OTHER WORK PRODUCTS REVIEW PLAN

Headwaters of the Tuscarawas River Final Watershed Assessment Ohio Section 729 Watershed Analysis

Huntington District

MSC Approval Date: Pending

Last Revision Date: None



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1. PURPOSE AND REQUIREMENTS

a. Purpose. This Review Plan defines the scope and level of peer review for the Section 729 Headwaters of the Tuscarawas River Final Watershed Assessment (FWA), Ohio.

b. References

- (1) Engineering Circular (EC) 1165-2-214, Civil Works Review, 31 Jan 2010
- (2) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2011
- (3) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
- (4) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
- (5) EC 1105-2-411, Watershed Plans, 15 Jan 2010
- (6) Watershed Assessment Management Plan, May 2011
- (7) ISO Process; Document ID: 4833, Great Lakes and Ohio River Division, Preparation and Approval of Civil Works Review Plans, 22 Sept 2011
- c. Requirements. This Review Plan was developed in accordance with EC 1165-2-214, 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 1165-2-214) and planning model certification/approval (per EC 1105-2-412).

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The Review Management Organization (RMO) is responsible for managing the overall peer review effort described in this Review Plan. The RMO for decision documents is typically either a Planning Center of Expertise (PCX) or the Risk Management Center (RMC), depending on the primary purpose of the decision document. The corresponding Major Subordinate Command (MSC) is designated as the RMO for Other Work Products (EC 1165-2-214 Paragraph 9.c.2). The RMO for the peer review effort described in this Review Plan is the Great Lakes and Rivers Division (LRD).

Feasibility level cost estimates are not included in this watershed assessment; therefore the RMO will not need to coordinate with the Cost Engineering Mandatory Center of Expertise (MCX).

3. STUDY INFORMATION

a. Decision Document. The Headwaters of the Tuscarawas River FWA is not a decision document. Completion of the FWA will not result in authorization of a project for construction. The FWA is a Section 729 watershed analysis and falls in the category of Other Work Products. The Headwaters of the Tuscarawas River FWA is being conducted under the authority of Section 729 of the Water Resources Development Act (WRDA) of 1986(33 U.S.C. 2267a), as amended by Section 202 of WRDA of 2000 and Section 2010 of WRDA of 2007. This authorization allows the US Army Corps of Engineers (USACE) along with the non-Federal sponsor to assess the water resources needs of entire river basins and watersheds of the United

States, in consultation with appropriate Federal, tribal, state and local agencies and stakeholders.

In contrast to traditional USACE planning studies, in which the desired output of the study is to identify a USACE project, the goal of the Headwaters of the Tuscarawas River FWA is to complete a Watershed Management Plan (WMP) which may or may not identify specific USACE projects. The study is likely to conclude with a series of recommendations implementable by a variety of resource agencies – both Federal and non-Federal – as funding allows. This report will be a planning and technical study which will not contain recommendations for authorization or funding for construction, but may recommend further study.

Due to the scope of the study, National Environmental Policy Act (NEPA) documentation will not be required. The study and its products will be considered a categorical exclusion from NEPA according to ER 200-2-2 (9.c.). Additionally there will not be any real estate acquisition required.

As previously stated, the overarching goal and purpose of the FWA will be to provide a water resource management strategy for the Headwaters of the Tuscarawas River Watershed. It will promote sustainable water resources management while taking into consideration flood risk management, environmental protection, economic development, and social well-being. The FWA will focus on the investigation and recommendation of solutions for two identified water resources problems: flooding and water quality.

b. Study/Project Description. The Watershed Assessment Management Plan (WAMP) for the Section 729 Headwaters of the Tuscarawas River FWA will act as a traditional Corps Project Management Plan (PMP). The Section 729 Headwaters of the Tuscarawas River FWA will result in a WMP outlining appropriate strategies and alternatives which will help to address two categories of problems identified in the Muskingum Basin Initial Watershed Assessment (IWA): flooding and water quality.

Throughout public scoping for the IWA the Barberton/Norton area (in the northern part of the basin) was repeatedly highlighted regarding flooding issues. After meeting with officials representing these towns it was stated other nearby cities experience the same problems. These towns include Green, New Franklin, and Copley, as well as bordering areas in the Chippewa Creek sub-watershed to the south (which will be addressed separately).

Aside from flood-related problems, water quality issues also affect the watershed. The primary streams in the watershed are listed on the 303(d) Impaired Waters List. The causes of impairment include hexachlorobenzene, flow alterations, habitat alterations, organic enrichment/low dissolved oxygen, PCBs in fish tissue, and siltation. Given the land use in the area, the sources of the listed impairments could be urban development and agricultural land usage or a combination thereof.

