steelhead Trout Population in the Alameda Creek Watershed*, by Andrew J. Gunther, Jeffrey Hagar, and Paul Salop for Applied Marine Sciences, Inc. was released in February 2000 and was funded in part by the California State Coastal Conservancy. This report, which summarized the findings of the Alameda Creek Fisheries Restoration Workgroup, determined that restoration of steelhead trout to Alameda Creek is feasible and described actions needed to achieve this result.

2) *Conceptual Fish Passage Designs & Cost Estimates for Lower Alameda Creek*, by Darryl Hayes for CH2M Hill, was completed in January 2001. This report is the basis for the preliminary project concept presented in the Preliminary Restoration Plan.

b. This study is investigating potential modifications of the following existing Corps project:

Alameda Creek Flood Control Project, located in the cities of Fremont, Hayward, and Union City, Alameda County, California. The U.S. Army Corps of Engineers, San Francisco District, and the Alameda County Flood Control and Water Conservation District (ACFCWCD) constructed this project between 1965 and 1975. It was constructed under authority of the Flood Control Act of 1962 (Public Law 87-874), for flood control purposes.

5. PLAN FORMULATION

During a study, six planning steps that are set forth in the Water Resource Council’s Principles and Guidelines are repeated to focus the planning effort and eventually to select and recommend a plan for authorization. The six planning steps are: 1) specify problems and opportunities, 2) inventory and forecast conditions, 3) formulate alternative plans, 4) evaluate effects of alternative plans, 5) compare alternative plans, and 6) select recommended plan. The iterations of the planning steps typically differ in the emphasis that is placed on each of the steps. In the early iterations, those conducted during the PRP phase, the step of specifying problems and opportunities is emphasized. That is not to say, however, that the other steps are ignored since the initial screening of preliminary plans that results from the other steps is very important to the scoping of the follow-on DPR phase studies. The sub-paragraphs that follow present the results of the initial iterations of the planning steps that were conducted during the PRP phase. This information will be refined in future iterations of the planning steps that will be accomplished during the DPR phase.

a. National Objectives

1) The national or Federal objective of water and related land resources planning is to contribute to National Economic Development (NED) consistent with protecting the nation’s environment, pursuant to national environmental statutes, applicable executive orders, and other Federal planning requirements. Contributions to NED are increases in the net value of the national output of goods and services, expressed in monetary units. Contributions to NED are the direct net benefits that accrue in the planning area and the rest of the nation.

2) The Corps has added a second national objective for Ecosystem Restoration in response to legislation and administration policy. This objective is to contribute to the nation’s ecosystems through ecosystem restoration, with contributions measured by changes in the amounts and values of habitat.

b. Problems and Opportunities: The evaluation of public concerns often reflects a range of needs, which are perceived by the public. This section describes these needs in the context of problems and opportunities that
can be addressed through water and related land resource management. For each problem and opportunity, the existing conditions and the expected future conditions are described, as follows:

Problems:

1) Steelhead trout are currently prevented from completing their life-history cycle within Alameda Creek due to the presence of an impassable migration barrier within the Alameda Creek Flood Control Channel (the Corps of Engineers “BART weir”), and are severely limited by several other impassible or partial migration barriers within the Channel. These barriers impede the upstream migration of adult steelhead. Without the project, these barriers would continue to prevent steelhead from migrating through the Channel.

2) Migration of juvenile steelhead (smolts) to the ocean may be limited by existing water project operations within the Corps Flood Control Channel. Smolts are unable to migrate downstream during years of low spring storm activity because they are not able to pass over barriers erected in the Channel. Furthermore, diversions at ACWD percolating ponds associated with the Corps channel currently do not have sufficient screens to prevent the entrainment of smolts. Without the project, barriers within the Channel would continue to prevent downstream migration of smolts, and water operation diversions would continue to represent an entrainment hazard for smolts.

Opportunity:

There is an opportunity to establish the Alameda Creek watershed as spawning and rearing habitat for Federally listed threatened steelhead trout. Suitable habitat has recently been judged (during the late 1990s) to exist within the Alameda Creek watershed to support steelhead. At the time the Alameda Creek Flood Control Project was constructed, the area was not considered suitable habitat, and therefore provisions for fish passage were not included in the design of the flood control measures. Without the project, a steelhead population would not be able to establish itself in the watershed because adults would be unable to migrate upstream through the Flood Control Channel.

d. Planning Objectives: The national objectives of National Economic Development and National Ecosystem Restoration are general statements and not specific enough for direct use in plan formulation. The water and related land resource problems and opportunities identified in this study are stated as specific planning objectives to provide focus for the formulation of alternatives. These planning objectives reflect the problems and opportunities and represent desired positive changes in the without project conditions. The planning objectives are specified as follows:

1) To provide upstream fish passage for in-migrating adults around the BART weir and other barrier structures associated with the Alameda Creek Flood Control Project.

2) To improve migratory habitat by protection of juvenile steelhead from entrainment in diversion structures associated with the Alameda Creek Flood Control Project.

e. Planning Constraints: Unlike planning objectives that represent desired positive changes, planning constraints represent restrictions that should not be violated. The planning constraints identified in this study are as follows:

1) Compliance with local land use plans:
   a. Modification to the existing Corps project must be consistent with its original authorization in that it cannot alter original flood control performance design.
   b. Wildlife resources must be protected, especially wetlands and endangered species.

2) Applicable Executive Orders, Statutes and Regulations:
   a. National Environmental Policy Act (NEPA) requires the analysis of environmental impacts of alternatives and a procedure allowing public comment.
   b. California Environmental Quality Act (CEQA) is a California law with requirements and goals similar to those set forth in NEPA.
c. Endangered Species Act (ESA) requires analysis of project impacts on listed species.

3) Modifications to structures in the Alameda Creek Flood Control Channel must not negatively impact the flood-control function of the original Corps project.

4) Modifications to structures in the flood control channel should minimize operational impacts to existing water supply operations.

f. Measures to Address Identified Planning Objectives. A management measure is a feature or activity at a site, which address one or more of the planning objectives. A wide variety of measures were considered, some of which were found to be infeasible due to technical, economic, or environmental constraints. Each measure was assessed and a determination made regarding whether it should be retained in the formulation of alternative plans. The descriptions and results of the evaluations of the measures considered in this study are presented below:

1) **Non-Structural**
   a. Adjustment of usage patterns of diversions at the percolating ponds and Alameda Creek Pipeline. Closing off the diversions during periods when smolts would be migrating downstream would prevent smolt entrainment into the percolating ponds and pipeline.
   b. Adjustment of usage patterns of Upper Inflatable Dam. Lowering the dam during periods when adults would be migrating upstream and smolts would be migrating downstream.

2) **Structural**
   a. Removal of the BART weir. This measure was discarded during the PRP phase because the weir plays an integral role in the flood control function of the channel. However, the California State Coastal Conservancy is currently funding a study to evaluate the feasibility of removing the weir and regrading the channel. If the study finds that this measure is feasible, it will be examined during the DPR phase.
   b. Fish ladder installation at BART weir/Middle Inflatable Dam (MID). The BART weir is an impassable structure, so a fish ladder would allow fish to surpass it. The MID was considered in the design of the ladder because of its proximity to the BART weir. A new fishway would allow fish to surpass the drop structure area and exit at the pool upstream of the Middle Inflatable Dam regardless of whether the dam is inflated or not.
   c. Fish ladder installation at Upper Inflatable Dam. The Upper Inflatable Dam is an impassable barrier to fish migration when it is inflated, but not when it is deflated.

3) Fish screen installation at diversions to percolator ponds and Alameda Creek Pipeline. Currently, the trash grates that block these diversion structures would probably be adequate to prevent the entrainment of adult steelhead migrating upstream, but downstream-migrating smolts would be entrained.

g. Preliminary Plans. Preliminary plans are comprised of one or more management measures. The PRP discussed the following plans, which will be among the array of plans evaluated during the DPR-level study. The Detailed Project Report (DPR) will discuss the following plans, among others:

1) **No Action.** The Corps is required to consider the option of “No Action” as one of the alternatives in order to comply with the requirements of the National Environmental Policy Act (NEPA). No Action assumes that no project would be implemented by the Federal Government or by local interests to achieve the planning objectives. No Action, which is synonymous with the Without Project Condition, forms the basis from which all other alternative plans are measured.
2) Two Fish Ladders and Four Fish Screens Alternative. Fish ladders would be installed at the BART Weir/Middle Inflatable Dam and at the Upper Inflatable Dam within the Alameda Creek Flood Control Channel. Fish screens would be installed at the following structures: Alameda Creek Pipeline, B Pond Diversion, Kaiser Pond Diversion, and Upper Shinn Pond Diversion.

3) One Fish Ladder and Four Fish Screens Alternative. This alternative would be identical to Plan #2, above, except that a fish ladder would not be installed at the Upper Inflatable Dam.

Future screening and reformulation of measures and alternatives will be based on the criteria of Effectiveness, Efficiency, Completeness and Acceptability.

6. FEDERAL INTEREST

Since aquatic ecosystem restoration is a goal with a high budget priority and restoring fish passage and improving habitat for endangered steelhead trout are the primary goals of the alternatives to be evaluated in the DPR phase, there is a strong Federal interest in conducting the DPR study. Based on the preliminary screening of alternatives, there appears to be potential project alternatives that would be consistent with Army policies, costs, benefits, and environmental impacts. The modifications made through this project would allow upstream passage of adult steelhead trout returning to Alameda Creek to spawn, and would protect steelhead trout smolts migrating downstream from being entrained in water diversions. With these modifications to the Corps project and associated facilities, it would be possible for steelhead trout to reach suitable spawning and rearing habitat in Niles Canyon and potentially farther upstream, and for smolts to migrate to the Bay without being entrained in water diversions.

7. PRELIMINARY FINANCIAL ANALYSIS

The local sponsor, the Alameda Creek Flood Control and Water Conservation District (ACFCWCD), is aware of the cost sharing requirements for potential project implementation. A letter of intent from the local sponsor stating a willingness to pursue the DPR study, and an understanding of the cost sharing that is required for project construction is included as Enclosure A.

8. ASSUMPTIONS AND QUALITY OBJECTIVES

a. DPR Phase Assumptions: The following critical assumptions will provide a basis for the DPR study:

1) Adult steelhead trout will continue to return to Alameda Creek, as they have been in increasing numbers since the 1990s, even though they are unable to reach their spawning and rearing habitat without assistance.

2) Adult steelhead trout will be unable to reproduce and complete their life cycle due to existing barriers and diversions in the Alameda Creek Flood Control Channel.

3) Smolts will be unable to migrate downstream to the ocean due to existing barriers and diversions in the Alameda Creek Flood Control Channel.

4) The San Francisco Public Utilities Commission (SFPUC) will remove its two non-functioning dams in Niles Canyon within the next two years for the primary purpose of liability reduction, regardless of whether fish passage is provided downstream. Removal of these dams will not by itself allow steelhead trout to utilize the Alameda Creek watershed for spawning and rearing.

b. Quality Objectives: DPR Phase studies will be accomplished to meet the following quality objectives:
1) Adequate evaluations will be conducted to meet the requirements of the National Environmental Policy Act and other environmental legislation.

2) Project costs for the selected plan will be developed to a level of certainty where the ultimate project cost will be within 20% of the DPR phase estimate.

3) DPR Phase studies will conform to the requirements of ER 1105-2-100.

9. DPR PHASE COST ESTIMATE

The current DPR phase cost estimate is provided in Chapter III, Work Breakdown Structure. These costs differ from the estimate included in the PRP because a greater level of input was provided by all of the functional sections in updating these costs.

10. VIEWS OF OTHER RESOURCE AGENCIES

Because of the funding and time constraints of the PRP phase, only limited and informal coordination has been conducted with other resource agencies. The Alameda County Flood Control and Water Conservation District (ACFCWCD) has provided a letter of intent for this project (Enclosure A). The ACFCWCD and the Alameda County Water District (ACWD) have consistently supported installation of fish ladders and fish screens on their facilities in Alameda Creek.

11. PROJECT AREA MAP

A map of the study area is provided as Enclosure B.

12. RECOMMENDATIONS

I recommend that the Lower Alameda Creek Fish Passage Improvements study proceed into the DPR phase as a cost shared DPR phase study to determine the Federal interest in providing aquatic ecosystem restoration improvements to the Alameda Creek Flood Control Channel.

