



REPLY TO
ATTENTION OF

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

CESWD-PDP

07 DEC 2012

MEMORANDUM FOR Commander, Ft. Worth District

SUBJECT Review Plan for Lower Colorado River Basin, Onion Creek Watershed, Austin, Texas, Limited Reevaluation Report

1. Reference EC 1165-2-209, Civil Works Review Policy, 31 Jan 2010; and Change 1, 31 Jan 2012.
2. The enclosed Review Plan (RP), prepared in accordance with reference 1, is hereby approved for review efforts on the Limited Reevaluation Report. This RP has been coordinated with the Risk Management Center and Flood Risk Management Planning Center of Expertise. Headquarters USACE granted an exclusion from Type I Independent External Peer Review in August 2012.
3. It is understood that this is an initial RP intended primarily to address the decision document. An updated RP to address implementation documents will be submitted along with the final decision document for approval.
4. The point of contact for this action is Lanora Wright at Lanora.Wright@usace.army.mil or office phone 469-487-7032.

THOMAS W. KULA
Brigadier General, USA
Commanding

REVIEW PLAN

LOWER COLORADO RIVER BASIN ONION CREEK WATERSHED, AUSTIN, TEXAS LIMITED REEVALUATION REPORT

FORT WORTH DISTRICT

MSC Approval Date: Pending

Last Revision Date: Initial



**US Army Corps
of Engineers®**

REVIEW PLAN

**LOWER COLORADO RIVER BASIN
ONION CREEK WATERSHED, AUSTIN, TEXAS
LIMITED REEVALUATION REPORT
FORT WORTH DISTRICT**

TABLE OF CONTENTS

1. PURPOSE AND REQUIREMENTS 1

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION 1

3. STUDY INFORMATION 2

4. DISTRICT QUALITY CONTROL (DQC) 5

5. AGENCY TECHNICAL REVIEW (ATR) 6

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR) 8

7. POLICY AND LEGAL COMPLIANCE REVIEW 9

8. COST ENGINEERING DIRECTORY OF EXPERTISE (DX) REVIEW AND CERTIFICATION 9

9. MODEL CERTIFICATION AND APPROVAL 9

10. REVIEW SCHEDULES AND COSTS 10

11. PUBLIC PARTICIPATION 11

12. REVIEW PLAN APPROVAL AND UPDATES 11

13. REVIEW PLAN POINTS OF CONTACT 11

ATTACHMENT 1: TEAM ROSTERS 12

ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS 13

ATTACHMENT 3: REVIEW PLAN REVISIONS 14

ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS 15

1. PURPOSE AND REQUIREMENTS

a. **Purpose.** This Review Plan defines the scope and level of peer review for the Lower Colorado River Basin Onion Creek Watershed Limited Reevaluation Report.

b. References

- (1) Engineering Circular (EC) 1165-2-209 Change 1, Civil Works Review Policy, 31 Jan 2012
- (2) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2010
- (3) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2011
- (4) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
- (5) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
- (6) Chief's Report, Lower Colorado River Phase I, 31 Dec 2006.
- (7) Implementation Guidance for Section 5144 of the Water Resources Development Act of 2007 (WRDA 2007)- Onion Creek, Texas, July 27, 2009.

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).

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 typically either a Planning Center of Expertise (PCX) or the Risk Management Center (RMC), depending on the primary purpose of the decision document. The RMO for the peer review effort described in this Review Plan is FRM –PCX.

The RMO will coordinate with the Cost Engineering Directory of Expertise (DX) to ensure the appropriate expertise is included on the review teams to assess the adequacy of cost estimates, construction schedules and contingencies.

3. STUDY INFORMATION

- a. **Decision Document.** The Limited Reevaluation Report (LRR) for the Lower Colorado River Basin Onion Creek Watershed, Austin, Texas is being performed to determine the economic and financial impact on the decision document of several directives included in the implementation Guidance for Section 5144 of the Water Resources Development Act of 2007(WRDA 2007) and the impact of updated cost and benefits. The Guidance impacts the financial and economic aspects of the project but do not impact the purpose or function of the project.

The impact is expected to decrease the total first cost of the project by \$7,140,000, reduce the first cost from \$82,781,000 to \$75,649,000 and decrease expected annual damages prevented by \$170,000 from \$3,372,000 to \$3,202,000.

