

**NAVIGATION AND ECOSYSTEM  
SUSTAINABILITY PROGRAM**

**PROJECT P2**

---

---

**LOCK AND DAM 22 FISH PASSAGE IMPROVEMENT  
PROJECT IMPLEMENTATION REPORT**

---

---

**REVIEW PLAN**

**Project Delivery Team Members**

Rock Island District	15
St. Paul District	2
St. Louis District	1
U.S. Fish & Wildlife Service	1
Illinois DNR	1
Missouri Dept. of Conservation	1
<b>Total</b>	<b>21</b>

**Project Reviewers**

Rock Island District	15
ERDC	7
Mississippi Valley Division	6
Headquarters	6
St. Paul District	5
St. Louis District	4
USGS	4
USFWS	3
Private Sector Contractors	3
Minnesota DNR	2
Portland District	2
Huntington District	1
Illinois Natural History Survey	1
IIHR – University of Iowa	1
Walla Walla District	1
Northwest Division	1
New England District	1
<b>Total</b>	<b>63</b>

## NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM

### PROJECT P2

---

---

## LOCK AND DAM 22 FISH PASSAGE IMPROVEMENT PROJECT IMPLEMENTATION REPORT

---

---

### REVIEW PLAN

#### I. PURPOSE AND REQUIREMENTS

**A. The Document.** This document outlines the review plan for Navigation and Ecosystem Sustainability Program, Project P2, Lock and Dam 22 Fish Passage Improvement Project Implementation Report with integrated Supplemental Environmental Assessment (SEA) and appendices. This site-specific evaluation was initiated as a follow on component of the Upper Mississippi River and Illinois Waterway System Navigation Study (Sept 2004), which was a General Investigation study authorized by Section 216 of the Flood Control Act of 1970. Subsequent authorization was received in the Water Resources Development Act (WRDA) of 2007, Title VIII, which authorized implementation of Ecosystem Restoration projects to attain and maintain the sustainability of the ecosystem of the Upper Mississippi River and Illinois River. The PIR for this project builds upon the comprehensive feasibility study and provides the site specific planning details necessary for project approval.

Engineer Circular (EC) 1105-2-410 (Circular) dated 22 Aug 2008 "Review of Decision Documents" provides the procedures for improving the quality and credibility of U.S. Army Corps of Engineers (USACE) decision documents through an independent review process. It complies with Section 515 of Public Law 106-554 (referred to as the "Data Quality Act "); and the Final Information Quality Bulletin for Peer Review by the Office of Management and Budget (referred to as the "OMB Bulletin. It also provides guidance for the implementation of Section 2034 of WRDA 2007 (P.L. 110-114). This Circular also presents a framework for establishing the appropriate level and independence of review and detailed requirements of review documentation and dissemination.

**B. The Circular.** All decision documents and their supporting analyses will undergo District Quality Control (DQC) and Agency Technical Review (ATR) and may also require IEPR, to "ensure the quality and credibility of the government's scientific information", in accordance with this circular and the quality management procedures of the responsible command. The Circular addresses review of the decision document as it pertains to both approaches and planning coordination with the appropriate Center. The Circular also requires that DrChecks (<https://www.projnet.org/projnet/>) be used to document all ATR and IEPR comments, responses, and associated resolution accomplished.

The types of technical review are provided below and have been redefined and renamed for consistency with recent legislation and to establish a more comprehensive lexicon. This Circular uses the terms "home district" or "home MSC" to refer to the office that has been assigned responsibility

for a study or project and whose commander will sign any recommendations or decision document. Where studies are conducted by non-Federal interests, the "home district" will be the district which has the area of responsibility that contains the proposed project.

1. **District Quality Control (DQC).** DQC is the review of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Project Management Plan (PMP). It is managed in the home district and may be conducted by staff in the home district as long as they are not doing the work involved in the study, including contracted work that is being reviewed. Basic quality control tools include a Quality Management Plan providing for seamless review, quality checks and reviews, supervisory reviews, Project Delivery Team (PDT) reviews, etc. Additionally, the PDT is responsible for a complete reading of the report to assure the overall integrity of the report, technical appendices and the recommendations before approval by the District Commander. It is expected that the MSC/District quality management plans address the conduct and documentation of this fundamental level of review. DQC is not covered by this Review Plan.

2. **Agency Technical Review (ATR).** ATR (which replaces the level of review formerly known as Independent Technical Review [ITR]) is an in-depth review, managed within USACE, and conducted by a qualified team outside of the home district that is not involved in the day-to-day production of a project/product. The purpose of this review is to ensure the proper application of clearly established criteria, regulations, laws, codes, principles and professional practices. The ATR team reviews the various work products and assures that all the parts fit together in a coherent whole. ATR teams will be comprised of senior USACE personnel (Regional Technical Specialists (RTS), etc.), and may be supplemented by outside experts as appropriate. To assure independence, the leader of the ATR team shall be from outside the home MSC.

