

**Continuing Authorities Program
Section 206, Water Resources Development Act of 1996, as Amended
Aquatic Ecosystem Restoration**

REVIEW PLAN

**COLORADO RIVER TAMARISK REMOVAL,
GRAND JUNCTION, MESA COUNTY, COLORADO**

SACRAMENTO DISTRICT

MSC Approval Date: Jun 21, 2012

Revision Date: Jun 12, 2012

Original date: May 14, 2012



**US Army Corps
of Engineers®**

**REVIEW PLAN
COLORADO RIVER TAMARISK REMOVAL,
GRAND JUNCTION, MESA COUNTY, COLORADO**

**Section 206, Water Resources Development Act of 1996, as amended
Aquatic Ecosystem Restoration**

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1. PURPOSE AND REQUIREMENTS

- a. **Purpose.** This review plan defines the scope and level of peer review for the COLORADO RIVER TAMARISK REMOVAL, GRAND JUNCTION, MESA COUNTY, COLORADO Aquatic Ecosystem Restoration project developed under Section 206, Water Resources Development Act of 1996, as amended.

Section 206 of the Water Resources Development Act of 1996, Public Law 104-305, authorizes the Secretary of the Army to carry out a program of aquatic ecosystem restoration with the objective of restoring degraded ecosystem structure, function, and dynamic processes to a less degraded, more natural condition considering the ecosystem's natural integrity, productivity, stability and biological diversity. This authority is primarily used for manipulation of the hydrology in and along bodies of water, including wetlands and riparian areas. This authority also allows for dam removal. It is a Continuing Authorities Program (CAP) which focuses on water resource related projects of relatively smaller scope, cost and complexity. Traditional USACE civil works projects are of wider scope and complexity and are specifically authorized by Congress. The Continuing Authorities Program is a delegated authority to plan, design, and construct certain types of water resource and environmental restoration projects without specific Congressional authorization. The Federal share of costs for any one Section 206 project may not exceed \$5,000,000.

- b. As defined in ER 1165-2-209 Civil Works Review Policy. A Section 206 project does not require IEPR if ALL of the following specific criteria are met:
- The project does not involve a significant threat to human life/safety assurance;
 - The total project cost is less than \$45 million;
 - There is no request by the Governor of an affected state for a peer review by independent experts;
 - The project does not require an Environmental Impact Statement (EIS),
 - The project is not likely to have significant economic, environmental, and/or social effects to the Nation;
 - The project/study is not likely to have significant interagency interest;
 - The project/study is not likely highly controversial;
 - The decision document is not likely to contain influential scientific information or be a highly influential scientific;
 - The information in the decision document or proposed project design is not likely to be based on novel methods, involve the use of innovative materials or techniques, present complex challenges for interpretation, contain precedent-setting methods or models, or present conclusions that are likely to change prevailing practices; and
 - The project has not been deemed by the USACE Director of Civil Works or Chief of Engineers to be controversial nature.

c. References

- (1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2010.
- (2) Director of Civil Works' Policy Memorandum #1, CECW-P, dated 19 January 2011.
- (3) EC 1105-2-412, Planning Assuring Quality of Planning Models, 31, March 2011.
- (4) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006.
- (5) ER 1105-2-100, Planning Guidance Notebook, Appendix F, Continuing Authorities Program, Amendment #2, 31 Jan 2007.
- (6) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007.
- (7) ER 11-1-321, Army Programs, Value Engineering, (USACE), 28 February 2005.
- (8) Colorado River at Grand Junction, Colorado, Aquatic Ecosystem Restoration, Section 206 Preliminary Restoration Plan, 18 July 2005.

d. 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 and implementation documents are subject to cost engineering review and certification (per EC 1165-2-209), planning model certification/approval (per EC 1105-2-412), and Value Engineering (per ER 11-1-321).

- (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.

Type I IEPR is not required for this document.

(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.

Type II IEPR is not required as it is not applicable for this document.

(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. 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.

- (7) Value Engineering. A Value Engineering (VE) study will be conducted and a report will be prepared to show the value engineering process was used. The aim of the VE studies should be to ensure that the widest range of feasible and cost efficient measures are considered and that alternatives formulated from those measures are not limited to those that first come to mind at the initiation of the study. Putting this step into the process ensures consideration of the fullest range of measures and alternatives.

