



**US Army Corps  
of Engineers** ®

**Pittsburgh District  
Great Lakes and Ohio River Division**

Mahoning River Clearing and Snagging Study

Trumbull County, Ohio

Continuing Authorities Program Section 208

P2/Project Number: 481614

# Review Plan – Decision Document

PREPARED BY: 

Kristi Dobra  
Lead Planner  
USACE, Pittsburgh District

RECOMMENDED BY: 

Marc Glowczewski, P.E., PMP  
Chief, Planning and Environmental Branch  
USACE, Pittsburgh District

ENDORSED BY: 

Dan Linkowski  
Chief, Planning and Policy Division  
USACE, Great Lakes and Ohio River Division  
Review Management Office (RMO)

DURRETT.STEPHEN.G.12  
APPROVED BY: 30591454

Digitally signed by  
DURRETT.STEPHEN.G.1230591454  
Date: 2021.04.14 17:16:29 -04'00'

Stephen G. Durrett, P.E., SES  
Regional Program Director  
USACE, Great Lakes and Ohio River Division

MSC APPROVAL DATE:

This information is distributed solely for the purpose of pre-dissemination review under applicable information quality guidelines. It has not been formally disseminated by USACE. It does not represent and should not be construed to represent any agency determination or policy.

**TABLE OF CONTENTS**

**1. PURPOSE AND REQUIREMENTS..... 1**

**2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION ..... 1**

**3. STUDY INFORMATION ..... 2**

**4. DISTRICT QUALITY CONTROL (DQC)..... 3**

**5. AGENCY TECHNICAL REVIEW (ATR) ..... 3**

**6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)..... 5**

**7. POLICY AND LEGAL COMPLIANCE REVIEW ..... 5**

**8. COST ENGINEERING MANDATORY CENTER OF EXPERTISE (MCX) REVIEW AND CERTIFICATION ..... 5**

**9. MODEL CERTIFICATION AND APPROVAL..... 6**

**10. REVIEW SCHEDULES AND COSTS ..... 6**

**11. PUBLIC PARTICIPATION ..... 6**

**12. REVIEW PLAN APPROVAL AND UPDATES..... 6**

**13. REVIEW PLAN POINTS OF CONTACT ..... 6**

**ATTACHMENT 1: TEAM ROSTERS..... 7**

**ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS ..... 8**

**ATTACHMENT 3: REVIEW PLAN REVISIONS..... 10**

## 1. PURPOSE AND REQUIREMENTS

- a. **Purpose.** This Review Plan defines the scope and level of peer review for the Mahoning River Clearing and Snagging Continuing Authorities Program (CAP) Section 208 project decision document.
- b. **Authority.** Section 208 of the Flood Control Act 1954, as amended, authorizes the US Army Corps of Engineers (USACE) to study, adopt, and construct in-stream clearing and snagging projects in the interest of flood risk management. It is a CAP project, 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. Additional Information on this program can be found in Engineer Regulation 1105-2-58.
- c. **Applicability.** This review plan is based on the Programmatic Review Plan for Section 14, 107, 111, 204, 206, 208 and 1135 project decision documents, which is applicable to projects that do not require Independent External Peer Review (IEPR), as defined in EC 1165-2-217 Civil Works Review Policy. This project currently meets all IEPR exemption criteria.
- d. **References**
  - (1) Engineer Circular (EC) 1165-2-217, Civil Works Review, 20 Feb 2018
  - (2) Director of Civil Works' Policy Memorandum #1, Jan 19, 2011
  - (3) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2010
  - (4) Engineer Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
  - (5) ER 1105-2-58, Continuing Authorities Program, 01 March 2019
  - (6) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
- e. **Requirements.** This programmatic review plan was developed in accordance with EC 1165-2-217, which 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 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) and ensuring 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).

## 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 208 decision documents is LRD. The MSC maintains authority and oversight but delegates the coordination and management of decision document ATR to the District. The home District will post the MSC approved review plan on its public website. A copy of the approved review plan (and any updates) will be provided to the appropriate Planning Center of Expertise to keep the PCX apprised of requirements and review schedules.

