Review Plan
June 2024

1. Project Summary

Project Name: Lower Rio Grande Valley Watershed Assessment

Location: Cameron, Hidalgo, Kenedy, and Willacy Counties, Texas

P2 Number: 514236

Decision and Environmental Compliance Document Type: Watershed Plan (not considered a USACE decision document)

Congressional Authorization Required: No, however, a final report is transmitted to Congress for information in response to the study authority and to the Office of Management and Budget if required for budgetary consideration.

Project Purpose(s): Watershed Study to conduct a regional assessment of long-term water resource related risks to populations, property, ecosystems, and infrastructure, develop potential strategies to manage risk, and identify the recommended risk management strategy(s).

Non-Federal Sponsor: Cameron County

Points of Public Contact for Questions/Comments on Review Plan:

District: Galveston District
District Contact: [redacted]

Major Subordinate Command (MSC): Southwestern Division
MSC Contact: [redacted]

Review Management Organization (RMO): Southwestern Division
RMO Contact: [redacted]

Key Review Plan Dates

Date of RMO Endorsement of Review Plan	Pending
Date of MSC Approval of Review Plan	Pending
Date of IEPR Exclusion Approval	N/A
Has the Review Plan changed since RMO Endorsement?	No

Date of Last Review Plan Revision	None
Date of Review Plan Web Posting	Pending

Milestone Schedule and Other Dates

	Scheduled	Actual
FCSA Execution	December 2022	12-Dec-22
Shared Vision Milestone	August 2024	-
Recommendations Milestone	February 2027	-
Release Draft Report to Public	June 2027	-
Final Report Milestone	November 2027	-

2. References

Engineer Regulation 1165-2-217 – Water Resources Policies and Authorities – Civil Works Review Policy, 1 May 2021.

Engineer Circular 1105-2-412 – Planning – Assuring Quality of Planning Models, 31 March 2011.

Planning Bulletin 2013-02, Subject: Assuring Quality of Planning Models (EC 1105-2-412), 31 March 2013.

Office of Management and Budget, Final Information Quality Bulletin for Peer Review, Federal Register Vol. 70, No. 10, January 14, 2005, pp 2664-267

Engineer Regulation 1105-2-102, Water Resource Policies and Authorities – Watershed Studies, 1 April 2022.

Lower Rio Grande Valley Watershed Assessment. Project Management Plan. Sept 2023.

The online USACE Planning Community Toolbox provides more review reference information at: https://planning.erdc.dren.mil/toolbox/current.cfm?Title=Peer%20Review&ThisPage=Peer&Side=No.

3. Review Execution Plan

The general plan for executing all required independent reviews is outlined in the following two tables.

Table 1 lists each study product to be reviewed. The table provides the schedules and costs for the anticipated reviews. Teams also determine whether a site visit will be needed to support each review.

The decisions about site visits are documented in the table. As the review plan is updated the team will note each review that has been completed.

Table 2 identifies the specific expertise and role required for the members of each review team. The table identifies the technical disciplines and expertise required for members of review teams. In most cases the team members will be senior professionals in their respective fields. In general, the technical disciplines identified for a District Quality Control (DQC) team will be needed for an Agency Technical Review (ATR) team. Each ATR team member will be certified to conduct ATR by their community of practice. The table is set up to concisely identify common types of expertise that may be applicable to one or more of the reviews needed for a study.

