2022 STORMWATER MANAGEMENT PROGRAM (SWMP) PLAN

March 2022

Skagit County Public Works

Natural Resources Division

Stormwater Management Program

1800 Continental Place

Mount Vernon, WA 98273

360-416-1400

https://www.skagitcounty.net/Departments/PublicWorksSurfaceWaterManagement/stormwatermain.htm

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List of Abbreviations

AKART	All Known, Available Reasonable methods of Treatment
BMP	Best management practice
CBSM	Community Based Social Marketing
CESCL	Certified Erosion and Sediment Control Lead
County	Skagit County Government
Ecology	Washington State Department of Ecology
EM	Emergency Management
E&O	Education and Outreach
Engineering	Skagit County's Engineering Division
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
GIS	Skagit County's Geographic Information Systems office
IC/ID	Illicit Connection/ Illicit Detection
IDDE	Illicit Discharges Detection and Elimination
LEED	Leadership in Energy and Environmental Design
LID	Low Impact Development
MEP	Maximum Extent Practicable
MS4	Municipal separate storm sewer system
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRD	Skagit County's Natural Resources Division
O&M	Operations and Maintenance
Operations	Skagit County Operations Division
PDS	Planning and Development Services
Permit	NPDES Phase II Municipal Stormwater Permit
PH	Public Health
Plan	The documentation of the SWMP
PW	Public Works
POTW	Publicly Operated Treatment Works
RRMP	Regional Road Maintenance Program
SCD	Skagit Conservation District
SOP	Standard operating procedure
SWMMWW	Stormwater Management Manual for Western Washington
SWMP	Stormwater Management Program
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
WSDOT	Washington State Department of Transportation

Section 1

Purpose of the Stormwater Management Program (SWMP) Plan

This document is Skagit County's (County) Stormwater Management Program (SWMP) Plan (Plan). Making this document available to the public helps keep Skagit County in compliance with the Western Washington National Pollution Discharge Elimination System (NPDES) Phase II Municipal Stormwater Permit (Permit). This Permit is a requirement of the Federal Clean Water Act and the NPDES. The Washington Department of Ecology (Ecology) manages the Permit on behalf of the U.S. Environmental Protection Agency (EPA).

A SWMP Plan is a set of required actions stated in Section S5 of the Permit. This Plan describes those actions and shows how Skagit County will meet the requirements of the 2019-2024 Permit cycle for this year. Skagit County will continue to update this Plan annually to reflect actions and planned actions to meet Permit requirements.

The County, along with all Washingtonians, continues to face unprecedented challenges in responding to the COVID-19 pandemic to protect the health of individuals and the greater community. These extraordinary circumstances have continued to affect the ability of the County to engage directly with the community. Measures that continue to be implemented in 2022 include social distancing plans, staff reassignment and rescheduling, and remote work. Due to these circumstances, the SWMP was unable to conduct some of its planned activities in 2020 and 2021, and will continue to face some limitations in 2022, primarily regarding the Public Education and Outreach component of the Permit.

1.1 What is Stormwater?

Past surveys found that many people in Western Washington understandably think of stormwater as heavy rainfall during a storm. Heavy rainfall does contribute to stormwater, but the definition used in our SWMP is somewhat broader.

The Permit defines stormwater as "runoff during and following precipitation and snowmelt events, including surface runoff, drainage, or interflow." [1]

[1] Interflow means downslope flow in the upper layers of the soil column.

"Stormwater is rain and snow melt that runs off rooftops, paved streets, highways, and parking lots. As it runs off, it picks up pollution like oil, fertilizers, pesticides, soil, trash, and animal manure. Most stormwater is not treated, even when it goes into a street drain. It flows downstream directly into streams, lakes, and marine waters. Stormwater runoff is the leading threat to Washington's urban waters, streambeds, banks, and habitats." [2] Figure 1-1 shows an example of stormwater runoff flowing into a storm drain.

Figure 1-1. Stormwater runoff flowing into a storm drain before making its way to the Skagit River.

It may be difficult to imagine stormwater runoff as being the biggest contributor to water pollution, but a small quantity of pollutants entering our streams, rivers, lakes and bays, thousands and thousands of times over, results in accumulation that is difficult to treat at a larger scale. Much of the pollution that finds its way into natural waters and aquatic food chains travels there unnoticed and is not quickly broken down or removed naturally. Additionally, stormwater runoff might be the only source of water pollution increasing over time. Figure 1-2 is a graphic to help illustrate stormwater runoff in a watershed.

[2] Washington State Department of Ecology - https://ecology.wa.gov/Water-Shorelines/Water-quality/Runoff-pollution/Stormwater

