Stormwater Management Program Plan 2024

Updated February 26, 2024





Department of Natural Resources and Parks Water and Land Resources Division **Stormwater Services Section** King Street Center, KSC-NR-0600 201 South Jackson Street, Suite 600 Seattle, WA 98104 206-477-4800 TTY Relay: 711 www.kingcounty.gov/stormwater

Alternate Formats Available

206-477-4800 TTY Relay: 711

PERMIT NO. WAR044501

The current permit took effect on August 1, 2019, and will expire on July 31, 2024

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List of Acronyms and Abbreviations

AKART	All Known, Available Reasonable methods of Treatment
BMP	Best management practice
CBIMP	Catch Basin Inspection and Maintenance Program
CESCL	Certified Erosion and Sediment Control Lead
CSP	Conveyance Screening Program
DES	Department of Executive Services
DNRP	Department of Natural Resources and Parks
Ecology	Washington State Department of Ecology
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FMD	Facilities Management Division
GPS	Geographic Positioning System
GIS	Geographic Information System
IC	Illicit connection
IC/IDDE	Illicit Connection / Illicit Discharges Detection and Elimination
ID	Illicit discharges
КСС	King County Code
KCD	King Conservation District
KCIA	King County International Airport
DLS Permits	King County, Division of Local Services – Permits
LID	Low impact development
MEP	Maximum Extent Practicable
MIS	Maintenance Information System
MS4	Municipal separate storm sewer system
NPDES	National Pollutant Discharge Elimination System
Parks	Parks and Recreation Division
Permit	NPDES Phase I Municipal Stormwater Permit
PGIS	Pollution Generating Impervious Surface
PGPS	Pollution Generating Pervious Surface
PHSKC	Public Health - Seattle & King County
PSSH	Puget Sound Starts Here
PSP	Puget Sound Partnership
ROADMAP	Regional Operations and Maintenance Program

Roads	Road Services Division
ROW	Right-of-Way
RSMP	Regional Stormwater Monitoring Program
SIMPLA	Site Management Plan
SIP	Stormwater Investment Plan
SMAP	Stormwater Management Action Plan
SMED	Stormwater Management for Existing Development
SPPM	Stormwater Pollution Prevention Manual
SPP	Stormwater Planning Program
SPPU	Strategy Policy and Performance Unit
STORM	Stormwater Outreach for Regional Municipalities
SWD	Solid Waste Division
SWDM	Surface Water Design Manual
SWG	Stormwater Work Group
SWMP	Stormwater Management Program
SWMP Plan	The documentation of the SWMP
SWPPP	Stormwater Pollution Prevention Plan
SWSS	Stormwater Services Section
TMDL	Total Maximum Daily Load
Transit	Metro Transit Department.
WAC	Washington Administrative Code
WLRD	Water and Land Resources Division
WQCU	Water Quality Compliance Unit
WRIA	Water Resource Inventory Area
WTD	Wastewater Treatment Division

King County Stormwater Program Overview

Stormwater Program Plan (SWMP) Overview

Update:

The County currently operates under the permit that was reissued on July 1, 2019, and became effective on August 1, 2019.

The current permit coverage expires on July 31, 2024. King County has submitted the notice of intent (NOI) for coverage under the next permit with a presumed effective date of August 1, 2024.

The Permit requires King County to develop and implement a Stormwater Management Program (SWMP) designed to minimize impacts caused by stormwater runoff. It also requires the County to document its stormwater management program in the Stormwater Management Program Plan (SWMP Plan).

This SWMP explains how King County plans to comply with the Phase I permit in 2024 through implementation of the permit *components*.

King County invests significant time, resources, and budget into the county's permit-required Stormwater Management Program (SWMP). This document demonstrates compliance with King County's Phase I Municipal Stormwater Permit (Permit No. WAR044501) section S5. Stormwater Management Program requirement S5. A.

The specific requirement S5A. states:

King County shall implement a Stormwater Management Program (SWMP) during the term of this Permit. A SWMP is a set of actions and activities comprising the components listed in S5, and additional actions necessary, to meet the requirements of applicable TMDLs pursuant to S7 – Compliance with TMDL Requirements and S8 – Monitoring and Assessment.

- 1. The SWMP Plan shall be written to inform the public of the **planned SWMP activities for the upcoming calendar year,** and include a description of:
 - a. Planned activities for each of the program components included in S5.C.
 - b. Any additional planned actions to meet the requirements of applicable **TMDLs** pursuant to S7 Compliance with TMDL Requirements.
 - c. Any additional planned actions to meet the requirements of **S8 Monitoring and Assessment**.
- 2. Each Permittee shall track the cost or estimated cost of development and implementation of each component of the SWMP. This information shall be provided to Ecology upon request.
- 3. Each Permittee shall track the number of inspections, follow-up actions as a result of inspections, official enforcement actions and types of public education activities as required by the respective program component. This information shall be included in the Annual Report.

King County's implementation of the SWMP covers discharges from the municipal separate storm sewer system (MS4) that is owned and operated by King County. The SWMP describes how King County will comply with the Phase I Municipal Stormwater NPDES Permit.

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SWMP Reporting Requirements

The section below describes the various reports to be submitted to Ecology to meet permit requirements:

Requirements	Page	Due
S5. STORMWATER MANAGEMENT PROGRAM A.1. SWMP Plan	6	March 31 st - Annual Report
S5.C.4. Public Involvement and Participation b. Each Permittee shall post on their website their SWMP Plan, and the Annual Report required under S9.A no later than May 31 each year.	10	May 31 - Website
S9. REPORTING REQUIREMENTS D. The Annual Report for Permittees listed in S1.B shall include the following: 1. A copy of the Permittee's current SWMP Plan as required by S5. A.1.	48	March 31 st - Annual Report

In most areas of King County, stormwater and wastewater are conveyed separately. Wastewater is routed to a treatment plant and stormwater typically flows directly into receiving waters. Receiving waters can include stream, lakes, groundwater, wetlands, rivers and Puget Sound. While the *municipal* stormwater permit applies to most of unincorporated King County, some King County sites are covered by other types of NPDES permits.

Table - Other King County NPDES Permits

KC Agency	NPDES Permits Held	Location
Solid Waste Division (SWD)	Industrial Stormwater General Permit Construction Stormwater General Permit	Cedar Hills Regional Landfill and six separate recycling & transfer stations South County Recycling & Transfer Station (under construction)
King County International Airport	Industrial Stormwater Permit	Portions of KCIA are covered by KC or KC tenant ISGP. Areas covered by the ISGP are typically operations and maintenance areas and generally covers the entire airport.
Parks Division	Sand and Gravel General Permit (Inactive Site)	Maury Island Natural Area (formerly CalPortland Glacier Pit)
Road Services Division (Roads)	Sand and Gravel General Permits Construction Stormwater General Permit	17 King County gravel pits These permits are obtained if a construction site is expected to disturb an area of 1 acre or more.
Metro Transit Department (Transit)	Industrial Stormwater General Permit	Transit South Operating Base, Transit North Operating Base, Transit East Operating Base, Transit Bellevue Operating Base, Transit South Base Annex
Wastewater Treatment Division (WTD)	Individual NPDES Waste Discharge Permits Industrial Stormwater General Permit (ISGP)	 WTD owns and operates five treatment plants. Stormwater on all of these plants is primarily managed under Individual Waste Discharge permits. ISGPs are in place for portions of two of the plants, and for a separate material processing facility. King County is implementing actions under the Nutrient General Permit (issued December 2021)
Multiple Agencies	Construction Stormwater Permit	Construction projects that disturb one or more acres of land.

National Pollutant Discharge Elimination System Permit Overview

In 1995, coverage began for King County under National Pollutant Discharge Elimination System (NPDES) Phase I Municipal Stormwater permits. The Washington State Department of Ecology (Ecology) issues and administers these permits in Washington State as a result of a delegation of Clean Water Act Authority from the Environmental Protection Agency (EPA). Municipal Stormwater Permits are issued to address the harmful effects of stormwater runoff from developed lands that is collected by and discharged from storm drain systems.

SWMP Plan Organization

This SWMP Plan documents our compliance actions proposed for 2024. As required by the Permit, the SWMP Plan is updated annually to reflect changes in programs. It addresses the following permit requirements:

The SWMP Plan is organized to demonstrate compliance with the Permit requirements, with current and proposed actions into the following program components required by the Permit:

- Training
- Section 1 S5.C1. Legal Authority
- Section 2 S5.C2. MS4 Mapping and Documentation
- Section 3 S5.C3. Coordination
- Section 4 S5.C4. Public Involvement and Participation
- Section 5 S5.C5. Controlling Runoff from New Development, Redevelopment, and Construction Sites
- Section 6 S5.C6. Stormwater Planning
- Section 7 S5.C7. Structural Stormwater Controls
- Section 8 S5.C8. Source Control Program for Existing Development
- Section 9 S5.C9. Illicit Connections and Illicit Discharges Detection and Elimination
- Section 10 S5.C10. Operation and Maintenance Program
- Section 11 S5.C11. Education and Outreach Program
- S7. Compliance with TMDL Requirements
- S8. Monitoring and Assessment
- S9. Reporting Requirements
- Conclusion
- Appendix

Each section includes a table that summarizes the relevant Permit requirements and the corresponding planned and ongoing compliance activities for the upcoming calendar year.

Training Program

King County training program is outlined below and contains all the requirements for training. These requirements are spread throughout the permit and have been consolidated into this section. Each county agency is responsible for ensuring that requisite training has be done by for the required staff. See Executive Order for Implementing the County's Program for Compliance with the National Pollutant Discharge Elimination System (NPDES) Phase I Municipal Stormwater Permit.

Permit Section Requirement **Planned and Ongoing Activities** S5.C.5 viii. Each Permittee shall ensure that all staff whose Training records are currently managed by **each agency**. These records are primary job duties are implementing the program to then uploaded to the stormwater classroom or maintained by the individual Controlling **Runoff from** Control Stormwater Runoff from New Development, agency to ensure appropriate staff members are trained. New Redevelopment, and Construction Sites, including Development, permitting, plan review, construction site This training also meets the requirements of S5.C.9.e. Illicit Connections and

The table is organized by each responsible agency and its approach to training.

Redevelopment,	inspections, and enforcement, are trained to conduct	Illicit Discharges Detection and Elimination training.
and Construction	these activities. As determined necessary by the	
<u>Sites</u>	Permittee, follow-up training shall be provided to	DLS Permits
b. Site and	address changes in procedures, techniques or	Select positions in DLS Permits require CESCL training. This training is
subdivision	staffing.	available through qualified vendors. Records are kept by DLS Permits.
<u>scale</u>		All other agencies
<u>requirements</u>	Permittees shall document and maintain records of	Select positions in all agencies require CESCL training. This training is
	the training provided and the staff trained.	available through qualified vendors. Records are kept by individual
		agencies. Public health does not conduct any construction projects and
		therefore this training requirements do not apply to them.
S5.C.8 Source	v. Permittees shall train staff who are responsible for	King County has an ongoing training program for employees conducting
Control Program	implementing the Source Control Program to	source control work. SWSS, the primary agency implementing the source
for Existing	conduct these activities. The ongoing training	control program, trains staff and updates staff training as needed using
Development	program shall cover the legal authority for source	both in-house training and field job shadowing.
<u>b. Minimum</u>	control, source control BMPs and their proper	
performance	application, inspection protocols, lessons learned,	
measures	typical cases, and enforcement procedures. Follow-	
	up training shall be provided as needed to address	
	changes in procedures, techniques, requirements, or	
	staff.	

Permit Section	Requirement	Planned and Ongoing Activities
	Permittees shall document and maintain records of	
	the training provided and the staff trained.	
Permit Section	Requirement	Planned and Ongoing Activities
S5.C.9 Illicit	c. Each Permittee shall implement an ongoing	King County trains field personnel and first responders on the
Connections and	program designed to detect and identify non-	identification, investigation, termination, cleanup, and reporting of illicit
Illicit Discharges	stormwater discharges and illicit connections into	discharges and illicit connections, as appropriate for their job duties.
Detection and	the Permittee's MS4.	
Elimination		Training records are maintained by the individual agency unless they use the Self-Certification process for Phase I permit required training.
- Field personnel	Permittees shall document and maintain records of	
training	the training provided and the staff trained.	In 2021, King County instituted a Self-Certification process for Phase I permit required training. County employees receive a survey requiring that they self-identify their need for training by answering the following questions:
		 Do you, as part of your job, conduct construction plan review or construction inspections? (Phase I permit reference S5.C.5.b.viii) Do you work in the field or manage field staff? (Phase I permit reference S5.C.9.c.iii)
		The survey then self populates the training required to meet permit requirements. The survey collects information of who was trained and what training they completed. Self-Certification will be done every other year to ensure that new employees are trained.
		Agencies that will be using the Self-Certification process: ☑ FMD ☑ KCIA
		⊠ DLSP □ Parks
		□ ROADs □ Sheriff
		Metro Transit Department
		⊠ WLRD

Permit Section	Requirement	Planned and Ongoing Activities
		КСІА
	c. Each Permittee shall implement an ongoing	In addition to King County IC/IDDE training for employees; employees,
	program designed to detect and identify non-	tenants and operators at the King County International Airport (KCIA)
	stormwater discharges and illicit connections into	receive annual spill response policy training, including procedures for
	the Permittee's MS4.	notification, response and reporting, as well as preventative measures.
		Training records are maintained in the agency's training files.
		DLS Permits
	Permittees shall document and maintain records of	This agency conducts its own training to meet this requirement. Training
	the training provided and the staff trained.	records are maintained in the agency's training files.
		Parks
		This agency conducts its own training to meet this requirement. Training
		records are maintained in the agency's training files.
		Roads
		Roads provides "first responder" spill response and participates actively
		in spill cleanup by Roads staff. Roads has developed customized
		hazardous waste and spill response ("first responder") training for
		personnel responding to spilled or illegally dumped materials. The
		training also includes guidelines for when an outside spill response
		contractor should be called in. Roads also provides IC/IDEE training to
		field staff conducting catch basin inspections.
		Training records are maintained in Roads' training files.
		Sheriff
		Trains field personnel on IC/IDDE using the Sherriff's department on-line
		training program. This system also maintains records for the Sherriff's
		department. Training records are maintained in the agency's training files.
		SWD
		Trains field personnel on IC/IDDE using vendor provided training.
		Training records are maintained in the agency's training files.

Permit Section	Requirement	Planned and Ongoing Activities
		Transit Transit has developed customized hazardous waste and spill response training for personnel responding to spilled or illegally dumped materials. The training also includes guidelines for when an outside spill response contractor should be called in. Training records are maintained in the agency's training files.
		WTD Trains field personnel on IC/IDDE using the KC web-based stormwater classroom. Training records are maintained in the agency's_training files.
- First Responders Training	e. Permittees shall train staff who are responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges, including spills and illicit connections, to conduct these activities. Permittees shall document and maintain records of the training provided and the staff trained.	 KCIA In addition to King County IC/IDDE training for employees; employees, tenants and operators at the King County International Airport (KCIA) receive annual spill response policy training, including procedures for notification, response and reporting, as well as preventative measures. Training records are maintained in KCIA training files. Roads Roads has developed customized hazardous waste and spill response training for personnel responding to spilled or illegally dumped materials. The training also includes guidelines for when an outside spill response contractor should be called in. Select Roads staff receive Hazwoper and RCRA training as well as hazardous waste handling requirements. Training records are maintained in Roads' training files. Transit Transit has developed customized hazardous waste and spill response training for personnel responding to spilled or illegally dumped materials. The training also includes guidelines for when an outside spill response contractor should be called in. Select Roads staff receive Hazwoper and RCRA training as well as hazardous waste handling requirements. Training records are maintained in Roads' training files. Transit Transit has developed customized hazardous waste and spill response training for personnel responding to spilled or illegally dumped materials. The training also includes guidelines for when an outside spill response contractor should be called in. Transit provide that training files. The training also includes guidelines for when an outside spill response contractor should be called in. Training records are maintained in Transit training files.