Date

Thomas R. Kendall
Chief, Planning Branch
Engineering and Technical Services
15. RESPONSE TO THE CONDITIONAL APPROVAL OF THE PRP.

a. The PRP was conditionally approved by the South Pacific Division (SPD) in March 2002. This approval was conditioned on compliance with the following issue:

“Although the estimated total project costs for this proposal exceed $6.6 million, which approximates the maximum Federal share at $5 million by statute, there is sufficient information to warrant pursuing the feasibility phase for a project modification project under the Section 1135 authority. However, there is also uncertainty regarding the inclusion of some components of the proposal as presented in the Preliminary Restoration Plan. Until additional justification is provided, we cannot approve Federal participation at the maximum $5 million limit. For this reason, any proposed modification to non-Flood Control Project facilities requires verification for inclusion in the proposed project early in the DPR phase. Full justification for this Section 1135 project shall be furnished in an updated fact sheet documenting the District’s findings prior to initiating any detailed studies for the DPR.”

b. The following is the San Francisco District’s (SPN) response to the above issue:

1) The District has investigated the origin and purpose of each of the facilities to be modified in the proposed project and is making the following recommendations concerning the modifications described in the PRP:

a. Fish ladder at the Corps of Engineers BART weir and Middle Inflatable Dam:
   i. The BART weir is a Federal structure constructed in 1972 as part of the Corps of Engineers Alameda Creek Flood Control Project (Flood Control Project) and is therefore eligible for funding under Section 1135 of the Water Resources Development Act of 1986. This structure is a complete barrier to the migration of steelhead trout and must therefore be modified for fish passage to be achieved.
   ii. The design of the fish ladder at the BART weir incorporate passage over the Middle Inflatable Dam (which was constructed by the ACWD in 1976) because the proximity of the two structures would make installing two fish ladders redundant and ineffective from a design standpoint. Fish exiting a fish ladder that allowed fish to surpass the BART weir, but not the Middle Inflatable Dam, would exit the ladder close to the weir, making it possible for the fish to fall back over the weir’s sloping apron.
   iii. District recommendation: The District considers this component to be an integral part of the project and has judged the structure to be eligible for Section 1135 funding because it modifies a Corps project structure.

b. Fish ladder at Upper Inflatable Dam and Fish screen at Alameda Creek Pipeline Intake:
   i. The Upper Inflatable dam and Alameda Creek Pipeline were constructed by ACWD in 1989 as part of the Groundwater Recharge Facilities Master Plan (Facilities Master Plan). The dam replaced an existing earthen dike previously located at approximately the same location while the pipeline supplied water to percolating pits for groundwater recharge. Currently the Upper Inflatable Dam is a barrier to steelhead migration when it is inflated, but not when it is deflated. Were fish passage to be achieved, smolts migrating downstream may be swept along into the Alameda Creek Pipeline, unable to escape. The trash rack currently located at the mouth of the diversion would probably suffice to keep out adult steelhead migrating upstream.
   ii. The Corps Flood Control Project made necessary the construction of Upper Inflatable Dam and Alameda Creek Pipeline because: 1) construction of the Flood Control Project altered the ACWD’s historical groundwater recharge operations and the natural recharge capacity within the creek and 2) additional flexibility was needed to operate the
groundwater recharge facilities during periods when the flood control channel was being maintained. (see Enclosure C and attachments within).

iii. Prior to the Corps Flood Control Project, the later-reconfigured section of Alameda Creek was the primary source of groundwater recharge for the Niles Cone Groundwater Basin. The Flood Control Project reduced the natural percolation of the channel as well as percolation during periodic flooding of the adjacent land. Furthermore, the operation of the flood control channel had direct impact on ACWD groundwater recharge operations in the vicinity of the gravel quarries. Flood control channel maintenance operations would preclude the operation of the Middle Inflatable Dam; thus, the Upper Inflatable Dam and Alameda Creek Pipeline were constructed to introduce greater flexibility into ACWD groundwater recharge operations. The ACWD constructed a series of new recharge facilities, including the Upper Inflatable Dam and Alameda Creek Pipeline, within and adjacent to the flood control channel in order to compensate for these impacts.

iv. **District recommendation:** The District’s position is that the fish ladder at the Upper Inflatable Dam and the fish screen at the Alameda Creek Pipeline Intake are eligible for Section 1135 funding because these structures were constructed as a direct response to impacts from the Flood Control Project on preexisting groundwater supply and groundwater recharge operations.

c. **Fish screen at Bunting Pond (B Pond) Diversion:**

i. The B Pond Diversion was constructed by ACWD in 1989 to allow diversion of water from the Upper Inflatable Dam (see above) to the B Pond for groundwater recharge. As described above, this groundwater recharge was necessary because the Flood Control Project reduced the percolating capacity of Alameda Creek. This diversion replaced three 8-inch pipelines that were constructed in 1972 to divert water from Alameda Creek to B Pond in order to make up for loss of percolating capacity caused by the Flood Control Project.

ii. **District recommendation:** The District’s position is that the fish screen at the B Pond Diversion is eligible for Section 1135 funding because it modifies a structure that was constructed as a direct response to impacts from the Flood Control Project on preexisting groundwater supply and groundwater recharge operations.

d. **Fish screen at Upper Shinn Pond Diversion:**

i. The Upper Shinn Pond Diversion, which is maintained by the ACWD and which existed prior to the Flood Control Project, was modified as a direct result of the Corps Project. Prior to the Flood Control Project, ACWD used four 60-inch pipelines to divert water from Alameda Creek to the adjacent percolation ponds. As a result of construction from the Flood Control Project, these pipeline diversions were abandoned and replaced with three 36-inch diversion pipelines.

ii. A fish screen has been proposed for construction at the Upper Shinn Pond diversion because fish passage to be achieved by constructing a fish ladder at the BART weir and Middle Inflatable Dam, smolts migrating downstream may be swept along into the percolating pond and would be unable to escape. The trash rack currently located at the mouth of the diversion would probably be sufficient to keep out adult steelhead migrating upstream.

iii. The Flood Control Project Design Memorandum recognized the need for ACWD to modify its preexisting structures to accommodate construction of the flood control channel:
Relocations and Modifications:
Paragraph 66—Intake Structures:
“The Alameda County Water District maintains several water intake structures upstream of the Western pacific Railroad Bridge, in which flows are regulated through a series of pipes to adjacent abandoned gravel pits for the purpose of percolation. A major structure exists on the right bank at Station 532+04 (Shinn Pit), in which four 60-in CMP’s will have to be extended 125 feet each to pass through the new levee.”

iv. In 1990, along with the Upper Rubber Dam and Alameda Creek Pipeline, two additional 54-inch pipelines were constructed adjacent to the existing 36-inch diversions to allow diversion of water from either the Middle Rubber Dam or Upper Inflatable Dam to the percolating ponds. The combination of the 36-inch diversions and these 54-inch diversions provides approximately the same diversion capacity as the four 60-inch pipelines used by the ACWD prior to the Flood Control Project. The fish screen would be installed at the 54-inch diversions because these pipelines have largely replaced the older 36-inch pipeline diversions.

v. District recommendation: The District considers the fish screen on the 54-inch Shinn Pond Diversion pipelines to be eligible for Section 1135 funding because it modifies structures that had been previously modified as a result of the Corps Flood Control Project.

e. Fish screen at Kaiser Pond Diversion:

i. A fish screen has been proposed at the Kaiser Pond Diversion to prevent entrainment of smolts migrating downstream into the percolating pond. The Kaiser Pond Diversion was constructed in 1970, at the same time as the installation of the flood control channel, to allow for diversion of water from the flood control channel to the Kaiser Ponds. This pipeline replaced a preexisting diversion from Alameda Creek that had to be abandoned due to construction of the flood control channel:

Relocations and Modifications:
Paragraph 67—Intake Structures:
“...A new structure, presently under design, is planned for the Kaiser Pit at Station 552+50(L). Design and construction of the modifications to the structures will be accomplished by others as a non-Federal cost item.”

ii. District recommendation: The District’s position is that the fish screen proposed for the Kaiser Pond Diversion intake is eligible for Section 1135 funding because it modifies a structure that was replaced as a direct result of the Corps Flood Control Project.
1. ORGANIZATIONAL BREAKDOWN STRUCTURE

All organizations responsible for tasks, including the local sponsor and other agencies, are identified in the Work Breakdown Structure (WBS), using the organization codes listed in the following Organizational Breakdown Structure (OBS). The tasks in the WBS are grouped by organization.

<table>
<thead>
<tr>
<th>District Name</th>
<th>Organization Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Management</td>
<td>CESPN-E-PM</td>
</tr>
<tr>
<td>Engineering Branch</td>
<td>CESPN-ET-E</td>
</tr>
<tr>
<td>Geotechnical Section</td>
<td>CESPN-ET-EG</td>
</tr>
<tr>
<td>Civil Design Section</td>
<td>CESPN-ET-ED</td>
</tr>
<tr>
<td>Water Resources Section</td>
<td>CESPN-ET-EW</td>
</tr>
<tr>
<td>Specifications &amp; Cost Estimating</td>
<td>CESPN-ET-ES</td>
</tr>
<tr>
<td>Planning Branch</td>
<td>CESPN-ET-P</td>
</tr>
<tr>
<td>Plan Formulation Section</td>
<td>CESPN-ET-PF</td>
</tr>
<tr>
<td>Economics Section</td>
<td>CESPN-ET-PS</td>
</tr>
<tr>
<td>Environmental Section</td>
<td>CESPN-ET-PP</td>
</tr>
<tr>
<td>Real Estate Division</td>
<td>CESPK-RE</td>
</tr>
<tr>
<td>ETS Admin.</td>
<td>CESPN-ET</td>
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<table>
<thead>
<tr>
<th>Non-Federal Sponsor</th>
<th>Organization Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alameda Creek Flood Control and Water Conservation District</td>
<td>ACFCWCD</td>
</tr>
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<table>
<thead>
<tr>
<th>Other Agency/Other Corps</th>
<th>Organization Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alameda County Water District</td>
<td>ACWD</td>
</tr>
<tr>
<td>US Fish &amp; Wildlife Service</td>
<td>FWS</td>
</tr>
<tr>
<td>National Marine Fisheries Service</td>
<td>NMFS</td>
</tr>
</tbody>
</table>
2. DPR STUDY SCHEDULE

a. SCHEDULE DEVELOPMENT

All schedules are developed using a Network Analysis System (NAS). The network is based on the tasks and durations that are listed in the Work Breakdown Structure and the detailed scopes of work in Chapter V, Scopes of Work. Major milestones that are defined in Enclosure D, CESPD Milestone System, are also included in the schedules.

b. LOCAL SPONSOR COMMITMENTS

Milestones become commitments when the project manager meets with the local sponsor(s) at the beginning of each Fiscal Year and identifies two to five tasks that are important for the district to complete during the Fiscal Year. These commitments would be flagged in the PROMIS database and monitored and reported on accordingly.

c. UNCERTAINTIES IN THE SCHEDULE

The schedule (Enclosure E) is a draft and is subject to change. The schedule is unconstrained, and task durations assume full staffing. As the project progresses and the schedule becomes more certain, tasks may be added or deleted from the schedule. The dates of individual tasks will be subject to internal negotiation at the beginning of each fiscal year.

d. MILESTONE SCHEDULE

The schedule for the milestones in the CESPD Milestone System is as follows:

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Description</th>
<th>Baseline Schedule</th>
<th>Current Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>Initiate Study</td>
<td>24-Feb-03</td>
<td>00-Jan-00</td>
</tr>
<tr>
<td>F2</td>
<td>Public Workshop/Scoping</td>
<td>28-May-03</td>
<td>00-Jan-00</td>
</tr>
<tr>
<td>F3</td>
<td>Feasibility Scoping Meeting</td>
<td>23-Feb-04</td>
<td>00-Jan-00</td>
</tr>
<tr>
<td>F4A</td>
<td>Alternative Review Conference</td>
<td>10-Dec-04</td>
<td>00-Jan-00</td>
</tr>
<tr>
<td>F5</td>
<td>Draft Feasibility Report</td>
<td>26-Apr-06</td>
<td>00-Jan-00</td>
</tr>
<tr>
<td>F6</td>
<td>Final Public Meeting</td>
<td>?</td>
<td>00-Jan-00</td>
</tr>
<tr>
<td>F7</td>
<td>Feasibility Review Conference</td>
<td>10-Jul-06</td>
<td>00-Jan-00</td>
</tr>
<tr>
<td>F8</td>
<td>Final Report to SPD</td>
<td>15-Aug-06</td>
<td>00-Jan-00</td>
</tr>
</tbody>
</table>
3. DPR COST ESTIMATE

a. BASIS FOR THE COST ESTIMATE

1). The DPR cost estimate is based upon a summation of the costs that were identified for the individual tasks in detailed scopes of work. Study cost estimates include allowances for inflation so that the non-Federal sponsor is fully aware of its financial commitment.