Table 1: Schedule and Costs of Reviews

Product to Undergo Review	Review Level	Site Visit	Start Date	End Date	Cost	Complete
Draft Watershed Report	DQC	No	Apr-27	May-27	$50,000	No
Draft Watershed Report	Public Comment	No	May-27	Jun-27	N/A	No
Draft Watershed Report	ATR	No	May-27	Jun-27	$50,000	No
Draft Watershed Report	P&LC	No	May-27	Jun-27	N/A	No
Final Watershed Report	DQC	No	Jul-27	Aug-27	$50,000	No
Final Watershed Report	ATR	No	Aug-27	Sep-27	$50,000	No
Final Watershed Report	P&LC	No	Sep-27	Sep-27	N/A	No
Review Management Organization – Coordination and Participation	The RMO is Southwestern Division	No	May-23	Dec-27	$0	No

Table 2: Review Teams - Disciplines and Expertise

Discipline / Role	Expertise	DQC	ATR
DQC Team Lead	Extensive experience preparing Civil Works decision documents and leading DQC. The lead may serve as a DQC reviewer for a specific discipline (planning, economics, environmental, etc.). The DQC lead should have Watershed Assessment Experience.	Yes	N/A
ATR Team Lead	Professional with extensive experience preparing Civil Works decision documents and conducting ATR. Skills to manage a virtual team through an ATR. The lead may serve on the ATR team for a specific discipline (such as planning, economics, or environmental work). The ATR lead should have Watershed Assessment Experience.	N/A	Yes
P&LC Review Manager	Professional with extensive experience preparing Civil Works Watershed Planning and conducting policy reviews. Skills to manage virtual team through the review. The lead may also serve on the P&LC team for a specific discipline (such as planning, economics, or environmental work).	N/A	N/A
Planning	Skilled water resources planner knowledgeable in complex planning investigations and the application of SMART principle to problem solving. The plan formulation reviewer will review how the spreadsheet models/analysis and environmental conceptual models to determine if they were appropriately used in the development of the watershed plan.	Yes	Yes
Economics	Experience with applying theory, methods and tools, including LifeSim, used in the economic evaluation of water resources projects. The economics reviewer will review the spreadsheet models/analysis completed to evaluate recreation, water supply, navigation/transportation, drought impacts, and economic/community development.	Yes	Yes
Environmental Resources	Experience in watershed studies, reviewing conceptual models and experience applying theory, methods, and tools used in riverine and coastal ER.	Yes	Yes
Cultural Resources	Experience with cultural resource survey methods, area of potential effects, National Historic Preservation Act Section 106, and state and federal laws pertaining to American Indian Tribes.	Yes	Yes

Hydrology and Hydraulic Engineering	Engineer with experience applying hydrologic and hydraulic engineering principles and technical tools to project planning, design, construction, and operation. The H&H reviewer will review the H&H modeling products and data provided by the NFS and/or other stakeholders.	Yes	Yes
Climate Preparedness and Resilience	A member of the Climate Preparedness and Resiliency Community of Practice knowledgeable of inland hydrology climate change assessment policy and practice.	Yes	Yes

4. Documentation of Reviews

Documentation of DQC. Quality Control will be performed continuously. A specific certification of DQC completion will be prepared at the base conditions (existing and future), draft and final report stages. Documentation of DQC will follow the District Quality Manual and the MSC Quality Management Plan. DrChecks will be used for documentation of DQC comments. An example DQC Certification statement is provided in ER 1165-2-217, Appendix D. Documentation of completed DQC, to include the DQC checklist, will be provided to the MSC, RMO and the ATR Team leader. The ATR team will examine DQC records and comment in the ATR report on the adequacy of the DQC effort.

Documentation of ATR. DrChecks will be used to document all ATR comments, responses, and resolutions. Comments should be limited to those needed to ensure product adequacy. All members of the ATR team will use the four-part comment structure (see ER 1165-2-217, Section 5). If a concern cannot be resolved by the ATR team and PDT, it will be elevated to the vertical team to resolve using the issue resolution process in ER 1165-2-217, Section 5.9. Unresolved concerns will be closed in DrChecks by noting the concern has been elevated. ATR documentation will include an assessment by the ATR team of the effectiveness of DQC. The ATR Lead will prepare a Statement of Technical Review (see ER 1165-2-217, Section 5.11, and Appendix D), for the draft and final reports, certifying that review issues have been resolved or elevated. ATR will be certified when all concerns are resolved or referred to the vertical team and the ATR documentation is complete.

