Review Plan

Pueblo of Acoma Watershed Assessment, Section 203
Pueblo of Acoma, New Mexico

TRIBAL PARTNERSHIP PROGRAM
(Section 203 of WRDA 2000, as amended)

Pueblo of Acoma, NM

U. S. Army Corps of Engineers
Albuquerque District

MSC Approval Date: 22-Oct-2013
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US Army Corps of Engineers ®
Albuquerque District

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REVIEW PLAN FOR PUEBLO OF ACOMA, NM, WATERSHED ASSESSMENT

1. Purpose and Requirements.

a. Purpose. This review plan defines the scope and level of review for the Pueblo of Acoma, NM, Watershed Assessment (Assessment).

Section 203 of the Water Resources Development Act (WRDA) of 2000 (as amended by Section 2011 of WRDA 2007) (33 USC § 2269), is also known as the Tribal Partnership Program, and reads in part:

> *(b) PROGRAM.—*
> *(1) IN GENERAL.—In cooperation with Indian tribes and the heads of other Federal agencies the Secretary may carry out water-related planning activities and study and determine the feasibility of carrying out water resources development projects that —*
> > *(A) will substantially benefit Indian tribes; and*
> > *(B) are located primarily within Indian country (as defined in section 1151 of title 18, United States Code) and including lands that are within the jurisdictional area of an Oklahoma Indian tribe, as determined by the Secretary of the Interior, and are recognized by the Secretary of the Interior as eligible for trust land status under part 151 of title 25, Code of Federal Regulations or in proximity to Alaska Native villages.*
> *(2) MATTERS TO BE STUDIED.—A study conducted under paragraph (1) may address—*
> > *(A) projects for flood damage reduction, environmental restoration and protection, and preservation of cultural and natural resources;*
> > *(B) watershed assessments and planning activities; and*
> > *(C) such other projects as the Secretary, in cooperation with Indian tribes and the heads of other Federal agencies, determines to be appropriate.*

Section 203(b)(I) of the Water Resources Development Act (WRDA) of 2000, Public Law [P.L.] 106-541 (114 Stat.2588-2589) and Section 2011 of WRDA 2007, P.L. 110-114 (121 Stat.1074), as amended.

> *Under Section 203 WRDA 2000, the U.S. Army Corps of Engineers may conduct a watershed assessment (WA) (feasibility phase), as stated in subsection (2)(B) above. A WA results in a watershed management plan (WMP) which makes recommendations for future study, rather than a project to be authorized for Corps construction, as is typical for Feasibility studies. The implementation guidance contained in CECW-P Memorandum for Commanders, Major Subordinate Commands dated 16 May 2008, Subject: Implementation Guidance for Section 2011 of the Water Resources Development Act (WRDA) of 2007, Tribal Partnership Program, directs that a Section 203 Assessment will follow the guidance covering WAs and planning activities pursuant to Section 729 of WRDA 1986, Study of Water Resources Needs of River Basins and Regions.*

Additional guidance for Assessments can be found in Engineering Circular (EC) 1105-2-411 Planning: Watershed Plans and Appendix H of Engineering Regulation (ER) 1105-2-100 Planning Guidance Notebook.

b. Applicability. This review plan satisfies the project review requirements contained in Engineering Circular 1165-2-214, Water Resources Policies and Authorities, Civil Works Review, 15 December 2012.

c. References:

(1) Director of Civil Works' Policy Memorandum #1, CECW-P, dated 19 January 2011.
(2) EC 1105-2-412, Assuring Quality of Planning Models, 31 March 2010.
(3) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 September 2006.