2). Appropriate contingencies and contingency management are included to adequately deal with the uncertainty in the elements of the study. Experience has shown that approximately 20 percent of the study costs should be reserved for activities after the release of the draft report. Contingencies in the amount required to raise the costs of activities after the draft report this amount have been added to the cost estimate.

b. COSTS FOR FEDERAL AND NON-FEDERAL ACTIVITIES

The DPR study cost is funded entirely by the Federal sponsor and the cost share is executed retroactively once the Project Cooperation Agreement (PCA) is signed. The DPR cost estimate is included in the WBS.

4. LISTING OF TASKS - WORK BREAKDOWN STRUCTURE

The following work breakdown structure lists the study activities, grouped by the responsible organization based on the OBS:
<table>
<thead>
<tr>
<th>Activity Desc.</th>
<th>Duration</th>
<th>Estimated Budget</th>
<th>Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A/E</strong></td>
<td></td>
<td></td>
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<tr>
<td>EIS/R Continuing Contract</td>
<td>884d</td>
<td>$150,000</td>
<td>a-Est Existing Cond</td>
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<tr>
<td>AE Mapping and Survey Contract</td>
<td>120d</td>
<td>$75,000</td>
<td>a-Est Existing Cond</td>
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<tr>
<td>Planning Aid Letter MIPR</td>
<td>35d</td>
<td>$15,000</td>
<td>a-Est Existing Cond</td>
</tr>
<tr>
<td>CAR and MIPR</td>
<td>60d</td>
<td>$3,000</td>
<td>b-Develop W/Proj Conditions</td>
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<tr>
<td>AE Soil Testing contract</td>
<td>65d</td>
<td>$63,000</td>
<td>b-Develop W/Proj Conditions</td>
</tr>
<tr>
<td>AE Design contract</td>
<td>154d</td>
<td>$204,200</td>
<td>c-Draft Report</td>
</tr>
<tr>
<td><strong>ET-ED</strong></td>
<td></td>
<td>$510,200</td>
<td></td>
</tr>
<tr>
<td>Existing Survey Data Collection</td>
<td>5d</td>
<td>$2,400</td>
<td>a-Est Existing Cond</td>
</tr>
<tr>
<td>Survey/Mapping SOW</td>
<td>10d</td>
<td>$4,800</td>
<td>a-Est Existing Cond</td>
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<tr>
<td>Survey/Mapping Negotiations</td>
<td>2d</td>
<td>$800</td>
<td>a-Est Existing Cond</td>
</tr>
<tr>
<td>Monitor and Review Mapping and Survey Submittals</td>
<td>120d</td>
<td>$5,200</td>
<td>a-Est Existing Cond</td>
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<tr>
<td>Prelim Alts Design for Costing</td>
<td>30d</td>
<td>$15,000</td>
<td>b-Develop W/Proj Conditions</td>
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<tr>
<td>ITR ET-ED Prelim Design</td>
<td>6d</td>
<td>$3,000</td>
<td>b-Develop W/Proj Conditions</td>
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<tr>
<td>Design Contract RFP</td>
<td>20d</td>
<td>$10,000</td>
<td>c-Draft Report</td>
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<tr>
<td>A/E Monitoring and Review of Submittals</td>
<td>154d</td>
<td>$12,000</td>
<td>c-Draft Report</td>
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<td>Complete ET-ED Appendix</td>
<td>20d</td>
<td>$10,000</td>
<td>c-Draft Report</td>
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<tr>
<td>Conduct ITR on ET-ED Draft Appendix</td>
<td>20d</td>
<td>$10,000</td>
<td>c-Draft Report</td>
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<tr>
<td>Final ET-ED ITR and Public Comment Response</td>
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<tr>
<td><strong>ET-EG</strong></td>
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<td>ET-EG Data Collection and Coord</td>
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<tr>
<td>Develop Boring Locations in Autocad</td>
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<td>$12,000</td>
<td>b-Develop W/Proj Conditions</td>
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<tr>
<td>ITR ET-EG Prelim Soils Analysis</td>
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<td>$6,000</td>
<td>b-Develop W/Proj Conditions</td>
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<tr>
<td>Develop RFP &amp; Neg AE Soil Testing</td>
<td>22d</td>
<td>$11,000</td>
<td>b-Develop W/Proj Conditions</td>
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<tr>
<td>Review AE Soils Testing Program &amp; certify lab</td>
<td>65d</td>
<td>$11,000</td>
<td>b-Develop W/Proj Conditions</td>
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<tr>
<td>Soils Report and Geotech Design</td>
<td>10d</td>
<td>$20,000</td>
<td>c-Draft Report</td>
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<tr>
<td>Complete ET-EG Appendix</td>
<td>10d</td>
<td>$16,000</td>
<td>c-Draft Report</td>
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<td>ITR ET-EG Draft Appendix</td>
<td>5d</td>
<td>$10,000</td>
<td>c-Draft Report</td>
</tr>
<tr>
<td>Final ET-EG ITR &amp; Comment Responses</td>
<td>5d</td>
<td>$5,000</td>
<td>d-Final Report</td>
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<tr>
<td><strong>ET-ES</strong></td>
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<td>Feasibility Alternatives Cost Estimate</td>
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<td>b-Develop W/Proj Conditions</td>
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<td>ITR ET-ES F4 Package</td>
<td>5d</td>
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<td>b-Develop W/Proj Conditions</td>
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<td>ET-ES App. &amp; Draft MCACES</td>
<td>10d</td>
<td>$10,000</td>
<td>c-Draft Report</td>
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<tr>
<td>ITR ET-ES Draft Appendix</td>
<td>5d</td>
<td>$5,000</td>
<td>c-Draft Report</td>
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<td>Final ET-ES ITR and Comment Response</td>
<td>5d</td>
<td>$5,000</td>
<td>d-Final Report</td>
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<td><strong>Total</strong></td>
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<td>$41,200</td>
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### ET-EW

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<th>Task</th>
<th>Duration</th>
<th>Cost</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Develop Baseline H&amp;H Studies</td>
<td>106d</td>
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<td>W/O-Project Hydro Certification</td>
<td>2d</td>
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<td>a-Est Existing Cond</td>
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<tr>
<td>Develop Preliminary Alternative Layouts</td>
<td>52d</td>
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<td>a-Est Existing Cond</td>
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<tr>
<td>F3 H&amp;H Package</td>
<td>28d</td>
<td>$15,000</td>
<td>a-Est Existing Cond</td>
</tr>
<tr>
<td>ITR on ET-EW Package</td>
<td>9d</td>
<td>$4,400</td>
<td>a-Est Existing Cond</td>
</tr>
<tr>
<td>Preliminary Alts Hydraulic Design</td>
<td>50d</td>
<td>$24,200</td>
<td>b-Develop W/Proj Conditions</td>
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<tr>
<td>ITR ET-EW Prelim Hydraulic Design</td>
<td>8d</td>
<td>$4,000</td>
<td>b-Develop W/Proj Conditions</td>
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<tr>
<td>NER Hydraulic Design</td>
<td>30d</td>
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<td>c-Draft Report</td>
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<tr>
<td>W/Project Hydrology Cert</td>
<td>2d</td>
<td>$600</td>
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<td>Write Draft ET-EW Appendix</td>
<td>20d</td>
<td>$10,000</td>
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<tr>
<td>ITR ET-EW Draft Appendix</td>
<td>8d</td>
<td>$4,000</td>
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<tr>
<td>Final ET-EW ITR and Comment Response</td>
<td>4d</td>
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**Total Cost:** $159,199

### ET-PC

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<tr>
<th>Task</th>
<th>Duration</th>
<th>Cost</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Econ ICA Coordination</td>
<td>201d</td>
<td>$2,880</td>
<td>a-Est Existing Cond</td>
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<tr>
<td>Develop NER and F4 Econ</td>
<td>14d</td>
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<td>b-Develop W/Proj Conditions</td>
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<td>ITR ET-PC NER Identification</td>
<td>4d</td>
<td>$1,800</td>
<td>b-Develop W/Proj Conditions</td>
</tr>
<tr>
<td>Develop Ability to Pay Analysis</td>
<td>13d</td>
<td>$6,120</td>
<td>c-Draft Report</td>
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<tr>
<td>Complete ET-PC Appendix</td>
<td>13d</td>
<td>$6,300</td>
<td>c-Draft Report</td>
</tr>
<tr>
<td>ITR ET-PC Draft Appendix</td>
<td>4d</td>
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<td>c-Draft Report</td>
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<tr>
<td>Final ITR &amp; ET-PC Final Comments Response</td>
<td>5d</td>
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<td>d-Final Report</td>
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**Total Cost:** $27,540

### ET-PF

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<th>Task</th>
<th>Duration</th>
<th>Cost</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>Develop Initial DPR Team Briefing</td>
<td>6d</td>
<td>$3,000</td>
<td>a-Est Existing Cond</td>
</tr>
<tr>
<td>Identify Problems and Opportunities</td>
<td>10d</td>
<td>$5,000</td>
<td>a-Est Existing Cond</td>
</tr>
<tr>
<td>Initial Public Meeting and Preparation</td>
<td>6d</td>
<td>$3,000</td>
<td>a-Est Existing Cond</td>
</tr>
<tr>
<td>Develop Preliminary Alternatives</td>
<td>6d</td>
<td>$3,000</td>
<td>a-Est Existing Cond</td>
</tr>
<tr>
<td>Coordinate F3 ITR</td>
<td>9d</td>
<td>$3,000</td>
<td>a-Est Existing Cond</td>
</tr>
<tr>
<td>Prepare F3 Documentation</td>
<td>10d</td>
<td>$5,000</td>
<td>a-Est Existing Cond</td>
</tr>
<tr>
<td>Conduct F3 ET-PF ITR</td>
<td>4d</td>
<td>$2,000</td>
<td>a-Est Existing Cond</td>
</tr>
<tr>
<td>Formulate Alternative Plans</td>
<td>10d</td>
<td>$5,000</td>
<td>b-Develop W/Proj Conditions</td>
</tr>
<tr>
<td>Coordinate F4 ITR</td>
<td>9d</td>
<td>$3,000</td>
<td>b-Develop W/Proj Conditions</td>
</tr>
<tr>
<td>Prepare F4 Documentation</td>
<td>20d</td>
<td>$10,000</td>
<td>b-Develop W/Proj Conditions</td>
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<tr>
<td>Conduct ITR on ET-PF F4 Documentation</td>
<td>4d</td>
<td>$2,000</td>
<td>b-Develop W/Proj Conditions</td>
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<tr>
<td>Coordinate Draft DPR ITR</td>
<td>9d</td>
<td>$3,000</td>
<td>c-Draft Report</td>
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<tr>
<td>Prepare Draft DPR</td>
<td>26d</td>
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<td>c-Draft Report</td>
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<tr>
<td>ITR ET-PF Draft</td>
<td>6d</td>
<td>$3,000</td>
<td>c-Draft Report</td>
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<tr>
<td>QC Certification for Draft DPR</td>
<td>5d</td>
<td>$1,000</td>
<td>c-Draft Report</td>
</tr>
<tr>
<td>Finalize DPR</td>
<td>20d</td>
<td>$10,000</td>
<td>d-Final Report</td>
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<tr>
<td>QC Certification for Final DPR &amp; Final EA</td>
<td>6d</td>
<td>$3,000</td>
<td>d-Final Report</td>
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</table>

