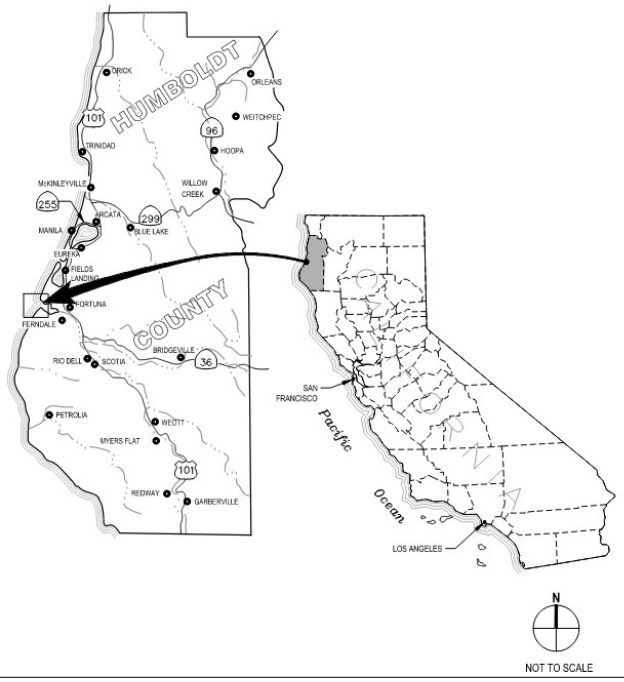
STORMWATER POLLUTION PREVENTION PLAN

for

Humboldt County Resource Conservation District Russ Creek and Centerville Slough Restoration Project

Project Location:



LOCATION MAP

WDID: [Number]
RISK LEVEL: II

Legally Responsible Person (LRP):
Humboldt County RCD

Project Address:
770 Russ Lane
Ferndale, CA 95536

Site Operating Hours:
7:00 AM – 6:00 PM, Monday - Friday

Estimated Project Dates:
Start of Construction: June 15th 2026
Completion of Construction: October 15th 2026

SWPPP Prepared by:
GHD Inc.
718 3rd Street
Eureka, CA, 95501

SWPPP Preparation Date:
February 2026

QSD Name and Signature:

[QSD Sign Here]

Jeremy Svehla, PE

Contact Information

Role	Name	Phone Number	License or Certification Number, if Applicable
Qualified SWPPP Developer (QSD)	Jeremy Svehla, PE	(707) 267-2246	C72169
Qualified SWPPP Practitioner (QSP)	Jeremy Svehla, PE	(707) 267-2246	C72169
Qualified SWPPP Practitioner (QSP)			
QSP Delegate			
QSP Delegate			

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Appendices

Qualified SWPPP Developer

Approval and Certification of the Stormwater Pollution Prevention Plan

Project Name: *Russ Creek and Centerville Slough Restoration Project*

Project Number/ID:
[if applicable]

"This Stormwater Pollution Prevention Plan and its appendices were prepared under my direction to meet the requirements of the California Construction Stormwater General Permit (*Order No. 2022-0057-DWQ*). I certify that I am a Qualified SWPPP Developer in good standing as of the date signed below and will maintain up to date credentials for the duration of the project."

March 1, 2026

QSD Signature | *Date*

Jeremy Svehla | C72169

QSD Name | *QSD Certificate Number*

Civil Engineer, GHD Inc | (707) 267-2246

Title and Affiliation | *Telephone Number*

Jeremy.Svehla@GHD.com

Email

Amendment Log

Project Name: Russ Creek and Centerville Slough Restoration Project

Project Number/ID:

Amendment No.	Date	Brief Description of Amendment (include section and page number)	Prepared and Approved By
			Name: QSD#
			Name: QSD#
			Name: QSD#

The SWPPP will be revised when:

- There is a 2022 CGP violation (2022 CGP Section VI.Q.1);
- There is a reduction or increase in total disturbed acreage (2022 CGP Section III.F.2. and F.4);
- BMPs are not effective and are not resulting in a reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges (2022 CGP Section VI.Q.1 and Attachment E Section III.C.5);
- There is a change in the project duration that changes the project Risk Type (2022 CGP Section III.F.1);
- Dischargers with projects where all construction activities (including passive treatment, active treatment systems, and/or active equipment) will be suspended for 30 days or more (2022 CGP Section III.G);
- There is a change in construction or operations that may affect the discharge of pollutants to surface waters, groundwater(s), or a municipal separate storm sewer system (MS4) (2022 CGP Sections IV.O. and VI.Q.1); or

When deemed necessary by the QSD. The QSD has determined that the changes listed in Table 1-1 can be field determined by the QSP. All other changes will be made by the QSD as formal amendments to the SWPPP. Note that the 2022 CGP requires that the QSD "revise the SWPPP to address potential problems identified by visual inspections, sampling data, comments from a QSP, or their own site observations (2022 CGP Section V.C.2.).

SWPPP Amendment QSD Certifications are located in Appendix C.

Section 1 SWPPP Requirements

1.1 INTRODUCTION

This Stormwater Pollution Prevention Plan (SWPPP) is designed to comply with California's *General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (2022 CGP),* State Water Resources Control Board (State Water Board) *Order No. 2022-0057-DWQ (NPDES No. CAS000002)* (Appendix S). This SWPPP has been prepared following the 2022 CGP SWPPP Template for Traditional Projects provided in the California Stormwater Quality Association (CASQA) Stormwater *Best Management Practice (BMP) Handbook: Construction* (CASQA 2023).

This project is considered a traditional construction project.

In accordance with the 2022 CGP, Section IV.O, this SWPPP is designed to address the following:

- Identification of all pollutants, their sources, and control mechanisms, including sources of sediment associated with all construction activities (e.g., sediment, paint, cement, stucco, cleaners, site erosion);
- Pollutant source assessments, including a list of potential pollutant sources and identification of site areas where additional BMPs are necessary to reduce or prevent pollutants in stormwater and authorized non-stormwater discharges, per the minimum requirements when developing the pollutant source assessment;
- Description of site-specific BMPs implemented to reduce or eliminate stormwater pollution;
- Where not otherwise required to be under a Regional Water Quality Control Board (Regional Water Board) permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated;
- Site BMPs are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges from construction activity to the Best Available Technology/Best Control Technology (BAT/BCT) standard; and;
- Stabilization BMPs are installed to reduce or eliminate pollutants after construction is completed are effective and maintained; and
- Calculations and design details, as well as BMP controls, are complete and correct.

The Russ Creek and Centerville Slough Restoration project (Project, or Site) comprises approximately 1,480 Acres, of which 960 will be disturbed. The Project is located four miles west of downtown Ferndale, California. The Project Area includes the Eel River Estuary Preserve (EREP) owned by The Wildlands Conservancy (TWC) and various parcels privately owned by Russ Ranch and Timber, L.L.C. (RR&T), the Linda S Russ Revocable Trust, Harville Ranch L.L.C. , the O'Rourke Foundation (ORF) and Randy Rayl & Rosemay Halley's property. The project will be excavated by the Contractor. The project's location is shown on the Site Maps in Appendix A.

1.2 PERMIT REGISTRATION DOCUMENTS

Required Permit Registration Documents (PRDs) shall be submitted to the State Water Board via the Stormwater Multi Application and Report Tracking System (SMARTS) by the LRP or DAR. The project-specific PRDs include (2022 CGP Section III.A):

1. Notice of Intent (NOI);
2. Risk Level Determination (Construction Site Sediment and Receiving Water Risk Determination);
3. Site Drawings and Map;
4. SWPPP;
5. Applicable plans, calculations, and other supporting documentation for compliance with the Phase I or Phase II municipal separate storm sewer system (MS4) post construction requirements or the post-construction standards of the 2022 CGP;
6. Dewatering Plan
7. Annual Fee per the current 23 California Code of Regulations Chapter 9 fee schedule for National Pollutant Discharge Elimination System (NPDES) stormwater permits; and
8. Signed Certification Statement (LRP Certification is provided electronically with SMARTS PRD submittal).

Site Maps can be found in Appendix A. A copy of the submitted PRDs shall also be kept in Appendix B along with the Waste Discharge Identification (WDID) confirmation.

1.3 SWPPP AVAILABILITY AND IMPLEMENTATION

The SWPPP will be available at the construction site during working hours list on the title sheet and Section 7.5, while construction is occurring and shall be made available upon request by a federal, state, or municipal inspector. A current copy of the site-specific SWPPP and any site inspection reports required by the 2022 CGP may be kept in electronic format at the site so long as the information requested by a federal, state, or municipal inspector can be made available during an inspection. Legible maps in hard copy must be available at the site (2022 CGP Section IV.O.1.).

The SWPPP must be implemented at the appropriate level to protect water quality at all times throughout the life of the project. The SWPPP must remain on the site during construction activities, commencing with the initial mobilization and ending with the termination of coverage under the 2022 CGP.

1.4 SWPPP AMENDMENTS

SWPPP changes or amendments will be uploaded through SMARTS within 30 calendar days. The SWPPP will be revised when:

- If there is a 2022 CGP violation (2022 CGP Section VI.Q.1);
- There is a reduction or increase in total disturbed acreage (2022 CGP Section III.F.2 and F.4.);
- BMPs are not effective and are not resulting in a reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges (2022 CGP Section VI.Q.1 and Attachment D Section III.C.5);

- There is a change in the project duration that changes the project's risk level (2022 CGP Section III.F.1); or
- Dischargers with projects where all construction activities (including passive treatment, active treatment systems, and/or active equipment) will be suspended for 30 days or more (2022 CGP Section III.G.).

Additionally, the SWPPP will be amended when:

- There is a change in construction or operations that may affect the discharge of pollutants to surface waters, groundwater(s), or a municipal separate storm sewer system (MS4) (2022 CGP Sections IV.O. and VI.Q.1); or

When deemed necessary by the QSD. The QSD has determined that the changes listed in Table 1-1 can be field determined by the QSP. All other changes will be made by the QSD as formal amendments to the SWPPP. Note that the 2022 CGP requires that the QSD revise the SWPPP to address potential problems identified by visual inspections, sampling data, comments from a QSP, or their own site observations (2022 CGP Section V.C.2.).

The following items shall be included in each amendment:

- Who requested the amendment;
- The location of proposed change;
- The reason for change;
- The original BMP(s) proposed, if any;
- The new BMP(s) proposed; and
- QSD certification.

SWPPP amendments will be logged at the front of the SWPPP and SWPPP Amendment QSD certifications will be located in Appendix C. The SWPPP text will be revised, replaced and/or hand annotated as necessary to properly convey the amendment. SWPPP amendments must be made by a QSD. The following changes have been designated by the QSD as "to be field determined" and constitute minor changes that the QSP may implement based on field conditions.

Table 1-1 List of Changes to be Field Determined

Candidate changes for field location or determination by QSP (1)	Check changes that can be field located or field determined by QSP
Increase quantity of an Erosion or Sediment Control Measure	*X*
Relocate/add stockpiles or stored materials	*X*
Relocate or add toilets	*X*
Relocate vehicle storage and/or fueling locations	*X*
Relocate areas for waste storage	*X*
Relocate water storage and/or water transfer location	*X*

Table 1-1 List of Changes to be Field Determined

Candidate changes for field location or determination by QSP (1)	Check changes that can be field located or field determined by QSP
Changes to access points (entrance/exits)	*X*
Change type or location of Erosion or Sediment Control Measure	*X*
Minor changes to schedule or phases	*X*
Changes in construction materials	*X*
(1) Any field changes not identified for field location or field determination by the QSP must be made as an amendment by the QSD.	

1.5 RETENTION OF RECORDS

Paper or electronic records of documents required by this SWPPP will be retained for a minimum of three years from the date generated or date submitted, whichever is later, for the following items:

- SWPPP;
- Visual monitoring reports;
- Sampling equipment calibration records;
- pH and turbidity sampling field sheets; and
- Analytical laboratory reports

These records will be available at the Site until construction is complete. Records assisting in the determination of compliance with the 2022 CGP will be made available within a reasonable time to the Regional Water Board, State Water Board, or U.S. Environmental Protection Agency (EPA) upon request. Requests by the Regional Water Board for retention of records for a period longer than three years will be adhered to.

1.6 REPORTING

Completed inspection checklists are not required to be submitted to the Regional Water Board. However, completed inspection checklists will be kept with the SWPPP on-site or electronically. The 2022 CGP requires that permittees prepare, certify, and electronically submit an Annual Report no later than September 1 of each year. Reporting requirements are identified in 2022 CGP Section VI.P. Annual reports will be filed in SMARTS and in accordance with information required by the online forms.

Planned changes in site construction activities that may result in non-compliance with the 2022 CGP are required to be provided in writing to the Regional Water Board and local stormwater agency in advance of the changes.

If a 2022 CGP discharge violation occurs, the QSP will immediately notify the LRP. The LRP will include information on the violation with the Annual Report. Corrective measures will be implemented immediately following identification of the discharge or written notice of non-compliance from the Regional Board. Discharges and corrective actions must be documented and include the following items:

- The date, time, location, nature of operation, and type of unauthorized discharge;

- The cause or nature of the notice or order;
- The BMPs deployed before the discharge event, or prior to receiving notice or order; and
- The date of deployment and type of BMPs deployed after the discharge event, or after receiving the notice or order, including additional measures installed or planned to reduce or prevent re-occurrence.

Results of (pH and turbidity, etc.) monitoring will be electronically submitted through SMARTS for all field sampling results within 30 days of the completion of the precipitation event or within 10 days if the field sampling results demonstrate the exceedance of the pH and/or turbidity NALs. See Section 7.7.2.7 for additional discussion of the reporting requirements.

Reporting requirements for pH and turbidity Receiving Water Monitoring Triggers are discussed in Section 7.7.2.7.

Results of non-visible pollutant monitoring and corrective actions will be electronically submitted within 30 days after obtaining analytical results or within 10 days if the analytical results demonstrate the exceedance of an applicable TMDL-related NAL or NEL or Basin Plan parameter. See Section 7.7.1.7 for additional discussion of the reporting requirements.

A NAL exceedance report will be prepared when requested, in writing, by the Regional Water Board.

In the event of a TMDL NEL exceedance, by the end of each reporting year the project will submit and certify, in SMARTS, documentation of the site assessment, SWPPP evaluation, and implementation of the corrective actions.

Results of monitoring (pH, turbidity, flowrate, volume discharged, and freeboard storage) will be electronically submitted monthly during the project. See the ATS Plan for additional discussion of the reporting requirements.

In the event of an ATS NEL exceedance results will be electronically certified and submitted to SMARTS within 24-hours of obtaining the results.

The Regional Water Board will be notified via email 24 hours prior to the beginning of a planned dewatering discharge.

In the event of an emergency dewatering, the Regional Water Board and applicable MS4 are to be notified within 24 hours of a discharge occurring. An emergency is defined as the need to protect human life and health or prevent severe property damage.

Results of (pH and turbidity, etc.) monitoring will be electronically submitted through SMARTS for all field sampling results within 30 days of the completion of the precipitation event or within 10 days if the field sampling results demonstrate the exceedance of the pH and/or turbidity NALs.

See Section 7.7.4.5 for additional discussion of the reporting requirements including contacts for Regional Water Board and MS4 notifications.

A Passive Treatment Plan will be submitted electronically 14 days before passive treatment chemicals are used on site. See the Passive Treatment Plan for additional discussion of the reporting requirements.

1.7 CHANGES TO PERMIT COVERAGE

The 2022 CGP allows for the reduction or increase of the total acreage covered under the 2022 CGP when: a portion of the project is complete and/or conditions for termination of coverage

have been met; when ownership of a portion of the project is purchased by a different entity; or when new acreage is added to the project.

Modified PRDs will be filed electronically through a Change of Information (COI) within 30 days of a reduction or increase in total disturbed area if a change in permit-covered acreage is to be sought. The SWPPP will be modified appropriately and will be logged at the front of the SWPPP. SWPPP Amendments QSD Certifications will be located in Appendix C. COIs submitted electronically via SMARTS can be found in Appendix D.

1.8 NOTICE OF TERMINATION

A Notice of Termination (NOT) must be submitted electronically by the LRP or DAR via SMARTS to terminate coverage under the 2022 CGP.

According to the requirements of 2022 CGP Section III.H.4., the following final stabilization method will be used to satisfy final stabilization condition requirements:

70 percent final cover method supported by pre- and post-project photographs demonstrating stabilization.

The Regional Water Board will consider a construction site complete when the conditions of the 2022 CGP Section III.H., have been met.

The discharger is required to submit the following in SMARTS:

- NOT SMARTS Form;
- QSP-prepared final NOT inspection which includes the QSP name and valid QSP certificate number;
- Final site map with photo orientation references;
- Photos demonstrating final stabilization and the applicable post-construction BMPs and/or low impact development; and
- A long-term maintenance plan for the post-construction stormwater runoff BMPs and/or low impact development features being implemented.

According to the 2022 CGP, the NOT will be automatically approved within 30 calendar days after the date the NOT was submitted, unless, within the 30 calendar days the Regional Water Board notifies the discharger through SMARTS that the Notice of Termination has been denied, returned, or accepted for review (2022 CGP Section III.H.7).

Note: If an Annual Report has not been filed in the current reporting year, an Annual Report will need to be submitted prior to the NOT.

Section 2 Project Information

2.1 PROJECT AND SITE DESCRIPTION

2.1.1 Site Description

The Russ Creek and Centerville Slough Restoration project site is Risk Level II that comprises approximately 1,480 Acres and is located at 770 Russ Lane, in Ferndale, California. The project site is located approximately four miles West of downtown Ferndale. The project site is located just south of the Eel River estuary. The project is located at4 0.59163754041502 Lat, -124.31539631572006 Long and is identified on the Site Map in Appendix A.

2.1.2 Existing Conditions

Historically, much of the Project Area was comprised of estuarine salt marsh and a network of tidal channels including Centerville Slough, which extended from the mouth of the Eel River to base of the Wildcat Hills. Beginning in the 1860's, the Russ Family began developing the area for agricultural purposes. This development included draining, diking and channelizing the existing sloughs and channels. An extensive system of dikes and floodgates was installed to achieve flood protection and different variations occurred over the last 150 years.

As of the initial date of this SWPPP, the project site's landscape is largely developed. The current flood control infrastructure includes a dike extending from the sand dunes in the northern portion of the Project Area extending east and finally ending approximately three miles to the southeast. The conversion from estuarine salt marsh to agricultural land resulted in a reduction in tidal prism, and in combination with sedimentation from freshwater tributaries, including Russ Creek and Shaw Creek, contributed to the infilling and narrowing of Centerville Slough to its present-day extent. Within the Project Area, a complex system of dikes, tide gates and drainage ditches enable multiple land managers to graze livestock in pastures. Tributaries and tidal channels drain northward across numerous APNs. EREP includes agricultural (grazing) land, tidal salt marsh, brackish marsh, riparian scrub, sloughs/open water channels, freshwater ponds and ditches, and nearshore dune ridges and swales. Russ Ranch and Timber, LLC, and the Linda S Russ Revocable Trust, own the parcels immediately south of EREP, which include grazing land with managed ditches, open water channels and mixed freshwater and brackish marsh and dunes.

2.1.3 Existing Drainage

The west side of the Project Area encompasses the near shore dunes extending from Centerville Beach to the mouth of the Eel River. East of the dunes, the Project Area supports a system of sloughs and pastures that comprise a portion of the Salt River watershed, itself a tributary to the Eel River estuary. The northern Project Area borders the Eel River. The southern half of the Project Area includes several perennial tributary streams draining from the Wildcat Hills including Russ Creek, Shaw Creek, a seasonal drainage referred to as Creamery Ditch, and an unnamed tributary. Much of the southern half of the Project east of the former Centerville Slough was reclaimed and has been converted to pasture for agricultural purposes. The Project Area also includes diked former tidelands that are separated from the estuarine wetlands by a series of dikes and the Cutoff Slough tide gate.