3. **Independent External Peer Review (IEPR).** This 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. The criteria for application of IEPR are: (1) the total project cost exceeds \$45 million; (2) there is a significant threat to human life; (3) it is requested by a State Governor of an affected state; (4) it is requested by the head of a Federal or state agency charged with reviewing the project if he/she determines the project is likely to have a significant adverse impact on resources under the jurisdiction of his/her agency after implementation of proposed mitigation (the Chief has the discretion to add IEPR under this circumstance); (5) there is significant public dispute regarding the size, nature, effects of the project; (6) there is significant public dispute regarding the economic or environmental cost or benefit of the project; (7) cases where information is based on novel methods, presents complex challenges for interpretation, contains precedent-setting methods or models, or presents conclusions that are likely to change prevailing practices; or (8) any other circumstance where the Chief of Engineers determines IEPR is warranted. IEPR may be appropriate for feasibility studies; reevaluation studies; reports or project studies requiring a Chiefs Report, authorization by Congress, or an EIS; and large programmatic efforts and their component projects. IEPR is managed by an outside eligible organization (OEO) that is described in Internal Revenue Code Section 501(c)(3), is exempt from Federal tax under section 501(a), of the Internal Revenue Code of 1986; is independent; is free from conflicts of interest; does not carry out or advocate for or against Federal water resources projects; and has experience in establishing and administering IEPR panels. The scope of review will address all the underlying planning, engineering, including safety assurance, economics, and environmental analyses performed, not just one aspect of the project.

**4. Policy and Legal Compliance Reviews** In addition to the technical reviews described above, decision documents will be reviewed throughout the study process for their compliance with law and policy. These reviews culminate in Washington-level 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 Chief of Engineers. Guidance for policy and legal compliance reviews is addressed further in Appendix H, ER 1105-2-100. The technical review efforts addressed in this Circular are to augment and complement the policy review processes by addressing compliance with published Army policies pertinent to planning products, particularly policies on analytical methods and the presentation of findings in decision documents. DQC and ATR efforts are to include the necessary expertise to address compliance with published planning policy.

**5. Planning Center of Expertise (PCX) Coordination.** The Circular outlines PCX coordination in conjunction with preparation of the review plan. Districts should prepare the plans in coordination with the appropriate PCX and appropriate consultation with the allied Communities of Practice. The MSC Commander's approval of the review plan is required to assure that the plan is in compliance with the principles of this Circular and the MSC Quality Management Plan (ER 5-1-11). The review plans must anticipate and define the appropriate level of review. All reviews are expected to be completed and documented before the District Commander signs the report. HQUSACE policy review will be completed before the draft decision and NEPA documents are released for public review and again before the Chief of Engineers signs his report. To the maximum extent practicable, reviews shall be scheduled and conducted in a manner to avoid or minimize delays in study or project completion.

## **II. PROJECT DESCRIPTION**

**A. Decision Document.** The purpose of the decision document entitled Navigation and Ecosystem Sustainability Program, Project P2, Lock and Dam 22 Fish Passage Improvement Project Implementation Report with integrated Supplemental Environmental Assessment (SEA) and appendices is to present the results of a feasibility study undertaken to restore connectivity of the Upper Mississippi River (UMR) for a wide range of migratory warmwater fish species. This project is not cost shared. This report provides planning, engineering, and implementation details of the recommended restoration plan to allow final design and construction to proceed subsequent to the approval of the plan.

**B. General Site Description.** The Lock and Dam 22 Fish Passage Improvement Project is located near Saverton, Missouri at river mile 301.2 on the Mississippi River. It is located about ten miles southeast of Hannibal, Missouri in Ralls County.

**C. Project Scope.** The quality management process for this project is identified in table PRP-1. The proposed project area is the spillway and the tailwaters downstream of the spillway. The estimated total project cost is \$59 million. These total costs include Adaptive Management and Monitoring measures which add \$17.2 million to the total construction cost. Operation and Maintenance costs are estimated at \$80 thousand annually.

**D. Problems and Opportunities.** Problems: Lock and Dam 22 is a part of the 9-foot navigation project. Though this dam serves to impound water for navigation, it also serves as an impediment to upstream fish movement. Navigation dams promote the following conditions which contribute to a reduction in the free movement of fish and the degradation of the river ecosystem:

- Reduced longitudinal connectivity of aquatic and floodplain habitats
- Reduced hydraulic slope/fluvial processes
- Adverse effects of impoundment and river regulation

These conditions contribute to the following ecological responses:

- Reduced fish passage/impeded migration routes
- Reduced access to needed main stem river and tributary habitat areas
- Reduced fish community composition
- Reduced geographic range of migratory fish species
- Reduced population size of migratory fish species
- Reduced reproductive success of native mussels
- Reduced population size of native mussels

Opportunities: The opportunity exists to restore longitudinal connectivity for migratory fishes by allowing unrestricted passage over the dam through a fishway.

### **III. AGENCY TECHNICAL PLAN**

As outlined above in paragraph 1.b. (1), the District is responsible for ensuring adequate technical review of decision documents. The responsible PDT District of this decision document is the Rock Island District. The PDT members and their area of expertise are shown in table PRP-2.

**A. General.** An ATR Manager from outside of MVD was designated to lead the ATR process. The proposed scope of work for the ATR Process is provided in Appendix A. In general, the ATR Manager is responsible for providing information necessary for setting up the review, communicating with the Team Leader, providing a summary of critical review comments, collecting grammatical and editorial comments from the ATR team (ATRT), ensuring that the ATRT has adequate funding to perform the review, facilitating the resolution of the comments, and certifying that the ATR has been conducted and resolved in accordance with policy.

**B. Team.** The ATRT will be comprised of individuals that have not been involved in the development of the decision document and will be chosen based on expertise, experience, and/or skills. The members will roughly mirror the composition of the PDT. The ATRT members and their areas of expertise are shown in table PRP-3.

The ATRT was briefed on 23 February 2006 on the project alternatives. The purpose of this meeting was to; 1) brief the Agency Technical Review team on the status of the Mississippi River fish passage projects and; 2) solicit input that can be used in the plan formulation.