Since the LRR will only measure financial and economic impacts, no additional NEPA documentation or other technical analysis will be necessary beyond what was prepared for the authorized Decision Document.

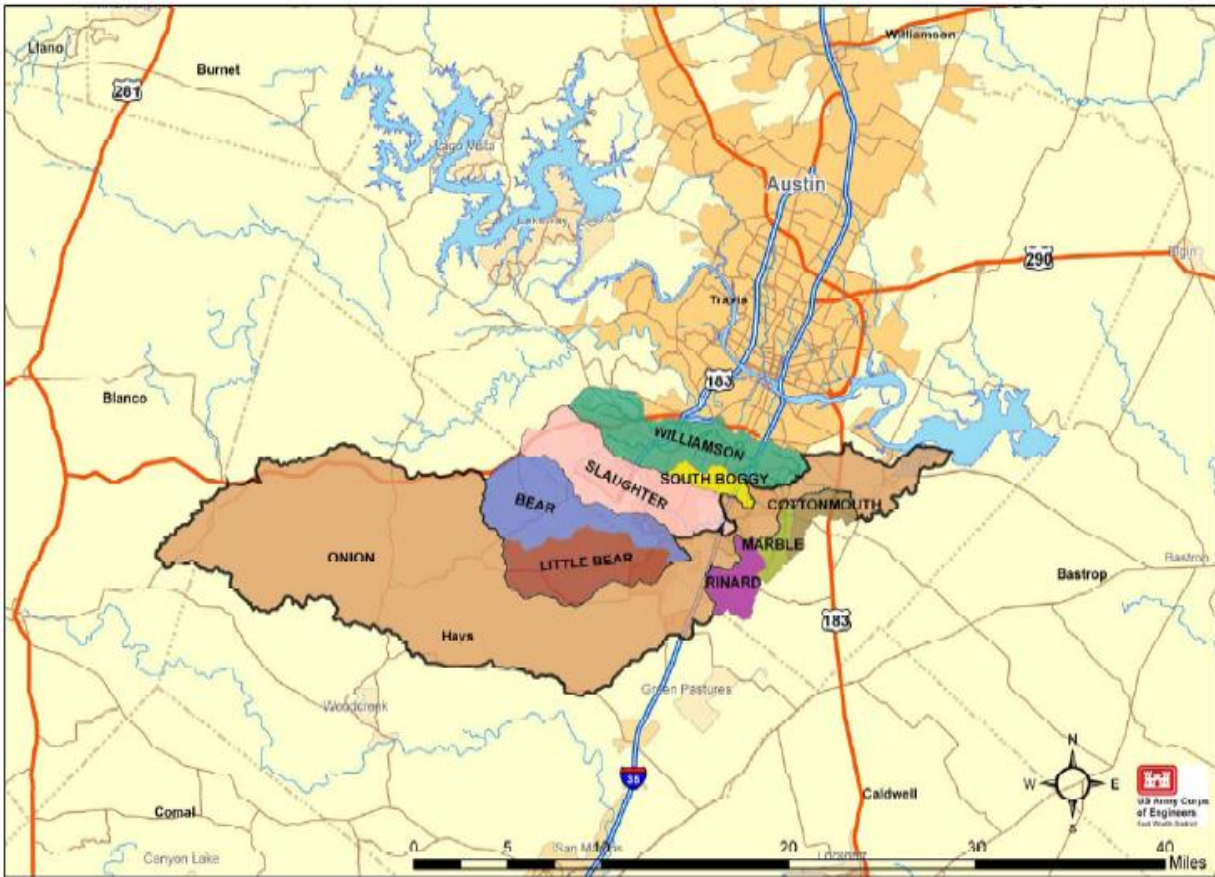
The LRR is an economic and financial impact on the decision document with no changes in the formulation, purpose or function of the project. The approval of the LRR, however, is specifically stated in the Implementation Guidance as being at the ASA (CW) level.

Study/Project Description. The Feasibility Report was initially completed in October 2006 and subsequently finalized on December 8, 2006. The Chief of Engineers submitted his report to the Secretary of the Army for transmission to Congress on December 31, 2006. The project was authorized for construction by Section 1001(43) of WRDA 2007.