5. Supporting Information

Study Authority

This study is authorized by Water Resources Development Act (WRDA) of 1986 (33.U.S.C. 2267a), Section 729, as amended in WRDA 2000, WRDA 2007, P.L. 110-114.

Study or Project Area

The Lower Rio Grande Valley, commonly known as the Rio Grande Valley or locally as the Valley or RGV, is a region spanning the border of Texas and Mexico located in a floodplain of the Rio Grande near its mouth. Bounded on the west and south by Mexico and to the east by the Gulf, the Lower Rio Grande Valley of Texas is separated from the nearest U.S. urban center of any size by miles of flat and arid brushland. The four Counties have a total population of approximately 1.3 million. The region consists of the Brownsville, Harlingen, Weslaco, Pharr, McAllen, Edinburg, Mission, San Juan, Sarita, and Rio Grande City metropolitan areas in the United States. Figure 1 displays a map of the four counties and where major cities are located.

The study area contains dense urban areas, large suburban communities, and relatively rural areas that are anticipated to transition to residential communities. Cameron, Hidalgo, Kenedy, and Willacy

Counties has been delineated into 16 watersheds. Portions of these watersheds encompass Lower Rio Grande Valley Region.

Although the region is one of the most productive agricultural centers in the nation, poverty tends to be pervasive within the Valley. Some of the nation's most severe socioeconomic conditions are indigenous to the region. It is home to some of the poorest cities in the nation, as well as many unincorporated, persistent poverty communities called Colonias.

The region has long experienced major flooding due to its low-lying lands and proximity to the Gulf of Mexico. The flooding problem is rooted in several issues across the built, natural, and social environments, including rapid urbanization and associated increase in impervious cover as well as the prevalence of older developments that do not account for hydrology, and colonias that are without drainage infrastructure. These typically low-lying communities, not ideal for residential development, have been home to thousands of families with deep social attachment to place.

Despite multiple mitigation efforts by local authorities, the flooding problem persists. Because of future climate variability, flooding events like these are more likely and will continue to present challenges. A lack of a thorough resilience plan and an integrative decision support system to cope with natural and anthropogenic hazards, coupled with insufficient resources, have made the area more vulnerable, particularly to consecutive disasters. This assessment will provide comprehensive and strategic evaluations and analyses that include diverse political, geographic, physical, institutional, technical, and stakeholder considerations. Watershed planning addresses identified water resources needs from any source, regardless of agency responsibilities, and provides a shared vision of a desired end state that may include recommendations for potential involvement by USACE, other federal agencies, or non-federal interests. Watershed assessments may identify potential USACE projects consistent with priority missions; however, this is not the primary consideration of watershed planning.