S5.C.10	f. Implement an ongoing training program for	In 2021, King County instituted a Self-Certification process for Phase I
Operation and	employees of the Permittee who have primary	permit required training. County employees receive a survey requiring that
Maintenance	construction, operations, or maintenance job	they self-identify their need for training by answering the following
Program	functions that may impact stormwater quality. The	questions:
	training program shall address the importance of protecting water quality, operation and maintenance standards, inspection procedures, relevant SWPPPs, selecting appropriate BMPs, ways to perform their job activities to prevent or minimize impacts to water quality, and procedures for	 Do you, as part of your job, conduct construction plan review or construction inspections? (Phase I permit reference S5.C.5.b.viii) Do you work in the field or manage field staff? (Phase I permit reference S5.C.9.c.iii) The survey then self populates the training required to meet permit requirements. The survey collects information of who was trained and what
	reporting water quality concerns. Follow-up training shall be provided as needed to address changes in	training they completed. Self-Certification will be done every other year to ensure that new employees are trained.
	procedures, techniques, requirements, or staffing. Permittees shall document and maintain records of the training provided. The staff training records to be kept include dates, activities or course descriptions,	See previous section S5.C.9 for Agencies that will participate in Self-Certification.
	names and positions of staff in attendance.	KCIA
	g. Implement a Stormwater Pollution Prevention Plan (SWPPP) vi. A training plan for all personnel responsible for implementing any components of the SWPPP.	In addition to King County IC/IDDE training for employees; employees, tenants and operators at the King County International Airport (KCIA) receive annual spill response policy training, including procedures for notification, response and reporting, as well as preventative measures. Training records are maintained in KCIA training files.
	Permittees shall document and maintain records of the training provided and the staff trained.	Roads Training is tailored specifically for the operations and maintenance staff at Roads and addresses, among other subjects, stormwater pollution prevention, spill response, hazardous and solid waste management, and aquifer protection. Training records are maintained in Roads training files. In addition, Roads field crews participate in the Regional Road Maintenance ESA Program (RRMEP) training. This training focuses on BMP practices, and addresses maintenance guidelines, water quality, sediment and erosion control, and fish habitat requirements. These RRMEP training records are recorded in Peoplesoft.
		SWD

	Trains field personnel on IC/IDDE using vendor provided training and
	maintained in SWD training files.

Section 1 - Legal Authority (S5.C1.)

Legal Authority Program (S5.C1.)

Table 1 Legal Authority summarizes the requirements of Permit Special Condition S5.C1., and outlines the corresponding activities for the Program.

Table 1. Legal Authority Program

Permit Requirements	Planned and Ongoing Activities
1. Legal Authority	King County Code (KCC) Title 9.12 has been the code used for the County's
Minimum performance	water quality compliance program since 1992 and addresses S5.C.1.b.i
measures:	through iii by prohibiting the discharge of contaminants into surface water,
a. Each Permittee shall be	stormwater, or groundwater. The intent of this code is the: minimization or
able to demonstrate that	elimination of water quality degradation; preservation and enhancement of
they can operate	waters for recreation, fishing, and other beneficial uses; and preservation and
pursuant to legal	enhancement of the aesthetic quality and biotic integrity of the water. The
authority which	current code may be found at
authorizes or enables the	http://www.kingcounty.gov/council/legislation/kc_code/12_Title_9.aspx.
Permittee to control	
discharges to and from	KCC Title 9.12.045 through .080 authorizes implementation and enforcement
MS4s owned or operated	of Title 9.12. KCC Title 23 provides supplementary authority for the
by the Permittee.	implementation and enforcement of code. Title 23 may be found at
	http://www.kingcounty.gov/council/legislation/kc_code/32_Title_23.aspx.
b. This legal authority,	
which may be a	King County employees are authorized to carry out inspections, surveillance,
combination of statute,	and monitoring procedures necessary to determine compliance and non-
ordinance, permit,	compliance with permit conditions through KCC Title 9.12 and King County
contracts, orders,	Board of Health code. These codes may be found at the following URLs:
interagency agreements,	
or similar means, shall	http://www.kingcounty.gov/council/legislation/kc_code/12_Title_9.aspx
authorize or enable the	http://www.kingcounty.gov/healthservices/health/BOH/code.aspx
Permittee	
	King County Code (KCC) Title 16 contains KC's building and construction
	standards which includes clearing and grading permit requirements contained
	in the Phase I permit with the purpose of minimizing impacts of construction
	projects on the environment.
	https://www.kingcounty.gov/council/legislation/kc_code/19_Title_16.aspx

Section 2 - Mapping (S5.C2.)

MS4 Mapping and Documentation Program (S5.C2.)

Table 2 MS4 Mapping and Documentation Program summarizes the requirements of Permit Special Condition S5.C2. and outlines the corresponding activities for the Program.

Dormit Doquiromonto	Diamod and Ongoing Activities
Permit Requirements	Planned and Ongoing Activities
The SWMP shall include an ongoing program for mapping and documenting the MS4. Minimum performance	King County ongoing-mapping updates and maintain all i. – viii. features listed under 2. MS4 Mapping and Documentation a. Ongoing Mapping including outfalls, known discharge point, receiving waters, stormwater treatment / flow control BMPs/facilities, connections and tributary conveyance as described in this section of the permit.
measures:	
a. Ongoing Mapping. Each Permittee shall maintain mapping data for the features listed below.	King County has mapped tributary conveyances to, and including, all known outfalls and discharge points within the urban/higher density rural sub-basins. A map of these basins appears in Appendix A. Ongoing mapping continues in the rural subbasins to improve spatial coverage and data review improves overall data quality. King County also performs CCTV inspections to better understand the integrity of its MS4 system and to reduce related risks.
	King County runs a program that identifies new connections to the MS4 through the building permit records process at DLS Permits. The permit review requires submittal of electronic copies of newly constructed drainage systems that will be turned over to King County post-construction. Private connections allowed under new permits are manually added to the County's MS4 mapping data set by SWSS personnel.
	KC has centralized its mapping information into on a single database. Any capital or maintenance activities conducted by county agencies that change the character of the MS4 are reported to SWSS to be included in the central database.
b. New Mapping.	
i. No later than January 1, 2020, begin to collect size and material for all known MS4 outfalls during normal course of business (e.g., during field screening, inspection, or maintenance) and update records.	i. King County has had a program that will collect size and material for all known MS4 outfalls during normal course of business since before January 1, 2020.
ii. No later than August 1, 2023,	

Table 2. MS4 Mapping and Documentation Program

Permit Requirements	Planned and Ongoing Activities
complete mapping of all known connections from the MS4 to a privately-owned stormwater system.	ii. Discharges to private systems have been mapped during the mapping of the MS4. King County completed mapping all known connections from the MS4 to a privately-owned stormwater system prior to August 1, 2023.
iii. No later than December 31, 2023, counties shall complete mapping tributary conveyances, as described in S5.C.2.a.v, for 50% of the areas outside the previously mapped urban/higher density rural sub-basins.	iii. King County has mapped more than 50% of the rural subbasins that had not been previously mapped to meet the December 31, 2023 deadline for 50% of the areas outside the previously mapped urban/higher density rural sub-basins. The approach used to map the remaining rural subbasins will be a combination of office analysis and field mapping.
c. The required format for mapping is electronic with fully described mapping standards	The County completes mapping in the required format and is prepared to respond appropriately to any mapping requests. Requests should be addressed to:
d. To the extent consistent with national security laws and directives, each Permittee shall make available to Ecology, upon request,	King County NPDES Phase I Coordinator, Stormwater Services Environmental Programs Managing Supervisor, Water and Land Resources Division, 201 South Jackson Street, Suite 600, Seattle, WA 98104-3855,
available maps e. Upon request, and to the extent appropriate, Permittees shall provide mapping information to federally recognized Indian Tribes, municipalities, and other Permittees.	or by e-mail at <u>stormwater@kingcounty.gov</u> .

Section 3 - Coordination (S5.C3.)

Coordination (S5.C3.)

Table 3 Legal Authority summarizes the requirements of Permit Special Condition S5.C3 and outlines the corresponding activities for the Program.

Table 3. Coordination Program

Permit Requirements	Planned and Ongoing Activities
The SWMP shall include	An order, signed by County Executive Dow Constantine, establishes the
coordination mechanisms	mechanism by which the various entities of County government participate in
among departments	permit compliance. The order that originally took effect November 20, 2007
within each jurisdiction to	was superseded by a new order on June 10, 2014, which is still in effect, and
eliminate barriers to	may be read at the following website:
compliance with the	
terms of this Permit.	http://www.kingcounty.gov/about/policies/executive/utilitiesaeo/put8191ae
The SWMP shall also	<u>o.aspx</u> .
include coordination	
mechanisms among	As directed by Executive Order, King County designated a Municipal Permit
entities covered under a	Coordinator for the County and a Municipal Permit Lead in each agency
municipal stormwater	subject to the requirements of the Permit. The Coordinator and Leads
NPDES permit to	coordinate compliance activities, and together ensure that each agency
encourage coordinated	understands the implications of the Permit requirements on their operations.
stormwater-related	
policies, programs, and	The Coordinator and Leads collaborate on development of standardized
projects within a	approaches to permit compliance. Permit deliverables, such as the Annual
watershed. Permittees	Report and SWMP Plan, are prepared by the Coordinator and includes
shall document their	information provided by Permit Leads to ensure accuracy and understanding
efforts to establish the	of permit requirements as well as how Permit and Program Leads / Managers
required coordination	implement their programs. The Permit Leads, Program Managers and the
mechanisms.	permit coordinator meet regularly to discuss, train, schedule, implement and
	resolve impediments to permit requirements.
a. Update, if needed, and	
implement an intra-	
governmental (internal)	
coordination	
agreement(s) or	
Executive Directive(s) to	
facilitate compliance with	
the terms of this Permit.	
Due no later than	
March 31, 2020	

Permit Requirements	Planned and Ongoing Activities
b. The SWMP shall	King County is instrumental in convening, supporting, and participating in
include, when needed,	numerous regional forums that develop and implement collaborative
coordination mechanisms	stormwater management programs. King County plays an important role in
among entities covered	the following forums:
under a municipal	
stormwater NPDES	1. Regional Operations and Maintenance Program (ROADMAP)
permit to encourage	2. The Regional Phase I and II Permit Coordinators Forums
coordinated stormwater-	3. Stormwater Managers Committee of the Washington State Chapter
related policies,	of the American Public Works Association (APWA)
programs and projects	4. Ecology's Water Quality Partnership
within adjoining or	5. Stormwater Work Group (SWG)/ Stormwater Action Monitoring
shared areas	(SAM)
	6. Salmon Recovery forums in Water Resource Inventory Areas (WRIAs)
	7, 8 and 9, and 10.
	7. Inter-Agency Team (TMDL implementation)
	8. Issue specific committees such as the Nutrient Forum
	9. Stormwater Outreach for Regional Municipalities (STORM)
	10. Puget Sound Partnership
	11. Business Inspection Group (BIG), a consortium of Phase I and Phase II
	Source Control Programs.
	12. Regional Road Maintenance ESA Program
	13. 6-PPDQ work groups
	The participation and relationships established within these groups form the
	basis for the timely coordination mechanisms and coordinated activities
	required by the Permit.

Section 4 - Public Involvement and Participation (S5.C4.)

Public Involvement and Participation (S5.C4.)

Table 4 Public Involvement and Participation summarizes the requirements of Permit Special Condition S5.C4. and outlines the corresponding activities for the Program.

Table 4. Public Involvement and Participation Program

Permit Requirements	Planned and Ongoing Activities
Permittees shall provide	As part of the annual update process, King County invites public comment on
ongoing opportunities for	the contents of the SWMP Plan. King County will advertise the comment
public involvement and	period through its website at https://kingcounty.gov/en/dept/dnrp/nature-
participation in the	recreation/environment-ecology-conservation/stormwater-surface-water-
Permittee's SWMP and	management/stormwater-management-program, and through social media.
implementation	All feedback received during the public comment period will be reviewed and
priorities.	considered prior to finalization of the SWMP Plan.
a. Permittees shall create	In addition to input received during the SWMP Plan public comment period,
opportunities for the	King County welcomes feedback year-round. Comments may be emailed to
public, including	stormwater@kingcounty.gov or mailed to:
overburdened	
communities, to	Stormwater Management Team,
participate in the	King County Dept. of Natural Resources and Parks,
decision-making	601 S. Jackson St., Suite 600,
processes involving the	Seattle, WA 98104.
development,	
implementation, and	King County also engages the public in decision-making processes when it
update of the Permittee's	comes to siting, construction, and maintenance of County-initiated capital
SWMP and SMAP	projects and in stormwater related updates to the 2024 Comprehensive Plan
(SMAP applies to	and Critical Areas Ordinance.
counties).	
b. Each Permittee shall	King County will post on the King County website the Final SWMP Plan, and
post on their website	the Annual Report required under S9.A no later than May 31 st each year at
their SWMP Plan, and the	https://kingcounty.gov/en/dept/dnrp/nature-recreation/environment-
Annual Report required	ecology-conservation/stormwater-surface-water-management/stormwater-
under S9.A no later than	management-program/stormwater-management-program-plan.
May 31 each year.	
	Other submittals related to the Municipal Permit are available upon request
	by sending an email to <u>stormwater@kingcounty.gov</u> .

Section 5 - Controlling Runoff from New Development, Redevelopment, and Construction Sites (S5.C5.)

Controlling Runoff from New Development, Redevelopment, and Construction Sites (S5.C5.)

Table 5 Legal Authority summarizes the requirements of Permit Special Condition S5.C5., and outlines the corresponding activities for the Program.

Permit Requirements	Planned and Ongoing Activities
The SWMP shall include a	Current codes and rules are set forth in the following list:
program to prevent and	
control the impacts of	KCC 9.04 Surface Water Runoff Policy
runoff from new	http://www.kingcounty.gov/council/legislation/kc_code/12_Title_9.aspx
development,	
redevelopment, and	KCC 9.08 Water Quality
construction activities.	http://www.kingcounty.gov/council/legislation/kc_code/12_Title_9.aspx
The program shall apply	
to private and public	KCC 16.82 Clearing and grading
development, including	http://www.kingcounty.gov/council/legislation/kc_code/19_Title_16.aspx
transportation projects.	
Minimum performance	KCC 21A.24 Critical Areas
measures:	http://www.kingcounty.gov/council/legislation/kc_code/24_30_Title_21A.as
	<u>px</u>
a. Each Permittee shall	
continue to implement	2021 King County SWDM
existing programs	http://www.kingcounty.gov/environment/waterandland/stormwater/docum
approved under the	ents/surface-water-design-manual.aspx
2013 Phase I Municipal	https://kingcounty.gov/en/dept/dnrp/nature-recreation/environment-
Stormwater Permit until	ecology-conservation/stormwater-surface-water-management/surface-
the program required in	water-design-manual/surface-water-design-manual-2021
S5.C.5.b.iv applies. The	2021 King County SPPM:
program required in	http://www.kingcounty.gov/environment/waterandland/stormwater/docum
S5.C.5.b.iv applies to	ents/pollution-prevention-manual.aspx
applications submitted	
prior to <mark>July 1, 2021</mark> ,	To meet the requirements of the 2019 Permit, modifications were made to
which have not started	the SWDM, SPPM and relevant documents. These enforceable requirements,
construction by July 1,	technical standards and manuals were determined to be equivalent to the
2026	Stormwater Management Manuals for Western Washington by Ecology.
iii. For King County,	
applications submitted	King County will continue the implementation of existing programs as
prior to April 24, 2016 , which have not started	required in S5. C.5. and implement application requirements identified in S5.
construction by July 1 ,	C.5. a. iii.
2021.	
b. Site and subdivision	See section above and 2021 Surface Water Design Manual.
scale requirements	

Table 5. Controlling Runoff from New Development, Redevelopm	ment, and Construction Sites Program
--	--------------------------------------

in No lator them lite 1	
iv. No later than July 1,	KC has updated its manual, codes and rules for implementation. King County
2021, each Permittee	has adopted and made effective a local program that meets the requirements
shall adopt and make	in S5.C.5.b.i through ii, above. Manuals and ordinances approved under this
effective a local	Section will be listed in Appendix 10, Part 3, following a permit modification.
program that meets the	
requirements in	See 2021 Surface Water Design Manual
S5.C.5.b.i through ii,	
above. Manuals and	
ordinances approved	
under this Section will	
be listed in Appendix	
10, Part 3, following a	
permit modification.	
vi. The program shall	King County continues to maintain this permitting process. See King County's
include a permitting	Annual Report for specific information regarding stormwater site plan review,
process with site plan	inspects prior to clearing and construction, inspections during construction
review, inspection,	
and enforcement	and prior to final approval and other activities required in this section.
capability to meet the	
following standards for	
both private	
and public projects,	
viii. Each Permittee	DLS Permits
shall ensure that all	See <u>Training Program</u> - Page 12
staff whose primary job	See <u>maining Program</u> - Page 12
duties are	
implementing the	
program to Control	
Stormwater Runoff	
from New	
Development,	
Redevelopment, and	
Construction Sites,	
-	
including permitting,	
plan review,	
construction site	
inspections, and	
enforcement, are	
trained	

Section 6 - Stormwater Planning (S5.C6.)

Stormwater Planning Program (S5.C6.)