The elevation of the project site ranges from 0.0' to 30.0' feet NAVD88. Surface drainage at the site currently flows to the North, towards the mouth of the Eel River. Stormwater is conveyed through, surface runoff, drainage ditches, tributaries, Sloughs and the Eel River. Existing site

topography, drainage patterns, and stormwater conveyance systems are shown on SWPPP Site Maps and sheet C-019 in the design plans in Appendix A.

The project site discharges to the Eel River. The water quality impairments (303 (d) list and TMDLs identified in the 2022 CGP Table H-1 for the receiving waters are identified in the Table 2-1.

Table 2-1 Applicable 303(d) List Impairments and TMDLs

Receiving Water	Water Quality Impairment	
	303(d) list	TMDL (2022 CGP Table H-1)
Eel River – Lower Main	Sediment	Sediment
Eel River – Lower Main	Temperature	Temperature

2.1.4 Geology and Groundwater

Based on geotechnical report by LACO and Associates dated December 12, 2016 and a review of published geologic maps (Ogle, 1953; CDMG, 1984; McLaughlin et al, 2000, Dibblee, 2008), much of the project site is underlain by Holocene aged (11,700 years old to present) flood plain and stream channel deposits dissected by active stream and slough channels. These sediments are described as unconsolidated gravel, sand, silt and clay. The western edge of the site is mapped as underlain by Holocene aged marine shoreline and aeolian deposits. These sediments are described as unconsolidated gravel and sand deposits on beaches and on dunes along present shorelines.

The depth of groundwater beneath the site varies spatially and temporally. Based on the LACO geotechnical report, the depth of groundwater beneath the site varies from approximately -100" to -0" . The groundwater gradient is generally towards the north.

2.1.5 Project Description

Project grading will occur on approximately 575 Acres of the project, which comprises approximately 40% percent of the total area. The limits of grading are shown on the SWPPP Site Map and in the design plans in Appendix A. Grading will include both cut and fill activities, with the total graded material estimated to be 849,400 cubic yards. no fill material will be imported during grading activities. Graded materials are expected to be balanced onsite. Soil will be temporarily stockpiled within the limits of disturbance as shown on Site Maps the SWPPP site map in Appendix A. all stock piles will be removed upon the completion of grading Construction activities. The Project will include barn demolition, levee lowering and removal, Centerville slough channel excavation, construction and reconstruction of a set-back berm, creation of sand dune berms, existing tide gate repairs, new culvert and tide gate installation, and public access improvements. The Project will be phased according to Zoned Earthwork Volumes sheet C-018 in the design plans. The Project will be completed in phases to ensure there is no offsite drainage implications for onsite and adjacent properties.

2.1.6 Developed Condition

Post-construction surface drainage will be directed to north as surface flow through the newly constructed Centerville Slough and will discharge into the Eel River.

Post-construction drainage patterns and conveyance systems are presented on the SWPP Site Map in Appendix A.

Table 2-2 Construction Site Estimates

Construction site area	1,480	acres
Total area of disturbance	960	acres
Percent impervious before construction	0	%
Percent partially impervious gravel before construction	0.5	%
Runoff coefficient before construction		
Percent impervious after construction	0	%
Percent partially impervious gravel after construction	0.5	
Runoff coefficient after construction		

2.2 PERMITS AND GOVERNING DOCUMENTS

In addition to the 2022 CGP, the following documents have been taken into account while preparing this SWPPP:

- Regional Water Board requirements
- Basin Plan requirements
- Contract Documents
- Air Quality regulations and permits
- Federal Endangered Species Act
- National Historic Preservation Act/Requirements of the State Historic Preservation Office
- State of California Endangered Species Act
- Clean Water Act Section 401 Water Quality Certifications and 404 Permits
- CA Department of Fish and Game 1600 Streambed Alteration Agreement
- California Ocean Plan
- State Water Board GeoTracker database (GeoTracker)

2.3 STORMWATER RUN-ON FROM OFFSITE AREAS

Run-on to the site is generated by multiple creeks and sloughs. Perennial tributary streams draining from the Wildcat Hills contribute to site run-on, including Russ Creek, Shaw Creek, a seasonal drainage referred to as Creamery Ditch, and an unnamed tributary. Centerville Slough, Cut-off slough, and Jack slough also contribute to site drainage.

The rainfall runoff model was developed for pre and post construction conditions. The hydraulic analysis and model results are included in Appendix L

The 2022 CGP requires that temporary BMPs be implemented to direct offsite run-on away from disturbed areas through the use of runoff controls. The following BMPs will be implemented; temporary coffer dams.

Temporary coffer dams will be located at the outlet of Centerville slough at the northern project boundary, on Jack Slough near the Salt River, on the outer Cutoff Slough in between the tide gate and the Salt River, on Cut-off Slough just upstream of the tide gate, on Centerville slough at the eastern project boundary, on Centerville slough near the bridge and tide gate, on Russ Creek, at the confluence of Shaw Creek and Creamery Ditch, and at the existing concrete culvert at the southern project boundary. The off-site drainage areas and associated stormwater conveyance facilities or BMPs are shown on the SWPPP Site Map in Appendix A.

2.4 FINDINGS OF THE CONSTRUCTION SITE SEDIMENT AND RECEIVING WATER RISK DETERMINATION

A construction site risk assessment has been performed for the project and the resultant risk level is Risk Level 2.

The risk level was determined through the use of the sediment risk and the receiving waters risk. Sediment risk was identified through determination of the rainfall erosivity factor (R), the soil erodibility factor (K), and the length-slope factor (LS). EPA's Rainfall Erosivity Factor Calculator for Small Construction Sites was used to identify the rainfall erosivity factor provided project duration and location. Soil erodibility and length-slope factors were determined using California Water Boards 2022 Construction Stormwater General Permit Map Tools for each factor, respectively. The risk level is based on project duration, location, proximity to impaired receiving waters, and soil conditions. A copy of the Risk Level determination submitted on SMARTS with the PRDs is included in Appendix B.

Table 2-3 and Table 2-4 summarize the sediment and receiving water risk factors and document the sources of information used to derive the factors.

Table 2-3 Summary of Sediment Risk

RUSLE Factor	Value	Method for Establishing Value
R	11.54	EPA's Rainfall Erosivity Factor for Small Construction Sites
K	0.42	California Water Boards 2022 Construction Stormwater General Permit Soil Erodibility (K) Factor Map Tool
LS	1.19	California Water Boards 2022 Construction Stormwater General Permit Length-Slope (LS) Factor Map Tool
Total Predicted Sediment Loss (tons/acre)		**5.8**
Overall Sediment Risk Low Sediment Risk < 15 tons/ acre Medium Sediment Risk >= 15 and < 75 tons/acre High Sediment Risk >= 75 tons/acre		☒ **Low** ☐ **Medium** ☐ **High**

Runoff from the project site discharges into slough channels that discharge into the Eel River and eventually into the Pacific Ocean.

Table 2-4 Summary of Receiving Water Risk

Receiving Water Name	303(d) Listed for Sediment Related Pollutant (1)	TMDL for Sediment Related Pollutant (1)	Beneficial Uses of COLD, SPAWN, and MIGRATORY (1)
Eel River	☒ Yes ☐ No	☒ Yes ☐ No	☒ Yes ☐ No
Overall Receiving Water Risk			☐ **Low** ☒ **High**
(1) If yes is selected for any option the Receiving Water Risk is High			

Risk Level 2 sites are subject to both the narrative effluent limitations and numeric action limitations (NALs). The narrative effluent limitations require stormwater discharges associated with construction activity to minimize or prevent pollutants in stormwater and authorized non-stormwater through the use of controls, structures and best management practices (BMPs). Discharges from Risk Level 2 site are subject to NALs for pH and turbidity shown in Table 2-5. This SWPPP has been prepared to address Risk Level 2 requirements (2022 CGP Attachment D).

Table 2-5 Numeric Action Levels and Numeric Effluent Limits

Parameter	Unit	Numeric Action Level	Numeric Effluent Limit
pH	pH units	Lower NAL < 6.5 Upper NAL > 8.5	Not Applicable
Turbidity	NTU	> 250 NTU	Not Applicable

Projects that discharge to a water body and or watershed listed in Table H-2 are subject to both the narrative and numeric effluent limitations imposed by the TMDL requirements in Attachment H. This SWPPP has been prepared to address the TMDL requirements (2022 CGP Attachment H).

2.5 CONSTRUCTION SCHEDULE

The site sediment risk was determined based on construction taking place between June 15th 2026 to October 15th 2026 and June 15th to October 15th 2027. Modification or extension of the schedule (start and end dates) may affect risk determination and permit requirements. The LRP shall contact the QSD if the schedule changes during construction to address potential impact to the SWPPP. The estimated schedule for planned work can be found in Appendix E. Land disturbing activities to be completed as part of this project near receiving waters includes excavation and placement of fill.

2.6 POTENTIAL CONSTRUCTION ACTIVITY AND POLLUTANT SOURCES

Appendix F includes a list of construction activities and associated materials that are anticipated to be used onsite as well as the pollutant source assessment form that was completed for the project. These activities and associated materials will or could potentially contribute pollutants, other than sediment, to stormwater runoff.

The anticipated activities and associated pollutants were used in Section 3 to select the BMPs for the project. Locations of anticipated pollutants and associated BMPs are shown on the Site Map in Appendix A.

Additionally, proper measures will be taken to ensure that trench spoils or any other soils disturbed during construction activities that are contaminated are not discharged with stormwater or non-stormwater discharges into storm drains or water bodies (except pursuant to a separate NPDES Permit). If contaminated soils are found on site, and the responsible party cannot be identified or fails to take action, soils will be sampled to determine proper handling and protect public safety. The appropriate local, State, and federal agencies along with the appropriate Regional Water Board will be notified when contaminated soils are observed.

For sampling requirements for non-visible pollutants associated with construction activity, please refer to Section 7.7.1. For a full and complete list of onsite pollutants, refer to the Safety Data Sheets (SDS), which are retained onsite at the construction trailer or are available electronically at the site.

2.7 TMDL REQUIREMENTS

Based on the project's receiving water and the pollutant source assessment, the following TMDLs are applicable to the project (See 2022 CGP Attachment H).

Applicable Water Body/ Watershed	Pollutants	Additional TMDL-Related NAL or NEL	Compliance Actions
Eel River – Lower Main	Sediment	250 NTU	Comply with General Permit and Erosion and Sediment Control BMPs
Eel River – Lower Main	Temperature	None	Comply with General Permit

These TMDLs are also identified in Section 2.1.3. The applicable NALs and NELs are also identified in Section 2.4. BMP requirements related to TMDLs are discussed in Section 3.4. Monitoring requirements related to TMDLs are discussed further in Section 7.7.

2.8 IDENTIFICATION OF NON-STORMWATER DISCHARGES

Non-stormwater discharges into storm drainage systems or waterways, which are not authorized under the 2022 CGP and listed in the SWPPP, or authorized under a separate NPDES permit, are prohibited.

Non-stormwater discharges that are authorized from this project site include the following:

- Dust control water

These authorized non-stormwater discharges will be managed with the stormwater and non-stormwater BMPs described in Section 3 of this SWPPP and will be minimized under the direction of the QSP. Additionally, the non-stormwater discharges not applicable to this project are still allowable granted they do not contact potential pollutant sources.

Activities at this site that may result in unauthorized non-stormwater discharges include:

- None

Steps will be taken, including the implementation of appropriate BMPs, to ensure that unauthorized discharges are eliminated, controlled, disposed, or treated on-site.

Discharges of construction materials and wastes, such as fuel or paint, resulting from dumping, spills, or direct contact with rainwater or stormwater runoff, are also prohibited.

The following discharge(s) have been authorized by (a) regional NPDES permit(s):

- None

2.9 REQUIRED SITE MAP INFORMATION

The construction project's Site Map(s) showing the project location, surface water boundaries, geographic features, construction site perimeter and general topography, locations of storm drain inlets that receive runoff from the project, and other requirements identified in 2022 CGP Sections IV.O.2. k. and l are located in Appendix A. Table 2-9 identifies Maps or Sheet Nos. where required elements are illustrated.

Table 2-9 Required Map Information

Included on Map/Plan Sheet No. [1]	Required Element
Pre-Earthwork Drawings	
G-001	Site and project boundaries
Not applicable	Areas disturbed during geotechnical or other preconstruction investigation work
C-002 – C-004	Existing roads and trails
C-019 & SWPPP Site Map	Drainage areas
C-019 & SWPPP Site Map	Discharge locations
Not applicable	Existing storm drain system if applicable
SWPPP Site Map	Proposed locations of storage areas for waste
SWPPP Site Map	Proposed locations of construction materials
SWPPP Site Map	Proposed locations of project staging areas

Table 2-9 Required Map Information

Included on Map/Plan Sheet No. [1]	Required Element
C-101 – C-116 & SWPPP Site Map	Proposed locations of stockpiles
SWPPP Site Map	Proposed locations of vehicles, equipment staging and vehicle maintenance
SWPPP Site Map	Proposed locations of loading/unloading materials
C-001 & SWPPP Site Map	Proposed locations of site access (entrance/exits)
SWPPP Map	Proposed locations of fueling, water storage, water transfer for dust control
C-015 – C-017	Proposed locations of demolition
SWPPP Map	Proposed locations of other construction support activities
Construction and Earthwork Drawing(s)	
C-101 – C-116	Site layout (grading plans) including roads
G-001	Site and project boundaries
C-019 & SWPPP Site Map	Drainage areas
C-019 & SWPPP Site Map	Discharge locations
SWPPP Site Map	Sampling locations
C-101 – C-116	Areas of soil disturbance (temporary or permanent)
C-101 – C-116	Proposed active areas of soil disturbance (cut or fill)
SWPPP Site Map	Proposed locations of erosion control BMPs
SWPPP Site Map	Proposed locations of sediment control BMPs
SWPPP Site Map	Proposed locations of run-off BMPs
Not applicable	Temporary and/or permanent run-on conveyance (if applicable)
Not applicable	Proposed locations of active treatment systems(s) (if applicable)
SWPPP Site Map	Proposed locations of storage areas for waste
SWPPP Site Map	Proposed locations of construction materials
SWPPP Site Map	Proposed locations of project staging areas
C-101 – C-116 & SWPPP Site Map	Proposed locations of stockpiles
SWPPP Site Map	Proposed locations of vehicles, equipment and vehicle maintenance

Table 2-9 Required Map Information

Included on Map/Plan Sheet No. (1)	Required Element
SWPPP Site Map	Proposed locations of loading/unloading materials
C-001 & SWPPP Site Map	Proposed locations of site access (entrance/exits)
SWPPP Site Map	Proposed locations of fueling, water storage, water transfer for dust control
C-015 – C-017	Proposed locations of demolition
SWPPP Site Map	Proposed locations of other construction support activities
C-501 - C-508 & SWPPP Site Map	Site-specific procedures to implement final stabilization BMPs as soon as reasonably practicable

Notes: (1) Indicate maps or drawings that information is included on (e.g., Vicinity Map, Site Map, Drainage Plans, Grading Plans, Progress Maps.)

Section 3 Best Management Practices

3.1 SCHEDULE FOR BMP IMPLEMENTATION

BMPs will be implemented as per the schedule indicated in Table 3-1. [Include additional descriptions of significant land disturbing activities and work near drainages or receiving water.]

	BMP	Implementation	Duration
Erosion Control BMPs	EC-1, Scheduling	Prior to Construction	Entirety of Project
	EC-2, Preservation of Existing Vegetation	Start of Construction	Entirety of Project
	EC-3 ,Hydraulic Mulch or EC-6 Straw Mulch	End of Construction	Permanent
	EC-4, Hydroseeding	End of Construction	Permanent
	EC-7 ,Geotextile and Mats	During Construction	Permanent
	EC-9, Earth Dikes and Drainage Swales	During Construction	Entirety of Project
	EC-15, Soil Preparation	During Construction	Permanent
Sediment Control BMPs	SE-1, Silt Fence	During Construction	Entirety of Project
	SE- 5, Fiber Rolls	During Construction	Permanent
	SE -7, Street Sweeping and Vacuuming	During Construction	Entirety of Project
Wind Erosion Control BMPs	WE-1, Wind Erosion Control	During Construction	Entirety of Project
Tracking Control BMPs	TC-1, Stabilized Construction Entrance/ Exit	During Construction	Entirety of Project
	TC-2, Stabilized Construction Roadway	During Construction	Entirety of Project
Non-Stormwater Control BMPs	NS-2, Dewatering Operations	Start of Construction	Entirety of Project
	NS-5, Clear Water Diversion	Start of Construction	Entirety of Project
	NS-6, Illicit Connection/Discharge	During Construction	Entirety of Project
	NS-8, Vehicle and Equipment Cleaning	During Construction	Entirety of Project
	NS-9, Vehicle and Equipment Fueling	During Construction	Entirety of Project

	BMP	Implementation	Duration
	NS-10, Vehicle & Equipment Maintenance	During Construction	Entirety of Project
	NS-11, Pile Driving Operation	During Construction	Entirety of Project
	NS-12, Concrete Curing	During Construction	Entirety of Project
	NS-14, Material and Equipment use over water	During Construction	Entirety of Project
	NS-15 Demolition Adjacent to Water	During Construction	Entirety of Project
Material & Waste Management Control BMPs	WM-1, Material Delivery and Storage	During Construction	Entirety of Project
	WM-2, Material Use	During Construction	Entirety of Project
	WM-3 Stockpile Management	During Construction	Entirety of Project
	WM-4, Spill Prevention and Control	During Construction	Entirety of Project
	WM-5, Solid Waste Management	During Construction	Entirety of Project
	WM-6, Hazardous Waste Management	During Construction	Entirety of Project
	WM-7, Contaminated Soil Management	During Construction	Entirety of Project
	WM-8, Concrete Waste Management	During Construction	Entirety of Project
	WM-9, Sanitary/Septic Waste Management	During Construction	Entirety of Project
	WM-10, Liquid Waste Management	During Construction	Entirety of Project

3.2 EROSION AND SEDIMENT CONTROL

Erosion and sediment controls are required by the 2022 CGP to provide effective reduction or elimination of sediment related pollutants in stormwater discharges and authorized non-stormwater discharges from the Site. Applicable BMPs are identified in this section for erosion control, sediment control, tracking control, and wind erosion control.

3.2.1 Erosion Control

Erosion control, also referred to as soil stabilization, consists of source control measures that are designed to prevent soil particles from detaching and becoming transported in stormwater runoff. Erosion control BMPs protect the soil surface by covering and/or binding soil particles.

This construction project will implement the following practices to provide effective temporary and final erosion control during construction:

1. Preserve existing vegetation where required and when feasible.
2. The area of soil disturbing operations shall be controlled such that the Contractor is able to implement erosion control BMPs quickly and effectively.
3. Stabilize non-active areas within 14 days of cessation of construction activities or sooner if stipulated by local requirements.
4. Control erosion in concentrated flow paths by applying erosion control blankets, check dams, erosion control seeding, or alternate methods.
5. Prior to the completion of construction, apply permanent erosion control to remaining disturbed soil areas.

Sufficient erosion control materials shall be maintained onsite to allow implementation in conformance with this SWPPP.

The following erosion control BMP selection table, Table 3-2 indicates the BMPs that will be implemented to control erosion on the construction site. Fact Sheets for temporary erosion control BMPs are provided in Appendix G.

These temporary erosion control BMPs shall be implemented in conformance with the following guidelines and as outlined in the BMP Factsheets provided in Appendix G. If there is a conflict between documents, the Site Map will prevail over narrative in the body of the SWPPP or guidance in the BMP Fact Sheets. Site specific details in the Site Map prevail over standard details included in the Site Map. The narrative in the body of the SWPPP prevails over guidance in the BMP Fact Sheets.