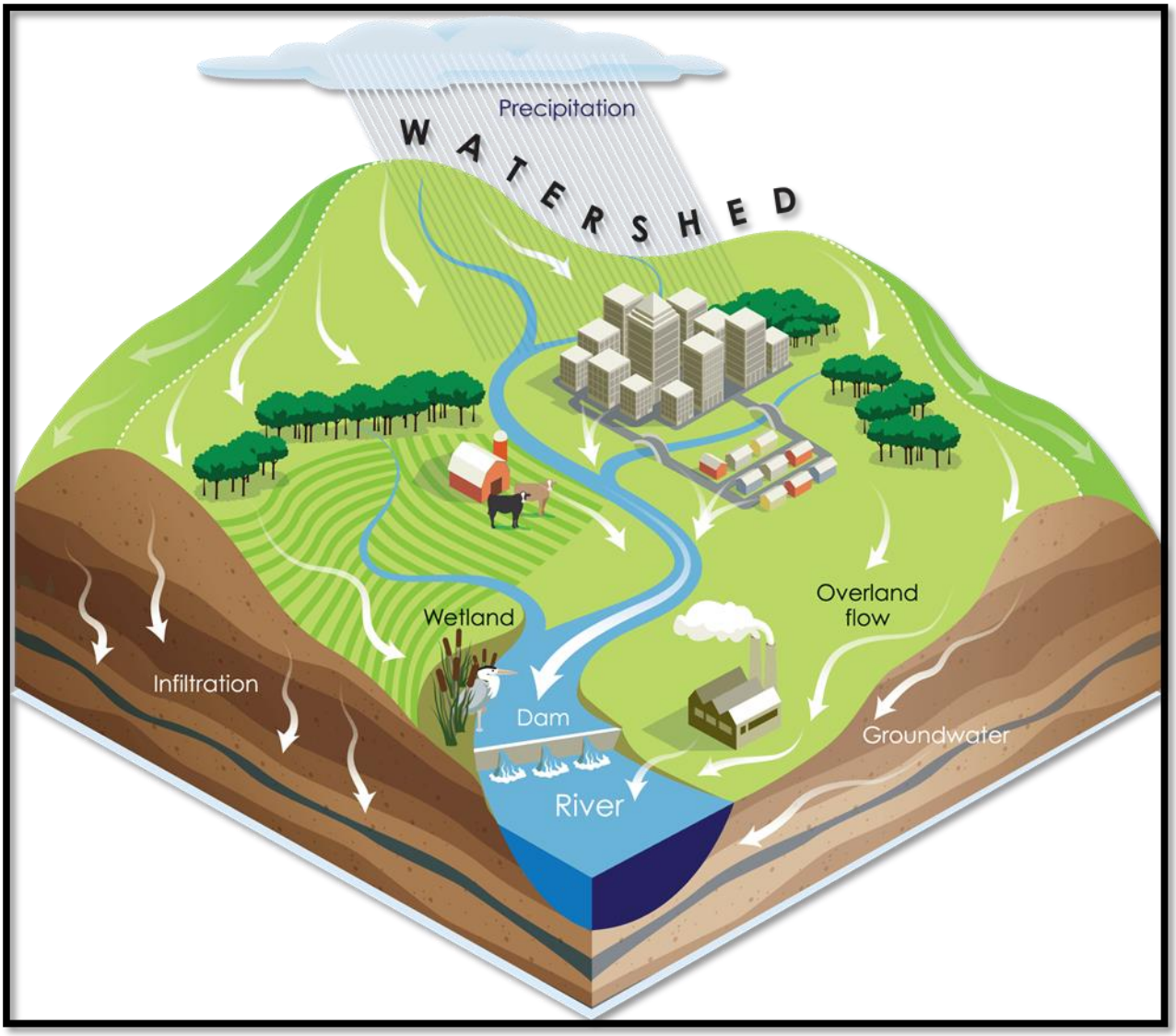

Figure 1-3. Watershed graphic illustration of stormwater runoff courtesy of Lake County Illinois Stormwater Management Commission.

1.2 Requirements of the SWMP as specified in the Permit (S5.A)

1. At minimum, the SWMP will implement the Plan throughout the geographic area of the Permit. (See Figure 1-3).
2. The SWMP will develop a SWMP Plan. This document is the SWMP Plan.
   a. The County will update the Plan annually and submit it to Ecology with the Permit required annual report. The Plan will inform the public of the SWMP activities for each of the program components in S5.C of the Permit. Any planned activities to meet Monitoring and Assessment requirements will be in the SWMP Plan too.
3. The Plan includes procedures for gathering, tracking, maintaining, and using information to evaluate the effectiveness of the SWMP, tracking Permit compliance and setting priorities. The County will track:

a. The cost or estimated cost of development and implementation of the SWMP Plan.
b. Number of inspections, inspection follow-up, enforcement actions, and public education efforts that support the Plan.

4. The SWMP will coordinate with other entities covered by municipal stormwater permits as needed for compliance with the Permit. Multiple departments within Skagit County's government must work together to implement the SWMP Plan.

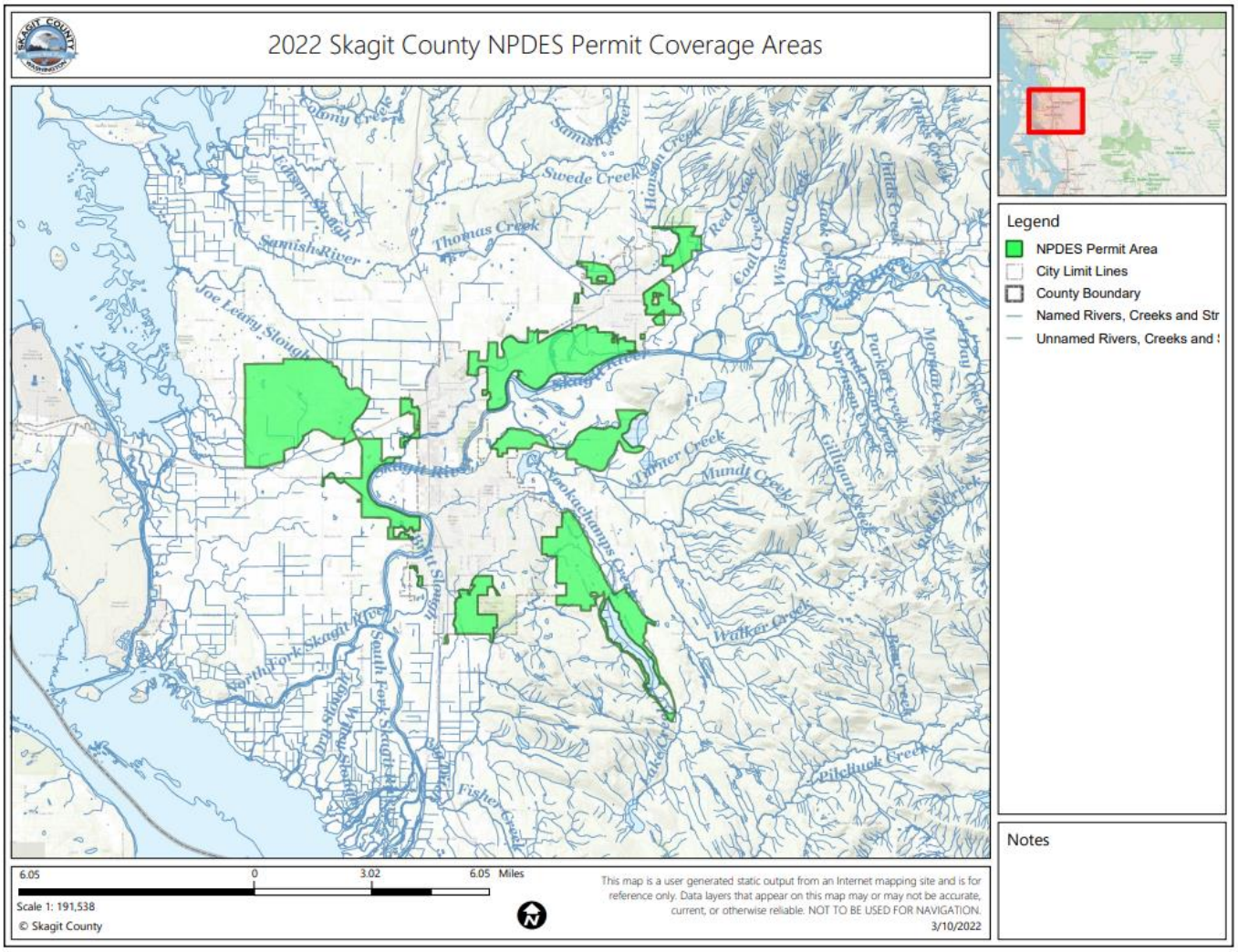

Figure 1-4. The Permit covers the areas on the map, shaded in green.

1.3 Goal and Technical Standard for the SWMP as specified in the Permit (S5.B-C)

The SWMP Plan aims to reduce discharges of pollutants from the County's Municipal Separate Storm Sewer System (MS4) to the Maximum Extent Possible (MEP) and protect water quality.

The MS4 is a stormwater management term that describes a jurisdiction's stormwater system. For Skagit County, the MS4 consists of a variety of infrastructure types, including but not limited to, ditches, pipes, culverts, and storm drains, designed to move stormwater off the developed landscape. The County's MS4 delivers this stormwater to our streams, rivers, lakes, bays, and sometimes to groundwater, but the MS4 does not deliver stormwater to a Publicly Operated Treatment Works (POTW), commonly known as a sewage treatment facility.

