

SCOPE

Preliminary Restoration Plan: Completed September 2001

Planning and Design: Initiated October 2001

Planning and Design Investigation Tasks

1. Project Planning: (PM)

- PMP (living document, updated quarterly)
- Schedule, -MS project
- Detailed Cost Estimate
- Sponsor Coordination/Team Coordination

2. ERS:

- Pre-Coordination discussions
- Initial Agency Meetings
- Studies Development/ Identification of existing data
- Biological Criteria for design
- Quantification of biological benefits (habitat units, etc)
- Contracting and Oversight of Studies
- Monitoring, field work and data analysis
- Design Review
- Impact Assessment and EA/BA preparation
- Final agency Coordination - FWCA
- Public Review and Permitting (404 analysis, water quality certification/public notice, coastal zone consistency, cultural resources assessment, collection permit)

3. Civil/ Structures:

- Site Assessment
- Preliminary Design
 - Spillway
 - Fish ladder
 - Intake
 - Right Abutment
- Write Design Analysis
- Assemble Calculations
- Write Specifications
- Provide Cost Engineering Input
- Final Design

NOTE: Due to the short fish window for construction, design may need to promote modular implementation of the project.

4. Geotech

- Site Assessment/Geotechnical report

5. Economics:

- Alternatives Analysis
- Plan Formulation (with PM)

- BC Ratio/ Economic Analysis
6. Cost Estimating:
- Preliminary Costs for PDA estimates
 - Detailed Costs Construction
4. Real Estate:
- Identification of real estate issues
 - Rights of Entry (ROE)
 - Real Estate Drawings for Real Estate Plan
 - Perform P. L. 91-646 Relocation Survey
 - Prepare Gross/Final Appraisals
 - Prepare a Baseline Cost Estimate for Real Estate in M-CACES Format
 - Prepare a Real Estate Plan (REP) for Planning and Design Report, (design documentation report-DDR)
 - Review, Comment and Coordinate DDR
 - Ascertain Non-Federal Sponsors' Legal Authority
 - Project Cooperation Agreement and Deviation Report
 - Technical Review of Decision Document
 - Revise Comment and Coordinate Response to Technical Review
 - Review and Higher Authority Review Comments
 - Certification of Land
 - LEERRD
7. H &H
- Determine / define functional criteria - Includes design discharges, design velocities through ladder, losses at screens, intakes and dam.
 - Design / configure dam alteration –(if applicable) Includes assessment of the best alternative for downstream dam face, dam crest elevation and apron configuration.
 - Design / configure fish screen at intakes (if applicable), including any bypass chute for juvenile fish
 - Design fish ladder extension (if applicable). Includes design / assessment of intake and outlet hydraulics, configuration for optimal velocities and attraction flows and addressing of sediment issues
 - Define channel hydraulics for upstream and downstream reaches – Includes determination of hydraulic and sediment conditions for the post-construction channel configuration at both high and low flow conditions, (depths, velocities)
 - Determine high flow impacts - Includes channel/system stability at high flow and consequent design of any required bank stabilization.
8. WDFW:
- Assist in plan formulation and identification and selection of alternatives
 - Public outreach/ workshop coordination (with PM)
 - Technical review of design

- PCA development
- HPA (concurrent to permit acquisition by the corps, Seattle will work on HPA Acquisition)
- Provide Cost share responsibilities

PDA Task Deliverables

1. Scopes of work from each team member
2. PCA -draft
2. Final PCA
3. Costs and Benefits/Economic Analysis of Alternatives
4. Public Notice
5. Technical Review of plan formulation and alternative selection
6. 10%, 35%, 65%, 100% design drawings
7. Technical Review of design drawings with documented backcheck
8. Stakeholder Workshop
9. Sponsor Financial Plan and Statement of Financial Capability
10. Permits (404 (b)(1) analysis, 401 water quality certification, Coastal Zone consistency determination, Cultural Resource Assessment, Fish and Wildlife Coordination Act concurrence
11. BA/EA/FONSI (ESA consultation, section 7 consultation)
12. Detailed Project Report (DPR) with NEPA compliance – Decision making document

Construction

1. Bid/ Award Contract

NOTE: How will operation of the hatchery and intake be effected during construction?

Scope changes

For any changes in scope or schedule, the responsible person will notify the PM for concurrence. Because several events are sequential, the scope change may require a team meeting. All significant changes that effect the team and schedule will be discussed as a team to determine the best course of action. All final decisions rest with the PM.