Table 3-2 Erosion Control BMPs

CASQA Fact Sheet	BMP Name	Considered for the Project [1]	BMP Used		If not used, state reason and alternate BMP, if applicable
			YES	NO	
EC-1	Scheduling	✓	x		
EC-2	Preservation of Existing Vegetation	✓	x		
EC-3	Hydraulic Mulch	✓[2]	x		
EC-4	Hydroseed	✓[2]	x		
EC-5	Soil Binders	✓[2]		x	Using Seed, Hydromulch, straw mulch, or geotextile
EC-6	Straw Mulch	✓[2]	x		
EC-7	Geotextiles and Mats	✓[2]	x		
EC-8	Wood Mulching	✓[2]		x	Using Hydromulch or straw mulch
EC-9	Earth Dike and Drainage Swales	✓[3]	x		
EC-10	Velocity Dissipation Devices	✓[3]	x		
EC-11	Slope Drains	✓[3]		x	No steep slopes in areas of surface runoff
EC-12	Stream Bank Stabilization		x		
EC-14	Compost Blankets	✓[2]		x	Topsoil will be suitable for hydroseeding
EC-15	Soil Preparation-Roughening	✓	x		
EC-16	Non-Vegetated Stabilization	✓[2]		x	Stabilizing with vegetation
WE-1	Wind Erosion Control	✓	x		

[1] The 2022 CGP Fact Sheet Section I.R.1.d.through I.R.1.i.describes various BMPs that should be considered for use on the construction site.
[2] The QSD shall ensure implementation of one of the minimum measures listed or a combination thereof to achieve and maintain the Risk Level requirements.
[3] All run-on and runoff from the construction site shall be managed for Risk Level 2 and 3 and Risk Level 1 if the evaluation of quantity and quality of run-on and runoff deems them necessary or visual inspections show that the site requires these controls. Run-on from offsite shall be directed away from all disturbed areas, diversion of offsite flows may require design/analysis by a licensed civil engineer and/or additional environmental permitting.

Scheduling

The site shall be secured with various BMPs employed as appropriate to minimize erosion and prevent sediment discharge from the project site in the event of summer rainstorms, when rainfall is forecast, or at the latest by October 15th. When rainfall is forecast, the construction schedule shall be adjusted by the Contractor to allow the implementation of erosion and sediment controls on all disturbed areas prior to the onset of rains.

The Contractor shall be prepared year-round to deploy erosion and sediment control and sediment treatment control practices. Erosion may be caused during the dry season by unseasonal rains, winds, and vehicle tracking. Keep the site stabilized year-round, and retain and maintain rainy season sediment trapping devices in operational condition.

Routinely verify that the work is progressing in accordance with the schedule. If progress deviates, take corrective actions to ensure that the work is completed prior to the onset of the rainy season, if at all possible. Additional guidelines on scheduling can be found on BMP Fact Sheet EC-1 in Appendix G.

Preservation of Existing Vegetation

Vegetation removal and other construction activities shall be restricted to the minimum area necessary to complete the project. This work should be phased when practical to minimize disturbed areas Additional guidelines on preservation of existing vegetation can be found on BMP Fact Sheet EC-2 in Appendix G.

Hydraulic Mulch

Hydraulic mulching will be used for areas of disturbed soils where continued earthwork and heavy traffic is not anticipated. Hydraulic mulch may be substituted for EC-6 Staw Mulch. Hydraulic mulching must be applied in conjunction with EC-4, hydroseed application. Additional guidelines on hydraulic mulch can be found on BMP Fact Sheet EC-3 in Appendix G.

Hydroseed

Hydroseeding will be used for areas of disturbed soils where continued earthwork and heavy traffic is not anticipated. All areas of soil disturbance shall be seeded and mulched in accordance to the plans and specifications. Hydroseed must be applied in conjunction with EC-6 hydraulic mulch, EC-3 straw mulch, or EC-7 geotextile fabric. Seeding & mulching should be done at an adequate time to develop a uniform cover (70% or greater) before the seasonal rains begin. If this is not possible at the site due to the construction schedule of the project, the Contractor shall implement temporary soil stabilization measures until the vegetative cover develops. The Contractor shall consider measures such as: covering with mulch, temporary seeding/vegetation, soil stabilizers, binders, fiber rolls, blankets, or permanent seeding.

Seeding and mulching should be done as soon as operations are completed. Proper and timely attention shall be taken to avoid erosion. Erosion control and seed establishment can be enhanced with the use of surface roughening followed by seeding and mulching. Additional guidelines on hydroseed can be found on BMP Fact Sheet EC-4 in Appendix G.

Straw Mulch

Straw mulching will be used for areas of disturbed soils where continued earthwork and heavy traffic is not anticipated. Straw mulch must be applied in conjunction with hydroseed application. Straw mulch may be substituted for EC -3 Hydro mulch. Additional guidelines on straw mulch can be found on BMP Fact Sheet EC-6 in Appendix G.

Geotextiles and Mats

Natural geotextile fabric (biodegradable erosion control product) will used to maintain soil stability and reduce sediment erosion along the streambank in sections of Russ Creek and Russ Slough. The geotextile fabric must be used in conjunction with EC-4 hydroseeding. Additional guidelines on geotextile and mats can be found on BMP Fact Sheet EC-7 in Appendix G.

Earth Dike and Drainage Swales

Temporary earth dikes will be constructed from compacted soil and will be located around the perimeter of the optional marsh plain fill areas. Dikes will be used to contain potential sediment migration in these areas. Additional guidelines on earth dike and drainage swales can be found on BMP Fact Sheet EC-9 in Appendix G.

Velocity Dissipation Devices

Velocity dissipation devices will be used at the outlet of any high velocity clear water diversions. It will be composed of rock or sandbags. Dissipation devices will be used to prevent scour of the soil caused by concentrated high velocity flows. Additional guidelines on velocity dissipation devices can be found on BMP Fact Sheet EC-10 in Appendix G.

Stream bank Stabilization

Stream bank stabilization will occur along newly graded sections Russ Creek and Russ Slough. Stream bank stabilization measures will include EC-7 geotextile and mats and EC-4 hydroseed. Additional guidelines on stream bank stabilization can be found on BMP Fact Sheet EC-12 in Appendix G.

Soil Preparation-Roughening

Soil preparation and/or roughening will be used in conjunction with revegetation efforts or other soil stabilization methods. Soil preparation or roughening must take place prior to placement of other BMPs. Soil preparation includes tilling, raking, and amendment, and soil roughening includes mechanical methods such as sheepsfoot rolling, track walking, scarifying, stair stepping, and imprinting. Soil roughening should not compromise slope stability or overall compaction. Additional guidelines on soil preparation and roughening can be found on BMP Fact Sheet EC-15 in Appendix G.

Wind Erosion Control

Wind erosion control will be applied throughout the project duration through the above-mentioned erosion control measures to prevent dust nuisance to provide water quality protection. In circumstances where there are areas of high traffic or ongoing grading activities, wind erosion control measures may include gravel construction entrances and synthetic covers for disturbed materials and stockpiles during grading. Wet suppression shall be used as necessary to minimize dust disturbances, and at least one mobile unit should be available to provide water for dust suppression. Additional guidelines on wind erosion control can be found on BMP Fact Sheet WE-1 in Appendix G.

3.2.2 Sediment Controls

Sediment controls are temporary or permanent structural measures that are intended to complement the selected erosion control measures and reduce sediment discharges from active construction areas. Sediment controls are designed to intercept and settle out soil particles that have been detached and transported by the force of water.

The following sediment control BMP selection table indicates the BMPs that will be implemented to control sediment on the construction site. Fact Sheets for temporary sediment control BMPs are provided in Appendix G.

These temporary sediment control BMPs will be implemented in conformance with the following guidelines and in accordance with the BMP Fact Sheets provided in Appendix G. If there is a conflict between documents, the Site Map will prevail over narrative in the body of the SWPPP or guidance in the BMP Fact Sheets. Site specific details in the Site Map prevail over standard details included in the Site Map. The narrative in the body of the SWPPP prevails over guidance in the BMP Fact Sheets.

Table 3-3 Temporary Sediment Control BMPs

CASQA Fact Sheet	BMP Name	Considered for the Project [1]	BMP used		If not used, state reason and alternate BMP, if applicable
			YES	NO	
SE-1	Silt Fence	✓[2] [3]	x		
SE-2	Sediment Basin			x	Using turbidity curtain
SE-3	Sediment Trap			x	Using turbidity curtain
SE-4	Check Dams			x	Using turbidity curtain
SE-5	Fiber Rolls	✓[2][3]	x		
SE-6	Gravel Bag Berm	✓[3]		x	Using fiber rolls and temporary earth dike
SE-7	Street Sweeping	✓	x		
SE-8	Sandbag Barrier			x	Using fiber rolls and temporary earth dike
SE-9	Straw Bale Barrier			x	Using fiber rolls and temporary earth dike
SE-10	Storm Drain Inlet Protection	✓ RL2&3		x	No drain inlets at site
SE-11	ATS			x	Using temporary earth dike
SE-12	Manufactured Linear Sediment Controls			x	Using temporary earth dike
SE-13	Compost Sock and Berm	✓[3]		x	Using temporary earth dike
SE-14	Biofilter Bags	✓[3]		x	Using fiber rolls
NA	Passive Treatment System			x	Not necessary
TC-1	Stabilized Construction Entrance and Exit	✓	x		
TC-2	Stabilized Construction Roadway		x		
TC-3	Entrance Outlet Tire Wash			x	Using stabilized construction entrance

[1] The 2022 CGPs Fact Sheet Section I.R.1.d through I.R.1.i describes various BMPs that should be considered for use on the construction site.
[2] The QSD shall ensure implementation of one of the minimum measures listed or a combination thereof to achieve and maintain the Risk Level requirements.
[3] All run-on and runoff from the construction site shall be managed. Risk Level 2 and 3 shall provide linear sediment control along toe of slope, face of slope, and at the grade breaks of exposed slope.

Silt Fence

Prior to construction, silt fences shall be installed as necessary and where necessary to reduce sediments from accumulating and traveling off site. At a minimum, this includes the locations shown on the Plans. Silt fences are to be placed along a level contour except at the ends, which should be returned uphill in a "J" hook formation to prevent water and sediment from flowing around the fence.

The silt fencing shall be maintained throughout construction. Repair undercut fences and repair or replace split, torn, slumping, or weathered fabric. Remove and properly dispose of sediment when it reaches one-third of the fence height. Silt fences shall not be removed until the area draining to the silt fence has stabilized and approved by the Owner, and accumulated materials have been removed. Fill and compact post holes, anchorage trench and grade fence alignment to blend with adjacent ground. Additional guidelines on silt fence implementation can be found on BMP Fact Sheet SE-1 in Appendix G.

Fiber Rolls

Fiber roles shall be installed as necessary and where necessary to reduce sediments from accumulating and traveling off site. At a minimum, this includes the locations shown on the Plans and other areas directed by the Construction Manager to prevent rill erosion. Fiber Rolls are to be placed along a level contour except at the ends, which should be returned uphill in a "J" hook formation to prevent water and sediment from flowing around the fiber roll. The fiber roles shall be maintained throughout construction. Additional guidelines on fiber roll implementation can be found on BMP Fact Sheet SE-5 in Appendix G.

Street Sweeping

Street sweeping and vacuuming includes use of self-propelled and walk-behind equipment to remove sediment from streets and roadways, and to clean paved surfaces in preparation for final paving. Sweeping and vacuuming prevents sediment from the project site from entering storm drains or receiving waters. Street sweeping will occur on any paved road where tracking from construction activities occur. Additional guidelines on Steet Sweeping implementation can be found on BMP Fact Sheet SE-7 in Appendix G.

Stabilized Construction Entrance and Exit

Stabilized construction entrance and exits will be used to control sediment tracking from the project site. It should be used where dirt or mud can be tracked onto public roads, adjacent to water bodies, where poor soil is encountered, and where dust is a problem during dry weather conditions. The length of the construction entrance will be 50 ft or the maximum length allowable with the site conditions and a minimum 10 ft width to accommodate traffic. Stabilized construction entrance and exits BMPs will be implemented throughout the duration of the project. Additional guidelines on stabilized construction entrance and exit can be found on BMP Fact Sheet TC-1 in Appendix G

Stabilized Construction Roadway

Temporary construction access roads will be constructed throughout the project to prevent soil erosion and maintain dust control. Additional guidelines on fiber stabilized construction roadways can be found on BMP Fact Sheet TC-2 in Appendix G.

3.3 NON-STORMWATER CONTROLS AND WASTE AND MATERIALS MANAGEMENT

3.3.1 Non-Stormwater Controls

Non-stormwater discharges into storm drainage systems or waterways which are not authorized under the 2022 CGP are prohibited. Non-stormwater discharges for which a separate NPDES permit is required by the local Regional Water Board are prohibited unless coverage under the separate NPDES permit has been obtained for the discharge. The selection of non-stormwater BMPs is based on the list of construction activities with a potential for non-stormwater discharges identified in Section 2.7 of this SWPPP.

The following non-stormwater control BMP selection table indicates the BMPs that will be implemented to control sediment on the construction site. Fact Sheets for temporary non-stormwater control BMPs are provided in Appendix G.

Non-stormwater BMPs will be implemented in conformance with the following guidelines and in accordance with the BMP Fact Sheets provided in Appendix G. If there is a conflict between documents, the Site Map will prevail over narrative in the body of the SWPPP or guidance in the BMP Fact Sheets. Site specific details in the Site Map prevail over standard details included in the Site Map. The narrative in the body of the SWPPP prevails over guidance in the BMP Fact Sheets.

Table 3-4 Temporary Non-Stormwater BMPs

CASQA Fact Sheet	BMP Name	Considered for the Project [1]	BMP used		If not used, state reason and alternate BMP, if applicable
			YES	NO	
NS-1	Water Conservation Practices	✓		x	Not expecting excess water use
NS-2	Dewatering Operation	✓	x		
NS-3	Paving and Grinding Operation			x	No paving operations
NS-4	Temporary Stream Crossing			x	No required stream crossings
NS-5	Clear Water Diversion		x		
NS-6	Illicit Connection/Discharge	✓	x		
NS-7	Potable Water/Irrigation	✓		x	No irrigation required
NS-8	Vehicle and Equipment Cleaning	✓	x		
NS-9	Vehicle and Equipment Fueling	✓	x		
NS-10	Vehicle and Equipment Maintenance	✓	x		
NS-11	Pile Driving Operation		x		
NS-12	Concrete Curing		x		
NS-13	Concrete Finishing			x	No concrete finished expected
NS-14	Material and Equipment Use Over Water		x		
NS-15	Demolition Removal Adjacent to Water		x		
NS-16	Temporary Batch Plants			x	No paving operations

[1] The 2022 CGP Fact Sheet Section I.R.1.d through I.R.1.i describes various BMPs that should be considered for use on the construction site.

Dewatering Operation

Appropriate dewatering operations and practices shall be utilized in the event that accumulated water must be removed from a work location so that construction work may be accomplished, such as the collection of rainwater in a utility trench. An appropriate dewatering operation shall be used to transfer the water to adjacent vegetative areas or Baker tank where solids can settle out. Direct discharge of stormwater from the channel shall not be allowed.

All dewatering and clear water diversion activities shall be carried-out in accordance to the 401 Water Quality Certification.

Non-stormwater cannot be discharged without prior notice to and approval from the RWQCB and/or local stormwater management agency. This includes stormwater that is co-mingled with groundwater or other non-stormwater sources. Additional guidelines on dewatering implementation can be found on BMP Fact Sheet NS-1 in Appendix G.

Clear Water Diversion

Clear water diversion consists of a system of structures and measures that intercept clear surface water runoff upstream of a project, transport it around the work area, and discharge it downstream with minimal water quality degradation from either the project construction operations or the construction of the diversion. Clear water diversions will be used to maintain existing flow paths while constructing sections of the new setback berm. Additional guidelines on clear water diversion implementation can be found on BMP Fact Sheet NS-5 in Appendix G.

Illicit Connection/Discharge

During the duration of the project, the contractor will be trained to recognize illicit connections or illegally dumped or discharged materials on the construction site and will report incidents. Additional guidelines on clear illicit connection/discharge implementation can be found on BMP Fact Sheet NS-6 in Appendix G.

Vehicle and Equipment Cleaning

Off-site commercial washing businesses are equipped to handle and dispose of wash water properly and are to be used for vehicle and equipment cleaning as much as possible. If vehicle and equipment washing and cleaning must occur on site and cannot be performed in a building equipped with sanitary sewer facilities, the outside cleaning area shall be located away from storm drain inlets and drainage facilities. The wash area shall be stabilized with aggregate base, and bermed to prevent run-off and run-on. The drainage area shall be outfitted with a sump to allow for the collection and disposal of wash water. Wash water is not to be disposed of in storm drains or watercourses.

The wash area shall be used as little as possible, while using the minimum amount of wash water and soaps necessary. Power washers tend to use less water and should be considered. Steam cleaning is not to be performed at any time. Cleaning solvents shall never to be used on-site. Additional guidelines on vehicle and equipment cleaning implementation can be found on BMP Fact Sheet NS-8 in Appendix G.

Vehicle and Equipment Fueling

On-site vehicle and equipment fueling should only be used where it's impractical to send vehicles and equipment off site for fueling. The Contractor shall designate an area for equipment fueling and maintenance away from storm drain inlets or drainage channels. The fueling area shall be located on a paved surface (if practical) and shall be protected with berms to prevent run-on and run-off and contain spills. Secondary containment techniques such as drip pans or drop cloths shall be used when fueling to catch drips or leaks. All fuel shall be completed a

minimum of 100-ft from coastal waters and in accordance to the spill prevention plan. Additional guidelines on vehicle and equipment fueling implementation can be found on BMP Fact Sheet NS-9 in Appendix G.

Vehicle and Equipment Maintenance

Perform vehicle maintenance off site whenever practical. The Contractor shall coordinate with the Owner and designate the on-site vehicle and equipment maintenance areas away from storm drain inlets and watercourses. Locate the maintenance areas on paved surfaces if practical and use protect the maintenance area from stormwater run-on and run-off.

Properly dispose of used oils, fuels, and lubricants. Do not dump fuels or lubricants on the ground, place in dumpsters, or pour into storm drains or watercourses. Properly dispose of or recycle batteries and other waste products.

Repair leaks of fluids and oil immediately. Place drip pans under vehicles with leaks while they are awaiting repair. Promptly empty drip pans in proper waste containers.

Regularly inspect vehicles and equipment for leaks or potential leaks. Perform regularly scheduled preventative maintenance, preferably off site. Inspect the maintenance area regularly and clean up any spills or leaks immediately. Maintain an adequate supply of spill cleanup materials in the maintenance area at all times. Additional guidelines on vehicle and equipment maintenance implementation can be found on BMP Fact Sheet NS-10 in Appendix G.

Pile Driving Operation

During the construction of cofferdams used for water management and during the installation of the new tide gate pile driving operations are expected. Driven piles are typically constructed of precast concrete, steel, or timber. Proper control and use of equipment, materials, and waste products from pile driving operations will reduce or eliminate the discharge of potential pollutants to the storm drain system, watercourses, and waters of the United States. Additional guidelines on pile driving operation implementation can be found on BMP Fact Sheet NS-11 in Appendix G.

Concrete Curing

Concrete curing is expected to take place during the construction of the new tide gate and during the repair of the existing tide gate. Concrete and its associated curing materials have basic chemical properties that can raise the pH of water to levels outside of the permitted range. Discharges of stormwater and non-stormwater exposed to concrete during curing may have a high pH and may contain chemicals, metals, and fines. Proper procedures and care should be taken when concrete curing materials to prevent them from coming into contact with stormwater flows, which could result in a high pH discharge. Additional guidelines on concrete curing implementation can be found on BMP Fact Sheet NS-12 in Appendix G.

Material and Equipment Use Over Water

During the excavation or dredging of Centerville slough, an amphibious excavator may be used. This BMP outlines procedures for the proper use, storage, and disposal of materials and equipment on barges, boats, temporary construction pads, or similar locations that minimize or eliminate the discharge of potential pollutants to a watercourse. These procedures should be implemented for construction materials and wastes (solid and liquid), soil or dredging materials, or any other materials that may cause or contribute to exceedances of water quality standards. Additional guidelines material and equipment use over water implementation can be found on BMP Fact Sheet NS-14 in Appendix G.

