



**US Army Corps
of Engineers®**
Walla Walla District

Review Plan

Waitsburg, Washington, Section 205 Integrated Feasibility Report and Environmental Assessment

April 2024

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1 OVERVIEW

Project Name: Waitsburg, Washington, Walla Walla County

AMSCO/P2 Number: 445802

Authority: Section 205, Flood Risk Management

District: Walla Walla District (NWW)

District Contact:

Project Manager, 509-527-7248

NWD Contact:

District Support Planner, 503-894-0682

Review Management Organization (RMO): Northwestern Division (NWD)

Key Review Plan Dates

Date of NWD Approval of Review Plan	Pending
Date of IEPR Exclusion Approval	Pending
Has the Review Plan changed since RMO Endorsement/Approval?	NA
Date of Last Review Plan Revision	NA
Date of Review Plan Web Posting	Pending
Date of Congressional Notifications	Pending

	Scheduled	Actual	Complete
FID Report Approval	Jan 2016	20 Jan 2016	Yes
FCSA Execution Amendment #1 Amendment #2		16 Jan 2018 6 Apr 2023 24 Nov 2023	Yes
In Progress Review (IPR)	1 Apr 2024	1 April 2024	Yes
Alternatives IPR	May 2024		
Tentatively Selected Plan	Jul 2024		
DQC Review	Aug 2024		
Release Draft Report	Sep 2024		
ATR/Policy/Public Review	Sep 2024		
Final Report Transmittal	Nov 2024		
Report Approval	Dec 2024		
PPA Execution	Jan 2025		

2 PROJECT FACT SHEET

Project Name: Waitsburg, Washington, Section 205 Flood Risk Management Integrated Feasibility Report/Environmental Assessment (IFR/EA)

P2/AMSCO Number: 445802

Congressional Delegation: Senators Patty Murray and Maria Cantwell, Representative Cathy McMorris Rodgers

Sponsor: City of Waitsburg, Washington

Authority: Section 205 of the Flood Control Act of 1948 (Public Law 80-858), 33 United States Code 701s, as amended by the Water Resource Development Act of 1986 and the Water Resource Reform and Development Act of 2014

Location / Project Area

The city of Waitsburg, Washington, is situated in Walla Walla County (Figure 1), within the Touchet River floodplain (river miles 45 to 43). The Touchet River, one of the largest tributaries to the Walla Walla River, has its headwaters in the Blue Mountains of southeastern Washington. The river is approximately 85 miles long.

Study Background

The city of Waitsburg has experienced devastating floods several times since 1906. In 1951, USACE built a levee along a portion of the Touchet River just downstream of Main Street Bridge (Figure 2). This levee has been rehabilitated and/or reconstructed many times, is in the USACE emergency preparedness and response program, and has been well maintained by the city. In addition to this Federal levee, locally constructed levees lie along much of the length of the Touchet River from Columbia County (east of the city). The locally constructed levees, while not in the USACE inventory, have provided some measure of protection to properties adjacent to the river.

