

DECISION DOCUMENT REVIEW PLAN

Floyd's Fork Ecosystem Restoration, Jefferson County, Kentucky

Continuing Authority Program Section 206

Louisville District

LRD Approval Date: *2 May 2019*



**US Army Corps
of Engineers®**

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I. PURPOSE AND REQUIREMENTS

A. Purpose

This Review Plan defines the scope and level of peer review for the Floyd's Fork Ecosystem Restoration, Jefferson County, Kentucky, Section 206 of the Continuing Authorities Program project decision document.

Section 206 of the Water Resources Development Act of 1996, Public Law 104-305, authorizes the Secretary of the Army to carry out a program of aquatic ecosystem restoration 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. This authority also allows for dam removal. 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 CAP is a delegated authority to plan, design, and construct certain types of water resource and environmental restoration projects without specific Congressional authorization.

B. Applicability

This review plan is based on the LRD CAP Programmatic Review Plan Model, which includes the GLFER Section 506 and Lake Michigan Waterfront Section 125 programs. It also accounts for CAP Section 103 and Section 205 projects, which require case-by-case determination on the appropriateness of Type I Independent External Peer Review (IEPR). The LRD CAP Programmatic Review Plan Model **is not approved** for use on any CAP, GLFER or Lake Michigan Waterfront projects where:

- A significant threat to human life/safety assurance exists;
- Total Project Cost is likely to exceed the limits established for the applicable Section in law.
- The Governor of an affected state has requested a peer review by independent experts;
- An Environmental Impact Statement (EIS) is required;
- Significant public dispute is likely due to the size, nature, or effects of the project;
- Significant public dispute is likely due to the economic or environmental cost or benefit of the project;
- Complex challenges will likely require use of novel methods, innovative materials, new techniques, precedent-setting methods or models, or result in conclusions that are likely to change prevailing practices;

- Redundancy, resiliency, and/or robustness are required or unique construction sequencing, or a reduced or overlapping design construction schedule will likely be required; or
- The Chief of Engineers or Director of Civil Works is likely to determine Type I IEPR is warranted.

If any of the circumstances above exist on the subject project, the LRD CAP Programmatic Review Plan Model is not applicable and a study specific review plan must be prepared by the home district, coordinated with the appropriate Planning Center of Expertise (PCX) and approved by LRD in accordance with EC 1165-2-217.

Applicability of the LRD CAP Programmatic Review Plan Model for a specific project is initially determined by the Louisville District and subsequently reviewed and approved by the LRD Commander. If the LRD determines that the model plan is applicable for a specific study, the LRD Commander may approve the plan (including exclusion from IEPR) without additional coordination with a PCX or Headquarters, USACE. The initial decision as to the applicability of the model plan shall be made no later than the Federal Interest Determination (FID) milestone (as defined in Appendix F of ER 1105-2-100, F-10.e.1) during the feasibility phase of the project. A review plan for the project will subsequently be developed and approved prior to execution of the Feasibility Cost Sharing Agreement (FCSA) for the study. In addition, per EC 1165-2-217, the home district and LRD shall assess at the MSC Decision Meeting (MDM) whether the initial decision on Type I IEPR is still valid based on new information. If the decision on Type I IEPR has changed, the District and LRD shall promptly begin coordination with the appropriate PCX.

After approval of the project decision document and prior to execution of a Project Partnership Agreement with the non-federal sponsor to implement the Floyd's Fork Ecosystem Restoration project, this review plan shall be updated and revised for the Implementation Phase by Louisville District, and subsequently reviewed by the LRD staff and approved by the LRD Commander. The revised and approved review plan shall specify the Design and Implementation phase products to be reviewed and the associated level of peer review of each, including the appropriateness of a Type II IEPR (Safety Assurance Review).