Demolition Removal Adjacent to Water

Demolition of multiple barns, waterlines, fences, culverts, concrete wingwall of existing tide gate and a levee that are anticipated during the project. This BMP outlines procedures to protect water bodies from debris and wastes associated with structure demolition or removal over or adjacent to watercourses. Additional guidelines on demolition removal adjacent to water implementation can be found on BMP Fact Sheet NS-15 in Appendix G.

3.3.2 Materials Management and Waste Management

Materials management control practices consist of implementing procedural and structural BMPs for handling, storing, and using construction materials to prevent the release of those materials into stormwater discharges. The amount and type of construction materials to be utilized at the Site will depend upon the type of construction and the length of the construction period. The materials may be used continuously, such as fuel for vehicles and equipment, or the materials may be used for a discrete period, such as soil binders for temporary stabilization.

Waste management consist of implementing procedural and structural BMPs for handling, storing, and ensuring proper disposal of wastes to prevent the release of those wastes into stormwater discharges, waste management should be conducted in accordance with the Project's demolition and debris removal specification.

Materials and waste management pollution control BMPs will be implemented to minimize stormwater contact with construction materials, wastes, and service areas; and to prevent materials and wastes from being discharged off-site. The primary mechanisms for stormwater contact that shall be addressed include:

- Direct contact with precipitation
- Contact with stormwater run-on and runoff
- Wind dispersion of loose materials
- Direct discharge to the storm drain system through spills or dumping
- Extended contact with some materials and wastes, such as asphalt cold mix and treated wood products, which can leach pollutants into stormwater.

A list of construction activities is provided in Section 2.6. The following Materials and Waste Management BMP selection table, Table 3-5, indicates the BMPs that shall be implemented to handle materials and control construction site wastes associated with these construction activities. Fact Sheets for Materials and Waste Management BMPs are provided in Appendix G.

Material management BMPs will be implemented in conformance with the following guidelines and in accordance with the BMP Fact Sheets provided in Appendix G. If there is a conflict between documents, the Site Map will prevail over narrative in the body of the SWPPP or guidance in the BMP Fact Sheets. Site specific details in the Site Map prevail over standard details included in the Site Map. The narrative in the body of the SWPPP prevails over guidance in the BMP Fact Sheets.

Table 3-5 Temporary Materials Management BMPs

CASQA Fact Sheet	BMP Name	Considered for Project [1]	BMP used		If not used, state reason and alternate BMP, if applicable
			YES	NO	
WM-01	Material Delivery and Storage	✓	x		
WM-02	Material Use	✓	x		
WM-03	Stockpile Management	✓	x		
WM-04	Spill Prevention and Control	✓	x		
WM-05	Solid Waste Management	✓	x		
WM-06	Hazardous Waste Management	✓		x	No hazardous waste anticipated
WM-07	Contaminated Soil Management			x	No contaminated soils expected
WM-08	Concrete Waste Management	✓	x		
WM-09	Sanitary-Septic Waste Management	✓	x		
WM-10	Liquid Waste Management	✓	x		

[1] The 2022 CGP Fact Sheet Section I.R.1.d through I.R.1.i describes various BMPs that should be considered for use on the construction site.

Material Delivery and Storage

Proper material delivery and storage will take place at the location identified on the plans to prevent, reduce, or eliminate the discharge of pollutants from material delivery and storage to the stormwater system or watercourses by minimizing the storage of hazardous materials onsite, storing materials in watertight containers and/or a completely enclosed designated area, installing secondary containment, conducting regular inspections, and training employees and subcontractors. Bags of mortar, concrete, or other supplies shall be placed on pallets and covered with tarps so that if precipitation does occur these materials will not be exposed to stormwater and become a stormwater pollutant. Additional guidelines on material delivery and storage implementation can be found on BMP Fact Sheet WM-01 in Appendix G.

Material Use

To prevent or reduce the discharge of pollutants to the storm drain system or watercourses from material use the contractor shall use alternative less hazardous products when possible, minimize hazardous material use onsite and provide training to employees and subcontractors Additional guidelines on material use implementation can be found on BMP Fact Sheet WM-012 in Appendix G.

Stockpile Management

Onsite stockpiles will be properly managed to reduce or eliminate stormwater pollution from stockpiles. The Contractor shall work with the Owner to designate an area to be used for stockpiled soils. Spoils generated during utility installation and other activities must be securely stockpiled at the site. In the event of rain, care shall be taken to prevent erosion and sediment transport from stockpiled areas. Stockpiles should be securely covered and placed away from drainage channels, preferably in areas with some natural vegetation in place. Silt fences shall be installed around the soil stockpile areas in the event of extended heavy rainfall. Silt fence construction and maintenance is further discussed in the Sediment Control section of this SWPPP. Uncovered soil stockpiles are to be wetted as needed during windy days to prevent wind erosion. Additional guidelines on stockpile management implementation can be found on BMP Fact Sheet WM-03 in Appendix G.

Spill Prevention and Control

The Contractor shall make adequate preparations, including training personnel and providing equipment, to contain and/or clean up spills of oil and other hazardous materials. Ensure that adequate materials such as absorbents, berms, dry sweep shovels, brooms, and absorbent pads are on hand to clean up any accidental spill that may occur. Spills of hazardous materials can originate from fueling, equipment breaking down (such as hydraulic lines), material transfer operations, and other sources. Clean up such spills immediately and properly dispose of all wastes and used spill control materials. Additional guidelines on spill prevention and control implementation can be found on BMP Fact Sheet WM-04 in Appendix G.

Solid Waste Management

Solid waste generated from the demolition of fences, waterlines, culverts, and barns are expected. The Contractor shall provide waste receptacles for common solid wastes at convenient locations on the job site and provide regular collection of wastes, including building materials. Provide cover for receptacles or piles of waste prior to rain events. Do not allow crew to discard miscellaneous trash on the project site. Solid waste management procedures and practices are designed to prevent or reduce the discharge of pollutants to stormwater from solid or construction waste by providing designated waste collection areas and containers, arranging for regular disposal, and training employees and subcontractors. Additional guidelines on

demolition solid waste management water implementation can be found on BMP Fact Sheet WM-05 in Appendix G.

Concrete Waste Management

The Contractor shall work with the Owner to designate an area to be used for washout of transit mix trucks and other vehicles used to transport, mix, or move concrete. The area shall be located at least 50 feet away from storm drain inlets or drainage facilities and away from the concrete truck access area so that construction traffic will not drive through wash waters. The wash out area shall have a bermed and lined area of sufficient volume to completely contain all liquid and waste concrete material. The area will be flagged off with stakes and surveyor tape, or similar methods, and signed as necessary to inform truck drivers and workers of its location. Do not allow slurry residue from concrete to enter storm drainages**.** Additional guidelines on concrete waste management implementation can be found on BMP Fact Sheet WM-08 in Appendix G.

Sanitary-Septic Waste Management

The Contractor shall provide sanitary facilities of sufficient number and size to accommodate construction crews. Locate the sanitary facilities in a convenient location, but away from storm drain inlets and drainage facilities. Anchor the facilities sufficiently to prevent them from being blown over or tipped by vandals. Ensure that the facilities are maintained in good working order and emptied at regular intervals by a licensed sanitary waste hauler. Additional guidelines on sanitary-septic waste management implementation can be found on BMP Fact Sheet WM-09 in Appendix G.

Liquid Waste Management

Non toxic liquid waste such as dredgings are expected to be produced by the project. Liquid waste management procedures and practices will be used to prevent discharge of pollutants to the storm drain system or to watercourses as a result of the creation, collection, and disposal of non-hazardous liquid wastes.Additional guidelines on liquid waste management implementation can be found on BMP Fact Sheet WM-10 in Appendix G.

3.4 TMDL-RELATED BMPS

Bacteria TMDL BMPs:

- The QSP shall conduct training for construction site staff on routine housekeeping and sanitary waste management of identified sources of bacteria.
- Structural BMPs designed for retention, infiltration, or diversion of stormwater shall be evaluated and implemented when the implemented minimum source control BMPs are inadequate to reduce bacteria loading to receiving waters.

Chloride and Salts TMDL BMPs:

- No additional BMPs are identified for this pollutant category in the 2022 CGP.

Diazinon TMDL BMPs:

- No additional BMPs are identified for this pollutant category in the 2022 CGP.

Nutrient TMDL BMPs:

- [No additional BMPs are identified for this pollutant category in the 2022 CGP.]

Sediment TMDL BMPs:

- Site will remain contained during construction to manage run-on and runoff. BMPs will be adjusted to manage climatic and site conditions.
- [No additional BMPs are identified for this pollutant category in the 2022 CGP.]

Temperature BMPs:

- No additional BMPs are identified for this pollutant category in the 2022 CGP.

Metals and Toxics TMDL BMPs:

- [No additional BMPs are identified for this pollutant category in the 2022 CGP.]

3.5 POST CONSTRUCTION STORMWATER MANAGEMENT MEASURES

Post construction BMPs are permanent measures installed during construction, designed to reduce or eliminate pollutant discharges from the site after construction is completed.

This site is subject to the post-construction requirements of an existing NPDES Phase I or Phase II MS4. ☐ Yes ☒ No

The post construction runoff reduction requirements have been satisfied through compliance with 2022 CGP Provision IV.N.3 and use of the SMARTS water balance calculator. The post construction requirements were uploaded as part of the PRDs as required by 2022 CGP Provision IV.N.2.

The following source control, site design, and treatment control post-construction BMPs to comply with 2022 CGP Section IV.N.3 have been identified for the site:

- Source Control: Sources of on-site runoff will consist of natural drainage of stormwater as there is very little planned increase in impervious surfaces as part of this Project.
- Site Design: Long term, post-construction BMPs will consist majorly of soil stabilization methods including hydroseeding, mulch/straw, biodegratible fabric and soil preparation through roughening.
- Stormwater Treatment: No anticipated stormwater treatment after completion of the Project.

A plan for the post construction funding and maintenance of these BMPs has been developed to address at minimum five years following construction. The post construction BMPs that are described above will be funded and maintained as described in the Operations and Maintenance Plan that will be uploaded with the NOT.

Section 4 BMP Inspection and Maintenance

4.1 BMP INSPECTION AND MAINTENANCE

The 2022 CGP requires routine weekly inspections of BMPs, along with inspections before, during, and after qualifying precipitation events. A BMP inspection checklist must be filled out for inspections and maintained on-site with the SWPPP. The inspection checklist must include the necessary information covered in Section 7.6. A blank BMP Inspection Form can be found in Appendix H. Completed forms will be kept in Appendix N.

Maintenance, repair, or design and implementation of new BMPs alternatives will be begin withing 72 hours of the identification of failures or other shortcomings. Corrections will be completed as soon as possible, prior to the next forecasted precipitation event (2022 CGP Appendix D Section II.J).

The QSP will verify that all BMP maintenance and repairs were appropriately implemented during the next visual inspection following completion.

The QSP may delegate BMP maintenance and repair verification to an appropriately trained QSP Delegate.

Specific details for maintenance, inspection, and repair of Construction Site BMPs can be found in the BMP Factsheets in Appendix G.

Section 5 Training

Appendix J identifies the QSPs and QSP Delegates for the project. To promote stormwater management awareness specific for this project, periodic training of job-site personnel will be included as part of routine project meetings (e.g., daily/weekly tailgate safety meetings), or task specific training as needed. Refresher training will be provided as necessary.

The QSP will be responsible for providing this information at the meetings, and subsequently completing the Training Reporting Form shown in Appendix I, which identify the site-specific stormwater topics covered as well as the names of site personnel who attended the meeting.

The QSP may delegate specific tasks to trained QSP Delegates who have received the following training based on the guidelines developed by the Construction General Permit Training Team.

1. **Foundational training** for all QSP Delegate(s) regarding stormwater compliance roles and responsibilities, forecast information, and documentation and reporting procedures; and
2. **Site-specific training** regarding visual inspections, sampling procedures, and/or SWPPP and BMP implementation activities relevant to the responsibilities assigned to the QSP Delegate(s).

The delegate cannot perform the QSD and QSP inspections required in Section V.C.4 or Section V.D.2, respectively.

Section 6 Responsible Parties and Operators

6.1 RESPONSIBLE PARTIES

The DAR who are responsible for SWPPP implementation and have authority to sign permit-related documents is listed below. The DAR assigned to this project is:

Name	Title	Phone Number
Jeremy Svehla, P.E	Engineer, QSP	(707) 267-2246

QSD(s) identified for the project are identified in Appendix J. The QSD will have primary responsibility for assessing how construction activities will affect sediment transport, erosion, and other discharges of pollutants in stormwater runoff throughout the project. The QSD is required to revise the SWPPP to address potential problems identified by visual inspections, sampling data, comments from a QSP, or their own site observations. The QSD is required to perform the following on-site visual inspections:

- Within 30 days of construction activities commencing on site;
- Within 30 days when a new QSD is assigned to the project;
- Twice annually, once August through October and once January through March;
- Within 14 calendar days after a numeric action level exceedance; and
- Within the time period requested in writing from Regional Water Board staff.

QSPs and QSP Delegates identified for the project are identified in Appendix J. The QSP will have primary responsibility and significant authority for the implementation, maintenance, and inspection/monitoring of SWPPP requirements. The QSP will be available at all times throughout the duration of the project.

Duties of the QSP include but are not limited to:

- Implementing all elements of the 2022 CGP and SWPPP, including, but not limited to:
    - Performing the following on-site visual inspections:
        - One inspection per calendar month; other weekly inspections in the month can be delegated to a trained QSP Delegate under the specific direction of the QSP.
        - Within 72 hours prior to a forecasted qualifying precipitation event, to inspect any areas of concern and to verify the status of any deficient BMPs, or other identified issues at the site. If extended forecast precipitation data (greater than 72 hours) is available from the *National Weather Service*, then the Pre-Precipitation Event inspection may be done up to 120 hours in advance.
        - Within 14 days after a NAL exceedance, the QSP shall visually inspect the drainage area for exceedance and document any areas of concern.
        - Prior to the submittal for the NOT or COI (for acreage changes) for all or part of the site.
    - Ensuring that all BMPs are implemented, inspected, and properly maintained;

    - Ensure that the SMARTS generated WDID Number Notification form is posted on-site, in a location viewable by the public or readily available upon request, and the dates are correct and match the dates listed in SMARTS.

- Implementing non-stormwater management, and materials and waste management activities such as: monitoring discharges; general Site clean-up; vehicle and equipment cleaning, fueling and maintenance; spill control; ensuring that no materials other than stormwater are discharged in quantities which will have an adverse effect on receiving waters or storm drain systems, etc.;
- Ensuring elimination of unauthorized discharges.
- The QSPs shall be assigned authority by the LRP to mobilize crews in order to make immediate repairs to the control measures.
- Coordinate with the Contractor(s) to assure the necessary corrections/repairs are made immediately and that the project complies with the SWPPP, the 2022 CGP, and approved plans at all times.
- Notifying the LRP or Duly Authorized Representative immediately of off-site discharges or other non-compliance events.
- Providing foundation and site-specific training to QSP Delegates and overseeing QSP Delegate work. Tasks that may be delegated to appropriately trained QSP-delegates include:
    - Performing non-stormwater and stormwater visual observations and inspections;
    - Performing stormwater sampling and analysis, as required; and
    - Performing routine inspections and observations.

Table 6-1. QSP and QSP Delegate Authorized Inspections

	Weekly BMP and NSW	Pre-QPE	Daily-QPE Visual Inspections	Post-QPE Visual Inspections	Post NAL Exceedances	Monthly BMP and NSW	NOT
QSP	X	X	X	X	X	X	X
QSP Delegate	X		X	X			

6.2 CONTRACTOR LIST

Contractor Name:	
Title:	
Contractor Company:	
Address	
Phone Number:	
Phone Number (24/7)	
[Add additional rows, if needed]	

Section 7 Construction Site Monitoring Program

7.1 Purpose

This Construction Site Monitoring Program was developed to address the following objectives:

1. To demonstrate that the site is in compliance with the Discharge Prohibitions and Numeric Action Levels (NALs)
2. To demonstrate that the site is in compliance with TMDL NALs and Numeric Effluent Limitations (NELs);
3. To determine whether non-visible pollutants discharged from the construction site and are causing or contributing to exceedances of water quality objectives;
4. To determine whether immediate corrective actions, additional BMP implementation, or SWPPP revisions are necessary to reduce pollutants in stormwater discharges and authorized non-stormwater discharges;
5. To determine whether BMPs included in the SWPPP are effective in preventing or reducing pollutants in stormwater discharges and authorized non-stormwater discharges.

7.2 Applicability of Permit Requirements

This project has been determined to be a Risk Level 2 project. The 2022 CGP identifies the following types of monitoring as being applicable for a Risk Level 2 project.

Risk Level 2

- Visual inspections of BMPs;
- Visual monitoring of the site related to qualifying precipitation events;
- Visual monitoring of the site for non-stormwater discharges;
- Sampling and analysis of construction site runoff for pH and turbidity;
- Sampling and analysis of construction site runoff for non-visible pollutants [including TMDL pollutants] identified during the pollutant source assessments when applicable
- Sampling and analysis of construction site runoff as required by the Regional Water Board when applicable.

7.3. Weather and Precipitation Event Tracking

Visual monitoring and inspections requirements of the 2022 CGP are triggered by a Qualifying Precipitation Event. The 2022 CGP defines a Qualifying Precipitation Event as any weather pattern that is forecast to have a 50 percent or greater Probability of Precipitation (PoP) and a Quantitative Precipitation Forecast (QPF) of 0.5 inches or more within a 24-hour period. The event begins with the 24-hour period when 0.5 inches has been forecast and continues on subsequent 24-hour periods when 0.25 inches of precipitation or more is forecast.

7.3.1 Weather Tracking

The QSP should daily consult the National Oceanographic and Atmospheric Administration (NOAA) for the Forecast Weather Table Interface. These forecasts can be obtained at http://forecast.weather.gov. Weather reports should be printed and maintained with the SWPPP in Appendix M. Record the date and time the forecast was printed.

7.3.2 Rain Gauges

The QSP shall install one rain gauge on the project site near the Wildland Conservancy building (Headquarters Barn) Locate the gauge in an open area away from obstructions such as trees or overhangs. Mount the gauge on a post at a height of 3 to 5 feet with the gauge extending several inches beyond the post. Make sure that the top of the gauge is level. Make sure the post is not in an area where rainwater can indirectly splash from sheds, equipment, trailers, etc.

The rain gauge(s) shall be read daily during normal site scheduled hours. The rain gauge should be read at approximately the same time every day and the date and time of each reading recorded. An example rain gauge log sheet is provided in Appendix O. Retain rain gauge readings in Appendix N. Follow the rain gauge instructions to obtain accurate measurements.

Once the rain gauge reading has been recorded, accumulated rain shall be emptied, and the gauge reset.

For comparison with the site rain gauge, the nearest appropriate governmental rain gauge(s) is located at the Fortuna Rohnerville Airport (KFOT) Lat 40.55296 N Long 124.13338 W. Precipitation data for this gauge can be fond here: National Weather Service

7.4 Monitoring Locations

Monitoring locations are shown on the Site Maps in Appendix A. Monitoring locations are described in the Sections 7.6 and 7.7.

Whenever changes in the construction site might affect the appropriateness of sampling locations, the sampling locations shall be revised accordingly. All such revisions shall be implemented as soon as feasible and the SWPPP amended. Temporary changes that result in a one-time additional sampling location do not require a SWPPP amendment.

7.5 Safety and Monitoring Exemptions

Safety practices for sample collection will be in accordance with the QSP or delegate's health and safety standards for onsite inspection.

This project is not required to collect samples or conduct visual observations (inspections) under the following conditions (see Section III.B of the 2022 CGP):

- During dangerous weather conditions such as electrical storms, flooding, and high winds above 40 miles per hour;
- Outside of scheduled site operating hours; or

When the site is not accessible to personnel. Scheduled site business hours are: Monday – Friday 7:00 AM to 7:00 PM.

If monitoring (visual monitoring or sample collection) of the site is unsafe because of the dangerous conditions noted above, then the QSP shall document the conditions for why an exception to performing the monitoring was necessary. The exemption documentation will be filed in Appendix N and must be included in the Annual Report.