Controlling discharges of pollutants to the MEP means we are trying to manage stormwater runoff with the available technology we understand to be effective and economically practicable. The SWMP's standard is to employ all known, available, and reasonable methods of prevention, control, and treatment (AKART) to protect water quality.

1.4 Elements of the SWMP as specified in the Permit (S5.C)

1. Stormwater Planning
2. Public Education and Outreach
3. Public Involvement and Participation
4. MS4 Mapping and Documentation
5. Illicit Discharge Detections and Elimination
6. Controlling Runoff from New Development, Redevelopment, and Construction Sites
7. Operations and Maintenance
8. Source Control Program for Existing Development

These eight elements are the components mentioned earlier in the SWMP Plan that drive the work of the SWMP. Each one of these elements have minimum performance measures designed to give the Plan a basic framework and keep the County in compliance throughout the current Permit cycle on an annual basis.

1.5 Stormwater Management Program for Cities, Towns, and Counties (S5)

Skagit County developed a SWMP as a Permit requirement and to ensure compliance with the actions and activities listed in the components in S5. The SWMP also ensures any additional actions necessary to meet the requirement of applicable Total Maximum Daily Load (TMDLs), pursuant to S7, Compliance with Total Maximum Daily Load Requirements and S8, Monitoring and Assessment are met.

Section 2

Stormwater Planning (S5.C.1)

Stormwater Planning Interdisciplinary Team (S5.C.1.a)

Skagit County's SWMP created a Stormwater Planning Interdisciplinary Team July of 2020 to inform and assist in the development, progress, and influence of the stormwater planning work. The Interdisciplinary Team is made up of staff from the Natural Resources Division (NRD), Planning and Development Services (PDS), the Engineering Division (Engineering), and Skagit County Geographic Information Services (SCGIS). The team meets quarterly to meet the Permit requirements described below, as well as other issues related to long-range stormwater planning.

2.1 Coordination with long-range plan updates (S5.C.1.b)

By March 31, 2022, the SWMP will submit a report to describe how water quality is being addressed, if at all, during this Permit term in updates to the Comprehensive Plan (or equivalent) and in other locally initiated or state-mandated, long-range land use plans that are used to accommodate growth or transportation.

By January 1, 2023, the SWMP will submit a report to describe how water quality is being addressed, if at all, during this Permit term in updates to the Comprehensive Plan (or equivalent) and in other locally initiated or state-mandated, long-range land use plans that are used to accommodate growth or transportation.

2.2 Low impact development code requirements (S5.C.1.c)

When updating, revising, or creating development codes, the County will continue to require Low Impact Development (LID) principles Best Management Practices (BMP). Each year, the SWMP will report any newly identified barriers to LID implementation and describe actions taken to overcome those barriers. This annual report will also include mechanisms developed to encourage or require LID and BMP's principles.

In 2019, the County began to review its Stormwater Code and a draft Land Disturbance Code in the Skagit County Code (SCC). This year the County will update the Stormwater Management code and create a new chapter known as the Land Disturbance code. These updates continue to ensure that LID is the preferred development method, compliance with the Permit, and protection of water quality. This 2022 code update package will also address Permit requirement S5.C.6a – "Each Permittee shall adopt and make effective a local program, no later than June 30, 2022, that meets the requirements of S5.C.6.b(i) through (iii)…"

2.3 Stormwater Management Action Planning (SMAP) (S5.C.1.d)

The SWMP is in the process of developing a Stormwater Management Action Plan (SMAP) for at least one basin within Skagit County. A SMAP is developed for a specific basin and contains prescriptive measures for that specific basin. The goal of the SMAP is to identify opportunities to conserve, protect, or restore receiving waters through stormwater and land management strategies.

These strategies act as water quality management tools, help reduce pollutant loading, and address hydrologic impacts from existing development, as well as planned for and expected future buildout conditions.

Overarching goals driving the SMAP may include flow control for flood prevention and erosion control, habitat restoration for endangered species, protection of shellfish growing areas, protection of drinking water sources, and protection of water quality for recreational uses.

The steps for developing the SMAP are prescribed by the Permit:

1. Receiving Water Assessment (S5.C.1.d.i) - By March 31, 2022, Permittees shall submit a watershed inventory and include a brief description of the relative conditions of the receiving waters and the contributing areas. The SWMP has been developing this inventory and summary of descriptions using methods outlined in *Stormwater Management Action Planning Guidance* (Ecology, 2019; Publication 19-10-010) and by March 31, 2022 will finalize the findings.
2. Receiving Water Prioritization (S5.C.1.d.ii) – Informed by the receiving waters assessment and other information the SWMP will develop and use prioritization method to determine which receiving waters will get the most benefit from stormwater retrofits, enhanced implementation of SWMP actions, or other land development actions. The prioritization report is due June 30, 2022.
3. Final SMAP (S5.C.1.d.iii) is due March 31, 2023 and will include:
    a. A description of the stormwater facility retrofits needed for the area, including the BMP types and preferred locations. Land management/development strategies and/or actions identified for water quality management.
    b. Targeted, enhanced, or customized implementation of stormwater management actions as described throughout this SWMP Plan. This could include enhances inspections or education and outreach efforts within the selected basin.
    c. Schedule and budget including:
        1. Short-term actions (within 6 years).
        2. Long-term actions (within 7-20 years).
    d. A process and schedule to provide future assessment and feedback to improve the planning process and implementation of procedures or projects.

2.4 Public Education and Outreach (E&O) (S5.C.2)

The goals of the SWMP Public Education and Outreach Element are:

- To create awareness about methods used to reduce stormwater impacts.
- To reduce or eliminate behaviors that cause negative stormwater effects.
- To create stewardship opportunities for community participation in reducing the impacts to our natural resources from stormwater runoff.

Figure 2-1. Enjoying the view from Young's Bar on the Skagit River.

The County's SWMP, along with the SWMPs from the cities of Sedro-Woolley, Burlington, Mount Vernon and Anacortes, will continue to contract with the Skagit Conservation District (SCD) this year in order to meet the Education and Outreach (E&O) requirements of the Permit. This will be the 12th year of this cooperative effort. This multi-jurisdictional partnership helps to raise environmental awareness while working together with the community we serve, to improve water quality, and protect the rich natural resources important to our region.

Ongoing (Activities may be cancelled or modified because of COVID restrictions) SCD projects include:

- LID education and pilot installations
- Producing LID workshops and outreach materials
- Providing LID information to local contractors and businesses on Green building, Leadership in Energy and Environmental Design (LEED) and LID ideas
- Training volunteers and operating the Skagit Stream Team, which was first established in 1998.
- Backyard Conservation program
- Producing outreach materials and packets for local schools
- Visiting hundreds of local school children every year to make presentations about stormwater.
- Storm drain marking
- Organizing and conducting the Watershed Masters Volunteer Training Program
- Running a Dog Poop Campaign to meet Community Based Social Marketing (CBSM) style project

SWMP staff will actively participate in local, community events by setting up a display table that includes educational games and interactive lessons. Annually, SWMP staff plan to host a table at the following events (Activities may be cancelled or modified because of COVID restrictions):

- Evergreen Elementary School's STEM (science, technology, engineering, and math) Night
- Mount Vernon High School Science Night
- Skagit County Fair (See Figure 2-2)
- Skagit Fisheries Enhancement Group's Skagit River Salmon Festival
- Fidalgo Bay Day

Figure 2-2. Staff hosts a table for the Poop Smart campaign at the 2021 Skagit County Fair.

