



DEPARTMENT OF THE ARMY  
US ARMY ENGINEER DIVISION, SOUTHWESTERN  
1100 COMMERCE STREET, SUITE 831  
DALLAS TX 75242-1317

REPLY TO  
ATTENTION OF

CESWD-PDP


12 DEC 2012

MEMORANDUM FOR Commander, Forth Worth District

SUBJECT: Table Rock Master Plan Revision 2012, Decision Document Review Plan Approval

1. Reference: EC 1165-2-209, Civil Works Review Policy, 31 January 2010; and Change 1, 31 January 2012.
2. In accordance with reference 1, I hereby approve the enclosed Review Plan (RP) for the subject master plan.
3. The RP has been prepared in accordance with the referenced guidance. An Independent External Peer Review is required. Public comments received will be incorporated into the plan as the study progresses.
4. Please post the final approved RP with a copy of this memorandum to the District's public internet website and provide the internet address to Southwestern Division. Before posting to the District website, the names of USACE employees should be removed.
5. The SWD point of contact for this action is Mr. Ken Conley, CESWD-PDP, at 469-487-7104.

Encl  
as

  
THOMAS W. KULA  
Brigadier General, USA  
Commanding

# DECISION DOCUMENT REVIEW PLAN

## *Table Rock Master Plan Revision* *2012*

### *Little Rock District*

**MSC Approval Date:** 12 December 2012

**Last Revision Date:** 3 December 2012



US Army Corps  
of Engineers ®

**DECISION DOCUMENT REVIEW PLAN**

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## 1. PURPOSE AND REQUIREMENTS

a. **Purpose.** This Review Plan defines the scope and level of peer review for the *Table Rock Lake, Master Plan Revision*. The Table Rock Lake Master Plan is the required USACE approval document (**ER 1130-2-550, Chapter 3**) that guides all use and development on the project's 62,049 acres of Federal public lands and waters for environmental stewardship and recreation related purposes, throughout the life of the project. Table Rock Lake's Master Plan was last updated in 1976, and it is now out of date. This review plan is a component of the Table Rock Lake Master Plan Revision Project Management Plan, dated June 2012.

### b. References

- (1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2012, Change 1
- (2) EC 1105-2-412, Assuring Quality of Planning Models, 31 March 2011
- (3) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
- (4) ER 1105-2-100, Planning Guidance Notebook, Appendix F, Continuing Authorities Program, Amendment #2, 31 Jan 2007
- (5) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
- (6) ER 1130-2-550—Specifically Chapter 3—draft dated 31 March 2012

c. **Requirements.** This review plan was developed in accordance with EC 1165-2-209, 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 1165-2-209) and planning model certification/approval (per EC 1105-2-412).

- (1) District Quality Control/Quality Assurance (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 Major Subordinate Command (MSC).
- (2) 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 US Army Corps of Engineers (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 a designated Review Management Organization (RMO) and is conducted by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior USACE personnel and may be supplemented by outside experts as appropriate. The leader

of the ATR team shall be from outside the home district, but may be from within the home MSC.

- (3) 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 1165-2-209, 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 areas of expertise suitable for the review being conducted. There are two types of IEPR: Type I is generally for decision documents and Type II is generally for implementation products.
  - (a) 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 1165-2-209.
  - (b) Type II IEPR. Type II IEPR, or Safety Assurance Review (SAR), 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.
- (4) 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. Since this is also an Operations document, applicable Operations-specific guidance (i.e. ER 1130-2-550) will also be reviewed for policy compliance. 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.
- (5) Cost Engineering DX Review and Certification. All **decision documents** shall be coordinated with the Cost Engineering Directory of Expertise (DX), located in the Walla Walla District.

Regional cost personnel that are pre-certified by the DX will conduct the cost estimate ATR. The DX will provide the Cost Engineering DX certification.

