



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, NORTHWESTERN DIVISION
PO BOX 2870
PORTLAND OR 97208-2870

CENWD-PDD

31 MAY 2012

MEMORANDUM FOR Commander, Walla Walla District (CENWW-PM-PE)

SUBJECT: Review Plan (RP) Approval for the Boise River at Eagle Island Ecosystem Restoration Project, Section 1135 Project

1. Reference EC 1165-2-209, Civil Works Review Policy, 31 January 2010.
2. The enclosed RP for the Boise River at Eagle Island Ecosystem Restoration Project, Idaho has been prepared to cover the review process for the subject decision document. It has been reviewed and coordinated with NWD staff to ensure it anticipates and defines the appropriate level of review, identifies the technical specialist needed, and fulfills the requirements of WRDA 2007 and the Information Quality Act. Additionally, it was reviewed to ensure consistency with EC 1165-2-209 requirements.
3. The RP has been revised to address NWD review comments. All comments have been back-checked and closed out.
4. I hereby approve this RP, which is subject to change as study circumstances require, consistent with study development under the Project Management Business Process. Subsequent revisions to this RP or its execution will require review by CENWD-PDD and approval by this office.
5. The RP should be posted to the internet and available for public comment.
6. Please contact Rebecca Weiss, at 503-808-3728, if you have further questions regarding this matter.

FOR THE COMMANDER:

Encl


DAVID J. PONGANIS, SES
Director, Programs

REVIEW PLAN
USING THE NWD MODEL REVIEW PLAN
for
Continuing Authorities Program
Section 14, 107, 111, 204, 206, 208, 1135 and projects directed by guidance to
use CAP procedures

Boise River at Eagle Island Ecosystem Restoration Project
Section 1135 Project

Walla Walla District

MSC Approval Date: Pending
Last Revision Date: 29 May 2012



**US Army Corps
of Engineers ®**

**REVIEW PLAN
USING THE NWD MODEL REVIEW PLAN**

*Boise River at Eagle Island Ecosystem Restoration Project
Ada County, Idaho
Section 1135 Project*

TABLE OF CONTENTS

| | |
|---|----------|
| 1. PURPOSE AND REQUIREMENTS | 1 |
| 2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION | 3 |
| 3. PROJECT INFORMATION | 3 |
| 4. DISTRICT QUALITY CONTROL (DQC) | 3 |
| 5. AGENCY TECHNICAL REVIEW (ATR) | 3 |
| 6. POLICY AND LEGAL COMPLIANCE REVIEW | 5 |
| 7. COST ENGINEERING Directory of Expertise (DX) REVIEW AND CERTIFICATION | 5 |
| 8. MODEL CERTIFICATION AND APPROVAL | 5 |
| 9. REVIEW SCHEDULES AND COSTS | 6 |
| 10. PUBLIC PARTICIPATION | 6 |
| 11. REVIEW PLAN APPROVAL AND UPDATES | 7 |
| 12. REVIEW PLAN POINTS OF CONTACT | 7 |
| ATTACHMENT 1: TEAM ROSTERS | 8 |
| ATTACHMENT 2: REVIEW PLAN REVISIONS | 9 |

1. PURPOSE AND REQUIREMENTS

- a. **Purpose.** This Review Plan defines the scope and level of peer review for the Boise River at Eagle Island Ecosystem Restoration Project, Ada County, Idaho, Section 1135 project decision document.

Section 1135 of the Water Resources Development Act of 1986, Public Law 99-662, provides the authority to modify existing Corps projects to restore the environment and construct new projects to restore areas degraded by Corps projects with the objective of restoring degraded ecosystem structure, function, and dynamic processes to a less degraded, more natural condition considering the ecosystem's natural integrity, productivity, stability and biological diversity. This authority is primarily used for manipulation of the hydrology in and along bodies of water, including wetlands and riparian areas. It is a Continuing Authorities Program (CAP) which focuses on water resource related projects of relatively smaller scope, cost and complexity. Traditional USACE civil works projects are of wider scope and complexity and are specifically authorized by Congress. The Continuing Authorities Program is a delegated authority to plan, design, and construct certain types of water resource and environmental restoration projects without specific Congressional authorization.