Waitsburg 205 Feasibility Study

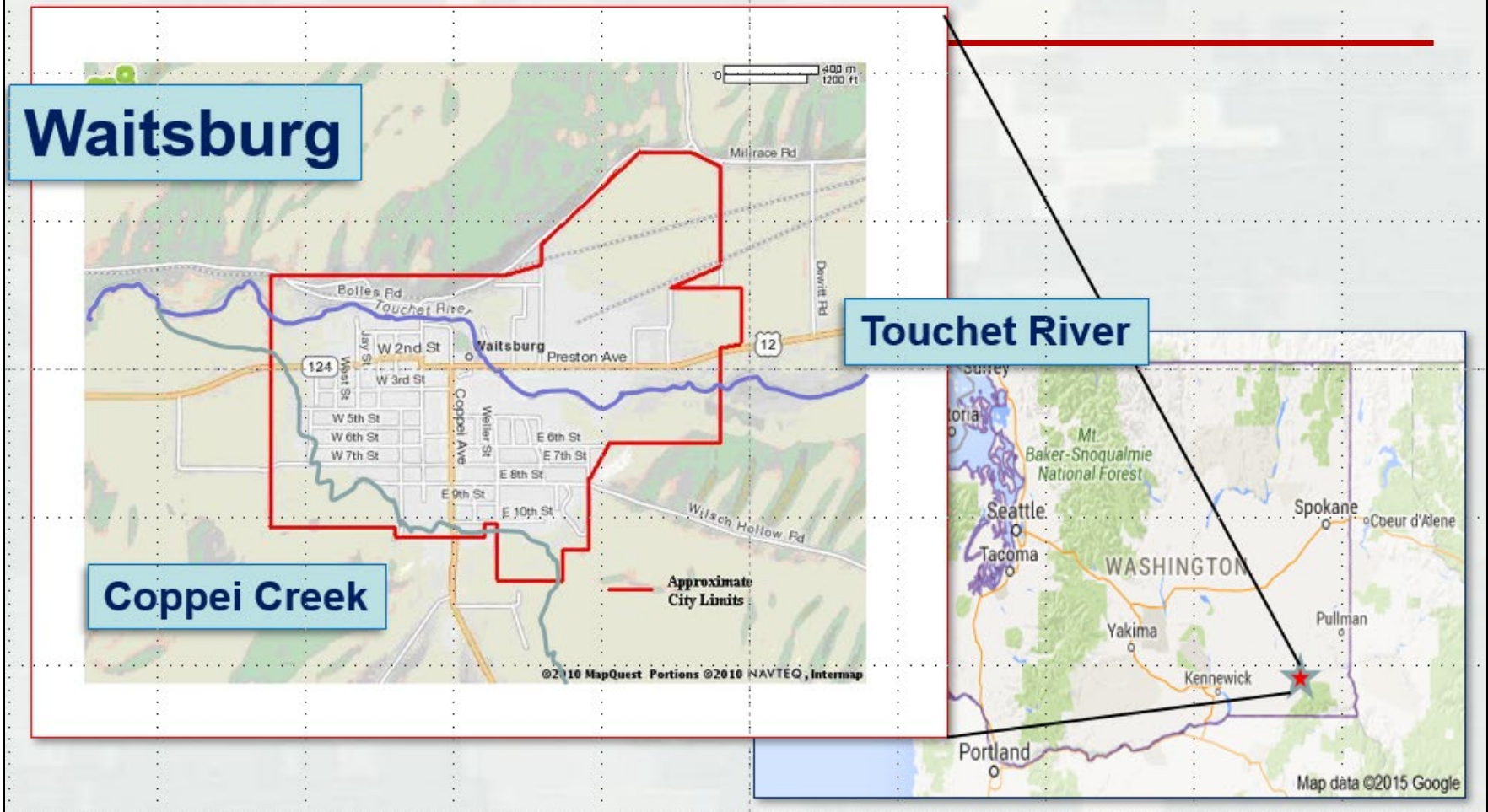


Figure 1. Project Map

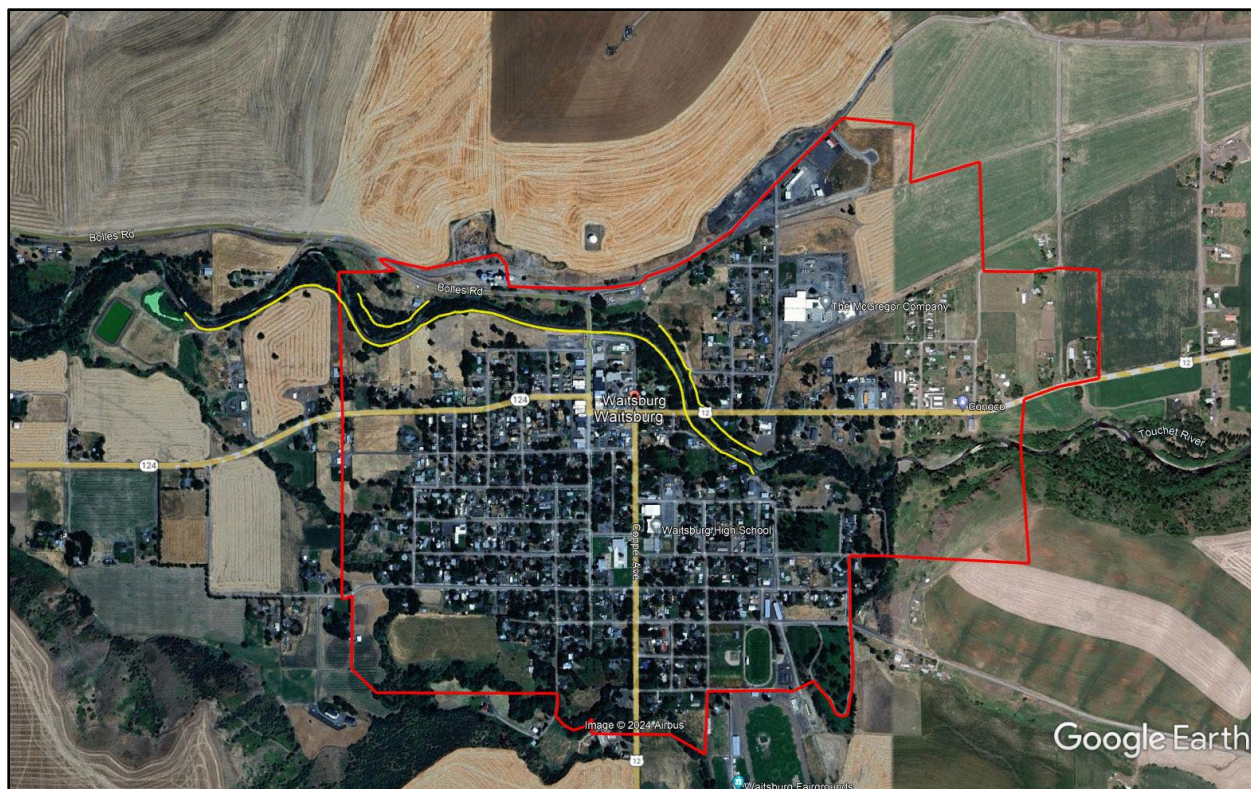


Figure 2. The City of Waitsburg. The red line is the city boundary, while the yellow lines are the federally constructed levee.

During the 1996 flooding, approximately 65% of the city was inundated by levee overtopping on both the Touchet River and Coppei Creek. The Touchet River overflowed its banks approximately 1 mile upstream of the city, and floodwaters spread overland throughout the valley and entered the east side of the city. Damages were extensive, exceeding an estimated \$13 million, and areas in and around Waitsburg were declared a State and Federal emergency. The floodwaters and sediment deposition destroyed homes, damaged public infrastructure and sewage treatment facilities, blocked highways, and isolated residents from access to critical services. A large residential area west of the downtown area was completely destroyed. Properties there were purchased by the Federal Emergency Management Agency (FEMA) and the property now lies empty.

Following the 1996 flooding, the city took steps to contain flooding from Coppei Creek that caused the majority of flooding in downtown Waitsburg in the 1996 flood. The emergency flood response procedures for the city were written. A levee along Coppei Creek near the old fairgrounds was breached, and the levee was rebuilt and strengthened following the flooding.

During the 2020 flood event (Figure 3), Coppei Creek did not reach flood stage. The Touchet River, however, flowed out of its banks east of Waitsburg in Columbia County and headed overland, flooding roads and properties outside of the downtown area. The major transportation route through the area, US Highway 12 (US12), had to be closed for a day, as it was covered with water and debris. Lower Hogeye Road was completely inundated for several days.



Figure 3. Overland flooding originating in nearby Columbia County as it inundates everything in its downstream path.

