BUREAU OF RECLAMATION

Water Quality Management Plan

Cle Elum Dam Pool Raise Project: Speelyi Shoreline Protection Project

Yakima River Basin Water Enhancement Project, Kittitas County, Washington
Columbia-Pacific Northwest Region

U.S. Department of the Interior June 2026

Mission Statements

The Department of the Interior conserves and manages the Nation's natural resources and cultural heritage for the benefit and enjoyment of the American people, provides scientific and other information about natural resources and natural hazards to address societal challenges and create opportunities for the American people, and honors the Nation's trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities to help them prosper.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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Section 1 Water Quality Management Plan

1.1 Introduction

This Draft Water Quality Management Plan is being provided by the US Department of Interior, Bureau of Reclamation as part of the submittals required for the Washington State Department of Ecology's Request for Clean Water Act Section 401 Water Quality Certification. Reclamation has intentionally timed the construction of the Speelyi Shoreline Protection Project to occur when the Cle Elum Reservoir pool elevation is at least 50 feet below the project's construction boundary. Construction work will be completed by a construction contractor who has not been identified at the time of preparation of this plan. Once a contractor is selected, the Contractor will finalize this draft plan and be subject to the requirements herein.

The Clean Water Act and associated federal regulations (Title 40 of the Code of Federal Regulations [CFR] 123.25(a)(9), 122.26(a), 122.26(b)(14)(x) and 122.26(b)(15)) require nearly all construction site operators engaged in clearing, grading, and excavating activities that disturb one acre or more, including smaller sites in a larger common plan of development or sale, to obtain coverage under a National Pollutant Discharge Elimination System (NPDES) permit for their stormwater discharges. Reclamation will be securing a Clean Water Act Section 402 National Pollutant Discharge Elimination System (NPDES) coverage under Environmental Protection Agency's (EPA) Construction Permit (GCP), because Reclamation is a "Federal Operator" and the construction of the Speelyi Shoreline Protection Project will disturb greater than one acre of land, including both private and federal.

Section 2 Project Location

2.1 Project Location

The project site is located near the Speelyi Day Use Area on Cle Elum Lake, about 8 miles northwest of the city of Cle Elum in Kittitas County (Figure 1). The approximate center of the project is 47.256 N lat. / -121.061 W long. The project will occur on both federal and private lands, with a majority of the work occurring on federal land, but also with a significant portion of work occurring on private parcel 291934 (Section 2, Township 20N, Range 14E).