The authorized plan includes two separable components within the Lower Colorado River Basin, The Wharton Component and the Onion Creek component. The Onion Creek component is made up of the Onion Creek Forest/Yarrabee Bend segment and Timber Creek segment. The Wharton Component is not impacted and is not considered in the LRR only the Onion Creek Component.

The Onion Creek watershed encompasses approximately 343 square miles and is located primarily in southern Travis and northern Hays Counties, with a minor part of the upper portion of the basin extending into eastern Blanco County. Major tributaries on Onion Creek include Cottonmouth, Williamson, Marble, South Boggy, Slaughter, Rinard, Bear and Little Bear Creeks. The Onion Creek watershed lies within Congressional Districts 21 (Lamar Smith) and 25 (Lloyd Doggett). Figure 1 shows the Onion Creek watershed.

Figure 1 - Onion Creek Watershed



The authorized plan by segment consists of:

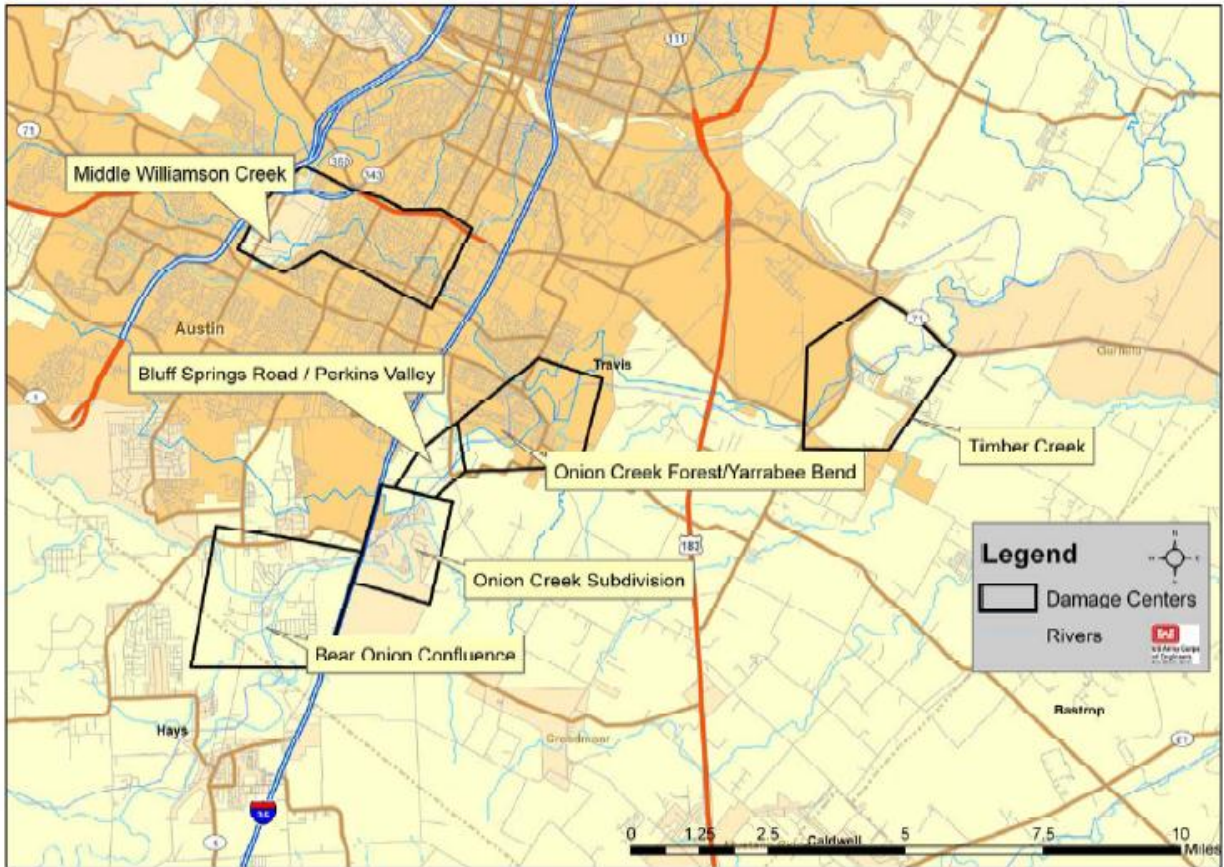
Timber Creek: The Recommended Plan of this segment, consists of the acquisition and removal of 81 residential structures and 90 parcels of land in the 4% ACE floodplain, in combination with recreation features and ecosystem restoration,. The plan would combine recreational features including 20 picnic shelters, 8 small group shelters, 1 large group shelter, 5,300 feet of unpaved trails and 1,200 feet of paved 10 foot wide trails, 2 basketball courts, one waterborne restroom, 12,000 square feet of parking, and the infrastructure associated with these facilities on 40 acres of land. The ecosystem restoration would include restoring riparian woodlands on an additional 16 acres.