Study or Project Area Map

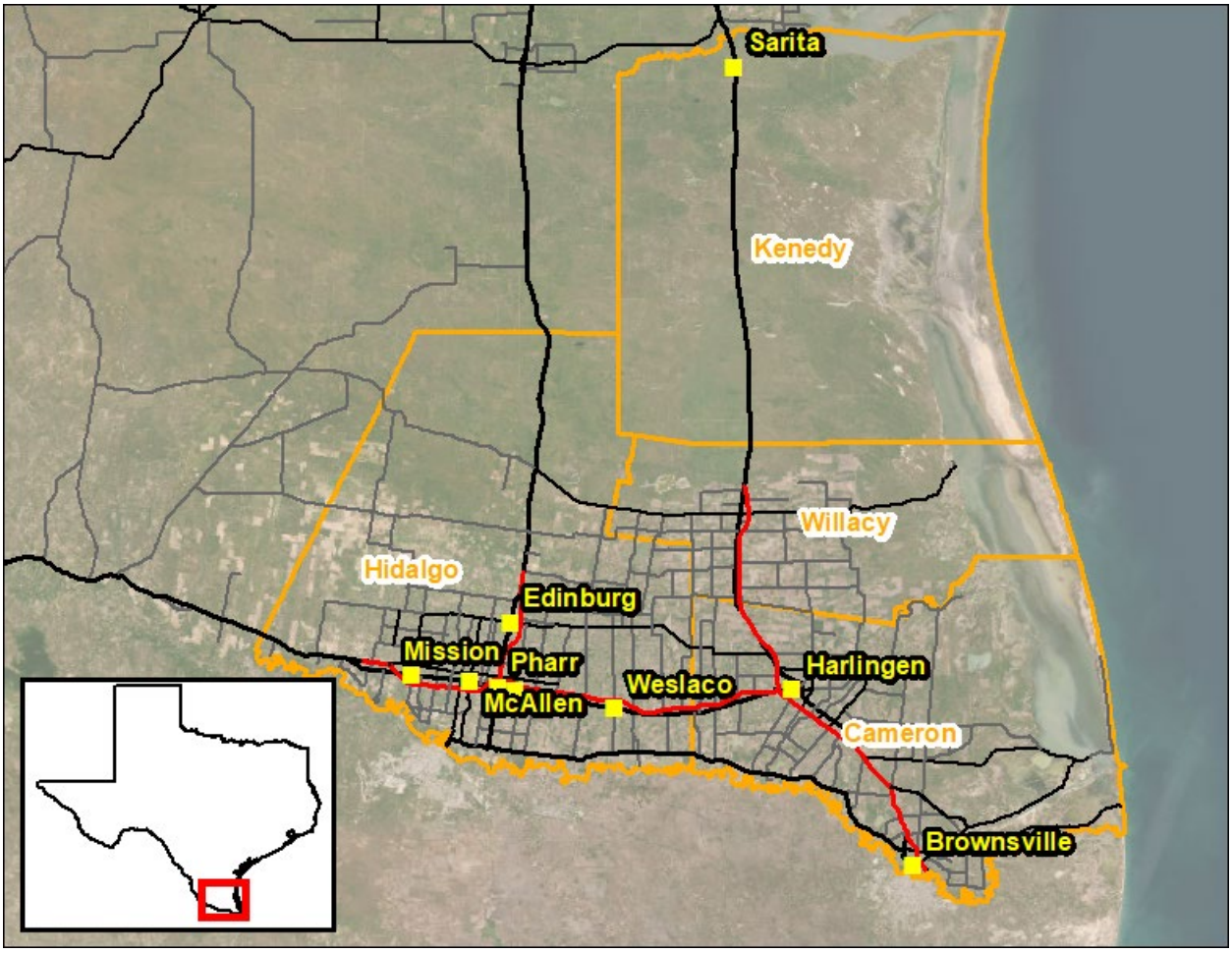

Figure 1-Lower Rio Grande Valley Watershed Assessment Study Location

Problem Statement

The LRGV region faces several water resource related challenges that have decreased economic resilience and increased risk to public health and safety. Challenges include international water control policy; water supply and quality for potable, agricultural and aquatic ecosystem needs; as well as the management of risks associated with coastal storms, riverine flood risk and stormwater management.

Goals and Objectives

The overarching goal and objective of the Watershed Study will be to provide a comprehensive water resource management strategy for the Lower Rio Grande Valley Region which seeks to

conduct a regional assessment of water resource concerns to populations, property, ecosystem, infrastructure, recreation, and develop potential strategies to manage risk and identify the recommended risk management strategy(s). The Watershed Study will investigate and recommended strategies and management measures to address the water resources and needs provided in Section 1.0 and described in more detail below.