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 206 decision documents is the home MSC. The MSC will coordinate and approve the review plan and manage the ATR. The home District will post the approved review plan on its public website. A copy of the approved review plan (and any updates) will be provided to the National Ecosystem Planning Center of Expertise (ECO-PCX) to keep the PCX apprised of requirements and review schedules.

3. STUDY INFORMATION

- a. **Decision Document.** The COLORADO RIVER TAMARISK REMOVAL, GRAND JUNCTION, MESA COUNTY, COLORADO decision document will be prepared in accordance with ER 1105-2-100, Appendix F. The approval level of decision documents (if policy compliant) is the home MSC. An Environmental Assessment (EA) will be prepared along with the decision document.

- b. **Study/Project Description.** As shown in Figure 1, the study area is on the Colorado River and adjacent areas in Mesa County starting at the Colorado/Utah state line and extending 52 miles upstream to the west entrance of Debeque Canyon. The study will focus on ecosystem restoration; however, opportunities will be sought to include minor recreation features. Measures will be identified to: improve fish and wildlife habitat, water quality, and conservation; create seasonal wetlands; revegetate the aquatic components of the river's floodplain; diminish public health hazards such as mosquito breeding areas that contribute to West Nile Virus; wildfire potential; and small craft entanglement. Opportunities to provide modest environmental education features and potentially some minor recreational features will be considered. Measures will include removal of invasive species including Tamarisk (*Tamarix* spp.) and Russian olive (*Elaeagnus Angustifolia*) by manual, mechanical (construction equipment) , chemical (herbicides), and biological means (introduction of tamarisk beetle and fire); revegetation with native wetland , riparian, and terrestrial floodplain species that riparian dependent fish and wildlife species also need for survival; improving hydraulic connectivity to restore fluvial and riparian function that benefits several endangered fish species and other native fauna; removal of sediment to develop side channels and backwater spawning and rearing habitat for listed fish species at one location; and maintenance of riparian plantings by controlling noxious weeds and other plants during and beyond the plant establishment period once the project is handed over to the sponsor.

The cost of the recommended plan will depend on the measures included. The preliminary cost estimate for development of the DPR is \$1,353,000. The preliminary cost estimate for the restoration is \$6.8 Million.