C. References

- (1) Engineering Circular (EC) 1165-2-217, Civil Works Review, 1 May 2018
- (2) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2010
- (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) LRD Continuing Authority Program Management Plan and Standard Operation Procedures (Rev. 3), 23 May 2018.
- (7) MSC and District Quality Management System (QMS) Procedures
- (8) PMP for study

D. Requirements

This review plan was developed from the LRD CAP Programmatic Review Plan Model. It was developed in accordance with EC 1165-2-217 and establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products by providing a seamless process for review of all Civil Works projects from initial planning through design, construction, and operation, maintenance, repair, replacement and rehabilitation (OMRR&R). The EC outlines four general levels of review: District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Major Subordinate Command (MSC) Policy and Legal Compliance Review. In addition to these levels of review, decision documents are subject to cost engineering review and certification (per EC 1165-2-217). Additionally, it ensures that planning models and analysis 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 (per EC 1105-2-412).

II. REVIEW MANAGEMENT ORGANIZATION (RMO)

The Review Management Organization (RMO) is responsible for managing the overall peer review effort described in this review plan. The RMO for CAP Section 206 decision documents is typically LRD, because the LRD Commander is responsible for approving the Review Plan and the decision to implement projects under this authority. However, an appropriate National Planning Center of Expertise (PCX) may also serve as the RMO. Because of the potential for CAP Section 103 and Section 205 projects to have significant life safety implications, determination of the RMO for the decision document for those type projects is made on a case-by-case basis at the FID approval stage. Also, during the FID review and approval process, the home District may request LRD to delegate its RMO responsibility to the most appropriate PCX for any CAP project.

The information presented in Section III below provides the basis for the determination that LRD will serve as the RMO for the Feasibility Phase of the Floyd's Fork Ecosystem Restoration Project.

III. STUDY INFORMATION

A. Decision Document

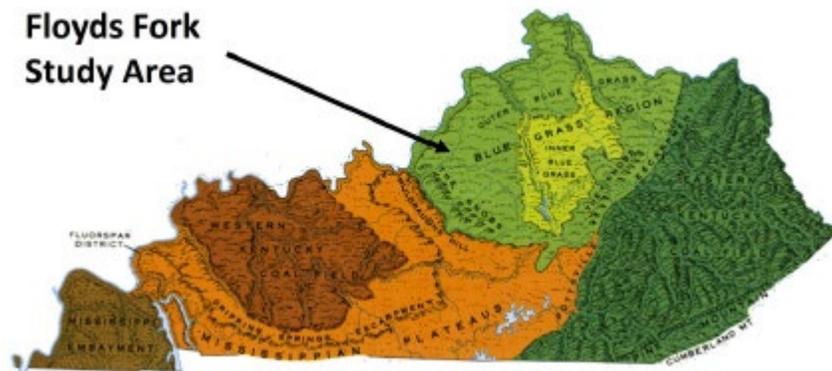
The Floyd's Fork Ecosystem Restoration, Jefferson County, Kentucky, CAP Section 206 document will be prepared in accordance with ER 1105-2-100, Appendix F. The preferred decision document format is contained in the Detailed Project Report (DPR) template in the LRD CAP Program Management Plan/Standard Operating Procedures, which integrates the environmental documentation required under NEPA and other relevant environmental statutes into the project decision document. The purpose of a DPR is to document the basis for a recommendation to invest Federal and non-Federal resources to address a local water resource problem or opportunity of significance to the Nation. The approval level of the decision document is the LRD Commander.

B. Study/Project Description.

The purpose of this study is to investigate the feasibility of restoring significant ecosystem structure, function and dynamic processes, such as the restoration of critical habitat for threatened and endangered species, which have been severely degraded or lost within the study area.

Study Area

Floyds Fork meanders for approximately 62 miles from its headwaters in southwestern Henry County to its confluence with the Salt River in Bullitt County, Kentucky. The Floyds Fork watershed is 285 square miles with 122 square miles contained in eastern Jefferson County. The Floyds Fork watershed lies within the Outer Bluegrass physiographic region of Kentucky and is characterized by multiple small tributaries and exposed bedrock (Waynesville Limestone). The Outer Bluegrass typically has low to moderate relief and soils that range from thick, over limestones, to thin, over shales; dolomites of the Silurian are commonly well exposed. Caves and sinking springs are found throughout the region.