Planning goals will include:

- Increasing regional resiliency, as well as long-term resilience of infrastructure and environment to inland and coastal climate stressors.
- Engage and improve community outreach to improve the public's understanding of flood risk and provide them with the tools to reduce their risk.
- Reduce the risk to public safety from flooding in the watershed.
- Characterize the generational community losses from to persistent flooding, both wealth and cultural.
- Broaden the recognition of necessary FRM measures - scale of vulnerability will not be addressed without consideration of tradeoffs of space, funds, aesthetics, environmental flows, and access.
- Consider non-FRM measures that can meet the needs of EJ communities, support ecosystem resources, restore recreation and eco-tourism, and improve reliability and resiliency of water resources to meet increasing demand during droughts

The Watershed Study will investigate an integrated approach to evaluate system functions from water supply to flood risk management to ecosystem restoration and protection and climate change adaptation. The specific goal of this study is to assist in developing a comprehensive basin-wide management plan that will:

- Incorporate stakeholder input and involvement.
- Assess existing watershed characteristics and conditions.
- Identify watershed issues and concerns.
- Develop, evaluate, and prioritize actions that could advance watershed goals and objectives.
- Identify potential "spin-off" and "off-shoot" projects that may fall under appropriate Federal, State, and/or local authorities, and
- Identify potential regionally- or locally funded projects.

Future Without Project Conditions

To be determined during the Shared Vision Milestone Phase.

Types of Measures/Alternatives Being Considered

Management measures will be developed to address one or more of the planning objectives. Some measures may go beyond that which can be constructed or built, including public outreach, proposed regulatory actions, or a programmatic approach for requirements.

Alternatives/strategies development will identify all of the possible management measures that address the planning goals and objectives. Measures will be screened initially by using information from experts, constraints, metrics, and specific screening criteria. The measures will be evaluated by the watershed study team for effectiveness in meeting the study goals and objectives. Measures will be grouped into an initial set of strategies/alternatives and refined and evaluated to provide a final set of strategies/alternatives. If appropriate, the watershed may be divided into geographic focus or opportunity areas (e.g. state planning areas) within which measures could be applied and would have independent benefits and costs. At the end of this stage in the project, the shared vision milestone will be delivered.

Screening criteria will be developed to apply to the set of management measures and actions to refine the list for further evaluation. An important screening criterion is to determine if the management measures and actions meet the shared vision statement and goals and objectives of the study. Measures will be screened initially by using constraints, expert judgment, metrics, and specific screening criteria.

The four Principles and Guidelines evaluation criteria provide a broad framework for comparing measures and strategies from a variety of perspectives:

- Completeness – the extent to which a given strategy/alternative provides and accounts for all necessary investments or other actions to ensure the realization of the planned effects.
- Effectiveness – the extent to which a strategy/alternative alleviates the specified problems and achieves the specified opportunities.
- Efficiency – the extent to which a strategy/alternative is the most cost-effective means of alleviating the specified problems and realizing the specified opportunities, consistent with the Nation's environment.
- Acceptability – the workability and viability of a strategy/alternative with respect to acceptance by federal and non-federal entities and the public and compatibility with existing laws, regulations, and public policies.

Preliminary Framework for evaluating recommendations and management strategies includes the items below. The Watershed Study Framework will be broken up by challenge instead of by geography. Each challenge will be assigned a working group. The group breakdown is currently a work in progress but will be defined during Phase 1 (see the PMP for additional details).

- Inventory Items/Assessment Documentation - USACE
- Demonstrate effectiveness and application of FRM tools with models in coordination with stakeholders on a regular basis, by feature, location, scenario choice, and demonstrated use
- Consultation with smaller agencies, other federal agencies, local and regional agencies – AE Support
- Initial feedback shows limitations to technical and financial resources that limit planning and construction, explore development of regional tools for analysis
- Formulate identified alternatives – USACE, NFS and LRGVDC
- Regional Coordination of FRM implementation
- Mitigation Paradigm Change
- Others as a result of Inventory Process

Estimated Cost/Range of Costs

To be determined.

6. Models to be Used in the Study

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. ER 1105-2-102 does not require formal model approval for models used in the watershed assessment, but the quality and validity of the models and data must be evaluated and the agency technical review documented by the appropriate agencies.