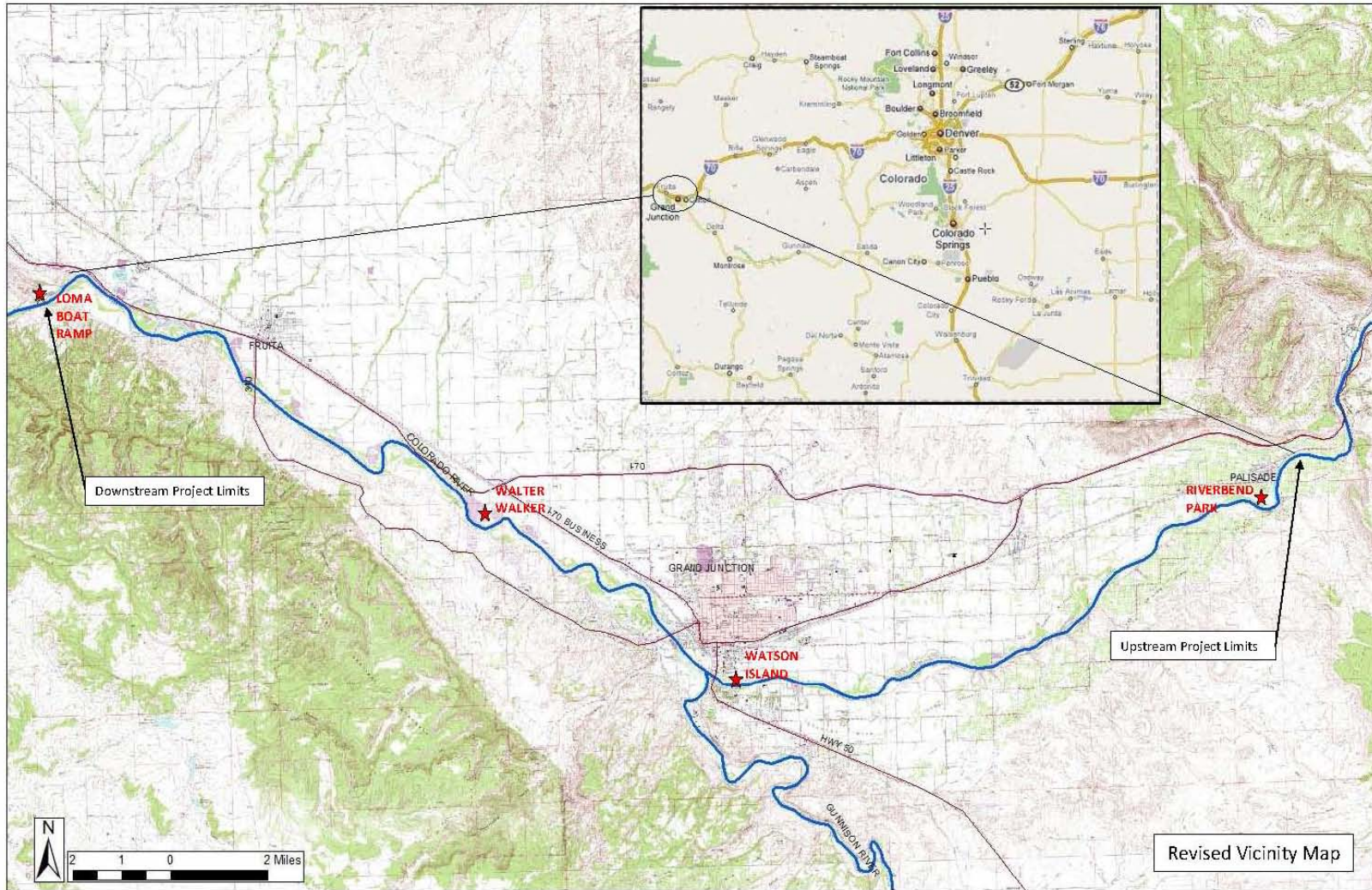


Figure 1. Project Vicinity and Site Location Map

c. Factors Affecting the Scope and Level of Review.

Quality Control will be obtained through DQC, ATR, and IEPR reviews. Questions that must be considered in determining the scope and level of review are identified in column 1 of the table below and are answered in column 2.

Questions to Determine Scope	Tamarisk Project
Will parts of the study be challenging?	<p>No parts of the study are anticipated to be more challenging than is typically expected in a project of this size and nature. For example, anticipated challenges include:</p> <ul style="list-style-type: none"> • Some portions of the project area are densely vegetated, which may create challenges for cultural surveys. • The project covers a large area on a long stretch of the river. Thus, there are likely to be real estate challenges. • The large project area will require more coordination in all aspects, especially access and staging areas.
Will the study report contain influential scientific information or be a highly influential scientific assessment?	It is not anticipated that the study will include influential scientific information.
Will the study have significant economic, environmental, and/or social effects to the Nation?	The study is not expected have significant national economic and environmental effects.
Will the study have significant interagency interest?	The study has local, state, and Federal resource agency interest.
Will the study have significant threat to human life/safety assurance?	The study does not have significant threat to human life/safety.
Will the study be highly controversial?	It is not expected that the project will be controversial.
Will the information in the decision document be based on novel methods, present complex challenges for interpretation, contain precedent-setting methods or models, or present conclusions that are likely to change prevailing practices?	It is not likely that the study will result in precedent-setting methods, models, or practices.

Questions to Determine Scope	Tamarisk Project
What are the likely study risks and the magnitude of the risks?	<p>The moderate to high level risks identified by the PDT include:</p> <ul style="list-style-type: none"> • Some of the sites initially identified for inclusion in the study are on other non-Federal or private land. The PDT must determine the most appropriate method for including these areas in the study (if at all). • Removal of vegetation can create some bank instabilities and increase bank retreat rates. The PDT must use caution to ensure this does not occur. • Removal of vegetation can increase hydraulic flow. The PDT must use caution to ensure that increase flows do not induce flooding downstream. • The PDT must ensure any the project will not impair levees.

Based on the factors listed above, it is anticipated the feasibility study will require ATR. It is not anticipated that Type I IEPR will be required per EC 1165-2-209 Section 11d (3)(c) as the mandatory triggers listed in column 1, are not met, an EIS is not required, and the project study is pursued under the CAP.

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. In-kind contributions include:

- Existing reports and hard data that they contribute to the study/project.
- Assistance during public involvement actions.
- Participation in PDT meetings.
- Assistance during the formulation of alternatives.
- Participation at AFB meeting.
- Review of draft DPR and all technical appendices.