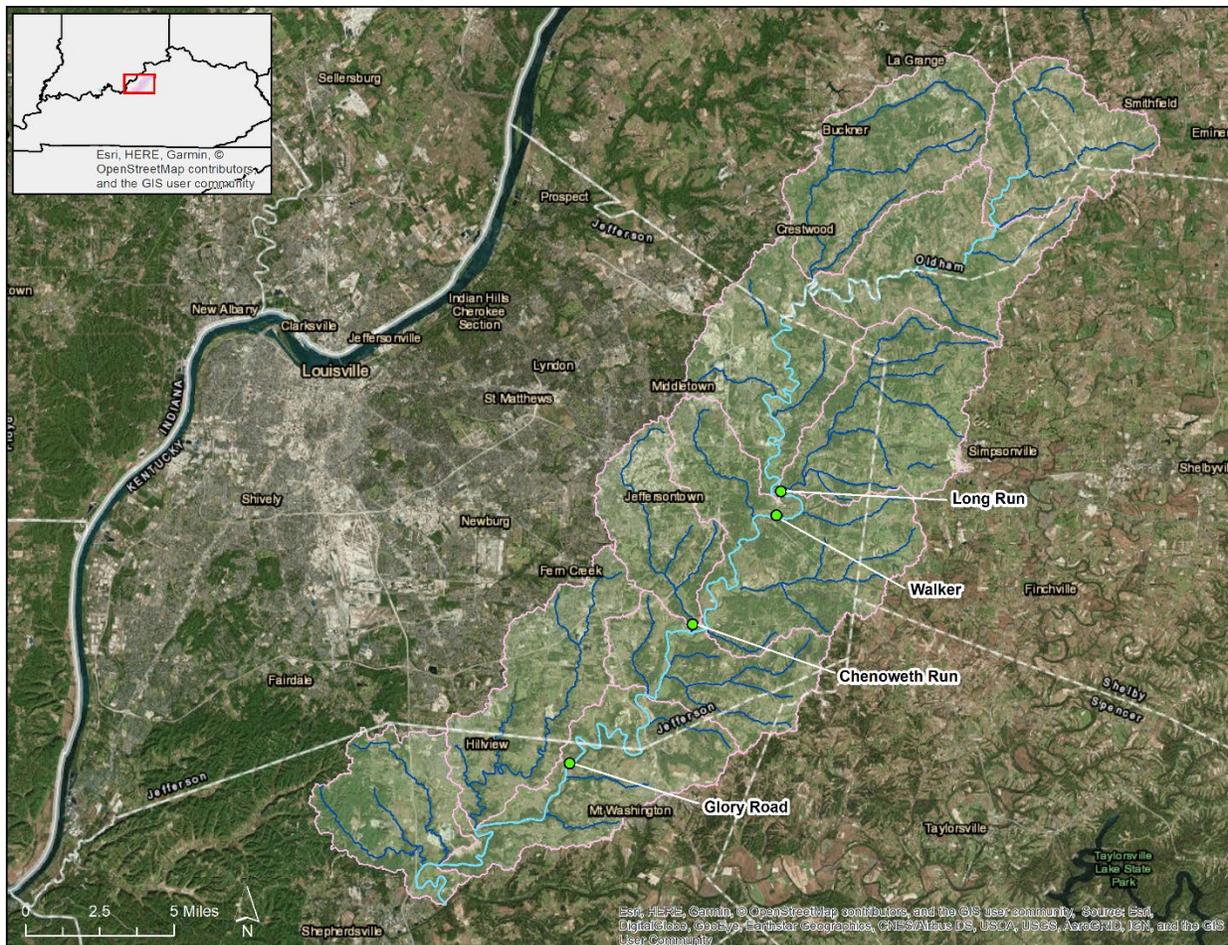
As of 2014, less than four percent of the portion of the watershed in Jefferson County consisted of impervious surfaces. Floyds Fork is the least urban of Louisville's watersheds and remains the least

impacted of all the streams in Louisville. Generally Long Run and Chenoweth Run are the most altered of the tributaries to Floyds Fork (Parks and Recreation System Master Plan 2016).