(4) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 November 2007.
(5) EC 1105-2-411 Watershed Plans, 15 January 2010, Expires 15 January 2012
(6) (CECW-CP Memo for Distribution, "Peer Review Process", 30 March 2007
(7) QMS 02500-SPD, Preparation and Approval of Review Plans
(8) QMS 02500.1-SPD, Supplemental Review Plan Checklist

d. Requirements. This review plan was developed in accordance with EC 1165-2-214, with the review requirements therein modified in accordance with Section 203 WRDA 2000 implementation guidance and EC 1105-2-411 to fit the unique nature of the Tribal Partnership Program (TPP) program as a small-scale (in scope, schedule and budget) investigations authority that lacks construction authority. These review requirements establish an appropriate, accountable, comprehensive review strategy by providing a seamless process for review of planning documents in the TPP. Four general levels of review are outlined below: District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Policy and Legal Compliance Reviews commensurate with the level of detail authorized in the TPP.

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 203 Tribal Partnership Program is the Major Subordinate Command (MSC). The MSC for the Albuquerque District (SPA) is the South Pacific Division (SPD). SPD will coordinate and approve the review plan and manage the ATR. SPA will post the approved review plan on its public website.

3. Watershed Assessment Information.

a. Decision Document. The Pueblo of Acoma (Pueblo) Assessment will result in a comprehensive and long-range Watershed Management Plan (WMP) which will undergo reviews as described in this plan. Since the WMP will not result in a project for implementation there is no requirement for documentation of impacts under NEPA or other environmental laws. There will not be a plan selected for implementation; therefore, the level of review is limited to the evaluation of existing and future-without project conditions, and an array of recommendations or potential solutions that address the issues within the watershed. Recommendations and solutions will be conceptual in nature, requiring additional analysis and design before implementation. The WMP will be prepared in accordance with ER 1105-2-100 and EC 1105-2-411. The approval level of the decision document is HQ per current guidance.

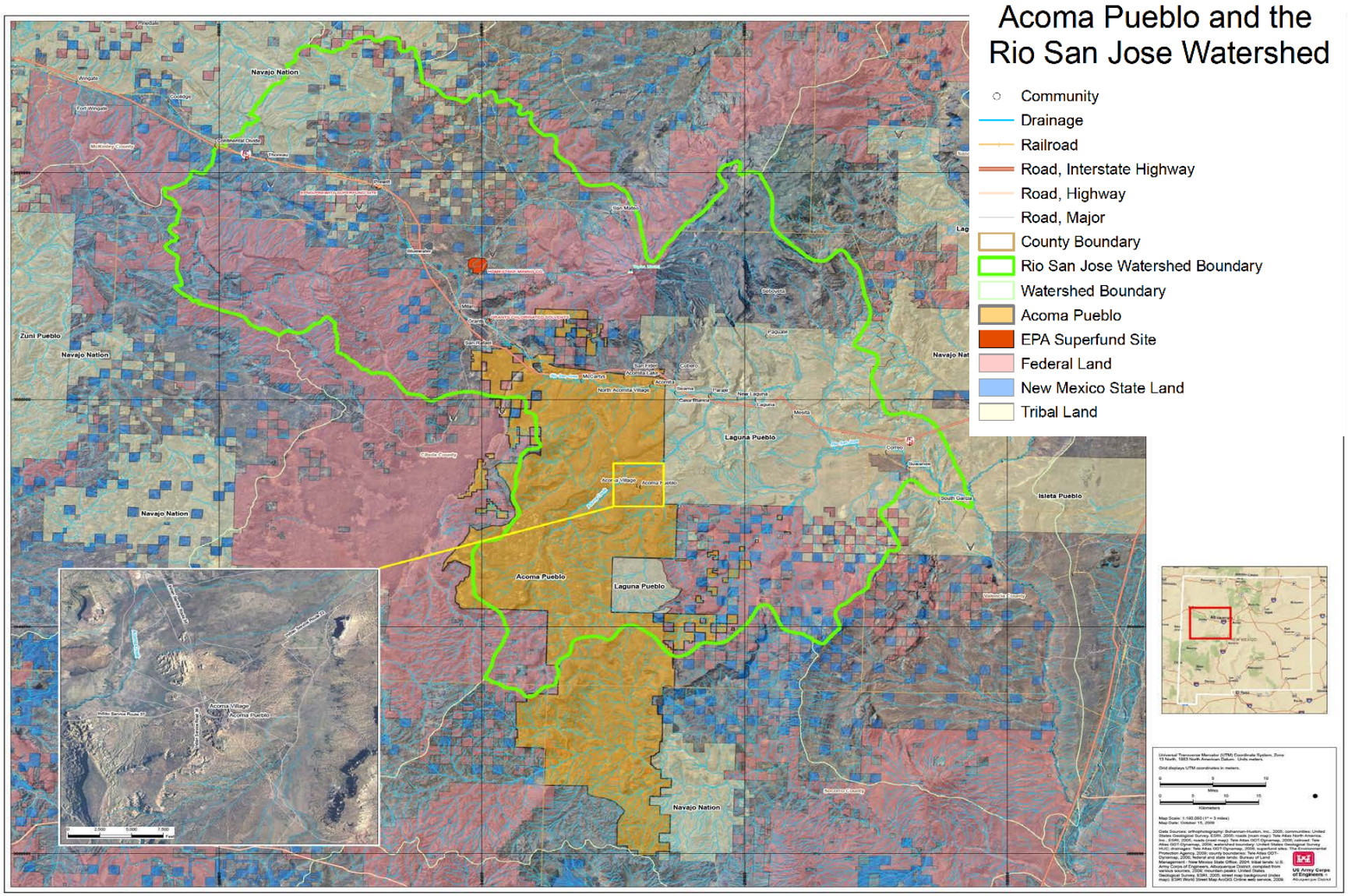
b. Watershed Assessment Description The Assessment area is located in west-central New Mexico, approximately 60 miles west and 12 miles south of Albuquerque off Interstate 40. The Assessment area is the Rio San José (RSJ) watershed above and including Pueblo of Acoma land. The Assessment area includes Federal, state, municipal, private and tribal lands in Cibola and McKinley Counties in New Mexico, with the full watershed totaling approximately 2,636 square miles in area. The RSJ watershed includes many small towns, Federal and state land, as well as the Pueblo of Acoma and Laguna Pueblo in Socorro, Cibola, McKinley, and Valencia Counties. The non-Federal sponsor for the Assessment is the Pueblo of Acoma, NM. The Pueblo is a Federally-recognized Native American Tribal Entity.