Table 6 Legal Authority summarizes the requirements of Permit Special Condition S5.C6., and outlines the corresponding activities for the Program.

Permit Requirements	Planned and Ongoing Activities
Each Permittee shall implement a Stormwater Planning program to inform and assist in the development of policies and strategies as water quality management tools to protect receiving waters. a. By August 1, 2020, each Permittee shall convene an inter- disciplinary team to inform and assist in the development, progress, and influence of this program.	King County has created <i>an interdisciplinary team</i> that includes a permit lead for each agency that has responsibilities under this permit within the county. This team works together to ensure countywide permit compliance goals and future needs are met. The team also collaborates in looking for opportunities to improve receiving water quality throughout the county. The participants include subject matter experts from Wastewater, Transit, Roads, Parks, Facilities Maintenance, Health, Solid Waste, Permitting, the Sherriff's office, and the King County International Airport. Additionally, Stormwater Services works closely with other sections in the Water and Land Resources Division.
b. Coordination with long-range plan updates. i. Each Permittee shall describe how stormwater management needs and protection / improvement of receiving water health are (or are not) informing the planning update processes and influencing policies and implementation strategies in their jurisdiction. The reporting shall describe the water quality and watershed protection policies, strategies, codes, and other measures intended	King County's SWSS coordinates with long-range plan updates including how stormwater management is needed for protection and improvement of receiving water health. SWSS also influences policies and implementation strategies in King County. Through this coordination, water quality and watershed protection policies, strategies, codes, and other measures intended to protect and improve local receiving water health are reviewed and updated as needed. <i>SWSS continues to work closely with a team updating the King County Critical</i> <i>Areas Ordinance and the Comprehensive Plan. Through this collaboration, we</i> <i>ensure consistency with the Surface Water Design Manual and review for</i> <i>impacts to various stormwater programs and goals.</i> As required King County will respond to the series of Stormwater Planning Annual Report questions by March 31, 2024.

Table 6. Stormwater Planning Program

c. Low impact	KC will continue to require LID Principles and LID BMPs when updating,
development code-	revising, and developing new King County codes, rules, standards, or other
related requirements	enforceable documents, as needed.
	The KCSWDM requires projects that trigger Core R 9 (LID Flow Control BMPs) to provide flow control LID BMPs for targeted surfaces to the maximum extent feasible and to document feasibility determinations. In addition to requiring LID BMPs be implemented to the maximum extent feasible, the KCSWDM also requires minimum levels of LID BMP implementation and provides alternative BMPs that are not dependent onsite feasibility to use if minimums can't be achieved by standard BMPs due to site conditions. These alternative BMPs for use in meeting KC's minimum implementation levels where standard BMPs are not feasible, include native vegetation preservation, reduced impervious footprints, and in lieu fees (program under development). These minimum LID BMP requirement goes above and beyond what the Ecology Stormwater manual. Recently, additional guidance was developed to include high performance bioretention media in the KCSWDM. This update will go through a public comment period in early 2024.
	King County's development-related codes, rules, standards, or other enforceable documents are be designed to minimize impervious surfaces, native vegetation loss, and stormwater runoff in all types of development situations, where feasible.
	Annually, King County will assess and document any newly identified administrative or regulatory barriers to implementation of LID Principles or LID BMPs.
	As part of Ecology's required review and approval of the local manuals and ordinances no later than July 1, 2020, King County reviewed its Surface Water Design Manual for barriers to LID and found no barriers that would otherwise result in additional LID BMP implementation.
d. Stormwater Management Action Planning Due no later than December 31, 2022	King County has developed a <u>Stormwater Management Action Plan (SMAP)</u> <u>See Appendix C: C.6 Stormwater Planning</u> for a single sub-basin or catchment area located within the geographic areas for which watershed-scale stormwater plans were developed in the 2013 Permit. It is considered to be a living document and will be attached to the 2023 Annual Report submitted March 31, 2024. The SMAP will also be hosted on King County's Stormwater Services website - <u>King County Stormwater Management Action Plan - King</u> <u>County, Washington</u> [Link to new Stormwater Landing Page].
	 KC's SMAP for a single sub-basin identifies: (a) Specific short-term actions (i.e., actions or projects to be accomplished within six years). (b) Specific long-term actions (i.e., actions or projects to be accomplished within seven to 20 years).

(c) Land management/development strategies and/or actions needed for
water quality management, if these were not articulated in the
watershed-scale stormwater plans. Include these in (a) and (b).
(d) Targeted, enhanced, or customized implementation of stormwater
management actions related to
permit sections within S5, including:
• IDDE field screening,
 Prioritization of Source Control inspections,
 O&M inspections or enhanced maintenance, or
• Public Education and Outreach behavior change programs
Identified actions shall support other specifically identified stormwater
management strategies and actions for the basin overall, or for the
catchment area in particular.
(a) A revised and updated implementation schedule and budget
sources. ¹

¹ From SMAP Guidance

Section 7 - Structural Stormwater Controls (S5.C7.)

Structural Stormwater Controls Program (S5.C7.)

Table 7. Structural Stormwater Controls Program summarizes the requirements of Permit Special Condition S5.C7. and outlines the corresponding activities for the Program.

Permit Requirements	Planned and Ongoing Activities
Permit RequirementsEach Permittee shallimplement a StructuralStormwater ControlProgram to prevent orreduce impacts to watersof the State caused bydischarges from the MS4.Impacts that shall beaddressed includedisturbances to	Planned and Ongoing Activities King County is implementing a Structural Stormwater Control Program to prevent or reduce impacts to waters of the State caused by discharges from the MS4. Impacts that will be addressed include disturbances to watershed hydrology and stormwater pollutant discharges. King County's program considers impacts caused by stormwater discharges from areas of existing development; including runoff from highways, streets and roads owned or operated by KC; and areas of new development, where impacts are anticipated as development occurs.
asturbunces to watershed hydrology and stormwater pollutant discharges. a. The program shall address impacts that are not adequately controlled by the other required actions of the SWMP.	a. The program is addressing impacts that are not adequately controlled by the other required actions of the SWMP. The program includes evaluating new flow control facilities, new treatment (or treatment and flow control) facilities, new LID BMPs, retrofit of existing treatment and/or flow control facilities, property acquisition for water quality and/or flow control benefits, maintenance with capital construction costs \geq \$25,000 as well as restoration of riparian buffers, restoration of forest cover, floodplain reconnection projects on water bodies that are not flow control exempt per Appendix 1 and permanent removal of impervious surfaces.
b. Each Permittee's SWMP Plan shall describe the Structural Stormwater Control Program	See <u>Appendix D: C.7 Structural Stormwater Control Program</u> for a program description that addresses each of the components listed above.
c. With each Annual Report, each Permittee shall provide a list of planned, individual projects scheduled for implementation during this Permit term for the purpose of meeting S5.C.7.d. per Appendix 12.	Appendix D: C.7 Structural Stormwater Control Program of King County's SWMP Plan contains King County's list of projects scheduled for implementation during the current Permit term. The list is formatted consistent with Appendix 12 of the Permit. This list is updated annually, and updates will be submitted to Ecology as part of the County's Annual Report.

Table 7. Structural Stormwater Controls Program

Section 8 - Source Control Program for Existing Development (S5.C8.)

Source Control Program for Existing Development Program (S5.C8.)

Table 8 Source Control Program for Existing Development Program summarizes the requirements of Permit Special Condition S5.C8. and outlines the corresponding activities for the Program.

Permit Requirements	Planned and Ongoing Activities
a. The Permittee shall	King County identifies multifamily, commercial, and industrial sites that are
implement a program to	potentially pollutant generating. On identified sites, the Source Control
reduce pollutants in	Program inspects structural and operational BMPs and onsite conveyance
runoff from areas that	systems to ensure that the appropriate operational and structural source
discharge to the MS4.	control BMPs are employed and properly maintained. If BMPs are lacking
	and/or inadequate, verbal and/or written notice is provided along with
	technical assistance, detailing what must be done to achieve compliance.
	Failure to comply will trigger progressive enforcement. The authority to issue
	written notices and enforce their contents is found in KCC Chapter 9.12.
	The County's Stormwater Pollution Prevention Manual (SPPM), various King
	County websites, and King County public outreach efforts all encourage the
	elimination or reduction of pesticides, herbicides and fertilizers. The SPPM
	was updated in 2021.
b. Minimum performance	King County uses KCC Chapter 9 and the <u>SPPM</u> to enforce the application of
measures:	source control BMPs. The SPPM identifies potentially polluting activities at
i. Permittees shall enforce	residential, commercial and industrial sites and the operational, structural,
ordinance(s), or other	and/or treatment BMPs required to prevent pollutants from entering surface
enforceable documents,	water, stormwater, and/or groundwater.
requiring the application	
of source control BMPs	The update to the Source Control enforcement program was implemented in
for pollutant generating	2018 and included changes to the King County Code and a Public Rule (PUT-8-
sources associated with	23) describing how penalties are calculated.
existing land uses and	The County's SPDM various King County websites, and King County public
activities.	The <u>County's SPPM</u> , various King County websites, and King County public
Permittees shall update	outreach efforts all encourage the elimination or reduction of pesticides,
and make effective the ordinance(s), or other	herbicides and fertilizers. The SPPM was updated in July 2021.
enforceable documents,	2021 SPPM
as necessary to meet the	In 2021 the Source Control team updated and adopted the 2021 SPPM. The
requirements of this	manual provides BMPs for managing stormwater and potential pollutants on
Section no later than	commercial, multifamily and residential properties. The SPPM describes the
August 1, 2021.	actions we are all required to take (KCC 9.12) to reduce the contamination of
	stormwater, surface water, and groundwater. The SPPM is updated a
	minimum of once every five years in order to maintain functionally
	equivalency with the Department of Ecology's Stormwater Management
	Manual for Western Washington, which was last updated in 2019. Revisions
	to the SPPM included new BMPs for the application of pesticides and

Table 8. Source Control Program for Existing Development Program

Permit Requirements	Planned and Ongoing Activities
	fertilizers; building repair and construction; in-water and over-water fueling; nurseries and greenhouses; and pet and goose waste.
ii. Permittees shall implement a program to identify publicly and privately owned institutional, commercial, and industrial sites which have the potential to generate pollutants to the MS4. The Permittee shall update the inventory at least once every 5 years.	SWSS developed an inventory of the land uses/businesses using the categories found in Appendix 8 of the Permit. King County has implemented an approach to develop the inventory list to meet this permit requirement. This approach is detailed in <u>Appendix E NPDES Source Control Inspection</u> <u>Program</u> .
	King County uses a combination of historical inspection and complaint records, information available through the King County Department of Assessments, map review, and field inspections to determine potential pollutant generating sites within unincorporated King County. Properties within the unincorporated area that are owned by the County and have the potential to produce pollutants are included in this inventory. The inventory is updated annually.
	With the implementation of new software, CityWorks, in 2019, as the inventory is entered into the system, businesses have been rated according to compliance history and potential to pollute. This rating is used to determine inspection frequency, resulting in businesses with a higher risk and/or poor compliance history being inspected on a more frequent basis.
iii. Permittees shall implement an inspection program for sites identified pursuant to S5. C.8.b.ii, above.	
(a) All identified sites with a business address shall be provided, by mail, telephone, electronic communications, or in- person information about activities that may generate pollutants and the source control requirements applicable to those activities. This information may be provided all at one time or spread out over the permit term to allow for some tailoring and distribution of the	a) Information about activities that may generate pollutants and the source control requirements applicable to those activities are provided in person during a site inspection, or if no one is present, by mail. This provides the benefit of customizing the information provided to the needs of each particular site. Identified sites with a business address that do not get inspected during the permit will receive information in the mail about activities that may generate pollutants and the source control requirements applicable to those activities. This information is also available on King County's website at www.kingcounty.gov/sppm.

Permit Requirements	Planned and Ongoing Activities
information during site	
inspections.	
(b) The Permittee shall	
annually complete the	
number of inspections	
equal to 20% of the	
businesses and/or sites	b) The business inventory for 2024 is approximately 1,860 businesses and/or
listed in their source	sites. King County will complete the number of inspections (372) equal to
control inventory to	20% of the businesses and/or sites listed in the source control inventory
assess BMP effectiveness	(1,860 x 20%).
and compliance with	
source control	Annexations may occur within King County over the next few years.
requirements. The	Combined with the addition of new businesses and the closing of other
Permittee may count	businesses, there is some uncertainty about the number of businesses in
follow up compliance	unincorporated King County from year to year. The number of sites under this
inspections at the same	program will be in constant flux, requiring annual analysis to determine the
site toward the 20%	20 percent inspection goal.
inspection rate. The	
Permittee may select	
which sites to inspect	
each year and is not	
required to inspect 100%	
of sites over a 5-year	
period. Sites may be	
prioritized for inspection	
based on their land use	
category, potential for	
pollution generation,	
proximity to receiving	
waters, or to address an	
identified pollution	
problem within a specific	
geographic area or sub-	
basin.	
(c) Each Permittee shall	
inspect 100% of sites	
identified through	
credible complaints.	
(d) Permittees may count	
inspections conducted	(c) King County inspects 100% of sites identified through credible complaints
based on complaints, or	received and responds as appropriate. All complaints and associated
when the property owner	responses are recorded in King County's Cityworks data base. King County
denies entry, to the 20%	uses Cityworks to track responses and ensure that follow up is completed
inspection rate.	until the compliant is resolved.

Permit Requirements	Planned and Ongoing Activities
iv. Each Permittee shall	The procedures for progressive enforcement include the issuance of a
implement a progressive	detailed Corrective Action Letter that specifies both what must be done to
enforcement policy to	come into compliance and the deadline for doing it. King County personnel
require sites to come into	work with property owners, tenants, and business operators to help them
compliance with	achieve compliance. The assistance may include additional site visits, bringing
stormwater requirements	in outside resources such as vouchers for hazardous waste disposal and
within a reasonable time	storage, facilitating conversations between property owners and tenants,
period	providing written materials, posting BMP signs, or phone calls and emails.
	When compliance is achieved, a Compliance Letter is sent if requested.
	King County makes every effort to bring facilities into compliance using site
	audits and technical assistance but in the very rare instance where
	compliance is not achieved, Notice and Orders can be issued, and additional
	enforcement action taken. Additionally, commercial sites are denied a
	discount on their SWM fee if source control BMPs are not implemented and if
	the onsite stormwater system is not properly maintained.
	See Appendix E: C8. NPDES Source Control Inspection Program – Site List
	Development and Modification and Progressive Enforcement Process for an
	overview of King County's approach to progressive enforcement.
	Records of inspection results, site photos, correspondence, etc., are all kept in
	electronic formats. There are activity logs for each site, which document
	inspections dates, contacts, illicit connections, referrals to other agencies, etc.
v. Permittees shall train	See <u>Training Program</u> - Page 12
staff who are responsible	
for implementing the	
Source Control Program	
to conduct these	
activities.	

Section 9 - Illicit Connections and Illicit Discharges Detection and Elimination (S5.C9.)

Illicit Connections and Illicit Discharges Detection and Elimination Program (S5.C9.)

Table 9 Illicit Connection and Illicit Discharge Detection and Elimination Program summarizes the requirements of Permit Special Condition S5.C1. and outlines the corresponding activities for the Program.