The SWMP will continue using social media, including Facebook, Twitter, and Nextdoor in our E&O work. The SWMP plans to contribute an article to the bilingual, online publication Eco-Lógica Magazine NW. Eco-Lógica is a free Spanish/English magazine, based out of the Seattle area, about environmental education, and sustainability.

2.4.1 Develop and start, and evaluate a new community program (S5.C.2.a.ii.c&d)

The SWMP has developed a new community-based social marketing plan, with a built-in evaluation strategy. The SWMP has already met the Permit requirement for developing a plan by February 1, 2021. The SWMP kicked off this campaign in March 2021. The target audience is residents who live in a watershed that drains to Big Lake. The focus of the campaign is lawn care practices and fertilizer applications with a goal to reduce nutrient loading into the lake. More outreach will occur this year, including with the assistance of staff from Washington State University's (WSU) Shore Steward Program.

The SWMP is working with the SCD and the other four jurisdictions involved in the E&O agreements mentioned previously to meet this requirement. The focus of the plan will be proper disposal of pet waste. The goal is to encourage behavioral change and reduce fecal coliform pollution to watercourses where fecal coliform loading exceeds Washington State water quality standards.

This Permit requirement has a goal of creating E&O campaigns that will measure effectiveness and potentially help the SWMP use financial and human resources more efficiently.

2.4.2 Creating Stewardship Opportunities (S5.C.a.iii)

Skagit County's NRD, including the SWMP, will continue to sponsor and promote stewardship opportunities in the community including Salish Sea Stewards, Watershed Masters Volunteer Training Program, Stream Team, and Skagit Fisheries Enhancement Group.

The County continues to be grateful for all the support these stewardship programs offer year after year. Their value is immeasurable. The hard work and dedication given by these volunteer community members goes a long way in protecting and improving water quality. Many of the natural resources the SWMP staff and County citizens value in the Pacific Northwest depend on the habitat naturally found within our streams, rivers, lakes, and bays.

2.5 Public Involvement and Participation (S5.C.3)

This SWMP Plan is one of the ways for the public to be involved in the SWMP and participate in the process. The SWMP Plan lets the community members know what the County has planned for the year ahead. The Permit, through its minimum performance measures, guides the program, but community input, concerns and criticisms are valuable to us. Listed below are a few of the ways The County engages Skagit County citizens.

The SWMP staff will post a draft of the updated Plan, on the County's Surface Water Management web page, by March 31, 2022, for public review and comment. SWMP staff will address comments before May 31, 2022, which is when we are required to post the SWMP Plan, which can be viewed at this site:

https://www.skagitcounty.net/Departments/PublicWorksSurfaceWaterManagement/whatwedo.htm

The compliance report, which the SWMP must submit to Ecology annually, is available on the County website for public view. On this website, an email address and phone number for the SWMP Coordinator can be found. The Coordinator can address any questions, input, concerns, or criticisms from the Public (See Figure 2-3).

Figure 2-3. County staff welcome phone calls, mail, or email.

During this Permit cycle, the SWMP will ensure topic specific opportunities for public comment on developing a Source Control Program and the SMAP process.

2.6 MS4 Mapping and Documentation (S5.C.4)

The SWMP is required to maintain an ongoing program to map and document its stormwater system within the Permit area. The SWMP also needs to ensure that future stormwater infrastructure and changes to that infrastructure are documented and mapped. The map is located at the link below:

https://www.skagitcounty.net/Maps/iMap/?mapid=27c3f114b86f442fa8893f568283a691

The County's stormwater system is a MS4 (Municipal **Separate** Storm Sewer System). The "separate" in MS4 means that stormwater does not get conveyed in pipes with sanitary sewage and does not flow to a sewage treatment plant. Stormwater from the MS4 discharges directly to streams, rivers, lakes, and bays (see Figure 2-4). Implementation of this Plan and Compliance with the Permit is essential for protecting those streams, rivers, lakes, and bays from polluted discharges from the MS4.

Figure 2-4. No Name Slough, which runs east to west from just east of Farm to Market Rd., receives stormwater from the MS4 and drains to Padilla Bay.

To meet this requirement the County, with assistance from Operations, Skagit County Geographic Information Systems (GIS), Skagit County Engineering (Engineering) and the SWMP, will continue to maintain digital mapping of the following features:

1. Known MS4 outfalls and known discharge points.
2. Receiving waters, other than ground water.
3. Stormwater treatment and flow control BMPs/facilities owned or operated by the Permittee.
4. Geographic areas served by the Permittee's MS4 that do not discharge stormwater to surface waters.
5. Tributary conveyances to all known outfalls and discharge points with a 24-inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems. The following attributes must be mapped:
    a. Tributary conveyance type, material, and size where known.
    b. Associated drainage areas.
    c. Land use.
    d. Connections between the MS4 owned or operated by the Permittee and other municipalities or public entities.
6. All connections to the MS4 authorized or allowed by the Permittee after February 16, 2007.

As of January 1, 2020, the SWMP began collecting size and material of all known MS4 outfalls during the normal course of business (i.e., during field screenings, inspection, or maintenance) and

update records. The SWMP focused on outfalls in the summer of 2021 and will finish collecting data on those and connections between the MS4 and private stormwater infrastructure Summer 2022. By August 1, 2023, the SWMP will map all known connections from the MS4 to a privately owned stormwater system.

All mapping will follow procedures and meet standards described in the Skagit County GIS Stormwater Mapping Standard Operating Procedures (SOPs). In a manner consistent with national security laws and directives, as well as Ecology's mapping requirements, the SWMP will provide stormwater maps to Ecology upon request. To the appropriate extent, the SWMP will provide mapping information to federally recognized Indian Tribes, municipalities, and other Permittees upon request.

Section 3

Illicit Discharge Detection and Elimination (S5.C.5)

The goal the SWMP's Illicit Discharge Detection and Elimination (IDDE) program is to prevent, detect, characterize, trace, and eliminate illicit (illegal) discharges and illicit connections to the MS4.

Anything that goes into the MS4, that is not stormwater, is considered an illicit discharge. It could be septic tank seepage washing into a roadside ditch, an illicit connection, or disposing of concrete or dry wall waste into the storm system after a home improvement project. That material is not stormwater and is, therefore, an illicit discharge. Other examples of things that do not belong in the stormwater system are soaps, paint, laundry wastewater, cooking grease, auto fluids, pesticides, and fertilizers (see Figure 3-1).

Figure 3-1. Photo of a catch basin polluted by an emulsifier product.