**Total Cost:** $77,001
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<thead>
<tr>
<th>Activity Desc.</th>
<th>Duration</th>
<th>Estimated Budget</th>
<th>Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop ICA Metric/Methodology</td>
<td>13d</td>
<td>$6,200</td>
<td>a-Est Existing Cond</td>
</tr>
<tr>
<td>SOW 4 EIS/R Contract</td>
<td>10d</td>
<td>$5,000</td>
<td>a-Est Existing Cond</td>
</tr>
<tr>
<td>Negotiate EIS/R Proposal</td>
<td>6d</td>
<td>$3,000</td>
<td>a-Est Existing Cond</td>
</tr>
<tr>
<td>First Admin Draft Coordination (Existing Conditions)</td>
<td>35d</td>
<td>$5,000</td>
<td>a-Est Existing Cond</td>
</tr>
<tr>
<td>Coordinate &amp; Announce EIS/R NOI</td>
<td>45d</td>
<td>$4,000</td>
<td>a-Est Existing Cond</td>
</tr>
<tr>
<td>SOW 4 F&amp;W PAR</td>
<td>3d</td>
<td>$1,500</td>
<td>a-Est Existing Cond</td>
</tr>
<tr>
<td>ITR on ET-PP F3 Package (W/O Conditions)</td>
<td>4d</td>
<td>$2,000</td>
<td>a-Est Existing Cond</td>
</tr>
<tr>
<td>ET-PP Assessment of PAR</td>
<td>6d</td>
<td>$3,000</td>
<td>a-Est Existing Cond</td>
</tr>
<tr>
<td>Finalize ICA Output</td>
<td>10d</td>
<td>$4,500</td>
<td>b-Develop W/Proj Conditions</td>
</tr>
<tr>
<td>Coord EIS/R 2nd Admin Draft (Alternatives)</td>
<td>35d</td>
<td>$4,500</td>
<td>b-Develop W/Proj Conditions</td>
</tr>
<tr>
<td>SOW 4 CAR</td>
<td>3d</td>
<td>$1,500</td>
<td>b-Develop W/Proj Conditions</td>
</tr>
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CHAPTER V
SCOPES OF WORK

1. DETAILED SCOPES OF WORK

The scopes of work for the tasks are grouped by the responsible organization. For each task that is included in the work breakdown structure, a scope of work is developed that describes the work that is to be performed. For each task, the scope describes the work, including specific activities, to be accomplished in narrative form. The scopes of work have been developed by the study team, which includes representatives of the non-Federal sponsor. The scopes also reflect the policy exceptions and streamlining initiatives that have been approved in the PRP.

2. DURATIONS OF TASKS

The durations for the tasks (listed in the WBS, Chapter IV) are entered into the project’s network analysis system (NAS) to develop the project schedule (Chapter IV). The durations are updated based on yearly negotiations between the Project Manager and the chiefs of the responsible organizations, as identified in Chapter IV.

3. COSTS OF TASKS

The cost estimate for each task is also listed in the WBS, Chapter IV. The total estimates are combined in the DPR Cost Estimate included in the WBS in Chapter IV. The cost estimates for the tasks are also based on negotiations between the Project Manager and the chiefs of the responsible organizations.

4. ITEMS NEED TO COMPLETE TASK

Where applicable, the deliverables required to complete each task are listed after the detailed scope of work.
5. DETAILED SCOPES OF WORK BY SECTION

1. CIVIL DESIGN (ED) JAE00

a) Task: Existing Survey Data Collection

Description of task: Civil Design will make inquiries at various local government offices for the availability of existing survey material that may be relevant to the project and will make determinations about the suitability of that material. Should there be no survey material available for engineering design, this section will proceed to develop a scope of work (SOW) for survey and mapping as described below.

Cost Estimate: $2,400

Items needed to complete tasks: Conceptual Engineering Plans

b) Task: Survey/Mapping SOW

Description of task: After evaluating all engineering criteria needed for the project in conjunction with water resources staff, geo-technical engineers and local sponsors, civil design will proceed to write a detailed scope of work and Independent Government Estimate (IGE) for surveying and mapping services for AE implementation.

Cost Estimate: $4,800

Items needed to complete tasks: Conceptual Engineering Plans

c) Task: Survey/Mapping Negotiation

Description of task: Final price for surveying services will be negotiated between A/E, CT and Civil Design. Negotiation of services also implies streamlining the SOW while reaching a clear understanding of the work involved.

Cost Estimate: $400

Items needed to complete tasks: SOW, IGE

d) Task: AE Mapping and Survey Contract

Description of task: This is the actual effort by the A/E contractor and includes assessing the terrain, Global Positioning System (GPS) ground markings, flight over & aerial photography if needed, supplemental field survey, photometry work, Digital Terrain Model (DTM) creation, preliminary and final base sheets and map preparation.

Cost Estimate: $75,000

Items needed to complete tasks: All of the above

e) Task: Monitor and Review Mapping and Survey Submittals

Description of task: This general task includes monitoring the work in progress, communications between A/E and Civil Design, change of orders, field inspections, review of preliminary and final submittals and comments.
Cost Estimate: $5,200

Items needed to complete tasks: All of the above

f) **Task: Prelim Alts Design for Costing**

Description of task: Civil Design will help developing all engineering design alternatives for the project in conjunction with water resources staff, geo-technical engineers and local sponsors and then it will proceed to determine volumetric, linear and structural element quantities that would be needed for achieving those alternatives. These quantities will be used for cost estimating each alternative.

Cost Estimate: $15,000

Items needed to complete tasks: Detailed Conceptual Engineering Plans for Each Alternative, Site Survey Mapping

g) **Task: ITR ET-ED Prelim Design**

Description of task: Civil Design will develop preliminary plans of the selected alternative in response to the overall project objectives. This effort will include preliminary drawings and the determination of volumetric, linear and structural element quantities that would be needed for achieving this alternative.

Cost Estimate: $15,000

Items needed to complete tasks: A Selected Alternative Plan, Hydraulic Design, Site Survey Mapping

h) **Design Contract RFP**

Description of task: After evaluating all engineering criteria needed for the project in conjunction with water resources staff, geo-technical engineers and local sponsors, civil design will proceed to write a detailed scope of work and Independent Government Estimate (IGE) for the A/E Design Contract. The A/E firm will be responsible for the final engineering design and for development of detailed drawings for both the NED and LPP plans. Final price for the Design Contract will be negotiated between A/E, CT and Civil Design. Negotiation of services also implies streamlining the SOW while reaching a clear understanding of the work involved

Cost Estimate: $10,000

Items needed to complete tasks: A Selected Alternative Plan, Hydraulic Design, Site Survey Mapping

i) **Task: A/E Design Contract**

Description of task: Once a design alternative is selected and a preliminary design has been formulated civil design will proceed to write a detailed scope of work (SOW) for design services and formulate an independent government cost estimate (IGE) for AE implementation and contracting purposes respectively. The A/E firm will be responsible for the final engineering design and for development of detailed drawings for both the NED and LPP plans.

Cost Estimate: $203,400

Items needed to complete tasks: Detailed survey and mapping of the area and detailed conceptual engineering plans

j) **Task: A/E Monitoring and Review of Submittals**
Description of task: This general task includes monitoring the contracted design work in progress, communications between A/E and Civil Design, change of orders, work review of preliminary and final submittals and comments.

Cost Estimate: $12,000

Items needed to complete tasks: Selected Alternative, SOW, A/E contract

k) Task: Complete ET-ED Appendix

Description of task: In addition to producing the final project design with detail drawings, plans and profiles, the A/E firm will be responsible for preparing the engineering appendix for the F4 conference

Cost Estimate: $10,000

Items needed to complete tasks: Selected Alternative, SOW, A/E contract

l) Task: Conduct ITR on ET-ED Draft Appendix

Description of task: Review of the draft appendix by the A/E firm will be accomplished independently by the USACE the project technical review team.

Cost Estimate: $10,000

Items needed to complete tasks: Final Engineering Design and Drawings.

m) Task: Address Final Comments ET-ED

Description of task: ET-ED will address and resolve all final comments from the Draft phases for inclusion into the Final DPR.

Cost Estimate: $3,000

Items needed to complete tasks: Final Engineering Design and Drawings.
2. GEOTECHNICAL DESIGN AND ANALYSIS (EG) JAC00

a) Task: Data Collection, Coordination and Preliminary Analysis

Description of task: Existing geologic and geotechnical data will be collected, reviewed and evaluated in relation to with-project condition and issues affecting preliminary Alternatives design will be relayed to PDT.

Cost Estimate: $10,000

Items needed to complete tasks: Site visit, prior reports, Project alternatives

b) Task: Develop Boring Locations

Description of task: Development of the Boring Locations will be predicated on literature searches and reviews of consistent project information, including existing geologic and soils data. Geotechnical Section will develop Boring Layouts in Auto Cad format for use in future RFP’s and for development and coordination of Real Estate Rights-of-Entry.

Cost Estimate: $12,000

Items needed to complete tasks: Project alternatives, updated topographic maps and surveys in AutoCAD format, as-built drawings

c) Task: ITR Data Collection and Analysis

Description: The geologic and geotechnical collection and analysis will be evaluated by an independent technical review team (ITR) for technical accuracy and applicability to the project conditions.

Cost Estimate: $6,000

Items needed to complete tasks: Existing data, Project alternatives

d) Task: Develop Request for Proposal (RFP)

Description of task: ET-EG will develop the SOW and IGE to perform the soil sampling and testing. The scope of services and associated costs will be negotiated and administered by the Corps. This will involve the preparation of RFP, review of proposals, and negotiation of the price with the A/E contractor.

Cost Estimate: $11,000

Items needed to complete tasks: Boring Locations, Rights-of-Entry

e) Task: A/E Contract and Soil Testing Program

Description of task: The subsurface explorations will be performed under an A/E contract. The subsurface investigation is expected to consist of borings drilled at locations of project improvements. These borings will be drilled to depths of 30 to 50 feet or continued until a competent layer is encountered. The purposes of these borings are to: (1) determine soil bearing capacity, shear strength, and earth pressures where retaining walls, foundations, and other project features are to be supported; (2) soil plasticity and gradation related to the proposed channel re-grading; (3) determine the potential for soil liquefaction and other seismic hazards; and (4) Develop Soils Report and Design.

A reputable laboratory, accredited within the last 2 years by the AASHTO Materials Reference Laboratory (AMRL) for the required soil tests, will perform the soils testing. The laboratory will be required to undergo auditing of the laboratory’s QC procedures by the Engineering Research and Development Center (ERDC) formerly known as WES.
Cost Estimate: $63,000

Items needed to complete tasks: RFP, Negotiations and NTP

f) Task: Review A/E Soil Testing Program

Description of task: The Corps will monitor the subsurface explorations. The monitoring will involve coordination with A/E Contractor, pre-investigation conference, and review of completed field boring logs and sample inventory. After the submittal of the field logs and sample inventory, the Corps will prepare the testing schedule and select the type of tests to be performed for selected samples.

Cost Estimate: $11,000

Items needed to complete tasks: Field boring logs by A/E Contractor

g) Task: Develop Soils Conditions Report and Geotechnical Design

Description of task: Data generated under an A/E subsurface investigation as well as existing data from prior flood control project, will be reviewed and served as a baseline condition from which to evaluate the geotechnical impacts of the improvement alternatives. Geology and soils data will be compiled and evaluated. The results of the subsurface investigation will be analyzed for seismic hazards, consolidation settlement, slope stability, soil bearing capacity, liquefaction potential, gradation, and earth pressures. Guidelines set by the Corps of Engineers as indicated in engineering manuals such as Bearing Capacity of Soils (EM 1110-1-1905), Retaining and Flood Walls (EM 1110-2-2502), Settlement Analysis (EM 1110-1-1904) will be used in the analyses. A/E will generate the report and reviewed by the Corps.

Cost Estimate: $20,000

Items needed to complete tasks: A/E contract

h) Task: Write Geotechnical Engineering Appendix

Description of task: The Corps will prepare a draft report of the geotechnical parameters for the project, and address comments prior to finalizing the report. The results of the geotechnical analyses will be documented and serve as the basis for the geotechnical design of the recommended alternative.

Cost Estimate: $16,000

Items needed to complete tasks: A/E Soils Report

i) Task: ITR Draft Geotech Appendix

Description of task: The Geotech section chief will assign an independent reviewer for the draft geotech appendix.

Cost Estimate: $10,000

Items needed to complete tasks: Draft Geotech Appendix

j) Task: Address Final Comments

Description of task: The comments provided by ITR team will be addressed to complete the Geotechnical Appendix.

Cost Estimate: $5,000
Items needed to complete tasks: ITR comments
3. SPECIFICATIONS & COST ENGINEERING SECTION (ES) JH000

a) Task: Develop Cost Estimates - Alternatives

Description of task: Specification and Cost Engineering to prepare cost estimates per Engineering Regulation (ER) 1110-2-1302 and Engineering Instructions (EI) 01D010 for this estimate. The cost estimates will include a narrative (basis of cost) on the method of construction, assumptions and design data. Estimates will be generated using either R.S. Means for construction or the Micro-Computer Aided Cost Engineering System (MCACES). These estimates will be escalated to the proposed mid-point of construction and presented as the base-line cost estimate.