The Pueblo is believed to have been established around the 12th century and is recognized as one of the oldest continuously inhabited communities in the United States. Groundwater is the most dependable source of water and the RSJ is the only perennial stream in Cibola County. The Pueblo receives its water from the RSJ and its tributaries, which flow through the Pueblo and are supplied by many springs throughout the watershed. In recent years, the Pueblo has become concerned about decreasing ground

water resources most likely caused by the extensive use for irrigation, mining, municipal development, as well as Acoma and Laguna Pueblo uses. There has also been an increase in population and resource demands within the RSJ watershed.

The purpose of the Assessment is to evaluate impacts to the watershed and develop a Watershed Management Plan (WMP) for the Pueblo.

Pueblo of Acoma Watershed Assessment location.



c. Factors Affecting the Scope and Level of Review. The conceptual nature of solutions or recommendation resulting from the Assessment will not involve significant threat to human life/safety or involve significant public dispute as to the size, nature, or effects of a project. All conceptual projects will require additional analysis prior to implementation. The WMP resulting from the Assessment has a much lesser scope and level of review than the traditional study since it does not provide detailed design or cost estimation, or the selection of one alternative over others. The Assessment will only conduct a screening level economic comparison among strategies to prioritize recommended actions. Hydrology and Hydraulics analysis is limited to the existing and future conditions to define the problem and inform potential solutions. Because this authority does not include construction of any alternatives, environmental compliance documentation and IEPR is not required. DQC and ATR will be restricted to verifying that the existing and future without project conditions were fully captured, and evaluating the screening level alternative formulation.