Permit Requirements	Planned and Ongoing Activities
The SWMP shall include	King County achieves compliance with S5.C.9 through implementation of the
an ongoing program	programs described in this section.
designed to prevent,	
detect, characterize,	KC has an ongoing program designed to prevent, detect, characterize, trace,
trace, and eliminate illicit	and eliminate illicit connections and illicit discharges into the MS4.
connections and illicit	
discharges into the MS4.	
Minimum performance	
measures:	
a. The program shall	a. In late 2020, King County Stormwater Services finalized its IC/IDDE
include procedures for	Standard Operating Procedures (SOP) document, which is tailored to the
reporting and correcting	geographic, institutional and other specific characteristics of King County. This
or removing illicit	SOP is based on both lessons learned over the near decade of conducting
connections, spills, and	IC/IDDE, as well as on the statewide Illicit Connection and Illicit Discharge
other illicit discharges	Field Screening and Source Tracing Guidance Manual – May 2020 Revision
when they are suspected	The link to this latter document is here:
or identified.	Link - https://www.wastormwatercenter.org/permit-
	assistance/municipal/permit-assistance-2/ic-id/
b. Permittees shall	b. KC Title 9 continue to implement an ordinance or other regulatory
continue to implement an	mechanism to effectively prohibit non-stormwater, illicit discharges, including
ordinance or other	spills, into the Permittee's MS4.
regulatory mechanism to	
effectively prohibit non-	King County is meeting permit requirements S5. C.5.a.i. and S5.C.5.a.ii, and
stormwater, illicit	achieves equivalency with Ecology's 2012 Stormwater Management Manual
discharges, including	for Western Washington as Amended in December 2014 by adopting and
spills, into the Permittee's	implementing the regulations and rules listed below:
MS4.	1. <u>King County Code Chapter 9.04 and Chapter 9.12</u> as amended by
	Ordinance 18257, adopted on March 15, 2016.
	2. <u>King County Code Chapter 16.82</u>
	3. <u>King County's Surface Water Design Manual</u> .
	4. <u>King County's Stormwater Pollution Prevention Manual</u>

Table 9. Illicit Connection and Illicit Discharge Detection and Elimination Program

Permit Requirements	Planned and Ongoing Activities
c. Each Permittee shall implement an ongoing program designed to detect and identify non- stormwater discharges and illicit connections into the Permittee's MS4.	Planned and Ongoing Activities c. / d. SWSS Each year, King County implements a Conveyance Screening Program (CSP) to inspect known stormwater outfalls and other locations where stormwater leaves the MS4. These locations will be checked for illicit discharge indicators, including dry weather flow and other evidence of non-permitted substances. Every year the goal is to inspect at least 12 percent of these locations, which are used as proxies for the entire MS4, which is comprised of thousands of catch basins and other features, and hundreds of miles of ditches and pipes. MS4 locations identified for further investigation—based on the presence of dry weather flow or other indicators will trigger follow-up <i>in situ</i> water quality field screening and lab analyses, to further assess the likelihood of illicit connections or illicit discharges.
d. Each Permittee shall implement an ongoing program designed to address illicit discharges, including spills and illicit connections, into the	In 2024, the CSP will continue to have particular emphasis in the Puyallup- White River, Bear/Evans Creek and Issaquah Creek FC TMDL drainage basins, folding into SWSS's planned work in these FC TMDL basins, based on our FC TMDL Standard Operating Procedures document and associated basin- specific annual work plans. KCIA
Permittee's MS4.	KCIA has an annual inspection program during the summer of each year to deal with illicit connections and illicit discharges. Training is provided and detailed in KCIA policy. KCIA documents activities in permit records and eventually in CityWorks. Parks
	Parks inspects all of its stormwater catch basins and stormwater conveyance systems on an annual basis. Part of this inspection process involves checking for signs of recent construction activity, unwarranted flow through the stormwater system, and other signs of possible illicit connections. If any such items are discovered, further investigations are performed.
	Roads Will conduct its annual Catch Basin Inspection and Maintenance Program (CBIMP). Roads plans to inspect 100 percent of known, mapped catch basins on an annual basis. However, Roads staff is currently reviewing four years of asset management data to evaluate the feasibility of adopting a reduced frequency catch basin inspection program per S5.C.10.d.i.(a). That alternative program may be implemented in 2024. While implementing CBIMP, Roads staff will actively look for evidence of IC/ID and will record whether or not such evidence is observed. Catch basins identified for further investigation will trigger follow-up in situ field screening to assess further the likelihood of IC/ID.
	SWD Routine inspections of SWD stormwater infrastructure note any unusual observations that suggest a possible illicit connection. Further investigations

Permit Requirements	Planned and Ongoing Activities
	are performed, as appropriate. Illicit discharges are addressed as they are identified.
	Transit Transit inspects allstormwater catch basins and stormwater conveyance systems on an annual basis. Part of this inspection process involves checking for signs of recent construction activity, unwarranted flow through the stormwater system, and other signs of possible illicit connections. If any such items are discovered, further investigations are performed to visually check for new connections into the MS4 and, if any are discovered, to conduct testing and further source-tracing to identify where the connection is coming from and what type of water (I.e foundation dewatering, potable, industrial, sewer, etc.) might be getting discharged.
	WTD WTD has a relatively small number of properties with stormwater conveyances in their facility inventory. WTD uses in-house capacity and training to conduct spill response activities for most commonly occurring spills (for example, vehicular fluids or paint). WTD requires its contractors to provide construction stormwater management.
	 Citizen reports are received by the County in a number of ways. Roads 24-hour hotline at 477-8100 or 800-KCROADS SWSS Water Quality hotline at 206-477-4811 Illegal Dumping Hotline 206-296-SITE or 866-431-7483 DLS Permits inspector contact information posted on signage at each development/redevelopment project site in unincorporated King County that is permitted by DLS Permits. Illegal Dumping web form at
	 <u>http://your.kingcounty.gov/solidwaste/cleanup/report-dumping.asp</u> Online report form for drainage and water quality problems at <u>http://www.kingcounty.gov/environment/waterandland/stormwater/problem-investigation-line/report-form.aspx</u> Direct contact between King County staff and a member of the public. Referrals from other King County Departments/Divisions/Agencies.
e. Permittees shall train staff who are responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges, including spills and illicit connections, to conduct these activities	See <u>Training Program</u> - Page 12

Permit Requirements	Planned and Ongoing Activities
f. Each Permittee shall either participate in a regional emergency response program or	King County will continue ongoing awareness and coordination among King County agencies around proper response, tracking, and reporting of spills and improper disposal into King County's MS4.
develop and implement procedures to investigate and respond to spills and	As appropriate, spills and other select Incidents are reported to Ecology's Environmental Report Tracking System database.
improper disposal into the MS4 owned or operated by the Permittee.	KCIA Airport tracks and maintains spill and IC/ID records for incidents occurring at the KCIA. PHSKC
g. Recordkeeping: Each Permittee shall track and maintain records of the activities conducted to meet the requirements of this Section.	Maintains a proprietary database designed for public health agencies that maintains records of inspections, complaints, responses and enforcement actions.
	RoadsTracks and maintains electronic and/or paper copies of IDDE records.Electronic IDDE records are compiled in an asset management databaselinked to Roadworks; paper records and other electronic records are compiledin various internal tracking forms or on servers maintained by EnvironmentalUnit staff. These include forms and records specific to the spill responseprogram, catch basin inspection records, and drainage evaluation records.SWDSolid Waste Division maintains paper and/or electronic records of incidents,including spills.
	SWSS SWSS uses the Report drainage and water quality problems to initiate responses, findings, and enforcement actions. CityWorks maintains information for each issue or problem through resolution. https://kingcounty.gov/services/environment/water-and-land/stormwater/problem-investigation-line/report-form.aspx
	Transit Transit's Environmental Compliance Office maintains electronic spreadsheets detailing fleet-related spills, conveyance system IDDE inspections, and employee training. See <u>Training Program</u> - Page 12
	WTD The Wastewater Treatment Division maintains paper and/or electronic records of incidents, including spills, through resolution.

Section 10 - Operation and Maintenance Program (S5.C10.)

Operation and Maintenance Program (S5.C10.)

Table 10 Operation and Maintenance Program summarizes the requirements of Permit Special Condition S5.C10. and outlines the corresponding activities for the Program.

Table 10. Operation and Maintenance Program

Dormit Doguiromonto	Diamod and Organiza Astivities
Permit Requirements	Planned and Ongoing Activities
Each Permittee shall	King County's Surface Water Design Manual sets forth the maintenance
implement and document	standards for stormwater facilities in King County per KCC 9.04. To comply
a program to regulate	with S5.C.10.a, King County updated the SWDM and related codes to include
maintenance activities	maintenance standards for LID BMPs. KC updated its manual codes and rules
and to conduct	in 2021.
maintenance activities by	
the Permittee to prevent	King County implements maintenance standards that are as protective, or
or reduce stormwater	more protective, of facility function per permit time frames:
impacts.	
	(a) Within 1 year for typical maintenance of facilities, except catch
a. Maintenance	basins.
Standards. Each	(b) Within 6 months for catch basins.
Permittee shall	(c) Within 2 years for maintenance that requires capital construction of
implement maintenance	less than \$25,000.
standards that are as	
protective, or more	Maintenance of stormwater treatment and flow control BMPs/facilities
protective, of facility	(facilities) is typically initiated by one of the following inspections:
function	(racinties) is typically initiated by one of the following inspections.
i. The purpose of the	 Inspections of facilities regulated by King County are conducted
maintenance	according to the description under S5.C.10.b, below.
standard is to	
determine if	conducted according to the description under S5.C.10.c, below.
maintenance is	
required.	
ii. Unless there are	
circumstances	
beyond the	
Permittee's control,	
maintenance	
shall be performed:	
(a) Within 1 year for	
typical maintenance of	
facilities, except catch	
basins.	
(b) Within 6 months for catch basins.	
(c) Within 2 years for	
maintenance that	
requires capital	
construction of less	
than \$25,000.	

Permit Requirements	Planned and Ongoing Activities
b. Maintenance of stormwater facilities	i. King County evaluates and, if necessary, updates existing ordinances or other enforceable documents requiring maintenance of all stormwater
-	
regulated by the	treatment and flow control BMPs/facilities regulated by King County.
Permittee	
	ii. SWSS – Inspection and required maintenance of Regulated facilities
i. Each Permittee	The following King County Codes authorize King County personnel to inspect
shall evaluate and, if	and require maintenance of stormwater facilities.
necessary, update	
existing ordinances	 KCC 9.04.050 states that "Maintenance of all drainage facilities in
or other enforceable	compliance with King County maintenance standards is the responsibility
documents requiring	of the applicant or property owner as described in the Surface Water
maintenance of all	Design Manual, except those facilities for which King County assumes
stormwater	maintenance and operation as described in K.C.C 9.04.115 and 9.04.120
treatment and flow	and the Surface Water Design Manual".
control	• KCC 9.12.140 gives the director authorization to "make such inspections
BMPs/facilities	and take all actions that may be required to enforce this chapter".
regulated	
regulated	Additionally, developers are required to record easements and covenants
ii. Each Permittee	providing the County with right-of-entry and inspection of private drainage
shall implement an	and stormwater control systems.
on-going <mark>inspection</mark>	and stormwater control systems.
	Beduced Inspection Fraguency: Driveto facilities regulated by King County are
program to annually	Reduced Inspection Frequency: Private facilities regulated by King County are
inspect all	inspected per Permit requirements. SWSS uses a reduced inspection
stormwater	frequency based on maintenance records of every other year inspection
treatment and flow	frequency. The maintenance records are kept in Cityworks, a data
control	management system, and the inspection schedule is developed from this
BMPs/facilities	database.
regulated	
	Stormwater facilities regulated by King County are inspected for maintenance
	in the following manner:
	 Half of the private commercial facility inventory is visited by an
	inspector to confirm full compliance based on the maintenance
	standards in the SWDM.
	• The other half of the private commercial facilities regulated by King
	County complete a self-certified inspection in which they confirm full
	functionality of all facilities and catch basins on their property.
	, , , , , , , , , , , , , , , , , , , ,
	For those properties with a history of consistent compliance, the inspection
	frequency may be reduced based on maintenance records.
	Catch basins regulated by the permittee are inspected and determined if
	maintenance is required.
	manifemanice is required.
iii. Compliance with	iii. King County achieves at least 80% of required inspections for regulated
the inspection	facilities.
requirements of S5.	ומטווונוכא.
C.10.b.ii, above, shall	
be determined by the	

Permit Requirements	Planned and Ongoing Activities
presence of an established inspection program and achieving at least 80% of required inspections.	
iv. The Permittee shall require cleaning of catch basins regulated by the Permittee if out of compliance	iv. If any deficiencies are discovered, a Maintenance Correction Letter is sent, giving the property owner sufficient time to correct the problem before the end of the year. The property owner notifies SWSS when the work has been completed. Extensions may be granted if circumstances warrant, and permit timelines can accommodate the extension. Progressive enforcement will be used when maintenance is not completed within the timelines specified by the County. See <u>Appendix E: Progressive Enforcement Process</u> for an overview of King County's approach to progressive enforcement.
c. Maintenance of	i. SWSS is responsible for inspecting and maintaining approximately 1,100
<mark>stormwater facilities</mark>	county-owned facilities in unincorporated King County and cities with which
owned or operated by the Permittee	the County contracts. County-owned facilities with consistent compliance
i. Each Permittee	may be eligible for a phased inspection (reduced inspection) schedule.
shall implement a	Reduced inspection frequency:
program to annually	The maximum duration between inspections has been updated from three
inspect all	years to two in 2023. Problem sites may require annual inspections and
stormwater treatment and flow control BMPs / facilities owned or	maintenance. The two-year inspection frequency is based on maintenance records. The maintenance records are kept in Cityworks, a data management system, and the inspection schedule is developed from this database.
operated by the Permittee.	When inspections of these owned and operated facilities identify an exceedance of a maintenance standard that is protective of facility function (aka. a "function-critical" maintenance standard), maintenance is conducted within the one-year timeline required by the Permit.

Planned and Ongoing Activities
ii. Spot inspections conducted after large rain events are performed by SWSS for private and public facilities. The respective custodial agencies conduct spot inspections and focus on the areas of greatest rainfall intensity based on rain gauge data.
 iii. swss Regional facilities are facilities accepted through capital projects or other processes than plat development. Regional facilities were originally a designation for sites that required specialized inspections often due to design elements outside the Surface Water Design manual but have come to include Shared Facilities for private and ROW runoff, sites covered by DOE Dam Safety Reporting, HDPE overland pipelines, and facilities constructed by WLRD Capital Services which have completely retrofitted existing residential facilities. King County Conveyance Only facilities are properties with conveyance-only MS4. Both types of facilities are generally inspected annually. Water & Land Resources Division Tracts are facilities that were either not accepted by the county for maintenance, or not correctly transferred to cities during annexation. These facilities are inspected on a case-by-case basis as requested by a complainant. SWSS implements phased inspections in the following way: Residential facilities, facilities built through a plat development process, undergo a maintenance and defect bond (M&D), and are accepted at the end of the M&D period into King County ownership: Residential facilities added to inventory: Inspected quarterly for a minimum of 2 years under M&D until all M&D are addressed by the developer and the facility is accepted into county ownership and stormwater maintenance Subsequently inspected annually and consecutively for 2 additional years

Permit Requirements	Planned and Ongoing Activities
	a. When a facility is identified as problem site, it moves to
	annual inspections until otherwise resolved.
	In 2024, SWSS will continue implementing this inspection schedule.
	At least 95 percent of required inspections are completed annually.
	FMD each has a relatively small number of facilities in their facility inventory. The agency inspects 100 % of their inventory at least annually and conduct maintenance on those that fail to meet the maintenance standards.
	Parks each has a relatively small number of facilities in their facility inventory. The agency inspects 100 % of their inventory at least annually and conduct maintenance on those that fail to meet the maintenance standards.
	SWD stores and tracks compliance maintenance actions in an electronic work order system. The agency inspects 100 % of their inventory at least annually and conducts maintenance on those that fail to meet the maintenance standards.
	Transit All facilities are covered by other permit requirements and maintained per requirements.
	WTD All facilities are covered by other permit requirements and maintained per requirements.

Permit Requirements	Planned and Ongoing Activities
d. Maintenance of	Each custodial agency within King County is responsible for the inspection
Catch Basins Owned	and maintenance of their respective properties and associated stormwater
or Operated by the	assets.
Permittee	
i. Each Permittee	All maintenance needs identified through inspections are addressed within
shall annually	the timelines established in this section.
inspect all catch	
basins and inlets	SWSS When inspections of these owned and operated catch basins identify
owned or	an exceedance of a maintenance standard that is protective of facility
operated by the	function (aka. a "function-critical" maintenance standard), maintenance is
Permittee	conducted within the six-month timeline required by the Permit.
	See 10c.
(c) The Permittee	Since 2023, SWSS has been implementing phased inspections for catch basins
may clean all	in the following way:1. If inspection of catch basin indicates that a
pipes, ditches,	maintenance standard has NOT been exceeded this information is captured in
catch basins, and	CityWorks.
inlets within a	2. If a maintenance standard has NOT been exceeded for 4 years, the
circuit once	inspection frequency can be reduced to every 2 years. If a maintenance
during the permit	standard has NOT been exceeded for 6 years, the inspection frequency can be
term. Circuits	reduced to every 3 years. This information is tracked in CityWorks, and
selected for this	inspection frequencies are tracked and implement based on the completed
alternative shall	inspections.
drain to a single	3. As soon as the maintenance standard is exceeded for a catch basin,
point.	inspection frequency reverts to annually. If a maintenance standard is NOT
	exceeded for the next 4 years, the inspection frequency can be reduced to
	every 2 years. And so on.
iii. Compliance	
with the	FMD has a relatively small number of catch basins (typically less than 500) in
inspection	their facility inventory. The agency inspects 100 % of their catch basin
requirements of	inventory at least annually and conduct maintenance on those that fail to
S5.C.10.d.i,	meet the maintenance standards found in the SWDM.
above, shall be	
determined by	KCIA To address maintenance challenges related to operating an airport, KCIA
achieving at least	uses an alternative approach due to several airport operation challenges,
95% of required	which is in accordance with the requirements in this section. KCIA performs
inspections.	enhanced daily mechanical sweeping of paved areas. It has established east,
	west, and central catch basin cleaning activity circuits and cleans all pipes,
	ditches, catch basins, and inlets in each circuit once during the permit term.
	The alternative cleaning schedule repeats every three years. Each circuit
	drains to a single point. Results of annual stormwater facility inspections,
	annual IC/IDDE inspections, stormwater line/facility cleaning, and daily
	pavement sweeping show that this frequency is optimal.
	KCIA also performs these activities in compliance with its Industrial
	Stormwater General Permit (ISGP) requirements. ISGP SWPPP requirements
	include monthly facility inspections, quarterly stormwater discharge
	monitoring and reporting, corrective actions, training, and annual reporting.