An illicit connection is any pipe, hose, trench, ditch, or other feature that connects to the MS4 and is not permitted. Occasionally businesses or residences will have waste pipes tapped into stormwater pipes. These can go undiscovered for a long time, but the IDDE program works to detect illicit connections through field screenings, water quality sampling, inspections, and daily work activities. The SWMP will continue to use the methods found in the *Illicit Connection and Illicit Discharge Filed Screening and Source Tracing Guidance Manual* (IDDE Manual) prepared for Washington State Department of Ecology by Herrera Environmental Consultants in May 2013 and updated in 2020.

The Permit requires the SWMP to develop and follow:

1. Procedures for reporting illicit connections, spills, and other illicit discharges,
2. Procedures for correcting or removing illicit connections, spills, and other illicit discharges, and
3. Procedures for addressing pollutants from interconnected MS4s.

The SWMP will identify illicit connections and discharges through field screening, inspections, complaints/reports, and monitoring information. The SWMP and other relative staff refer to the IDDE Manual for illicit discharge screening methodology.

The SWMP will inform public employees, businesses, and the public about hazards of illicit discharges and improper waste disposal. For employees, the information will be included in training. This information will be included in the general awareness campaigns carried out as part of the E&O element of the SWMP. This information will be communicated directly to businesses as part of the forthcoming Source Control Inspection element of the SWMP.

In most cases, the County will attempt to resolve illicit discharges and connections through technical assistance. In egregious offences and cases not resolved by technical assistance, the SWMP will rely on *SCC 16.32: Water Pollution* and *SCC 14.44 Enforcement/Penalties* to prohibit illicit discharges into the MS4. *SCC 14.44: Enforcement/Penalties* allows for escalating levels of enforcement.

The SWMP will continue to evaluate the effectiveness of its regulations for prohibiting illicit discharges and spills into its MS4 and update regulations as necessary.

3.1 Detecting Illicit Discharge and Connection (S5.C.5.d)

The SWMP will investigate potential illicit discharges and connections to the MS4. SWMP staff will conduct annual field screenings on an average of 12% of the geographic area of the MS4 per year using methods described in the IDDE Manual. The County will maintain its illicit discharge reporting hotline as way for the public to report concerns of illicit discharges, including spills. The SWMP will provide ongoing training to staff who may observe illicit connections or discharges while doing their work.

The number for reporting spills, illicit discharges, and other water quality related issues is 360-416-1400.

3.2 Addressing Illicit Discharges and Connection (S5.C.5.e)

For spills, County staff will follow procedures described in the Spill Plan, which is included in the 2021 Stormwater Pollution Prevention Plan (SWPPP) for Skagit County's Road Shop located in Burlington.

The County will meet the following timelines when addressing illicit discharges (S5.C.5.e.iv):

1. When illicit discharges, including spills, threaten human health or the environment, respond immediately.
2. Investigate or refer to the appropriate agency within 7 days of receiving a complaint, report, or monitoring data that suggests a potential illicit discharge.
3. Investigate illicit connection within 21 days of discovery or receiving a report. Identify the nature and volume of the discharge and the responsible party.
4. When an illicit connection is confirmed, use the compliance strategy to eliminate the connection within 6 months. The Permit requires that all illicit connections to the MS4 be eliminated.

3.3 Staff Training for IDDE (S5.C.5.f)

County staff in Public Works (PW), Planning and Development Services (PDS), Emergency Management (EM), Public Health (PH), Facilities Management, and the Operations Division (Operations) will receive training both from Public Works staff members and outside organizations. The SWMP will maintain a record of training content, schedules, and staff trained.

These trainings include:

- Certified Erosion and Sediment Control Lead trainings (CESCL)
- HAZWOPER certification trainings
- Regional Road Maintenance Program (RRMP) Endangered Species Act (ESA) 4(d) BMP Training Track 3
- Ag Outreach Messaging trainings
- Illicit Connection/ Illicit Detection (IC/ID) Field Screening and Source Tracing Trainings
- LID trainings
- CBSM trainings
- Spill Response trainings
- Stormwater Chemistry trainings

3.4 IDDE Record Keeping (S5.C.5.g)

The SWMP will document all actions taken to satisfy the requirements of section S5.C.5 of the Permit and the IDDE section of this SWMP Plan. Information about illicit discharges, including spills, and illicit connections will be included in the annual report. The information in the report will follow the requirements specified in Appendix 12 of the Permit.

Section 4

Controlling Runoff from New Development, Redevelopment, and Construction Sites (S5.C.6)

The Permit requires that the County use an enforceable regulatory mechanism to address runoff from new development, redevelopment, and construction sites. This requirement applies to private and public development and includes roads both within developments and Country road projects.

4.1 Skagit County's Regulatory Mechanism for Meeting Stormwater Requirements (S5.C.6.b)

Skagit County Stormwater Development Code, *SCC 14.32: Stormwater Management*, is being updated to meet the minimum requirements of Appendix 1 of the Permit. (S5.C.6.b.i).

The County's Development Code incorporates the following requirements, limitations, and criteria from the most recent version of the *Stormwater Management Manual for Western Washington* to implement the requirements of Appendix 1 of the Permit in a way that will protect water quality, reduce pollutant discharges to the MEP, and meet the RCW 90.48 requirement to apply AKART:

1. Site planning requirements
2. BMP selection criteria
3. BMP design criteria
4. BMP infeasibility criteria
5. LID competing needs criteria
6. BMP limitations

The SWMP will document how these criteria and requirements protect water quality, reduce the discharge of pollutants to the MEP, and satisfy state AKART requirements (S5.C.6.b.ii).

4.2 Plan Review, Inspections, and Enforcement (S5.C.6.c)

Qualified County staff in PDS and PW will enforce a permitting process that ensures that both public and private projects subject to the process described in this SWMP Plan section meet the requirements listed above. Staff will accomplish this with the following actions:

1. Reviewing stormwater plans for proposed development.
2. Inspecting sites prior to clearing and construction.
3. Inspecting all permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls. The County will enforce as needed based on inspections.

4. Inspecting sites at construction completion to insure proper installation of permanent stormwater facilities before final approval or occupancy. At this time the County will verify that a maintenance plan is completed and responsibility for maintenance of stormwater treatment and flow control BMPs/facilities is assigned. The County will enforce as needed based on inspections.
5. Compliance with Actions 1 through 4 above is demonstrated by records and must achieve 80% of scheduled inspections.

County staff will use education and outreach strategies to deal with issues and an escalating course of enforcement actions *SCC 14.44: Enforcement/Penalties* to respond to non-compliance with stormwater requirements for developments.

4.3 Coordination with Other Stormwater Permits (S5.C.6.d)

Links to the electronic *Construction Stormwater General Permit Notice of Intent* (NOI) form for construction activity and the electronic *Industrial Stormwater General Permit* NOI form for industrial activity are available on the County web site.

Permittees shall continue to enforce local ordinances controlling runoff from sites that are also covered by stormwater permits issued by Ecology. The SWMP also seeks to coordinate efforts, when appropriate, with secondary Permittees.