4. DISTRICT QUALITY CONTROL (DQC)

a. Products to undergo DQC. The following document are subject to DQC:

- Alternative Formulation Briefing (AFB) documentation.
- Draft DPR and all technical appendices.
- Final DPR and all technical appendices.
- Plans and Specifications.
- Operations and Maintenance (O&M) manual.

The Project Manager will work with the DQC team leader to ensure that adequate funding is available and is commensurate with the level of review needed. Any funding shortages will be negotiated on a case by case basis and in advance of a negative charge occurring.

The DQC team leader shall provide organization codes for each team member and a responsible financial point of contact (CEFMS responsible employee) for creation of labor codes. Reviewers shall monitor individual labor code balances and alert the DQC team leader to any possible funding shortages.

All products developed by contractors are also subject to DQC.

5. AGENCY TECHNICAL REVIEW (ATR)

a. Products to Undergo ATR. ATR will be performed throughout the study in accordance with the District and MSC Quality Management Plans. The ATR shall be documented and discussed at the AFB milestone. Certification of the ATR will be provided prior to the District Commander signing the final report. Products to undergo ATR include:

- Alternative Formulation Briefing (AFB) documentation.
- Draft DPR and all technical appendices.
- Final DPR and all technical appendices.
- Plans and Specifications.
- O&M manual (to level appropriate).

b. Required ATR Team Expertise. The ATR team members and expertise required is listed in the following table.

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should be a senior professional with experience in preparing Section 206 decision documents and conducting ATR. The lead should also have the necessary skills and experience to lead a virtual team through the ATR process. Typically, the ATR lead will also serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc).
Planning	The planning reviewer should be a senior water resources planner with experience in plan formulation for ecosystem restoration projects, planning for CAP studies, and planning in a collaborative environment.
Hydrology and Hydraulics	The hydrology and hydraulic reviewer should be a senior engineer with expertise in hydrology and hydraulics for restoration projects. Reviewer should have expertise in geomorphology and mobile bed modeling in order to address the challenges of modeling, bank erosion, and related impacts.

ATR Team Members/Disciplines	Expertise Required
Environmental Resources	The environmental resources reviewer should be a senior environmental resources specialist with experience in the aquatic habitat types, understand the factors that influence the reestablishment of native species of plants and animals, and understand requirements for NEPA documentation.
Revegetation Specialist	The revegetation specialist reviewer should have expertise in revegetation and weed control (Russian Olive and Tamarisk). Relevant disciplines are landscape architect, botanist, biologist.
Civil Engineering	The Civil Engineer reviewer should be a senior engineer with experience with civil/site work projects.
Cost Engineering	Experience in the application of scientific principles and techniques to problems of cost estimating, cost control, business planning and management science, profitability analysis, project management, and planning and scheduling. Pre-certified by the DX will conduct the cost estimate ATR. The DX will provide the Cost Engineering DX certification
Real Estate	Expertise in real estate appraisal and acquisition processes.

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 ER 1110-2-12 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 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. A sample Statement of Technical Review is included in Attachment 2.

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

- a. **Decision on IEPR.** Based on the information and analysis provided in paragraph 3(c) 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.
- b. **Products to Undergo Type I IEPR.** Not applicable.
- c. **Required Type I IEPR Panel Expertise.** Not applicable.
- d. **Documentation of Type I IEPR.** Not applicable.

7. MODEL CERTIFICATION AND APPROVAL

The following models are anticipated to be used in the development of the decision document.

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study
IWR Plan	IWR Planning Suite assists with plan formulation by combining user-defined solutions to planning problems and calculating the effects of each combination, or "plan." The program can assist with plan comparison by conducting cost effectiveness and incremental cost analyses, identifying the plans which are best financial investments and displaying the effects of each on a range of decision variables.
HEC-RAS 4.0 (River Analysis System)	The Hydrologic Engineering Center's River Analysis System (HEC-RAS) provides one-dimensional steady and unsteady flow river hydraulics calculations, sediment transport-mobile bed modeling and water temperature analysis. The HEC-RAS software supersedes the HEC-2 river hydraulics package, which was a one-dimensional, steady flow water surface profiles program. This software program will create the water surface profile elevations.
MII	MII (second generation of MCACES) is an integrated cost estimating system.