The Assessment may or may not involve novel methods, techniques or models in the data collection, data interpretation and analysis of existing problems in the watershed. This analysis will not be used to determine specific conclusions resulting in an investment decision, activity or undertaking. Follow-on projects based on this Assessment will include further, more detailed, analysis of alternatives and economic or environmental effects. The Assessment will integrate existing research with some data collection restricted to filling gaps in the existing conditions.

Project challenges include watershed planning and forecasting of future conditions in the face of drought and continued mining operations. Hydrologic, geomorphic and habitat changes due to short and long term climate conditions present challenges to forecasting future conditions in the watershed.

This Assessment does have significant interagency interest. Coordination with multiple agencies and entities within the watershed such as the Bureau of Indian Affairs, Indian Health Services, US Geological Service and New Mexico Environment Department will be included in the Assessment, though their role and contributions have yet to be defined. The involvement of these agencies, who have had previous on-the-ground involvement with the Pueblo, will strengthen the resulting WMP. Leveraging of expertise from other agencies and the Pueblo will provide a stronger evaluation of aspects not standard to U.S. Army Corps of Engineers (USACE) operations or studies. These aspects include water quality, groundwater movement and impacts of mining.

Since there will be no project selected for implementation, participation by general engineering, cost engineering, real estate and economics will be minimal and on a qualitative basis. The conceptual nature of the watershed management recommendations is the main determinant for the scope of review of the WMP, and the level of expertise required from the reviewers.

Even though the product for this study is a Watershed Management Plan (), Safety Assurance factors for any recommended flood risk management measures will include, at a minimum, a DQC review for the following factors:

- Where failure leads to significant threat to human life,
- Novel methods / complexity / precedent setting models / policy changing conclusions,
- Innovative materials or techniques,
- Design redundancy, resiliency or robustness,
- Unique construction sequences or acquisition planning, or
- Reduced / overlapping design construction schedules.

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. To date, in-kind contributions

have not included any products requiring review. In-kind contributions by the Pueblo have consisted mainly of meeting attendance, administrative work related to the Assessment, and the gathering and compilation of well data.

4. District Quality Control (DQC).

All decision documents (including supporting data and analyses) shall undergo DQC prior to ATR. DQC is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Watershed Assessment Management Plan (WAMP) and SPD Quality Management Plan. SPA shall manage the DQC review in accordance with SPD and District Quality Management Plan. DQC reviewers will consist of similar disciplines to those that contribute to the Assessment. Any discrepancies between a reviewer and a Project Delivery Team (PDT) member will be resolved face-to-face. If a concern cannot be satisfactorily resolved between the DQC team and the PDT, it will be elevated to the section supervisor for resolution

a. Documentation of DQC. DrChecks® review software will be used to document substantive ATR comments, responses and associated resolutions accomplished throughout the review process. Comments will be provided in the four-part comment structure and should be limited to those that are required to ensure adequacy of the product. Any editorial comments (typos, grammar, etc.) should be provided informally by email to the PDT contact. This documentation will be placed in the project folder and included in future submittal packages to the RMO. A DQC certification memo signed by both the planning section and branch chief will be included in all ATR submittal packages.

b. Products to Undergo DQC. The WMP is the primary product of the Assessment to undergo review. Supporting documents and studies will also undergo DQC. Supporting documents will include technical appendices and assessment models specific to the Assessment that support conclusions made in the Assessment – including those conducted by the sponsor or other entity.

c. Required DQC Expertise. The expertise necessary for DQC review of the WMP is shown in the table below.