As a result of these flood events, the city believes the priority for the study should be the Touchet River. Neither Waitsburg nor USACE is aware of any evaluations done in the past on the entire right bank of the Touchet River.

Problems

- The existing levee system does not provide adequate flood protection against high water events. The Touchet River levees are overtopped at 9,000 cubic feet per second (cfs), which is a 2-percent chance exceedance (50-year) flood event. The Coppei River levees are overtopped at 1,500 cfs, which is also a 2-percent chance exceedance (50-year) flood event.

- Bridges are improperly aligned or inadequately sized for high water events. The south US12 bridge abutments could be flanked during high flows on Coppei Creek. The east US12 bridge obstructs flood flows on the Touchet River. The new Main Street Bridge near Preston Park performed admirably in the 2020 floods. However, if the Touchet River experiences out-of-bank flooding in that location, it is likely the floodwaters would flow directly down Main Street.
- Overland flows from the Touchet River that originate upstream of the city cannot be controlled adequately with existing levees.
- Coppei Creek flood waters become impounded by levees on the Touchet River and have no return route to the river.
- No advance flood warning for high flows exists on Coppei Creek.
- Development continues to occur within the floodplain, including one new housing development upstream near the Touchet River.
- Sedimentation collects in the Touchet River, particularly near Preston Park.
- A lack of interior drainage capacity exists for the wastewater system. The sewage lagoons and wastewater treatment plant were moved after the 1996 flood. Although the lagoons remained intact during the flooding, riparian habitat was destroyed.
- Major impacts to commerce and transportation along US12 occurs during flood events. Since US12 is the major route for trucking between Lewiston and Walla Walla, this is a significant problem.
- Life, health, and safety is also a serious issue during flood events because of US12 closures. The nearest hospitals for residents of Waitsburg are in Dayton and Walla Walla, both of which are frequently cut off during flood events.
- Ground saturation from standing floodwaters can cause the underlying soil to become almost fluid-like (“quick”) and extremely unstable.
- The frequency of flood events is an issue. Although both the 1996 and 2020 flood events were considered to be 2-percent chance exceedance (50-year) events, they have happened more frequently in the past. In and around Waitsburg, future changes in climate are likely to produce severe flood events more often.

Objectives

- Reduce the risk of flood damages to property, commerce, transportation, and critical infrastructure to Waitsburg over the 50-year period of analysis.
- Reduce the risk to human life, health, and safety from flooding in Waitsburg over the 50-year period of analysis.

Measures

The Project Delivery Team (PDT) initially identified 17 measures, both structural and non-structural), including the No Action Alternative required by the National Environmental Policy Act (NEPA). These measures ranged from using swim bladders to reduce the risk of flooding to improving the existing levee and constructing additional levee segments along the entire right bank of the river extending for nearly 12,000 feet. Ultimately, a tentative plan was selected that consisted of constructing a levee in Columbia County along the western side of Gallaher Road (Figure 3). The levee would tie into an existing berm, extend down to the bridge abutment at Hogeve Hollow Road, tie in again to the bridge abutment on the other side of Hogeve Hollow Road, and extend downstream for about 600 feet further. In addition, the levee near the city park would be raised up to 1 foot to account for additional water being put back into the system during flood events.

An additional measure was added following analysis of the original Tentatively Selected Plan (TSP). Only four measures were eliminated initially, while the rest were carried forward for further evaluation.

When the original TSP was chosen by the PDT, it was believed that only a minor amount of flood water would get past the levee and it would be moving quite slowly, thereby posing little risk to life, health, and safety. However, after the 2020 flood event, the PDT was shown video footage of the flooding that would get beyond the levee. It was moving much swifter and was deeper than anticipated based on the evidence left after the 1996 flood event.

At that point, the PDT regrouped and considered ways to capture this additional water. The TSP was reformulated to add a return ditch to the previous plan (Figure 4). Otherwise, the previous alternative remained the same.



Figure 4. The proposed new levee (yellow line), including the return ditch (red line).