Planning models are any models and analytical tools used 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 following planning models will be used to develop the watershed plan.

Table 4: Planning Models.

Model Name and Version	Brief Model Description and How It Will Be Used in the Study	Approval Status
LifeSim 2.0	The software computes damages and potential life loss using output from HEC-RAS as inputs in this model.	Approved for use in Planning Studies
Spreadsheet Models	Spreadsheet models will be used to evaluate recreation, water supply, navigation/transportation, drought impacts, and economic/community development	
Conceptual Model	A conceptual model of the region will be developed by the PDT and key stakeholders in the ecosystem	

	restoration working group to help focus and better understand the challenges to natural resources and inform potential areas for ecosystem restoration and use of natural and nature-based features.	

EC 1105-2-412 does not cover engineering and economic models used in planning. ER 1105-2-102 specifies that use of H&H models and expertise outside USACE is also appropriate as long as it meets the needs of the assessment. The responsible use of well-known and proven USACE developed and commercial engineering and economic software will continue. The professional practice of documenting the application of the software and modeling results will be followed. The USACE Scientific and Engineering Technology Initiative has identified many engineering models as preferred or acceptable for use in studies. These models should be used when appropriate. For example, HH&C models need to comply with the requirements of HH&C CoP Enterprise Standard 08101.

The following engineering and economic models may be used to develop the watershed plan. Note the team intends to leverage existing models or model outputs for H&H conditions without producing new model products.

Table 5: Engineering Models.

Model Name and Version	Brief Model Description and How It Will Be Used in the Study	Approval Status
HEC-RAS 6.x (River Analysis System)	The software performs 1-D steady and unsteady flow river hydraulics calculations and has capability for 2-D (and combined 1-D/2-D) unsteady flow calculations. Existing modeling will be leveraged to characterize flood risk in the area.	HH&C CoP Preferred Model
HEC- HMS	The software will support scenario analysis of flood risk and flow on a basin-wide scale.	
ADCIRC	Support coastal surge analysis. Existing modeling will be leveraged.	
SWMM	Support local drainage. Existing modeling will be leveraged.	

7. Factors Affecting Level and Scope of Review

All planning products are subject to the conduct and completion of District Quality Control. Most planning products are subject to Agency Technical Review. Watershed studies do not apply Independent External Peer Review and/or Safety Assurance Reviews. Information in this section helps in the scoping of reviews through the considerations of various potential risks.

Objectives of the Reviews

The PDT will principate in vertical team IPR meetings and/or decision point milestones, along with the multi-disciplinary Agency Technical Review (ATR) team, Planning Center of Expertise representatives, Major Subordinate Command (MSC) quality assurance reviewers, and HQUSACE RIT and policy review team members.

District Quality Control (DQC) will be conducted on technical products during their development, and Agency Technical Review (ATR) will be conducted after their development, to assure the quality and credibility of the scientific information. The DQC will be completed prior to the Recommendations Milestone meeting, as will any ATR on technical products, models or analyses that are particularly complex and would benefit from a technical review prior to other reviews (public, policy, etc.).

Assessing the Need for IEPR

Formal Type I Independent External Peer Review (IEPR) is not required for watershed studies (ER 1105-2-102).

Assessing Other Risk Considerations

- Will the study likely be challenging? If so, describe how?

  Yes. The Lower Rio Grande Valley watershed has a number of challenges covering several USACE missions. These include FRM, ER, and water management. Conflating these challenges is the presence of socially vulnerable communities that potentially create environmental justice concerns. Challenges with the study will include coordinating with the various entities and reaching a consensus. In addition, new modeling information will be available after the Lower Rio Grande Valley Watershed Assessment is complete and this study will not be able to utilize the information in final recommendations. Specific discipline notes on this question are below:

  - *For Econ: the primary challenge will be to capture all the various components that attribute to the local economy. The region is very diverse in its water challenges. Its proximity to Mexico poses added challenge in terms of trade, immigrant workers, local resources, and a shared watershed.*

- Provide a preliminary assessment of where the project risks are likely to occur and assess the magnitude of those risks.