DQC Team Members/Disciplines	***Expertise Required***
Planning	The reviewer should have recent experience in reviewing Plan Formulation processes for watershed studies and be able to draw on "lessons learned" in advising the PDT of best management practices.
Economics	The reviewer should be familiar with the processes used in evaluation of watershed studies and have recent experience in preparing screening level economic figures used to discriminate or prioritize measures and recommendations.
Ecological Resources	The reviewer should have a solid background in the habitat types to be found in the arid southwestern United States, and understand the factors that influence the reestablishment of native plant and animal species.
Cultural Resources	The reviewer should have extensive USACE experience regarding cultural resources on public and tribal lands, and be familiar with Department of Defense and USACE policies and procedures as they pertain to USACE studies and projects. http://www.usace.army.mil/CECW/Pages/cultural.aspx.
Hydrology	The reviewer should have extensive knowledge of hydrology in the arid southwest. Knowledge specific to the RSJ basin would be beneficial.
Hydraulic Engineering	The reviewer should have extensive knowledge of HEC-RAS modeling including the use of GIS (ARC-INFO) inputs to the model. The reviewer should also have a solid understanding of the geomorphology of alluvial rivers.

DQC Team Members/Disciplines	*Expertise Required*
Geotechnical Engineering	The reviewer should be a licensed Professional Engineer and have recent experience in investigating existing subsurface conditions and materials; determining their physical/mechanical and chemical properties that are relevant to the project considered, assessing risks posed by site conditions as they effect runoff or subsurface flows.
Cost Engineering	The reviewer should have extensive USACE 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. Cost Engineering involvement will be minimal due to the conceptual level of design work (if included).
Environmental Engineering	The reviewer should have experience in the application of scientific principles and techniques to evaluate water, air and soil quality relative to human and wildlife uses, fishery impacts, EPA and ASTM standards. Specific experience related to the impacts of uranium mining would be beneficial.

5. Agency Technical Review (ATR).

ATR is mandatory for all decision documents (including supporting data and analyses). The ATR should be scaled in scope and cost, however, according to the complexity of the study. Certification of the ATR will be provided prior to the SPA Commander signing the final report. ATR is managed within USACE by the designated RMO and is conducted by a qualified team from outside SPA that is not involved in the day-to-day development of the Assessment/WMP. ATR teams will be comprised of senior personnel within USACE and may include personnel from SPD.

a. Products to Undergo ATR. ATR will be performed in accordance with the District and the SPD Quality Management Plans. Consistent with the scope of the Tribal Partnership Program, the scope of the ATR should be scaled to meet the intent of EC 1165-2-214 while avoiding undue burden in the Assessment process.

Products to undergo ATR include, but are not necessarily limited to:

- Final WMP including supporting documentation;
- Technical products that support subsequent analyses to include:
  - Hydrology and hydraulics,
  - Environmental Engineering, and
  - Geotechnical investigations, if applicable.

b. Required ATR Team Expertise. The appropriate RMO, in cooperation with the PDT, vertical team, and appropriate centers of expertise, will determine the final make-up of the ATR team. The following table provides the disciplines that may be included on the ATR team and descriptions of the expertise required.

ATR Team Members/Disciplines	*Expertise Required*
ATR Team Leader	The ATR Team Leader should be a senior professional, preferably with experience in / knowledge of developing feasibility studies and Assessments under the authority of Section 203, WRDA 2007. The lead should also have the necessary skills and experience to lead a virtual team through the ATR process. Typically, the ATR Team Leader will also serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc). The ATR Team Leader shall be based outside of SPD.
Planning	The reviewer should have recent experience in reviewing Plan Formulation processes for watershed studies and be able to draw on "lessons learned" in advising the PDT of best practices.
Economics	The reviewer should be familiar with the processes used in evaluation of watershed studies and have recent experience in preparing screening level economic figures used to discriminate or prioritize measures and recommendations.
Ecological Resources	The reviewer should have a solid background in the habitat types to be found in the arid southwestern United States, and understand the factors that influence the reestablishment of native species of plants and animals.
Cultural Resources	The reviewer should have extensive USACE experience regarding cultural resources on public and tribal lands, and be familiar with Department of Defense and USACE policies and procedures, as they pertain to USACE studies and projects. http://www.usace.army.mil/CECW/Pages/cultural.aspx.
Hydrology	The reviewer should have extensive knowledge of hydrology in the arid southwest. Knowledge specific to the RSJ basin would be beneficial.
Hydraulic Engineering	The reviewer should have extensive knowledge of HEC-RAS modeling including the use of GIS (ARC-INFO) inputs to the model. The reviewer should also have a solid understanding of the geomorphology of alluvial rivers.
Geotechnical Engineering	The reviewer should be a licensed Professional Engineer and have recent experience in investigating existing subsurface conditions and materials; determining their physical/mechanical and chemical properties that are relevant to the project considered, assessing risks posed by site conditions as they effect runoff or subsurface flows.
Cost Engineering	The reviewer should have extensive USACE 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. Cost Engineering involvement will be minimal due to the conceptual level of design work (if included).
Environmental Engineering	The reviewer should have experience in the application of scientific principles and techniques to evaluate water, air and soil quality relative to human and wildlife uses, fishery impacts, EPA and ASTM standards. Specific experience related to the impacts of uranium mining would be beneficial.