Although the assessment area will encompass the entire Headwaters of the Tuscarawas River Watershed, the approach used to develop integrated water resource management strategies may vary from sub-watershed to sub-watershed depending on the complexity of issues.

As previously stated, the study findings may recommend areas for further study but is not intended to recommend, or serve as the basis for authorizing a site specific project. If a

watershed study identifies potential projects for Corps implementation, a separate and more detailed feasibility study may be initiated with the watershed study serving as the technical component of the reconnaissance study.

The Headwaters of the Tuscarawas River FWA will be carried out with cost-sharing from the Muskingum Watershed Conservancy District (MWCD), which has agreed to partner with the USACE, Huntington District as the non-Federal sponsor. The MWCD has issued a letter of intent to cost-share for the effort. They are contributing 25% of the study cost in a combination of cash and in-kind services.

- c. Factors Affecting the Scope and Level of Review. The Headwaters of the Tuscarawas River FWA is anticipated to be challenging and beneficial, but it will not be novel, controversial, or precedent-setting. The FWA focuses on a major tributary to the Muskingum River, which in turn is a tributary to the Ohio River, a nationally significant waterway. The Muskingum River was identified as a priority river system for assessment by the Ohio River Basin Comprehensive Reconnaissance Report. This study will provide strategic guidance for flood damage reduction and water quality restoration from a systems-wide perspective. The WMP will recommend alternatives and measures to address the two main water resource needs identified through stakeholder outreach which, as previously stated, include flooding and water quality.
- **d. In-Kind Contributions.** The non-Federal cost share partner, the MWCD, will contribute in-kind services as part of their cost share. This is reflected in the current cost estimate for the study. The MWCD will be contributing \$34,732 of in-kind services as part of their \$77,886 cost share. The Huntington District will provide oversight and quality control on in-kind services, and they will be subject to a level of review commensurate with technical Federal contributions to the study.

4. DISTRICT QUALITY CONTROL (DQC)

All 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 WAMP. 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.

- **a. Documentation of DQC.** DQC is documented in a Quality Control Plan (QCP), which summarizes the reviewed product and review process, along with major issues and their resolution. This QCP, signed by the Project Delivery Team (PDT) and DQC team, will be provided to the ATR team. The DQC process is outlined as an Appendix in the WAMP. Each member of the PDT will ensure a quality product in their functional area through internal design checks, seamless reviews, and interaction with the ATR.
- **b. Products to Undergo DQC.** The products developed during the FWA including a watershed planning document, the WAMP, products and analyses provided by non-Federal sponsors as inkind services, as well as all read-ahead material will undergo DQC. These products shall be subject to comprehensive PDT Review as well.

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 if 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 which 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 the home MSC.

a. **Products to Undergo ATR.** The Headwaters of the Tuscarawas River FWA will be subject to ATR. Due to the scope of the project, NEPA documentation is not required, as outlined in ER 200-2-2 (9.c.).

Required ATR Team Expertise.

ATR Team			
ATR Team Members/Disciplines	Expertise Required		
ATR Lead	The ATR lead should be have experience in preparing Civil Works 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 may also serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc).		
Planning Formulation	The Planning reviewer should be a senior water resources planner with experience in flooding and water quality issues. There will be extensive alternative analyses within the plan which would need to be reviewed along with determinations of likely interested parties for project implementation.		
Environmental	The Environmental reviewer should be well versed on ecosystems. Although the watershed plan will not include any NEPA evaluations, the concepts and principles behind NEPA will be used to determine the appropriateness of recommended actions. Due to the possibility of future Corps projects being identified, this reviewer should also be familiar with actions requiring review in accordance with environmental policies, procedures, laws, and regulations which apply to Corps projects.		
Hydrology & Hydraulics	The interaction between water management and its impact on streams is of paramount importance in this investigation. Familiarity with standard hydrologic and hydraulic modeling and its application may be required.		

- **b. 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 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 which has not be 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 action(s) 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 ER 1110-1-12 or ER 1105-2-100, Appendix H, as appropriate. Unresolved concerns can be closed in DrChecks with a notation that the concern has been elevated to the vertical team for resolution.

At the conclusion of each ATR effort, the ATR Team Lead will prepare an ATR 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 the issues raised by the ATR team have been resolved (or elevated to the vertical team). A Statement of Technical Review should be completed, based on work reviewed to date, for the draft report, and final report. A sample Statement of Technical Review is included in Attachment 2. Team members and area of expertise are identified in Attachment 1.