4.4 Staff Training for Development and Construction (S5.C.6.e)

Certified Erosion and Sediment Control Lead (CESCL) certifications are maintained by County staff whose work involves controlling stormwater runoff from new development, redevelopment, and construction sites, including permitting, plan review, construction site inspections, and enforcement. Staff from other division, including Operations and NRD, also maintain CECLS certification.

Starting Fall of 2022, the County will be operating an in-house CESCL certification program that was approved by Ecology. This program is aimed at staff from Operations who do construction related work in the field, but the concepts are the same as taught in many outside CESCL courses designed for private construction work. Pierce and Kitsap Counties are credited with helping to build Skagit County's program, which staff from the SWMP and Environmental Services crew will facilitate.

Section 5

Operations and Maintenance (O&M) (S5.C.7)

5.1 Permit Requirements

The County's Operation and Maintenance (O&M) SWMP element aims to prevent and reduce pollutant runoff from municipal operations and to ensure that stormwater facilities owned or regulated by the County are maintained and properly functioning.

5.2 Maintenance Standards – (S5.C.7.a)

Maintenance standards (criteria) for County operated or regulated facilities will be at least as protective as maintenance standards specified in the *Stormwater Management Manual for Western Washington* (SWMMWW). The SWMP will develop maintenance standards for any facilities for which the SWMMWW does not have standards. Maintenance standards provide a threshold to determine when maintenance is required. When maintenance is required, it will be performed:

1. Within 6 months for catch basins (see Figure 5-1).
2. Within 1 year for other typical facilities, except catch basins.
3. Within 2 years for maintenance, which requires capital construction of less than $25,000.

The SWMP will document reasons any delays in maintenance, which may include denial of access by property owners, denial or delay of permits, or un-expected reallocation of maintenance staff for emergency work.

Figure 5-1. Skagit County's vacuum truck used to clean a catch basin.

5.3 Maintenance of stormwater facilities regulated by the Permittee (S5.C.7.b)

The SWMP must ensure that stormwater treatment and flow control facilities permitted and constructed pursuant to the section S5.C 6.c of the Permit be maintained in accordance with section S5.C.7.a of the Permit. The County will use *SCC 14.32: Stormwater Management* and *SCC 14.44: Enrollment/Penalties* to ensure that the responsible party is identified, and that the facilities are inspected as required by the Permit. Enforcement procedures are used when inspection and maintenance standards are not met. The SWMP will maintain records of all maintenance inspections and activities.

5.3.1 Annual inspections of all stormwater treatment and flow control BMPs/facilities (S5.C.7.b.i.b)

SWMP staff will inspect all stormwater treatment and flow control BMPs/facilities that discharge to the MS4 and were permitted by the County, pursuant to section S5.C 6.c of the current Permit, and those permitted by the County pursuant to previous versions of the Permit. The SWMP will inspect at least 80% of those facilities to stay compliant with the Permit.

5.3.2 Inspections of all permanent stormwater treatment and flow control BMPs/facilities and catch basins (S5.C.7.b.i.c)

County staff from the SWMP or PDS will inspect all permanent stormwater treatment and flow control BMPs/facilities and catch basins in new residential developments every six months until 90% of the lots are constructed (or when construction is stopped, and the site is fully stabilized). This work will help identify maintenance needs and enforce compliance with maintenance standards as needed. The County will inspect at least 80% of these facilities to stay in compliance with the Permit.

5.4 Maintenance of stormwater facilities owned or operated by the Permittee (S5.C.7.c)

5.4.1 Inspections (S5.C.7.c.i)

SWMP staff will inspect all County-owned or operated permanent stormwater treatment and flow control BMP/facilities and maintain these facilities according to the adopted maintenance standards.

5.4.2 Spot Checks – (S5.C.7.c.ii)

After major storm events[3], the County will spot check these facilities to insure they are functioning and were not damaged during the storm. If spot checks reveal widespread damage or maintenance needs, staff will inspect all potentially affected facilities and maintain to established standards.

5.4.3 Catch Basins and Inlets – (S5.C.7.c.iii)

SWMP staff will inspect all MS4 catch basins and inlets at least once every two years, and clean catch basins to establish maintenance standards. Decant water from catch basins must be disposed of according to Appendix 6 of the Permit.

5.4.4 Required Inspections – (S5.C.7.c.iv)

Compliance with the inspection requirements in section S5.C.7.c.i-iii, above, shall be determined by the presence of an established inspection program achieving at least 95% of required inspections.

5.5 Reducing Stormwater Impacts from County Lands and Road Maintenance (S5.C.7.d)

The County will maintain County roads and County lands to reduce impacts of stormwater runoff. County lands include roads, parking lots, buildings, parks, right-of-way, maintenance yards, and stormwater infrastructure through a Comprehensive Management Strategy for County owned stormwater infrastructure. By December 31, 2022, the SWMP will document practices, policies, and procedures that direct staff to minimize stormwater impacts while performing the following activities:

1. Pipe Cleaning
2. Cleaning of culverts that convey stormwater in ditch systems
3. Ditch maintenance
4. Street cleaning
5. Road repair and resurfacing, including pavement grinding
6. Snow and ice control
7. Utility installation
8. Pavement striping maintenance
9. Maintaining roadside areas, including vegetation management
10. Dust control

[3] A 24-hour storm event with a 10-year or greater recurrence interval.

11. Application of fertilizers, pesticides, and herbicides according to the instructions for their use, including reducing nutrients and pesticides using alternatives that minimize environmental impacts
12. Sediment and erosion control
13. Landscape maintenance and vegetation disposal
14. Trash and pet waste management
15. Building exterior cleaning and maintenance

The County is enrolled in the RRMP. This is a volunteer program coordinated by Washington State Department of Transportation (WSDOT) designed to follow the Endangered Species Act (ESA). The ESA component of the program requires participants to employ BMP's during road maintenance activities to protect water quality, aquatic habitat, and ESA listed species. Guidelines followed by RRMP participants were created with input from local government agencies, WSDOT, National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS), and other stakeholders. BMPs are modified and addressed annually, as needed and as technology changes and advances.

Maintaining membership in the RRMP requires relevant County staff to follow those guidelines, take specific trainings to protect water quality and ESA listed species and record BMP implementation at job sites daily, and participate in quarterly meetings with other RRMP members. The County expects that our active participation in this program will keep us in compliance with Permit road requirements found in section S5.C.7.d. This expectation is based on discussions with other jurisdictions in the Puget Sound region who are also members of the RRMP, information learned at ongoing trainings and workshops, contrasting what SWMP staff have learned between WSDOT, RRMP and CESCL trainings, and the knowledge that the NMFS signed off on RRMP guidelines and BMP's. The NMFS's approval means that are RRMP members are operating in a manner and employing practices using AKART methodologies designed to protect critically imperiled species from extinction.

RRMP most recently drafted a mobile friendly version of the BMP guidance that can be referenced anywhere, including out in the field. This will allow County staff to search by BMP, type of site, goal (i.e., remove water, prevent turbidity), and see detailed installation instructions.

5.6 Training – (S5.C.7.e)

The SWMP will maintain and continually improve its training program for staff in PW, Parks and Recreation, and Facilities Management whose construction, operations, and maintenance functions can affect stormwater quality.