Risks

The existing levees do not provide adequate protection during flood events. The US12 Bridge obstructs flows during high water events. The new Main Street Bridge could potentially direct flows down Main Street even before levees are overtopped. The main transportation route between Lewiston and Tri-Cities is US12, and it is inundated any time major flood events occur. The railroad embankment on the east side of the city constricts localized flood flows, effectively increasing the depth and velocity of flooding.

Without a project, Waitsburg will continue to experience the serious impacts and damages from flooding it has many times in the past century. While Waitsburg is not technically considered a disadvantaged community, many parts of it are disadvantaged. A low-income trailer park lies directly in the path of the overland flows. While this project cannot completely eliminate the risk of flood damage, it will greatly reduce the severity and amount of damages to the city and its environs.

As previously mentioned, US12 is the major commercial route between Lewiston and the Tri-Cities. However, if it is inundated, not only commerce is affected. There is no hospital or medical facility within Waitsburg, potentially impacting life, health, and safety. If the highway is inundated medical or fire personnel and vehicles would be unable to respond to emergency situations.

3 DOCUMENTATION OF RISKS AND ISSUES

3.1 Factors Affecting the Levels and Scopes of Reviews

Mandatory IEPR Triggers. CAP projects are typically excluded from Independent External Peer Review (IEPR) except those with decision documents that include an EIS or that meet the mandatory triggers for IEPR in ER 1165-2-217.

- Will the NEPA documentation require an Environmental Impact Statement? No. Effects of this Section 205 project are expected to be minor and will be documented in an Environmental Assessment (EA).
- Has the Governor of an affected state requested a peer review by independent experts? The Governor of the State of Washington has not requested an IEPR.
- Has the Chief of Engineers determined the project study is controversial due to significant public dispute over the size, nature, or effects of the project or the economic or environmental costs or benefits of the project (including but not limited to projects requiring an Environmental Impact Statement)? No.

Level and Scope of Review.

- Will the study likely be challenging? This project is unlikely to present any unusual engineering challenges, although project management and coordination could be quite challenging.
- Provide a preliminary assessment of where the project risks are likely to occur and assess the magnitude of those risks. The primary risks to this project are implementation and schedule due to limited income and ability to provide meaningful work-in-kind. The city has access to a rock quarry, but it has not been accredited to the level required by Washington State Department of Transportation, which would be a costly process for the city, with no guarantee that that money could be recouped by using their own quarry rock.
- Is the project likely to be justified by life safety or is the study or project likely to involve significant life safety issues? The project will not be justified solely by life safety issues, although they do exist. Any proposed project is likely to reduce any such issues.
- 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? The proposed alternative will involve a standard levee design, tied into an existing berm. A concrete return ditch along Gallaher Road will return excess water to the Touchet River near the bridge on Hogeye Hollow Road. The proposed alternative will also include a levee raise for about 850 feet within the city to account for the additional water being channeled into the Touchet River upstream. How much of a levee raise will be required has yet to be determined, but it is anticipated to be approximately 6 inches.

- Does the project design require redundancy, resiliency, and/or robustness, unique construction sequencing, or a reduced or overlapping design/construction schedule? The project design does not require any redundancy, resiliency, and/or robustness. No unique construction sequencing or schedule will be required.
- Is the project expected to have more than negligible adverse impacts on scarce or unique tribal, cultural, or historic resources? Section 106 consultation will be required as part of the study report. Historic properties lie within the project footprint, but the project is intended to provide protection for these properties as part of the protection for the city. There are no known cultural resource sites within the project footprint.
- Is the project expected to have substantial adverse impacts on fish and wildlife species and their habitat prior to the implementation of mitigation measures? The study area lies within the geographic range and spawning area for Middle Columbia River (MCR) steelhead Evolutionarily Significant Unit (ESU), which was listed as threatened under the Endangered Species Act (ESA) on March 25, 1999 and January 5, 2006, and updated April 14, 2014. However, any work done within the Touchet River will be done during in-water work windows established by National Marine Fisheries Service and the US Fish and Wildlife Service (Services) and, therefore, would be unlikely to have any substantial adverse impacts on the MCR steelhead ESU. Additionally, consultation with the Services will be conducted prior to the commencement of any construction.
- 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? It is unlikely that any substantial adverse impacts to endangered or threatened species, or their designated critical habitat, will occur as a result of this project or any potential required mitigation measures.