Permit Requirements	Planned and Ongoing Activities
	Catch basins are also cleaned on an as-needed basis in accordance with the Airport's Spill Response Policy and the occurrence of construction activities. The KCIA tenants are required to clean their catch basins and sweep as well.
	Parks Parks has a relatively small number of catch basins (typically less than 700) in their facility inventory. The agency inspects 100 % of their catch basin inventory at least annually, with a very limited number on a more frequent modified schedule, and conduct maintenance on those that fail to meet the maintenance standards found in the SWDM.

Permit Requirements	Planned and Ongoing Activities
	Roads
	Roads carries the largest catch basin inventory. Roads inspects 100% of the mapped catch basins within Roads' ownership with a minimum requirement of achieving 95% inspections. This program is implementing via an electronic asset management database linked to Cityworks. The program includes annual staff training, completion of inspection checklists, data input into a geospatial database, data quality assurance/quality control, work order generation, requisite maintenance, and documentation of maintenance activities.
	SWD has a relatively small number of catch basins in their facility inventory. SWD inspects 100% of their catch basin inventory at least annually, and conduct maintenance on those that fail to meet the maintenance standards found in the SWDM.
	Transit 100 % inspection is the annual goal for catch basin cleaning. Where line cleaning has been done per ISGP requirements, inspection may be less frequent. Cleaning per inspection and within 6 months.
	WTD
	WTD has a relatively small number of catch basins (about 200) in their facility inventory. WTD inspects the majority of the catch basins annually, with a very limited number on a more frequent modified schedule. Catch basin cleaning and maintenance are conducted on those that fail to meet the maintenance standards found in the SWDM.

d. ii. The disposal of	Roads operates a regional stormwater decant station in Renton and satellite
decant water shall be	decant stations at three other maintenance facilities run by Roads. Decant
in accordance with	solids and liquids are transferred to the Renton facility for proper disposal.
the requirements in	
Appendix 6 – Street	Transit operates its own decant station at one of its Tukwila properties.
Appendix 6 – Street Waste Disposal.	Transit operates its own decant station at one of its Tukwila properties. These decant stations are a key element in the disposal of stormwater removed from the County's MS4 during catch basin cleaning activities. All stormwater accepted at these decant stations is disposed of through the sanitary sewer.

e. Each Permittee shall	The County has established practices for reducing stormwater impacts
implement practices,	associated with runoff from parking lots, streets, roads, and highways owned,
policies, and procedures	maintained, or operated by the County.
to reduce stormwater	
impacts associated with	Custodial agencies (FMD, KCIA, Parks, Roads, Sheriff (using FMD leased
runoff from all lands	properties), SWD, Transit and WTD) are responsible for developing an
owned or maintained by	inventory of their properties and developing and implementing an inspection
the Permittee, and road	and maintenance program.
maintenance activities	
under the functional	The 2021 SiMPla (Site Management Plan), SPPM or other agency developed
control of the Permittee.	facility specific manuals by County's custodial agencies , is used as the
No later than December	minimum standard for operations and maintenance of properties owned or
<i>31, 2022, document the</i>	maintained by King County.
practices, policies, and	
procedures. Lands owned	SiMPla website was developed at
or maintained by the	http://www.kingcounty.gov/environment/waterandland/stormwater/docum
Permittee include, but	ents/site-management-plan.aspx to allow for easy navigation and access to
are not limited to parking	the document and its contents. The 2021 document includes sections of the
lots, streets, roads,	following:
highways, buildings,	<u>Regional Road Maintenance Program</u> -
parks, open space, road	https://wsdot.wa.gov/construction-planning/protecting-
right-of-way,	environment/regional-roadside-maintenance,
maintenance yards, and	2019 Stormwater Management Manual for Western Washington
stormwater treatment	 King County's Stormwater Pollution Prevention Manual, and
and flow control	 Integrated Pest Management Program guidelines (Current version
BMPs/facilities.	can be found in <u>King County's SiMPla</u>).
	Note: King County properties under other NPDES stormwater permits have
	SWPPPs (see <u>S5.C10.g. SWPPPS and Table - Other King County NPDES</u>
	Permits), which are used instead of the SiMPla.
f. Implement an ongoing	See <u>Training Program</u> - Page 12
training program for	
employees of the	
Permittee who have	
primary construction,	
operations, or	
maintenance job	
functions that may	
impact stormwater	
quality.	

g. Implement a	Properties owned by King County are evaluated and those that required
Stormwater Pollution	municipal SWPPPS have SWPPPs. Properties that have existing SWPPPs
Prevention Plan (SWPPP)	continued to implement these SWPPPs. SWPPPs will be updated according to
for all heavy equipment	new requirements in section i. through vi. as listed below by December 31,
maintenance or storage	2022 by the individual Agencies who manage the properties:
yards, and material	
storage facilities owned	i. A detailed description of the operational and structural BMPs in use
or operated by the	at the facility and a schedule for implementation of additional BMPs
Permittee in areas	····
subject to this Permit	ii. Annual inspections of the facility
that are not required to	iii. An inventory of the materials and equipment stored on-site, and the
have coverage under	activities conducted at the facility, which may be exposed to
another NPDES permit	precipitation or runoff and could result in stormwater pollution.
that authorizes	iv. A site map showing the facility's stormwater drainage, discharge
stormwater discharges	points, and areas of potential pollutant exposure.
associated with the	v. A plan for preventing and responding to spills at the facility
activity.	
	The need for SWPPPs at King County properties will continue to be evaluated
	by the individual Agencies who manage the properties and by SWSS.
	The following agencies do NOT own or operate any heavy equipment
	maintenance or storage yards, and material storage facilities – FMD, SWD,
	Transit or WTD.
	Roads maintains Phase I Municipal SWPPPs for all Roads heavy equipment
	maintenance or storage yards (Skykomish, Fall City, Lake Youngs and Vashon),
	and material storage facilities that they own or operate.
h. Maintain records of	Stormwater-related inspection and maintenance programs exist in several
the activities conducted	King County agencies, each with their own record-keeping systems. All
to meet the requirements	agencies conducting inspections or maintenance activities per permit
of this Section.	requirements will continue to track those actions and maintain those records
	for a period of no less than five years.
N	

Section 11 - Education and Outreach Program (S5.C11.)

Education and Outreach Program (S5.C11.)

Table 11 Education and Outreach Program summarizes the requirements of Permit Special Condition S5.C11. and outlines the corresponding activities for the Program.

Permit Requirements	Planned and Ongoing Activities
S5.C11. The SWMP shall include an education and outreach program	S5.C11. General Awareness / Behavior Change and Stewardship Opportunities for 2022
	General Awareness
 outreach program designed to: Build general awareness about methods to address and reduce stormwater runoff. Effect behavior change to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts. Create stewardship opportunities that encourages community engagement in addressing the impacts from stormwater runoff. 	 General Awareness Dumpster Outreach Campaign Pet Waste Campaign King County will continue to participate in STORM (Stormwater Outreach for Regional Municipalities), the regional consortium that supports outreach projects in response to permit awareness requirements. King County will serve on STORM's Steering, Campaign, and Measurement committees and support work teams addressing outreach projects. Regional NPDES Phase I and Phase II and King County partner on outreach to share resources, build programs and deliver awareness/behavior change efforts with other Puget Sound partners. STORM's reach beyond jurisdictional boundaries provides greater impact in delivering consistent information to new and mobile audiences. King County will continue to host, update, and maintain online assets, investing in web development, design, testing and translation. These websites offer general awareness and information that supports behavior change: Puget Sound Starts Here continues research, design and delivery of an annual awareness program using lessons from past efforts. There will be an annual appeal for partners and funding by the STORM collaborative. Besides a regional advertising or other outreach effort, two key elements need funding: support to nonprofit partners and hiring a social media emphasize the usefulness in engaging new audiences. In 2021, the team introduced 6PPD and its fatal effect on coho salmon and keeping tires properly inflated to reduce the amount of tire fragments in stormwater. 2024 we will continue to share research results from green driving practices that shows tire inflation does help reduce tire fragments and reinforce the 2022 campaign information. The campaign tested audience interest in the English, Spanish, Korean and Vietnamese language audiences and will use those lessons in 2024.

Permit Requirements	Planned and Ongoing Activities
	 The Puget Sound Starts Here team will continue to build on the strategic content calendar of seasonal environmental actions and sharing stewardship events using 2023 lessons from social media and the blog. The web site has over 60K users during the annual awareness campaign period. Social media interactions total over 350K with many of the interactions related to the Don't Wait to Inflate campaign, environmental messages and actions, and stewardship events (see summary report for details). Users from the English, Spanish, Korean and Vietnamese communities, as well as low income, vehicle owners, regional geographic areas will continue to be the 2024 focus audiences as we apply lessons learned from 2023. Investment in the Spanish, Korean and Vietnamese language audiences will also be a focus. King County will continue to partner on STORM Fest – educational outreach to Highline school district 6th and 7th graders. That event will also raise awareness of with educators, families and the community through multi-language engagement, paid interpreters, and community volunteers as educators. The curricula include translated take-home information that helps students describe what they learned to their families. King County SWS communications will fund a Climate Action Intern to work with partners on research and design of clean water climate messaging and strategy. This will include English, Spanish, Korean and Vietnamese language audiences. STORM will continue to develop outreach materials and toolkits. These materials support awareness and behavior change and are shared on the Resource Reservoir at <u>www.pugetsoundstormgroup.org/</u>. This site allows members to add vetted engagement research, strategies, and products to share with permittees, nonprofit groups, and educators. Nonmembers may download PDFs but not access editing, uploading, or reporting tools. A summary of the total documents, downloads and search terms is in the Resource Reservoir D
	Behavior Change King County continues to work with partners on the Dumpster Outreach program. That program will combine source control outreach, awareness building, and behavior change and will continue that effort.
	King County will continue to partner, coordinate, and invest in capacity building trainings on social marketing, equity, multi-cultural project design and other skills to improve the effectiveness of awareness and behavior change efforts among stormwater managers and nonprofits. This includes helping build a roster of community contractors that can support engagement projects.
	Stewardship Opportunities

Permit Requirements	Planned and Ongoing Activities
	King County continues to support the ECO Net partner's activities (<u>www.kingcoeconet.org/</u>) that help provide stewardship opportunities and share clean water messaging like Puget Sound Starts Here.
	King County stormwater services will continue to promote regional and county agency stewardship opportunities. Participation in outreach and stewardship events will be done through partnership with other county agencies such as the King County Parks, Wastewater Treatment Division, Department of Local Services, STORM Fest and others.
Minimum performance measures:	a.i. General awareness
a. Each Permittee shall implement an education and outreach program for the area served by the MS4. i. General awareness (a) Target	 (a) Key Audiences: To improve and share best practices on engaging overburdened communities, residents and businesses, King County plans and hosts trainings to build regional capacity and awareness in outreach, communication, and environmental and racial justice best practices serving overburdened communities. SWSS will continue sharing how to apply Equity and Social Justice practices to
Audiences: General Public (including school age children	project planning and outreach and offering resources and training to STORM and ECO Net partners.
and overburdened communities), and businesses (including home-	 Projects for those audiences include: Dumpster Outreach (businesses), Puget Sound Starts Here, Natural Yard Care: Neighborhoods, pet waste, general water quality
based and mobile business)	 STORM Fest and K-12 Education Guides (students and educators, overburdened communities),
(b) Target audiences : Engineers, contractors,	 Hazardous waste information (businesses and residents, overburdened communities), and Green stormwater information (businesses and residents).
developers, and land use planners. Subject areas: Technical standards for stormwater site and erosion control plans. • LID principles and LID BMPs.	(c) Ongoing or strategic schedule Projects have individual timelines. That information is available online and shared though campaigns and project partners. In addition, regional social media has a strategic content calendar to deliver messaging depending on the project cycle (e.g. Natural Yard Care Neighborhood and green stormwater tips https://www.naturalyardcare.org/docs/Natural-Yard-Care-Seasonal- Calendar.pdf.
• Stormwater treatment and flow control BMPs/facilities. (c) Permittees shall	Using social media is the replacement effort for the event tools on the Natural Yard Care Neighborhoods and <u>Puget Sound Starts Here websites</u> . The benefits are more up to date regional information and the ability to build partnerships through social media sharing. This is a labor focused effort and needs a social media manager.
provide subject area	

Permit Requirements	Planned and Ongoing Activities
information to the target audience on an ongoing or strategic schedule .	 Other clean water environmental events by King County agencies are posted in various websites. There are several online King County tools that share stewardship options: https://kingcounty.gov/services/parks-recreation/parks/get- involved/volunteer.aspx https://kingcounty.gov/services/environment/stewardship/volun teer.aspx https://kingcounty.gov/services/environment/animals-and- plants/noxious-weeds/classes.aspx https://kingcounty.gov/services/environment/wastewater/cso/ra inwise.aspx https://kingcountyhazwastewa.gov/en/news-and- events?type=events#ne-nav
ii. Behavior change	ii. Behavior change and
To effect behavior change, Permittees shall select, at a minimum, one target audience and one BMP: (a) Target audiences: Residents, landscapers, and property managers/owners, school-age children, and businesses (including homebased and mobile businesses). iii. No later than July 1, 2020, each	 <i>iii. No later than July 1, 2020, each Permittee shall conduct a new evaluation.</i> Prior to July 1, 2020, King County participated, and will continue to participate, in a behavior change pilot project in partnership with the STORM Regional Dumpster Lid Social Marketing Campaign. Conducting a pilot campaign is a recommended step in traditional Social Marketing (Implementation) and community-based social marketing (Step 4). Piloting the campaign provides an opportunity to evaluate the effectiveness of social marketing strategies and adapt them before implementing a campaign broadly. Lessons Learned / Evaluation Results The Regional Dumpster Lid Campaign evaluation results show significant improvement in dumpster lid closure as a result of the campaign. The percentage of lids closed rose from 49% during the baseline evaluation to 77% during the final evaluation. The final lid closure rate for businesses participating in the pilot rose 57% over baseline observations.
Permittee shall	Top Recommendations
conduct a new evaluation of the effectiveness of the ongoing behavior	The future broadscale implementation, timing, and level of effort for this campaign are now up to the
change program Permittees shall	discretion of each jurisdiction. The top recommendations based on the pilot campaign evaluation include:
document lessons learned and recommendations for which option to select from S5. C.11.a.iv	 Implementing the Sticker + Sign + In-Person Visits as the minimum strategies to begin broadscale implementation. Continued tracking during broadscale implementation to compare to the pilot campaign's success. Transcreation of materials to better meet business needs.