8. REVIEW SCHEDULES AND COSTS

- a. **ATR Schedule and Cost.** The ATR schedule is show below, but is dependent on funding. Technical findings may be provided for review prior to the full draft date.

Task	Date
Draft DPR, including technical appendices	March 2013
Alternatives Formulation Briefing (AFB) documentation	June 2013
Final DPR, including technical appendices	November 2013
Plans and Specifications	August 2015
O&M Manual	February 2021

The Sacramento District shall provide labor funding by cross charge labor codes. Funding for travel, if needed, will be provided through government order. The Project Manager will work with the ATR team leader to ensure that adequate funding is available and is commensurate with the level of review needed. Any funding shortages will be negotiated on a case by case basis and in advance of a negative charge occurring.

The ATR team leader shall provide organization codes for each team member and a responsible financial point of contact (CEFMS responsible employee) for creation of labor codes. Reviewers shall monitor individual labor code balances and alert the ATR team leader to any possible funding shortages. ATR review is estimated to be \$24,000 for the study.

- b. **Type I IEPR Schedule and Cost.** Not applicable.
- c. **Value Engineering.** The Value Engineering schedule will be determined as the study progresses but will be conducted no later than at 35% plans and specifications. The cost is estimated to be approximately \$40,000 for the study.

- 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 ATR team will be provided copies of public and agency comments. The draft DPR will be provided to the public for review in November 2010. Release of the draft report for public review will occur after issuance of the AFB policy guidance memo.

10. 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, along with the Commanders' approval memorandum, will be posted on the home 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:

- SPK contact, Alicia E. Kirchner, Planning Chief, 916-557-6767, Alicia.E.Kirchner@usace.army.mil
- MSC contact, Karen Berresford, 415-503-6557, Karen.G.Berresford@usace.army.mil
- PCX contact, Jodi Staebell, 309-794-5448, Jodi.K.Staebell@usace.army.mil

ATTACHMENT 1: TEAM ROSTERS

The following tables include rosters and contact information for the current PDT, ATR team, and PCX points of contact.

Project Delivery Team

Name	Discipline	Agency/Office	Phone
James Baker	Project Manager	Project Management	916. 557.5394
Kim Carsell	Planner	Planning Division	916.557.7636
Mario Parker	Environmental	Planning Division	916.557.6701
Jeremy Hollis	Real Estate Lead	Real Estate	916.557.6880
Leslie Huynh	Civil Engineer	Engineering Division	916.557.7274
Scott Stonestreet	Hydraulic Engineer	Engineering Division	916.557.7719
Jim Lee	Landscape Architecture	Engineering Division	916.557.7564
Tri Duong	Cost Engineer	Engineering Division	916.557.7202

Agency Technical Review Team

Discipline	Phone	Years of Experience	Credentials
ATRT Lead	TBD		
Planning	TBD		
Hydrology and Hydraulics	TBD		
Environmental Resources	TBD		
Real Estate	TBD		
Cost Engineering	TBD		
Flood Risk Manager	TBD		

Planning Center of Expertise

Name	Discipline	Phone
Jodi Staebell	ECO-PCX	309-794-5448

ATTACHMENT 2: ATR FORM

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the <insert type of product> for COLORADO RIVER TAMARISK REMOVAL, GRAND JUNCTION, MESA COUNTY, COLORADO. The ATR was conducted as defined in the project’s Review Plan to comply with the requirements of EC 1165-2-209. During the ATR, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: assumptions, methods, procedures, and material used in analyses, alternatives evaluated, the appropriateness of data used and level obtained, and reasonableness of the results, including whether the product meets the customer’s needs consistent with law and existing US Army Corps of Engineers policy. The ATR also assessed the District Quality Control (DQC) documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from the ATR have been resolved and the comments have been closed in DrCheckssm.

SIGNATURE

Name
ATR Team Leader
Office Symbol/Company

Date

SIGNATURE

James Baker
Project Manager
CESPK-PM-C

Date

SIGNATURE

Name
Architect Engineer Project Manager ¹
Company, location

Date

SIGNATURE

Name
Review Management Office Representative
Office Symbol

Date

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

Rick Poppelman
Chief, Engineering Division
CESPK-ED

Date

SIGNATURE

Alicia E. Kirchner
Chief, Planning Division
CESPK-PD

Date

¹ Only needed if some portion of the ATR was contracted

ATTACHMENT 3: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS

Term	Definition	Term	Definition
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