c. Documentation of ATR. DrChecks® review software will be used to document substantive ATR comments, responses and associated resolutions accomplished throughout the review process. Comments will be provided in the four-part comment structure and should be limited to those that are required to ensure adequacy of the product. Any editorial comments (typos, grammar, etc.) should be provided informally by email to the PDT contact. The four part comment structure includes:

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 those addressing incomplete or unclear information, comments may consist of a request for 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 SPA, SPD, 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 will be closed in DrChecks with a notation that the concern has been elevated to the vertical team for resolution.

At the conclusion of the 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.

The ATR may be certified when all ATR concerns have been either resolved or referred to the vertical team for resolution and the ATR documentation is complete. The ATR Team Leader 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 sample Statement of Technical Review for Decision Documents is included in Attachment 2.

6. Independent External Peer Review (IEPR).

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. There are two types of IEPR:

- **Type I IEPR.** 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 Section 203 Assessments, an exclusion from Type I IEPR is appropriate since the Assessment will not result in detailed design or implementation and there are no controversial or life threatening issues.
- **Type II IEPR.** Type II IEPR involves the review of the design and construction activities prior to initiation of physical construction, and periodically thereafter on a regular schedule until construction activities are completed. For Section 203 Assessments, Type II IEPR is not applicable since the Assessment does not result in detailed design or implementation.

The decision on whether the above criteria are met (and a Type I IEPR exclusion is appropriate) is the responsibility of the SPD Commander.

As described in section 3. c. the conceptual nature of formulated alternatives and recommendations contained in the WMP typically do not trigger the need for IEPR as described in EC 1165-2-214 and presented below. A risk-informed decision, as described in EC 1165-2-214, is made as to whether IEPR is appropriate. In the case of the Pueblo of Acoma Assessment, IEPR exclusion seems appropriate since the following statements are true:

- Federal action is not justified by life safety or failure of the project would not pose a significant threat to human life;
- Life safety consequences and risk of non-performance of a project are not greater than under existing conditions;
- There is no request by the Governor of an affected state for a peer review by independent experts;
- The project does not require an EIS;
- The Assessment is not likely to involve significant public dispute as to the size, nature, or effects of the project;
- The Assessment is not likely to involve significant public dispute as to the economic or environmental cost or benefit of the project;
- The information in the decision document or anticipated 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;
- The project design is not anticipated to require redundancy, resiliency, and/or robustness, unique construction sequencing, or a reduced or overlapping design construction schedule; and
- There are no other circumstances where the Chief of Engineers or Director of Civil Works determines Type I IEPR is warranted.

a. Products to Undergo Type I IEPR. Not applicable (dependent on the decision by the SPD Commander).

b. Required Type I IEPR Panel Expertise. Not applicable (dependent on the decision by the SPD Commander).

c. Documentation of Type I IEPR. Not applicable (dependent on the decision by the SPD Commander).

7. Policy and Legal Compliance Review.

All decision documents will be reviewed throughout the Assessment 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 WMP and the supporting analyses and coordination comply with law and policy, and warrant approval by the Commander, SPA, approval by the Commander, SPD, and by HQ. DQC and ATR augment and complement the policy review process 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.