Permit Requirements	Planned and Ongoing Activities
	 Listening to businesses about their needs, additional recommendations for increasing lid closures, adapting the campaign, and learning from others to continue to expand and improve upon this campaign.
	See 2021 Regional Dumpster Lid SMC Pilot Survey in King County 2022 Stormwater Management Program Plan - Appendix F: C11. Education and Outreach Topics by Program.
a.iv. Based on the recommendation from S5.C.11.a.iii, by February 1, 2021 , each Permittee shall follow social	 iv. King County will implement a minimum of two social marketing-based campaigns by: (a) Developing a strategy and scheduling implementation of the existing campaign more effectively, or Dumpster Outreach project will continue to apply the strategy, lessons, and recommendations from the pilot, complete a schedule and track the outcomes.
marketing practices and methods, similar to Community-Based Social Marketing, and develop a campaign that is tailored to the community, including the development of a program evaluation plan.	 (b) Developing a strategy and expanding the existing campaign to a new audience and a new BMP, the Puget Sound Starts Here campaign did fulfill the NEP grant. The 2023 campaign included digital advertising and organic social media to deliver an awareness campaign. The campaign was based on audience research of English, Spanish, Korean and Vietnamese speakers about tire care barriers and incentives. Tire inflation was chosen as the clean water action because proper tire inflation might reduce tire fragments in stormwater and the release of 6PPD, which has been directly connected to coho salmon death. The 2024 campaign will use the lessons learned from the 2023 campaign to continue to try and reach the key audiences, in particular the Korean and Vietnamese, using different strategies. The 2023 campaign also revealed that the most popular messaging differed between the English and Spanish speaking audiences and that will be an area to investigate. In addition, it will be helpful to design a behavior change impact element to the 2024 campaign with partners, if budget and time allows. Engagement of overburdened communities on the tire crumb and 6PPD topic will be attempted by investing in ethnic media.
a.v. No later than April 1, 2021, begin to implement the strategy developed in S5. C.11.a.iv.	v. Prior to April 1, 2021, and ongoing King County implemented and will continue to implement the Dumpster Outreach and the Puget Sound Starts Here Campaign. See <u>Appendix F: C11. Education and Outreach Topics by</u> <u>Program</u> which includes 2021 Regional Dumpster Lid SMC Pilot Survey in King County 2022 Stormwater Management Program Plan and the timeline in Appendix H 2021 Regional Dumpster Lid SMC Pilot Survey
<i>a.vi.</i> No later than March 31, 2024, evaluate and report on:	

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Permit Requirements	Planned and Ongoing Activities
(a) The changes in understanding and adoption of targeted	(a) By March 31, 2024, King County will provide the changes in understanding and adoption of targeted behaviors resulting from the implementation of the strategy; and
behaviors resulting from the implementation of the strategy; and (b) Any changes to the campaign in order to be more effective; describe the strategies and	i. King County has been investigating the awareness and action around pet waste management. The project has taken different approaches to uncovering incentives and barriers to pet waste disposal using different strategies and working with different partners since 2019. A report, King County Pet Waste Program 2023 is included as an attachment.
process to achieve the results.:	(b) These changes will be captured in 2022 – 2024 as outreach and education respond to COVID regulations. The strategies and process to achieve the results will be described in the final report.
b. Each Permittee shall provide and advertise stewardship opportunities and/or partner with existing	 b. King County used social media channels to advertise and engage with nonprofits and city and county partners to share and promote regional stewardship opportunities. From the Puget Sound Starts Here 2023 Social Media Report: Facebook (Stewardship vs. Awareness)
organizations (including non-permittees) to encourage residents to participate	<section-header><section-header><text><text><text><text></text></text></text></text></section-header></section-header>
	Puget Sound 12 Starts Here 14
	And recommendations for improvements:

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Permit Requirements	Planned and Ongoing Activities
	() (I 2023 Social Media Review (Jan - Apr)
	 Continue to grow reach and followers on IG in 2024. The Instagram algorithm currently favors Reels (short, fun vertical-format videos) to compete with TikTok. Reels can be useful to grow audience reach and engagement. Consider audience goals. Currently PSSH social media audiences skew heavily female and older. Do we want to reach more men? Consider paid promotion for micro campaigns (and co-branded efforts) to ensure content is seen throughout the year. Continue to explore best ways to share and amplify stewardship events on and off social. Social media works great for sharing events because it is timely, fast, and low-effort, but downside is audience must be on the platform or go to the PSSH website to see it.
	For a complete list of the stewardship opportunities posts, a breakdown of the city, county and nonprofit events, demographics of the different social media site visitors, and how the posts reinforced the strategic content calendar, etc., please see the Puget Sound Starts Here 2023 Social Media Report in the attachments.
	This effort also includes promoting nonprofit events regionally and sharing events and resources through the King County ECO Net listserv, and King County e-newsletters (e.g., WRIA8, Snoqualmie Watershed, King County Employee News). A partial list of events from the event tool and social media posts (is included in the attachments). This does not include the extensive ECO Net email notifications.

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S7. Compliance with TMDLs

S7. Compliance with TMDL Program (S7.)

Table S7. Compliance with the Total Maximum Daily Load (TMDL) Program summarizes the requirements of Permit section S7. Compliance with TMDLs and outlines the corresponding activities for the Program.

Permit Requirements	Planned and Ongoing Activities
The following requirements apply if an applicable Total Maximum Daily Load (TMDL) is approved for stormwater discharges from MS4s owned or operated by the Permittee.	The King County S7. Compliance with TMDL Program will implement this section by:
A. For applicable TMDLs listed in Appendix 2, affected Permittees shall comply with the specific requirements identified in Appendix 2. Each Permittee shall keep records of all actions B. For applicable TMDLs not listed in Appendix 2, compliance with this Permit shall constitute compliance with those TMDLs.	 A. King County has kept and continues to keep records of all actions required by this Permit that are relevant to applicable TMDLs within their jurisdiction. The status of the TMDL implementation shall be included as part of the Annual Report submitted to Ecology. Each Annual Report shall include a summary of relevant SWMP, and Appendix 2 activities conducted in the TMDL area to address the applicable TMDL parameter(s). See Specific Actions below for a summary of actions. B. For applicable TMDLs not listed in Appendix 2, compliance with this Permit shall constitute compliance with those TMDLs. See Specific Actions below for a summary of actions.
Specific Actions	
WRIA 8 - Bear-Evans	The Bear-Evans FC TMDL requirements include identifying if there are
Watershed Action	municipally owned or operated properties which could benefit water quality
Required	by installing animal waste education and/or collection stations. For the most
Install and maintain	part this requirement was previously met under the 2013-2019 permit.
animal waste education	
and/or collection	IDDE Field Screening for Bacteria Sources:
stations at municipal	SWSS is implementing a 5-year "micro-basin"-oriented FC TMDL approach, as
parks and other Permittee owned and	presented in our fecal coliform TMDL standard operating procedures (SOP)
operated lands	document. This SOP was written in late 2019 by SWSS staff and approved for
reasonably expected to	implementation by SWSS management. Under this 2019 SOP, a 5-year work
have substantial	plan was developed specifically for the Bear-Evans basin and will be updated
domestic animal (dog	each successive year to add new work areas, comprised of sets of micro-
and horse) use and the	basins not previously visited. The 5-year approach necessitates planning be
potential for pollution	done each year for that part of the basin which will be focused on in that
of stormwater.	particular year. SWSS plans to conduct this work beyond the imposed permit

Table S7. Compliance with TMDLs Program

Permit Requirements	Planned and Ongoing Activities
Designate previously	requirement deadline of January 1, 2022, in the interest of increasing the
unscreened areas	probability of finding illicit discharges.
discharging via the MS4	
to the TMDL area as	
high priority areas for	
illicit discharge	
detection and	
elimination. Complete	
IDDE field screening for	
bacteria sources in	
these areas, including	
rural MS4 sub-basins,	
by January 1, 2022, and	
implement the	
schedules and activities	
identified in S5.C.9 of	
the Phase I Permit for	
response to any illicit	
discharges found.	
WRIA 8 - Cottage Lake	Cottage Lake and areas draining to it are part of a Sensitive Lake Treatment
Action Required	Area. These areas are designated by King County in the watersheds of lakes
King County shall apply	that have a combination of water quality characteristics and watershed
phosphorus control	development potential that makes them particularly prone to eutrophication
treatment requirements to	induced by development. New and redevelopment projects in these Sensitive
new and redevelopment	Areas trigger a Core 8 (water quality) requirement and must provide a water
projects, as applicable,	quality facility for target surfaces defined on page 1-68 of the 2016 SWDM
throughout the Cottage	from the Sensitive Lake Treatment Menu with a goal of 50 percent annual
Lake watershed, including	average total phosphorus removal, assuming typical concentrations in urban
all tributaries to Cottage	runoff. Some projects in the basin, even if they need a permit, could be
Lake. King County's	
Department of Permitting	exempt from Core 8 if certain Pollution Generating Impervious
and Environmental Review	Surface/Pollution Generating Pervious Surface (PGIS/PGPS) thresholds are not
(DLS-PD) shall not rely on	met (see Exemption from Core 8 on page 1-69 of the 2016 SWDM).
the quarter mile/15 percent	
distance downstream clause	
in King County's Surface	
Water Design Manual.	
WRIA 8 - Issaquah Creek	The Issaquah Creek FC TMDL requirements include identifying if there are
Basin Water Cleanup	municipally owned or operated properties which could benefit water quality
Plan for Fecal Coliform	by installing animal waste education and/or collection stations. For the most
Bacteria	part this requirement was previously met under the 2013-2019 permit.
Action Required	
	IDDE Field Screening for Bacteria Sources:
Install and maintain	SWSS is implementing a 5-year "micro-basin"-oriented FC TMDL approach, as
animal waste education	presented in our fecal coliform TMDL standard operating procedures (SOP)
and/or collection	document. This SOP was written in late 2019 by SWSS staff and approved for
stations at municipal	implementation by SWSS management. Under this SOP, a 5-year work plan
parks and other	was developed for the Issaquah Creek basin and will be updated each
Permittee owned and	successive year for a set of micro-basins not previously visited. The 5-year
operated lands	approach necessitates planning be done each year for that part of the basin
reasonably expected to	
have substantial	which will be focused on in that particular year. SWSS has conducted this

Permit Requirements		ned and Ongoing Activities
domestic animal (dog		k beyond the imposed permit requirement deadline of January 1, 2023, in
and horse) use	. –	nterest of increasing the probability of finding illicit discharges such as
potential for p		ng septic systems.
of stormwater		is septie systems.
Designate prev		
unscreened ar	eas	
discharging vie	a MS4 to	
the TMDL area	a as high	
priority areas	for illicit	
discharge dete	ection and	
elimination. Co	omplete	
IDDE field scre	ening for	
bacteria sourc	es in	
these areas, in	cluding	
rural MS4 sub-	basins,	
by January 1, 2	2023, and	
implement the	2	
schedules and	activities	
identified in S5	5.C.9 of	
the Phase I Pe	rmit for	
response to an	ny illicit	
discharges fou	nd.	
WRIA 10 - Puyal	lup IDDI	Field Screening for Bacteria Sources:
Watershed Wate	r Quality SWS	S is implementing its 5-year "micro-basin"-oriented FC TMDL approach,
Improvement Pro	-	resented in our fecal coliform TMDL standard operating procedures (SOP)
	-	ument. This SOP was written in late 2019 by SWSS staff and approved for
When conduct		ementation by SWSS management. Under this SOP, a 5-year work plan
related field so	-	developed for the Puyallup-White basin and will be updated each
under S5.C.9 o	C	essive year to include a set of micro-basins not previously visited. The 5-
Phase I Permit	King	approach necessitates planning be done each year for that part of the
County shall so	sreen for	
bacteria sourc	ρς ιη αην	n which will be focused on in that particular year. It is noted here that the
MS4 sub-basin	s which -	graphic area of the Puyallup-White FC TMDL in the 2019-2024 Permit was
discharge to su	urface expa	unded beyond the geographic area identified in the 2013-2019 Permit.
waters in the T		
area. Impleme	nt the It is	noted that SWSS staff have been communicating and collaborating with
schedules and	activities mul	iple outside agencies on this fecal coliform reduction effort. SWSS has
identified in S5	5.C.9 of conv	ened working meetings over the last decade with these following
the Phase I Pe		ncies, specifically to fine-tune and improve our bacterial screening:
response to an	y illicit Was	hington State Departments of Ecology and Agriculture; King Conservation
discharges fou	nd. Dist	rict; the Muckleshoot Indian Tribe; the City of Enumclaw; and the
King County sh	nall Dep	artment of Public Health-Seattle & King County. Additionally, SWSS has
inspect comme	ercial regi	larly communicated with and have coordinated efforts as needed with
animal handlir	ig areas	from the King County Agriculture Program (Livestock Ordinance
and commerci		gram), the King County Environmental Laboratory, and the King County
composting fa	cilico to	
ensure implem		nce and Technical Support Section. As in past years, SWSS staff plan to
of source cont		inue to leverage our FC TMDL efforts to find sources of excessive
for bacteria.		erial pollution from failing septic systems and inadequate livestock
Commercial ar		ure handling practices. Lessons learned over the previous years have
handling areas		n valuable, and SWSS continues to improve our field and analytical
associated wit	prac	tices.
Standard Indu	strial	

Permit Requirements	Planned and Ongoing Activities
Code (SIC) 074 and 075	King County's Source Control Program has been inspecting commercial animal
and include veterinary	handling facilities in the Puyallup-White basin. Commercial operations with
and pet care/boarding	bacteria source control problems will be reinspected within three years.
services, animal	Commercial animal handling facilities that do not allow access to inspect will
slaughtering, and	receive information in the mail on activities that may generate pollutants and
support activities for	the source control requirements applicable to those activities. There are no
animal production.	known commercial composting operations in unincorporated King County in
Facilities	the Puyallup-White basin.

S8. Monitoring and Assessment

Monitoring and Assessment (S8.)

Table S8. Monitoring and Assessment Program summarizes the requirements of Permit section S8. Monitoring and Assessment and outlines the corresponding activities for the Program.

S8. Monitoring and Assessment Program

Permit Requirements	Planned and Ongoing Activities						
A. Regional Status and	King County's chosen options for compliance with Phase I Permit requirem						
Trends Monitoring	S8. Monitoring and Assessment due no later than December 1, 2019.						
B. Stormwater	Options chosen:						
Management Program	• Regional Status and Trends Monitoring - Option #a. (S8.A.2.a)						
Effectiveness and Source Identification Studies	 a. Make annual payments into a collective fund to implement regional receiving water status and trends monitoring of small streams and marine nearshore areas in Puget Sound. The annual payments into the collective fund are due on or before August 15 each year beginning in 2020. Submit payments according to Section S8.D. Stormwater Management Program Effectiveness and Source Identification Studies – Option # a. (S8.B.2.a) a. Make annual payments into a collective fund to implement effectiveness and source identification studies. The annual payments into the collective fund are due on or before August 15 each year beginning in 2020. Submit payments according to Section S8.D. As such, King County is agreeing to pay into a collective fund to implement the above programs. 						

S9. Reporting Requirements

Reporting Requirements (S9.)

Table S9. Reporting Requirements summarizes the requirements of this Permit section and outlines the corresponding activities for the Program.

S9. Reporting Requirements

Permit Requirements	Planned and Ongoing Activities								
A. No later than March	Please find King County's Annual Report at Annual reports to Ecology for the								
31 of each year, each	NPDES Municipal Stormwater Permit.								
Permittee shall submit an									
Annual Report. The	Link: https://kingcounty.gov/services/environment/water-and-								
reporting period for the	land/stormwater/npdes-annual-reports.aspx								
first Annual Report will									
be from January 1, 2019,									
through December									
31, 2019. The reporting									
period for all subsequent									
Annual Reports shall be									
the previous calendar									
year unless otherwise									
specified.									

Conclusion and Contact Information

The SWMP Plan describes the actions and activities that King County plans to implement over the coming year to manage stormwater to protect the land and waterscapes it affects. Central to that effort is internal coordination among all King County agencies subject to Permit requirements (see <u>Section 3 - Coordination</u> (<u>S5.C3.</u>). This coordination mechanism successfully engages staff from several agencies and minimizes barriers to achieving Permit compliance.

King County is committed to implementing the programs described herein and recognizes that doing so contributes to two very important objectives:

- Protection of King County's waters and lands so its citizens can enjoy them safely today and for generations to come; and,
- Compliance with the County's NPDES Phase I Municipal Stormwater Permit.

The SWMP Plan is a living document that will updated continually as circumstances change. The SWMP plan will be updated annually throughout the Permit term to reflect changes in the County's approach to stormwater management and Permit compliance. King County will continue to invite the public to participate in the decision-making processes regarding the County's SWMP. For more information on participation opportunities, see Section 4 - Public Involvement and Participation (S5.C4.) of this plan.