### C. Timing and Schedule

1. The ATR process for this document followed the timeline below. Review of the draft PIR document began in June 2008.

<b>Task</b>	<b>Date</b>
Comment Period Begin	2 June 2008
Kickoff Meeting	2 June 2008
ATR Comments Due	27 June 2008
PDT Responses Due	11 July 2008
Responses Backcheck	15 Oct. 2008
Certification	31 Oct. 2008
Alternative Formulation Briefing (AFB)	3 Dec. 2008
AFB Policy Memo Issued	15 Jan. 2009
After Action Review	30 Jan. 2009

2. Throughout the development of this document, the team will hold planning meetings (charrettes) to ensure planning quality. Senior staff and subject matter experts from the PDT District and members of the vertical team (DST, Planning CoP, RIT) will attend the charrettes and provide comments on the product to date. A planning charrette was held on 27 March 2008 to review the PDT draft PIR. Comments from this meeting were summarized in a Memorandum for Record and addressed in the draft PIR.

The general quality management process schedule is identified in table PRP-1.

### IV. INDEPENDENT EXTERNAL PEER REVIEW PLAN

**A. General.** This decision document will present the details of a feasibility study undertaken to restore the longitudinal connectivity for migratory fish at Lock and Dam 22 as described in Section II of this PIR. This critical restoration project is part of a larger program aimed at restoration of the Upper Mississippi River Basin. An IEPR will be conducted for the following reasons:

- (1) Novel methods - This will be Mississippi Valley Division's first modification of a major structure for fish passage on a low-gradient river. In addition, the project is using a "novel approach" in terms of a newly developed Fish Passage Efficiency Index to evaluate benefits. This index has not been assessed or verified.
- (2) Complex challenges - The current plan calls for building a large fish passage structure and then adjusting/manipulating the width of the structure to determine the optimum operating configuration which may be interpreted to indicate that fish passage: (1) is not well understood, (2) may require major adjustments to achieve benefits, (3) may be at risk that the project will not achieve the estimated benefits, and (4) will set precedents for how we implement three other authorized fish passage projects.

- (3) Cost - The Final Feasibility Report recommended the construction of 14 fish passage structures over the 50 year period of analysis. Ultimately, 4 fish passage structures were authorized for implementation at a cost of \$245 million. IEPR of fish passage at Lock and Dam 22 will allow us to apply the insight gained to all four authorized projects.
- (4) Project risk/safety - While safety has been considered by the PDT, this project will lower approximately 12% of the spillway by 3 feet on a major structure in the Mississippi River. Therefore, IEPR is warranted.

**B. IEPR Method.** The IEPR will focus on the formulation of the restoration plan and will address project scoping, alternative screening, sizing, location and design, and the likelihood of enhancing migratory opportunities for fish populations at Lock and Dam 22. The review panel will be composed of individuals with expertise in fisheries and river ecology, structural engineering, geotechnical engineering, hydraulics and hydrology. The entire PIR with appendices will be provided to the IEPR team. There will be no travel required by the reviewers.

The IEPR will be conducted by a contractor and managed by the ECO-PCX. The ECO-PCX will follow the Circular in managing the IEPR.

**C. Timing and Schedule.** The IEPR will be conducted after ATR and concurrently with the public and agency review of the draft PIR. The IEPR is scheduled to begin in the winter of 2008-09 at an estimated cost of \$130,000. Following is the draft schedule for the IEPR:

Task	Schedule
ECO-PCX Prepares IEPR Scope of Work	September 2008
IEPR Contract Awarded	February 2009
IEPR Review Initiated	March 2009
Final IEPR Report Submitted	April 2009
PDT Submits Clarifying Questions to Contractor	May 2009
Contractor Submits Responses to Clarifying Questions	June 2009

**V. PUBLIC AND AGENCY REVIEW**

A. Release of the draft document for public review will occur after issuance of the AFB policy guidance memo and concurrence by HQUSACE. Whenever feasible and appropriate, the office producing the document shall make the draft decision document available to the public for comment at the same time it is submitted for review (or during the review process) and sponsor a public meeting where oral presentations on scientific issues can be made to the reviewers by interested members of the public. When employing a public comment process, the PCX shall, whenever practical, provide reviewers with access to public comments that address significant scientific or technical issues. To ensure that public participation does not unduly delay USACE activities, the PCX shall clearly specify time limits for public participation throughout the review process.

B. Public review of this document will begin approximately one month after the completion of the ATR process and issuance of the HQUSACE policy guidance memo. The estimated time frame for this review is March 2009. The period will last 30 days. No public concerns with the fish passage

*NESP  
Project P2  
L &D 22 Fish Passage Improvement  
Project Implementation Report with Integrated Supplementation Environmental Assessment  
Review Plan*

project were identified at public meetings held in Saverton, Missouri on 10 May 2005 and a year later on 9 May 2006.

C. The public review of necessary State or Federal permits will also take place during this period.

D. A formal State and Agency review will occur after the release of the final report is approved by the Civil Works Review Board. However, intensive coordination with these agencies has occurred concurrent with the planning process. Possible coordinating parties' issues include; the fishway's potential to expand the range of Asian carp; and the fishway's alteration of a structure (the dam) which is listed on the National Register of Historic Places.

E. Upon completion of the review period, comments will be consolidated in a matrix and addressed, if needed. A summary of the comments and resolutions will be included in the document.