More recently, suburban development patterns have begun to threaten the Floyds Fork corridor with loss of: threatened and endangered species habitat; floodplain connectivity; and riparian habitat quality. In the early 1990's community and state leaders anticipated this development trend and began to actively preserve land, as well as establish a conservation overlay to protect the drainage from encroachment. The Future Fund, Inc., a Kentucky nonprofit corporation (The Future Fund) and 21st Century Parks, Inc., a Kentucky nonprofit corporation (21st Century Parks), were two central organizational outgrowths of this effort.

Project Area(s)

The project is comprised of four sub-areas (three located in eastern Jefferson County and one in northern Bullitt County). These preliminary project areas were identified based on existing conditions and opportunities to implement aquatic ecosystem restoration projects. Future iterations of plan formulation will evaluate aquatic ecosystem restoration measures at each project area individually, as well as across all four project areas.



Measures/Alternatives

Potential measures to be included in the restoration effort will focus on in-stream, riparian, and floodplain forests habitat types. Native plantings in either fallow or flood-prone agricultural parcels will be recommended to restore the quantity of bottomland forests, increase riparian buffer zones, improve connectivity of wildlife corridors, and support summer roosting habitat for federally threatened and endangered bat species. In-stream grade control structures and other measures designed to create riffle-pool complexes will be designed to address the “blown out” sections of Long Run and Chenoweth Run tributaries. Geomorphic contouring such as bank grading will be used to return the eroded, incised banks to a gentler slope that will allow for re-vegetation and potential wetland creation. The creation of wetlands or moist soil impoundments will be recommended at key floodplain locations. This measure will increase the habitat diversity within the project area.

The range of costs for a potentially recommended plan is between [REDACTED]

The expected non-federal sponsor will be the Future Fund, Inc. They are the entity that will be providing the land in which these projects will be implemented. Future Fund expects to provide a major portion of their 35% cost-share as LERRDS credit.

C. Factors Affecting the Scope and Level of Review.

This project may include impoundments which will be designed below the height required to be considered a risk to life safety for residents within the project area. These impoundments will not serve any flood mitigation purpose, but are designed to hold back water to create wetland habitat. The remainder of the design for the project poses no potential risk to life-safety.

D. In-Kind Contributions.

No in-kind contributions will be associated with this project.

IV. DISTRICT QUALITY CONTROL (DQC)

All decision documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC. DQC is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Project Management Plan (PMP). The home district shall manage DQC. Documentation of DQC activities is required and should be in accordance with the District and LRD QMS procedures. Attachment 1 lists the DQC team members according to each significant area of expertise needed to accomplish the feasibility study objectives.

A. Products to Undergo DQC.

DQC will be performed on interim reports and milestone documentation (i.e. Alternative Formulation Briefing, Draft Feasibility Report, Final Feasibility Report) prior to ATR.

B. Required DQC Expertise.

Senior-level non-PDT members and/or supervisory staff will conduct DQC. The technical disciplines represented on the DQC team will mirror that of the project delivery team. DQC will be managed by the project manager or lead planner

C. Documentation of DQC.

DQC will be documented by signature sheets with senior-level checkers, subject matter experts, and supervisors, and will be provided to the ATR team at review. District Quality Control documentation will also include review comments, responses and associated resolutions.

V. AGENCY TECHNICAL REVIEW (ATR)

ATR is mandatory for all decision documents (including supporting data, analyses, environmental compliance documents, etc.). The objective of ATR is to ensure consistency with established criteria, guidance, procedures, and policy. The ATR will assess whether the analyses presented are technically correct and comply with published USACE guidance, and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers. 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 and may be supplemented by outside experts as appropriate. The ATR team lead will be from outside LRD. At a minimum, the name of the ATR lead will be provided at the time of initial decision document review plan submission. Remaining ATR team members will be selected and identified in a revised review plan (Attachment 1) once the study funds are obtained.