Questions about the County's SWMP should be directed to the:

Stormwater Management Team

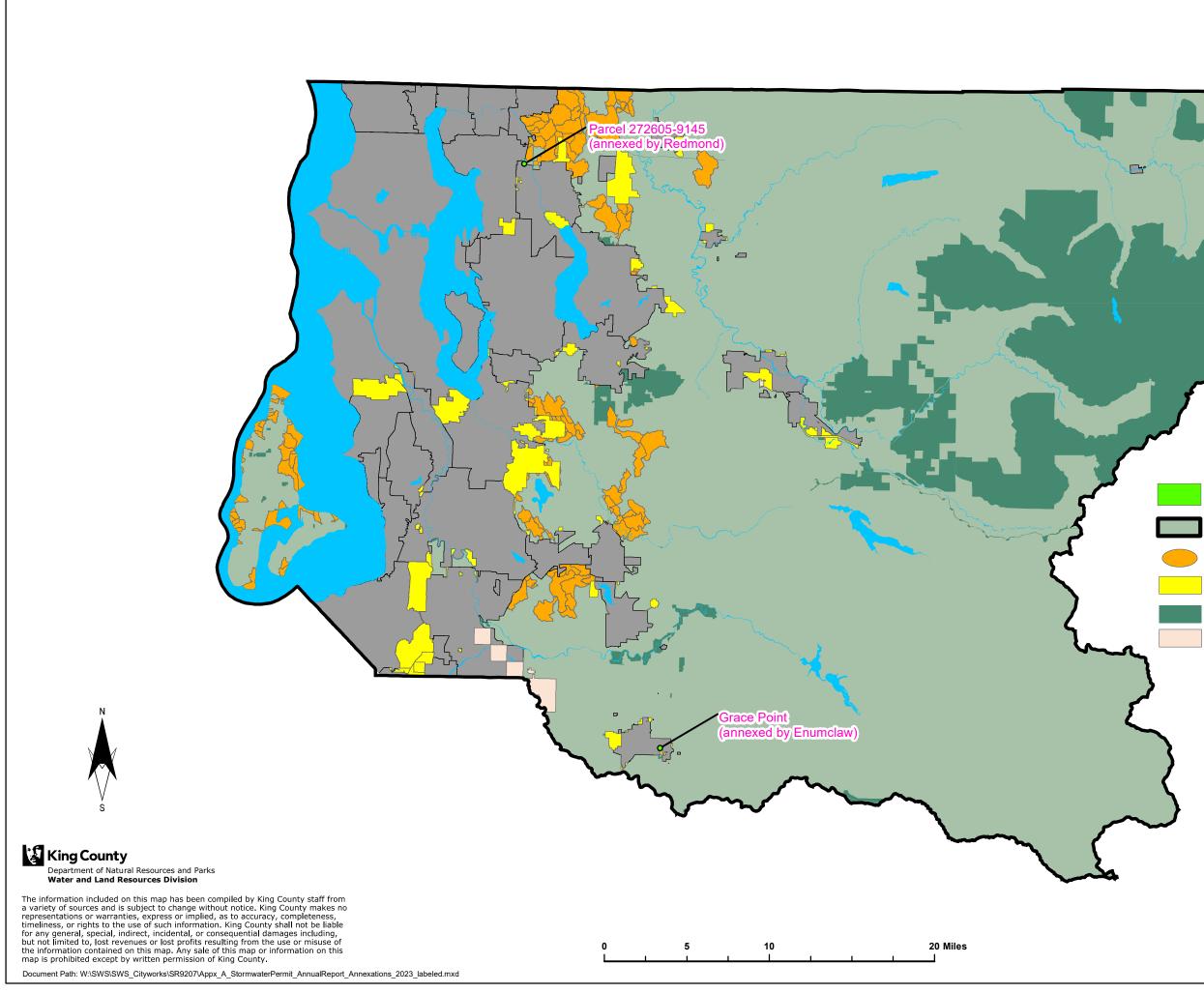
King County Department of Natural Resources and Parks

201 South Jackson Street, Suite 600 Seattle, WA 98104

stormwater@kingcounty.gov

Appendices

Appendix A: Map of King County Urban/Higher Density Rural Subbasins



King County NPDES Stormwater Permit Mapping Areas

Area Annexed in 2023

King County NPDES Area of Responsibility

Higher Density Rural Subbasin (HDRS)

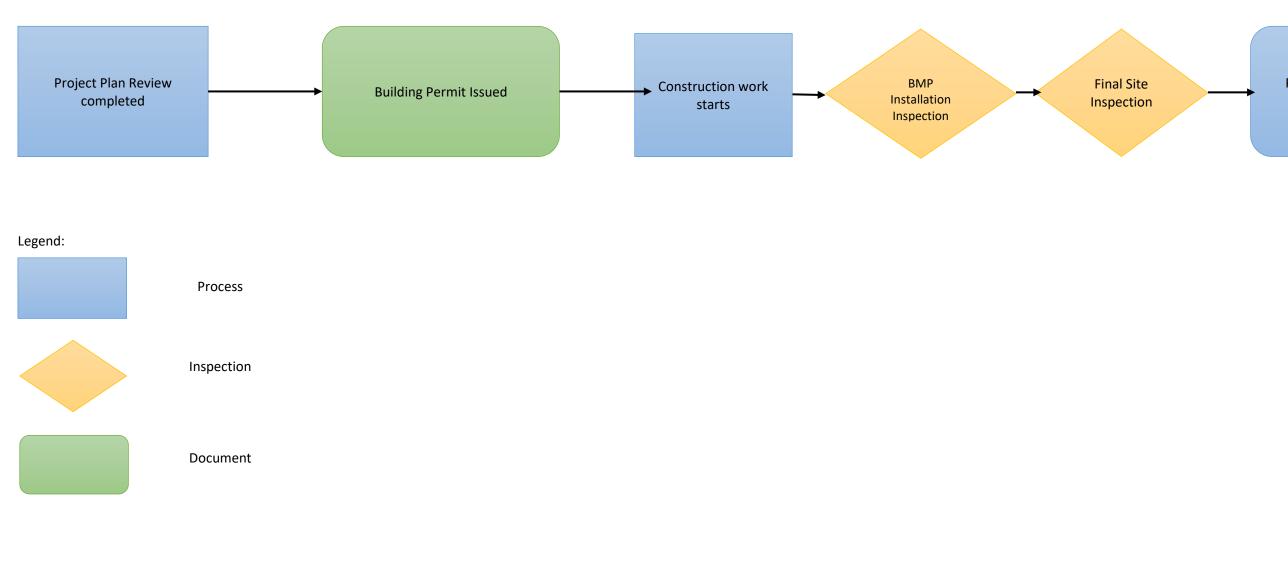
Potential Annexation Area (Urban Area)

NRCA or Parks Not Owned or Maintainted by King County Tribal Lands

Appendix B: King County DLS-PD Process flow charts

Appendix B: Site Inspection Process* Flowchart

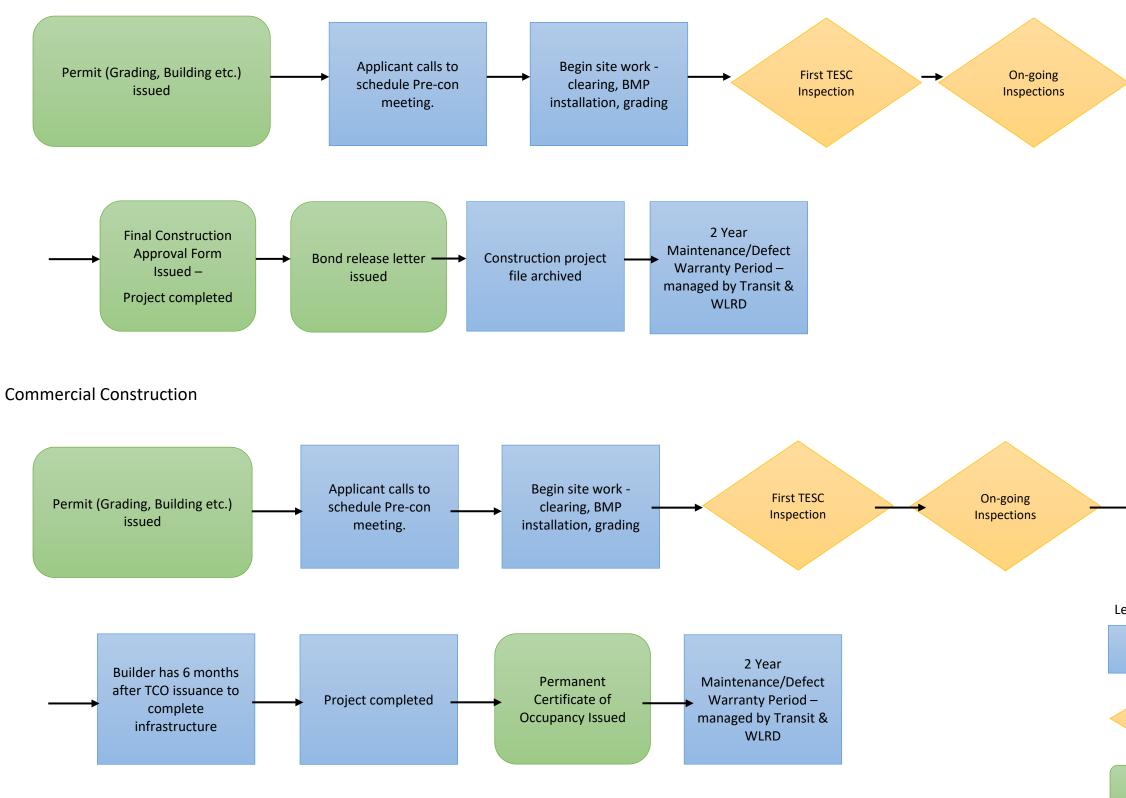
Residential



*Process outlined above reflects only those steps of residential development process related to site conditions inspection process. https://kc1-my.sharepoint.com/personal/blair_scott_kingcounty_gov/Documents/Blair's Docs/Permit Reporting/SWMP/2024/King County_2024_SWMP.docx Permit Signed & Recorded – Permit sent to Records

Appendix B: Site Inspection Process* Flowchart

Infrastructure Construction



*Process outlined above reflects only those steps of residential development process related to site conditions inspection process. https://kc1-my.sharepoint.com/personal/blair_scott_kingcounty_gov/Documents/Blair's Docs/Permit Reporting/SWMP/2024/King County_2024_SWMP.docx LUI creates punch list, good for 30 days

Follow up Punch List Re-Inspections

Temporary Certificate of Occupancy (TCO) issued upon completion parking, flow control, hazard removal

Legend:



Process

Inspection

Document

Page **67** of **85**

Appendix C: C.6 Stormwater Planning

Please see King County's Stormwater Management Action Plan

(https://kingcounty.gov/services/environment/water-and-land/stormwater/stormwater-management-actionplan.aspx) for the latest version of this plan.

Appendix D: C.7 Structural Stormwater Control Program and SSC List of Planned / Individual Project for Permit Term

The Stormwater Services Section (SWS) is developing the Structural Stormwater Controls (SSC) Program required by the 2019 Phase I Municipal Stormwater Permit. The SSC Program is required to include the following:

- i. King County's Structural Stormwater Control Program goals meet 2019 Permit requirements.
- ii. King County's planning process used to develop the Structural Stormwater Control Program, includes:(a) The geographic scale of the planning process.
 - (b) Issues and regulations addressed.
 - (c) Steps in the planning process.
 - (d) Types of characterization information considered.
 - (e) Amount budgeted for implementation.
 - (f) The public involvement processes.
 - (g) A description of the prioritization process, procedures and criteria used to select the Structural Stormwater Control projects.

The watershed-scale stormwater plans (developed in the 2013-2019 Permit) are being used to help inform S5.C.7 project prioritization and selection. The County has and will continue to participate in larger basin planning efforts to identify stormwater control projects and other actions to mitigate the stormwater impacts of past, present, and future development. The County has led multi-jurisdictional planning efforts that have or will identify stormwater retrofit needs. These include the WRIA 9 Stormwater Retrofit Plan, the Miller/Walker Creeks Stormwater Retrofit Plan, and the Bear Creek Study. Public outreach and involvement has been a component of all these planning efforts.

The Bear Creek stormwater basin planning effort is estimated to cost over \$2 million and is a multijurisdictional effort being performed by King County to comply with the Permit's watershed-scale stormwater planning requirement. Because the Bear Creek basin is largely developed, a major focus of the effort will be to identify a conceptual list of retrofit projects for future implementation. Further planning will be needed after the basin plan to develop pre-designs for these projects to seek local funding and state/federal grant funding for implementation. For the most part the order of projects implementation has been prioritized based on cost vs. Benefit, although we are currently working on a stormwater retrofit planner which includes a broader set of criteria for consideration during prioritization. This decision support framework includes metrics to track progress on how we are advancing Equity and Social Justice (ESJ) and climate change preparedness goals in addition to water quality benefits with stormwater retrofit projects .

King County's program is aimed toward retrofitting existing developed areas; and promotes planning and prioritization of these projects to reduce impacts to watershed hydrology and pollutant discharges from MS4s. This program also addresses regional stormwater facilities and stormwater impacts inadequately controlled by other Permit requirements.

Timing

No later than December 31, 2022, King County achieved 300 SSC Program Points, calculated per Appendix 12, as follows:

- i. 225 design-stage retrofit incentive points, and
- ii. 75 complete or maintenance stage incentive points.

Qualifying Project Types:

1. New flow control facility	1.0 times Flow Control Equivalent area
2. New runoff treatment facility (or treatment and flow	1.5 times Flow Control Equivalent area
control facility)	
3. New LID BMPs	1.5 times Flow Control Equivalent area
4. Retrofit of existing treatment and/or flow control facility	
5. Property acquisition	0.50 times acres acquired
 6. Maintenance with capital construction costs ≥ \$25,000 	0.25 times the area served by the maintenance activity, or 0.25 times (curb miles swept x (# events/year 1)), or 0.025 times the linear feet of lines cleaned.
7. Restoration of riparian buffer	0.35 times acres restored
8. Restoration of forest cover	0.25 times acres restored
9. Floodplain reconnection projects	0.10 times acres reconnected, with a maximum of 200 points
10. Removal of impervious surfaces	1.0 times the sq. ft. of impervious surface removed
11. Other actions to address stormwater runoff into or from the MS4 not otherwise required in S5.C.	