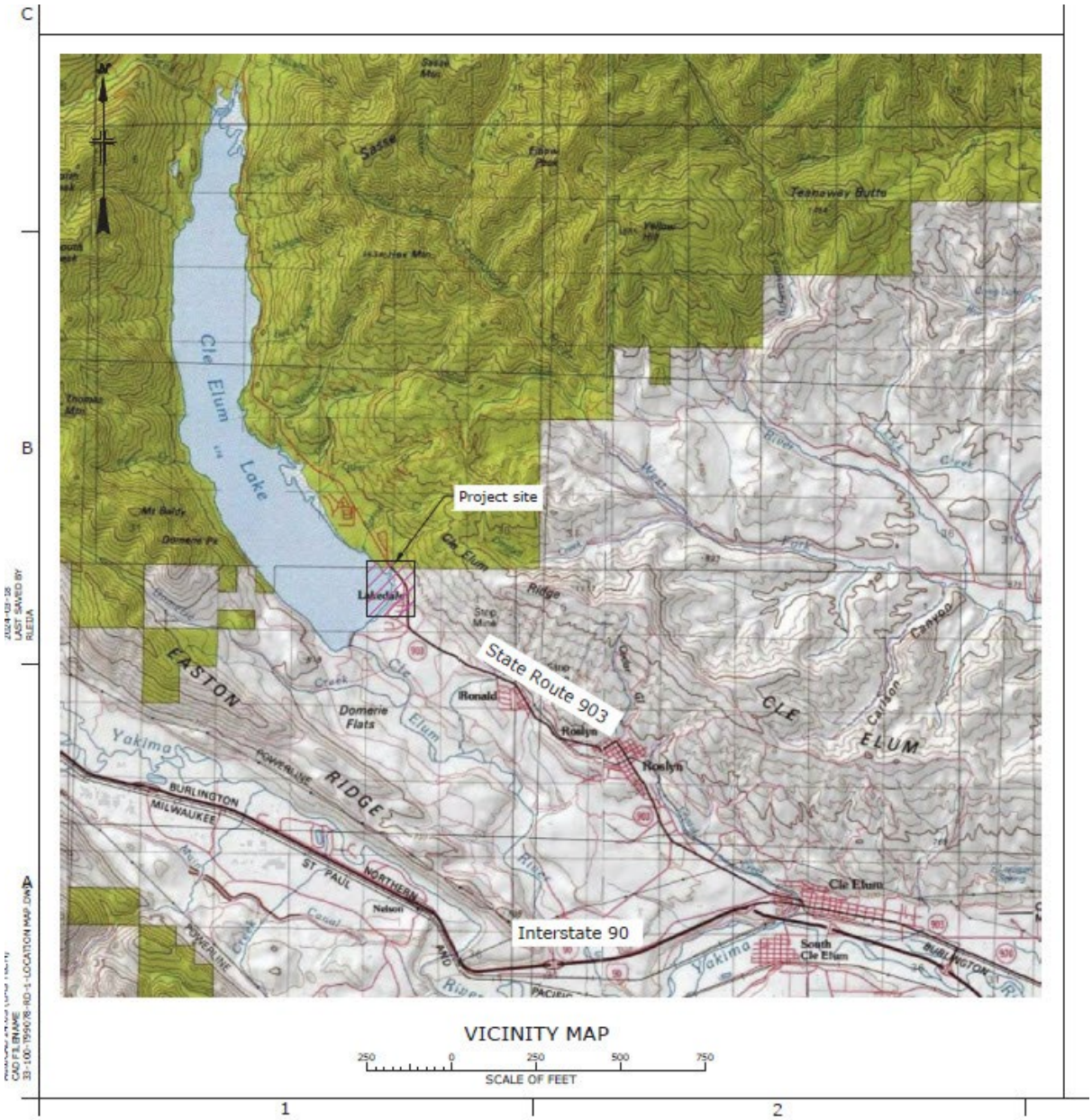

Figure 1 Location of Speelyi Site location. Located approximately 8 miles northwest of Cle Elum, Washington.

Section 3 Project Description

3.1 Project Introduction

The Speelyi Shoreline Protection Project is a component of the larger Cle Elum Pool Raise (CEPR) Project, which is a component of the Yakima River Basin Integrated Water Resource Management Plan. The CEPR Project will raise the reservoir's maximum pool elevation from 2240' to 2243' adding 14,600-acre-feet of additional storage which will be dedicated to enhancing instream flows for fish rearing, fish habitat and migration. Due to the 3-foot raise of the reservoir water surface elevation specific areas on the shoreline may be affected, Speelyi being one of those areas.

The Speelyi Shoreline Protection Project will provide mitigation for the 3-foot raise by armoring a section of shoreline with riprap at a 2:1 slope and creating a perched beach at the northern end of the project as shown in the drawings provided with the permitting application. Fill for the armored slopes will be borrowed within the limits of work shown on the drawings (between the temporary access road and the top of the riprap fill slope), mostly from the key trench required to hold the riprap in place.

The primary concern for the work being conducted is the potential for erosion of site soils (primarily sand, cobble, and small boulders) and subsequent turbidity in receiving waters as well as the potential release of construction related contaminants such as fuel, oil, grease, and hydraulic fluids.

A combination of factors minimizes concerns for exceeding surface water quality standards for turbidity including: 1) Any runoff generated in the project area will infiltrate into adjacent soils (extremely well drained material including cobble, small boulders, gravels, and sand) before reaching surface water; 2). In general, there is a significant distance of well drained material between disturbance areas and receiving waters that would remove any fines, if present; and 3) the steepness of slopes would make installation of conventional TESC BMPs difficult and impractical. The contractor would commit to daily inspections of receiving waters and would be part of the overall stormwater pollution prevention plan (SWPPP) prepared for the project. All disturbance of upland areas would have TESC BMPs in place, such as silt fencing, straw wattles, stabilized construction entrances to prevent erosion of upland soils or tracking of soils onto local roadways.

Work is to be performed by a Construction Contractor which has not been identified at the time this plan was prepared. Reclamation's construction Contract requires the Contractor to prepare and submit for approval a site-specific pollution prevention, control, and countermeasure plan which will address potential for accidental releases of construction related contaminants. Requiring the Contractor to prepare the plan eliminates the contractual risk of dictating work means and methods to the Contractor, which is not allowed by the Federal Acquisition Regulations. The plan must be submitted for approval a minimum of 28 days in advance of starting work and work will not be allowed to start until the plan is approved. The site-specific plan is required to include measures such as not allowing refueling within 150 feet of surface waters, daily equipment inspections for leaks, storage of equipment in upland areas when not in use, equipment operating below the new maximum pool elevation will only use vegetable oil-based hydraulic fluids and having spill containment and cleanup materials on-site and ready for immediate deployment, if needed.