A. Products to Undergo ATR.

ATR will be performed throughout the study in accordance with the regional QMS as found in Qualtrax. The ATR team and planned review shall be discussed at the MDM milestone. ATR review will be performed concurrently with MSC and public review. Certification of the ATR will be provided prior to the District Commander signing the final report. Products to undergo ATR include MSC Decision Milestone Draft DPR (including NEPA and supporting documentation) and Final DPR.

B. Required ATR Team Expertise.

The Table below lists the technical disciplines and requisite expertise deemed appropriate to successful accomplishment of the subject feasibility study objectives. The selected ATR members are listed according to discipline in Attachment 1.

ATR Team Members/Disciplines	Expertise Required
ATR Lead/Plan Formulation	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. The ATR Lead will also serve as the planning reviewer. The ATR Lead should be a senior water resources planner who possesses knowledge with the NEPA process and whom also has extensive experience with formulation of CAP projects (preferably Section 206 projects).
Cost Engineering	Team member will be experienced in design and construction of ecosystem restoration projects. In addition the Team member will be familiar cost estimating for similar civil works projects using MCACES.
Hydraulics and Hydrology	The H&H reviewer will be an expert in the field of in-stream and floodplain habitat design engineering and have a thorough understanding of the level of analysis required for Section 206 projects.
NEPA Compliance	The NEPA Compliance reviewer will be an expert in the field of environmental compliance (specifically with NEPA, the Endangered Species Act, and the Clean Water Act) with certification as an ATR by the Planning Community of Practice.
Real Estate	The real estate reviewer should have extensive experience in the design of ecosystem restoration projects.

Climate Assessment	At least one member of the ATR Team must be certified by the Climate Preparedness and Resilience CoP in the Corps of Engineers Review Certification and Access Program. This may be a specific individual to review the climate change analysis, or this role may be covered by one of the other members, if they holds this certification (see ECB No. 2016-25).
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C. Documentation of ATR.

DrChecksSM 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. The four key parts of a quality review comment will normally include:

- (1) The review concern – identify the product’s information deficiency or incorrect application of policy, guidance, or procedures;
- (2) The basis for the concern – cite the appropriate law, policy, guidance, or procedure that has not been properly followed;
- (3) The significance of the concern – indicate the importance of the concern with regard to its potential impact on the plan selection, recommended plan components, efficiency (cost), effectiveness (function/outputs), implementation responsibilities, safety, Federal interest, or public acceptability; and
- (4) The probable specific action needed to resolve the concern – identify the action(s) that the reporting officers must take to resolve the concern.

In some situations, especially addressing incomplete or unclear information, comments may seek clarification in order to then assess whether further specific concerns may exist. The ATR documentation in DrChecksSM will include the text of each ATR concern, the PDT response, a brief summary of the pertinent points in any discussion, including any vertical team coordination (the vertical team includes the district, RMO, LRD, and HQUSACE), and the agreed upon resolution. 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 EC 1165-2-217 or ER 1105-2-100, Appendix H, as appropriate. Unresolved concerns can be closed

in DrChecksSM with a notation in the ATR Summary Report and the DrChecks comment evaluation that the concern has been elevated to the vertical team for resolution.

At the conclusion of each ATR effort, the ATR team will prepare an ATR Summary Report, which will be an integral part of the ATR documentation and shall:

- Identify the document(s) reviewed and the purpose of the review;
- Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- Include the charge to the reviewers;
- Describe the nature of their review and their findings and conclusions;
- Identify and summarize each unresolved issue (if any); and
- Include a verbatim copy of each reviewer's comments (either with or without specific attributions), or represent the views of the group as a whole, including any disparate and dissenting views.

ATR may be certified when all ATR concerns are either resolved or referred to the vertical team for resolution and the ATR documentation is complete. The ATR Lead will prepare a Statement of Technical Review certifying that the issues raised by the ATR team have been resolved (or elevated to the vertical team). A Statement of Technical Review should be completed prior to the District Commander signing the final report. A sample Statement of Technical Review is included in Attachment 2.