### 3. STUDY INFORMATION

- a. **Decision Document.** The Mahoning River Clearing and Snagging Section 208 Project decision document will be prepared in accordance with ER 1105-2-58. The approval level of the decision document (if policy compliant) is the home MSC. NEPA compliance will be accomplished with an EA prepared for this study, which will be presented within the decision document as an integrated Detailed Project Report/EA.
- b. **Study/Project Description.** This study is to determine the feasibility of alleviating nuisance flooding along the Mahoning River by implementing clearing and snagging. The Mahoning River in Trumbull County, Ohio, contains many fallen trees and significant debris accumulation throughout the channel. Severe logjams and debris accumulation within an 11-mile reach of the Mahoning River are restricting channel flow and contributing to nuisance flooding that threatens residences, businesses, transportation infrastructure, and public parks in the vicinity of the study area. The primary opportunity for this study is to alleviate damages to homes, businesses, roadways, and public parks caused by ongoing regular nuisance flooding and to prevent more significant flooding damages that may occur in the future as logjams and debris continue to accumulate within the channel. Removing significant debris accumulation from the channel will also allow for more recreational opportunities for boaters along this stretch of the Mahoning River. Trumbull County Metroparks is the study non-Federal sponsor, hereinafter designated as sponsor.

The intent with this study is to maximize professional judgement in the production of the analysis, while ensuring the level of review is commensurate with study complexity. Section 208 projects have a relatively small budget, with a total federal contribution not to exceed \$500K. Executing this study on a limited budget allows the Corps to maximize the implementation/construction portion of the project.

Some alternatives being considered, in addition to *No Action*, are identified below.

**Logjam and Debris Removal** - This measure would remove logjams and debris (fallen trees, branches, foreign debris caught up in logjams) that have accumulated within the channel. This includes woody debris that is visible from the surface at a normal water level, and trees that may be partially submerged. This measure is the most direct way to rectify the problem of logjams in the Mahoning River and will alleviate nuisance flooding.

**Logjam and Debris Removal Combined with Floodplain Clearing** – This alternative would include logjam and foreign debris removal described above, combined with selective clearing of vegetation, brush, and debris from the banks of the Mahoning River.

- c. **Factors Affecting the Scope and Level of Review.**

This study is considered routine without any significant factors requiring any special treatment such as Independent External Peer Review. The Governor of Ohio has not requested any peer review by independent experts. The project does not constitute a threat to human safety. No novel construction methods are required by any alternatives and therefore should not present any challenges to a competent construction firm. Due to the small footprint and lack of public interest expressed so far, the project is not likely to involve significant public dispute concerning size, nature, or effects. Clearing and snagging methods for this project will not require any specialized redundancy, resiliency, and/or robustness, unique construction sequencing, or complicated construction schedule. Relative to other CAP projects, Section 208 projects are of limited complexity and cost. Therefore, this project will be justified based on best professional judgement rather than technical modeling.

- d. **In-Kind Contributions.** Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC and ATR, similar to any products developed by USACE. No in-kind products or analyses are to be provided by the sponsor.

**4. 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 Quality Manual of the District and the home MSC.

Due to the uncomplicated nature of the report, all DQC will be performed by the immediate supervisors of the Project Delivery Team (PDT). DQC comments will be documented using DrChecks (ProjNet) software.

**5. 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. The ATR team lead will be from outside the home MSC.

- a. **Products to Undergo ATR.** ATR will be performed in accordance with the regional Quality Management System. The ATR shall be documented and discussed at the Tentatively Selected Plan milestone. Certification of the ATR will be provided prior to the District Commander signing the final report. Products to undergo ATR include the feasibility report and appendices (the detailed project report).
- b. **Required ATR Team Expertise.** The ATR Review team for this study consists of personnel in the disciplines of hydrology & hydraulic engineering, cost engineering, real estate, economics, plan formulation, and environmental compliance. Several disciplines were combined into one reviewer due to the simplistic nature of the project alternatives and small footprint. The cost reviewer is from the Walla-Walla District Center of Expertise.

<b>ATR Team Members/Disciplines</b>	<b>Expertise Required</b>
ATR Lead	The ATR lead should be a senior professional preferably with experience in preparing CAP 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 Pittsburgh District.