Cost Estimate: $15,000.00

Items needed to complete tasks: To be provided by all sections involved: quantity take-off calculations, project parameters and design(s), environmental mandates and constraints, real estate and relocation costs. Sufficient engineering and design must be performed for each designated alternative. Best available construction features (descriptions), lands and damages, utility relocations, any mandatory mitigations, engineering and design, construction management, and contingencies. Consultation with PDT/PF/PM and Section Chiefs will be required.

b) Task: ITR ET-ES F4 Package

Description of task: QC review of estimates

Cost Estimate: $5,000

Items needed to complete tasks: Cost estimates for the alternatives

c) Task: Develop DRAFT Feasibility Level Cost Estimates

Description of task: Specification and Cost Engineering section will prepare and further refine the cost estimate per Engineering Regulation (ER) 1110-2-1302 and Engineering Instructions (EI) 01D010 for the selected alternative. The cost estimate will include updates to the project design and construction, narrative on the method of construction, assumptions and design data. Estimates will be generated using the Micro-Computer Aided Cost Engineering System (MCACES). These estimates will be escalated to the proposed mid-point of construction and presented as the base-line cost estimate.

Cost Estimate: $10,000

Items needed to complete tasks: Updates to the engineering and design for the selected alternative to be provided by all sections involved: quantity take-off calculations, project parameters and design(s), environmental mandates and constraints, real estate and relocation costs. Refined information on construction features (descriptions), lands and damages, utility relocations, any mandatory mitigations, engineering and design, construction management, and contingencies.

d) Task: Conduct ITR on DRAFT Feasibility Level Cost Estimates and Report

Description of task: Conduct seamless review of the cost estimate.

Cost Estimate: $5,000

Items needed to complete tasks: Draft feasibility level cost estimate
e) Task: Develop Final MCACES and Basis of Cost

Description of task: Finalize and incorporate all changes/updated information to determine the final cost estimate.

Cost Estimate: $7,500

Items needed to complete tasks: All updated information and changes to the design. To be provided by all sections involved: quantity take-off calculations, project parameters and design(s), environmental mandates and constraints, real estate and relocation costs.
Costs for Planning, Engineering and Design (PED), Engineering and Design during construction (E&D), and Supervisory and Administration (S&A) to be provided by PPMD.

f) Task: Conduct ITR on FINAL Feasibility Level Cost Estimates

Description of task: Conduct seamless review of the cost estimate.

Cost Estimate: $5,000

Items needed to complete tasks: Final feasibility level cost estimate
a) Task: Collect H&H Data and Update Baseline H&H Studies

Subtask: Basin Hydrology

Description of subtask: Collect and review all available data on basin hydrology. Given the long history of water operations in the Alameda Creek watershed, it is assumed that sufficient existing information is available to define the current basin hydrology without the need for extensive new analyses. Adequacy of the existing data will be assessed during this task. Previous hydrologic studies will be reviewed to determine their appropriateness given existing climate data, current land uses, projected future development, and overall watershed characteristics. Hydrologic data collected will include flow duration curves, headwater and tailwater rating curves at each of the sites being considered for modification for various operating conditions, flood flows, as well as low flow frequency and duration data.

Available data will also be reviewed to determine existing groundwater hydrology and to delineate the current groundwater recharge program. It is assumed that sufficient information is available to evaluate the affect of the proposed modifications on the existing and future conditions. Additional detailed studies will be recommended, should they be determined necessary. If it is determined that a detailed assessment of the groundwater hydrology is needed, a preliminary contingency budget of $44,000 and 400 hours should be included.

Budget includes an allowance for 4 team meetings approximately 2 hours each and 2 off-site meetings with County or related staff during research phase of task.

Hydrology subtask cost estimate: $20,500
Additional contingency cost estimate: $44,000

Items needed to complete subtask: Regional map including topographic contours and prominent planimetric features, site map, City/County/USACE agency hydrology and groundwater study data and reports, State Land Use GIS system (LUPIN) data and locality specific data if available.

Subtask: Baseline Hydraulic Analyses

Description of subtask: Available information for the water control facilities between Mission Boulevard and Decoto Road will also be reviewed. These structures include the Alameda Creek channel, adjacent storm water collection and discharge facilities, the grade control structure known as the BART Weir, as well as the three inflatable dams and their associated perimeter structures. Other upstream structures that will be discussed qualitatively include the 3 large reservoirs (Calaveras, San Antonio, and Del Valle). In addition, recent investigations associated with removal of the diversion dam upstream of Sunol Regional Park will be evaluated to determine its impact, if any, on the hydraulics of the downstream project area.

County personnel will be interviewed to determine if any additional structural or operational changes have been made to the storm water system or other hydraulic elements that might have significant impacts on the proposed project structures (specifically impacts associated with channel hydraulics, ground water recharge and/or sedimentation rates).

Hydraulic analysis will be conducted for this project to determine the baseline condition of the existing Alameda Creek channel and structures. Available information will be truth checked against current survey data to verify elevations of critical, existing hydraulic structures.

Budget includes an allowance for 4 team meetings approximately 2 hours each and 2 off-site meetings with County or related staff during research phase of task.
Hydraulic subtask cost estimate: $24,200

Items needed to complete subtask: USACE, ACWD, ACFCWCD as-built drawings including modifications, operational hydraulics and procedures for inflatable dams and percolation ponds, and points of contact for facility operations, survey data at inflatable dam structures including immediately upstream and downstream as well as at proposed screen locations.

Subtask: Assess Sediment Loading and Analyses Needs

Description of subtask: Channel stability as well as sediment sources and sinks within the Alameda Creek watershed will be qualitatively evaluated to determine potential sources of sediment at the project site. Detailed literature review and data investigations will then be performed to characterize these sources and to assess the sedimentation potential. Given that Alameda Creek is a lined channel, sedimentation is anticipated to be insignificant. Therefore no detailed sedimentation or accretion rate analyses are anticipated. These assumptions will be verified during this task.

Budget includes an allowance for a one day site visit to evaluate potential sediment sources and sinks within watershed and adjacent to project sites.

Sediment loading subtask cost estimate: $8,800

Items needed to complete subtask: Available agency site assessments for upstream tributaries to Alameda Creek as well as in Alameda Creek upstream of the project site. Storm water characterization data for pipes discharging near the project site, if available. Regional land use map and storm water system, if available, for pre-site visit planning. Possible access authorization requirements.

Total Task 1 Cost Estimate: $53,500
Cost Estimate for Optional subtask: $44,000

b) Task: Preliminary Evaluation of Alternatives

Description of task: Literature review of fish passage design examples and past project lessons learned. Analyses will be conducted to determine operational hydraulics of proposed fish ladders and fish screens based on site specific criteria at proposed locations. Basis of element design is PRP and previous analyses by CH2M Hill for ACWD and ACFCWCD. Fish passage improvements will be designed based on criteria consistent with established NMFS and CDFG guidelines for steelhead fry.

Budget includes an allowance for 4 team meetings approximately 2 hours each and 2 off-site meetings with Darryl Hayes (CH2M Hill) and/or County/CDFG/NMFS staff.

Cost Estimate: $26,400

Items needed to complete tasks: CA DFG and NMFS design criteria for steelhead fry, CH2M Hill Conceptual Design report and supporting documentation, if available, Alameda Creek technical memorandums, ACWD and ACFCWCD supporting documentation.

c) Task: Summarize H&H Studies (F3 H&H Package)

Description of task: Summarize H&H studies in written F3 report including available data, site characterization, analyses and assumptions, findings and recommendations as determined in Tasks 2 and 3. This estimate assumes that the maps and figures listed below will be available in an electronic format that allows modification. If it is determined that the Water Resources Section will need to generate these drawings from scratch, an optional budget of $13,200 and 120 hours should be included.
Includes allowance for 4 team meetings, Draft Report and Water Resources Section QA/QC review, as well as revision of F3 document follow ITR.

Cost Estimate: $15,000
Additional Contingency Cost Estimate: $13,200

Items needed to complete tasks: Electronic version of regional map, location map, project site plan, concept level plan and profile drawing of each structure being considered for modification, plan and profile drawing of each alternative being considered. Supporting documentation and analyses from Tasks 2 and 3.

d) Task: Without Project Hydrology Certification

Description of task: Certification of Without Project Hydrology.

Cost Estimate: $600

Items needed to complete tasks: F3 H&H Package.

e) Task: Perform ITR on F3 H&H Package

Description of task: Independent Technical Review (ITR) of F3 H&H package by qualified individual(s) familiar with H&H processes in Alameda Creek and fundamentals necessary for evaluating fish passage structures.

Cost Estimate: $4,400

Items needed to complete tasks: PRP, PMP, Draft F3 H&H Package.

f) Task: Preliminary Alternative Design

Description of task: Review F3 elements from other disciplines to confirm consistency H&H assumptions and design. Based on F3 conference, sponsor comments, and Public Meeting address outstanding issues and refine hydraulic design of preferred alternative(s). Revise F3 H&H Package with new analyses data. Address comments / concerns from public and sponsor. Includes allowance for 4 team meetings of approximately 2 hours.

Cost Estimate: $24,200

Items needed to complete tasks: Complete F3 Submittal (all disciplines), Public meeting minutes, Latest version of PMP, F3 H&H Package, Comments from Public, Sponsor, CDFG, and NMFS.

g) Task: ITR on ET-EW Preliminary Hydraulic Design

Description of task: Independent Technical Review (ITR) of ET-EW Preliminary Hydraulic Design by qualified individual(s) familiar with H&H processes in Alameda Creek and fundamentals necessary for evaluating fish passage structures.

Cost Estimate: $4,000

Items needed to complete tasks: PRP, PMP, F3 Comments, H&H Preliminary Hydraulic Design.
h) Task: NER Design

Description of task: Detail design of preferred alternative for each fish passage structure proposed for qualifying sites. Assumes review of Civil Design Plans and Specifications. Includes allowance for eight 2-hour team meetings.

Cost Estimate: $15,000

Items needed to complete tasks: Preliminary ET-EW Alternative Design

i) Task: Write ET-EW Draft Appendix

Description of task: Compilations of written record and discussion of previous H&H studies, existing H&H conditions, description of alternatives considered and selection of preferred alternative including all supporting data and analyses.

Includes allowance for 2 team meetings.

Cost Estimate: $10,000

Items needed to complete tasks: H&H supporting references, studies and analyses.

j) Task: Conduct ITR on ET-EW Draft Appendix

Description of task: Technical review of ET-EW Draft Appendix.

Cost Estimate: $4,000

Items needed to complete tasks: PRP, ET-EW Draft Appendix.

k) Task: With Project Hydrology Certification

Description of task: Certification of With Project Hydrology

Cost Estimate: $600

Items needed to complete tasks: ET-EW Draft Appendix.

l) Task: With Project Hydrology Certification

Description of task: Final technical review and incorporation of comments into Final Report

Cost Estimate: $2000

Items needed to complete tasks: All outstanding comments both internal and public.
5. ECONOMIC TASKS (PE) JB000

a) Task: ICA Metric Development Coordination

Description of task: The Economics Section will work closely with the environmental and plan formulation sections as well as the local sponsor to identify a metric to assess the benefits of ecosystem restoration improvements. This metric will be measurable and preferably, environmentally-focused. Much of the coordination will take place in the early stages of the study leading up to the without project conditions milestone. Once developed, the metric will be used extensively in the cost effectiveness/incremental cost analyses.

Cost Estimate: $2,880

b) Task: Develop NER and F4 Econ Package

Description of task: Economics studies for ecosystem restoration shall be performed in accordance with Cost Effectiveness Analysis for Environmental Planning: Nine Easy Steps, Institute for Water Resources, U.S. Army Corps of Engineers 1994, which provides guidance on how the Federal Government’s Policies & Guidelines requirement can be met.

A cost effectiveness analysis will ensure that the least cost solution is identified for each possible level of environmental output. Subsequent incremental cost analyses will reveal changes in costs for increasing levels of environmental outputs. The incremental cost analysis will provide information on the marginal cost to produce each additional unit of environmental output. The Economics section will use these tools to identify the NER plan and will provide a summary of these efforts to insure that the process is understood at the F4 Conference.