Assessment of the District Chief of Engineering.

The District Chief of Engineering and Construction has evaluated the project risks and determined there is not a significant threat to human life associated with this project.

3.2 Review Execution Plan

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 (including data, analyses, environmental compliance documents, etc. - edit this list to be project specific) will undergo DQC. This internal review process covers basic science and engineering work products. It fulfils the project quality requirements of the Project Management Plan.

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. The RMO POC will aid the team in selection of an appropriate ATR team lead and vet the ATR team members to ensure appropriate qualifications and certifications.

Cost Engineering Review. All decision documents will be coordinated with the Cost Engineering Mandatory of Expertise (MCX). The MCX will assist in determining the expertise needed on the ATR team and will provide the Cost Engineering certification. These reviews occur as part of ATR.

Model Review. DQC, ATR, and IEPR 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.

Policy and Legal Review. All decision documents will be reviewed for compliance with law and policy. 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 NWD Commander.

Public Review. The district will post the Review Plan and approval memo on the district 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.

Table 1 provides the schedules and costs for reviews. The specific expertise required for the teams are identified in later subsections of this plan covering each review. These subsections also identify requirements, special reporting provisions, and sources of more information.

Table 1. Schedule and Costs of Reviews

Product(s) to undergo Review	Review Level	Start Date	End Date	Cost	Complete
IPR with IMO	IPR	1 Apr 24	1 Apr 24	\$5K	Yes
Draft Feasibility Report / EA or EIS	DQC	Aug 24		\$40K	No
Draft Feasibility Report / EA or EIS	ATR	Sep 24		\$45K	No
Draft Feasibility Report / EA or EIS	Policy/Public and Legal Review	Sep 24		NA	No
Final Report Transmittal	Policy and Legal Review	Nov 2024		NA	No
Report Approval		Dec 2024			
PPA Execution	Jan 2025				

3.2.1 District Quality Control

The home district will manage DQC and will appoint a DQC Lead to manage the local review (see ER 1165-2-217, Chapter 4). Table 2 identifies the required expertise for the DQC team. The DQC Team members should not be involved in the production of any of the products reviewed.

Table 2. Required DQC Team Expertise

DQC Team Discipline	Expertise Required
DQC Lead	A senior professional with extensive experience preparing Civil Works decision documents and conducting DQC. The lead may also serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc.).
Planning	A senior water resources planner with experience in flood risk management studies and integrated documents.
Economics	A senior economist with demonstrated experience evaluating flood risk management project benefits and costs, and familiar with LifeSim and HEC-FDA modeling.
Environmental Resources/ NEPA Compliance	A senior environmental or NEPA specialist with knowledge of flood risk management and. In addition, familiarity with environmental justice would be beneficial.
Hydrology/Hydraulic Engineering	A senior H&H engineer with thorough knowledge of open channel dynamics, application of levees and flood walls, non-structural solutions and flood proofing, and computer modeling (e.g., HEC-RAS).
Geotechnical Engineering	A senior geotechnical engineer with experience working with levees and other flood risk management structures, roads, drainages, etc.
Cost Engineering	A cost engineering professional.
Real Estate	A senior real estate specialist with knowledge of easements, rights-of-way, etc.
Risk and Uncertainty	A multi-discipline flood risk analysis should be assigned to either the H&H engineer or the economist to ensure consistent and appropriate identification, analysis, and written communication of the risk and uncertainty, per ER 1105-2-101.