Additional information regarding the Construction Contractor's responsibility to develop and implement a temporary erosion control and sediment control (TESC) plan are discussed in the Draft Dredging Plan that Reclamation has provided with this application. The TESC plan that

Reclamation will require the Contractor to develop and implement will be site-specific and establish what best management practices (BMPs) the Contractor will utilize to ensure the construction work is in compliance with all applicable state and federal water quality standards.

3.2 Proposed Action

The Speelyi Shoreline Protection Project will stabilize an approximately half-mile long section of shoreline within the Cle Elum reservoir that may otherwise be adversely impacted by wave action from water during high water years as a result of the increase in pool level. Without mitigation, the shoreline would be at risk of erosion due to higher water levels as a result of the CEPR Project. Riprap will be imported from an off-site source to protect the shoreline. The perched beach section of the project will be constructed with borrow material generated from excavating the riprap key trench and by importing riprap material. The United States Forest Service (USFS) will implement a revegetation plan post construction.

The project is expected to take three months on-site starting in Fall of 2026. All construction will occur when the pool water level is low and below the lowest elevation of the project footprint, and as such the construction start date is subject to pool elevation levels. Therefore, though the expected work window is between September and November 2026, the work may need to be postponed to the next favorable work window based on historic pool elevations, which is between March and early June 2027. Should contract timing not work out for completion of the work in one continuous period, there may be a period over the winter when work stops before resuming in the spring. These time windows are estimated and the Contractor will develop a proposed construction schedule at the start of construction.

All work will be performed in the dry when the water level in Cle Elum Reservoir is at elevation 2220 or lower. Most of the activities will be located within the reservoir boundaries, below the OHWM of elevation 2240. As such, project work is considered "in-water work", hence the need for this plan. Removal of material from the work area would be considered dredging if water were present. However, despite work being conducted below the OHWM, all work will occur “in the dry” when the reservoir elevation is no higher than elevation 2220, so any borrow material taken from the work area would fall under the definition of excavation for this project.

Construction will include excavation of a key trench to hold riprap in place, shaping the final slope of the embankment at a 2:1 slope for riprap placement, grading a perched beach area at the northern end of the project, and reshaping a slough channel on private property so that it properly drains to the reservoir rather than subjecting a private parcel to flooding.

3.3 In Water Work below the Ordinary High-Water Mark

No dewatering will be necessary for the Speelyi Shoreline Protection Project. Though construction is occurring below the ordinary high-water mark, the water surface elevation is expected to be at least 50 feet below the lower construction zone boundary during construction, and no construction will be allowed if the reservoir water surface level is at 2220 or higher. This will ensure all work is completed on dry land, above pool water surface elevation at the time of construction. If, come the time of construction, the water surface elevation is higher than expected or allowed, then construction would be postponed until adequate conditions for construction are met.

The following activities will occur in the Cle Elum Reservoir below the Ordinary High-Water Mark:

- Grading a portion of the shoreline slope and installing riprap for armoring.
- The majority of key trench excavation for riprap placement.
- Creating a perched beach at the northern end of the site using excess excavated material generated from the slope where riprap will be placed.
- Grading a temporary access road for construction vehicle access, which will be restored to its pre-construction state when no longer required for Contractor access.

3.4 Water Quality Protection

The construction contractor will develop and implement a temporary erosion and sediment control (TESC) plan for all aspects of project construction requiring clearing, vegetation removal, grading, ditching, filling, embankment compaction, demolition, and/or excavation. BMPs defined in the plan will be used to control sediments from all vegetation removal or ground-disturbing activities. This plan will be required as a submittal in Reclamation's construction contract, due a minimum of 28 days before starting work, and work will not be allowed to start until the plan is approved.

The construction contractor will develop a spill prevention control and countermeasures (SPCC) plan before beginning construction. The SPCC plan will identify the appropriate spill containment measures that will be used throughout project construction. This plan will be required as a submittal in Reclamation's construction contract, due a minimum of 28 days before starting work, and work will not be allowed to start until the plan is approved.

Reclamation's Construction Contractor will adhere to water quality standards as stated in the 401 Water Quality Certificate and National Pollution Discharge Elimination System (NPDES) permit issued for the project as applicable.