For Section 203 Tribal Partnership Program feasibility studies or Assessments, ATR of the costs may be conducted by pre-certified district cost engineering personnel within the region or by the Walla Walla Cost DX. The list of pre-certified cost personnel has been established and is maintained by the Cost DX at https://kme.usace.army.mil/EC/cost/CostAtr/default.aspx. The cost ATR member will coordinate with the Cost DX for execution of cost ATR and cost certification. Final cost certification responsibility may be delegated to SPA at the discretion of the Cost DX. Costs anticipated to undergo certification for the Assessment are preliminary cost estimates developed for recommended follow-on projects designed to a conceptual (15%) level.

9. Model Certification and Approval.

MSC Commanders are responsible for assuring models for all planning activities are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. ATR will be used to ensure that models and analyses are compliant with Corps policy, theoretically sound, computationally accurate, transparent, described to address any limitations of the model or its use, and documented in study reports. Existing certified/approved planning models are highly recommended, and should be used whenever appropriate; however, 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).

The responsible use of well-known and proven USACE developed and commercial engineering software will continue, and the professional practice of documenting the application of the software and modeling results will be followed. As part of the USACE Scientific and Engineering Technology (SET) Initiative, many engineering models have been identified as preferred or acceptable for use on Corps studies and these models should be used whenever appropriate. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC, ATR, and IEPR (if required).

a. Planning Models. No planning models are anticipated to be used in the Assessment.

b. Engineering Models. The following engineering models are anticipated or could be used, if necessary, in the development of the WMP.

Model Name/ Version	*Brief Description of Model and how it will be Applied*	*Approval Status*
HEC-HMS 3.5 (Hydrologic Modeling System)	Hydrologic model to analyze precipitation frequency events and the volume of runoff generated.	H H&C CoP Preferred Model

Model Name/ Version	*Brief Description of Model and how it will be Applied*	*Approval Status*
HEC-RAS 4.0 (River Analysis System)	HEC-RAS provides the capability to perform one-dimensional steady and unsteady flow river hydraulics calculations. The program will be used for steady flow analysis to evaluate the future without- and with-project conditions along the Rio Grande and its tributaries.	H H&C CoP Preferred Model
Flo-2D	Model used by the Corps Flood Plain Management Group and includes graphics and reporting. This model will be used for hydrologic routing for with and without project floodplains and flood stages.	Approved for flood routing and floodplain mapping.

10. Review Schedules and Costs.

The PM will work with the ATR Team Leader to ensure that adequate funding is available and is commensurate with the level of review for technical disciplines as outlined in item 5. b. above. 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. Any funding shortages will be negotiated on a case by case basis, and in advance of an overcharge occurring. Reviewers shall monitor individual labor code balances and alert the ATR Team Leader of any possible funding shortages.

ATR and assistance is estimated to be between $75,000 and $100,000. Costs should always be kept to a reasonable minimum as this is a cost shared Assessment for a sponsor with limited resources.

The Assessment schedule and estimated dates for DQC and ATR of the WMP are shown below. Schedule dates are subject to change and are contingent upon funding and resource availability.

WMP Review Phases	Anticipated Date
DQC/Acoma Pueblo Review	18 May – 7 July 2017
ATR	10-July – 18 Sep 2017
SPD Review	10-July – 18 Sep 2017
HQ Review	19-Sep – 22-Nov-2017
ASA(CW) Review	24-Nov-2017 – 23-Jan-2018
Final WMP approval	21-Feb-2018

11. Public Participation.

Public involvement is anticipated throughout the Assessment. The sponsor, as an independent sovereign nation, has determined that USACE PDT presentations / workshops given at their tribal council meetings meet the requirements of public involvement. A public meeting to present the findings of the WMP and solicit input will be held at the Pueblo prior to submittal of the final WMP to SPD.