Documentation of DQC. Quality Control will be performed continuously throughout the study. A specific certification of DQC completion will be prepared at the draft and final report stages. Documentation of DQC will follow the District Quality Manual and the

NWD Quality Management Plan. Dr. Checks 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 will be provided to the MSC, RMO, and ATR Team leader prior to the initiation of ATR. Documentation available at the time of ATR will be made available to the ATR Team. The team will examine DQC records and comment in the ATR report on the adequacy of the DQC effort.

3.2.2 Agency Technical Review

The ATR will assess whether the analyses are technically correct and comply with guidance, and that documents clearly explain the analyses and results. The RMO will manage the ATR. The review will be conducted by an ATR Team whose members are certified to perform reviews. Lists of certified reviewers are maintained by the various technical Communities of Practice (see ER 1165-2-217, Chapter 5.5.3). Table 3 identifies the disciplines and required expertise for this ATR Team (also see Attachment 1 - the ATR Team roster). A site visit will not be necessary for the ATR team as pictures will tell the story clearly.

Table 3. Required ATR Team Expertise

ATR Team Discipline	Expertise Required
ATR Lead (the ATR Lead should be from outside of NWD)	A senior professional with extensive experience preparing Civil Works decision documents and conducting ATR. The lead should have the skills to manage a virtual team through an ATR. The lead may serve as a reviewer for a specific discipline (e.g., planning).
Planning	A senior water resources planner with experience in flood risk management and integrated documents. The reviewer will be certified for ATR by the Plan Formulation Sub-CoP.
Economics	A senior economist with demonstrated experience evaluating flood risk management project benefits and costs, and familiar with LifeSim and HEC-FDA modeling. The reviewer will be certified by the Economics Sub-CoP for ATR of flood risk management.
Environmental Resources/ NEPA Compliance	A senior environmental or NEPA specialist with knowledge of flood risk management and ESA. The reviewer will be certified by the Environmental and CoP for ATR of Environmental. In addition, familiarity with environmental justice would be beneficial.

Hydrology/Hydraulic Engineering	A senior H&H engineer with thorough knowledge of open channel dynamics, application of levees and flood walls, non-structural solutions and flood proofing, and computer modeling (e.g., HEC-RAS). The reviewer will be listed in CERCAP as certified for ATR by the HH&C CoP.
Geotechnical Engineering	A senior geotechnical engineer with experience working with levees and other flood risk management structures, roads, drainage, etc. The reviewer will be listed in CERCAP as certified for ATR by the Geotechnical CoP.
Cost Engineering	The reviewer will be on the list of qualified ATR reviewers maintained by the Cost Engineering CX in Walla Walla.
Real Estate	A senior real estate specialist with knowledge of easements, rights-of-way, etc. The reviewer will be certified for ATR by the Real Estate CoP.
Climate Preparedness and Resilience CoP Reviewer	A member of the Climate Preparedness and Resiliency CoP will participate in the ATR review. The reviewer may be combined with H&H if all qualifications/certifications are met.
Risk and Uncertainty	A subject matter expert in multi-discipline flood risk analysis to ensure consistent and appropriate identification, analysis, and written communication of risk and uncertainty per ER 1105-2-101. This function should be assigned to either the Economics or H&H reviewer.

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, Chapter 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 described in ER 1165-2-217, chapter 5.9. Concerns will be closed in DrChecks by noting the concern has been elevated. The ATR Lead will prepare a Statement of Technical Review (see ER 1165-2-217, chapter 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.

Assessment of IEPR Conditions and Factors

Section 1 of this Review Plan assesses the factors affecting the levels and scopes of reviews, including IEPR. These factors include three mandatory conditions (cost of a project, request by the Governor of an affected state, or a determination by the Chief of Engineers) that independently require performance of IEPR. Additional discretionary

factors or scenarios may also lead to the performance of IEPR. A risk-informed decision regarding the performance of IEPR is made through assessment of both the mandatory conditions and discretionary factors.

Decision on IEPR. This project is being conducted under the authority of CAP, Section 205. An exclusion is not required.