7.6 Visual Monitoring

Per Section III.B.2. of Attachment D in the 2022 CGP, "For inactive projects, dischargers may reduce the visual inspection frequency and suspend sampling per Section III.G of the 2022 CGP. Dischargers shall provide an explanation with supporting information for all missed visual inspections or sampling required by this Attachment, to be included in the Annual Report."

Visual monitoring includes observations and inspections. Inspections of BMPs are required to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. Visual observations of the site are required to observe storm water drainage areas to identify any spills, leaks, or uncontrolled pollutant sources.

Table 7-1 identifies the required frequency of visual observations and inspections. Inspections and observations will be conducted at the locations identified in Section 7.6.3.

Table 7-1 Summary of Visual Monitoring and Inspections

Type of Inspection	Frequency
Routine Inspections[1]	
BMP Inspections	Weekly[2]
Qualifying Precipitation Event Triggered Inspections	
Site Inspections Prior to a Qualifying Precipitation Event	Within 72 hours of a qualifying precipitation event or up to 120 hours prior if supported with forecast [2]
BMP Inspections During an Extended Qualifying Precipitation Event	Once every 24-hour period of a qualifying precipitation event[3]
Site Inspections Following a Qualifying Precipitation Event	Within 96 hours of a qualifying precipitation event[2]

[1] Inspections are required during scheduled site operating hours.

[2] Most BMPs must be inspected weekly; those identified below must be inspected more frequently.

[3] Inspections are required during scheduled site operating hours on days that the forecast predicts at least 0.25 inches of precipitation once the qualifying precipitation event commences.

7.6.1 Routine Observations and Inspections

Routine site inspections and visual monitoring are necessary to confirm that the project is in compliance with the requirements of the 2022 CGP.

7.6.1.1 Routine BMP Inspections

Inspections of BMPs are conducted to identify and record:

- BMPs that are properly installed;
- BMPs that need maintenance to operate effectively;
- BMPs that have failed; or
- BMPs that could fail to operate as intended.

7.6.1.2 Non-Stormwater Discharge Observations

Each drainage area will be inspected for the presence of or indications of prior unauthorized and authorized non-stormwater discharges. Inspections will record:

- Presence or evidence of any non-stormwater discharge (authorized or unauthorized);
- Identification and elimination of unauthorized non-stormwater discharges

- Pollutant characteristics (floating and suspended material, sheen, discoloration, turbidity, odor, etc.); and
- Source of discharge.

7.6.2 Qualifying Precipitation Event Triggered Observations and Inspections

Visual observations of the site and inspections of BMPs are required prior to a qualifying precipitation event; following a qualifying precipitation event, and every 24-hour period during a qualifying precipitation event. Pre-Qualifying Precipitation Event inspections will be conducted after consulting NOAA and determining that a precipitation event with a 50 percent or greater PoP and a QPF of 0.5 inches or more precipitation within a 24-hour period has been predicted by the National Weather Service Forecast Office.

7.6.2.1 Visual Observations Prior to a Forecasted Qualifying Precipitation Event

Within 72 hours prior to a qualifying precipitation event or up to 120 hours prior if extended forecast precipitation data is available, a stormwater visual monitoring site inspection will include observations of the following locations:

- All stormwater drainage areas to identify leaks, spills, or uncontrolled pollutant sources and when necessary, implement appropriate corrective actions.
- All BMPs to identify whether they have been properly implemented per the SWPPP and implement appropriate corrective actions, as necessary.
- All stormwater storage and containment areas to detect leaks and check for available capacity to prevent overflow.

The QSP must conduct the inspection prior to the qualifying precipitation event. Consistent with the requirements for a qualifying precipitation event, pre-rain BMP inspections and visual monitoring will be triggered by a NOAA forecast that indicates a 50 percent or greater probability of 0.5 inches of precipitation or more in a 24-hour period in the project area.

7.6.2.2 BMP Inspections During a Qualifying Precipitation Event

During an extended qualifying precipitation event BMP inspections will be conducted at least once every 24 hours. Qualifying precipitation events are extended for each subsequent 24-hour period forecast to have at least 0.25 inches of precipitation. The BMP inspections are to identify and record:

- If BMPs were adequately designed, implemented and effective.
- BMPs that require repair or replacement due to damage.
- Additional BMPs that need to be implemented and revise the SWPPP accordingly.

If the construction site is not accessible during the rain event, the visual inspections shall be performed at all relevant outfalls, discharge points, downstream locations. The inspections should record any projected maintenance activities.

7.6.2.3 Visual Observations Following a Qualifying Precipitation Event

Within 96 hours following the end of a qualifying precipitation event a stormwater visual monitoring site inspection is required to observe:

- If BMPs were adequately designed, implemented and effective.
- BMPs that require repair or replacement due to damage.
- Additional BMPs that need to be implemented and revise the SWPPP accordingly.

7.6.3 Visual Monitoring Procedures

Visual monitoring shall be conducted by the QSP or QSP Delegates.

The name(s) and contact number(s) of the QSPs or QSP Delegates assigned to conduct visual observations are listed below and their training qualifications are provided in Appendix J.

Assigned QSP: Jeremy Svehla Contact phone: (707) 267-2246
Assigned QSP Delegate: Spencer Babcock Contact phone: (707) 267-2201

Stormwater observations shall be documented on the *Visual Inspection Field Log Sheet* (see Appendix O). BMP inspections shall be documented on the site-specific BMP inspection checklist and include photographs of areas of concern along with the QSP's description of the problem.

The completed reports will be kept in Appendix N. Results of visual monitoring must be summarized and reported in the Annual Report.

7.6.4 Visual Monitoring Follow-Up and Reporting

Maintenance, repairs, and correction of deficiencies, including design changes to BMPs, identified by the observations or inspections, including required repairs or maintenance of BMPs, shall be initiated within 72 hours of identification and completed as soon as possible, prior to the next forecasted precipitation event.

When design changes to BMPs are required, the SWPPP shall be amended to reflect the changes.

Deficiencies identified in site inspection reports and correction of deficiencies will be tracked on the *Inspection Field Log Sheet* or *BMP Inspection Report* shall be kept in Appendix N. QSP Delegates shall report issues identified during inspections that require corrective action to the QSP within 24 hours of the observation.

Results of visual monitoring must be summarized and reported in the Annual Report.

7.6.5 Visual Monitoring Locations

The inspections and observations identified in Sections 7.6.1 and 7.6.2 will be conducted at the locations identified in this section.

BMP locations are shown on the SWPPP Site Maps in Appendix A.

There are 7 drainage area on the project site and the contractor's yard, staging areas, and storage areas. Drainage areas are shown on the SWPP Site Maps in Appendix A and Table 7-2 identifies each drainage area by location.

Table 7-2 Site Drainage Areas

Location No.	Name	Location
1	Unnamed Tributary	Southern most drainage area (drains onto site)
2	Shaw Creek	2nd drainage area from the south (drains onto site)
3	Creamery Ditch	3rd drainage area from the south (drains onto site)

Table 7-2 Site Drainage Areas

Location No.	Name	Location
4	Russ Creek	Eastern drainage area (drains onto site)
5	Culvert outlet	Located within project site from artesian spring
6	Cutoff Slough	End northmost drainage area (drains off site
7	Centerville Slough	North most drainage area (drains off site)

There is 1 stormwater storage or containment area are on the project site from which stormwater will be dewatered (Centerville slough). Stormwater storage or containment area are shown on the Site Maps in Appendix A and Table 7-3 identifies each stormwater storage or containment area by location.

Table 7-3 Stormwater Storage and Containment Areas (Dewatering Locations)

Location No.	Location
1	Temporary areas located within the limits of disturbance that are disconnected to off-site surface waters.

There are multiple discharge location(s) on the project site. Areas within the limits of disturbance and disconnected from offsite waterways may be used for discharge and stormwater infiltration. Table 7-4 identifies each stormwater discharge location.

Table 7-4 Site Stormwater Discharge Locations

Location No.	Location
1	See SWPPP map and note locations will vary per contractor's construction phasing

7.7 Water Quality Sampling and Analysis

7.7.1 Sampling and Analysis Plan for Non-Visible Pollutants in Stormwater Runoff Discharges

This Sampling and Analysis Plan for Non-Visible Pollutants describes the sampling and analysis strategy and schedule for monitoring non-visible pollutants in stormwater runoff discharges from the project site.

Sampling for non-visible pollutants, including those associated with TMDLs will be conducted when (1) a breach, leakage, malfunction, or spill is observed; and (2) the leak or spill has not

been cleaned up prior to the rain event; and (3) there is the potential for discharge of non-visible pollutants to surface waters or drainage system.

Table 7-4 summarizes the potential non-visible pollutants identified in the pollutant source assessment Sections 2.6 and 2.7 and the water quality constituent or indicator for that pollutant. Drainage areas where the source is present are shown on the Site Maps in Appendix A.

Table 7-5 Potential Non-Visible Pollutants and Water Quality Indicator Constituents Based on the Pollutant Source Assessment

Pollutant	Water Quality Indicator or Constituent	Source/Reason from Pollutant Source Assessment	TMDL Pollutant	Site Drainage Area
Battery Acid, oil and grease	Oil and Grease, Sulfuric acid; Pb, pH	Vehicle and Equipment Use	No	All
Total/Fecal Coliform	Bacteria and disinfectants	Portable Toilets	No	5,6 & 7
Curing Compounds, Acid Wash, Concrete Rinse Water, Sawcut Slurries	pH, Alkalinity, VOC	Concrete & Masonry	No	6 & 7
Pesticides, Herbicides, Fertilizers, Lime, Gypsum, Aluminum Sulfate, Sulfur	pH, Alkalinity, TDS, Nitrates, Phosphorous, Ammonia	Landscaping	No	All
Detergents, Bleaches, Polishes and Solvents	Detergents, Bleaches and Solvents	Cleaning Products	No	5,6 & 7

The project has the potential to receive stormwater run-on from the following locations with the potential to contribute non-visible pollutants to stormwater discharges from the project. Locations of such run-on to the project site are shown on the Site Maps in Appendix A.

- Drainage area #1 - Unnamed tributary
- Drainage area #2 – Shaw Creek
- Drainage area #3 Creamery Ditch
- Drainage area #4 Russ Creek

7.7.1.1 Sampling Schedule

Samples for the potential non-visible pollutant(s) and a sufficiently large unaffected background sample shall be collected during the first eight hours of discharge from rain events that result in a sufficient discharge for sample collection. Samples shall be collected during the site's scheduled hours and shall be collected regardless of the time of year and phase of the construction.

Collection of discharge samples for non-visible pollutant monitoring will be triggered only when any of the following conditions are observed during site inspections conducted prior to or during a rain event.

- Materials or wastes containing potential non-visible pollutants are not stored under watertight conditions. Watertight conditions are defined as (1) storage in a watertight container, (2) storage under a watertight roof or within a building, or (3) protected by temporary cover and containment that prevents stormwater contact and runoff from the storage area.
- Materials or wastes containing potential non-visible pollutants are stored under watertight conditions, but (1) a breach, malfunction, leakage, or spill is observed, (2) the leak or spill is not cleaned up prior to the rain event, and (3) there is the potential for discharge of non-visible pollutants to surface waters or a storm drain system.
- A construction activity, including but not limited to those in Section 2.6, with the potential to contribute non-visible pollutants (1) was occurring during or within 24 hours prior to the rain event, (2) BMPs were observed to be breached, malfunctioning, or improperly implemented, and (3) there is the potential for discharge of non-visible pollutants to surface waters or a storm drain system.
- Soil amendments that have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil have been applied, and there is the potential for discharge of non-visible pollutants to surface waters or a storm drain system.
- Stormwater runoff from an area contaminated by historical usage of the site has been observed to combine with stormwater runoff from the site, and there is the potential for discharge of non-visible pollutants to surface waters or a storm drain system.

7.7.1.2 Sampling Locations

Sampling locations are based on proximity to planned non-visible pollutant storage, occurrence or use, accessibility for sampling, and personnel safety. Planned non-visible pollutant sampling locations are shown on the Site Maps in Appendix A and include the locations identified in Table 7-6.

There are three proposed sampling locations on the project site have been identified for the collection of samples of runoff from planned material and waste storage areas and areas where non-visible pollutant producing construction activities are planned.

There are Four proposed sampling locations have been identified for the collection of an uncontaminated sample of runoff as a background sample for comparison with the samples

being analyzed for non-visible pollutants. These locations were selected such that the sample will not have come in contact with the operations, activities, or areas identified in Section 7.7.1 or with disturbed soils areas. These four sampling locations will also be used identify potential sources of non-visible pollutants that originate off the project site. Run-on from these locations has the potential to combine with discharges from the site being sampled for non-visible pollutants.

Table 7-6 Non-Visible Pollutant Sample Locations

Sample Location Identifier	Sample Location Description	Sample Location Latitude and Longitude	Runoff or Run-on
#1 – Unnamed Tributary	Located on the south end of the project site on the unnamed tributary just outside of the LOD	40°34'40.11"N 124°20'33.90"W	Run-on
#2 Shaw Creek	Located on Shaw Creek outside of the LOD, just upstream of the proposed set back berm	40°35'1.82"N 124°20'16.89"W	Run-on
#3 Creamery Ditch	Located on Creamery Ditch outside of the LOD, just upstream of the proposed set back berm	40°35'6.04"N 124°20'14.09"W	Run-on
#4 Russ Creek	Located on Russ Creek just upstream of the proposed Russ Creek grading, outside of the LOD	40°35'19.88"N 124°19'45.53"W	Run-on
#5 Culvert Outlet	Located at the culvert outlet near the wetland creation area downstream of the artesian spring	40°35'40.41"N 124°19'20.67"W	Run-on
#6 Cutoff Slough	Located on cutoff slough downstream of the Cutoff slough tide gate	40°37'0.42"N 124°19'7.53"W	Runoff
#7 Centerville Slough Outlet	Located at the outlet of Centerville Slough in the Eel river. Downstream of the turbidity curtain	40°37'17.44"N 124°18'58.96"W	Runoff

If a stormwater visual monitoring site inspection conducted prior to or during a storm event identifies the presence of a material storage, waste storage, operations area with spills, or the potential for the discharge of non-visible pollutants to surface waters or a storm drain system that is at a location not listed above and has not been identified on the Site Maps, sampling locations will be selected by the QSP using the same rationale as that used to identify planned

locations. Non-visible pollutant sampling locations shall be documented by the QSP on the pre-rain event inspection form prior to a forecasted qualifying precipitation event and the *Effluent Sampling Field Log Sheet*, which are provided in Appendix O.

7.7.1.3 Monitoring Preparation

Non-visible pollutant samples will be collected by:

QSP	☒ Yes	☐ No
QSP Delegate	☒ Yes	☐ No

An adequate stock of monitoring supplies and equipment for monitoring non-visible pollutants will be available on the project site prior to a sampling event. Monitoring supplies and equipment will be stored in a cool temperature environment that will not come into contact with rain or direct sunlight. The QSP or QSP Delegates responsible for sampling will be available to collect samples in accordance with the sampling schedule. Supplies maintained at the project site will include, but are not limited to, clean powder-free nitrile gloves, sample collection equipment, coolers, appropriate number and volume of sample bottles, identification labels, re-sealable storage bags, paper towels, personal rain gear, ice, and *Effluent Sampling Field Log Sheets* and Chain of Custody (CoC) forms, which are provided in Appendix O.

7.7.1.4 Analytical Constituents

Table 7-7 lists the specific sources and types of potential non-visible pollutants based on the project pollutant source assessment and the water quality indicator constituent(s) for that pollutant. Table 7-7 provides the specific analytical methods and reporting limits for the potential non-visible pollutants. Analytical methods were selected in compliance with U.S. EPA sufficiently sensitive method requirements in 40 Code of Federal Regulations Part 136, as evidenced by the method detection limit and minimum level.

7.7.1.5 Sample Collection

Samples of discharge shall be collected at the designated non-visible pollutant sampling locations identified in Table 7-6 and shown on the Site Maps in Appendix A or in the locations determined by observed breaches, malfunctions, leakages, spills, operational areas, soil amendment application areas, and historical site usage areas that triggered the sampling event.

Grab samples shall be collected and preserved in accordance with the methods identified in the Table 7-7, "Sample Collection, Preservation and Analysis for Monitoring Non-Visible Pollutants" provided in Section 7.7.1.6. Only the QSP, or QSP Delegates trained on sample collection identified in Section 7.7.1.3 shall collect samples.

Sample collection and handling requirements are described in Section 7.7.7.

Table 7-7 Sample Collection, Preservation and Analysis for Monitoring Non-Visible Pollutants

Constituent	Analytical Method	Minimum Sample Volume	Sample Containers	Sample Preservation	Reporting Limit	Maximum Holding Time
VOCs-Solvents	EPA 8260B	3 x 40 mL	VOA-glass	Store at 4˚ C, HCl to pH<2	1 ug/L	14 days
SVOCs	EPA 8270C	1 x 1 L	Glass-Amber	Store at 4˚ C	10 ug/L	7 days
Pesticides/ PCBs	EPA 8081A/8082	1 x 1 L	Glass-Amber	Store at 4˚ C	0.1 ug/L	7 days
Herbicides	EPA 8151A	1 x 1 L	Glass-Amber	Store at 4˚ C	Check Lab	7 days
BOD	EPA 405.1	1 x 500 mL	Polypropylene	Store at 4˚ C	1 mg/L	48 hours
COD	EPA 410.4	1 x 250 mL	Glass-Amber	Store at 4˚ C, H_2SO_4 to pH<2	5 mg/L	28 days
DO	SM 4500-O G	1 x 250 mL	Glass-Amber	Store at 4˚ C	Check Lab	8 hours
pH	EPA 150.1	1 x 100 mL	Polypropylene	None	Unitless	Immediate
Alkalinity	SM 2320B	1 x 250 mL	Polypropylene	Store at 4˚ C	1 mg/L	14 days
Metals (Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, Se, Na, Th, Va, Zn)	EPA 6010B/7470A	1 x 250 mL	Polypropylene	Store at 4˚ C, HNO_3 to pH<2	0.1 mg/L	6 months
Metals (Chromium VI)	EPA 7199	1 x 500 mL	Polypropylene	Store at 4˚ C	1.0 ug/L	24 hours

7.7.1.6 Sample Analysis

Samples shall be analyzed using the analytical methods identified in the Table 7-7.

Samples will be analyzed by:

Laboratory Name:	North Coast Laboratories Ltd.
Street Address:	5680 West End Road
City, State Zip:	Arcata, CA 95521
Telephone Number:	(707) 822-4649
Point of Contact:	TBD
ELAP Certification Number:	TBD

Samples will be delivered to the laboratory by:	The QSP or QSP Delegate	
Driven by QSP/QSP Delegate/Contractor	☒ Yes	☐ No
Picked up by Laboratory Courier	☒ Yes	☐ No
Shipped	☒ Yes	☐ No

7.7.1.7 Data Evaluation and Reporting

The QSP shall complete an evaluation of the water quality sample analytical results based on a comparison of the results to the unaffected sample [and to the TMDL NALs or NELs].

Runoff/downgradient results shall be compared with the associated upgradient/unaffected results and any associated run-on results. Should the runoff/downgradient sample show an increased level of the tested analyte relative to the unaffected background sample, which cannot be explained by run-on results, the BMPs, site conditions, and surrounding influences shall be assessed to determine the probable cause for the increase.

As determined by the site and data evaluation, appropriate BMPs shall be repaired or modified to mitigate discharges of non-visible pollutant concentrations. Any revisions to the BMPs shall be recorded as an amendment to the SWPPP.

Analytical results of non-visible pollutant monitoring shall be submitted to SMARTS within 30 days of obtaining the analytical results. Results demonstrating an exceedance of an applicable TMDL-related NAL shall be submitted to SMARTS within 30 days of obtaining the analytical results.

The 2022 CGP prohibits the storm water discharges that contain hazardous substances equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4. The results of any non-stormwater discharge results that indicate the presence of a hazardous substance in excess of established reportable quantities shall be immediately reported to the Regional Water Board and other agencies as required by 40 C.F.R. §§ 117.3 and 302.4.