Additional Information on this program can be found in Engineering Regulation 1105-2-100, Planning Guidance Notebook, Appendix F Amendment #2.

- b. **Applicability.** This review plan is based on the NWD Model Review Plan for Section 14, 107, 111, 204, 206, 208, 1135 and authorities directed by guidance to follow CAP procedures, which is applicable to projects that do not require Independent External Peer Review (IEPR), as defined in EC 1165-2-209 Civil Works Review Policy.

c. References

- (1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2010
- (2) EC 1105-2-412, Model Certification, 31 May 2005
- (3) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
- (4) ER 1105-2-100, Planning Guidance Notebook, Appendix F, Continuing Authorities Program, Amendment #2, 31 Jan 2007
- (5) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
- (6) Continuing Authority Program Planning Process Improvements, Director of Civil Works' Policy Memorandum #1, 19 Jan 2011

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this review plan. The RMO for Section 1135 projects is the home MSC. The MSC will coordinate and approve the review plan and manage the Agency Technical Review (ATR). The home District will post the approved review plan on its public website and provide the appropriate NWD District Support Planner with the link. A copy of the approved review plan (and any updates) will be provided to the ECO-PCX to keep the PCX apprised of requirements and review schedules.

3. PROJECT INFORMATION

- a. **Decision Document.** The Boise River at Eagle Island Ecosystem Restoration Project, Ada County, Idaho decision document will be prepared in accordance with ER 1105-2-100, Appendix F. The approval level of the decision document (if policy compliant) is the home MSC. An Environmental Assessment (EA) will be prepared along with the decision document.

- b. **Study/Project Description** The Boise River Flood Control District No. 10 (FCD10), Ada County Soil and Water Conservation District (ACSWCD), and Idaho Parks and Land Foundation (IPLF) are the non-Federal Sponsors of the environmental restoration project located on the Boise River at and near the head of Eagle Island. The Boise River at Eagle Island Ecosystem Restoration Project is located approximately 15 miles downstream of Lucky Peak Dam where the lower Boise River splits into North and South Channels, creating Eagle Island (Figure 1). The project area is located within the floodplain of the Boise River, near the cities of Eagle, Garden City, and Boise, in Ada County, Idaho. The project is focused from the head of Eagle Island, downstream along both the north and south Channels, to approximately the west end of the existing gravel ponds.

This area has been affected by flow regulation, irrigation diversion, flood control projects, gravel mining, and land development encroachment from the 1950s to the present day. These floodplain activities are able to occur largely because of the construction and operation of three Federal projects upstream of the project area which includes the Corps Lucky Peak Project and the Bureau of Reclamation’s Boise Project (Arrowrock and Anderson Ranch dams) which has reduced the amount of land area inundated by floods and altered the hydrologic regime. This in turn has impacted riparian growth along the river banks, such as the regeneration of cottonwood trees and other riparian vegetation, which are vital in maintaining wintering areas for bald eagles, great blue heron rookeries, a wide variety of fish and wildlife habitat, and contributing to sustainable floodplain functions.

The objective of the proposed project is to restore the biological (aquatic and riparian communities) and physical components, at and near the head of Eagle Island, to a more naturally functioning and self-sustaining state. Restoration opportunities identified by the project delivery team (PDT) include:



Figure 1. Boise River at Eagle Island Ecosystem Restoration Project Area

- Reestablish a more natural functioning floodplain and natural habitat.
- Re-establish high quality habitat and improve aquatic and riparian habitat.
 - Create high quality wetlands and improve existing wetlands.
 - Create conditions for cottonwood tree seedling recruitment or plant cottonwood trees.
 - Restore native vegetation.
- Reduce the risk of pit capture.

This is a grandfathered CAP project. The Corps and sponsors do not have a signed Feasibility Cost Share agreement and 100-percent of the feasibility study is currently Federally funded. Feasibility study costs will be included in Total Project Costs (TPC) and 25 percent of TPC will be reimbursed by the non-Federal sponsors upon execution of a Project Partnership Agreement. TPC are currently being developed. Based on planning level budgetary cost estimates developed during plan formulation, TPC is estimated at \$5.5 million.