3.4.1 Best Management Practices

BMPs included in the TESC and SPCC plans and NPDES permit conditions will include, but will not be limited to, the following:

- Erosion control devices (e.g., silt fences) will be installed, as needed, to protect surface waters and other critical areas.
- Erosion control blankets, or an equally effective BMP will be installed, as needed, on steep slopes that are susceptible to erosion and where ground-disturbing activities have occurred. This will prevent erosion and will assist with establishment of native vegetation.
- Material that may be temporarily stored for use in project activities will be covered with plastic or other impervious material during rain events to prevent sediments from being washed from the storage area to surface waters.
- All temporary and permanent erosion and sedimentation control measures will be inspected on a regular basis, maintained, and repaired to ensure continued performance of their intended function.
- Silt fences will be inspected after each rainfall and at least daily during prolonged rainfall.
- All equipment to be used for construction activities will be cleaned and inspected before arriving at the project site to ensure that no potentially hazardous materials are exposed, no leaks are present, and the equipment is functioning properly.

- Construction equipment and vehicles will be maintained to prevent them from leaking fuel or lubricants.

3.4.2 General BMPs for Construction Near Sensitive Areas:

The project proponent will ensure compliance with all local, state, and federal permits received for the project.

Reclamation's Construction Contractor will delineate the boundaries of ground disturbance to prevent unintended effects on riparian vegetation, wetlands, woodlands, and other sensitive sites, both inside and outside of the construction limits as applicable. The construction limits will be clearly marked with high-visibility construction fencing before any ground-disturbing or construction-related activities, and no work in sensitive areas will occur outside of the construction limits.

Reclamation's Construction Contractor will implement measures to prevent erosion from soil or rock stockpiles, excavated materials, and excess soil materials into sensitive habitats, including water channels, wetlands, and riparian areas outside of the construction limits as a result of stormwater runoff.

3.4.3 Regulatory Controls:

The project will be constructed in accord with regulatory permits, including the Hydraulic Project Approval issued by WDFW.

Project construction will be performed in compliance with Washington State water quality rules (Washington Administrative Code [WAC] 173 201A 200).

Areas disturbed during construction will be restored with native vegetation suited to site conditions. The US Forest Service will also be implementing a revegetation plan as part of the total Cle Elum Pool Raise Project.

Section 4 Responsible Parties

4.1 Reclamation's Construction Contractor

Reclamation's Construction Contractor will be responsible for meeting requirements of this Water Quality Management Plan, and for preparing and submitting a site-specific pollution prevention, control, and countermeasure plan which will address potential for accidental releases of construction related contaminants, as described earlier in this plan. Contacts for key roles on Reclamation's end to ensure Contractor compliance are listed in the following table:

Role	Name	Cell Phone
Project Manager	Wade Warner	509-573-8045
Civil Engineer	Matt DeAmico	541-970-4357

Section 5 Water Quality Standards

The following sections discuss the fresh water designated uses and criteria found in WAC 173-201A-200.

5.1 Fresh Water Designated Uses and Criteria

Fresh water designated use and criteria in WAC 173-201A-200 for this project window (September/November 2025 or March/June 2026 depending on pool water surface elevations) is salmonid spawning, rearing and migration.

5.1.1 Aquatic Life Temperature Criteria

Per WAC-173-201A-200 (1)(c), temperature is measured by the 7-day average of the daily maximum temperatures (7-DADMax). The 7-DADMax for salmonid rearing and migration only is 17.5°C (63.5°F). The following are extracted from WAC-173-201A-200 (1)(c) as applicable to the designated use of salmonid rearing and migration only:

(i) When a water body's temperature is warmer than the criteria in Table 200 (1)(c) (or within 0.3°C (0.54°F) of the criteria) and that condition is due to natural conditions, then human actions considered cumulatively may not cause the 7-DADMax temperature of that water body to increase more than 0.3°C (0.54°F).

(ii) When the background condition of the water is cooler than the criteria, incremental temperature increases resulting from individual point source activities must not exceed the numeric criteria and must not, at any time, exceed 28/(T+7) as measured at the edge of a mixing zone boundary (where "T" represents the background temperature as measured at a point or points unaffected by the discharge and representative of the highest ambient water temperature in the vicinity of the discharge).

(iii) Temperatures are not to exceed the criteria at a probability frequency of more than once every 10 years on average.

(vi) Temperature measurements should be taken to represent the dominant aquatic habitat of the monitoring site. This typically means samples should:

(A) Be taken from well mixed portions of rivers and streams; and

(B) Not be taken from shallow stagnant backwater areas, within isolated thermal refuges, at the surface, or at the water's edge.