The QSP shall compare the runoff sample results to the applicable TMDL NALs to determine whether the TMDL NALs have been exceeded, see Table 7-8.

Table 7-8 TMDL NAL and NEL Exceedances

Standard	Exceedance Evaluation
TMDL NAL	An exceedance occurs on the second, and each subsequent, analytical result for samples taken from any and all discharge location(s) within the same drainage area, during the same reporting year and taken in accordance with Attachment D Section III.D.3, that is above the concentration set forth in an applicable NAL.
TMDL NEL	An exceedance occurs on the second, and each subsequent, analytical result for samples taken from any and all discharge location(s) within the same drainage area, during the same reporting year and taken in accordance with Attachment D Section III.D.3, that is above the concentration set forth in an applicable NEL.

In the event that the TMDL NAL is exceeded, the QSP shall immediately notify the and investigate the cause of the exceedance and identify corrective actions.

The LRP or DAR shall electronically report all analytical results to the State Water Board by the through SMARTS within 30 days of receiving the results. Exceedances of TMDL NALs shall be electronically reported to the State Water Board by the LRP or DAR through SMARTS within 10 days of receiving the results.

If requested by the Regional Water Board in writing, a TMDL NAL Exceedance report will be submitted within 30 days of the request. The TMDL NAL Exceedance Report must contain the following information:

- Analytical method(s), method reporting unit(s), and Method Detection Limit(s) of each parameter;
- Date, place, time of sampling, visual observation, and/or measurements, including precipitation; and
- Description of the current BMPs associated with the sample that exceeded the TMDL NAL, a description of each corrective action taken including photographs, and date of implementation.

In the event of a TMDL NEL exceedance, by the end of each reporting year, project shall implement the following water quality based corrective actions:

- Conducting a site assessment to identify pollutant source(s) within the site that are associated with construction activity and whether the BMPs described in the SWPPP have been properly implemented;
- Evaluating the SWPPP and its implementation to determine whether additional BMPs or SWPPP implementation measures are necessary to reduce or prevent pollutants in all regulated discharges to comply applicable NELs, and
- Certifying and submitting through SMARTS a report of the above site assessment and SWPPP evaluation that:
    - Additional BMPs or SWPPP implementation measures have been identified and included in the SWPPP, or
    - No additional BMPs or SWPPP implementation measures are required to reduce or prevent pollutants in all regulated discharges to comply with applicable NELs.

7.7.2 Sampling and Analysis Plan for pH and Turbidity in Stormwater Runoff Discharges

Sampling and analysis of runoff for pH and turbidity is required for this project. This Sampling and Analysis Plan describes the strategy for monitoring turbidity and pH levels of stormwater runoff discharges from the project site and run-on that may contribute to an exceedance of a Numeric Action Level (NAL).

Samples for pH and turbidity will be collected at all discharge points where stormwater is discharged off-site.

7.7.2.1 Sampling Schedule

Stormwater runoff samples shall be collected for pH and turbidity from each day of a qualifying precipitation event that results in a discharge from the project site. One sample from each discharge location will be collected each 24 hour period of active discharge during a qualifying precipitation event. Samples should be representative of the discharge flow and characteristics.

Run-on samples shall be collected whenever the QSP identifies that run-on has the potential to contribute to an exceedance of a NAL.

7.7.2.2 Sampling Locations

Sampling locations are based on the site runoff discharge locations and locations where run-on enters the site, accessibility for sampling, and personnel safety. Planned pH and turbidity sampling locations are shown on the Site Maps in Appendix A and include the locations two sampling location(s) on the project site and the contractor's yard have been identified for the collection of runoff samples.

Table 7-9 Turbidity and pH Runoff Sample Locations

Sample Location Identifier	**Sample Location Description**	**Sample Location Latitude and Longitude** (Decimal Degrees)
#6 Cutoff Slough	Located on cutoff slough downstream of the Cutoff slough tide gate	40°37'0.42"N 124°19'7.53"W
#7 Centerville Slough Outlet	Located at the outlet of Centerville Slough in the Eel river. Downstream of the turbidity curtain	40°37'17.44"N 124°18'58.96"W

Five sampling locations have been identified for the collection of run-on samples where the run-on has the potential to contribute to an exceedance of a NAL or a Receiving Water Monitoring Trigger. Table 7-10 identifies the run-on sample locations.

Table 7-10 Turbidity and pH Run-On Sample Locations

Sample Location Identifier	Sample Location Description	Sample Location Latitude and Longitude (Decimal Degrees)
#1 – Unnamed Tributary	Located on the south end of the project site on the unnamed tributary just outside of the LOD	40°34'40.11"N 124°20'33.90"W
#2 Shaw Creek	Located on Shaw Creek outside of the LOD, just upstream of the proposed set back berm	40°35'1.82"N 124°20'16.89"W
#3 Creamery Ditch	Located on Creamery Ditch outside of the LOD, just upstream of the proposed set back berm	40°35'6.04"N 124°20'14.09"W
#4 Russ Creek	Located on Russ Creek just upstream of the proposed Russ Creek grading, outside of the LOD	40°35'19.88"N 124°19'45.53"W
#5 Culvert Outlet	Located at the culvert outlet near the wetland creation area downstream of the artesian spring	40°35'40.41"N 124°19'20.67"W

The project does not receive run-on with the potential to exceed NALs or Receiving Water Monitoring Triggers.

7.7.2.3 Monitoring Preparation

Turbidity and pH samples will be collected and analyzed by:

QSP	Jeremy Svehla	☒	Yes	☐	No
QSD Delegate	Spencer Babcock	☒	Yes	☐	No

An adequate stock of monitoring supplies and equipment for monitoring turbidity and will be available on the project site prior to a sampling event. Monitoring supplies and equipment will be stored in a cool temperature environment that will not come into contact with rain or direct sunlight. The QSP or QSP Delegates will be available to collect samples in accordance with the sampling schedule. Supplies maintained at the project site will include, but are not limited to, field meters, extra batteries, clean powder-free nitrile gloves, sample collection equipment, appropriate sample containers, paper towels, personal rain gear, and *Effluent Sampling Field Log Sheets* and CoC forms provided in Appendix O.

The QSP or QSP Delegates will obtain and maintain the field-testing instruments, as identified in Section 7.7.2.6, for analyzing samples in the field. Field meter instructions are provided in Appendix P.

7.7.2.4 Field Parameters

Samples shall be analyzed for the constituents indicated in the Table 7-11.

Table 7-11 Sample Collection and Analysis for Monitoring Turbidity and pH

Parameter	Test Method	Minimum Sample Volume [1]	Sample Collection Container Type	Detection Limit (minimum)
Turbidity	Field meter/probe with calibrated portable instrument	500 mL	Polypropylene or glass (Do not collect in meter sample cells)	1 NTU
pH	Field meter/probe with calibrated portable instrument or calibrated pH test kit	100 mL	Polypropylene	0.2 pH units

Notes: [1] Minimum sample volume recommended. Specific volume requirements will vary by instrument; check instrument manufacturer instructions.

L – Liter
mL – Milliliter
NTU – Nephelometric Turbidity Unit

7.7.2.5 Sample Collection

Samples of discharge shall be collected at the designated runoff and run-on sampling locations listed in Tables 7-9 and 7-10 shown on the Site Maps in Appendix A. Run-on samples shall be collected within close proximity of the point of run-on to the project.

Sample collection and handling requirements are described in Section 7.7.7.

7.7.2.6 Field Measurements

The collection and analysis of samples for field analysis, collection, analysis and the calibration of equipment shall be in accordance with the field instrument manufacturer's specifications.

Immediately following collection, samples for field analysis shall be tested in accordance with the field instrument manufacturer's instructions and results recorded on the *Effluent Sampling Field Log Sheet*.

The QSP shall identify make and model of field instrument(s) to be used to analyze pH and turbidity.

The manufacturers' instructions are included in Appendix P. Field sampling staff shall review the instructions prior to each sampling event and follow the instructions in completing measurement of the samples.

- The instrument(s) shall be maintained in accordance with manufacturer's instructions.
- The instrument(s) shall be calibrated before each sampling and analysis event.
- Maintenance and calibration records shall be maintained with the SWPPP.

The QSP may authorize alternate equipment provided that the equipment meets the 2022 CGP's requirements and the manufacturers' instructions for calibration and use are added to Appendix P.

7.7.2.7 Data Evaluation and Reporting

The LRP or DAR shall electronically report all stormwater pH and turbidity results to the State Water Board by the through SMARTS within 30 days of receiving the results. Exceedances of NALs shall be electronically reported to the State Water Board by the LRP or DAR through SMARTS within 10 days of receiving the results.

Numeric Action Levels

Compliance with the NALs for pH and turbidity is based on a single sample evaluation. A NAL exceedance occurs when any sample exceeds the turbidity NAL or is outside of the pH range shown in Table 7-13.

Table 7-13 Numeric Action Levels

Parameter	Unit	NAL
pH	pH units	Lower NAL < 6.5 Upper NAL > 8.5
Turbidity	NTU	>250

In the event that the pH or turbidity NAL is exceeded, the QSP shall immediately notify the RCD and investigate the cause of the exceedance and identify corrective actions.

Exceedances of NALs shall be electronically reported to the State Water Board by the LRP or DAR through the SMARTS within 10 days of the conclusion of the storm event.

If requested by the Regional Water Board in writing, a NAL Exceedance report will be submitted within 30 days of the request. The NAL Exceedance Report must contain the following information:

- Analytical method(s), method reporting unit(s), and Method Detection Limit(s) of each parameter;
- Date, place, time of sampling, visual observation, and/or measurements, including precipitation; and

An assessment of the existing BMPs associated with the sample that exceeded the NAL, a description of each corrective action taken including photographs, and date of implementation.

Receiving Water Monitoring Triggers

This project is subject to Receiving Water Monitoring Triggers for pH and turbidity (Table 7-14). Compliance with the Receiving Water Monitoring Triggers for pH and turbidity is based on a single sample evaluation. Receiving water monitoring is triggered when any sample exceeds the turbidity value or is outside of the pH range shown in Table 7-14. Exceeding the Receiving Water Monitoring Triggers is also a NAL exceedance.

Table 7-14 Receiving Water Monitoring Triggers

Parameter	Unit	Trigger Value
pH	pH units	Lower Trigger < 6.5 Upper Trigger > 8.5
Turbidity	NTU	>250

In the event that the pH or turbidity Receiving Water Monitoring Trigger is exceeded, the QSP shall immediately notify the RCD and follow the NAL Exceedance reporting requirements.

Additionally, exceeding a Receiving Water Monitoring Trigger requires the implementation of receiving water monitoring described in Section 7.7.4 unless the exceedance was caused by run-on from a forest fire or any other natural disaster.]

7.7.3 Sampling and Analysis Plan for pH and Turbidity in Receiving Water

The project directly discharges to the following receiving water(s):

- Eel River

Following an exceedance of a Receiving Water Monitoring Trigger, receiving water monitoring is required.

7.7.3.1 Sampling Schedule and Locations

Following the exceedance of the pH Receiving Water Monitoring Trigger, receiving water samples shall be collected for pH.

Following the exceedance of the turbidity Receiving Water Monitoring Trigger, receiving water samples shall be collected for turbidity.

A minimum of one upstream and one downstream receiving water sample shall be collected once every 24-hour period of the qualifying precipitation event**.** If the Regional Water Board requests in writing, the receiving water monitoring may be extended beyond the end of the qualifying precipitation event and the sampling schedule in the SWPPP will be amended.

Sampling locations are based on the site discharge locations into the receiving water, location accessibility for sampling, and personnel safety. Planned sampling locations are listed in Table 7-15.

Two sampling location(s) have been identified for the collection of receiving water samples.

Table 7-15 Receiving Water Sample Locations

Upstream/Upgradient/Background *(This location(s) is a representative and accessible location located as close as possible and upstream from the runoff discharge point)*		
Sample Location Identifier(s)	Sample Location Description	Sample Location Latitude and Longitude
#7 Centerville Slough Outlet and #X Cutoff Slough	Located at the outlet of Centerville Slough in the Eel river. Downstream of the turbidity curtain (INCOMING TIDE)	40°37'17.44"N 124°18'58.96"W
Russ & Shaw Creeks		
Downstream/downgradient *(This location(s) is a representative and accessible location located as close as possible and downstream from the runoff discharge point)*		

Table 7-15 Receiving Water Sample Locations

Sample Location Identifier(s)	Sample Location	Sample Location Latitude and Longitude
#7 Centerville Slough Outlet #X Cutoff Slough	Located at the outlet of Centerville Slough in the Eel river. Downstream of the turbidity curtain (OUTGOING TIDE)	40°37'17.44"N 124°18'58.96"W

No special permissions are needed to access the sampling site.

7.7.3.2 Monitoring Preparation

Receiving water samples will be collected by:

QSP	Jeremy Svehla	☒	Yes	☐	No
QSD Delegate	Spencer Babcock	☒	Yes	☐	No

An adequate stock of monitoring supplies and equipment for monitoring the receiving will be available on the project site prior to a sampling event. Monitoring supplies and equipment will be stored in a cool temperature environment that will not come into contact with rain or direct sunlight. The QSP or QSP Delegates responsible for sampling will be available to collect samples in accordance with the sampling schedule. Supplies maintained at the project site will include, but are not limited to, clean powder-free nitrile gloves, sample collection equipment, field meters, appropriate sample containers, paper towels, personal rain gear, and *Receiving Water Sampling Field Log Sheets* and CoC forms provided in Appendix O.

7.7.3.3 Sample Collection and Field Analysis

Receiving water samples shall be collected at the designated sampling locations listed in Table 7-15 and shown on the Site Maps in Appendix A.

Samples for field parameters shall be analyzed for the constituents indicated in Table 7-11, "Sample Collection, and Analysis for Monitoring Turbidity and pH." Turbidity and pH samples shall be analyzed immediately.

Sample collection and handling requirements are described in Section 7.7.7.

7.7.3.4 Data Evaluation and Reporting

The QSP shall complete an evaluation of the receiving water quality sample analytical results.

Downgradient results shall be compared with the associated upgradient/background results and any associated construction runoff results. Should the downgradient sample show an increased level of the tested analyte relative to the upgradient/background sample, the QSP shall initiate an evaluation of the BMPs, site conditions, and surrounding influences shall be assessed to determine the probable cause for the increase in the parameter concentration in the receiving water.

As determined by the evaluation, appropriate BMPs shall be repaired or modified to mitigate discharges of non-visible pollutant concentrations. Any revisions to the BMPs shall be recorded as an amendment to the SWPPP.

Receiving water data shall be electronically reported to the State Water Board by the LRP or DAR through the SMARTS within 10 days of the conclusion of the precipitation event.

7.7.4 Sampling and Analysis Plan for Dewatering Discharges

☐ No dewatering activities are planned for this project.

☒ Dewatering activities planned for this project will be conducted and monitored according to the requirements of the following NPDES Permit: Water Quality Certification 401 SRGO

☒ Dewatering activities planned for this project will be conducted and monitored according to the requirements of the 2022 CGP Attachment J.

This Sampling and Analysis Plan for dewatering discharges describes the sampling and analysis strategy and schedule for monitoring dewatering discharges in accordance with the requirements of the 2022 CGP.

7.7.4.1 Sample Schedule

Sampling of dewatering discharges will be conducted within the first hour of the commencement of discharge and daily each day that the discharge continues.

7.7.4.2 Sample Locations

Sampling locations are based on the planned dewatering locations. Planned dewatering sampling locations are listed in Table 7-16 and shown on the Site Maps in Appendix A.

Multiple dewatering sampling location(s) on the project site and the contractor's yard will be identified for the collection of dewatering samples. Sampling locations will vary based on the contractors methods and will occur within the LOD shown on the Site Maps in Appendix A.

Table 7-16 Turbidity and pH Dewatering Sample Locations

Sample Location Identifier	**Sample Location Description**	**Sample Location Latitude and Longitude** (Decimal Degrees)
TBD	TBD	TBD

In the event that dewatering is required at a location not listed in Table 7-15, and has not been identified on the Site Maps, sampling locations will be selected by the QSP using the same rationale as that used to identify planned locations. Dewatering sampling locations shall be documented by the QSP on the *Effluent Sampling Field Log Sheet*, which are provided in Appendix O.

7.7.4.3 Monitoring Preparation

Dewatering samples will be collected by:

QSP	Jeremy Svehla	☒	Yes	☐	No
QSD Delegate	Spencer Babcock	☒	Yes	☐	No

An adequate stock of monitoring supplies and equipment for monitoring turbidity and will be available on the project site prior to a sampling event. Monitoring supplies and equipment will

be stored in a cool temperature environment that will not come into contact with rain or direct sunlight. The QSP or QSP Delegates will be available to collect samples in accordance with the sampling schedule. Supplies maintained at the project site will include, but are not limited to, field meters, extra batteries, clean powder-free nitrile gloves, sample collection equipment, appropriate sample containers, paper towels, personal rain gear, and *Effluent Sampling Field Log Sheets* and CoC forms provided in Appendix O.

The QSP or QSP Delegates will obtain and maintain the field-testing instruments, as identified in Section 7.7.2.6, for analyzing samples in the field.

7.7.4.4 Sample Collection and Field Analysis

Dewatering samples shall be collected at the designated sampling locations listed in Table 7-15 and shown on the Site Maps in Appendix A.

Samples for field parameters shall be analyzed for the constituents indicated in Table 7-11 "Sample Collection, and Analysis for Monitoring Turbidity and pH." Turbidity and pH samples shall be analyzed immediately.

Sample collection and handling requirements are described in Section 7.7.7.

7.7.4.5 Data Evaluation and Reporting

At least 24 hours prior to the beginning of a dewatering discharge, the QSP, QSP delegate, or the DAR shall notify the Regional Water Board via email of the anticipated dewatering discharge. Copy the following project staff on the notifications QSP, QSP delegate, and the DAR

The QSP shall sample collection submit copies of the completed *Effluent Sampling Field Log Sheets* to RCD.

Compliance with the NALs for pH and turbidity in dewatering discharges is based on a single sample evaluation. A NAL exceedance occurs when any sample exceeds the turbidity NAL or is outside of the pH range shown in Table 7-13.

In the event that the pH or turbidity NAL is exceeded, the QSP shall immediately notify the RCD and investigate the cause of the exceedance and identify corrective actions.

The QSP or QSP Delegate hall immediately cease dewatering discharges if the NALs are exceeded. If the discharge is necessary to protect human life and health or prevent severe property damage and cannot be ceased, the QSP, QSP Delegate, or the LRP shall notify the Regional Water Board and the Local Stormwater Agency within 24 hours.

Table 7-17 Dewatering Notification Contacts

Agency	Name	Email
Regional Water Board	TBD	TBD
Local Stormwater Agency	TBD	TBD

Exceedances of NALs shall be electronically reported to the State Water Board by the LRP or DAR through SMARTS within 10 days of receiving the results.

Following a NAL exceedance, the QSD shall revise the SWPPP to incorporate corrective actions to prevent further exceedances within 10 days of the measurement.

7.7.5 Sampling and Analysis Plan for Other Pollutants Required by the Regional Water Board

The Regional Water Board has not specified monitoring for additional pollutants.

7.7.6 Training of Sampling Personnel

QSP Delegates assigned to conduct sampling shall be trained by the QSP to collect, maintain, and ship samples in accordance with the 2022 CGP Sample Collection and Handling Instructions and supplemental information as needed. Training records of QSP Delegates assigned to sample are provided in Appendix I.

7.7.7 Sample Collection and Handling

7.7.7.1 Sample Collection

Samples shall be collected at the designated sampling locations shown on the Site Maps and listed in the preceding sections. Samples shall be collected, maintained and shipped in accordance with the 2022 CGP Sample Collection and Handling Instructions.

Grab samples shall be collected and preserved in accordance with the methods identified in preceding sections.

To maintain sample integrity and prevent cross-contamination, sample collection personnel shall follow the protocols below.