Planning	The Planning reviewer should be a senior water resources planner with experience in CAP studies
Hydrology and Hydraulic Engineering	The H&H engineering reviewer should have experience in logjam/debris removal in civil works projects.
Cost Engineering	Cost MCX Staff or Cost MCX Pre-Certified Professional as assigned by the Walla Walla Cost Engineering Mandatory Center of Expertise with experience preparing cost estimates for CAP projects.
Environmental	The Environmental Reviewer should be a senior environmental professional with NEPA experience.
Climate Preparedness and Resiliency	The CPR reviewer should have experience in CPR assessments for flood risk management projects, and must be CERCAP certified.
Real Estate	Because the real estate portion of this study is anticipated to be minimal and of limited complexity, LRP and LRD agree that a real estate reviewer is not needed for the ATR.

c. **Documentation of ATR.** DrChecks review software will be used to document all ATR comments, responses and associated resolutions accomplished throughout the review process. Comments should be limited to those that are required to ensure adequacy of the product. 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 DrChecks 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, MSC, 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 DrChecks with a notation that the concern has been elevated to the vertical team for resolution.

At the conclusion of each ATR effort, the ATR team will prepare a Review Report summarizing the review. Review Reports will be considered 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.

## **6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)**

- a. **Decision on IEPR.** Based on the information and analysis provided in the preceding paragraphs of this review plan, *the project covered under this plan is excluded from IEPR because it does not meet the mandatory IEPR triggers and does not warrant IEPR based on a risk-informed analysis.* If any of the criteria outlined in paragraph 1(b) are not met, this model Programmatic Review Plan is not applicable and a study specific review plan must be prepared by the home district, coordinated with the appropriate PCX and approved by the home MSC in accordance with EC 1165-2-217.

## **7. 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.

## **8. COST ENGINEERING MANDATORY CENTER OF EXPERTISE (MCX) REVIEW AND CERTIFICATION**

All decision documents shall be coordinated with the Cost Engineering MCX, located in the Walla Walla District. For decision documents prepared under the model Programmatic Review Plan, 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. The Cost

Engineering MCX will make the selection of the cost engineering ATR team member. The cost to complete the certification is estimated at \$1,000.

## **9. MODEL CERTIFICATION AND APPROVAL**

- a. Planning Models.** No planning models will be used in the plan formulation or economic and environmental evaluation of alternatives for this study.
- b. Engineering Models.** No engineering models will be used in the plan formulation or economic and environmental evaluation of alternatives for this study.

## **10. REVIEW SCHEDULES AND COSTS**

- a. ATR Schedule and Cost.** The ATR results up to this point will be evaluated and the report revised as appropriate. The revised report will then be reviewed by the new ATR team. The cost to complete the ATR is estimated to range between \$4,000 and \$6,000.

The ATR will take approximately four weeks to complete. A breakdown of the schedule is: 1) Initial ATR review – 10 business days, 2) PDT evaluation of the ATR comments – 5 business days, and 3) ATR backcheck of the PDTs evaluation comments – 5 business days.

- b. Type I IEPR Schedule and Cost.** Not applicable.
- c. Model Review Schedule and Cost.** Not applicable.

## **11. 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. As required by NEPA, the public will also have the opportunity to review and comment on the DPR/EA.

## **12. REVIEW PLAN APPROVAL AND UPDATES**

The home MSC Commander is responsible for approving this review plan and ensuring that use of the Model Programmatic Review Plan is appropriate for the specific project covered by the plan. The review plan is a living document and may change as the study progresses. The home district is responsible for keeping the review plan up to date. Minor changes to the review plan since the last MSC Commander 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 the MSC Commander following the process used for initially approving the plan. The latest version of the review plan will be posted on the home district's webpage.

## **13. REVIEW PLAN POINTS OF CONTACT**

Public questions and/or comments on this review plan can be directed to the following points of contact: Kristi Dobra, Lead Planner, Pittsburgh District; kristi.s.dobra@usace.army.mil.



**ATTACHMENT 1: TEAM ROSTERS.**

**REDACTED**

**ATTACHMENT 2: SAMPLE 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> 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 DrChecks<sup>sm</sup>.

*SIGNATURE*

---

Name

ATR Team Leader

Office Symbol/Company

---

Date

*SIGNATURE*

---

Name

Project Manager (home district)

Office Symbol

---

Date

*SIGNATURE*

---

Name

Architect Engineer Project Manager<sup>1</sup>

Company, location

---

Date

*SIGNATURE*

---

Name

Review Management Office Representative (or Delegate)

---

Date

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 (home district)

Office Symbol

\_\_\_\_\_

Date

*SIGNATURE*

---

Name

Chief, Planning Division (home district)

Office Symbol

\_\_\_\_\_

Date

<sup>1</sup> Only needed if some portion of the ATR was contracted

**ATTACHMENT 3: REVIEW PLAN REVISIONS**

Revision Date	Description of Change	Page / Paragraph Number