Onion Creek Forest/Yarrabee Bend: The Recommended Plan in this segment consists of acquisition and removal of 410 residential structures located in the 4% ACE floodplain, in combination with recreation features and ecosystem restoration. Recreational features include 32 picnic shelters, 32 small group shelters, 1 large group shelter, 7,860 feet of unpaved trails and 9,680 feet of paved 10 foot wide trails (including 1 footbridge), 7,400 feet of equestrian trails, 4 basketball courts, 2 tennis courts, 19 volleyball courts, one waterborne restroom, 20,000 square feet of parking, and the

infrastructure associated with these facilities. The Recommended Plan would result in a 100-acre park. In addition approximately 190 additional acres would be restored to riparian woodland.

This Limited Reevaluation Report (LRR) addresses only the Onion Creek Forest/ Yarrabee Bend portion of the watershed, Figure 2. This is the primary area in which the local sponsors, the city of Austin and Travis County have purchased and relocated residential units using Federal funds obtained through FEMA’s Hazard Mitigation Grant Program. This program also required a 75/25 percent local share. In addition, the sponsor has acquired some properties using 100 percent local funds.

Figure 2 – Onion Creek Forest/Yarrabee Bend



Timber Creek is only impacted by updating the data to current dollars.

The 2006 Chief’s Report included the property subsequently purchased with FEMA funds and did not include any properties purchased prior to execution of the FCSA in May 2000. The Assistant Secretary has also agreed with the sponsor that the money spent for relocation assistance will be allowed to be included as a contribution whether FEMA funds or city funds were used to fund the relocation. In addition, lands purchased with FEMA funds will be allowed to be used for environmental and recreational purposes. Section 5144 WRDA 2007 “directs the Secretary to include the costs and benefits associated with the relocation of flood-prone residences in the study

area in the period beginning 2 years before the date of initiation of the feasibility study (Feasibility Cost Share Agreement executed on 25 May 2000).” The guidance also states “the costs for acquiring and removing residences within the study area accomplished as part of FEMA’s Hazard Mitigation Grant Program (HMGP) are not considered part of the project costs and benefits because they were funded under another Federal agency’s program.”

- b. Factors Affecting the Scope and Level of Review.** Specific implementation guidance for Section 5144 of the Water Resource Development Act of 2007 – Onion Creek, Texas. directs that a Limited Reevaluation Report (LRR) shall be prepared to document the inclusion of appropriate costs (both economic and financial) and benefits of flood-prone residences acquired by non-Federal interest after 25 May 1998 and to document and support the necessary findings of the Secretary.

Specifically the following changes will be made to the study to measure their impact and determine if there is any impact on the decision criteria,

- The impact to the Decision Document of including the costs and benefits associated with the relocation of flood-prone residences in the study area in the 2 year period before 25 May 2000 (Feasibility Cost Share Agreement Execution) and ending on the date of execution of the partnership agreement for construction of the project. This is to include relocation cost of the residences incurred by the non-federal interest.
- Include the cost of residences acquired by the City after 25 May 1998 and prior to the 25 May 2000 feasibility cost share agreement
- Include only the relocation assistance cost incurred by the non-federal sponsor for those properties acquired through the Federal Emergency Management Agency’s (FEMA) Hazard Mitigation Grant Program (HMGP). The cost of the property, asbestos mitigation and demolition will be removed from the study costs.
- Update the Cost and Benefit by more current numbers. The original study was based on 2004 data and subsequent updates were made to 2006. The LRR will update the numbers to 2010.

The impact of these changes will be a financial and economic impact only.