VI. Independent External Peer Review

While CAP projects are generally smaller and less technically complicated than specifically authorized feasibility studies, IEPR may be required for CAP decision documents under certain circumstances. IEPR is the most independent level of review, and is applied in cases that meet certain criteria where the risk and magnitude of the proposed project are such that a critical examination by a qualified team outside of USACE is warranted. A risk-informed decision, as described in EC 1165-2-217, is made as to whether IEPR is appropriate. Where designated, IEPR panels will consist of independent, recognized technical experts from outside of the USACE in the appropriate disciplines, representing a balance of areas of expertise suitable for planning, design and construction of a Civil Works project. There are two types of IEPR:

- Type I IEPR. Type I IEPR reviews are managed outside the USACE and are conducted on project feasibility studies, which upon approval, serve as a federal decision document. Type I IEPR

panels assess the adequacy and acceptability of the economic and environmental assumptions and projections, project evaluation data, economic analysis, environmental analyses, engineering analyses, formulation of alternative plans, methods for integrating risk and uncertainty, models used in the evaluation of environmental impacts of proposed projects, and biological opinions of the project study. Type I IEPR covers the entire decision document, including key component actions taken to address the underlying engineering, economics, and environmental work, not just one aspect of the study. For decision documents where a Type II IEPR (Safety Assurance Review) is anticipated during project implementation, safety assurance shall also be addressed during the Type I IEPR per EC 1165-2-217.

Section 506, 125, and CAP project decision documents are generally excluded from Type I Independent External Peer Review (IEPR) except those under Section 103 and Section 205. The exceptions are any project that requires an EIS or any project that meets the mandatory triggers stated in EC 1165-2-217. Due to the nature of flood risks, Section 103 and Section 205 decision documents require a case-by-case risk informed decision to conduct a Type I IEPR, which may be prepared using the LRD CAP Programmatic Review Plan Model or prepared as a project specific Review Plan that meets the requirements of EC 1165-2-217. Section VI.A below specifies the project specific circumstances and rationale for adopting or excluding Type I IEPR of the Floyd's Fork Ecosystem Restoration decision document.

- Type II IEPR. Type II IEPR, or Safety Assurance Review (SAR), considers the adequacy, appropriateness, and acceptability of the design and construction activities in assuring public health safety and welfare, and in some cases may include decision document reviews during the Feasibility Phase. Type II IEPR is managed outside the USACE and is conducted on design and construction activities for hurricane, storm, and flood risk management projects or other projects where existing and potential hazards pose a significant threat to human life. Type II IEPR panels conduct reviews of the design and construction activities prior to initiation of physical construction and, until construction activities are completed, periodically thereafter on a regular schedule.

The risk informed decision on whether Type I and/or II IEPR will be required is documented below.

A. Decision on IEPR.

EC 1165-2-217 exempts CAP 206 projects from Type I IEPR, and based on the consideration of project specific factors presented in Section III.C relative to the criteria in Paragraph I.B above, the level of risk of the Floyd's Fork Ecosystem Restoration project does not warrant a Type I IEPR of the project decision documents.

B. Products to Undergo Type I IEPR.

Not-Applicable

C. Required Type I IEPR Panel Expertise.

Not-Applicable

D. Documentation of Type I IEPR.

Not-Applicable

VII. 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 by the MSC Commander, or warrant a recommendation by the MSC Commander to higher authority for approval. 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.

VIII. COST ENGINEERING MANDATORY CENTER OF EXPERTISE (MCX) REVIEW AND CERTIFICATION

The home District, in conjunction with the RMO, is responsible for coordinating with the Cost Engineering MCX located in the Walla Walla District for review of the cost estimate for all CAP decision documents. For decision documents prepared under the LRD CAP Programmatic Review Plan Model, regional cost personnel that are pre-certified by the MCX, and assigned by the Cost Engineering MCX, will conduct the cost engineering ATR. The MCX will provide the Cost Engineering MCX certification. Either the designated ATR Lead or the Cost Engineering MCX shall make the selection of the cost engineering ATR team member.