- Collect samples (for laboratory analysis) in analytical laboratory-provided or specified sample containers;
  - Use of any other type of containers could cause sample contamination and may result in NAL or NEL exceedances.
- Wear clean, powder-free nitrile gloves when collecting samples;
- Change gloves whenever something not known to be clean has been touched;
- Change gloves between sampling locations;
- Decontaminate all equipment (e.g., bucket, tubing) prior to sample collection;
  - using a trisodium phosphate water wash, distilled water rinse, and final rinse with distilled water..
  - Dispose of wash and rinse water appropriately (i.e., do not discharge to storm drain or receiving water).
  - Do not decontaminate laboratory provided sample containers;
- Do not smoke during sampling events;
- Never sample near a running vehicle;
- Do not park vehicles in the immediate sample collection area (even non-running vehicles);
- Do not eat or drink during sample collection; and
- Do not breathe, sneeze, or cough in the direction of an open sample container.

The most important aspect of grab sampling is to collect a sample that represents the entire runoff stream. Typically, samples are collected by dipping the collection container in the runoff flow paths and streams as noted below.

i. For small streams and flow paths, simply dip the bottle facing upstream until full.

ii. For larger stream that can be safely accessed, collect a sample in the middle of the flow stream by directly dipping the mouth of the bottle. Once again making sure that the opening of the bottle is facing upstream as to avoid any contamination by the sampler.
iii. For larger streams that cannot be safely waded, pole-samplers may be needed to safely access the representative flow.
iv. Avoid collecting samples from ponded, sluggish or stagnant water.
v. Avoid collecting samples directly downstream from a bridge as the samples can be affected by the bridge structure or runoff from the road surface.

Note, that depending upon the specific analytical test, some containers may contain preservatives. These containers should **never** be dipped into the stream but filled indirectly from the collection container.

7.7.7.2 Sample Handling

Turbidity and pH measurements must be conducted immediately. Do not store turbidity or pH samples for later measurement.

Samples for laboratory analysis must be handled as follows. Immediately following sample collection:

- Cap sample containers;
- Complete sample container labels;
- Place sealed containers in a re-sealable storage bag;
- Place sample containers into an ice-chilled cooler;
- Document sample information on the *Effluent Sampling Field Log Sheet* (Appendix O); and
- Complete the CoC.

All samples for laboratory analysis must be maintained between 0-6 degrees Celsius during delivery to the laboratory. Samples must be kept on ice, or refrigerated, from sample collection through delivery to the laboratory. Place samples to be shipped inside coolers with ice. Make sure the sample bottles are well packaged to prevent breakage and secure cooler lids with packaging tape.

Ship samples that will be laboratory analyzed to the analytical laboratory right away. Hold times are measured from the time the sample is collected to the time the sample is analyzed. The 2022 CGP requires that samples be received by the analytical laboratory within 48 hours of the physical sampling (unless required sooner by the analytical laboratory to meet all hold times).

Laboratory Name:

Address:

City, State Zip:

Telephone Number:

Point of Contact:

7.7.7.3 Sample Documentation Procedures

All original data documented on sample container identification labels, *Effluent Sampling Field Log Sheet* (Appendix O), and CoCs shall be recorded using waterproof ink. These shall be considered accountable documents. If an error is made on an accountable document, the individual shall make corrections by lining through the error and entering the correct

information. The erroneous information shall not be obliterated. All corrections shall be initialed and dated.

Duplicate samples shall be identified consistent with the numbering system for other samples to prevent the laboratory from identifying duplicate samples. Duplicate samples shall be identified in the Effluent Sampling Field Log Sheet.

Sample documentation procedures include the following:

Sample Bottle Identification Labels: Sampling personnel shall attach an identification label to each sample bottle. Sample identification shall uniquely identify each sample location. (These location identifiers should be listed in the tables in the SWPPP.)

Field Log Sheets: Sampling personnel shall complete the *Effluent Sampling Field Log Sheet* and *Receiving Water Sampling Field Log Sheet* (Appendix O) for each sampling event, as appropriate.

Chain of Custody: Sampling personnel shall complete the CoC for each sampling event for which samples are collected for laboratory analysis. The sampler will sign the CoC (Appendix O) when the sample(s) is turned over to the testing laboratory or courier.

7.8 Active Treatment System Monitoring

Will an Active Treatment System (ATS) be deployed on the site?

☐ Yes ☒ No

This project does not require a project specific Sampling and Analysis Plan for an ATS because deployment of an ATS is not planned.

7.9 Passive Treatment Monitoring

Will passive treatment technologies be deployed on the site?

☐ Yes ☒ No

This project does not require a project specific Sampling and Analysis Plan for passive treatment because deployment of passive treatment is not planned.

The project specific Passive Treatment Plan includes a Sampling and Analysis Plan. The Passive Treatment Plan is provided in Appendix R.

7.10 Watershed Monitoring Option

This project is not participating in a watershed monitoring option.

7.11 Quality Assurance and Quality Control

An effective Quality Assurance and Quality Control (QA/QC) plan shall be implemented as part of the CSMP to ensure that analytical data can be used with confidence. QA/QC procedures to be initiated include the following:

- Field logs;
- Clean sampling techniques;
- CoCs;
- QA/QC Samples; and
- Data verification.

Each of these procedures is discussed in more detail in the following sections.

7.11.1 Field Logs

The purpose of field logs is to record sampling information and field observations during monitoring that may explain any uncharacteristic analytical results. Sampling information to be included in the field log include the date and time of water quality sample collection, sampling personnel, sample container identification numbers, and types of samples that were collected. Field observations should be noted in the field log for any abnormalities at the sampling location (color, odor, BMPs, etc.). Field measurements for pH and turbidity should also be recorded in the field log. A Visual Inspection Field Log, an Effluent Sampling Field Log Sheet, and a Receiving Water Sampling Field Log Sheet are included in Appendix O.

7.11.2 Clean Sampling Techniques

Clean sampling techniques involve the use of certified clean containers for sample collection and clean powder-free nitrile gloves during sample collection and handling. As discussed in Section 7.7.7, adoption of a clean sampling approach will minimize the chance of field contamination and questionable data results.

7.11.3 Chain of Custody

The sample CoC is an important documentation step that tracks samples from collection through analysis to ensure the validity of the sample. Sample CoC procedures include the following:

- Proper labeling of samples;
- Use of CoC forms for all samples; and
- Prompt sample delivery to the analytical laboratory.

Analytical laboratories usually provide CoC forms to be filled out for sample containers. An example CoC is included in Appendix O.

7.11.4 QA/QC Samples

QA/QC samples provide an indication of the accuracy and precision of the sample collection; sample handling; field measurements; and analytical laboratory methods. The following types of QA/QC will be conducted for this project:

☒ Field Duplicates at a frequency of 1 duplicate minimum per sampling event
(Required for all sampling plans with field measurements or laboratory analysis)

☐ Equipment Blanks at a frequency of:
(Only needed if the equipment used to collect samples could add the pollutants to sample)

☐ Field Blanks at a frequency of:
(Only required if sampling method calls for field blanks)

☐ Travel Blanks at a frequency of:
(Required for sampling plans that include VOC laboratory analysis)

7.11.4.1 Field Duplicates

Field duplicates provide verification of laboratory or field analysis and sample collection. Duplicate samples shall be collected, handled, and analyzed using the same protocols as primary samples. The sample location where field duplicates are collected shall be randomly selected

from the discharge locations. Duplicate samples shall be collected immediately after the primary sample has been collected. Duplicate samples must be collected in the same manner and as close in time as possible to the original sample. Duplicate samples shall not influence any evaluations or conclusion.

7.11.4.2 Equipment Blanks

Equipment blanks provide verification that equipment has not introduced a pollutant into the sample. Equipment blanks are typically collected when:

- New equipment is used;
- Equipment that has been cleaned after use at a contaminated site;
- Equipment that is not dedicated for surface water sampling is used; or
- Whenever a new lot of filters is used when sampling metals.

7.11.4.3 Field Blanks

Field blanks assess potential sample contamination levels that occur during field sampling activities. De-ionized water field blanks are taken to the field, transferred to the appropriate container, and treated the same as the corresponding sample type during the course of a sampling event.

7.11.4.4 Travel Blanks

Travel blanks assess the potential for cross-contamination of volatile constituents between sample containers during shipment from the field to the laboratory. De-ionized water blanks are taken along for the trip and held unopened in the same cooler with the VOC samples.

7.11.5 Data Verification

After results are received from the analytical laboratory, the QSP or QSP Delegates shall verify the data to ensure that it is complete, accurate, and the appropriate QA/QC requirements were met. Data must be verified as soon as the data reports are received. Data verification shall include:

- Check the CoC and laboratory reports.
  Make sure all requested analyses were performed and all samples are accounted for in the reports.
- Check laboratory reports to make sure hold times were met and that the reporting levels meet or are lower than the reporting levels agreed to in the contract.
- Check data for outlier values and follow up with the laboratory.
  Occasionally typographical errors, unit reporting errors, or incomplete results are reported and should be easily detected. These errors need to be identified, clarified, and corrected quickly by the laboratory. The QSP or QSP Delegates should especially note data that is an order of magnitude or more different than similar locations or is inconsistent with previous data from the same location.
- Check laboratory QA/QC results.
  EPA establishes QA/QC checks and acceptable criteria for laboratory analyses. These data are typically reported along with the sample results. The QSP or QSP Delegates shall evaluate the reported QA/QC data to check for contamination (method, field, and equipment blanks), precision (laboratory matrix spike duplicates), and accuracy (matrix spikes and laboratory control samples). When QA/QC checks are outside acceptable ranges, the laboratory must flag the data, and usually provides an explanation of the potential impact to the sample results.

- Check the data set for outlier values and, accordingly, confirm results and re-analyze samples where appropriate.
  Sample re-analysis should only be undertaken when it appears that some part of the QA/QC resulted in a value out of the accepted range. Sample results may not be discounted unless the analytical laboratory identifies the required QA/QC criteria were not met and confirms this in writing.

Field data including inspections and observations must be verified as soon as the field logs are received, typically at the end of the sampling event. Field data verification shall include:

- Check field logs to make sure all required measurements were completed and appropriately documented;
- Check reported values that appear out of the typical range or inconsistent; Follow-up immediately to identify potential reporting or equipment problems, if appropriate, recalibrate equipment after sampling;
- Verify equipment calibrations;
- Review observations noted on the field logs; and
- Review notations of any errors and actions taken to correct the equipment or recording errors.

7.12 Records Retention

All records of stormwater monitoring information and copies of reports (including Annual Reports) must be retained for a period of at least three years from date of submittal or longer if required by the Regional Water Board.

Results of visual monitoring, field measurements, and laboratory analyses must be kept in the SWPPP along with CoCs, and other documentation related to the monitoring.

Records are to be kept onsite while construction is ongoing. Records to be retained include:

- The date, place, and time of inspections, sampling, visual observations, and/or measurements, including precipitation;
- The individual(s) who performed the inspections, sampling, visual observation, and/or field measurements;
- The date and approximate time of field measurements and laboratory analyses;
- The individual(s) who performed the laboratory analyses;
- A summary of all analytical results, the method detection limits and reporting limits, and the analytical techniques or methods used;
- Rain gauge readings from site inspections;
- QA/QC records and results;
- Calibration records;
- Visual observation and sample collection exception records;
- The records of any corrective actions and follow-up activities that resulted from analytical results, visual observations, or inspections;
- Dewatering notifications to the Regional Water Board;
- NAL Exceedance Report

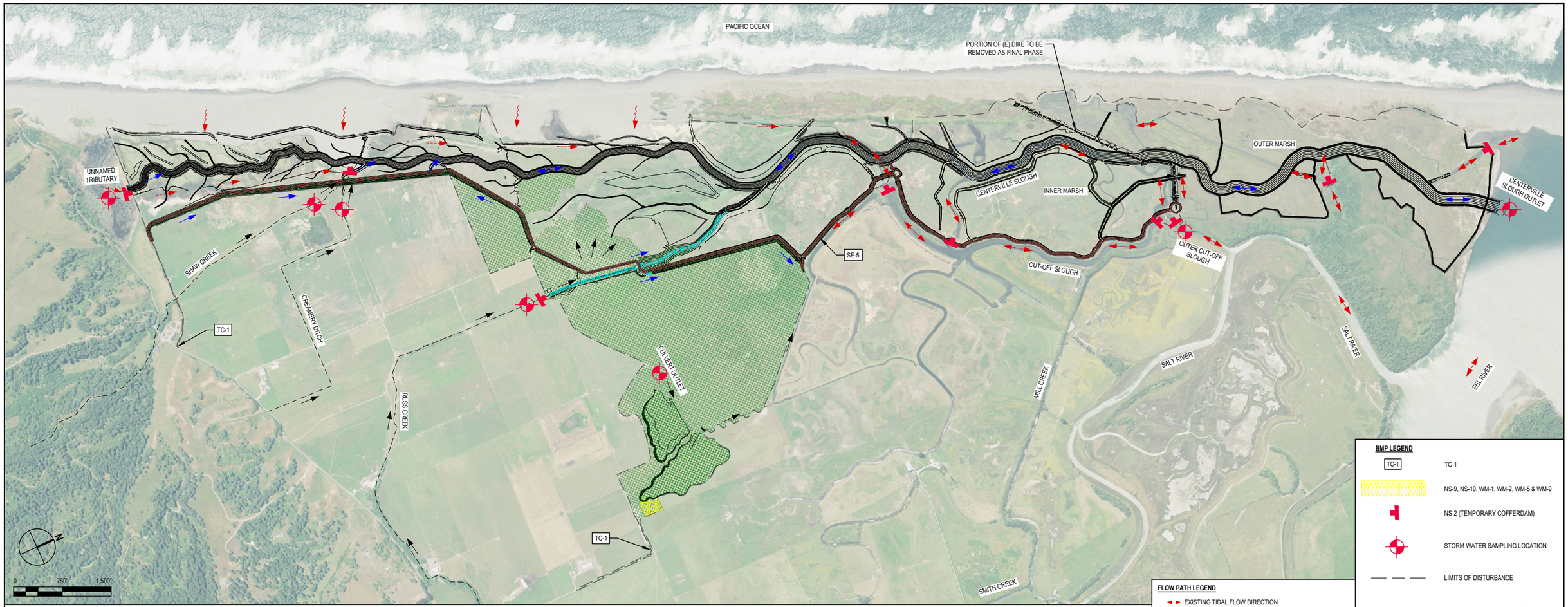
Section 8 References

Project Plans and Specifications dated March 2026, prepared by GHD

SWRCB (State Water Resources Control Board). (2022). Order 2022-0057-DWQ, NPDES General Permit No. CAS000002: Stormwater Discharges Associated with Construction and Land Disturbing Activities. Available online at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction/general_permit_reissuance.html.

CASQA 2023. *Stormwater BMP Handbook: Construction*. Available online at: www.casqa.org

Appendix A: Site Maps and Drawings



GENERAL NOTES

1. THE PROPOSED EROSION AND SEDIMENT CONTROL MEASURES ARE A MINIMUM BEST MANAGEMENT PRACTICE. THE CONTRACTOR MAY BE REQUIRED TO TAKE ADDITIONAL EROSION CONTROL MEASURES TO ENSURE THAT NO SEDIMENT LADEN WATER EXITS THE SITE OR ENTERS THE EXISTING STORMWATER SYSTEMS. BMPS ARE TO BE EMPLOYED AS APPROPRIATE TO MINIMIZE EROSION AND PREVENT SEDIMENT DISCHARGE FROM THE SITE IN THE EVENT OF SUMMER RAINSTORMS, WHEN RAINFALL IS FORECAST, OR AT THE LATEST BY OCTOBER 15TH AND UNTIL APRIL 15TH.
2. SUFFICIENT EROSION CONTROL SUPPLIES SHALL BE AVAILABLE ON-SITE AT ALL TIMES TO DEAL WITH AREAS SUSCEPTIBLE TO EROSION DURING RAIN EVENTS.
3. UPDATE MAP THROUGHOUT CONSTRUCTION TO SHOW LOCATIONS OF STORAGE AREAS FOR WASTE, VEHICLES, SERVICE, LOADING/UNLOADING OF MATERIALS, STAGING, STOCKPILES, CONCRETE WASHOUT, SANITARY FACILITIES, ACCESS (ENTRANCE/EXIT) POINTS TO CONSTRUCTION SITE, FUELING, WATER STORAGE, WATER TRANSFER FOR DUST CONTROL AND COMPACTION, AND ANY ADDITIONAL BMPs REQUIRED TO COMPLY WITH THE GENERAL PERMIT.
4. SEE BMP FACT SHEETS IN SWPPP APPENDIX I.
5. NIC - NOT IN CONTRACT
6. AERIAL IMAGE DOES NOT ACCURATELY REFLECT CURRENT DRAINAGE OR VEGETATION CONDITIONS. CONTRACTOR TO VERIFY FIELD CONDITIONS.

BMP KEY

EROSION CONTROL BMPs
EC-1 SCHEDULING
EC-2 PRESERVATION OF EXISTING VEGETATION
EC-3 HYDRAULIC MULCH
EC-4 SEEDING
EC-5 SOIL BINDERS
EC-6 STRAW MULCH
EC-7 GEOTEXTILES & MATS
EC-8 WOOD MULCHING
EC-9 EARTH DIKES AND DRAINAGE SWALES
EC-10 VELOCITY DISSIPATION DEVICES
EC-11 SLOPE DRAINS
EC-12 STREAMBANK STABILIZATION
EC-14 COMPOST BLANKETS
EC-15 SOIL PREPARATION / ROUGHENING
EC-16 NON-VEGETATIVE STABILIZATION

WIND EROSION CONTROL BMPs
WE-1 WIND EROSION CONTROL

TEMPORARY SEDIMENT CONTROL BMPs
SE-1 SILT FENCE
SE-2 SEDIMENT BASIN
SE-3 SEDIMENT TRAP
SE-4 CHECK DAM
SE-5 FIBER ROLLS
SE-6 GRAVEL BAG BERM
SE-7 STREET SWEEPING AND VACUUMING
SE-8 SANDBAG BARRIER
SE-9 STRAW BALE BARRIER
SE-10 STORM DRAIN INLET PROTECTION
SE-11 ACTIVE TREATMENT SYSTEMS
SE-12 MANUFACTURED SEDIMENT CONTROL
SE-13 COMPOST SOCKS AND BERMS
SE-14 BIOFILTER BAGS

NON-STORM WATER MANAGEMENT BMPs
NS-1 WATER CONSERVATION PRACTICES
NS-2 DEWATERING OPERATIONS
NS-3 PAVING AND GRINDING OPERATIONS
NS-4 TEMPORARY STREAM CROSSING
NS-5 CLEAR WATER DIVERSION
NS-6 ILLICIT CONNECTION/DISCHARGE
NS-7 POTABLE WATER/IRRIGATION
NS-8 VEHICLE AND EQUIPMENT CLEANING
NS-9 VEHICLE AND EQUIPMENT FUELING
NS-10 VEHICLE AND EQUIPMENT MAINTENANCE
NS-11 PILE DRIVING OPERATIONS
NS-12 CONCRETE CURING
NS-13 CONCRETE FINISHING
NS-14 MATERIAL AND EQUIPMENT USE
NS-15 DEMOLITION ADJACENT TO WATER
NS-16 TEMPORARY BATCH PLANTS

WASTE MANAGEMENT & MATERIALS POLLUTION CONTROL BMPs
WM-1 MATERIAL DELIVERY AND STORAGE
WM-2 MATERIAL USE
WM-3 STOCKPILE MANAGEMENT
WM-4 SPILL PREVENTION AND CONTROL
WM-5 SOLID WASTE MANAGEMENT
WM-6 HAZARDOUS WASTE MANAGEMENT
WM-7 CONTAMINATED SOIL MANAGEMENT
WM-8 CONCRETE WASTE MANAGEMENT
WM-9 SANITARY/ SEPTIC WASTE MANAGEMENT
WM-10 LIQUID WASTE MANAGEMENT

TEMPORARY TRACKING CONTROL BMPs
TC-1 STABILIZED CONSTRUCTION ENTRANCE/EXIT
TC-2 STABILIZED CONSTRUCTION ROADWAY
TC-3 ENTRANCE/OUTLET TIRE WASH

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID			3/1/2026

Author S.BABCOCK | Drafting Check J.SVEHLA | Project Manager B. VIVYAN
Designer S.BABCOCK | Design Check J.SVEHLA | Project Director J. SVEHLA

Bar is one inch on original size sheet
0 1"

REGISTERED PROFESSIONAL ENGINEER JEREMY SHANE SVEHLA No. C 72169 Exp. 6/30/26 CIVIL STATE OF CALIFORNIA

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Client HUMBOLDT COUNTY RESOURCE CONSERVATION DISTRICT
Project RUSS CREEK AND CENTERVILLE SLOUGH RESTORATION PROJECT

Project No. 11187323 | Date 3/4/2026 | Scale AS SHOWN

Title SWPPP SITE MAP

Size ANSI D

Sheet No. Sheet 1 of 1

Plot Date: 4 March 2026 - 8:15 AM | Plotted By: Spencer Babcock | Filename: C:\ADSK\ACCDocs\GHD Services Pty Ltd\11187323-Centerville Slough Restoration\Project Files\01 WIP\Figures\SWPPP Figure\11187323_SWPPP Figure.dwg

Appendix B: Permit Registration Documents

Permit Registration Documents included in this Appendix:

Location in SWPPP	**Permit Registration Document** (in addition to a copy of the SWPPP)
	Notice of Intent
	Risk Level Determination
	Certification
	Post-Construction Requirements, if applicable
	Site Maps and Drawings, see Appendix A

Appendix C: SWPPP Amendment QSD Certifications

SWPPP Amendment No. _____

Project Name: _____

Project Number: _____

Qualified SWPPP Developer's Certification of the Stormwater Pollution Prevention Plan Amendment

"This Stormwater Pollution Prevention Plan and its appendices were prepared under my direction to meet the requirements of the 2022 CGP (SWRCB Order No. 2022-0057-DWQ). I certify that I am a Qualified SWPPP Developer in good standing as of the date signed below."