- c. **In-Kind Contributions.** Products and analyses provided by non-Federal sponsors as in-kind services are subject to District Quality Control (DQC) and ATR, similar to any products developed by USACE. No in-kind services are anticipated for the feasibility study.

4. DISTRICT QUALITY CONTROL (DQC)

All decision documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC prior to ATR. The home district shall manage DQC.

5. AGENCY TECHNICAL REVIEW (ATR)

One ATR is mandatory for all decision documents (including supporting data, analyses, environmental compliance documents, etc.), however additional ATRs may be performed if deemed warranted. ATR is managed within USACE by the designated RMO and is conducted by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior USACE personnel. The ATR team lead will be from within the home MSC.

a. Required ATR Team Expertise.

An ATR Team member may serve multiple roles if the scope of the study and the level of effort warrant. The ATR Team Leader should use the “ATR Lead Checklist” and “ATR Charge Template” developed by the National Planning Centers of Expertise as resources when conducting the review.

| ATR Team Members/Disciplines | Expertise Required |
|------------------------------|---|
| ATR Lead | The ATR lead should be a senior professional preferably with experience in preparing Section 1135 decision documents and conducting ATR. The lead should also have the necessary skills and experience to lead a virtual team through the ATR process. Typically, the ATR lead will also serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc). The ATR Lead MUST be from outside Walla Walla District. |
| Plan Formulation/Economics | The Plan Formulation/Economics reviewer should be a senior water resources planner with experience in plan formulation for |

| | |
|---|--|
| | riparian and aquatic environmental restoration projects. The reviewer should be familiar with western U.S. ecosystem compositions and function. The reviewer should also have experience with CE/ICA analysis. |
| Environmental Resources (Biology/NEPA/Ecosystem Output) | The Environmental Resources reviewer should be a senior level environmental resource specialist with experience in aquatic and riparian and wetlands ecosystem restoration. The reviewer will also need to have knowledge and experience with NEPA and other environmental compliance requirements and ecosystem output evaluation using HEP and HSI. |
| Engineering/ Hydrology and Hydraulics | This reviewer should be a senior level hydraulic engineer/civil engineer proficient with river and reservoir hydraulics and associated one dimensional models, and hydrologic statistics. The reviewer will have a thorough knowledge of computer modeling techniques that will be used such as HEC-RAS. The review should also have civil engineering expertise associated with river morphology, earth work, planning analysis, and a number of other closely associated technical subjects. |
| Cost Engineering | The cost engineering expert will be a Cost DX Pre-Certified Professional with experience preparing costs estimates for environmental restoration projects using MCACES/MII that include earth work and vegetative plantings. |
| Real Estate | This reviewer should be a real estate specialist familiar with real estate valuations, land cost estimates, utility relocations, and easements and rights-of-ways necessary for implementation of Civil Works ecosystem projects. |

- b. Charge Document.** The district will prepare the charge document which clearly identifies the review requirements. This document must be completed prior to requesting an ATR team.
- c. Documentation of ATR.** *DrChecks review* software will be used to document all ATR comments, responses and associated resolutions accomplished throughout the review process. Comments should be limited to those that are required to ensure adequacy of the product. *If an ATR concern cannot be satisfactorily resolved between the ATR team and the PDT, it will be elevated to the vertical team for further resolution in accordance with the policy issue resolution process described in either ER 1110-2-12 or ER 1105-2-100, Appendix H, as appropriate. Unresolved concerns can be closed in DrChecks with a notation that the concern has been elevated to the vertical team for resolution.*

6. POLICY AND LEGAL COMPLIANCE REVIEW

All decision documents will be reviewed throughout the study process for their compliance with law and policy. Guidance for policy and legal compliance reviews is addressed in Appendix H, ER 1105-2-100. These reviews culminate in determinations that the recommendations in the reports and the supporting analyses and coordination comply with law and policy, and warrant approval or further recommendation to higher authority by the home MSC Commander. DQC and ATR augment and complement the policy review processes by addressing compliance with pertinent published Army

policies, particularly policies on analytical methods and the presentation of findings in decision documents.