- c. In-Kind Contributions.** Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC, ATR, and IEPR. The in-kind products and analyses to be provided by the non-Federal sponsor include: There is not expected to be any in kind services performed by the local 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 (EC) 1165-2-209. 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.** The DQC of the LRR will be performed as the document is prepared. The LRR consists of modifying Real Estate, Benefits and Cost of an authorized project. An updated real estate plan will be developed, an updated economic appendix will be developed and all costs will be updated, including the use of actual costs where available. Each section will be reviewed internally with comments being addressed before submittal to Project Manager. Once assembled, the study will be resubmitted to each team member for review and agreement.
- b. **Required DQC Expertise.** Senior technical members in the areas of Real Estate, Economic, Plan Formulation, and Cost Engineering sections.

5. AGENCY TECHNICAL REVIEW (ATR)

ATR is mandatory for all decision documents (including supporting data, analyses, environmental compliance documents, etc.). The objective of ATR is to ensure consistency with established criteria, guidance, procedures, and policy. The ATR will assess whether the analyses presented are technically correct and comply with published USACE guidance, and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers. ATR is managed within USACE by the designated RMO and is conducted by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior USACE personnel 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.** Limited Reevaluation Report for the Lower Colorado River Basin Onion Creek Watershed, Austin and Travis County, Texas, including the attached Economic Appendix and Supplement to Gross Appraisal Report. A review by the cost DX will be performed on the cost appendix.
- b. **Required ATR Team Expertise.**

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should be a senior professional with extensive 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	The Planning reviewer should be a senior water resources planner with experience in FRM
Economics	Team member will be an expert in multi purpose flood damage reduction studies using non-structural solutions.
Real Estate	Team member will be experienced in Flood Damage reduction studies. Experience should also involve relocation including PL 91-646 assistance.

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 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 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 1110-1-12 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 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, based on work reviewed to date, for the AFB, draft report, and final report. A sample Statement of Technical Review is included in Attachment 2.

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 1165-2-209, 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 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 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.
- a. Decision on IEPR.** After considering all risk factors for this product, it is the opinion of Fort Worth District that little to no risk is associated with the potential recommendations and findings of the LRR. Thus, a request for Exclusion from the Type I IEPR requirement will be made for approval by the Director of Civil Works. This opinion is based on the following:
- (1) Although the LRR addresses a portion of a flood risk management project that exceeds the threshold amount for a IEPR requirement, the project is entirely non-structural in nature.
 - (2) The LRR is only an economic and financial impact on the project due primarily to changes to lands as directed by the implementation guidance.
 - (3) As noted earlier, the resulting project will actually be over \$7 Million less costly. The changes are based almost entirely on actual costs, with little to no estimates required to assess the change.
 - (4) No alternative considerations, or design changes are being recommended.
 - (5) No NEPA documentation is required or included in the LRR.
 - (6) There are no changes anticipated in operation of the project, nor is there a threat to human life or project controversy.
 - (7) There will not be any policy change, reformulation, scope change or any changes in impact from the authorized project.

A review by a HQ panel gives the following guidance:

“this LRR is a decision document being prepared to support guidance from the ASA(CW) on implementation of an authorized project; does not include new formulation, economic, or environmental analyses; and is not prepared to support a recommendation to Congress.

In light of this information, the panel decided that the Onion Creek LRR is not subject to an IEPR and an exclusion isn't necessary.”

b. Products to Undergo Type I IEPR. N/A

c. Required Type I IEPR Panel Expertise. N/A

d. Documentation of Type I IEPR. N/A

7. POLICY AND LEGAL COMPLIANCE REVIEW

All decision documents will be reviewed throughout the study process for their compliance with law and policy. Guidance for policy and legal compliance reviews is addressed in Appendix H, ER 1105-2-100. These reviews culminate in determinations that the recommendations in the reports and the supporting analyses and coordination comply with law and policy, and warrant approval or further recommendation to higher authority by the home MSC Commander. DQC and ATR augment and complement the policy review processes by addressing compliance with pertinent published Army policies, particularly policies on analytical methods and the presentation of findings in decision documents.

8. COST ENGINEERING DIRECTORY OF EXPERTISE (DX) REVIEW AND CERTIFICATION

All decision documents shall be coordinated with the Cost Engineering DX, located in the Walla Walla District. The DX will assist in determining the expertise needed on the ATR team and Type I IEPR team (if required) and in the development of the review charge(s). The DX will also provide the Cost Engineering DX certification. The RMO is responsible for coordination with the Cost Engineering DX.