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

IEPR may be required for 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 1165-2-214, is made as to whether IEPR is appropriate. IEPR panels will consist of independent, recognized experts from outside of the USACE in the appropriate disciplines, representing a balance of expertise suitable for the review being conducted. There are two types of IEPR:

- Type I IEPR. Type I IEPR reviews are managed outside the USACE and are conducted on project studies. 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 will cover the entire decision document or action and will address all 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 1165-2-214.
- Type II IEPR. Type II IEPR, or Safety Assurance Reviews (SARs), are managed outside the USACE and are 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 will 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 reviews shall consider the adequacy, appropriateness, and acceptability of the design and construction activities in assuring public health, safety, and welfare. Type II IEPR is not required for this study.
- a. Decision on IEPR. This study does not meet any mandatory trigger for Type I IEPR: there is no threat to human life, there will be no construction; the total project cost is under the \$45 million ceiling, the study is not controversial and its project recommendations are intended to preserve and enhance ecological health and resilience. EC 1165-2-214 states that "Meeting the specific conditions identified for possible exclusions is not, in or of itself, sufficient grounds for recommending exclusion. A deliberate, risk-informed recommendation whether to undertake IEPR shall be made and documented by the project delivery team (PDT)." The PDT has performed a risk assessment for this study, and for the reasons stated below IEPR is not applicable for this watershed plan.
 - (1) There is no design included in this study, and the study does not directly lead to construction.
 - (2) The study will examine priority risk areas for flooding. There may be current risks to life safety from flooding conditions in the watershed and these will be identified in the study. If a project is proposed from the watershed assessment it will likely be conceptual in nature and residual risk and/or project non-performance will be considered. However, more detailed feasibility analyses would be required on

project specific recommendations since this study will not authorize a site specific project.

Should this FWA result in a Corps feasibility study, a new, separate Review Plan will be prepared and submitted to LRD for review/approval. Revised, risk informed decisions regarding Type I and Type II IEPR will be included.

- (3) There is no formal cost estimate, as would be developed for a study concluding with a recommendation for project authorization. There will not be recommendations for USACE project implementation.
- (4) The watershed plan does not require NEPA documentation.
- (5) The watershed plan does not impact a dam of appurtenant structure whose performance involves potential life safety risks. It will not involve changes in management to any flood control structure. The WMP may identify flows necessary to support ecological health. Study products may identify future feasibility or implementation documents that impact structures whose performance involves potential life safety risks. A determination on necessary review requirements for those studies will be made when their Review Plans are drafted.
- (6) This watershed plan has a study cost of \$311,732 and no investment of public monies is required beyond the study cost.
- (7) This watershed plan will not directly lead to project implementation and therefore does not support a USACE budget request for a specific project.
- (8) This watershed plan does not involve ground disturbances.
- (9) The watershed plan does not affect any special features.
- (10) The watershed plan does not involve activities that trigger regulatory permitting.
- (11) The watershed plan does not involve activities that could potentially generate hazardous wastes and/or disposal of hazardous materials.
- (12) The watershed plan does not reference the use of or reliance on manufacturers' engineering and specifications.
- (13) The watershed plan does not involve utility systems and therefore does not rely on local authorities for inspection/certification.
- (14) No controversy is expected surrounding Federal actions associated with this work product.

- **b. Products to Undergo Type I IEPR.** Not-Applicable in this phase, but will be reevaluated during the feasibility phase.
- **c. Required Type I IEPR Panel Expertise.** Not-Applicable in this phase, but will be reevaluated during the feasibility phase.
- **d. Documentation of Type I IEPR.** Not-Applicable in this phase,but will be reevaluated during the feasibility phase.

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 of ER 1105-2-100. These reviews ensure 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 DIRECTORY OF EXPERTISE (DX) REVIEW AND CERTIFICATION

Cost Engineering is not anticipated for the FWA. Any costs developed or used in the report will be parametric or venture level. No detailed estimates for project specific authorization will be developed, therefore there will be no coordination with the DX and a certified estimate will not be required for this study.

9. MODEL CERTIFICATION AND APPROVAL

EC 1105-2-412 mandates the use of certified or approved models for all planning activities to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. Planning models, for the purposes of the EC, are defined as any models and analytical tools planners use to define water resources management problems and opportunities, formulate potential alternatives to address the problems and take advantage of the opportunities, evaluate potential effects of alternatives, and support decision making. The use of a certified/approved planning model does not constitute technical review of the planning product. 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, ATR, and IEPR (if required).

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

- **a. Planning Models.** No planning models are to be used in the performance of this study. Study findings are based on literature review, best professional judgment, and expert consultation.
- **b. Engineering Models.** No engineering models are currently anticipated to be used in the performance of this study. Study findings are based on literature review, best professional judgement, and expert consultation.

10. REVIEW SCHEDULES AND COSTS

a. ATR Schedule and Cost. ATR will be completed prior to submission of documentation to the MSC. ATR costs for the watershed management study are not yet determined but have been budgeted at \$10,000. These costs are cost-shared with the study's non-Federal sponsor. ATR will be completed on the following documentation:

ATR Status Date

FWA Not Started September 2014

- b. Type I IEPR Schedule and Cost. Not-Applicable.
- c. Model Certification/Approval Schedule and Cost. Not-Applicable.

