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

PROGRAMMATIC REVIEW PLAN
For
SECTION 536
PLANNING STUDIES
and
IMPLEMENTATION DOCUMENTS

Portland District

MSC Approval Date: Pending
Last Revision Date: None
MEMORANDUM FOR Commander, Portland District (CENWP-PM-PF)

SUBJECT: Approval of the Programmatic Review Plan (RP) for the Section 536 Projects, Lower Columbia River Ecosystem Restoration, Oregon and Washington

1. References:
   b. Continuing Authority Program Planning Process Improvements, Director of Civil Works’ Policy Memorandum #1, 19 January 2011.
   c. NWD Review Procedures for the Continuing Authorities Program (CAP) and Projects Directed by Guidance to Use CAP Procedures, including the NWD Model RP templates, Memorandum, 10 March 2011.

2. The enclosed Programmatic RP for the Lower Columbia River Ecosystem Restoration Planning Studies and Implementation Documents has been prepared in accordance with the referenced Civil Works Review Policy. The Programmatic RP did use the model template endorsed by NWD for Regional Authorities that follow the CAP, Section 206 procedures. However, as a programmatic document, it is a deviation requiring the MSC Commander’s approval.

3. The revised Programmatic RP has been reviewed by appropriate NWD staff and all previous comments have been addressed.

4. I hereby approve this RP, which is subject to change as circumstances require, consistent with study development under the Project Management Business Process. Subsequent revisions to the RP or its execution will require review and approval CENWD-PDD.

5. The RP should be posted on the District internet site 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:

[Signature]

DAVID J. PONGANIS, SES
Director, Programs

Encl
1. PURPOSE AND REQUIREMENTS

a. Purpose. This Programmatic Review Plan defines the scope and level of peer review for all planning studies and Implementation documents prepared under Section 536, Water Resources Development Act of 2000, as amended. The purpose of the Programmatic Review Plan is to ensure that a consistent review process is applied to all products, from initial planning through construction.

Section 536 of the Water Resources Development Act of 2000, Public Law 106-541 directs the Secretary to conduct studies and implement ecosystem restoration projects for the Lower Columbia River and Tillamook Bay estuaries in Oregon and Washington. The projects will be for the protection, monitoring, and restoration of fish and wildlife habitat and are to have no adverse effect on specified water related needs or private property rights. Section 536 directs that the Secretary shall use the comprehensive conservation and management plans developed for the Lower Columbia River estuary program and the Tillamook Bay national estuary project as a guide, and that the Secretary shall consult with local, state, Federal, and tribal agencies in identifying and developing projects and in establishing priorities for implementation.

In preparing this plan, certain assumptions about complexity, safety, public interest, etc. have been made. However, during the Alternatives Formulation Briefing (AFB) or during reviews of the prepared reports (Feasibility Studies, Study Reports and Design & Analysis / NEPA Reports), these basic assumptions can be revisited.

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 536 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
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. (Note: Reference the new streamlined process; for the purposes of ATR, the Design & Analysis NEPA Report will be considered the Decision document.)

a. Required ATR Team Expertise. It is anticipated that the following areas of expertise will need to be represented on the ATR team. One of the members could also perform the ATR Lead function. If approved by the RMO, the ATR review shall be completed by a dedicated team in Kansas City District. (Note: The cost ATR member will be from the DX in Walla Walla.)