  Because this is a watershed study, there will be no implementation of a project. Therefore, the focus of this are study risks. All identified study risks are listed in the risk register. Specific discipline notes on this question are below:

- *For Econ: Study risks for Economics is minimal. Minor risks include variances in data sources, unanticipated population growth in affected areas, macroeconomic factors that could cause a shift in the economy, and other variations with forecasts.*

- Is the project likely to be justified by life safety or is the study or project likely to involve significant life safety issues? Briefly describe the life risk, including the District Chief of Engineering's assessment as to whether there is a significant threat to human life associated with aspects of the study or failure of the project or proposed projects.

  The purpose of the watershed assessment is to collect a broad view of problems, needs, and opportunities by establishing agency partnerships and expansive stakeholder involvement. Watershed assessments do not culminate into recommended plans and therefore this study will not be justified by life safety. Life safety is one component in the overall watershed assessment. The life safety assessment will only determine the population at risk. Individual model scenarios and alternatives will not be analyzed to determine potential life loss. That approach will be taken for individual projects within the region at a later date, as recommended in the Final Watershed Plan.

- Is the information in the decision document or anticipated project design likely to be based on novel methods, involve 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? If so, how?

  Watershed assessments do not culminate into recommended plans, and it is not anticipated that anything will be based on novel methods, involve innovative materials or techniques, etc. The study is intended to be a high-level look at the study area/region.

- Does the project design require redundancy, resiliency, and/or robustness, unique construction sequencing, or a reduced or overlapping design/construction schedule? If so, how?

  Watershed assessments do not culminate into recommended plans, and it is not anticipated that any of these will apply.

- Is the project expected to have more than negligible adverse impacts on scarce or unique tribal, cultural, or historic resources? If so, what are the anticipated impacts?

  Since this is a watershed assessment, no negligible adverse impacts on scarce or unique tribal, cultural, or historic resources are anticipated. Any recommended actions will be coordinated with the tribes having interest in the watershed and with appropriate stakeholders.

- Is the project expected to have substantial adverse impacts on fish and wildlife species and their habitat prior to the implementation of mitigation measures? If so, describe the impacts?

  No. Since this is a watershed assessment, the study will not result in any recommendations that authorize construction and thus no adverse or beneficial impacts or need for mitigation as a result of the study. General impacts of recommendations will be documented but acknowledged that if in the future there is a Federal nexus or a Clean Water Act permit is required, site-specific impact analysis, and mitigation if adverse impacts are expected, will need to be completed., Any recommended actions will be coordinated with the appropriate state and federal agencies and stakeholders.

- Is the project expected to have, before mitigation measures, more than a negligible adverse impact on an endangered or threatened species or their designated critical habitat? If so, what are the anticipated impacts?

  No. Since this is a watershed assessment, the study will not result in any recommendations that authorize construction and thus no adverse or beneficial impacts to endangered or threatened species or their designated critical habitat as a result of the study. General impacts of recommendations on T&E species and their critical habitat will be documented but acknowledged that the description is not a source of compliance and if the recommendation is pursued in the future, compliance with the Endangered Species Act would need to occur. Any recommended actions will be coordinated with the appropriate state and federal agencies and stakeholders.

8. Risk Informed Decisions on Level and Scope of Review

Targeted ATR. Will a targeted ATR be conducted for the study? TBD

IEPR Decision. Type I IEPR is not required for Watershed studies.

Safety Assurance Review. Safety Assurance Review is not required for Watershed studies.

Decision on Safety Assurance Review. Type II IEPR is not required for Watershed studies.

Policy and Legal Compliance Review

Policy and legal compliance review of draft and final planning decision documents is delegated to the MSC (see Director's Policy Memorandum 2019-01). The P&LCR team roster is included in the PMP.