Cost Estimate: $6,300

Items needed to complete tasks: Working cost estimates must be complete. Metric for proposed ecosystem restoration must be agreed upon and deemed appropriate by SPD and HQUSACE.

c) Task: Conduct ITR on NER and F4 submittal

Description of task: The Economics Section Chief will assign an independent technical reviewer either from the District or another District to review the CE/ICA.

Cost Estimate: $1,760

Items needed to complete task: Summary of NER selection process and F4 submittal package

d) Task: Develop Ability to Pay Analysis

Description of task: The sponsor will prepare a letter assuring the Corps of their ability to finance their portion of the project. The letter will include a finance statement as well as a statement of their financial capability. The Corps will then perform an informal audit of the sponsor's financial statements for the past several fiscal years in order to determine whether the sponsor indeed has the ability to finance its portion of the project. The Corps will also examine the non-Federal sources of funding during and after construction, local government income, current local indebtedness, operating expenses, trends in assessed values, bond ratings, tax collection rates and other financial data. The results will appear in the Feasibility Study as a financial assessment report.

Cost Estimate: $6,120

Items needed to complete task: Cost estimates must be complete.

e) Task: Prepare Draft Economic Appendix
Description of task: Task 5 involves preparing and writing the Economic Appendix, which will document the informational sources, data, assumptions, and methodologies used in the CEA/ICA; the appendix will explicitly identify all alternatives as well as the NER plan.

Cost Estimate: $6,300

f) Task: Conduct ITR on Draft Economic Appendix

Description of task: The Economics Section Chief will assign an independent technical reviewer either from the District or another District to review the draft economic appendix.

Cost Estimate: $1,760

g) Task: Address Final Comments

Description of Tasks: Formal responses to the ITR comments will be addressed and all economic products (appendix, CEA/ICA) will be revised as appropriate.

Cost Estimate: $2,380
6. PLAN FORMULATION (PF) JJ000

a) Task: Develop Initial DPR Team Briefing

Description of task: The Project Planner will summarize the information from the PRP and PMP in a presentation to the PDT. This will include putting an introduction package together for each member of the PDT containing the PMP and an executive summary of the preliminary goals and objectives. In conjunction with the Project Manager the PDT will be briefed on the teams immediate objectives and the next milestone.

Cost Estimate: $3000

Items needed to complete tasks: Final approved PMP.

b) Task: Identify Problems and Opportunities

Description of task: With input from the PDT, including the non-Federal sponsor, PF will identify and document the Problems and Opportunities that exist for fish passage improvements within the Alameda Creek Flood Control Channel. PF will then define existing and without project conditions.

Cost Estimate: $5000

Items needed to complete tasks: Brainstorm during PDT meeting, feedback from PDT and non-Federal sponsor after site visit

c) Task: Public Meeting Preparation (Initial Public Meeting)

Description of task: In conjunction with the local sponsor (ACFCWCD) and the EIS Contractor, PF will prepare presentation materials for the initial public meeting. The initial public meeting will be a combined EIS scoping meeting and plan formulation scoping meeting and will be held before the Preliminary Alternatives are developed. The public meeting will give the public and agencies an opportunity to provide input into the priorities of both the EIS and the Plan Formulation Process. PF will document the public comments in the Detailed Project Report (DPR).

Cost Estimate: $3000

Items needed to complete tasks: An approved PMP, and the participation of the EIS contractor.

d) Task: Develop Preliminary Alternatives

Description of task: With input from other PDT members, including the non-Federal sponsor, PF will develop preliminary plans for fish passage improvements in the Alameda Creek Flood Control Channel.

Cost Estimate: $3000

Items needed to complete tasks: PDT Brainstorming meeting, Existing Conditions, Environmental Studies.

e) Task: Coordinate F3 ITR

Description of task: ET-PF will assign an ITR coordinator other than the Project Planner to coordinate the ITR of all technical products developed in support of the F3 conference. The ITR coordinator will facilitate the transfer of technical products for review to the respective ITR team members, coordinate the distribution of comments, the response and back check for resolution of any issues. The ITR coordinator will then certify and include the documentation of the ITR to the Project planner for inclusion into the F3 read ahead package.
f) Task: Prepare F3 Documentation

Description of task: PF will prepare materials for the DPR Scoping Meeting (F3). Items to be discussed include: study background (including the without-project condition), preliminary discussion and evaluation of alternative plans, policy issues or questions, technical review documentation, the latest version of the PMP (including study/project schedule with milestones and completion dates), and status of NEPA documentation, engineering appendix, real estate plan and study sponsor support.

Cost Estimate: $5000

Items needed to complete tasks: study background (including the without-project condition), preliminary discussion and evaluation of alternative plans, policy issues or questions, technical review documentation, the latest version of the PMP (including study/project schedule with milestones and completion dates), and status of NEPA documentation, engineering appendix, real estate plan and study sponsor support.

g) Task: Conduct Independent Technical Review (ITR) on ET-PF F3 documents

Description of task: The PF Section Chief will assign an Independent Technical Reviewer from Plan Formulation to review documentation for the DPR Scoping Meeting (F3).

Cost Estimate: $2000

Items needed to complete tasks: Materials for F3 conference: study background (including the without-project condition), preliminary discussion and evaluation of alternative plans, policy issues or questions, technical review documentation, the latest version of the PMP (including study/project schedule with milestones and completion dates), and status of NEPA documentation, engineering appendix, real estate plan and study sponsor support.

h) Task: Formulate Alternative Plans

Description of task: With input from the PDT, including the non-Federal sponsor, PF will define project objectives and constraints. PF will then develop and refine the alternative plans. As part of the formulation process, the study will consider technical feasibility, economic feasibility, environmental impact, real estate acquisition, induced flooding, and views of the public. The alternatives that pass the initial screening will be analyzed in terms of costs and benefits to determine an NER plan.

Cost Estimate: $5000

Items needed to complete tasks: Technical Documentation from F3 Conference

i) Task: Coordinate F4 ITR

Description of task: The ITR coordinator will facilitate the transfer of technical products for review to the respective ITR team members, coordinate the distribution of comments, the response and back check for resolution of any issues. The ITR coordinator will then certify and include the documentation of the ITR to the Project planner for inclusion into the F4 read ahead package.

Cost Estimate: $3000

j) Task: Prepare F4 Documentation

Description of task: PF will prepare materials for the Alternative Review Conference (F4). Items to be discussed include those listed for the F3 conference (see above) in addition to: the NER plan, the tentatively
recommended plan, the identification of environmental mitigation requirements, status of the MCACES cost estimate, any guidance memorandum from Issue Resolution Conferences and/or ITR.

Cost Estimate: $10,000

Items needed to complete tasks: Submission of Technical documentation from involved Disciplines.

k) Task: Conduct ITR on ET-PF F4 Documentation

Description of task: The PF Section Chief will assign an Independent Technical Reviewer from Plan Formulation to review documentation for the Alternative Review Conference (F4).

Cost Estimate: $2,000

Items needed to complete tasks: Materials for F4 conference: F3 materials (see above) in addition to the NER plan, the tentatively recommended plan, the identification of environmental mitigation requirements, status of the MCACES cost estimate, guidance memorandum from recent Issue Resolution Conferences and/or ITR.

l) Task: Prepare Draft DPR

Description of task: PF will assemble the DPR, which will include the following information: study authority, study purpose and scope, discussion of prior studies, reports, and existing water projects, a description of plan formulation, description of the selected plan, a description of plan implementation, a summary of public coordination, views, and comments, and recommendations (including disclaimer). The DPR will recommend the preferred alternative based on the analysis in the Engineering Appendix, EIS/R, Real Estate Appendix, and Economics Appendix. After the F4 conference and the public review period for the Draft Detailed Project Report (DPR), PF will revise the Draft DPR based on feedback from Corps entities, the non-Federal sponsor, and the public. PF will assemble the report, EA, and the technical appendices into a Final DPR.

Cost Estimate: $13,000

Items needed to complete tasks: To complete these tasks, all technical appendices (Economic Appendix, ICA, Fish and Wildlife Coordination Act Report, EA/FONSI, BA, Cultural Resources Appendix, Geotechnical Appendix, H&H Appendix, Maps/Surveys from ET-ED, Drawings for NED and LPP, Real Estate Appendix) must be completed prior to making final recommendations regarding a preferred plan alternative. Draft DPR, Public Involvement documentation, Economic Appendix, ICA, Fish and Wildlife Coordination Act Report, EA/FONSI, BA, Cultural Resources Appendix, Geotechnical Appendix, H&H Appendix, Maps/Surveys from ET-ED, Drawings for NED and LPP, Real Estate Appendix.

m) Task: Coordinate Draft DPR ITR

Description of task: The ITR coordinator will facilitate the transfer of technical products for review to the respective ITR team members, coordinate the distribution of comments, the response and back check for resolution of any issues. The ITR coordinator will then certify and include the documentation of the ITR to the Project planner for inclusion into the Draft DPR read ahead package.

Cost Estimate: $3,000

Items needed to complete tasks: To complete these tasks, all technical appendices (Economic Appendix, ICA, Fish and Wildlife Coordination Act Report, EA/FONSI, BA, Cultural Resources Appendix, Geotechnical Appendix, H&H Appendix, Maps/Surveys from ET-ED, Drawings for NED and LPP, Real Estate Appendix) must be completed prior to making final recommendations regarding a preferred plan alternative. Draft DPR, Public Involvement documentation, Economic Appendix, ICA, Fish and Wildlife Coordination Act Report, EA/FONSI, BA, Cultural Resources Appendix, Geotechnical Appendix, H&H Appendix, Maps/Surveys from ET-ED, Drawings for NED and LPP, Real Estate Appendix.
n) Task: Conduct ITR on Draft DPR (ET-PF)

Description of task: The PF Section Chief will assign an Independent Technical Reviewer from Plan Formulation to review the Draft DPR.

Cost Estimate: $3000

Items needed to complete tasks: DPR and associated appendices (see task above, Coordinate Final DPR)

o) Task: Finalize DPR

Description of task: The Project planner will finalize the DPR by incorporating all of the Draft comments into the Final DPR and coordinating the production of the final document for Division approval

Cost Estimate: $10,000

Items needed to complete tasks: All comments from previous ITR and final agency comments on Draft as well as QC certification for Final DPR and EIS.

p) Task: QC Certification of Final DPR and EIS

Description of task: The ITR Coordinator will coordinate and finalize all prior ITR into the Final QC certification

Cost Estimate: $3,000

Items needed to complete tasks: All comments from previous ITR and final agency comments on Draft as well as QC certification for Final DPR and EIS.
a) Task: Develop SOW For EIS/R

Description of task: The Environmental Section will develop a Scope of Work for an IDIQ EIS/R Continuing Contract. The Scope of Work will detail the expectations and a deliverables schedule for regular submittals. The IDIQ Contract Scope will also detail all aspects of Cultural and HTRW investigation and documentation as well as agency coordination. Because of the Continuing Contract status, a multi-year schedule of deliverables will be established.

Cost Estimate: $5,000

Items needed to complete tasks: PMP approval.

b) Task: Negotiate EIS/R Proposal

Description of task: The Environmental Section will first develop an Independent Government Estimate (IGE), which will be the internal basis for contract negotiations. After the negotiations the EM will be the point of contact to coordinate the finalization of acquiring the IDIQ contract.

Cost Estimate: $3,000

Items needed to complete tasks: EIS/R SOW, disclosure statement of no financial interest in the project from the contractor

c) Task: EIS/R Continuing Contract

Description of task: The EIS/R contract will be a continuing contract specifying a schedule of deliverable over the life of the study.

Cost Estimate: $150,000

Items needed to complete tasks:

d) Task: Coordinate EIS/R Notice of Intent

Description of task: The EM will coordinate with the EIS/R contractor to set and announce through the proper channels a Notice of Intent to develop and EIS/R. The NOI will be published in the Federal Register.

Cost Estimate: $4,000

Items needed to complete tasks: EIS/R Contract, Proposed Alternatives, Proposed Scoping process including any scoping meetings.

e) Task: Develop ICA Metric/Methodology

Description of task: The environmental section will work closely with the economic and planning sections, the local sponsor, and Alameda Creek experts, and the EIS Contractor to insure maximal ecosystem restoration compared to costs and water use benefits. A measurable, environmentally based metric will be developed to be used to consider the environmental benefits/drawbacks brought forth with each plan. Background research will be conducted and FWS and DFG etc. (ERDC) will be consulted to insure suitable environmental parameters are established for this metric.