IX. MODEL CERTIFICATION AND APPROVAL

The approval of planning models under EC 1105-2-412 is not required for CAP projects. MSC Commanders are responsible for assuring models for all planning activities are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. Therefore, the use of a certified/approved planning model is highly recommended and

should be used whenever appropriate. Planning models are defined as any models and analytical tools that planners use to define water resources management problems and opportunities, to formulate potential alternatives to address the problems and take advantage of the opportunities, to evaluate potential effects of alternatives and to support decision making. The selection and application of the model and the input and output data is the responsibility of the users and is subject to DQC and ATR.

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.

A. Planning Models.

The following planning 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	Certification / Approval Status
Qualitative Habitat Evaluation Index (QHEI)	The QHEI is an index of macrohabitat quality for streams. It provides a measure of habitat quality that corresponds to physical factors that affect fish communities and which are generally important to other aquatic life (e.g . invertebrates). QHEI has six metrics which take in account variables such as bottom substrate, channel morphology, riparian cover, and other modifications to the stretch. A QHEI measurement can have a maximum score of 100 with scores less than 30 identifying a very poor quality stream and scores of 70 or higher characterizing excellent quality streams.	Certified
Floristic Quality Index (FQI)	The FQI is a tool used to assess an area’s ecological integrity based on its plant species composition. This is accomplished through a system of assigning plant species a coefficient of conservatism based on the region in which the study area occurs. These coefficients vary from 0-10, and indicate the degree to which a species is able to tolerate environmental degradation. Plants are given a low rating if they are able to tolerate a very wide range of conditions and are found in a variety of habitats/locations. A high rating is given to species which have very specific requirements and cannot exist outside of those conditions. Non-native species are generally given a rating of zero.	Approved
IWR Planning Suite II	The CE/ICA provides analysis for formulating and evaluating ecosystem restoration plans with incremental cost analysis methods. This program may be used to aid in identifying the most cost effective ecosystem restoration project.	Certified

B. Engineering Models.

The following engineering 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	Approval Status
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Micro-Computer Aided Cost Estimating System (MCACES), Second Generation (MII), Version 4.1	MII provides an integrated costs estimating system that meets the USACE requirements for preparing cost estimates. MCACES may be used to produce estimates and may be reported by using Microsoft Excel.	Required per ETL 1110-2-573
HEC-RAS and HEC-HMS	Hydraulic and hydrologic conditions will be modeled to show the environmental benefits achieved through the proposed alternatives.	Certified

X. REVIEW SCHEDULES AND COSTS

A. ATR Schedule and Cost.

The ATR will be performed on the draft and final detailed project report with integrated EA and other supporting documents. The estimated ATR cost to review the draft report is \$20,000 (including only ATR team time).

Activity	Duration (Days)	Start Date	Finish Date
Kickoff meeting	1		
ATR Read /Review	7		
ATR Comments due in DrChecks	7		
PDT Evaluations Due	7		
ATR Back check	30		
ATR Review Report Complete	7		
ATR Review - Final	15		

B. Type I IEPR Schedule and Cost.

Not applicable.

C. Model Review Schedule and Cost.

Not applicable.

XI. 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. The integrate DPR and environmental document will be posted for 30 day public comment period.

XII. REVIEW PLAN APPROVAL AND UPDATES

The LRD Senior Executives are responsible for approving this review plan and ensuring that use of the LRD CAP Programmatic Review Plan Model 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 LRD approval are documented in Attachment 3. Significant changes to the review plan (such as changes to the scope and/or level of review) should be re-approved by LRD following the process used for initially approving the plan. Significant changes may result in the MSC determining that use of the LRD CAP Programmatic Review Plan Model is no longer appropriate. In these cases, a project specific review plan will be prepared and approved in accordance with EC 1165-2-217 and Director of Civil Works' Policy Memorandum #1. The MSC Approved Review Plan, along with the MSC approval memorandum, will be posted on the home district's webpage.

XIII. REVIEW PLAN POINTS OF CONTACT

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



ATTACHMENT 1: TEAM ROSTERS.