State and Federal resource agencies may be invited to participate in this Assessment as partner agencies, or as technical members of the PDT, as appropriate. Neighboring land managers such as the Bureau of Land Reclamation, the City of Grants, NM and Cibola County may be asked to participate in all or part of the Assessment. The PDT will closely coordinate with other entities with technical expertise if they are not part of the Assessment team. These entities include the US Geological Service, the US Forest Service, Bureau of Reclamation, Bureau of Indian Affairs, Indian Health Services and the Environmental Protection Agency, Region 6, among others. The draft WMP will be released to stakeholders and groups with permission from the Pueblo.

12. Review Plan Approval and Updates.

The SPD Commander is responsible for approving this review plan. The Commander's approval reflects vertical team input as to the appropriate scope, level of detail, and level of review for the WMP. Like the WAMP, the review plan is a living document and may change as the Assessment progresses. SPA is responsible for keeping the review plan up to date. Minor changes to the review plan, since the last SPD 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 SPD 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 SPA's webpage. The latest review plan will also be provided to SPD.

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: 505-342-3361
- RIT Lead, SPD: 415-503-6558

Attachment 1: Team Rosters

PDT Members

Name	Discipline	Phone Number
	Project Management	505-342-3361
	Plan Formulation	505-342-3364
	Cost Engineering	505-342-3667
	Hydrology, Hydraulics & Sedimentation	505-342-4814
	Economics	505-342-3366
	Environmental Studies	505-342-3661
	Cultural Resources	505-342-3687
	Geotechnical	505-342-3689
	Environmental Engineering	505-342-3139
	Civil Engineering	505-342-3307
	Geospatial	505-342-3674
	Real Estate	505-342-3224

ATR Team Members

Name	Discipline	District	Phone

TO BE DETERMINED

Vertical Team Members

Name	Discipline	Location	Phone
	Ecological Resources	Eco-PCX	206-764-7205
	Ecological / Cultural Resources	SPD	415-503-6585
	Watershed Planning	SPD	415-503-6591

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 1165-2-214 and Director of Civil Works' Policy Memorandum #1. 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 DrChecks[sm].

SIGNATURE _____ _____

Name Date
ATR Team Leader
Office Symbol/Company

SIGNATURE _____ _____

Name Date
Project Manager
Office Symbol

SIGNATURE _____ _____

Name Date
Architect Engineer Project Manager[1]
Company, location

SIGNATURE _____ _____

Name Date
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 _____ _____

Name Date
Chief, Engineering Division
Office Symbol

SIGNATURE _____ _____

Name Date
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
7-Jun-2016	Updated project dates	

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
CoP	Community of Practice	OMB	Office and Management and Budget
CSDR	Coastal Storm Damage Reduction	OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
DPR	Detailed Project Report	OEO	Outside Eligible Organization
DQC	District Quality Control/Quality Assurance	OSE	Other Social Effects
DX	Directory of Expertise	PCX	Planning Center of Expertise
EA	Environmental Assessment	PDT	Project Delivery Team
EC	Engineer Circular	PAC	Post Authorization Change
EIS	Environmental Impact Statement	PMP	Project Management Plan
EO	Executive Order	PL	Public Law
ER	Ecosystem Restoration	QMP	Quality Management Plan
FDR	Flood Damage Reduction	QA	Quality Assurance
FEMA	Federal Emergency Management Agency	QC	Quality Control
FRM	Flood Risk Management	RED	Regional Economic Development
FSM	Feasibility Scoping Meeting	RMC	Risk Management Center
GRR	General Reevaluation Report	RMO	Review Management Organization
Home District/MSC	The District or MSC responsible for the preparation of the decision document	RTS	Regional Technical Specialist
HQUSACE	Headquarters, U.S. Army Corps of Engineers	SAR	Safety Assurance Review
IEPR	Independent External Peer Review	SPA	USACE Albuquerque District
ITR	Independent Technical Review	SPD	USACE South Pacific Division
LRR	Limited Reevaluation Report	USACE	U.S. Army Corps of Engineers
MSC	Major Subordinate Command	WRDA	Water Resources Development Act