Cost Estimate: $6200
Items needed to complete tasks: Meetings with economic and planning sections, correspondence with the local sponsor and Alameda Creek experts

f) Task: Scope Planning Aid Report

Description of task: EM will write scope for USFWS to prepare a Planning Aid Report in which the FWS will look at the site, its fish and wildlife, and the preliminary project alternatives and write a report with their assessment and recommendations.

Cost Estimate: $1,500

Items needed to complete tasks: List of preliminary alternatives.

g) Task: Develop an Assessment of the PAR.

Description of task: The EM in coordination with the EIS/R contractor, will assess the PAR, coordinate with F&W to confirm any issues of concern and provide input into the initial plan formulation process to identify any potential concerns or constraints. The assessment will be used to inform the preliminary alternatives and to insure that the PDT team is aware of potentially serious environmental issues affecting plan formulation.

Cost Estimate: $3,000

Items needed to complete tasks: PAR

h) Task: EIS/R First Admin Draft

Description of task: The EM will coordinate the contract deliverable of a First Admin Draft. The First Admin draft will contain the Without Project Cultural Assessment and the HTRW preliminary assessment. Both items will be used to identify any appropriate issues to the PDT. For the purposes of this scope of work it is assumed that the results of the HTRW preliminary investigations will conclude that no sampling will be required as the proposed project is within the footprint of the existing project. In the case that additional HTRW work is required the Scope will be modified.

Cost Estimate: $5,000

Items needed to complete tasks: First Admin Draft. HTRW and Cultural Assessments.

i) Task: Conduct ITR on Env Existing Conditions and ICA Metric

Description of task: EM will submit Existing Conditions Environmental Studies ICA Metric, Environmental baseline as established by the contractor in the First admin draft as well as the Cultural assessment to another member of the Environmental Section to gain feedback and suggestions. Suggestions/comments will be reviewed and resolved as necessary by the EM for submission to Project Planner and inclusion into the F3 Package.

Cost Estimate: $2,000

Items needed to complete tasks: see Description of Task.

j) Task: Finalize ICA Outputs

Description of task: The environmental section will use the developed ICA metric to quantify each plan’s ecosystem restoration benefits. EM will gather the opinions of the local sponsor, Alameda Creek experts, the EIS Contractor and work with internal Corps staff to finalize the determination of each plan’s effect on the creek ecosystem. This information will be collected and circulated among the project team members and given to the Contractor for use in the EIS/R.
Cost Estimate: $4,500

Items needed to complete tasks: Project Plans, ICA metric, input from Corps and non-Corps team members.

k) Task: 2nd Admin Draft of EIS/R (Alternatives Analysis)

Description of task: The EM will coordinate the contract deliverable of the 2nd Admin Draft and alternatives analysis.

Cost Estimate: $4,500

Items needed to complete tasks: Project Alternatives and NER plan.

l) Task: ITR ET-PP with project F4 Package

Description of task: Independent technical review will be conducted on the EIS/R and the finalized ICA Output. Comments and suggestions will be sent to the contractor and EM, respectively.

Cost Estimate: $5,000

Items needed to complete tasks: EIS/R alternatives analysis and 2nd Admin Draft.

m) Task: ET-PP Environmental Mitigation/Design Requirements

Description of task: Environmental Section and EIS Contractor will review Civil Design plans to insure the project’s design will minimize environmental impacts. Mitigation measures will be sought and suggested for unavoidable impacts.

Cost Estimate: $5,000

Items needed to complete tasks: Civil Design’s plans (or contractor plans) for the primary alternative.

n) Task: Biological Assessment

Description of task: EM will coordinate with wildlife experts to analyze the effects of the project on listed and proposed species in terms of individuals and populations, including consideration of indirect effects of the proposal on the species and its habitat, and an analysis of alternative actions considered. This will include: an on-site inspection of the project area; a detailed survey of the area to determine if listed, threatened, species of special concern or suitable habitat is present; a review of literature and scientific data to determine species distribution, habitat needs, and other biological requirements; and interviews with experts. The BA will conclude with whether or not any listed or proposed species will be affected. This item will be included in the EA, if necessary.

Cost Estimate: $10,000

Items needed to complete tasks: Alternative plans being considered, species lists, input from wildlife experts.

o) Task: Section 7 Consultation

Description of task: EM will contact USFWS and NMFS by mail to request an updated species list for the project area and conduct discussions with these agencies to determine the effect the project will have on listed species. EM will conduct background research to determine potential impacts the project could have on each listed species. Because Steelhead Trout will be affected, the EM will compose a BA. If a “no effect” determination is agreed upon, EM will obtain a Written Service Concurrence, if adverse affects are anticipated. Formal Consultation will be required.
Cost Estimate: $4,000

THIS ASSUMES INFORMAL CONSULTATION ONLY, WITH THE BA HAVING A CONCLUSION OF “NOT LIKELY TO ADVERSELY IMPACT”.

Items needed to complete tasks: Species Lists from USFWS and NMFS, meetings and site visits with NMFS and coordination with the sponsor.

p) Task: Develop Draft EIS/R (A/E)

Description of task: Contractor will develop Draft EIS/R. EM will coordinate with contractor to provide any necessary Corps furnished information and maintain an agreeable schedule. EM will review the draft and coordinate with the contractor to implement any necessary modifications.

Cost Estimate: $10,000

Items needed to complete tasks: Alternative plans being considered, species lists, input from wildlife experts.

q) Task: Conduct ITR on EIS/R Draft

Description of task: EM will submit the ET-PP Draft Package to another member of the Environmental Section to gain feedback and suggestions. Suggestions will be considered and added as necessary by the EM and contractor.

Cost Estimate: $5,000

Items needed to complete tasks: Biological Assessment, Draft EIS/R.

r) Task: Address Agency and Public Comments on EIS/R

Description of task: After distribution of the Draft EIS/R and the close of the comment period. The EM will coordinate the closure and incorporation of the comments into the Final EIS/R.

Cost Estimate: $5,000

Items needed to complete tasks: Draft EIS/R and summary of draft EIS/R.

s) Task: ITR ET-PP Final EIS/R

Description of task: Previous reviewer will finalize EIS/R and prepare ROD

Cost Estimate: $1,000

Items needed to complete tasks: Draft EIS/R and all comments.
8. REAL ESTATE STUDIES

a) Task: Develop Rights of Entry for Geotech & Cultural

Description of task: RE will use the Boring Maps to determine ownerships and will then obtain the rights of way.

Cost Estimate: $7,000

Items needed to complete tasks: Geotech work locations in autocad/electronic format

b) Task: Develop NER Selection Real Estate Costs.

Description of task: Using project footprint, representative land use costs will be developed to for the Incremental Cost Analysis NER project selection purpose.

Cost Estimate: $7,000

Items needed to complete tasks: Project footprint/preliminary design to include access areas & construction staging areas, provided in electronic autocad format

c) Task: F4 RE ITR

Description of task: NER level costs will be given to the ITR team member for evaluation.

Cost Estimate: $2,000

Items needed to complete tasks: Project footprint and preliminary designs.

d) Task: Develop Real Estate MCACES

Description of task: Prepare Real Estate MCACES for input into Cost Estimating Section’s total project MCACES. In addition RE will prepare gross appraisal of project lands

Cost Estimate: $15,000

Items needed to complete tasks: Federal and Non-Federal Administrative Costs, Real Estate Mapping, Ownerships, and Estates,

e) Task: Prepare Real Estate Appendix

Description of task: The Corps’ Real Estate Division will perform the following tasks: (1) preparation of the Real Estate Plan which is an overall plan describing the minimum real estate requirements for the project requirements (ER 405-1-12, Chapter 12.) and which is an appendix to the Feasibility Report; (2) preparation of a detailed estimate of all real estate costs associated with acquisition of the project’s real estate property requirements (see ER 405-1, Draft Chapter 12, Section III-Planning, Section VI-Appraisals, paragraph 12-28b and Real Estate Policy Guidance Letter Number 3, Guidance for Preparation of the Gross Appraisal), (3) determination of the tract ownership and acreage in addition to preparing real estate preliminary and final take line drawings; (4) investigation and attorney’s determination, if owners of project-affected facilities or utilities have a vested interest and compensable interest in the property, with regard to the real estate taking, (5) Real Estate will coordinate requests and work with the sponsor to obtain rights of entry for the survey, cultural resources, and geotechnical exploration work required, and (6) perform an institutional real estate financial capability analysis.

Cost Estimate: $10,000
Items needed to complete tasks:  Mapping (recent aerial/ortho photo of project site) & Ownerships, Gross Appraisal, and RE MCACES, and Discussion of Issues, & Utility/Facility Information, Preliminary Design. Utility/facility information from RE Program Manager/Realty Specialist

f) Task: Draft RE ITR

Description of task: ITR will be performed on all Draft RE materials and appendix.

Cost Estimate: $2,000

Items needed to complete tasks: All Draft RE materials

g) Task: Final ITR and Comment Responses

Description of task: Final ITR on all RE materials and response and incorporation into Final Document

Cost Estimate: $2,000

Items needed to complete tasks: All RE related Comments.
9. PROJECT MANAGEMENT (PM) JPA00

a) Task: Project management

Description of task: PM will prepare budget documents, project justifications, and perform financial tracking and record keeping as well as coordinate on a non-technical level with the Sponsor on project activities and issues. The PM will assist in preparation of the Project Management Plan and any cost-sharing agreements. The project manager will attend project team meetings and Sponsor meetings as required and coordinate with the project planner in resolving issues concerning the project within the District as needed. The program analyst will assist the PM in preparing budget documents and fact sheets.

Cost Estimate: $150,000

Duration: See WBS (Chapter IV) for all task durations
CHAPTER IX
QUALITY CONTROL PLAN

1. QUALITY CONTROL PLAN OBJECTIVE

The quality control objective is to achieve DPR phase documents and services that meet or exceed customer requirements, and are consistent with Corps policies and regulations.

2. GUIDELINES FOLLOWED FOR TECHNICAL REVIEW

The guidelines for independent technical review are set forth in the South Pacific Division Quality Management Plan, CESPD R 1110-1-8, and in the corresponding District Quality Management Plan, CESPN OM 1110-1-12.

3. ROSTER OF THE PROJECT STUDY TEAM

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<tr>
<th>Corps of Engineers</th>
<th>Name</th>
<th>Phone</th>
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<tbody>
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4. ROSTER OF THE TECHNICAL REVIEW TEAM

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<tr>
<th>Corps of Engineers</th>
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<tbody>
<tr>
<td>Project Planner</td>
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<td>Civil Design</td>
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5. DOCUMENTS TO BE REVIEWED AND SCHEDULE FOR REVIEW ACTIVITIES

a. All of the products of the tasks listed in the detailed scopes of work in Chapter V, Scopes of Work, will be subject to independent technical review. Seamless Single Discipline Review will be accomplished prior to the release of materials to other members of the study team or integrated into the overall study. Section chiefs shall be responsible for accuracy of the computations through design checks and other internal procedures, prior to the independent technical review.
b. Independent product review will occur prior to major decision points in the planning process at the CESPD milestones so that the technical results can be relied upon in setting the course for further study. These products would include documentation for the CESPD milestone conferences (F3 & F4) and the draft and final reports. These products shall be essentially complete before review is undertaken. Since this quality control will have occurred prior to each milestone conference, the conference is free to address critical outstanding issues and set direction for the next step of the study, since a firm technical basis for making decisions will have already been established. In general, the independent technical review will be initiated at least two week prior to a CESPD milestone conference.

c. For products that are developed under contract, the contractor will be responsible for quality control through an independent technical review. Quality assurance of the contractor’s quality control will be the responsibility of the District.

6. DEVIATIONS FROM THE APPROVED QUALITY MANAGEMENT PLAN

There are no deviations to the approved South Pacific Division quality management plan:

7. COST ESTIMATE FOR QUALITY MANAGEMENT

The costs for conducting independent technical review are included in the individual scopes of work that are included in Chapter V, Scopes of Work and total $114,000, which is approximately 9% of the study cost estimate. Quality management activities of Branch and Division Chiefs are included in the cost estimate for each task.

8. PMP QUALITY CERTIFICATION

The Chief, Planning Division, has certified that 1) the independent technical review process for this PMP has been completed, 2) all issues have been addressed, 3) the streamlining initiatives proposed in this PMP will result in a technically adequate product, and 4) appropriate quality control plan requirements have been adequately incorporated into this PMP. The signed certification is included as Enclosure F.