7. COST ENGINEERING DIRECTORY OF EXPERTISE (DX) REVIEW AND CERTIFICATION

For CAP projects, ATR of the costs may be conducted by pre-certified district cost personnel within the region or by the Walla Walla Cost DX. The pre-certified list of cost personnel has been established and is maintained by the Cost DX. The cost ATR member will coordinate with the Cost DX for execution of cost ATR and cost certification. The Cost DX will be responsible for final cost certification and may be delegated at the discretion of the Cost DX.

8. MODEL CERTIFICATION AND APPROVAL

Approval of planning models under EC 1105-2-412 is not required for CAP projects. MSC commanders remain responsible for assuring the quality of the analyses used in these projects. ATR will be used to ensure that models and analyses are compliant with Corps policy, theoretically sound, computationally accurate, transparent, described to address any limitations of the model or its use, and documented in study reports.

- a. **EC 1105-2-412.** This EC does not cover engineering models used in planning. The responsible use of well-known and proven USACE developed and commercial engineering software will continue and the professional practice of documenting the application of the software and modeling results will be followed. As part of the USACE Scientific and Engineering Technology (SET) Initiative, many engineering models have been identified as preferred or acceptable for use on Corps studies and these models should be used whenever appropriate. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC and ATR.
- b. **Planning and Engineering Models.** The following models are anticipated to be used in the development of the decision document:

| Model Name and Version | Brief Description of the Model and How It Will Be Applied in the Study |
|-------------------------------------|--|
| IWR-PLAN | This is an economic planning model certified by the Corps, which assists with the formulation and comparison of alternative plans. It assists with plan formulation by combining solutions to planning problems and calculating the additive effects of each combination. It will compare the cost effectiveness and incremental cost of each plan, identifying the plans that are the best financial investments and displaying the effects of each on a range of decision variables. |
| HEP/HSI | The Habitat Evaluation Procedure (HEP) will be used to quantify habitat benefits. Habitat benefits will be calculated using HEP and Habitat Suitability Index (HSI) models. The study will be using HSI models developed for the great blue heron, rainbow trout and mallard duck. All are approved for use by the USACE. |
| HEC-RAS 4.1 (River Analysis System) | The Hydrologic Engineering Center’s River Analysis System (HEC-RAS) program provides the capability to perform one-dimensional steady |

| | |
|------------|--|
| | and unsteady flow river hydraulics calculations. The program will be used for steady flow analysis to evaluate the future without- and with-project conditions along the Wild River and its tributaries. [For a particular study the model could be used for unsteady flow analysis or both steady and unsteady flow analysis. The review plan should indicate how the model will be used for a particular study.] |
| MCACES/MII | This is a cost estimating model that was developed by Building Systems Design Inc. The Corps began using the model in 1989. This software will be used to estimate construction costs for three surface water storage sites based on 15 percent engineering design. |

9. REVIEW SCHEDULES AND COSTS

ATR Schedule and Cost. An ATR of the decision document and preliminary EA and its supporting analyses will occur before release of documents for public review. Documents would be ready for ATR would in the summer 2012 period. The ATR is estimated to cost \$25,000 for review by the external ATR team. Given the current Federal funding situation, ATR will likely occur in FY 2013 as noted below.

| | |
|--------------------------------|--------------------------------------|
| Agency Technical Review (ATR) | November 1 – November 30, 2012 |
| Address ATR / Sponsor Comments | December 3 – December 21, 2012 |
| Back Check and Closeout | December 24, 2012 – January 25, 2013 |

An Alternative Formulation Briefing (AFB) was completed on April 26, 2012.

10. PUBLIC PARTICIPATION

State and Federal resource agencies may be invited to participate in the study covered by this review plan as partner agencies or as technical members of the PDT, as appropriate. Agencies with regulatory review responsibilities will be contacted for coordination as required by applicable laws and procedures. The ATR team will be provided copies of public and agency comments.

Scoping pursuant to the NEPA occurred in December 2010 – January 2011. A document was prepared summarizing NEPA scoping comments.

A public information meeting was conducted in July 2011 seeking input on problems and issues that should be addressed in the study and suggestions for measures to address problems/issues. A meeting summary document was prepared.

A meeting with Federal, state, and local agencies occurred in September 2011 to review the identified problems, opportunities, planning objectives and constraints and measures. Meeting notes were prepared documenting this meeting. Another meeting with agencies is anticipated to occur before release of the draft feasibility report and preliminary environmental assessment for public review.