(i) Policy Review.

The policy review team is identified through the collaboration of the MSC Chief of Planning and Policy and the HQUSACE Chief of the Office of Water Project Review. The makeup of the Policy

Review team will be drawn from Headquarters (HQUSACE), the MSC, the Planning Centers of Expertise, and other review resources as needed.

- The Policy Review Team will be invited to participate in key meetings during the development of decision documents. These engagements may include In-Progress Reviews, Issue Resolution Conferences or other vertical team meetings plus the milestone events.
- The input from the Policy Review team should be documented in a Memorandum for the Record (MFR) produced for each engagement with the team. The MFR should be distributed to all meeting participants.
- Teams may choose to capture some of the policy review input in a risk register if appropriate. These items should be highlighted at future meetings until the issues are resolved. Any key decisions on how to address risk or other considerations should be documented in an MFR.

(ii) Legal Review.

Representatives from the Office of Counsel will be assigned to participate in reviews. Members may participate from the District, MSC and HQUSACE. The MSC Chief of Planning and Policy will coordinate membership and participation with the office chiefs.

- In some cases, legal review input may be captured in the MFR for the particular meeting or milestone. In other cases, a separate legal memorandum may be used to document the input from the Office of Counsel.

Each participating Office of Counsel will determine how to document legal review input.

9. Public Comment

This Review Plan will be posted on the District's website. Public comments on the scope of reviews, technical disciplines involved, schedules and other considerations may be submitted to the District for consideration. If the comments result in a change to the Review Plan, an updated plan will be posted on the District's website.

10. Documents Distributed Outside the Government

For information distributed for review to non-governmental organizations, the following disclaimer shall be placed on documents:

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

Appendix A - Brief Description of Each Type of Review

This section describes each level of review to be conducted. Based upon the factors discussed in Section 1, this study will undergo the following types of reviews:

District Quality Control. All decision documents and accompanying components will undergo DQC. This internal review covers basic science and engineering work products. It fulfils the project quality requirements of the Project Management Plan. The DQC team will read all reports and appendices. The review must evaluate the correct application of methods, validity of assumptions, adequacy of basic data, correctness of calculations (error-free), completeness of documentation, and compliance with guidance and standards. Districts are required to check all computations and graphics by having the reviewer place a highlight (e.g., place a "red dot") on each annotation and/or number indicating concurrence with the correctness of the information shown.

Agency Technical Review. ATR will be performed by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. These teams will be comprised of certified USACE personnel. The ATR team lead will be from outside the home MSC.

Cost Engineering Review. Watershed planning utilizes concept screening cost estimates to assist in assessing efficient allocation of limited resources. Costs for measures and strategies are pre-budget development and may be Class 5 estimates as defined in ER 1110-2-1302. Costs may also be categorized qualitatively by high, medium, and low to generate a non-quantitative ranking or least cost options and outcomes. As such, the watershed does not have to be coordinated with the Cost Engineering Mandatory Center of Expertise (MCX).

Policy and Legal Compliance Review. These reviews culminate in determinations that report recommendations 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.

Public Review. The District will post the Review Plan and approval memo on the District's internet site. Public comment on the adequacy of the Review Plans will be accepted and considered. Additional public review will occur when the report and environmental compliance document(s) are released for public and agency comment.

Appendix B – Team Rosters

PROJECT DELIVERY TEAM		
Name	**Office**	**Position**
[redacted]	[redacted]	[redacted]

DISTRICT QUALITY CONTROL		
Name	**Position**	**Experience**
[redacted]	DQC Lead	

AGENCY TECHNICAL REVIEW		
Name	**Position**	**Experience**
[redacted]	ATR Team Lead	

POLICY AND LEGAL COMPLIANCE REVIEW TEAM		
Name	**Office**	**Position**
[redacted]	CESWD-PDP	Review Manager
[redacted]	CESWD-PDP	RMO Representative/QA Lead