Project Delivery Team		
Technical Discipline	Team Member	District
Project Manager	[REDACTED]	LRL
Plan Formulator	[REDACTED]	LRL
Environmental	[REDACTED]	LRL
Archaeology	[REDACTED]	LRL
Real Estate	[REDACTED]	LRL
H&H/Climate Assessment	[REDACTED]	LRL
Cost Engineering	[REDACTED]	LRL
Office of Counsel	[REDACTED]	LRL
Resource Management	[REDACTED]	LRL
Agency Technical Review Team		
Technical Discipline	Team Member	District
ATR Team Lead	[REDACTED]	NAB
Plan Formulation	[REDACTED]	NAB
Cost Engineering	TBD	TBD
Hydraulics and Hydrology	TBD	TBD
Real Estate	TBD	TBD
NEPA Compliance	TBD	TBD
Climate Assessment	TBD	TBD
District Quality Control Team		
Technical Discipline	Team Member	District
Plan Formulation	[REDACTED]	LRL
Environmental	[REDACTED]	LRL
Archaeology	[REDACTED]	LRL
Real Estate	[REDACTED]	LRL
Hydraulics and Hydrology	[REDACTED]	LRL
Climate Assessment	[REDACTED]	LRL
Cost Engineering	[REDACTED]	LRL

ATTACHMENT 2: STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the <type of product and brief description of it> for <project name and location>. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-217. During the ATR, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: 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 DrChecksSM.

SIGNATURE

Name

Date

ATR Team Leader

Office Symbol/Company

SIGNATURE

Name

Date

Project Manager (home district)

Office Symbol

SIGNATURE

Name

Date

Architect Engineer Project Manager¹

Company, location

SIGNATURE

Name

Date

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

Date

Chief, Engineering Division (home district)

Office Symbol

SIGNATURE

Name

Date

Chief, Planning Division (home district)

Office Symbol

¹ Only needed if some portion of the ATR was contracted

ATTACHMENT 3: REVIEW PLAN REVISIONS LOG

<All revisions after the initial LRD Commander approved review Plan shall be documented here, including major revisions (i.e. at initiation of Design and Implementation Phase) where LRD Commander is required and the cover page updated to reflect the latest Commander approval date. >

Revision Date	Description of Change	Page / Paragraph Number

ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS

<u>Term</u>	<u>Definition</u>	<u>Term</u>	<u>Definition</u>
ASA(CW)	Assistant Secretary of the Army for Civil Works	NED	National Economic Development
ATR	Agency Technical Review	NER	National Ecosystem Restoration
CAP	Continuing Authorities Program	NEPA	National Environmental Policy Act
CSDR	Coastal Storm Damage Reduction	O&M	Operation and maintenance
DPR	Detailed Project Report	OMB	Office and Management and Budget
DQC	District Quality Control/Quality Assurance	OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
DX	Directory of Expertise	OEO	Outside Eligible Organization
EA	Environmental Assessment	OSE	Other Social Effects
EC	Engineer Circular	PCX	Planning Center of Expertise
EIS	Environmental Impact Statement	PDT	Project Delivery Team
EO	Executive Order	PAC	Post Authorization Change
ER	Ecosystem Restoration	PMP	Project Management Plan
FDR	Flood Damage Reduction	PL	Public Law
FEMA	Federal Emergency Management Agency	QMS	Quality Management System
FRM	Flood Risk Management	QA	Quality Assurance
FSM	Feasibility Scoping Meeting	QC	Quality Control
HQUSACE	Headquarters, U.S. Army Corps of Engineers	RED	Regional Economic Development
IEPR	Independent External Peer Review	RMC	Risk Management Center
		RMO	Review Management Organization
LERRDs	Lands, Easements, Rights-of-Way, Relocations, Disposal/borrow areas	RTS	Regional Technical Specialist
MCX	Mandatory Center of Expertise	SAR	Safety Assurance Review
MDM	MSC Decision Meeting	USACE	U.S. Army Corps of Engineers
MSC	Major Subordinate Command	WRDA	Water Resources Development Act