<table>
<thead>
<tr>
<th>ATR Team Members/Disciplines</th>
<th>Expertise Required</th>
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<tbody>
<tr>
<td>ATR Lead</td>
<td>The ATR lead should be a senior professional preferably with experience in preparing Section 206 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 the home district.</td>
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<tr>
<td>Planning</td>
<td>The Planning reviewer should be a senior water resources planner with experience in ecosystem restoration projects and with NEPA and environmental compliance. Also, able to evaluate the habitat models used and comment on their suitability.</td>
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<tr>
<td>Economics</td>
<td>An experienced professional Economist with extensive knowledge of alternatives formulation, incremental cost analysis, etc.</td>
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<tr>
<td>Environmental Resources</td>
<td>An expert in the field of Environmental Compliance / Biology with extensive civil works experience in ecosystem restoration projects and with NEPA and environmental compliance experience including letters, BAs, consultation documentation, 404b(1) analysis and other documents supporting environmental coordination and consultation. Also, able to evaluate the habitat models used and comment on their suitability.</td>
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<tr>
<td>Hydraulics and Hydrology</td>
<td>An expert in the field of hydraulics with a thorough understanding of channel stability, open channel dynamics, application of levees, sedimentation processes (geomorphology) and hydraulic modeling techniques that will be used such as HEC-RAS, FLO-2D, UNET, TABS, etc.</td>
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<tr>
<td>Geotechnical Engineering / Civil Design</td>
<td>A senior professional in civil design and geotechnical engineering as relates to civil works projects, especially in connection to levee design and modification.</td>
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<tr>
<td>Cost Engineering</td>
<td>Cost DX Staff or Cost DX Pre-Certified Professional with experience preparing cost estimates for levees, ecosystem restorations projects and tide gate or culvert installations.</td>
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(2) **Decision on Type II IEPR.** Based on the information and analysis provided in paragraph 6b, the projects covered under this Programmatic Review Plan are required to perform a Type II IEPR if a flood protection levee is to be modified as part of the project. However, a project that does not include modifying a flood protection levee could be excluded from Type II IEPR Review because they do not meet the mandatory Type II IEPR triggers and do not warrant IEPR based on a risk-informed analysis. The District considered these risks and determined that Type II IEPR is required on projects that involve the modification of a flood protection levee.

**Products to Undergo Type II IEPR.** It is anticipated that the Feasibility Study (legacy projects) or the Design & Analysis / NEPA Report (streamlined process) shall be subject to Type II IEPR review.

(3) **Required Type II IEPR Panel Expertise.** The Type II IEPR Team should include, as a minimum, a geotechnical engineer and a hydraulic engineer with levee and flood protection experience.

### 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. (Note: At this time, an ATR member from the Cost Engineering DX, located in the Walla Walla District, has not been identified. However, it is the intent that the DX will assist in determining the expertise needed on the ATR team and recommend a dedicated member. The DX will also provide the Cost Engineering DX certification.)

### 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.
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 Commander or Planning Chief, as appropriate, following the process used for initially approving the plan. Significant changes may result in the determination that use of the Programmatic 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.

11. REVIEW PLAN POINTS OF CONTACT

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

- Mark Dasso, 503.808.4728, Supervisory Project Manager, Portland District
- Valerie Ringold, 503.808.3984, Planning Specialist, Northwestern Division
<table>
<thead>
<tr>
<th>Member</th>
<th>Connection to levee design and modification.</th>
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<tbody>
<tr>
<td>Allen Holland</td>
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<tr>
<td>Economist Member</td>
<td>Allen is an experienced professional as an Economist with extensive knowledge of alternatives formulation, incremental cost analysis</td>
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<tr>
<td>Carla Buatte</td>
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<tr>
<td>Real Estate Member</td>
<td>Carla is an expert in the field of Real Estate, including the preparation of Real Estate Plans, acquisition, appraisal and crediting.</td>
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<td>William Otero</td>
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<tr>
<td>Hydraulics and Hydrology Member</td>
<td>William is an expert in the field of hydraulics with a thorough understanding of channel stability and sedimentation processes (geomorphology) and hydraulic modeling.</td>
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<td>TBD</td>
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<tr>
<td>Cost Engineer</td>
<td>An expert in cost estimating, with experience in alternatives formulation, incremental cost analysis and government estimates for construction contracts.</td>
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ATTACHMENT 3: SAMPLE STATEMENT OF ATR CERTIFICATION

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the Draft Final Implementation Plan for the project at XXXXXXX County, OR. The ATR was conducted as defined in the Programmatic Review Plan to comply with the requirements of EC 1165-2-209. During the ATR, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: the appropriateness and use of models, assumptions, methods, procedures, and material used in analyses, alternatives evaluated, the appropriateness of data used and level obtained, and reasonableness of the results, including whether the product meets the customer’s needs consistent with law and existing US Army Corps of Engineers policy. The ATR also assessed the District Quality Control (DQC) documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from the ATR have been resolved and the comments have been closed in DrChecks.

SIGNATURE
Name
ATR Team Leader
Office Symbol/Company

SIGNATURE
Name
Project Manager
CENWP-PM-F

SIGNATURE
Name
Review Management Office Representative
Office Symbol

CERTIFICATION OF AGENCY TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows: Describe the major technical concerns and their resolution.

As noted above, all concerns resulting from the ATR of the project have been fully resolved.

SIGNATURE
Name
Chief, Engineering Division
Office Symbol

SIGNATURE
Name
Chief, Planning Division
Office Symbol