Training will include:

1. Certified Erosion and Sedimentation Control Lead (CESCL) training
2. Ongoing training with RRMP
3. Continual training on maintenance standards and source control BMPs from the SWMMWW
4. Following the SWPPP for the County Road Shop
5. Spill response and reporting requirements

The SWMP will document training schedules, subjects, and attendees.

5.7 Stormwater Pollution Prevention Plan (SWPPP) (S5.C.7.f)

The County will continue to implement a SWPPP for the Burlington Road Shop and update as needed for consistency with the SWMMWW and to comply with the Permit. The County updated the SWPPP for the Burlington Road shop in 2021. The SWPPP includes:

1. A detailed facility description along with BMPs that are consistent with the SWMMWW
2. Annual inspections
3. Seasonal spot-checks of certain parts of the stormwater facilities
4. An Inventory of materials, equipment, and activities that could contribute to stormwater pollution
5. A site map showing drainage, stormwater facilities, and areas of potential exposure
6. A spill prevention and response plan for the site.

The County maintains a record of SWPPP inspections, maintenance, and repairs.

Section 6

Source Control Program for Existing Development (S5.C.8)

The 2019 – 2024 Permit requires the County to implement a Source Control program to prevent and reduce pollutants in runoff from areas that discharge to MS4s and include the following elements: (section S5.C.8.a)

1. Application of operational source control BMPs, and, if necessary, structural source control BMPs or treatment BMPs/facilities, or both, to pollution generating sources associated with existing land uses and activities.
2. Inspections of pollutant generating sources at publicly and privately owned institutional, commercial, and industrial properties to enforce implementation of required BMPs to control pollution discharging into the County's MS4.
3. Enforcement of local ordinances at sites identified pursuant to section S5.C.8.b.ii, including sites with discharges authorized by a separate NPDES permit. Permittees that are in compliance with the terms of this Permit will not be held liable by Ecology for water quality standard violations or receiving water impacts caused by industries and other Permittees covered, or which should be covered under an NPDES permit issued by Ecology.
4. Practices to reduce polluted runoff from the application of pesticides, herbicides, and fertilizer discharging into MS4s owned or operated by the Permittee.

6.1 Source Control Performance Measures (S5.C.8.b)

6.1.1 Source Control Ordinance (S5.C.8.b.i)

The County is in the process of updating *SCC 16.32: Water Pollution* to require the application of source control BMPs for pollutant generating sources associated with existing land uses and activities, which is due for adoption by August 1, 2022. Source control BMPs are derived from the SWMMWW.

This ordinance will require that all public and privately owned institutional, commercial, and industrial sites, which have the potential to discharge pollutants to the MS4, use operational source control BMPs. When operational source control BMPs are not enough to prevent illicit discharges, structural or treatment BMPs, facilities, or both will be required. County staff will use education and technical assistance to implement source control requirements. Formal enforcement will be available if needed.

6.1.2 Inventory of Potential Pollutant Generators (S5.C.8.b.ii)

Skagit County's SWMP has created an inventory of publicly and privately owned institutional, commercial, and industrial sites that have the potential to discharge pollutants to the MS4. The current inventory identified sites by using Appendix 8 of the Permit, as well as other methods, to meet the criteria.

6.1.3 Source Control Inspection Program (S5.C.8.b.iii)

The County is currently working on a Memorandum of Understanding (MOU), with the Skagit County Public Health Department (Health), to establish a source control program for existing development. The goal is for Health to host the source control program and inspector. The County is also working with the cities of Anacortes, Burlington, Mount Vernon, and Sedro Woolley to work cooperatively and help them meet their future source control program requirements.

By January 1, 2023, the SWMP will implement its source control inspection program, which includes the following actions:

1. Provide all sites identified in the inventory, described above, with information about activities that can generate pollutants and the applicable source control requirements. This element may use any selection or combination of a variety of communication methods.
2. County staff will complete annual inspections to assure BMP effectiveness and compliance with source control requirements. The number of annual inspections will equal 20% of the number sites in the source control inventory. Because follow up compliance inspections count toward this number, the permit does not require that 20% of the sites need to be inspected each year, nor does it mean that 100% of the sites need to be inspected over 5 years.
3. The County will inspect all sites identified through legitimate complaints.

6.1.4 Source Control Enforcement Policy – (S5.C.8.b.iv)

By January 1, 2023, The County will implement an inspection program and a progressive enforcement policy that requires sites to comply with stormwater requirements within a specified and reasonable time:

1. If the County determines, through inspections or otherwise, that a site has failed to implement required BMPs, the County shall take appropriate follow-up action(s), which may include phone calls, reminder letters, or follow-up inspections, which the goal of resolving issues through technical assistance.
2. When the County determines that a facility has failed to adequately implement BMPs after a follow-up inspection, the County shall take enforcement action as established through authority in its code and ordinances, or through the judicial system.
3. Staff will maintain records, including documentation of each site visit, inspection reports, warning letters, notices of violations, and other enforcement records, demonstrating an effort to bring facilities into compliance. The County must also maintain records of sites that were not inspected because the property owner denies entry.

4. The County may refer non-emergency violations of local ordinances to Ecology, provided, the County also makes a documented effort of progressive enforcement. At a minimum, the County's enforcement effort shall include documentation of inspections and warning letters or notices of violation.

6.1.5 Staff Training for Source Control Program– (S5.C.8.b.v)

The SWMP will ensure staff, who are responsible for implementing the new source control program, are properly trained to conduct inspections. These trainings will include topics like source control BMPs and their proper application, inspection protocols, lessons learned, the type of cases they can expect to encounter in the field and enforcement procedures. Ongoing training will be provided to address issues including changes in procedure, techniques, requirements, and to prepare new staff. The SWMP will document and maintain records of all relevant trainings.

Section 7
Other Permit Requirements

This section of the SWMP Plan identifies Permit requirements that are outside of the eight core elements of the SWMP Plan, described above.

7.1 Obtaining Coverage under the Permit (S1.D)

The County, as required by the Permit, filed a Duty to Reapply – NOI for Coverage under NPDES Municipal Stormwater General Permit.

The Permittee shall use AKART to prevent and control pollution of waters of the State of Washington (S4D)

This overarching requirement to use AKART guides all actions in this SWMP Plan.

7.2 MS4 Compliance (S4.F)

7.2.1 Reporting Water Quality Standard Violations (S4.F.1)

A Permittee shall notify Ecology in writing within 30 days of becoming aware, based on credible site-specific information that a discharge from the MS4 owned or operated by the Permittee is causing or contributing to a known or likely violation of Water Quality Standards in the receiving water. Written notification provided under this subsection shall, at a minimum, identify the source of the site-specific information, describe the nature and extent of the known or likely violation in the receiving water, and explain the reasons why the MS4 discharge is believed to be causing or contributing to the problem. For ongoing or continuing violations, a single written notification to Ecology will fulfill this requirement.

7.2.2 Correcting Water Quality Violations by Using Permit Requirements or Adaptive Management - (S4.F.2&3)

The County must correct any discharges from the MS4 that result in violations of the Water Quality Standards. Permit Requirements S4.F.2&3 describe the adaptive management process for correction.