9. DPR PHASE CERTIFICATION

The documentation of the independent technical review shall be included with the submission of the reports to CESPD. Documentation of the independent technical review shall be accompanied by a certification, indicating that the independent technical review process has been completed and that all technical issues have been resolved. The certification requirement applies to all documentation that will be forwarded to CESPD for review or approval. The Chief, Planning Division will certify the pre-conference documentation for the CESPD conferences and the Draft DPR. The District Commander will certify the Final DPR, which includes the signed recommendation of the District Commander. This certification will follow the example that is included as Appendix H of the CESPD Quality Management Plan and will be signed by the Chief, Planning Division and the District Commander.
CHAPTER X
RISK & CHANGE MANAGEMENT PLANS

1. Risk Management Plan

Risk Management is a systematic process of identifying, analyzing, and responding to risk for the entire life of the project. A risk analysis is performed for four categories of project risk: scope, quality, schedule, and cost, and the level of detail of the risk analysis and Risk Management Plan is based on the complexity of the project. In the case of the Lower Alameda Creek Fish Passage Improvements Project, it will be the responsibility of the Project Delivery Team (PDT) to keep track of identified risks, identify new ones, determine if agreed upon responses to risks have been executed, and evaluate the effectiveness of risk response to reduce identified risks. This will be accomplished at quarterly DST meetings where they will consider potential risks that could be associated with accomplishing the project’s activities, schedule, and fiscal resources, and evaluate and analyze each risk identified and determine the appropriate rating and severity (should the risk event occur) for each risk.

2. Change Management Plan

The purpose of a Change Management Plan is to define and manage the project’s baseline performance measurement thresholds for scope, schedule, cost, quality, and risk and to determine if actual project performance has exceeded these thresholds. These baseline performance measurement thresholds are:

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<tr>
<td>Defined in Project Management Plan and by the WBS</td>
</tr>
<tr>
<td>Schedule</td>
</tr>
<tr>
<td>Defined by schedule start and finish dates in project’s critical path</td>
</tr>
<tr>
<td>Cost</td>
</tr>
<tr>
<td>Defined by resource plan that reflects total project cost</td>
</tr>
<tr>
<td>Quality</td>
</tr>
<tr>
<td>Defined by quality objectives</td>
</tr>
<tr>
<td>Risk</td>
</tr>
<tr>
<td>Defined by Customer requirements, resource availability, and schedule</td>
</tr>
</tbody>
</table>

Change requests can be presented in the form of verbal or informal requests, however, proposed changes should be formally recorded in order to facilitate the understanding of the intent of the proposed change. The Change Request Form (ENCLOSURE G) provides a means of documenting the impact of the proposed changes and provides the rationale for approving changes that exceed the project’s baseline performance measurement thresholds. Change Request Forms will be coordinated with the members of the PDT as well as with the sponsor.
CHAPTER XI
PUBLIC COMMUNICATION PLAN

1. CESPD MILESTONES

Two of the milestones in the CESPD milestone system have been established specifically for the purpose of providing a public forum to receive public input. The first of these is the initial public workshop. This workshop is an opportunity to present the study to the public, obtain input and public opinions, and fulfill the NEPA scoping meeting requirements. The second milestone in the system is the final public meeting. This meeting is after the release of the draft report for public review and is an opportunity to present the findings of the draft report to the public and receive public comment.

2. PUBLIC INVOLVEMENT ACTIVITIES

The Project Delivery Team (PDT) will use the following steps to develop a public communications plan, which will determine when additional public meetings should be held and what information should be disseminated:

1) Define issues that may have impact on the project: What are the issues in the project environment that may impact it? The issues may involve economics; quality of life; institutional forces; political forces on the Tribal, Federal, state, and local level; environmental, health, and safety issues; or cultural, technical, legal, or other issues. The PDT will brainstorm how these issues may affect the project.

2) Identify key stakeholders: The PDT will identify the groups that will be affected by or will affect the project, and determine what effects they will have. In identifying stakeholders, the PDT will consider geography, economics, quality of life, and political sensitivity. This information will be documented for PDT access.

3) Research stakeholders’ interests: To better understand expectations, problems, concerns, and issues associated with the project, the PDT will speak with local sponsors, lawmakers, regulators, communities, interest groups, and other members of the Corps. If necessary, the PDT will also review existing documents and conduct survey or focus groups.

4) Develop key messages: Key messages to the public concerning the project may address the following questions: What is the project doing about a problem or issue? What is the Corps’s position, and why? What is the status, progress, or limitation? What are the challenges, accomplishments, and partnerships unique to this project?

5) Outline steps to inform and initiate action: The PDT will select spokespersons, determine what meetings should occur and what communications tools and media should be used to disseminate information to the public. Public meetings will occur in conjunction with major milestones and events in the project. The PDT will coordinate with the Public Affairs office, and, where feasible, with third-party champions of the project. Key messages will be selected for each step.

6) Develop a media strategy: An active and/or passive strategy will be developed. An active strategy is a planned effort to initiate media interest and a passive strategy will enable the PDT to respond rapidly to media calls. The following procedures will be established: Who to call in an emergency, who to refer reporters to for official comments, where media interviews should take place, how to report media calls, and whom to coordinate with.

7) Evaluate and update: The communication strategy will be evaluated based on the following criteria: 1) Did the communication strategy: a) allow the PDT to determine the playing field, b) allow the PDT to frame the issues, and c) help the PDT collaborate with its constituents? 2) Were the messages sent by the PDT used? 3) Was the majority of dialogue fact-based or emotional? 4) What was the overall impact? Based on the evaluation, the PDT will determine what will happen next.
ENCLOSURE B

Project Location
(3 maps)
ENCLOSURE C

SUPPORTING DOCUMENTATION FOR SECTION 1135 ELIGIBILITY OF NON-FEDERAL STRUCTURES
(ACWD Report)
### CESPD MILESTONE SYSTEM

**DPR PHASE MILESTONES FOR CAP PROJECTS**

<table>
<thead>
<tr>
<th>MIL</th>
<th>MILESTONE NAME</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Initiate DPR Phase (F1&lt;sup&gt;2&lt;/sup&gt;)</td>
<td>This is the date the District receives DPR phase study funds. (Hold TRSS shortly thereafter; from QM requirements)</td>
</tr>
<tr>
<td>101</td>
<td>Feasibility Study Public Workshop (F2)</td>
<td>This is a Public Meeting/Workshop to inform the public and obtain input, public opinions and fulfill scoping requirements for NEPA purposes.</td>
</tr>
<tr>
<td>102</td>
<td>Feasibility Scoping Conference (F3)</td>
<td>This recommended meeting is held (chaired by district) with SPD invited to address potential changes in the PMP. It will establish without-project conditions and screen preliminary plans. (The district is responsible for approving the hydrology)</td>
</tr>
<tr>
<td>103</td>
<td>Alternative Review Conference #2 (F4/4A)</td>
<td>This recommended meeting is held (chaired by district) with SPD invited to evaluate the final plans and reach a consensus that the evaluations are adequate to select a plan. (Takes place before public review—helps to get SPD DST buy in to the draft report)</td>
</tr>
<tr>
<td>145</td>
<td>Public Review of Draft Report (F5)</td>
<td>Initiation of field-level coordination of the draft report with concurrent submittal to SPD for policy compliance review. (Note: The district cannot release report for public review if it has an EIS or a cost greater than $4M until after SPD approval—Concurrent SPD review starts and then continues during the public review period)</td>
</tr>
<tr>
<td>162</td>
<td>Final Public Meeting (F6)</td>
<td>Date of the final public meeting.</td>
</tr>
<tr>
<td>130</td>
<td>DPR Review Conference (F7)</td>
<td>Optional—as required, Policy compliance review of the draft report with SPD to identify actions that are required to complete the final report.</td>
</tr>
<tr>
<td>165</td>
<td>DPR w/NEPA (F8)</td>
<td>Date of submittal of final report package to CESPD, including technical and legal certifications, compliance memorandum and other required documentation for approval and authorization.</td>
</tr>
</tbody>
</table>

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1 MIL – Milestone number used in the PROMIS database.
2 F1 through F9 are the historical designations for the SPD Milestones.
ENCLOSURE F

QUALITY CONTROL CERTIFICATION

COMPLETION OF QUALITY CONTROL ACTIVITIES

The District has completed the Project management plan for the Lower Alameda Creek Fish Passage Improvement Project. All quality control activities defined in the generic quality control plan for PRP phase products have been completed. Compliance with clearly established policy principles and procedures, utilizing justified and valid assumptions, has been verified, including whether the PMP meets the non-Federal sponsors needs and is consistent with law and existing Corps policy. All issues and concerns resulting from the independent technical review of the PMP have been resolved.

CERTIFICATION

Certification is hereby given that 1) the independent technical review process for this PMP has been completed, 2) all issues have been addressed, 3) the streamlining initiatives proposed in this PMP will result in a technically adequate product, and 4) appropriate quality control plan requirements have been adequately incorporated into this PMP. In summary, the study may proceed into the DPR phase in accordance with this PMP.

_________________________  ____________________________
Date                        Chief, Planning Division
## Change Request Form

<table>
<thead>
<tr>
<th>Project:</th>
</tr>
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<tbody>
<tr>
<td>Request No.: _____</td>
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<td>Date of Request: ______________</td>
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<table>
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<tr>
<th>Change Description:</th>
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<table>
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<tr>
<th>Justification:</th>
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<tr>
<th>Description of Impact:</th>
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### Coordination

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<th>DST Review/Approval:</th>
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<th>Sponsor Review/Approval:</th>
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### Resolution of Change

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<table>
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<tr>
<th>Disapproved:</th>
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ENCLOSURE H

LIST OF ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CESPD</td>
<td>South Pacific Division (also SPD)</td>
</tr>
<tr>
<td>DE</td>
<td>Division Engineer (Division Commander)</td>
</tr>
<tr>
<td>EA</td>
<td>Environmental Assessment</td>
</tr>
<tr>
<td>EC</td>
<td>Engineering Circular</td>
</tr>
<tr>
<td>EIS</td>
<td>Environmental Impact Statement</td>
</tr>
<tr>
<td>EP</td>
<td>Engineering Pamphlet</td>
</tr>
<tr>
<td>ER</td>
<td>Engineering Regulation</td>
</tr>
<tr>
<td>FONSI</td>
<td>Finding of No Significant Impact</td>
</tr>
<tr>
<td>H&amp;H</td>
<td>Hydrology and Hydraulics</td>
</tr>
<tr>
<td>HQUSACE</td>
<td>Headquarters, U.S. Army Corps of Engineers</td>
</tr>
<tr>
<td>HTRW</td>
<td>Hazardous, Toxic and Radioactive Waste</td>
</tr>
<tr>
<td>MSC</td>
<td>Major Subordinate Command</td>
</tr>
<tr>
<td>NAS</td>
<td>Network Analysis System</td>
</tr>
<tr>
<td>NED</td>
<td>National Economic Development</td>
</tr>
<tr>
<td>NEPA</td>
<td>National Environmental Policy Act</td>
</tr>
<tr>
<td>OBS</td>
<td>Organizational Breakdown Structure</td>
</tr>
<tr>
<td>P&amp;G</td>
<td>Water Resources Council’s Principles and Guidelines</td>
</tr>
<tr>
<td>PED</td>
<td>Preconstruction Engineering and Design</td>
</tr>
<tr>
<td>PMP</td>
<td>Project Management Plan</td>
</tr>
<tr>
<td>PPMD</td>
<td>Programs and Project Management Division</td>
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<tr>
<td>PROMIS</td>
<td>Project Management Information System</td>
</tr>
<tr>
<td>PSP</td>
<td>Project study plan (now referred to as a PMP)</td>
</tr>
<tr>
<td>RAM</td>
<td>Responsibility Assignment Matrix</td>
</tr>
<tr>
<td>ROD</td>
<td>Record of Decision</td>
</tr>
<tr>
<td>S&amp;A</td>
<td>Supervision and Administration</td>
</tr>
<tr>
<td>SPD</td>
<td>South Pacific Division (CESPD)</td>
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<tr>
<td>Acronym</td>
<td>Full Form</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>USF&amp;WL</td>
<td>U.S. Fish and Wildlife Service</td>
</tr>
<tr>
<td>WBS</td>
<td>Work Breakdown Structure</td>
</tr>
<tr>
<td>WRDA</td>
<td>Water Resources Development Act</td>
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