- (6) **Model Certification/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 that planners use to define water resources management problems and opportunities, to formulate potential alternatives to address the problems and take advantage of the opportunities, to evaluate potential effects of alternatives and to support decision making. The 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. The use of engineering models is also subject to DQC, ATR, and IEPR (if required).

Use of existing certified or approved planning models is encouraged. Where uncertified or unapproved model are used, approval of the model for use will be accomplished through the ATR process. The ATR team will apply the principles of EC 1105-2-412 during the ATR to ensure the model is theoretically and computationally sound, consistent with USACE policies, and adequately documented. If specific uncertified models are identified for repetitive use within a specific district or region, the appropriate PCX, MSC(s), and home District(s) will identify a unified approach to seek certification of these models.

## **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 decision documents is the Southwestern Division (SWD). The SWD will coordinate and approve the review plan and manage the ATR, if applicable. Little Rock District will post the approved review plan on its public website. A copy of the review plan will also be shared within the Operations Community of Practice.

## **3. STUDY INFORMATION**

- a. **Decision Document.** The *Table Rock Master Plan Revision* process will result in an updated Table Rock Lake Master Plan, which will incorporate all existing supplements (37 to date) as well as look at any potential land classification changes and improving how the natural resources around the lake are managed. This document will be prepared in accordance with **ER 1130-2-550, Chapter 3**. Currently an Environmental Assessment (EA) is anticipated. If public scoping determines an EIS is required then the NEPA document will be changed to an EIS.
- b. **Study/Project Description.** The Table Rock Lake Master Plan is the required USACE approval document (**ER 1130-2-550, Chapter 3**) that guides all use and development on the project's 62,049 acres of Federal public lands and waters for environmental stewardship and recreation related

purposes, throughout the life of the project. Table Rock Lake's Master Plan was last updated in 1976, and it is now out of date.

1. The Table Rock Lake Civil Works project on the White River located within Southwest Missouri (Stone, Taney, and Barry counties) and Northwest Arkansas (Boone and Carroll counties) was authorized by the Flood Control Act of 28 June 1938, Public Law 761, 75<sup>th</sup> Congress, 3<sup>rd</sup> Session.
  2. Table Rock Lake was authorized for five missions: Flood control, generation of hydroelectric power, provide recreational development, fish and wildlife, and storage to provide water for operation of a fish hatchery by the State of Missouri (water supply).
  3. The construction of the dam was completed in 1958, and the powerhouse and switchyard were completed in 1959. The lake was declared operational for public use in 1960.
  4. The original Table Rock Lake Master Plan was approved in 1959 and included 1 Supplement. The Master Plan was updated in 1966. The Master Plan was updated in 1970 and accumulated 8 supplements. The Master Plan was last updated in 1976.
  5. Updating of the Master Plan is now required for the following reasons:
    - a. Most of the approved plans in the previous update have been implemented;
    - b. The existing plan format and mapping technology is outdated and not compliant with current Master Plan format and technology requirements;
    - c. Current Corps policies/regulations, budget processes, business line performance measures, and priorities are not reflected;
    - d. Customer uses, trends, and facility and service demands have changed significantly the past 30 years, ex. dramatically increased visitation and attainment of national tourist destination status due to the City of Branson, Missouri.
    - e. Commercial demands challenge existing master plan.
    - f. Shoreline Management development demands, and resulting environmental and management issues have continued to increase causing sustainability concerns.
    - g. Partners and stakeholders are increasingly more engaged with the Corps and seek to leverage improvements and innovations to increase and sustain benefits provided by the lake; and
    - h. Resource issues generated by off-project influences that affect the operational purposes of the lake have been identified and need to be addressed through the Master Plan.
  6. Draft policy guidance (ER 1130-2-550), dated 21 March 2012, will be used to help guide the team in developing a quality process and product.
- c. Factors Affecting the Scope and Level of Review.**  
The study analyses, while complex, are well within the scope that is typical for similar studies.