TMDL Requirements (S7) and TMDLs in Appendix 2 of the Permit are not within the County's Permit Area. For TMDLs not listed in Appendix 2, compliance with the Permit is considered compliance with the TMDL. The Permit may be modified to include future TMDL requirements. The Permit encourages the County to participate in the development of TMDLs within its jurisdiction, which took place most recently in the fecal coliform TMDL for Padilla Bay.

7.3 Monitoring and Assessment – (S8)

The SWMP has chosen option S8.B Trends Monitoring Option #1 for the current Permit Cycle, which runs August 1, 2019 through July 31, 2024 and will pay into the collective fund to implement regional small streams and marine nearshore areas status and trends monitoring in Puget Sound.

The payment for Ecology's 2022 fiscal year is due on August 15, 2022 in the amount listed in listed in Appendix 11. The 2022 payment will be due on or before August 15, 2022.

The SWMP chose option S8.C Effectiveness Studies Option #1 for the current Permit Cycle, which runs August 1, 2019 through July 31, 2024 and will pay into the collective fund to implement regional small streams and marine nearshore areas status and trends monitoring in Puget Sound. The payment for Ecology's 2022 fiscal year is due on August 15, 2022 in the amount listed in listed in Appendix 11. The 2022 payment will be due on or before August 15, 2022.

On October 15, 2019 the SWMP notified Ecology, in writing that it will pay into the collective fund for trends monitoring, SAM effectiveness and source identification studies for the duration of this Permit. Payments to the general fund are due by August 15, 2022 in the amount listed in Appendix 11.

The SWMP will submit records of SWMP activities tracked and/or maintained in accordance with S5 and/or S9 in response to requests from the Stormwater Action Monitoring (SAM) Coordinator for information associated with effectiveness and source identification studies that are under active SAM contracts.

7.4 Reporting (S9)

7.4.1 Annual Report – (S9.A&D)

By March 31 each year (started in 2020), the SWMP will submit an annual report to Ecology including the following items:

1. A copy of the County's current SWMP Plan as required by section S5.A.2.
2. Submittal of the annual report form as provided by Ecology pursuant to section S9.A, describing the status of implementation of the requirements of this permit during the reporting period.
3. Attachments to the annual report form including summaries, descriptions, reports, and other information as required, or as applicable, to meet the requirements of this permit during the reporting period. Refer to Appendix 3 of the Permit for annual report questions.
4. If applicable, provide notice that the MS4 is relying on another governmental entity to satisfy any of the obligations under the Permit.
5. Certification and signature pursuant to section G19.D, and notification of any changes to authorization pursuant to section G19.C.
6. A notification of any annexations, incorporations, or jurisdictional boundary changes resulting in an increase or decrease in the Permittee's geographic area of Permit coverage during the reporting period.

7.4.2 Record Keeping (S9.B)

The Permit requires that the County will keep all records related to this Permit and the SWMP for at least five years.

7.4.3 Public Access (S9.C)

The County will make all records related to the Permit and the SWMP available to the public during business hours. The County may require advanced notice for access to document and charge a fee for printing copies of records.

7.5 Proper Operation and Maintenance (General Condition 2)

The County will always properly operate and maintain all facilities and systems of collection, treatment, and control (and related appurtenances) which are installed or used by the Permittee for pollution control to achieve compliance with the terms and conditions of this Permit.

7.6 Notification of Discharge, Including Spills – (General Condition 3)

If a Permittee has knowledge of a discharge, including spills, into or from a MS4 that could constitute a threat to human health, welfare, or the environment, the Permittee shall:

1. Take appropriate action to correct or minimize the threat to human health, welfare and/or the environment.
2. Notify the Ecology regional office and other appropriate spill response authorities immediately, but in no case later than within 24 hours of obtaining that knowledge.
3. Immediately report spills or other discharges which might cause bacterial contamination of marine waters, such as discharges resulting from broken sewer lines and failing onsite septic systems, to the Ecology regional office and to the Department of Health, Shellfish Program.
4. Immediately report spills or discharges of oils or hazardous substances to the Ecology regional office and to the Washington Emergency Management Division at 1-800-258-5990.

7.7 Bypass Prohibited (General Condition 4)

The County will not allow bypasses to any portion of the MS4 when the design capacity of the treatment capacity of the BMP is not exceeded unless the provisions of Permit General Condition G4 are met.

7.8 Right of Entry (General Condition 5)

The County will allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law at reasonable times:

1. To enter upon the Permittee's premises where a discharge is located or where any records shall be kept under the terms and conditions of this Permit.
2. To have access to, and copy at reasonable cost and at reasonable times, any records that shall be kept under the terms of the Permit.
3. To inspect at reasonable times any monitoring equipment or method of monitoring required in the Permit.
4. To inspect at reasonable times any collection, treatment, pollution management, or discharge facilities.
5. To sample at reasonable times any discharge of pollutants.

7.9 Duty to Mitigate (General Condition 6)

The County will take all reasonable steps to minimize or prevent any discharge in violation of this Permit, which has a reasonable likelihood of adversely affecting human health or the environment.

7.10 Monitoring and Sampling (General Condition 9)

All monitoring and sampling performed to comply with this Permit will meet the requirements specified in Permit General Condition G9.

7.11 Removed Substances – Proper Handling (General Condition 10)

With the exception of decant from street waste vehicles, the County shall not allow collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of stormwater to be resuspended or reintroduced to the storm sewer system or to waters of the state. Decant from street waste vehicles resulting from cleaning stormwater facilities may be reintroduced only when other practical means are not available and only in accordance with the Street Waste Disposal Guidelines in Permit Appendix 6. Solids generated from maintenance of the MS4 may be reclaimed, recycled, or reused when allowed by local codes and ordinances. Soils that are identified as contaminated pursuant to Chapter 173-350 WAC shall be disposed at a qualified solid waste disposal facility (see Permit Appendix 6).

7.12 Reporting a Cause for Modification or Revocation (General Condition 15)

The County will report to Ecology any actions taken or planned, that would constitute cause for modification, revocation, or re-issuance of the Permit.

7.13 Duty to Reapply (General Condition 18)

The County will apply for permit renewal at least 180 days prior to the specified expiration date of this Permit.

7.14 Certification and Signature (General Condition 19)

All formal submittals to Ecology shall be signed and certified in accordance with Permit General Condition G9.

7.15 Non-Compliance Notification (General Condition 20)

In the event a Permittee is unable to comply with any of the terms and conditions of this Permit, the Permittee must:

1. Notify Ecology of the failure to comply with the permit terms and conditions in writing within 30 days of becoming aware that the non-compliance has occurred. The written notification must include all of the following:
    a. A description of the non-compliance, including dates.
    b. Beginning and end dates of the non-compliance, and if the compliance has not been corrected, the anticipated date of correction.
    c. Steps taken or planned to reduce, eliminate, or prevent reoccurrence of the non-compliance.
2. Take appropriate action to stop or correct the condition of non-compliance.