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 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. 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. The following planning 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	Certification / Approval Status
HEC-FDA 1.2.4 (Flood Damage Analysis)	The Hydrologic Engineering Center’s Flood Damage Reduction Analysis (HEC-FDA) program provides the capability for integrated hydrologic engineering and economic analysis for formulating and evaluating flood risk management plans using risk-based analysis methods. The program will be used to evaluate and compare the future without- and with-project plans along Onion Creek to determine impact of implementation plan and determine benefits of FRM.	Certified

b. Engineering Models. The following engineering models are anticipated to be used in the development of the decision document: N/A

10. REVIEW SCHEDULES AND COSTS

a. ATR Schedule and Cost. The schedule and cost for ATR review are as follows

- Submission of Draft Review Plan and Checklist January 21, 2010
- PCX Reviewer Assigned January 29, 2010
- PCX provides Draft Review Plan to Program Manager February 12, 2010
- FRM-PCX Concurrence Memo February 25, 2010
- Home District Final Review Plan to MSC May 18, 2012
- MSC Approval of Review Plan July 13, 2012
- ATR Review February 6, 2012
- ATR Certification April 13, 2012
- Recommendation to MSC November 27, 2012
- LRR Approval February 28, 2013

Total cost estimated under \$25,000.

b. Type I IEPR Schedule and Cost. N/A

c. Model Certification/Approval Schedule and Cost. N/A

11. PUBLIC PARTICIPATION

It is anticipated that no additional formal public participation is necessary. Only financial and economic aspects changed. The impact will not change the decision on the project.

The final report will be sent to the Lower Colorado River Basin, the City of Austin and Travis County. In addition the LRR and final decision will be given to the same entities as the final feasibility report.

A joint statement of finalization of the report and expected development of partnership agreements allowing for beginning of construction, upon project funding, will be released by the Corp of Engineers public affairs and the City of Austin and Travis County.

12. REVIEW PLAN APPROVAL AND UPDATES

The Southwest 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.

13. REVIEW PLAN POINTS OF CONTACT

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

- Project Manager/Study Manager 817-886-1369
- POC-MSD 469-487-7069
- POC at lead PCX 504-862-1915

ATTACHMENT 1: TEAM ROSTERS

Original Decision Document Team (Preparers)

NAME	DISCIPLINE/ EXPERTISE	EXPERIENCE	ROLE IN DOCUMENT

LRR PDT Team

ATR Team

ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the <type of product> for <project name and location>. The ATR was conducted as defined in the project’s Review Plan to comply with the requirements of EC 1165-2-209. 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 _____ Date _____
Name
ATR Team Leader
Office Symbol/Company

SIGNATURE _____ Date _____
Name
Project Manager
Office Symbol

SIGNATURE _____ Date _____
Name
Architect Engineer Project Manager¹
Company, location

SIGNATURE _____ Date _____
Name
Review Management Office Representative
Office Symbol

CERTIFICATION OF AGENCY TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows: Describe the major technical concerns and their resolution.

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

SIGNATURE _____ Date _____
Name
Chief, Engineering Division
Office Symbol

SIGNATURE _____ Date _____
Name
Chief, Planning Division
Office Symbol

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
CSDR	Coastal Storm Damage Reduction	O&M	Operation and maintenance
DPR	Detailed Project Report	OMB	Office and Management and Budget
DQC	District Quality Control/Quality Assurance	OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
DX	Directory of Expertise	OEO	Outside Eligible Organization
EA	Environmental Assessment	OSE	Other Social Effects
EC	Engineer Circular	PCX	Planning Center of Expertise
EIS	Environmental Impact Statement	PDT	Project Delivery Team
EO	Executive Order	PAC	Post Authorization Change
ER	Ecosystem Restoration	PMP	Project Management Plan
FDR	Flood Damage Reduction	PL	Public Law
FEMA	Federal Emergency Management Agency	QMP	Quality Management Plan
FRM	Flood Risk Management	QA	Quality Assurance
FSM	Feasibility Scoping Meeting	QC	Quality Control
GRR	General Reevaluation Report	RED	Regional Economic Development
Home District/MS	The District or MSC responsible for the preparation of the decision document	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