The draft feasibility report and preliminary EA will be distributed electronically and by U.S. Postal Service for a 30-day public review and comment period. A public meeting will occur during the comment period.

11. REVIEW PLAN APPROVAL AND UPDATES

The NWD Planning Chief has been delegated responsibility for approving this review plan and ensuring that use of the NWD Model Review Plan is appropriate for the specific project covered by the plan. The review plan is a living document and may change as the study progresses. The home district is responsible for keeping the review plan up to date. Minor changes to the review plan since the last NWD Planning Chief approval are documented in Attachment 2. Significant changes to the review plan (such as changes to the scope and/or level of review) should be re-approved by the NWD Planning Chief following the process used for initially approving the plan. Significant changes may result in the NWD Planning Chief determining that use of the NWD Model Review Plan is no longer appropriate. In these cases, a project specific review plan will be prepared and approved in accordance with EC 1165-2-209. The latest version of the review plan, along with the Chief's approval memorandum, will be posted on the home district's webpage.

12. REVIEW PLAN POINTS OF CONTACT

Public questions and/or comments on this review plan can be directed to the following points of contact:

- Ellen Berggren, Project Manager, Walla Walla District, Boise Outreach Office, 208-345-2065
- Valerie Ringold, DST Planner, Northwestern Division, 503-808-3984

ATTACHMENT 1: TEAM ROSTERS

PROJECT DELIVERY TEAM

| First | Discipline | Phone | Email |
|-----------------------------|----------------------------------|--------------|--|
| Ellen Berggren ¹ | Project Manager/Plan Formulation | 208-345-2065 | Ellen.M.Berggren@usace.army.mil |
| Michael Murray | Contractor (HDR) PM | 208-387-7033 | Mike.murray@hdrinc.com |
| Nathan Pierson | Civil Engineer | 208-342-1215 | Nathan.R.Pierson@usace.army.mil |
| Sandy Shelin | Env. Resource Specialist | 509-527-7265 | Sandy.L.Shelin@usace.army.mil |
| Scott Hall | Archaeology | 509-527-7278 | Scott.M.Hall@usace.army.mil |
| Brandon Hobbs | Hydraulic Engineer | 208-345-2969 | Brandon.W.Hobbs@usace.army.mil |
| Kurt Friederich | Cost Estimator | 208-527-7512 | Kurt.O.Friederich@usace.army.mil |
| Theresa Hampson | Counsel | 509-527-7709 | Theresa.L.Hampson@usace.army.mil |
| Ben Tice | Biologist | 509-527-7267 | Ben.J.Tice@usace.army.mil |

¹ Primary contact for this Review Plan.

AGENCY TECHNICAL REVIEW TEAM

| Name | Discipline | Phone | Email |
|------|-------------------------------|-------|-------|
| TBD | ATR Manager ¹ | | |
| TBD | Civil Engineering | | |
| TBD | Cost Engineering ² | | |
| TBD | Biology/Env. Resources | | |
| TBD | Plan Formulation | | |
| TBD | Real Estate | | |

¹The ATR Manager will also have expertise in one of the other disciplines listed and will act as the technical team member and ATR manager.

²The cost engineering team member nomination will be coordinated with the NWW Cost Estimating Center of Expertise as required. That PCX will determine if the cost estimate will need to be reviewed by PCX staff.

VERTICAL TEAM

| Name | Discipline | Phone | Email |
|-----------------|-------------------------|----------------|--|
| Valerie Ringold | DST Planner | (503) 808-3984 | Valerie.A.Ringold@usace.army.mil |
| Jim Fredericks | Sr. Planning Specialist | (503) 808-3856 | Jim.K.Fredericks@usace.army.mil |

ECOSYSTEM RESTORATION PLANNING CENTER OF EXPERTISE

| Name | Discipline | Phone | Email |
|-----------------|------------|----------------|--|
| Valerie Ringold | Biologist | (503) 808-3984 | Valerie.A.Ringold@usace.army.mil |

ATTACHMENT 2: REVIEW PLAN REVISIONS

| Revision Date | Description of Change | Page / Paragraph Number |
|----------------------|------------------------------|--------------------------------|
| | | |
| | | |
| | | |
| | | |
| | | |