QSD's Signature	Date
QSD Name	QSD Certificate Number
Title and Affiliation	Telephone
Address	Email

Appendix D: Submitted Changes of Information

Log of Updated PRDs

The 2022 CGP allows for the reduction or increase of the total acreage when a portion of the project is complete and/or conditions for termination of coverage have been met; when ownership of a portion of the project is purchased by a different entity; or when new acreage is added to the project.

A Change of Information (COI) shall be filed electronically within the timeframe shown in the table below. The SWPPP shall be modified appropriately, with revisions and amendments recorded in the SWPPP Amendment Log at the front of the SWPPP. COIs submitted electronically via SMARTS can be found in this Appendix.

Reason for Filing COI	**Timeline for Filing COI**
Reduction or increase in total disturbed area	Within 30 days of the reduction or increase
Updating site specific BMPs	Within 14 days of design change
Change construction start or end date	At least 14 days prior to the date to be changed
Post-construction plans updated or approved by the municipal stormwater permittee	Within 14 days of approval

---

This appendix includes all of the following updated PRDs (check all that apply):

☐ Change of Information;

☐ Revised Site Map;

☐ Revised Risk Assessment;

☐ New landowner's information (name, address, phone number, email address); and

☐ New signed certification statement.

Signature of [Authorized Representative of] Legally Responsible Person or Duly Authorized Representative	Date
Name of [Authorized Representative of] Legally Responsible Person or Duly Authorized Representative	Telephone Number

Appendix E: Construction Schedule

Appendix F: Construction Activities, Materials Used, and Associated Pollutants

Table F.1 Pollutant Source Assessment Form

Phase	Activity	Associated Materials or Pollutants	Pollutant Category [1]
Demolition and Pre- Development Site Preparation Phase	Sanitary waste	• Portable toilets	Nutrients
	Barn removal, fence & water line removal	• Litter, trash and debris Vegetation	Gross Pollutants
	Vehicle and equipment use	• Equipment operation • Equipment maintenance • Equipment washing Equipment fueling	Oil and Grease
Grading and Land Development	Active land grading	Sediment and turbidity	Sediment
	Concrete pours and curing	• Curing Compounds, Acid Wash, Concrete Rinse Water, Sawcut Slurries	pH, Alkalinity, VOC
	Sanitary waste	• Portable toilets	Nutrients
	Solid waste	• Litter, trash and debris Vegetation	Gross Pollutants
	Vehicle and equipment use	• Equipment operation • Equipment maintenance • Equipment washing Equipment fueling	Oil and Grease
Final Landscaping and Site Stabilization Phase	Planting Vegetation Management	• Vegetation control (pesticides/herbicides) • Planting • Plant maintenance Vegetation removal	Nutrients, Metals, Synthetic Organics
	Sanitary waste	• Portable toilets	Nutrients
	Soil preparation/amendments	Use of soil additives/amendments	Nutrients
	Solid waste	• Litter, trash and debris Vegetation	Gross Pollutants
	Vehicle and equipment use	• Equipment operation • Equipment maintenance • Equipment washing Equipment fueling	Oil and Grease

[1] Categories per CASQA BMP Handbook (i.e., Sediment, Nutrients, Bacteria and Viruses, Oil and Grease, Metals, Synthetic Organics, Pesticides, Gross Pollutants, and Vector Production)

Appendix G: CASQA Stormwater BMP Handbook: Construction Fact Sheets

CASQA BMP Fact Sheets

CASQA BMP Fact Sheets will be included in the final version of this document. CASQA BMP Fact Sheets can be made available upon request.

Appendix H: BMP Inspection Form

BMP INSPECTION REPORT

Date and Time of Inspection:	Date Report Written:

Inspection Type: (Circle one)	Weekly *Complete Parts I,II,III and VII*	Pre-Qualifying Precipitation Event (QPE) *Complete Parts I,II,III,IV and VII*	During QPE *Complete Parts I, II, III, V, and VII*	Post-QPE *Complete Parts I,II,III,VI and VII*	*Inactive Project Complete Parts I,II,III and VII*

Part I. General Information

Site Information

Construction Site Name:	
Construction stage and completed activities:	Approximate area of site that is exposed:

Photos Taken: (Circle one)	Yes	No	Photo Reference IDs:

Weather

Estimate storm beginning: (date and time)	Estimate storm duration: (hours)
Estimate time since last storm: (days or hours)	Rain gauge reading and location: (in)

Is a "Qualifying Precipitation Event" predicted or did one occur (i.e., any weather pattern with a 50% chance of 0.5" or more within a 24-hr period when 0.5" has been forecast and continues on subsequent 24-hour periods when 0.25" of precipitation or more is forecast)? (Y/N)
If yes, summarize forecast:

Exception Documentation (explanation required if inspection could not be conducted). Visual inspections are not required outside of business hours or during dangerous weather conditions such as electrical storms, flooding, and high winds above 40 miles per hour.

Inspector Information

Inspector Name:	Inspector Title:
Inspector Certification:	Date:

Part II. BMP Observations. Describe deficiencies in Part III.

Minimum BMPs for Risk Level _____ Sites	Adequately designed, implemented and effective (yes, no, N/A)	Action Required (yes/no)	Action Implemented (Date)
Good Housekeeping for Construction Materials			
Inventory of products (excluding materials designed to be outdoors)			
Stockpiled construction materials not actively in use are covered and bermed			
All chemicals are stored in watertight containers with appropriate secondary containment, or in a completely enclosed storage shed			
Construction materials are minimally exposed to precipitation			
BMPs preventing the off-site tracking of materials are implemented and properly effective			
Good Housekeeping for Waste Management			
Wash/rinse water and materials are prevented from being disposed into the storm drain system			
Portable toilets are contained to prevent discharges of waste			
Sanitation facilities are clean and with no apparent for leaks and spills			
Equipment is in place to cover waste disposal containers at the end of business day and during rain events			
Discharges from waste disposal containers are prevented from discharging to the storm drain system / receiving water			
Stockpiled waste material is securely protected from wind and rain if not actively in use			
Procedures are in place for addressing hazardous and non-hazardous spills			
Appropriate spill response personnel are assigned and trained			
Equipment and materials for cleanup of spills is available onsite			
Washout areas (e.g., concrete) are contained appropriately to prevent discharge or infiltration into the underlying soil			
Good Housekeeping for Vehicle Storage and Maintenance			
Measures are in place to prevent oil, grease, or fuel from leaking into the ground, storm drains, or surface waters			
All equipment or vehicles are fueled, maintained, and stored in a designated area with appropriate BMPs			
Vehicle and equipment leaks are cleaned immediately and disposed of properly			

Part II. BMP Observations Continued. Describe deficiencies in Part III.			
Minimum BMPs for Risk Level _____ Sites	Adequately designed,	Action Required (yes/no)	Action Implemented (Date)

	implemented and effective (yes, no, N/A)		
Good Housekeeping for Landscape Materials			
Stockpiled landscape materials such as mulches and topsoil are contained and covered when not actively in use			
Erodible landscape material has not been applied 2 days before a forecasted rain event or during an event			
Erodible landscape materials are applied at quantities and rates in accordance with manufacturer recommendations			
Bagged erodible landscape materials are stored on pallets and covered			
Good Housekeeping for Air Deposition of Site Materials			
Good housekeeping measures are implemented onsite to control the air deposition of site materials and from site operations			
Non-Stormwater Management			
Non-Stormwater discharges are properly controlled			
Vehicles are washed in a manner to prevent non-stormwater discharges to surface waters or drainage systems			
Streets are cleaned in a manner to prevent unauthorized non-stormwater discharges to surface waters or drainage systems.			
Erosion Controls			
Wind erosion controls are effectively implemented			
Effective soil cover is provided for disturbed areas inactive (i.e., not scheduled to be disturbed for 14 days) as well as finished slopes, open space, utility backfill, and completed lots			
The use of plastic materials is limited in cases when a more sustainable, environmentally friendly alternative exists.			
Sediment Controls			
Perimeter controls are established and effective at controlling erosion and sediment discharges from the site			
Entrances and exits are stabilized to control erosion and sediment discharges from the site			
Sediment basins are properly maintained			
Inspect immediate access roads prior to forecasted precipitation			
Linear sediment control along toe of slope, face of slope an at grade breaks (Risk Level 2 & 3 Only)			
Limit construction activity to and from site to entrances and exits that employ effective controls to prevent offsite tracking (Risk Level 2 & 3 Only)			
Ensure all storm, drain inlets and perimeter controls, runoff control BMPs and pollutants controls at entrances and exits are maintained and protected from activities the reduce their effectiveness (Risk Level 2 & 3 Only)			
Run-On and Run-Off Controls			

Run-on to the site is effectively managed and directed away from all disturbed areas.			
Other			
Are the project SWPPP and BMP plan up to date, available onsite and being properly implemented?			
Is the posting of the project's unique WDID number, waiver identification number, and site and project contact information publicly accessible?			

Part III. Descriptions of BMP Deficiencies		
Deficiency	**Repairs Implemented: Note - Repairs must begin within 72 hours of identification and, complete repairs as soon as possible.**	
	Start Date	**Action**
1.		
2.		
3.		
4.		

Part IV. Additional Pre-QPE Observations. Note the presence or absence of floating and suspended materials, sheen, discoloration, turbidity, odors, and source(s) of pollutants(s).	
	Yes, No, N/A
Do stormwater storage and containment areas have adequate freeboard? If no, complete Part III.	
Are drainage areas free of spills, leaks, or uncontrolled pollutant sources? If no, complete Part VII and describe below.	
Notes:	
Are stormwater storage and containment areas free of leaks? If no, complete Parts III and/or VII and describe below.	
Notes:	

Part V. Additional During-QPE Observations. If BMPs cannot be inspected during inclement weather, list the results of visual inspections at all relevant outfalls, discharge points, and downstream locations. Note odors or visible sheen on the surface of discharges. Complete Part VII (Corrective Actions) as needed.
Outfall, Discharge Point, or Other Downstream Location

Location	Description
Location	Description
Location	Description
Location	Description

Part VI. Additional Post-QPE Observations. Visually observe (inspect) stormwater discharges at all discharge locations within 96 hours after each qualifying precipitation event, and observe (inspect) the discharge of stored or contained stormwater that is derived from and discharged subsequent to a qualifying precipitation event producing precipitation of ½ inch or more at the time of discharge. Complete Part VII (Corrective Actions) as needed.	
Discharge Location, Storage or Containment Area	**Visual Observation**

Part VII. Additional Corrective Actions Required. Identify additional corrective actions not included with BMP Deficiencies (Part III) above. Note if SWPPP change is required.	
Required Actions	**Implementation Date**

Appendix I: Training Forms

Contractor Personnel Training Log

Stormwater Management Training Log and Documentation

Project Name: _____

WDID #: _____

Stormwater Management Topic: (check as appropriate)

☐ Good Housekeeping BMPs ☐ Erosion Control BMPs

☐ Sediment Control BMPs ☐ Tracking Control

☐ Non-Stormwater Management BMPs ☐ Waste Management & Pollution Control BMPs

☐ BMP Implementation Activities ☐ Advanced BMPs

☐ Identification of QSPs and QSP Delegates

Training Objective: _____

Date: _____ Instructor: _____

Training Length (hours): _____

Attendee Roster (Attach additional forms if necessary)

Name	Company	Phone

QSP Delegate Training Log

Stormwater Management Training Log and Documentation

Project Name: _____

WDID #: _____

QSP Delegate Name: _____

Delegated Responsibilities:

☐ Stormwater Visual Inspections

☐ Sampling

☐ BMP Inspections

☐ BMP Maintenance and Repair

Foundational Training

Topic	Date Completed	QSP Trainer
☐ Roles and Responsibilities		
☐ Forecast Information		
☐ Documentation and Reporting Procedures		

Site-Specific Training

Topic	Date Completed	QSP Trainer
☐ Visual Inspections		
☐ Sample Collection Procedures		
☐ Sample Reporting Procedures		
☐ BMP Implementation		

As needed, attach proof of external training (e.g., course completion certificates, credentials for the QSP Delegate).

Appendix J: Responsible Parties

Identification of QSP and QSP Delegates

Project Name: _____

WDID #: _____

The following are QSPs and QSP Delegates associated with this project

Name of Personnel[1]	QSP Number, or state "Delegate"	Company	Date
Jeremy Svehla	C72169	GHD	03-01-2026
Spencer Babcock	Delegate	GHD	03-01-2026

(1) If additional QSPs or QSP Delegates are required on the job site add additional lines

Appendix K: Contractors and Subcontractors

Contractor Name:	
Title:	
Contractor Company:	
Address	
Phone Number:	
Phone Number (24/7)	
[Add additional rows, if needed]	

Appendix L: Calculations

Appendix M: Weather Reports

The discharger must obtain the precipitation forecast information from the National Weather Service Forecast Office (http://forecast.weather.gov). A printed copy with the date and time of printing should be retained in this Appendix.

Appendix N: Monitoring Records

Place completed BMP Inspection Forms, photographic documentation, Effluent Sampling, Receiving Water, and Dewatering Field Logs, Monitoring Exceptions, NAL Exceedance Reports, and Receiving Water Monitoring Trigger Exceptions in this appendix.

Appendix O: Example Storm Event Monitoring Forms

Rain Gauge Log Sheet				
Construction Site Name:				
WDID #:				
Date (mm/dd/yy)	Time (24-hr)	Initials	Rainfall Depth (Inches)	Notes:

Risk Level 1, 2, 3 ***Visual Inspection Field Log Sheet***					
Date and Time of Inspection:				Report Date:	
Inspection Type:	☐ Weekly	☐ Pre Qualifying Precipitation Event (QPE)	☐ During QPE	☐ Post QPE	☐ Dewatering Discharge
Site Information					
Construction Site Name:					
Construction stage and completed activities:				Approximate area of exposed site:	
Weather and Observations					
Date Rain Predicted to Occur:			Predicted % chance of precipitation (PoP): Predicted quantity of precipitation (QPF):		
Estimate storm beginning: _____ (date and time)		Estimate storm duration:_____ (hours)	Estimate time since last storm: _____ (days or hours)	Rain gauge reading:_____ (inches)	
Observations: If yes identify location					
Odors	Yes ☐	No ☐			
Floating material	Yes ☐	No ☐			
Suspended Material	Yes ☐	No ☐			
Sheen	Yes ☐	No ☐			
Discolorations	Yes ☐	No ☐			
Turbidity	Yes ☐	No ☐			
Site Inspections					
Outfalls or BMPs Evaluated			**Deficiencies Noted**		
(add additional sheets or attached detailed BMP Inspection Checklists)					
Photos Taken:	Yes ☐	No ☐	Photo Reference IDs:		
Corrective Actions Identified (note if SWPPP/REAP change is needed)					
Inspector Information					
Inspector Name:			Inspector Title:		
Signature:				Date:	

Risk Level 1, 2, 3 ***Effluent Sampling Field Log Sheets***			
Construction Site Name:		Date:	Time Start:
Sampler:			
Sampling Event Type:	☐ Stormwater	☐ Dewatering Discharge	☐ Non-visible pollutant
Field Meter Calibration			
pH Meter ID No./Desc.: Calibration Date/Time:		Turbidity Meter ID No./Desc.: Calibration Date/Time:	

Field pH and Turbidity Measurements			
Discharge Location Description	pH	Turbidity	Time

Grab Samples Collected		
Discharge Location Description	Sample Type	Time

Additional Sampling Notes:
Time End:

Risk Level 3 ***Receiving Water Sampling Field Log Sheets***		
Construction Site Name:	Date:	Time Start:
Sampler:		
Receiving Water Description and Observations		
Receiving Water Name/ID:		
Observations:		
Odors Yes ☐ No ☐		
Floating material Yes ☐ No ☐		
Suspended Material Yes ☐ No ☐		
Sheen Yes ☐ No ☐		
Discolorations Yes ☐ No ☐		
Turbidity Yes ☐ No ☐		
Field Meter Calibration		
pH Meter ID No./Desc.: Calibration Date/Time:	Turbidity Meter ID No./Desc.: Calibration Date/Time:	

Field pH and Turbidity Measurements			
Upstream Location			
Type	Result	Time	Notes
pH			
Turbidity			
Downstream Location			
Type	Result	Time	Notes
pH			
Turbidity			
Additional Sampling Notes:			
Time End:			

NAL Exceedance Evaluation Summary Report	Page __ of __
Project Name	
Project WDID	
Project Location	
Date of Exceedance	
Type of Exceedance	**NAL ☐ pH ☐ Turbidity** **☐ Other (specify) _____**
Measurement or Analytical Method	**☐ Field meter** **(Sensitivity: _____)** **☐ Lab method (specify) _____** **(Minimum Level: _____)** **(MDL: _____)**
Calculated Daily Average	**☐ pH _____ pH units** **☐ Turbidity _____ NTU**
Rain Gauge Measurement	**_____ inches**
Visual Observations on Day of Exceedance	

NAL Exceedance Evaluation Summary Report	Page __ of __
Description of BMPs in Place at Time of Event	
Initial Assessment of Cause	
Corrective Actions Taken (deployed after exceedance)	
Additional Corrective Actions Proposed	
Report Completed By	_____ **(Print Name, Title)**
Signature	_____

CHAIN-OF-CUSTODY **DATE:** **Lab ID:**

DESTINATION LAB: ATTN: **ADDRESS:** **Office Phone:** **Cell Phone:**							REQUESTED ANALYSIS				Notes:
SAMPLED BY:											
Contact:											
Project Name											
Client Sample ID	**Sample Date**	**Sample Time**	**Sample Matrix**	**Container #**	**Container Type**	**Container Pres.**					

SENDER COMMENTS:	**RELINQUISHED BY**	
	Signature:	
	Print:	
	Company:	
	Date:	TIME:
LABORATORY COMMENTS:	**RECEIVED BY**	
	Signature:	
	Print:	
	Company:	
	Date:	TIME:

Appendix P: Field Meter Instructions

Appendix Q: Supplemental Information

Appendix R: Active Treatment System and Passive Treatment Plans

Appendix S: Construction General Permit

Copies of the Construction Stormwater General Permit may be downloaded from the State Water Board website at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml.