GENERAL INSTRUCTIONS AND CAVEATS

INSTRUCTIONS

Instructions are identified by gray shading, and **should be deleted upon SWPPP** completion.

This template presents the recommended structure and content for preparation of a Construction Stormwater General Permit (CSWGP) and/or a Stormwater Pollution Prevention Plan (SWPPP).

The Washington State Department of Ecology's (Ecology) CSWGP requirements inform the structure and content of this SWPPP template.

A Construction Stormwater Site Inspection Form can be found on Ecology's website.

https://www.ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Construction-stormwater-permit

Is my project required to submit a SWPPP?

All new development and redevelopment projects are responsible for preventing erosion and discharge of sediment and other pollutants into receiving waters.

Projects which result in 2,000 square feet of new plus replaced hard surface area, or disturb 7,000 square feet or more of land must prepare a Construction SWPP Plan (SWPPP) as part of the Stormwater Site Plan (see section 2.5.1 SWMMWW 2014). The 2,000 square feet threshold for hard surfaces and 7,000 square feet threshold for land disturbance are chosen to capture most single family homes and their equivalent.

Do not: copy and paste from an old Template as the structure of the Templates may not be the same, change the format or delete sections from this Template.

This SWPPP must be completed and submitted to the City of Lynnwood Surface Water Division for review, and approval obtained prior to scheduling a preconstruction meeting.

Do I need permit coverage? https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Construction-stormwater-permit

Many construction sites will need to apply for coverage under the CSWGP. Construction site operators are required to be covered if **both** of these apply:

- 1. Your construction project disturbs land¹ through clearing, grading, excavating, or stockpiling of fill material.
 - Sites that disturb one acre or more.

- Sites that are smaller than one acre that are part of a larger common plan of development² that will ultimately disturb one acre or more and discharge stormwater to surface waters must apply for a permit.
- Sites of any size discharging stormwater to state waters (Waters of the State)
 that we determine to be a significant contributor of pollutants.
- Sites of any size that we reasonably expect to cause a violation of any water quality standard.
- 2. There is any possibility that during construction, stormwater could run off your site or enter a conveyance system that leads to surface waters. In almost every case it does. If the location of your site poses no possibility that rainfall or snowmelt could leave the site or enter a waterway, you do not need a permit.

Using the SWPPP Template

Each section will include instructions and space for information specific to your project. Please read the instructions for each section and provide the necessary information when prompted. Some sections may be completed with brief answers while others may require several pages of explanation.

Do I need a CESCL or an Inspector? (CSWGP S4. Monitoring Requirements, Benchmarks, and reporting Triggers)

Construction sites one acre or larger that discharge stormwater to surface waters of the State must have the site inspection conducted by a certified CESCL. Sites less than once acre may have a person without CESCL certification conduct inspections. The staff must be knowledgable in the principals and practices of erosion and sediment control. The CESCL (sites one acre or more) or inspector (sites less than one acre) must have the skills to asses the:

¹ Count the cumulative acreage of the whole project, whether it's single or multiphase. Include off-site disturbance acreage from support activities related to the construction site. This applies if your project is a portion (less than one acre) of a larger project planned over time.

² Common Plan of Development or Sale - A site where multiple separate and distinct construction activities may be taking place at different times on different schedules and/or by different contractors, but still under a single plan. Examples include: 1) phase projects and projects with multiple filings or lots, even if the separate phases or filings/lots will be constructed under separate contract or by separate owners (e.g., a development where lots are sold to separate builders); 2) a development plan that may be phased over multiple years, but is still under a consistent plan for long-term development; 3) projects in a contiguous area that may be unrelated but still under the same contract, such as construction of a building extension and a new parking lot at the same facility; and 4) linear projects such as roads, pipelines, or utilities. If the project is part of a common plan of development or sale, the disturbed area of the entire plan must be used in determine permit requirements.

- a. Site conditions and construction activities that could impact the quality of stormwater, *and*
- b. Effectiveness of erosion and sediment control measures used to control the quality of stormwater discharge

The SWPPP must identify the CESCL or inspector, who must be present on site or oncall at all times.

Follow this link to a copy of the Construction Stormwater General Permit: https://www.ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Construction-stormwater-permit

Follow this link to a copy of the Sampling Guide for Construction Sites: https://fortress.wa.gov/ecy/publications/documents/0610020.pdf

Stormwater Pollution Prevention Plan (SWPPP)

for [Insert Project Name]

Prepared for:

The Washington State Department of Ecology Northwest Regional Office 3190 – 160th Avenue SE Bellevue, WA 98008 Prepared for:

City of Lynnwood 19100 44th Ave W Lynnwood, WA 98036 425-670-5200

Permittee / Owner	Developer	Operator / Contractor
[Insert Name]	[Insert Name]	[Insert Name]

[Insert Project Site Location]

Update as necessary.

Certified Erosion and Sediment Control Lead (CESCL)

Name	Organization	Contact Phone Number
[Insert Name]	[Insert Name]	[Insert Name]
CESCL No.	Certification Exp. Date	
[Insert CESCL No.]	[Insert Certificate Exp Date]	

SWPPP Prepared By

Name	Organization	Contact Phone Number
[Insert Name]	[Insert Name]	[Insert Name]

SWPPP Preparation Date

Project Construction Dates

Activity / Phase	Start Date	End Date
[Insert Name]		

Table of Contents

1	Ρ	roject I	nformation	4
	1.1	Exis	ting Conditions	4
	1.2	Prop	posed Construction Activities	4
2	С	Construc	ction Stormwater Best Management Practices (BMPs)	ε
	2.1	The	13 Elements	7
	2	.1.1	Element 1: Preserve Vegetation / Mark Clearing Limits	7
	2	.1.2	Element 2: Establish Construction Access	8
	2	.1.3	Element 3: Control Flow Rates	9
	2	.1.4	Element 4: Install Sediment Controls	10
	2	.1.5	Element 5: Stabilize Soils	11
	2	.1.6	Element 6: Protect Slopes	12
	2	.1.7	Element 7: Protect Drain Inlets	13
	2	.1.8	Element 8: Stabilize Channels and Outlets	14
	2	.1.9	Element 9: Control Pollutants	15
	2	.1.10	Element 10: Control Dewatering	18
	2	.1.11	Element 11: Maintain BMPs	19
	2	.1.12	Element 12: Manage the Project	20
	2	.1.13	Element 13: Protect Low Impact Development (LID) BMPs	23
3	Р	Pollution	Prevention Team	24
4	Ν	/lonitorii	ng and Sampling Requirements	25
	4.1	Site	Inspection	25
	4.2	Stor	mwater Quality Sampling	25
	4	.2.1	Turbidity Sampling	25
	4	.2.2	pH Sampling	27
5	D)ischarg	es to 303(d) or Total Maximum Daily Load (TMDL) Waterbodies	28
	5.1	303	(d) Listed Waterbodies	28
	5.2	TMI	DL Waterbodies	28
6	R	•	g and Record Keeping	
	6.1	Rec	ord Keeping	
	6	.1.1	Site Log Book	
	6	.1.2	Records Retention	
	6	.1.3	Updating the SWPPP	
	6.2	Rep	orting	
		.2.1	Discharge Monitoring Reports	
	6	.2.2	Notification of Noncompliance	31

List of Tables

Table 1 – Summary of Site Pollutant Constituents	4
Table 2 – Pollutants	15
Table 3 – pH-Modifying Sources	16
Table 4 - Dewatering BMPs	18
Table 5 – Management	20
Table 6 - BMP Implementation Schedule	21
Table 7 – Team Information	24
Table 8 – Turbidity Sampling Method	26
Table 9 – pH Sampling Method	27

List of Appendices

Appendix/Glossary

- A. Site Map
- B. BMP Detail
- **C.** Correspondence
- D. Site Inspection Form
- E. Construction Stormwater General Permit (CSWGP)
- F. 303(d) List Waterbodies / TMDL Waterbodies Information
- G. Contaminated Site Information
- H. Engineering Calculations

List of Acronyms and Abbreviations

Acronym / Abbreviation	Explanation
303(d)	Section of the Clean Water Act pertaining to Impaired Waterbodies
BFO	Bellingham Field Office of the Department of Ecology
BMP(s)	Best Management Practice(s)
CESCL	Certified Erosion and Sediment Control Lead
CO ₂	Carbon Dioxide
CRO	Central Regional Office of the Department of Ecology
CSWGP	Construction Stormwater General Permit
CWA	Clean Water Act
DMR	Discharge Monitoring Report
DO	Dissolved Oxygen
Ecology	Washington State Department of Ecology
EPA	United States Environmental Protection Agency
ERO	Eastern Regional Office of the Department of Ecology
ERTS	Environmental Report Tracking System
ESC	Erosion and Sediment Control
GULD	General Use Level Designation
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Units
NWRO	Northwest Regional Office of the Department of Ecology
рН	Power of Hydrogen
RCW	Revised Code of Washington
SPCC	Spill Prevention, Control, and Countermeasure
su	Standard Units
SWMMEW	Stormwater Management Manual for Eastern Washington
SWMMWW	Stormwater Management Manual for Western Washington
SWPPP	Stormwater Pollution Prevention Plan
TESC	Temporary Erosion and Sediment Control
SWRO	Southwest Regional Office of the Department of Ecology
TMDL	Total Maximum Daily Load
VFO	Vancouver Field Office of the Department of Ecology
WAC	Washington Administrative Code
WSDOT	Washington Department of Transportation
WWHM	Western Washington Hydrology Model

1 Project Information

Project/Site Name:		
Street/Location:		
City:	State:	Zip code
Subdivision:		·
Receiving waterbody:		

1.1 Existing Conditions

Total acreage (including support activities such as off-site equipment staging yards, material storage areas, borrow areas).

Total acreage:

Disturbed acreage:

Existing structures:

Landscape

topography:

Drainage patterns:

Existing Vegetation:

Critical Areas (wetlands, streams, high erosion

risk, steep or difficult to stabilize slopes):

List of known impairments for 303(d) listed or Total Maximum Daily Load (TMDL) for the receiving waterbody:

Table 1 includes a list of suspected and/or known contaminants associated with the construction activity.

List all known or suspected contaminants associated with this site in Table 1. Include contaminants previously remediated.

Table 1 – Summary of Site Pollutant Constituents

Constituent (Pollutant)	Location	Depth	Concentration

1.2 Proposed Construction Activities

Description of site development (example: subdivision):

Description of construction activities (example: site preparation, demolition, excavation):

Description of site drainage including flow from and onto adjacent properties. Must be consistent with Site Map in Appendix A:

Description of final stabilization (example: extent of revegetation, paving, landscaping):

Contaminated Site Information:

Proposed activities regarding contaminated soils or groundwater (example: on-site treatment system, authorized sanitary sewer discharge):

2 Construction Stormwater Best Management Practices (BMPs)

Describe the BMPs identified to control pollutants in stormwater discharges. Depending on the site, multiple BMPs for each element may be necessary. For each element identified:

- Clearly describe the control measure(s).
- Describe the implementation sequence.
- Describe the inspection and maintenance procedures for that specific BMP.
- Identify the responsible party for maintaining BMPs (if your SWPPP is shared by multiple operators, indicate the operator responsible for each BMP).

Categorize each BMP under one of the following elements as listed below:

- 1. Preserve Vegetation / Mark Clearing Limits
- 2. Establish Construction Access
- 3. Control Flow Rates
- 4. Install Sediment Controls
- 5. Stabilize Soils
- 6. Protect Slopes
- 7. Protect Drain Inlets
- 8. Stabilize Channels and Outfalls
- 9. Control Pollutants
- 10. Control Dewatering
- 11. Maintain BMPs
- 12. Manage the Project
- 13. Protect Low Impact Development
- BMPs must be consistent with the most current approved edition (at the time the CSWGP was issued) of the Stormwater Management Manual for Western Washington (SWMMWW) at sites west of the crest of the Cascade Mountains.
- Note the location of each BMP on your Site Map in Appendix A.
- Include the corresponding Ecology source control BMPs and runoff conveyance and treatment BMPs in Appendix B.
 - SWMMWW Volume II Chapter 4 Sections 4.1 and 4.2 https://fortress.wa.gov/ecy/publications/SummaryPages/1410055.html

If it can be justified that a particular element does not apply to the project site, include a written justification in lieu of the BMP description in the text for the appropriate element.

The SWPPP is a living document reflecting current conditions and changes throughout the life of the project. These changes may be informal (i.e., hand-written notes and deletions). Update the SWPPP when the CESCL or local agency has noted a deficiency in BMPs or deviation from original design.

2.1 The 13 Elements

2.1.1 Element 1: Preserve Vegetation / Mark Clearing Limits

Describe the methods (signs, fences, etc.) you will use to protect those areas that should not be disturbed.

Describe natural features identified and how each will be protected during construction. Trees that are to be preserved, as well as all sensitive areas and their buffers, shall be clearly delineated, both in the field and on the plans.

Describe how natural vegetation and native topsoil will be preserved.

A protective barrier shall be placed around the protected trees prior to land preparation or construction activities, and shall remain in place until all construction activity is terminated. No equipment, chemicals, soil deposits or construction materials shall be placed within the protective barriers. Any landscaping activities subsequent to the removal of the barriers shall be accomplished with light machinery or hand labor. Tree protection barriers shall be a minimum of four feet high, constructed of chain link, polyethylene laminar safety fencing or similar material, subject to approval by the city. (LMC 17.15.160 B)

Τ	ist	and	describe	BMPs:
_	-131	ana	ucsci ibc	DIVII 3.

Installation Schedules:

Inspection and Maintenance plan:

Responsible Staff:

2.1.2 Element 2: Establish Construction Access

Describe how you will minimize dust generation and vehicles tracking sediment off-site.

Limit vehicle access to one route, if possible.

Street sweeping, street cleaning, or wheel wash/tire baths may be necessary if the stabilized construction access is not effective. All wheel wash wastewater shall be controlled on-site and CANNOT be discharged into waters of the State.

Install site ingress/egress stabilization BMPs according to BMP C105.

Describe how you will clean the affected roadway(s) from sediment which is tracked off-site.

List and describe BMPs: Installation Schedules:

Inspection and Maintenance plan:

Responsible Staff:

2.1.3 Element 3: Control Flow Rates

Describe how you will protect properties and waterways downstream of the project from increased speed and volume of stormwater discharges due to construction activity. Construction of stormwater retention and/or detention facilities must be done as one of the first steps in grading. Assure that detention facilities are functioning properly before constructing site improvements (i.e., impervious surfaces). If applicable, describe how you will protect areas designed for infiltration from siltation during the construction phase. Will you construct stormwater retention and/or detention facilities? ☐ Yes ☐ No Will you use permanent infiltration ponds or other low impact development (example: rain gardens, bio-retention, porous pavement) to control flow during construction? ☐ Yes ☐ No List and describe BMPs: Installation Schedules: Inspection and Maintenance plan: Responsible Staff:

2.1.4 Element 4: Install Sediment Controls

Describe how you will minimize sediment discharges from the site. Construct sediment control BMPs as one of the first steps of grading. These BMPs must be functional before other land disturbing activities – especially grading and filling – take place.

Describe the BMPs identified to filter sediment prior to it being discharged to an infiltration system or leaving the construction site.

Describe how you will direct stormwater for maximum infiltration where feasible.

Describe how you will not interfere with the movement of juvenile Salmonids attempting to enter off-channel areas or drainages.

Describe how you will respond if sediment controls are ineffective and turbid water is observed discharging from the site.

Consider the amount, frequency, intensity and duration of precipitation, soil characteristics, and site characteristics when selecting sediment control BMPs.

List and describe BMPs:
Installation Schedules:

Inspection and Maintenance plan:

Responsible Staff:

2.1.5 Element 5: Stabilize Soils

Describe how you will stabilize exposed and unworked soils throughout the life of the project (i.e., temporary and permanent seeding, mulching, erosion control fabrics, etc.).

Describe how you will stabilize soil stockpiles.

Describe how you will minimize the amount of soil exposed throughout the life of the project.

Describe how you will minimize the disturbance of steep slopes.

Describe how you will minimize soil compaction.

Describe how you will stabilize contaminated soil and contaminated soil stockpiles if applicable.

Exposed and unworked soils will be stabilized according to the time period set forth for dry and wet seasons, on the west side of the crest of the Cascade Mountains.

West of the Cascade Mountains Crest

Season	Dates	Number of Days Soils Can be Left Exposed
During the Dry Season	May 1 – September 30	7 days
During the Wet Season	October 1 – April 30	2 days

Soils must be stabilized at the end of the shift before a holiday or weekend if needed based on the weather forecast.

Anticipated project dates: Start date:	End date:
Will you construct during the wet season? ☐ Yes ☐ No	
List and describe BMPs:	
Installation Schedules:	
Inspection and Maintenance plan:	
Responsible Staff:	

2.1.6 Element 6: Protect Slopes

West of the Cascade Mountains Crest

Describe how slopes will be designed, constructed, and protected to minimize erosion.

Temporary pipe slope drains must handle the peak 10-minute flow rate from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate predicted by an approved continuous runoff model, increased by a factor of 1.6, may be used.

The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits.

For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates.

If using the Western Washington Hydrology Model (WWHM) to predict flows, bare soil areas should be modeled as "landscaped area".

Describe how you will reduce scouring within constructed channels that are cut down a slope.

Will steep slopes be present at the site during construction? ☐ Yes ☐ No
List and describe BMPs:
Installation Schedules:
Inspection and Maintenance plan:
Responsible Staff:

2.1.7 Element 7: Protect Drain Inlets

Describe how you will protect all operable storm drain inlets so that stormwater runoff does not enter the stormwater conveyance system.

Describe how you will remove sediment that enters the stormwater conveyance system (i.e., filtration, treatment, etc.).

Keep in mind inlet protection may function well for coarse sediment but is less effective in filtering finer particles and dissolved constituents. Inlet protection is the last component of a treatment train and protection of drain inlets include additional sediment and erosion control measures. Inlet protection devices will be cleaned (or removed and replaced), when sediment has filled the device by one third (1/3) or as specified by the manufacturer.

Inlets will be inspected weekly at a minimum and daily during storm events.

List and describe BMPs:
Installation Schedules:
Inspection and Maintenance plan

Responsible Staff:

2.1.8 Element 8: Stabilize Channels and Outlets

Describe how you will prevent downstream erosion where site runoff is to be conveyed in channels, discharged to a stream or, discharged to a natural drainage point.

West of the Cascade Mountains Crest

On-site conveyance channels must handle the peak 10-minute flow rate from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate predicted by an approved continuous runoff model, increased by a factor of 1.6, may be used.

The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits.

For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates.

If using the WWHM to predict flows, bare soil areas should be modeled as "landscaped area".

Provide stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes, and downstream reaches, will be installed at the outlets of all conveyance systems.

List and describe BMPs:
Installation Schedules:
Inspection and Maintenance plan
Responsible Staff:

2.1.9 Element 9: Control Pollutants

The following pollutants are anticipated to be present on-site:

Table 2 – Pollutants
Pollutant (List pollutants and source, if applicable)
Describe how you will handle and dispose of all pollutants, including waste materials and demolition debris, in a manner that does not cause contamination of stormwater.
Describe how you will cover, contain, and protect from vandalism all chemicals, liquid products, petroleum products, and other polluting materials.
Describe how you will manage known contaminants to prevent their discharge with stormwater to waters of the State (i.e., treatment system, off-site disposal).
List and describe BMPs:
Installation Schedules:
Inspection and Maintenance plan:
Responsible Staff:
Will maintenance, fueling, and/or repair of heavy equipment and vehicles occur on-site? ☐ Yes ☐ No
If yes, describe spill prevention and control measures in place while conducting maintenance, fueling, and repair of heavy equipment and vehicles.
If yes, also provide the total volume of fuel on-site and capacity of the secondary containment for each fuel tank. Secondary containment structures shall be impervious.
List and describe BMPs:
Installation Schedules:
Inspection and Maintenance plan:
Responsible Staff:

Will wheel wash or tire bath system BMPs be used during construction? ☐ Yes ☐ No
If yes, provide disposal methods for wastewater generated by BMPs.
If discharging to the sanitary sewer, include the approval letter from your local sewer district under Correspondence in Appendix C.
List and describe BMPs:
Installation Schedules:
Inspection and Maintenance plan:
Responsible Staff:
Will pH-modifying sources be present on-site? ☐ Yes ☐ No
Table 3 – pH-Modifying Sources None Bulk cement Cement kiln dust Fly ash Other cementitious materials New concrete washing or curing waters Waste streams generated from concrete grinding and sawing Exposed aggregate processes Dewatering concrete vaults Concrete pumping and mixer washout waters Recycled concrete Recycled concrete stockpiles Other (i.e., calcium lignosulfate) [please describe:
Describe BMPs you will use to prevent pH-modifying sources from contaminating stormwater.
List and describe BMPs:
Installation Schedules:
Inspection and Maintenance plan:
Responsible Staff:
Adjust pH of stormwater if outside the range of 6.5 to 8.5 su.
Obtain written approval from Ecology before using chemical treatment with the exception of CO ₂ or dry ice to modify pH.

Concrete trucks must not be washed out onto the ground, or into storm drains, open ditches, streets, or streams. Excess concrete must not be dumped on-site, except in designated concrete washout areas with appropriate BMPs installed. Excess concrete must be returned to the plant for recycling if there are no concrete washout areas with appropriate BMPs installed.

and bridge foundations be infiltrated provided the wastewater is managed in a way that prohibits discharge to surface waters? Yes No
If yes, provide BMPs to contain the wastewater during infiltration.
Prior to infiltration, water from water- only based shaft drilling that comes into contact with curing concrete must be neutralized until pH is in the range of 6.5 to 8.5 (su).
List and describe BMPs:
Installation Schedules:
Inspection and Maintenance plan:
Responsible Staff:

2.1.10 Element	t 10:	Control	Dewatering
----------------	-------	---------	------------

Describe where dewatering will occur, including source of the water to be removed. State clearly if dewatering water is contaminated or has the potential to be contaminated.

Water from foundations, vaults, and trenches with characteristics similar to stormwater runoff shall be discharged into a controlled conveyance system before discharging to a sediment trap or sediment pond. Clean dewatering water will not be routed through stormwater sediment ponds.

Only clean, non-turbid dewatering water (such as well-point groundwater) may be discharged to systems tributary to, or directly into, surface waters of the State, provided the dewatering flow does not cause erosion or flooding of receiving waters.

Describe how you will manage dewatering water to prevent the discharge of contaminants to waters of the State, including dewatering water that has comingled with stormwater (i.e., treatment system, off-site disposal).

[Insert text here]

Check treatment of disposal option for dewatering water, if applicable:

Table 4 – Dewatering BMPs

Infiltration
Transport off-site in a vehicle (vacuum truck for legal disposal)
Ecology-approved on-site chemical treatment or other suitable treatment technologies
Sanitary or combined sewer discharge with local sewer district approval (last resort)
Use of sedimentation bag with discharge to ditch or swale (small volumes of localized dewatering)

List and describe BMPs:

Installation Schedules:

Inspection and Maintenance plan:

Responsible Staff:

2.1.11 Element 11: Maintain BMPs

This section is a list of permit requirements and does not have to be filled out.

All temporary and permanent Erosion and Sediment Control (ESC) BMPs shall be maintained and repaired as needed to ensure continued performance of their intended function.

Maintenance and repair shall be conducted in accordance with each particular BMP specification (see *Volume II of the SWMMWW*).

Visual monitoring of all BMPs installed at the site will be conducted at least once every calendar week and within 24 hours of any stormwater or non-stormwater discharge from the site. If the site becomes inactive and is temporarily stabilized, the inspection frequency may be reduced to once every calendar month.

All temporary ESC BMPs shall be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed.

Trapped sediment shall be stabilized on-site or removed. Disturbed soil resulting from removal of either BMPs or vegetation shall be permanently stabilized.

Additionally, protection must be provided for all BMPs installed for the permanent control of stormwater from sediment and compaction. BMPs that are to remain in place following completion of construction shall be examined and restored to full operating condition. If sediment enters these BMPs during construction, the sediment shall be removed and the facility shall be returned to conditions specified in the construction documents.

2.1.12 Element 12: Manage the Project

The project will be managed based on the following principles:

- Projects will be phased to the maximum extent practicable and seasonal work limitations will be taken into account.
- Inspection and monitoring:
 - Inspection, maintenance and repair of all BMPs will occur as needed to ensure performance of their intended function.
 - Site inspections and monitoring will be conducted in accordance with Special Condition S4 of the CSWGP. Sampling locations are indicated on the <u>Site Map</u>. Sampling station(s) are located in accordance with applicable requirements of the CSWGP.
- Maintain an updated SWPPP.
 - The SWPPP will be updated, maintained, and implemented in accordance with Special Conditions S3, S4, and S9 of the CSWGP.

As site work progresses the SWPPP will be modified routinely to reflect changing site conditions. The SWPPP will be reviewed monthly to ensure the content is current.

Chec	k all the management BMPs that apply at your site:
Tabl	e 5 – Management
	Design the project to fit the existing topography, soils, and drainage patterns
	Emphasize erosion control rather than sediment control
	Minimize the extent and duration of the area exposed
	Keep runoff velocities low
	Retain sediment on-site
	Thoroughly monitor site and maintain all ESC measures
	Schedule major earthwork during the dry season
	Other (please describe)

Fill out Table 6 by listing the BMP associated with specific construction activities. Identify the phase of the project (if applicable). To increase awareness of seasonal requirements, indicate if the activity falls within the wet or dry season.

Table 6 – BMP Implementation Schedule

Phase of Construction Project	Stormwater BMPs	Date	Wet/Dry Season
[Insert construction activity]	[Insert BMP]	[MM/DD/YYYY]	[Insert Season]

Phase of Construction Project	Stormwater BMPs	Date	Wet/Dry Season
[Insert construction activity]	[Insert BMP]	[MM/DD/YYYY]	[Insert Season]

2.1.13 Element 13: Protect Low Impact Development (LID) BMPs

Describe LIDs.

Describe how you will protect LID facilities from sedimentation, protect soils from compaction, and maintain the infiltration capabilities.

Describe how you will clean permeable pavements fouled with sediments.

Responsible parties must protect all Bioretention and Rain Garden facilities from sedimentation through installation and maintenance of erosion and sediment control BMPs on portions of the site that drain into the Bioretention and/or Rain Garden facilities. Restore the facilities to their fully functioning condition if they accumulate sediment during construction. Restoring the facility must include removal of sediment and any sediment-laden Bioretention/Rain Garden soils, and replacing the removed soils with soils meeting the design specification.

Responsible parties must maintain the infiltration capabilities of Bioretention and Rain Garden facilities by protecting against compaction by construction equipment and foot traffic. Protect completed lawn and landscaped areas from compaction due to construction equipment.

Responsible parties must control erosion and avoid introducing sediment from surrounding land uses onto permeable pavements. Do not allow muddy construction equipment on the base material or pavement. Do not allow sediment-laden runoff onto permeable pavements.

Responsible parties must clean permeable pavements fouled with sediments or no longer passing an initial infiltration test using local stormwater manual methodology or the manufacturer's procedures.

Responsible parties must keep all heavy equipment off existing soils under LID facilities that have been excavated to final grade to retain the infiltration rate of the soils.

3 Pollution Prevention Team

Table 7 – Team Information

Title	Name(s)	Phone Number
Certified Erosion and	[Insert Name]	[Insert Number]
Sediment Control Lead		
(CESCL)		
Resident Engineer		
Emergency Ecology		
Contact		
Emergency Permittee/		
Owner Contact		
Non-Emergency Owner		
Contact		
Monitoring Personnel		
Ecology Regional Office	Northwest Regional Office	425-649-7000

4 Monitoring and Sampling Requirements

Monitoring includes visual inspection, sampling for water quality parameters of concern, and documentation of the inspection and sampling findings in a site log book. A site log book will be maintained for all on-site construction activities and will include:

- A record of the implementation of the SWPPP and other permit requirements
- Site inspections
- Stormwater sampling data

Use the Construction Stormwater Site Inspection Form found on Ecology's website. https://www.ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Construction-stormwater-permit

File a blank form under Appendix D.

The site log book must be maintained on-site within reasonable access to the site and be made available upon request to Ecology or the local jurisdiction.

Numeric effluent limits may be required for certain discharges to 303(d) listed waterbodies. See CSWGP Special Condition S8 and Section 5 of this template.

Complete the following paragraph for sites that discharge to impaired waterbodies for fine sediment, turbidity, phosphorus, or pH:

The receiving waterbody, insert waterbody name, is impaired for: insert impairment. All stormwater and dewatering discharges from the site are subject to an **effluent limit** of 8.5 su for pH and/or 25 NTU for turbidity.

4.1 Site Inspection

Site inspections will be conducted at least once every calendar week and within 24 hours following any discharge from the site. For sites that are temporarily stabilized and inactive, the required frequency is reduced to once per calendar month.

The discharge point(s) are indicated on the <u>Site Map</u> (see Appendix A) and in accordance with the applicable requirements of the CSWGP.

4.2 Stormwater Quality Sampling

4.2.1 Turbidity Sampling

Requirements include calibrated turbidity meter or transparency tube to sample site discharges for compliance with the CSWGP. Sampling will be conducted at all discharge points at least once per calendar week.

Method for sampling turbidity:

Check the analysis method you will use:

Table 8 – Turbidity Sampling Method

Turbidity Meter/Turbidimeter (required for disturbances 5 acres or greater in size)
Transparency Tube (option for disturbances less than 1 acre and up to 5 acres in size)

The benchmark for turbidity value is 25 nephelometric turbidity units (NTU) and a transparency less than 33 centimeters.

If the discharge's turbidity is 26 to 249 NTU <u>or</u> the transparency is less than 33 cm but equal to or greater than 6 cm, the following steps will be conducted:

- 1. Review the SWPPP for compliance with Special Condition S9. Make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.
- 2. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible. Address the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period.
- 3. Document BMP implementation and maintenance in the site log book.

If the turbidity exceeds 250 NTU <u>or</u> the transparency is 6 cm or less at any time, the following steps will be conducted:

- Telephone or submit an electronic report to the listed Ecology Region's Environmental Report Tracking System (ERTS) within 24 hours. https://ecology.wa.gov/About-us/Get-involved/Report-an-environmental-issue
 - Northwest Region (King, Kitsap, Island, San Juan, Skagit, Snohomish, Whatcom): (425) 649-7000
- 2. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible. Address the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period
- 3. Document BMP implementation and maintenance in the site log book.
- 4. Continue to sample discharges daily until one of the following is true:
 - Turbidity is 25 NTU (or lower).
 - Transparency is 33 cm (or greater).
 - Compliance with the water quality limit for turbidity is achieved.
 - 1 5 NTU over background turbidity, if background is less than 50 NTU
 - 1% 10% over background turbidity, if background is 50 NTU or greater
 - The discharge stops or is eliminated.

4.2.2 pH Sampling

pH monitoring is required for "Significant concrete work" (i.e., greater than 1000 cubic yards poured concrete over the life of the project). The use of recycled concrete or engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD] or fly ash) also requires pH monitoring.

For significant concrete work, pH sampling will start the first day concrete is poured and continue until it is cured, typically three (3) weeks after the last pour.

For engineered soils and recycled concrete, pH sampling begins when engineered soils or recycled concrete are first exposed to precipitation and continues until the area is fully stabilized.

If the measured pH is 8.5 or greater, the following measures will be taken:

- 1. Prevent high pH water from entering storm sewer systems or surface water.
- 2. Adjust or neutralize the high pH water to the range of 6.5 to 8.5 su using appropriate technology such as carbon dioxide (CO₂) sparging (liquid or dry ice).
- 3. Written approval will be obtained from Ecology prior to the use of chemical treatment other than CO₂ sparging or dry ice.

Method for sampling pH:

Check the analysis method you will use:		
Tabl	e 9 – pH Sampling Method	
	pH meter	
	pH test kit	
	Wide range pH indicator paper	

5 Discharges to 303(d) or Total Maximum Daily Load (TMDL) Waterbodies

5.1 303(d) Listed Waterbodies The 303(d) status is listed on the Water Quality Atlas: https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Assessment-of-state-waters-303d Circle the applicable answer, if necessary: Is the receiving water 303(d) (Category 5) listed for turbidity, fine sediment, phosphorus, or pH? ☐ Yes ☐ No List the impairment(s): The receiving waterbody, insert waterbody name, is impaired for: insert impairment. All stormwater and dewatering discharges from the site are subject to an effluent limit of 8.5 su for pH and/or 25 NTU for turbidity. If yes, discharges must comply with applicable effluent limitations in S8.C and S8.D of the CSWGP. Describe the method(s) for 303(d) compliance: List and describe BMPs: 5.2 TMDL Waterbodies Waste Load Allocation for CWSGP discharges:

List and describe BMPs:

Describe the method(s) for TMDL compliance:

Discharges to TMDL receiving waterbodies will meet in-stream water quality criteria at the point of discharge.

The Construction Stormwater General Permit Proposed New Discharge to an Impaired Water Body form is included in Appendix F.

6 Reporting and Record Keeping

6.1 Record Keeping

This section does not need to be filled out. It is a list of reminders for the permittee.

6.1.1 Site Log Book

A site log book will be maintained for all on-site construction activities and will include:

- A record of the implementation of the SWPPP and other permit requirements
- Site inspections
- Sample logs

6.1.2 Records Retention

Records will be retained during the life of the project and for a minimum of three (3) years following the termination of permit coverage in accordance with Special Condition S5.C of the CSWGP.

Permit documentation to be retained on-site:

- CSWGP
- Permit Coverage Letter
- SWPPP
- Site Log Book

Permit documentation will be provided within 14 days of receipt of a written request from Ecology. A copy of the SWPPP or access to the SWPPP will be provided to the public when requested in writing in accordance with Special Condition S5.G.2.b of the CSWGP.

6.1.3 Updating the SWPPP

The SWPPP will be modified if:

- Found ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site.
- There is a change in design, construction, operation, or maintenance at the construction site that has, or could have, a significant effect on the discharge of pollutants to waters of the State.

The SWPPP will be modified within seven (7) days if inspection(s) or investigation(s) determine additional or modified BMPs are necessary for compliance. An updated timeline for BMP implementation will be prepared.

6.2 Reporting

6.2.1 Discharge Monitoring Reports

Select and retain applicable paragraph.

Cumulative soil disturbance is less than one (1) acre; therefore, Discharge Monitoring Reports (DMRs) will not be submitted to Ecology because water quality sampling is not being conducted at the site.

Or

Cumulative soil disturbance is one (1) acre or larger; therefore, Discharge Monitoring Reports (DMRs) will be submitted to Ecology monthly. If there was no discharge during a given monitoring period the DMR will be submitted as required, reporting "No Discharge". The DMR due date is fifteen (15) days following the end of each calendar month.

DMRs will be reported online through Ecology's WQWebDMR System.

To sign up for WQWebDMR go to:

https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance/WQWebPortal-guidance

6.2.2 Notification of Noncompliance

If any of the terms and conditions of the permit is not met, and the resulting noncompliance may cause a threat to human health or the environment, the following actions will be taken:

- 1. Ecology will be notified within 24-hours of the failure to comply by calling the applicable Regional office ERTS phone number (Regional office numbers listed below).
- 2. Immediate action will be taken to prevent the discharge/pollution or otherwise stop or correct the noncompliance. If applicable, sampling and analysis of any noncompliance will be repeated immediately and the results submitted to Ecology within five (5) days of becoming aware of the violation.
- 3. A detailed written report describing the noncompliance will be submitted to Ecology within five (5) days, unless requested earlier by Ecology.

Specific information to be included in the noncompliance report is found in Special Condition S5.F.3 of the CSWGP.

Anytime turbidity sampling indicates turbidity is 250 NTUs or greater, or water transparency is 6 cm or less, the Ecology Regional office will be notified by phone within 24 hours of analysis as required by Special Condition S5.A of the CSWGP.

• **Northwest Region** at (425) 649-7000 for Island, King, Kitsap, San Juan, Skagit, Snohomish, or Whatcom County

Include the following information:

- 1. Your name and / Phone number
- 2. Permit number
- 3. City / County of project
- 4. Sample results
- 5. Date / Time of call
- 6. Date / Time of sample
- 7. Project name

In accordance with Special Condition S4.D.5.b of the CSWGP, the Ecology Regional office will be notified if chemical treatment other than CO₂ sparging is planned for adjustment of high pH water.

A. Site Map

The site map must meet the requirements of Special Condition S9.E of the CSWGP

B. BMP Detail

Insert BMPs specification sheets here.

Download BMPs from the Ecology Construction Stormwater website at:

https://www.ecology.wa.gov/Regulations-Permits/Guidance-technical-

assistance/Stormwater-permittee-guidance-resources/Stormwater-manuals

C. Correspondence

Ecology

EPA

Local Government

D. Site Inspection Form

Download Ecology's template:

https://www.ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Construction-stormwater-permit

E. Construction Stormwater General Permit (CSWGP)

Download the CSWGP:

https://www.ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Construction-stormwater-permit

F. 303(d) List Waterbodies / TMDL Waterbodies Information

Proposed New Discharge to an Impaired Water Body form SWPPP Addendum addressing impairment

G. Contaminated Site Information

Administrative Order Sanitary Discharge Permit Soil Management Plan

Soil and Groundwater Reports

Maps and Figures Depicting Contamination

H. Engineering Calculations