11. PUBLIC PARTICIPATION

In addition to technical meetings with other government entities, a public meeting will be held once a draft of the FWA is available. The purpose of the public meeting is to give the public an opportunity to comment on the Draft FWA. Additionally, a publically accessible project website will also be created, and will include key pieces of information that need to be distributed regarding the FWA. This will also be the eventual location that will house the completed Watershed Plan. Additionally, the website will be formatted to allow for public submittal of comments throughout the study process.

12. REVIEW PLAN APPROVAL AND UPDATES

The Great Lakes and Ohio River Division Commander is responsible for approving this Review Plan. The Commander's approval reflects vertical team input (involving District, MSC, RMO, and HQUSACE members) as to the appropriate scope and level of review for the decision document. Like the PMP, 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, along with the Commanders' approval memorandum, should be posted on the home District's webpage. The latest Review Plan should also be provided to the RMO and home MSC.

For the feasibility study phase, a new Review Plan will be prepared and submitted to LRD for review/approval. At that time, a corresponding risk informed decision will be included related to the recommended plan. In accordance with EC 1165-2-214, the District Chief of Engineering will prepare this assessment. It will be documented in the feasibility study Review Plan. LRD will

review the District Chief of Engineer's assessment and make the determination regarding Type I and Type II IEPR at that time.

13. REVIEW PLAN POINTS OF CONTACT

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

, Study Manager, Huntington District

Chief, Planning and Policy Division, Great Lakes and Ohio River Division

ATTACHMENT 1: TEAM ROSTERS

Project Delivery Team				
Name	Role	Office Symbol	Telephone	Email
2				
		\$200 S		
,				

Agency Technical Review Team				
Name	Role	Office	Telephone	Email

ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECSION DOCUMENTS

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the Final Watershed Assessment for the Headwaters of the Tuscarawas RiverWatershed Section 729 Analysis, Ohio. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-214. 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

<u>Name</u>	Date
ATR Team Leader	
Office Symbol/Company	
SIGNATURE	
	Data
Name	Date
Project Manager	
Office Symbol	
SIGNATURE	
Name	Date
Review Management Office Representative	
Office Symbol	
CERTIFICATION OF AGENCY TECHN	IICAL REVIEW
Significant concerns and the explanation of the resolution are as fo	llows:
As noted above, all concerns resulting from the ATR of the project	have been fully resolved.
SIGNATURE	
<u>Name</u>	Date
Chief, Engineering Division	
Office Symbol	
SIGNATURE	
<u>Name</u>	Date
Chief, Planning Division	

ATTACHMENT 3

Review Plan Revisions		
Revision Date	Description of Change	Page / Paragraph Number
11.0		

ATTACHMENT 4

	Acronyms and A	Abbreviation	ns
Term	Definition	Term	Definition
AFB	Alternative Formulation Briefing	MSC	Major Subordinate Command
ASA(CW)	Assistant Secretary of the Army for Civil Works	NED	National Economic Development
ATR	Agency Technical Review	NER	National Ecosystem Restoration
CSDR	Coastal Storm Damage Reduction	NEPA	National Environmental Policy Act
DPR	Detailed Project Report	0&M	Operation and maintenance
DQC	District Quality Control/Quality Assurance	OMB	Office and Management and Budget
DX	Directory of Expertise	OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
EA	Environmental Assessment	OEO	Outside Eligible Organization
EC	Engineer Circular	OSE	Other Social Effects
EIS	Environmental Impact Statement	PCX	Planning Center of Expertise
EO	Executive Order	PDT	Project Delivery Team
ER	Ecosystem Restoration	PAC	Post Authorization Change
FDR	Flood Damage Reduction	PMP	Project Management Plan
FEMA	Federal Emergency Management Agency	PL	Public Law
FRM	Flood Risk Management	QMP	Quality Management Plan
FSM	Feasibility Scoping Meeting	QA	Quality Assurance
GRR	General Reevaluation Report	QC	Quality Control
Home District/MSC	The District or MSC responsible for the preparation of the decision document	RED	Regional Economic Development
HQUSACE	Headquarters, U.S. Army Corps of Engineers	RMC	Risk Management Center
IEPR	Independent External Peer Review	RMO	Review Management Organization
IHA	Indicators of Hydrologic Alteration	RTS	Regional Technical Specialist
ITR	Independent Technical Review	SAR	Safety Assurance Review
IWRM	Integrated Water Resource Management	USACE	U.S. Army Corps of Engineers
LRR	Limited Reevaluation Report	WRDA	Water Resources Development Act