## **VI. MODEL CERTIFICATION**

**A. General.** This project will use the novel approach of the Fish Passage Effectiveness Index to evaluate benefits. The model has not been certified by the ECO-PCX. Effectiveness of fish passage improvement alternatives was estimated considering the number of species that would probably use the fish passage improvement and the estimated effectiveness in passing large numbers (significant fraction of adult population) of fish. The PDT formed a sub-group of fisheries and planning experts known as the Habitat Benefit Quantification Group to evaluate the effectiveness of the Fish Passage Effectiveness Index as an evaluation tool (see Section II, I. for a list of participants). The activities of this team were reported to the ECO-PCX and used as support documentation for the model certification plan. The Fish Passage Effectiveness Index was presented for approval/certification to the ECO-PCX in December 2007.

**B. Method.** In accordance with the EC 1105-2-407, Planning Models Improvement Program: Model Certification, the ECO-PCX recommended a model certification team to review the Fish Passage Effectiveness Index consisting of the individuals listed in table PRP-4.

*NESP  
Project P2  
L &D 22 Fish Passage Improvement  
Project Implementation Report with Integrated Supplementation Environmental Assessment  
Review Plan*

**C. Timing and Schedule** Model certification was scheduled for completion in June 2008 at an estimated cost of \$50,000. The following is the schedule for model assessment and certification:

<b>Task</b>	<b>Date</b>
Establish Model Certification Plan and Team	January 2008
Kickoff Meeting	April 2008
Conduct Model Assessment	April-May 2008
Prepare Written Summary	May 2008
Meet (PDT, MCT, PCX, PMIP) To Discuss Findings	May 2008
Prepare Draft Certification Report	June 2008
Draft Certification Report Review by PDT, PCX, PMIP	October 2008
Meeting To Discuss Draft Certification Report	November 2008
Final Certification Report	November 2008

## **VII. PCX COORDINATION**

The appropriate PCX for this document is the National Ecosystem Planning Center of Expertise (ECO-PCX). This review plan will be submitted through the PDT District Planning Chief to the PCX Director, [REDACTED], for approval. The ECO-PCX will manage the review of the ATRT and the IEPR. The approved review plan will be posted to the ECO-PCX website. Any public comments on the review plan will be collected by the Office of Water Project Review (OWPR) and provided to the PDT District for resolution and incorporation if needed.

**VIII. APPROVAL**

The PDT will carry out the review plan as described. The Team Leader will submit the plan to the PDT District Planning Chief for approval. Coordination with PCX will occur through the PDT District Planning Chief. Signatures by the individuals below indicate approval of the plan as proposed.

\_\_\_\_\_  
[Redacted Signature] Date  
Team Leader, Fish Passage, Lock & Dam 22 PDT

\_\_\_\_\_  
[Redacted Signature] Date  
District Program Manager, NESP

\_\_\_\_\_  
[Redacted Signature] Date  
Ecosystem Technical Manager, NESP

\_\_\_\_\_  
[Redacted Signature] Date  
Plan Formulation Technical Manager, NESP

\_\_\_\_\_  
[Redacted Signature] Date  
Program Manager, NESP

\_\_\_\_\_  
[Redacted Signature] Date  
Assistant Chief, Programs and Project Management Division  
Rock Island District

\_\_\_\_\_  
[Redacted Signature] Date  
Chief, Programs and Project Management Division  
Rock Island District

NESP  
Project P2  
L & D 22 Fish Passage Improvement  
Project Implementation Report with Integrated Supplementation Environmental Assessment

Review Plan

**Table PRP-1. Quality Management Process for the development of Project Information Report for NESP Project P - Fish Passage**

Review Briefing	Product Name	Efforts included in Evaluation	Type of Interaction	Required Interaction <sup>1</sup>	Personnel Involved	Result/Approval Level	Schedule
1 Initial Team Review	Draft Project Management Plan	<ul style="list-style-type: none"> <li>Team building</li> <li>Preliminary scheduling</li> <li>Initial identification of goals, objective, and constraints</li> <li>Identification of potential methods of analysis and models</li> </ul>	Face to Face meeting Briefing, Discussion	Kickoff of PDT	PDT, Subject matter experts and potential members of the ATR and VE teams	Team formation Group subject matter training	March 2005
2 Public Scoping Meeting	Preliminary Alternatives Presentation	<ul style="list-style-type: none"> <li>Identification of problems and opportunities</li> </ul>	Face to Face meeting Briefing, Q & A Session	Public Meeting	PDT	Identification of site specific issues. Buy-in from the public	May 2005, May 2006
3 PMP	Project Management Plan	<ul style="list-style-type: none"> <li>Scoping of work efforts,</li> <li>Costs, etc. (Includes Methods of Analysis and Models, Study Assumptions, etc.)</li> <li>Identify performance measures</li> </ul>	Face to Face meeting and/or conference call Briefing	MVD Briefing (Following appropriate PMP review by PDT, Management Council, and PRB's)	PDT, Functional Chief's, Planning COP	Buy-In to Proceed on Planning Effort	December 2005
4 Science Panel	Future Without and preliminary Alternatives Report (Report written to date), Monitoring Plan	<ul style="list-style-type: none"> <li>Monitoring Goals and Objectives</li> <li>Monitoring techniques</li> <li>Design Considerations</li> <li>Refine performance measures</li> </ul>	Face to Face meeting Briefing, Discussion, Field Trip	Science Panel Briefing	TLs, Science Panel	By-In to proceed with the Planning and Monitoring Effort	November 2005, October 2006
5 Plan Form, VE, ATR Kickoff	Future Without and preliminary Alternatives Report (Report written to date)	<ul style="list-style-type: none"> <li>Problems and opportunities</li> <li>Existing conditions</li> <li>Planning constraints</li> <li>Future Without</li> <li>Defined goals, objectives, and features</li> <li>Preliminary alternatives to be evaluated</li> <li>Air disagreements</li> </ul>	Face to Face meeting Discussion, Briefing	Kickoff of ATR and VE.	PDT, Functional Chiefs, ATR and VE Teams	Proceed to Feasibility Scoping Meeting with MVD and HQ; Memorandum acknowledging kickoff ATR and VE	May 2006
6 Feasibility Scoping	Future without and preliminary Alternatives report	<ul style="list-style-type: none"> <li>Problems and Opportunities</li> <li>Existing conditions</li> <li>Planning Constraints</li> <li>Future Without</li> <li>Defined Goals, Objectives, and Features</li> <li>Preliminary Alternatives to be Evaluated</li> </ul>	Face to Face meeting and/or conference call Briefing and report review	Feasibility Scoping Meeting with HQ (required)	PDT, Functional Chiefs, MVD, HQ, ATR Team	Proceed to Next Planning Step Update Project Management Plan HQ and MVD Guidance Memorandum	May 2006
7 Model Certification	Model Certification Package	<ul style="list-style-type: none"> <li>Model Review, Revision, and Certification</li> </ul>	Conference call Briefing and model certification package review	Model certification team review and approvals	PDT, Model Certification Team, Eco-PCX	Eco-PCX Model Certification	January 2008 – November 2008
8 ATR	ATR Draft Project Implementation Report	<ul style="list-style-type: none"> <li>Refined Problems and Opportunities, Goals, Objectives, and Features, Future Without, Adaptive Mgmt and Performance Measures</li> <li>Alternative Analysis, Evaluation and Comparison of Alternative Plans</li> </ul>	Conference call Briefing and Project Implementation Report review	Kickoff of ATR and DrChecks comment/response	PDT and ATR team	Update Project Implementation Report Proceed to Next Planning Step	June 2008 – Jan. 2009
9 Regional Stakeholder Meeting	ATR Draft Project Implementation Report	<ul style="list-style-type: none"> <li>Refined Problems and Opportunities, Goals, Objectives, and Features, Future Without, Adaptive Mgmt and Performance Measures</li> <li>Alternative Analysis, Evaluation and Comparison of Alternative Plans</li> </ul>	Face to Face meeting and/or conference call Briefing and report review	Feasibility and Alternatives Briefing	PDT and NECC	Finalize Draft Report and coordinate to higher HQ, VE report and ATR	August 2008
10 IEPR	Draft Project Implementation Report	<ul style="list-style-type: none"> <li>Refined Problems and Opportunities, Goals, Objectives, and Features, Future Without, Adaptive Mgmt and Performance Measures</li> <li>Alternative Analysis, Evaluation and Comparison of</li> </ul>	Conference call Briefing and Project Implementation Report review	Kickoff of IEPR and DrChecks comment/response	PDT, ECO-PCX, IEPR Team	Update Project Implementation Report Finalize Draft Report and coordinate to higher HQ,	Sept. 2008 – June 2009

*NESP*  
*Project P2*  
*L & D 22 Fish Passage Improvement*  
*Project Implementation Report with Integrated Supplementation Environmental Assessment*

*Review Plan*

		Alternative Plans				VE report and ATR	
11 AFB	Draft Project Implementation Report	<ul style="list-style-type: none"> <li>Refined Problems and Opportunities, Goals, Objectives, and Features, Future Without, Adaptive Mgmt and Performance Measures</li> <li>Alternative Analysis, Evaluation and Comparison of Alternative Plans</li> </ul>	Face to Face meeting and/or conference call Briefing	Alternative Formulation Briefing with HQ and MVD	PDT, Functional Chiefs, ATR Team, VE Team, MVD and HQ	ATR Signoff, Draft Report to Public AFB Guidance Memo	December 2008
12 Public Meeting	Draft Project Implementation Report	<ul style="list-style-type: none"> <li>Refined Problems and Opportunities, Goals, Objectives, and Features, Future Without, Adaptive Mgmt and Performance Measures</li> <li>Alternative Analysis, Evaluation and Comparison of Alternative Plans</li> </ul>	Face to Face meeting Briefing, Q & A Session	Public Meeting	PDT, MVD	Public Involvement Report, Statement of Findings Package	February 2009
13 Final Signoff	Final Project Implementation Report	<ul style="list-style-type: none"> <li>Recommended Plan</li> <li>Signed FONSI</li> </ul>	Face to Face meeting Briefing (Comparison with AFB Guidance Memo)	Routing	PDT, Functional Chiefs	Team Signoff, Policy and Technical Compliance Checklist Signoff	April 2009
14 Civil Works Review Board	Documentation of Review Findings (DRF)	<ul style="list-style-type: none"> <li>Recommended Plan</li> <li>CWRB Meeting Minutes</li> <li>After Action Report</li> <li>Chief of Engineers Report</li> </ul>	Face to Face meeting & VTC, Briefing,	District Commander's Briefing to the CWRB	Deputy Commanding General, CRRB, CoP Leader, CRRB, OMB, District Commander, OWPR, RIT, PDT	CWRB Approval	June 2009
15 State & Agency Review	Final Review Assessment	<ul style="list-style-type: none"> <li>Final Recommended Plan</li> </ul>	30-Day review	Coordination with State and Federal Agencies	PDT, State and other federal agencies	Chief's Briefing Package and Signed Chiefs Report	July 2009

Notes: <sup>1</sup> Interagency coordination (in addition to PDT involvement) occurs at regular intervals through the River Teams, Regional Stakeholder, Science Panel, and PDT Meetings. Key opportunities for interaction occur around: 1) Statement of Work that precedes initiation of the PDT, 2) PMP development, 3) after completion of key activities and draft products, and 4) specific issues that may arise. The briefing called out in Review Briefing 7 is formally recognized as a component of the Quality Management Plan. Others will be informal and scheduled upon request.

*NESP*  
*Project P2*  
*L &D 22 Fish Passage Improvement*  
*Project Implementation Report with Integrated Supplementation Environmental Assessment*

*Review Plan*

**Table PRP-2. Product Delivery team**

<b>Name</b>	<b>Organization</b>	<b>Discipline</b>	<b>Phone</b>	<b>Email</b>
[REDACTED]	MVR-PM-A	Team Leader/Biologist	[REDACTED]	[REDACTED]
[REDACTED]	MVS	Plan Formulation	[REDACTED]	[REDACTED]
[REDACTED]	MVP	Fish Passage Advisor	[REDACTED]	[REDACTED]
[REDACTED]	MVR-EC-DN	Project Engineer	[REDACTED]	[REDACTED]
[REDACTED]	MVR-EC-DN	Project Engineer	[REDACTED]	[REDACTED]
[REDACTED]	MVP	Lead Hydrologic Engineer	[REDACTED]	[REDACTED]
[REDACTED]	MVR-EC-HH	Hydrologic Engineer	[REDACTED]	[REDACTED]
[REDACTED]	MVR-EC-HH	Hydrologic Engineer	[REDACTED]	[REDACTED]
[REDACTED]	MVR	Geotechnical Engineer	[REDACTED]	[REDACTED]
[REDACTED]	MVR-PM-A	Archeologist	[REDACTED]	[REDACTED]
[REDACTED]	MVR-PM-A	Socio-economics	[REDACTED]	[REDACTED]
[REDACTED]	MVR-PM-A	Public Involvement	[REDACTED]	[REDACTED]
[REDACTED]	MVR-OD-M	Operations	[REDACTED]	[REDACTED]
[REDACTED]	MVR-RE-M	Real Estate	[REDACTED]	[REDACTED]
[REDACTED]	MVR-EC-DS	Structures	[REDACTED]	[REDACTED]
[REDACTED]	MVR-EC-S	Survey	[REDACTED]	[REDACTED]
[REDACTED]	MVR-EC-HQ	Water Quality	[REDACTED]	[REDACTED]
[REDACTED]	MVR-EC-DE	Cost Estimating	[REDACTED]	[REDACTED]
[REDACTED]	MVR-OC	Office of Counsel	[REDACTED]	[REDACTED]
[REDACTED]	MVR-EC-DE	Value Engineering	[REDACTED]	[REDACTED]
[REDACTED]	MVR-OD-P	Regulatory	[REDACTED]	[REDACTED]
[REDACTED]	US Fish & Wildlife Service - RIFO	Biology	[REDACTED]	[REDACTED]
[REDACTED]	Illinois DNR - Greenville Office	Fishery Biologist	[REDACTED]	[REDACTED]
[REDACTED]	Missouri DOC - Hannibal Field Station	Fishery Biologist	[REDACTED]	[REDACTED]
[REDACTED]	Iowa DNR – Fairport Fish Hatchery	Fishery Biologist	[REDACTED]	[REDACTED]

*NESP*  
*Project P2*  
*L &D 22 Fish Passage Improvement*  
*Project Implementation Report with Integrated Supplementation Environmental Assessment*

*Review Plan*

**Table PRP-3. ATRT Members**

<b>Name</b>	<b>Organization</b>	<b>Discipline</b>	<b>Phone</b>	<b>Email</b>
[REDACTED]	CENAO-PM-PR	Plan Formulation, ATR Manager	[REDACTED]	[REDACTED]
[REDACTED]	USGS, Biological Resources Division	Biology	[REDACTED]	[REDACTED]
[REDACTED]	Minnesota Department of Natural Resources	Biology	[REDACTED]	[REDACTED]
[REDACTED]	MVP-PM-E	NEPA, Biology	[REDACTED]	[REDACTED]
[REDACTED]	MVP-EC-H	Hydraulics/Hydrology	[REDACTED]	[REDACTED]
[REDACTED]	LRH-EC-DS	Structures	[REDACTED]	[REDACTED]
[REDACTED]	NWW-EC-X	Cost Engineering	[REDACTED]	[REDACTED]
[REDACTED]	NWD-PDD-A	Operations	[REDACTED]	[REDACTED]
[REDACTED]	MVP-PM-E	Cultural Resources	[REDACTED]	[REDACTED]
[REDACTED]	MVP-EC-D	Geotechnical Engineering	[REDACTED]	[REDACTED]

**Table PRP-4. Model Certification Team Members**

<b>Name</b>	<b>Organization</b>	<b>Discipline</b>	<b>Phone</b>	<b>Email</b>
[REDACTED]	CENAE-EP-PP	Cert Team Leader – Biologist	[REDACTED]	[REDACTED]
[REDACTED]	CENWP-EC-HD	Excel spreadsheets	[REDACTED]	[REDACTED]
[REDACTED]	CENWP-PM-E	Fish passage design	[REDACTED]	[REDACTED]
[REDACTED]	CEERD-EE-E	Fisheries biology	[REDACTED]	[REDACTED]
[REDACTED]	CEMVR-PM-F	ECO-PCX Coordinator	[REDACTED]	[REDACTED]
[REDACTED]	CECW-PC	HQ Policy Advisor	[REDACTED]	[REDACTED]

**REVIEW PLAN  
APPENDIX A  
ATR SCOPE OF WORK**

**NAVIGATION AND ECOSYSTEM  
SUSTAINABILITY PROGRAM**

**PROJECT P2**

---

---

**LOCK AND DAM 22 FISH PASSAGE IMPROVEMENT**

---

---

**PROJECT IMPLEMENTATION REPORT**

**REVIEW PLAN  
APPENDIX A  
ATR SCOPE OF WORK**

**NAVIGATION AND ECOSYSTEM  
SUSTAINABILITY PROGRAM**

**PROJECT P2**

**LOCK AND DAM 22 FISH PASSAGE IMPROVEMENT**

**PROJECT IMPLEMENTATION REPORT**

**I. GENERAL**

An ATR Manager shall be designated for the ATR process. The proposed ATR Manager for this project is Greg Steele. As required by EC 1105-2-410, the manager is from outside the PDT's Division. In general, the ATR Manager is responsible for providing information necessary for setting up the review, communicating with the PDT Leader, providing a summary of critical review comments, collecting grammatical and editorial comments from the ATR team (ATRT), ensuring that the ATRT has adequate funding to perform the review, facilitating the resolution of the comments, and certifying that the ATR has been conducted and resolved in accordance with policy.

**II. TEAM**

The ATRT will be comprised of individuals that have not been involved in the development of the decision document and will be chosen based on expertise, experience, and/or skills. The members will roughly mirror the composition of the PDT. The ATRT members and their areas of expertise are:

<b>Name</b>	<b>Organization</b>	<b>Discipline</b>	<b>Phone</b>	<b>Email</b>
[REDACTED]	CENAO-PM-PR	Plan Formulation, ATR Manager	[REDACTED]	[REDACTED]
[REDACTED]	USGS, Biological Resources Division Minnesota	Biology	[REDACTED]	[REDACTED]
[REDACTED]	Department of Natural Resources	Biology	[REDACTED]	[REDACTED]
[REDACTED]	MVP-PM-E	NEPA, Biology	[REDACTED]	[REDACTED]
[REDACTED]	MVP-EC-H	Hydraulics/Hydrolog	[REDACTED]	[REDACTED]
[REDACTED]	LRH-EC-DS	Structures	[REDACTED]	[REDACTED]
[REDACTED]	NWW-EC-X	Cost Engineering <sup>1</sup>	[REDACTED]	[REDACTED]
[REDACTED]	NWD-PDD-A	Operations	[REDACTED]	[REDACTED]
[REDACTED]	MVP-PM-E	Cultural Resources	[REDACTED]	[REDACTED]
[REDACTED]	MVP-EC-D	Geotechnical	[REDACTED]	[REDACTED]

<sup>1</sup>The cost engineering team member nomination was coordinated with the NWW Cost Estimating Directory of Expertise as required. The Directory will decide if the cost estimate will need to be reviewed by Directory Staff.

### **III. COMMUNICATION**

The communication plan for the ATR is as follows:

- A.** The team will use DrChecks to document the ATR process. The PDT Leader will facilitate the creation of a project portfolio in the system to allow access by all PDT and ATRT members. An electronic version of the draft report and appendices in Word format shall be posted at: <ftp://ftp.usace.army.mil/pub/> at least one business day prior to the start of the comment period.
- B.** The PDT shall send the ATR manager one hard copy (with color pages as applicable) of the draft report and appendices for each ATRT member such that the copies are received at least one business day prior to the start of the comment period.
- C.** The PDT shall host an ATR kick-off meeting virtually to orient the ATRT during the first week of the comment period. If funds are not available for an on-site meeting, the PDT shall provide a presentation about the project, including photos of the site, for the team.
- D.** The PDT Leader shall inform the ATR manager when all responses have been entered into DrChecks and conduct an in progress review to summarize comment responses.
- E.** A revised electronic version of the report and appendices with comments incorporated shall be posted at <ftp://ftp.usace.army.mil/pub/> for use during back checking of the comments.
- F.** Team members shall contact ATRT members or leader as appropriate to seek clarification of a comment's intent or provide clarification of information in the report. Discussions shall occur outside of DrChecks but a summary of discussions may be provided in the system.
- G.** Reviewers will be encouraged to contact PDT members directly via email or phone to clarify any confusion. DrChecks shall not be used to post questions needed for clarification.
- H.** The ATRT, PDT, and vertical team shall conduct an after action review (AAR).

### **IV. FUNDING**

- A.** The PDT district shall provide labor funding by cross charge labor codes. Funding for travel, if needed, will be provided through government order. The PDT Leader will work the ATR manager to ensure that adequate funding is available and is commensurate with the level of review needed. The current cost estimate for this review is \$30,000. Any funding shortages will be negotiated on a case by case basis and in advance of a negative charge occurring.
- B.** The ATR leader shall provide organization codes for each team members and a responsible financial point of contact (CEFMS responsible employee) for creation of labor codes.
- C.** Reviewers shall monitor individual labor code balances and alert the ATRT Team Leader to any possible funding shortages.

### **V. TIMING AND SCHEDULE**

- A.** Throughout the development of this document, the team will hold planning charrettes to ensure planning quality. Senior staff and subject matter experts from the PDT District and

members of the vertical team (DST, Planning CoP, RIT) will attend the charrettes and provide comments on the product to date.

**B.** The ATR will begin once a recommended plan has been tentatively selected, the preliminary design is complete, and the environmental assessment has been performed.

**C.** The PDT held a “page-turn” session to review the draft report to ensure consistency across the disciplines and resolve any issues prior to the start of ATR. Writer/editor services were performed on the draft prior to ATR as well.

**D.** The ATR process for this document will follow the timeline below. Actual dates will be scheduled once the period draws closer. It is estimated that review of this document began in the 3rd Quarter of FY 08.

<b>Task</b>	<b>Date</b>
Comment Period Begin	2 June 2008
Kickoff Meeting	2 June 2008
ATR Comments Due	27 June 2008
PDT Responses Due	11 July 2008
Responses Backcheck	15 Oct. 2008
Certification	31 Oct. 2008
Alternative Formulation Briefing (AFB)	3 Dec. 2008
AFB Policy Memo Issued	15 Jan. 2009
After Action Review	30 Jan. 2009

## **VI. REVIEW**

**A.** ATR Team responsibilities are as follows:

1. Reviewers shall review the draft report to confirm that work was done in accordance with established professional principles, practices, codes, and criteria and for compliance with laws and policy. Comments on the report shall be submitted into DrChecks.
2. Reviewers shall pay particular attention to one’s discipline but may also comment on other aspects as appropriate. Reviewers that do not have any significant comments pertaining to their assigned discipline shall provide a comment stating this.
3. Grammatical and editorial comments shall not be submitted into DrChecks. Comments should be submitted to ATR manager via electronic mail using tracked changes feature in the Word document or as a hard copy mark-up. The ATR manager shall provide these comments to the PDT Leader.
4. Review comments shall contain these principal elements:
  - A clear statement of the concern
  - The basis for the concern, such as law, policy, or guidance
  - Significance for the concern
  - Specific actions needed to resolve the comment

5. The “Critical” comment flag in DrChecks shall not be used unless the comment is discussed with the ATR manager and/or the PDT Leader first.

**B. PDT Team responsibilities are as follows:**

1. The team shall review comments provided by the ATRT in DrChecks and provide responses to each comment using “*Concur*”, “*Non-Concur*”, or “*For Information Only*”. *Concur* responses shall state what action was taken and provide revised text from the report if applicable. *Non-Concur* responses shall state the basis for the disagreement or clarification of the concern and suggest actions to negotiate the closure of the comment.

2. Team members shall contact the PDT and ATRT managers to discuss any “non-concur” responses prior to submission.

**VII. RESOLUTION**

**A.** Reviewers shall back check PDT responses to the review comments and either close the comment or attempt to resolve any disagreements. Conference calls shall be used to resolve any conflicting comments and responses.

**B.** Reviewers may “agree to disagree” with any comment response and close the comment with a detailed explanation. ATRT members shall keep the ATR manager of problematic comments. When resolution is not readily achievable, the ATR team should engage the PCX or MSC SMEs to help with resolution and they, in turn, may choose to engage HQ SMEs. If a specific concern still remains unresolved, the district should pursue resolution through the policy issue resolution process described in ER 1105-2-100, Appendix H. Significant ATR concerns that are documented by the PCX will be forwarded through the MSC to the RIT (including basic research of USACE guidance and an expression of the desired outcome) for further resolution in accordance with the policy issue resolution process described in ER 1105-2-100, Appendix H. The ATR documentation will include the text of each ATR comment, the PDT response, a brief summary of pertinent points in the ensuing discussion including any vertical coordination, the agreed upon resolution, and any significant issues they believe were not satisfactorily resolved. ATR shall be certified in accordance with ER 1110-1-12 when all ATR concerns are resolved or deferred by HQ to a separate process.

**VIII. CERTIFICATION**

To fully document the ATR process, a statement of technical review will be prepared. Certification by the ATR manager and the PDT Leader will occur once issues raised by the reviewers have been addressed to the review team’s satisfaction. Indication of this concurrence will be documented by the signing of a certification statement (Appendix 1). A summary report of all comments and responses will follow the statement and accompany the report throughout the report approval process.

**IX. ALTERNATIVE FORMULATION BRIEFING (AFB)**

The AFB for this project will occur after ATR certification. It is possible that the briefing will result in additional technical or policy comments for resolution. After resolution of significant comments, the ATR will be re-certified, if needed.

**APPENDIX A**

**STATEMENT OF TECHNICAL REVIEW**

**NAVIGATION AND ECOSYSTEM  
SUSTAINABILITY PROGRAM**

**PROJECT P2**

---

---

**LOCK AND DAM 22 FISH PASSAGE IMPROVEMENT**

---

---

**PROJECT IMPLEMENTATION REPORT**

The Rock Island District has completed the project implementation report with integrated environmental assessment and appendices of the NESP Project P2, Lock and Dam 22 Fish Passage Improvement, Ecosystem Restoration Project. Notice is hereby given that an agency technical review, that is appropriate to the level of risk and complexity inherent in the project, has been conducted as defined in the Review Plan. During the agency technical review, compliance with established policy principles and procedures and utilization of 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 result, including whether the product meets the customer's needs consistent with law and existing Corps policy. The agency technical review was accomplished by an independent team composed of staff from five Corps Districts or Divisions and two non-Corps staff. All comments resulting from ATR have been resolved.

---

\_\_\_\_\_  
[REDACTED] Date  
ATR Manager, NESP Project P2, Lock and Dam 22 Fish Passage Improvement Project  
Agency Technical Review Team

---

\_\_\_\_\_  
[REDACTED] Date  
PDT Leader, NESP Project P2, Lock and Dam 22 Fish Passage Improvement Project

**CERTIFICATION OF AGENCY TECHNICAL REVIEW**

A summary of all comments and responses are attached. Significant concerns and the explanation of the resolution are as follows:

*(Describe the major technical concerns, possible impact and resolution)*

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

\_\_\_\_\_  
[Redacted]  
Chief, Planning, Programs, and Project Management Division,  
Rock Island District

\_\_\_\_\_  
Date