- EC 1165-2-209 requires Type I IEPR if the estimated cost of the proposed project is greater than \$45 million, if there is significant threat to human life, if the Governor of the affected State requests it, or if the DCW or Chief of Engineers determines that the project study is controversial. Table Rock Master Plan revision has an estimated project cost of between \$1M to \$2M, there is currently no determined significant impacts or public controversy.

Challenges: The formulation of Table Rock Lake Master Plan Revision, Branson, Missouri involve Plan Formulation, Environmental, Operations, Economic, Real Estate, Hydrology and Hydraulics (H&H), Cost Engineering, Regulatory, Public Affairs, and Contracting considerations.

- Peer review: It is anticipated that the Governors of Missouri or Arkansas will not request a peer review by independent experts.
- Controversial Issues: Potential controversial issues will be assessed throughout Master Plan revision process. It is anticipated there will be significant public participation throughout this process, however controversial issues are not anticipated.
- Precedent-Setting Methods: Information presented in the Table Rock Lake Master Plan revision process will be based on standard methods for plan formulation, project operation, cost estimating, hydrology and hydraulics, economics and environmental assessment.

Cultural and Environmental: It is anticipated that the revision process will not have an adverse impact on cultural or environmental resources. The revision process is not anticipated to have an adverse impact upon critical habitat or any endangered species. Cultural and environmental aspects will be thoroughly and continuously assessed throughout formulation of the Table Rock Lake Master Plan revision process.

Interagency Coordination: It is anticipated that the study will not have significant adverse interagency interest. Agency coordination will take place at every opportunity available, but definitely during (1) Scoping, (2) Draft master plan release, and (3) Final master plan release.

Redundancy, Resiliency, and/or Robustness: The revised Table Rock Lake Master Plan will aim to ensure good science, sound engineering, and public health, safety, and welfare are incorporated into the plan. The need for redundancy, resiliency, and/or robustness will be continuously evaluated throughout the course of the study.

Consequently, the recommendation of the District, with SWD concurrence, is that the highest level of peer review be DQC and, if applicable, ATR. Requirement for a Type I and/or Type II IEPR is not anticipated at this time. However, since there is not an IEPR waiver in place, IEPR review will build it into the schedule until such time as the District secures the waiver or the SWD determines it is not necessary.

**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 analysis is anticipated as this effort is not cost-shared with a Non-Federal 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 Little Rock District shall manage DQC. Documentation of DQC activities is required and should be in accordance with the Quality Manual of the District and the SWD.

DQC is the review of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Table Rock Lake Revision Project Management Plan (PMP), dated July 2012, for the study (to which this Review Plan will ultimately be appended). It is managed in the District and may be conducted by in-house staff as long as the reviewers 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 (QMP) providing for seamless review, quality checks and reviews, supervisory reviews, Project Delivery Team (PDT) reviews, etc. 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 the approval by the District Commander. In addition, non-PDT members and/or supervisory staff will conduct a review for major draft and final products.

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

Per ER 1130-2-550 Appendix V, Master Plan review and approval requirements will be satisfied through the District Quality Control process, unless the NEPA document becomes an Environmental Impact Statement (EIS). If an EIS is required or if other significant issues are identified, then additional review, including ATR and/or IEPR will be implemented. Should ATR be implemented, this review plan will be revised and updated accordingly.

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

Per ER 1130-2-550 Appendix V, Master Plan review and approval requirements will be satisfied through the District Quality Control process, unless the NEPA document becomes an Environmental Impact Statement (EIS). If an EIS is required, then additional review, including ATR and/or IEPR will be implemented. Should IEPR be implemented, this review plan will be revised and updated accordingly.

## **7. MODEL CERTIFICATION AND APPROVAL**

- a. Planning Models.** At this time, no planning models are anticipated for use during this revision to the Table Rock Master Plan. If models are deemed necessary during the course of the revision, appropriate measures will be taken to ensure the model is approved and certified for use.
- b. Engineering Models.** At this time, no planning models are anticipated for use during this revision to the Table Rock Master Plan. If models are deemed necessary during the course of the revision, appropriate measures will be taken to ensure the model is approved and certified for use.

## **8. REVIEW SCHEDULES AND COSTS**

- a. DQC Schedule.**

DQC will take place throughout the Master Plan revision process. At a minimum, this will include, but is not limited to, DQC of the draft Master Plan/draft EA (May 2013) and DQC of the final Master Plan/final EA (November 2013).

- b. ATR Schedule and Cost.** Not applicable at this time; if required, this review plan will be updated accordingly.
- c. Type I IEPR Schedule and Cost.** The District will seek a waiver once the determination is made that an EIS is not required based on information gathered during public scoping. If public scoping determines an EIS is required, an IEPR will be conducted during public and agency review of the draft documents and this review plan will be updated accordingly.
- d. Model Certification/Approval Schedule and Cost.** Use of existing certified or approved planning models is encouraged. Where uncertified or unapproved model are used, approval of the model for use will be accomplished through the ATR process. The ATR team will apply the principles of EC 1105-2-412 during the ATR to ensure the model is theoretically and computationally sound, consistent with USACE policies, and adequately documented. If specific uncertified models are identified for repetitive use within a specific district or region, the appropriate PCX, MSC(s), and home District(s) will identify a unified approach to seek certification of these models.

## **9. 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 DQC team will be provided copies of public and agency comments.

It is anticipated that public participation, including coordination with key agency, partner, and stakeholders, will take place specifically at 3 points during the Table Rock Master Plan revision process; (1) at the start during Scoping for public input and comment; (2) during the draft master plan release; and (3) during the final master plan release.

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

The SWD Commander is responsible for approving this review plan. The review plan is a living document and may change as the study progresses. Little Rock District is responsible for keeping the review plan up to date. Minor changes to the review plan since the last SWD 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 SWD Commander following the process used for initially approving the plan. The latest version of the review plan, along with the Commander's approval memorandum, will be posted on Little Rock District's webpage.

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

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

- SWL: Dana Coburn, 501-324-5601 (Planning)

- SWL: Greg Oller, 501-340-1931 (Operations)
- MSC: Margaret Johanning, 469-487-7045 (Planning)
- MSC: Andrea Murdock-Mcdaniel (Operations)

#### **ATTACHMENT 1: TEAM ROSTERS**

A list of team members and their contact information can be made available upon request.

DQC Team Members are as follows:

A list of District Quality Control members can be made available upon request.

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

**COMPLETION OF DISTRICT QUALITY CONTROL**

District Quality Control (DQC) has been completed for the *Master Plan* for *Table Rock Lake, Branson, Missouri*. The DQC was conducted as defined in the project’s Review Plan to comply with the requirements of EC 1165-2-209. During the DQC, 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. DQC activities employed appear to be appropriate and effective. All comments resulting from the DQC have been resolved and the comments have been closed in DrChecks<sup>sm</sup>.

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[Dana Coburn](#)  
Project Manager

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Date

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[James Sandberg](#)  
Table Rock Lake OPM

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Date

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[John Balgavy](#)  
Chief, Operations Division

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Date

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[Patricia Anslow](#)  
Chief, Planning And Environmental Division

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Date

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[Don Balch](#)  
Chief, Real Estate

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Date

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[R.E. Rogers](#)  
Office of Counsel

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Date

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[Tony Batey](#)  
Chief, E&C Division

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Date

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[Kent Cummins](#)  
Chief, PAO

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Date

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[Elaine Edwards](#)  
Chief, Regulatory Division

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Date

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[Sandra Easter](#)  
Chief, Contracting Division

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Date

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[Dr. Randy Hathaway](#)  
Deputy District Engineer

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Date

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[COL Glen Masset](#)  
District Engineer

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Date

**ATTACHMENT 3: REVIEW PLAN REVISIONS**

<b>Revision Date</b>	<b>Description of Change</b>	<b>Page / Paragraph Number</b>

**ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS**

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