5.1.2 Aquatic Life Dissolved Oxygen (D.O.) Criteria

The D.O. criteria are measured in milligrams per liter (mg/L) or percent oxygen saturation. The

D.O. criteria for the aquatic life use category of salmonid rearing and migration only is a water column 1-day minimum of 6.5 mg/L. Compliance may be demonstrated through either the water column or intragravel criteria.

Reclamation has determined that this project will not affect D.O.; therefore, Reclamation is not requiring the contractor to monitor D.O.

5.1.3 Aquatic Life Turbidity Criteria

Turbidity is measured in "nephelometric turbidity units" or "NTUs." The salmonid rearing and migration only category states that turbidity shall not exceed:

- 10 NTU over background when the background is 50 NTU or less; or
- A 20 percent increase in turbidity when the background turbidity is more than 50 NTU.

The turbidity criteria established under WAC 173-201A-200 (1)(e) shall be modified, without specific written authorization from the department, to allow a temporary area of mixing during and immediately after necessary in-water construction activities that result in the disturbance of in-place sediments. This temporary area of mixing is subject to the constraints of WAC **173- 201A-400** (4) and (6) and can occur only after the activity has received all other necessary local and state permits and approvals, and after the implementation of appropriate best management practices to avoid or minimize disturbance of in-place sediments and exceedances of the turbidity criteria. A temporary area of mixing shall be as follows:

(i) For waters up to 10 cfs flow at the time of construction, the point of compliance shall be 100 feet downstream from the activity causing the turbidity exceedance.
(ii) For waters above 10 cfs up to 100 cfs flow at the time of construction, the point of compliance shall be 200 feet downstream of the activity causing the turbidity exceedance.
(iii) For waters above 100 cfs flow at the time of construction, the point of compliance shall be 300 feet downstream of the activity causing the turbidity exceedance.
(iv) For projects working within or along lakes, ponds, wetlands, or other nonflowing waters, the point of compliance shall be at a radius of 150 feet from the activity causing the turbidity exceedance.

5.1.4 Aquatic Life pH Criteria

Measurement of pH is expressed as the negative logarithm of the hydrogen ion concentration. The pH level for the aquatic life use category of salmonid rearing and migration only shall be within the range of 6.5 to 8.5 with a human-caused variation within the above range of less than 0.5 units.

5.1.5 Aquatic Life Fine Sediment Criteria

The following narrative criteria apply to all existing and designated uses for fresh water:

(i) Water bodies shall not contain excess fine sediment (<2 mm) from human-caused sources that impair designated uses.
(ii) When reference values are used to demonstrate compliance with the fine sediment criteria, measured conditions shall be compared to those from reference sites or regional data that represent least disturbed site conditions of a comparable water body or ecoregion. Reference locations should be comparable in hydrography, geology, ecology, and habitat to that of the water body evaluated.

5.1.6 Recreational Uses

Recreational use concerns are focused on primary contact recreation. The WAC 173-201A-200 recreational use concerns include:

- Toxic, radioactive, and deleterious materials,
- Aesthetic values,
- Water contact recreation bacteria criteria counts for Escherichia coli (E. coli) and fecal coliform,
- Water supply uses (e.g., domestic, agricultural, industrial, or stock watering) and
- Miscellaneous uses, including wildlife habitat, harvesting, commerce, and navigation, boating, and aesthetics.

Section 6 Monitoring and Record Keeping

6.1 Monitoring

Since Reclamation's Construction Contractor will be conducting all work "in the dry" and at least 50-feet from the Cle Elum pool water surface elevation, Reclamation's Construction Contractor will monitor for turbidity according to the terms set forth in EPA's construction general permit (CGP). Visual and instrumental monitoring will be conducted for turbidity after a rain or snowmelt event if Reclamation notices a turbidity plume directly associated to construction. If State Water Quality Standards are exceeded due to construction combined with a stormwater event, procedures outlined in the GCP will be completed, including any required reporting.

6.2 Record Keeping

If Reclamation's Construction Inspector or the Construction Contractor notices a turbidity plume springing from the construction site, the turbidity will be measured. If an increased level of turbidity is observed, Reclamation's Contractor will pause the work that is causing increased turbidity until new management practices can be put in place to avoid the disturbance. If turbidity exceeds limits identified in the WAC Reclamation will issue a stop work order until turbidity levels fall back below the limits in the WAC. Notes will be made of this, and any other remediation measures taken in Reclamation's construction inspection reports, including the duration of the work pause until turbidity returns to acceptable limits. All records will be recorded and kept in accordance with the procedures outlined in the GCP.