Decision on Safety Assurance Review. Safety Assurance Reviews are managed design and construction products for hurricane, storm and flood risk management projects, or other projects where existing and potential hazards pose a significant threat to human life. The Waitsburg 205 project poses no significant risk to human life or public safety.

3.2.3 Model Certification or Approval

The approval of planning models under EC 1105-2-412 is not required for CAP projects. MSC Commanders remain responsible for assuring the quality of the analyses used in these projects. 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.

Table 5: Planning Models. The following models may be used to develop the decision document:

Model Name and Version	Brief Model Description and How It Will Be Used in the Study	Certification / Approval
HEC-FDA 1.4.3	The program integrates hydrologic engineering and economic analysis to formulate and evaluate plans using risk-based analysis methods. It will be used to evaluate /compare plans to aid in selecting a recommended plan.	Certified
LifeSim 2.0	The program is used to estimate life loss with the fundamental intent to simulate population redistribution during an evacuation. Life loss and economic damages are then determined by the hazard (e.g., flooding).	Certified

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. 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. 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.

Table 6. Engineering Models. These models may be used to develop the decision document:

Model Name and Version	Brief Model Description and How It Will Be Used in the Study	Approval Status
HEC-RAS 5.0 or greater (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. It will be used for steady flow analysis to evaluate the future without-project and future with-project conditions.	HH&C CoP Preferred
HEC-Statistical Software Package (SSP)	This program is used to perform statistical analysis of hydrologic data.	HH&C CoP Preferred

3.2.4 Policy and Legal Compliance Review

Policy Review

The team is identified in Attachment 1 of this Review Plan. The Policy Review team will be typically comprised of NWD staff but may also be drawn from Headquarters (HQUSACE), other MSCs, 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 as well as SMART Planning Milestone meetings. 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 will be documented in a Memorandum for the Record (MFR) produced for each engagement with the team. The MFR will be distributed to all meeting participants.
- In addition, 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 will be documented in an MFR.

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 NWD 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 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.

ATTACHMENT 1 - TEAM ROSTERS

PROJECT DELIVERY TEAM		
Name	Office	Position
[REDACTED]	NWW	Project Manager/Plan Formulator
[REDACTED]	NWW	Economist
[REDACTED]	NWW	Hydraulic Engineer/Climate Change
[REDACTED]	NWW	NEPA/ESA/Greenhouse Gas
[REDACTED]	NWW	Environmental Justice
[REDACTED]	NWW	Geotech Engineer
[REDACTED]	NWW	Archaeologist
[REDACTED]	NWW	Cost Engineer
[REDACTED]	NWW	Realty Specialist

DISTRICT QUALITY CONTROL		
Name	Position	Experience
[REDACTED]	DQC Lead	Plan Formulation Supervisor, NWW
	Plan Formulator	
	H&H Engineer/Climate Change	
	Environmental Compliance/ NEPA/ESA/ Greenhouse Gas	
	Geotech Engineer	
	Economist/ Environmental Justice	
	Cost Engineer	
	Real Estate	

AGENCY TECHNICAL REVIEW		
Name	Position	Experience
██████████	ATR Team Lead	ATR Certified for Plan Formulation, MVP
	Plan Formulator	
	H&H Engineer/Climate Change	
	Environmental Compliance/ NEPA/ESA/ Greenhouse Gas	
	Geotech Engineer	
	Economist/ Environmental Justice	
	Cost Engineer	
	Real Estate	

LEGAL REVIEW TEAM		
Name	Position	Experience
██████████████████	Attorney	Planning/Contracts
██████████████████	Attorney	NEPA/ESA

POLICY AND LEGAL COMPLIANCE REVIEW TEAM		
Name	Position	Experience
██████████████████	NWD	Review Manager/Plan Formulation
██████████████████	NWD	Economics
██████████████████	NWD	Environmental Resources
██████████████████	NWD	H&H/Climate Change

[REDACTED]	NWD	Levee Safety
[REDACTED]	NWD	Real Estate
[REDACTED]	NWD	Office of Counsel