2022 Appendix 12

Hide row Project Name	Project Number PM	Project Type	Start Year	Status	Year End	Cost Estimate	Basin Area (ac) LID equiv. Area	LID Point Factor	RT equiv. Area	RT Point Factor FC	Equiv. Area	FC Other Point Project Are Factor -AC or mi	Other Point Total SSC Program Points	Lat / Long (. Y)	X, Receiving water body name	Comments	Column3
TOTAL SSC Program Points													318.246				
		6. Maintenance with			_									16.391			
Madeeen Dam Berm DR0642	Kameda, Wes	capital construction costs ≥ \$25,000	2022	4. Complete/ Maintenance	2022	\$240,000.00	67.5	0 NA	3.465	1.5	62.1	0.25 NA	NA				
	1129499 McNair, Matt	1. New flow control facility	2017	2. Design and permitting	2022	\$1,992,000.00	4.175	0 NA	0	NA	1.59	1.5 NA	NA	2.385 47.674644, - 122.065161	Evans Creek	Design stromwater retrofit detention vault in right of way, in front of addresses 20650 through 20690 NE 79th Street.	
WLSWCWQ MIL CK TRIB51 DESIGN	1129500 McNair, Matt	 Retrofit of existing treatment and/or flow control facility 	2017	2. Design and permitting	2022	\$621,000.00	13.8	0 NA	2.1	1.5	1.2	1.5 NA	NA	4.95 47.334998, - 122.290586		Design Retrofit of D91563 to improve Water Volume & Quality management within the basin	
	1136642 McNair, Matt	1, 2, 3, 4	2016	3. Construction	2023	\$554,000.00	3.07 TBD	1	.5 0.61	1.5	0.24	1.5 NA	NA	122.290586 1.275 47.469957, - 122.342485	Miller-Walker Creek	Retrofit and expand an existing detention cell to two bioretention (infiltration) cells. Treats adjacent parking lot and Burien City ROW. This project provided more than what was actually needed for the natural runoff	
Fairwood 11 Pipe Replacement	R Barryessa	4. Retrofit of existing		4. Complete/ Maintenance	2021	\$1,989,063.00	22.98	0 NA	0	NA	24.8184	1 NA	NA	24.82 47.45479, - 122.16306	Molasses Creek - Tributary 0304	conditions. Actual runoff treatment volume was accually needed for the natural runoff conditions. Actual runoff treatment volume was greater than what would have been needed for historical conditions (forest) for this area.	
DR0678 - Vault near D90119	R Berryessa	control facility T. New flow control		4. Complete/ Maintenance	2020		6.5	0 NA	0	NA	1.865	1 NA	NA	1 88 47 453 -	Madsen Creek - Tributary 0305		
Big Spring/Newaukum Creek Natural Area		facility 5. Property acquisition	2019	4. Complete/ Maintenance	2019	\$465,000.00	10.00							5 122.126	Newaukum		
		5. Property acquisition	2013	4. Complete/ Maintenance	2019	\$355,436.00	12.50							47.21515 - 122.00819 47.54368 -	Ckreek Tibbetts Creek		
Couger Mountain Middle Bear Creek Natural Area		5. Property acquisition		4. Complete/ Maintenance	2019	\$126,500.00								2.58 47.722 -	Bear Creek		
Middle Bear Creek Natural Area Image: Since Source Sour		5. Property acquisition		4. Complete/ Maintenance	2019	\$120,500.00								34.3 47.76651 -	Bear Creek Bear Creek		
Shoquaime Valley IDR				4. Complete/ Maintenance	2019									2.125	Lower Ceder		
Paradise Valley Natural Area		5. Property acquisition	2010	4. Complete/ Maintenance	2019	\$50,000.00								2.125 47.46485 - 122 12111	Lower Ceder River		
Judd Creek Natural Area		5. Property acquisition		4. Complete/ Maintenance	2019	\$45,000.00								47.42036 -	Judd Creek		
Vashon Farmiand		5. Property acquisition		4. Complete/ Maintenance	2019	\$286,000.00								6.22 47.38953 -	Puget Sound		
Mitchell Hill		5. Property acquisition		4. Complete/ Maintenance	2019	\$430,000.00								47.54889 -	Patterson Creek		
TDR Farmland Easement		5. Property acquisition		4. Complete/ Maintenance	2019	\$27,500.00								3.19 47.464854 -			
Patterson Creek Natural Area		5. Property acquisition	2019	4. Complete/ Maintenance	2019	\$420,000.00	49.23							47.48765 -	May Creek		
Wayne Golf Course, Back Nine		5. Property acquisition		4. Complete/ Maintenance	2019		31.38							15.69 47.74682 - 20 122.210898	Sammamish Slough Newaukum		
Lower Newaukum Creek Natural Area		5. Property acquisition	2019	4. Complete/ Maintenance	2019	\$495,000.00	40.00							47.26578 -	Ckreek		
Vashon-Paradise Valley		5. Property acquisition	2019	4. Complete/ Maintenance	2019		5.23							2.615 122.03543 47.420997 -	Judd Creek		
Cougar Mountain Regional Wildland		5. Property acquisition	2019	4. Complete/ Maintenance	2019	\$600,000.00	10.00							5 47.53847 -	Tibbetts Creek		
Green River Natural Area		5. Property acquisition	2019	4. Complete/ Maintenance	2019	\$153,000.00	5.98							2.99 47.26888 -	Mid Green River		
Lower Cedar River Natural Area		5. Property acquisition	2019	4. Complete/ Maintenance	2019		10.90							5.45 47.43571 -	Lower Ceder River		
Big Spring/Newaukum Creek Natural Area		5. Property acquisition	2019	4. Complete/ Maintenance	2019	\$27,500.00	3.60							1.8 122.05408 47.21968 -	Newaukum Creel	ĸ	
Snoquaimie: Hafner Levee Setback		5. Property acquisition	2019	4. Complete/ Maintenance	2019	\$475,000.00	38.52							19.26 47.76816 -	Bear Creek		
Paradise Lake Natural Area		5. Property acquisition	2019	4. Complete/ Maintenance	2019	\$420,000.00	10.02							5.01 47.41306 -	Lower Ceder River		
Paradise Lake Natural Area		5. Property acquisition		4. Complete/ Maintenance	2013	\$320,000.00	8.40							4.2 122.0391 47.42036 -	Judd Creek		
			2013		2013									13	Middle Green		
Cover Newaukum Creek		5. Property acquisition	2020	4. Complete/ Maintenance	2020	\$529,900.00	26.00							47.26896/-	River and Newaukum Creel	s	
Mitchell Hill Connector Forest		5. Property acquisition		4. Complete/ Maintenance	2020	\$388,000.00	39.56							19.78 122.0308 47.55251/-	Patterson Creek		
		5. Property acquisition	2021	4. Complete/ Maintenance	2021	\$1,122,000.00	90.89							45.445	Middle Green River		-
Bess Lake Complex Natural Area TOTAL SSC Program Points			2021		2021	., ,							318.246	121.99518	River	Design-Stage Retrofit Incentive Points = 25.001 Complete or Maintenance Stage Incentive Points = 293.245	
Notes:																5 Hydro Benefit	
N/A - not available or not applicable																1. Project's volume ratio	
WQ - water quality																2a. 100%	
TSS - total suspeded solids																2b. 100%	
TS - total solids																2c. Project's volume ratio	
FEMA - Federal Emergency Management Agency																6 Retrofit Incentive - From Washington State Department of Ecology Retrofit Incentive Table	
Project Type:																	+
Project type: 1. New flow control facility																	+
1. New tiok control facility 2. New runoff treatment facility (or treatment and flow control facility)																	+
2. New runoit realment facility (or realment and now control facility)																	+
3. New LID BMPs 4. Retroft of existing treatment and/or flow control facility																	+
4. Netroit of existing treatment and/or now control facility 3. Property acquisition																	+
																	+
6. Maintenance with capital construction costs ≥ \$25,000																	+
7. Restoration of riperian buffer																	+
8. Restoration of forest cover																	+
9. Floodplain reconnection projects																	+
10. Removal of Impervious surfaces																	+
11. Other actions to address stormwater runoff into or from the MS4 not otherwise required in S5.C.																	

Appendix E: C8. NPDES Source Control Inspection Program – Site List Development and Modification and Progressive Enforcement Process

Introduction

This document has been developed in collaboration with other Phase I jurisdictions and describes the program by which King County will prepare, and annually modify, a list of potentially pollution generating sites that meets the requirements of NPDES Phase 1 municipal stormwater permit section S5.C.8. Permittees must annually complete the number of inspections equal to 20% of the sites listed in the source control inventory. Follow-up inspections count towards the required number of inspections. Permittees are not required to inspect 100% of sites over a 5-year period. Consequently, the list must contain a well-defined set of guidelines to identify appropriate sites and processes to include or remove these sites from a central database.

Business License and Parcels

Depending on the permittee (City or County), the basic elements in compiling the initial list is either the business license (for Cities) or the legal land parcel (for Counties). The difference is because most Cities have local business licenses, whereas Counties do not. However, due to the complexities and limitations of each method, the initial list may contain elements generated by both office records and fieldsurveys.

Through time, the list will be refined to maximize the number of elements that should be regulated as "sites" in the context of the source control program of the NPDES permit.

Official date of list

Permittees must annually complete the number of inspections equal to 20% of the businesses and/or sites listed in the source control inventory in any given calendar year. To determine compliance with this requirement, the number of sites must be fixed for that year. The permit does not define a date upon which the official list for the year will be fixed. For the purposes of establishing the official number of sites by which to determine compliance metrics for any given calendar year, an "official" list will be established at a date within the jurisdiction's budget preparation schedule, with the understanding that as businesses are identified through field survey or other methods cited in this paper, they will be added (or dropped) from the list, as appropriate. Although the total number of businesses will remain constant, it is anticipated that the specific named businesses will shift as businesses relocate or additional businesses missed in records are found in the field. Thus, the final list of inspected businesses at the end of the year may include some businesses not originally on the "official" list.

Initial site list development

King County developed its' list for the 2013 program using the current list of developed parcels located in the current stormwater audit program inventory. King County will modify the inventory for use in future years by the following methods.

<u>Step 1 – assemble list of sites based on office records</u>

Developed parcels with commercial or industrial zoning: King County has used the current commercial or similar stormwater fee classification in the drainage utility database for commercial and industrial zoned parcels. This list will be supplemented using the current municipal business licenses and any other sets of municipal records.

<u>Appendix E - C8. NPDES Source Control Inspection Program – Site List Development and Modification and Progressive</u> <u>Enforcement Process</u>

Stormwater Management Program Plan

Developed parcels with multifamily zoning (includes both apartments and condominiums): King County has defined properties with 3 or more residential units and current multifamily or similar stormwater fee classification for inclusion in the drainage utility database based on potential impact.

<u>Step 2 – Add any sites identified by field or database surveys</u>

These databases are both internal to the County and external from other agencies. The databases include the following:

- 1. The existing database of business/commercial sites that have approved flow control and/or water quality treatment facilities, which are maintained King County.
- 2. The existing database of business/commercial sites with simple drainage conveyance systems, which may be maintained by King County.
- 3. The existing database of all properties owned/operated by King County, which is maintained by King County Real Estate Services and the Department of Executive Services Facility Management section; and

These databases and their respective updates will be used to modify the current list of addresses, and winnow out those already listed via commercial, industrial, or multifamily zoning. These datasets will be verified by a combination of telephone, database and field verifications of the businesses existence, and relevance for inclusion in this program.

An additional step in the program will be to identify businesses by conducting field surveys of targeted roads or geographic areas with potential high density of businesses of interest. The program will select target roads or geographic areas and conduct "windshield surveys" to field identify business sites based on visible evidence of commercial activity such as advertising signs or commercial-scale or type of material storage or activities. These businesses will be verified by comparing them to the current database.

Modification of initial site list

King County will modify the initial list by the following methods:

- Modifying multiple legal parcels that should be dealt with as onesite.
- Modifying single parcels with multiple businesses (e.g., shopping malls) that should be dealt with as multiple sites.
- Correcting database as occupant records change.
- Adding developed sites shown as undeveloped in office records.
- Identifying the presence of pollutant generating activities using citizen reports, field investigations, or other methods.

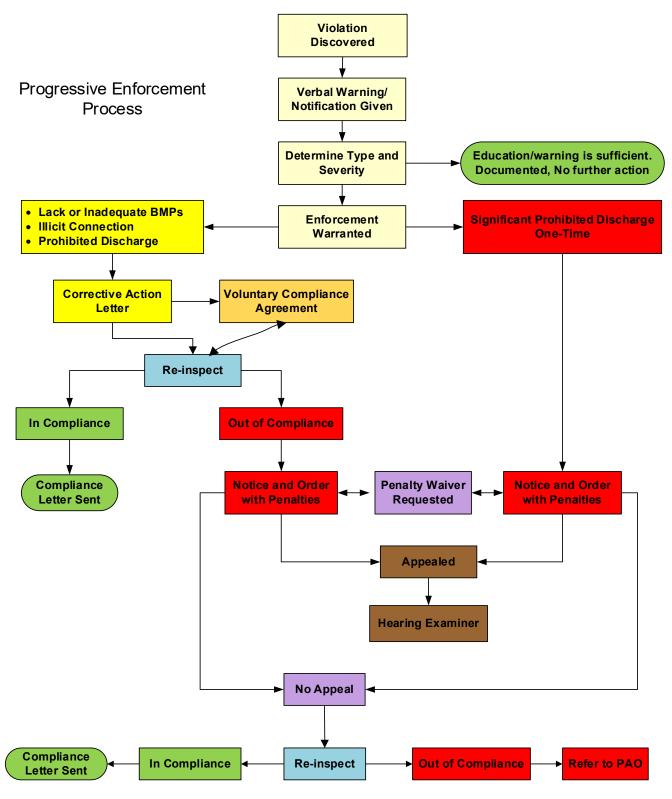
Counting Inspections

For the purpose of complying with the permit conditions to annually complete the number of inspections equal to 20% of the businesses and/or sites listed in the source control inventory, the following shall be counted:

- 1. Inspections performed by staff of the permittee.
- 2. Inspections performed by contractors representing the permittee and for which the permittee performs any needed follow-up enforcement activity.

- 3. Inspections performed by staff from other jurisdictions under an MOA or MOU with the permittee (e.g., inspections performed by King County in the Densmore basin under an MOA).
- 4. Inspection performed by Source Control Specialists funded by Ecology as part of the Pollution Prevention Assistance Program or the Urban Waters Initiative.

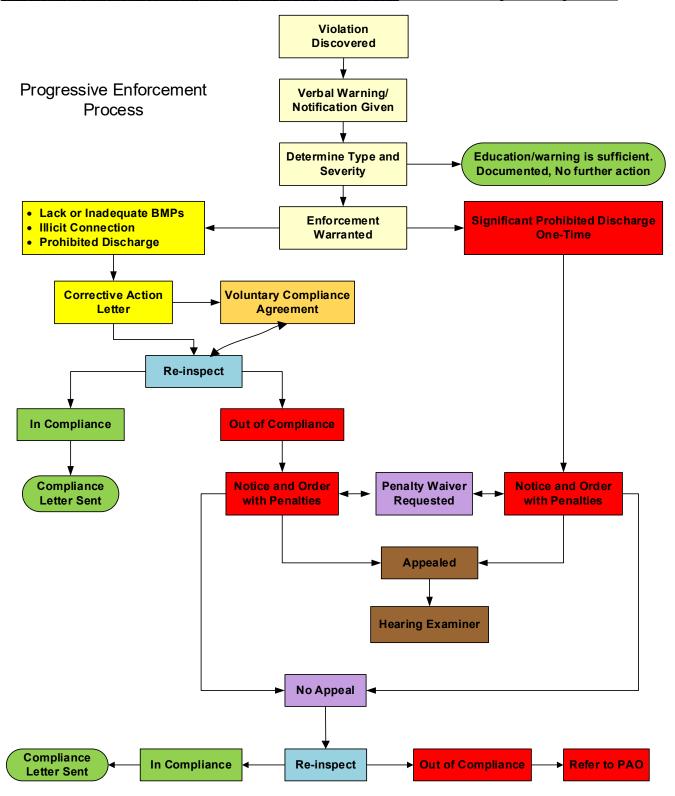
<u>Appendix E - C8. NPDES Source Control Inspection Program – Site List Development and Modification and Progressive</u> <u>Enforcement Process</u>



<u>Stormwater Management Program Plan</u>

4. Inspection performed by Source Control Specialists funded by Ecology as part of the Pollution Prevention Assistance Program or the Urban Waters Initiative.

<u>Appendix E - C8. NPDES Source Control Inspection Program – Site List Development and Modification and Progressive</u> <u>Enforcement Process</u>



Appendix F: C11. Education and Outreach Topics by Program

Education and Outreach Summary

S5.C11. General Awareness / Behavior Change and Stewardship Opportunities for 2024

General Awareness

- Dumpster Outreach Campaign
- STORM
- Puget Sound Starts Here

Behavior Change

- Dumpster Outreach Campaign
- Pet waste Campaign

Stewardship Opportunities

- Support the ECO Net partner's activities (www.kingcoeconet.org/)
- Organic Social Media Outreach through pugetsoundstartshere.org

General awareness

(a. & b.) Target Audiences:

To improve and share best practices on engaging overburdened communities, residents and businesses, King County plans and hosts trainings to build regional capacity in outreach, communication, and environmental and racial justice best practices serving overburdened communities.

SWSS will continue sharing how to apply Equity and Social Justice practices to project planning and outreach and offering resources and training to STORM partners.

Projects for those audiences include:

- Dumpster Outreach (businesses),
- Puget Sound Starts Here,
- Natural Yard Care: Neighborhoods, pet waste, general water quality tips (overburdened communities),
- STORM Fest and K-12 Education Guides (students and educators, overburdened communities),
- Hazardous waste information (businesses and residents, overburdened communities), and
- Green stormwater development (businesses and residents).

2020 New Evaluation

ii. Behavior change and iii. No later than July 1, 2020, each Permittee shall conduct a new evaluation

Prior to July 1, 2020, King County participated, and will continue to participate, in a **behavior change** pilot project in partnership with the STORM Regional Dumpster Lid Social Marketing Campaign . Conducting a pilot campaign is a recommended step in traditional Social Marketing (Implementation) and community-based social marketing (Step 4). Piloting the campaign provides an opportunity to evaluate the effectiveness of social marketing strategies and adapt them before implementing a campaign broadly.

Lessons Learned / Evaluation Results

The Regional Dumpster Lid Campaign evaluation results show significant improvement in dumpster lid closure as a result of the campaign. The percentage of lids closed rose from 49% during the baseline evaluation to 77% during the final evaluation. The final lid closure rate for businesses participating in the pilot rose 57% over baseline observations.

Top Recommendations

The future broadscale implementation, timing, and level of effort for this campaign are now up to the

discretion of each jurisdiction. The top recommendations based on the pilot campaign evaluation include:

- Implementing the Sticker + Sign + In-Person Visits as the minimum strategies to begin broadscale implementation.
- Continued tracking during broadscale implementation to compare to the pilot campaign's success.
- Transcreation of materials to better meet business needs.
- Listening to businesses about their needs, additional recommendations for increasing lid closures, adapting the campaign, and learning from others to continue to expand and improve upon this campaign.

KING COUNTY STORMWATER SERVICES SECTION, STORMWATER MANAGEMENT PROGRAM

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		Permit citation S5.C.11				C	a.i.(a)								a.i	i.(b)					a.i.(c)									a.ii.(a)								b.
			Public: English language, school age children, overburdened communities	Public: Other languages than English, school age childran overburdened communities	School Age Children (English, other languges)	Businesses (including home-based and mobile	General impacts of stormwater on surface waters	Impervious surfaces impacts	Hazards associated with illicit discharges	Hazards assciated with improper disposal of waste.	Low impact Development, LID Best Practices	Engineers	Contractors Developers	Land Use Planners	Property Managers/Owners	General impacts of stormwater on surface waters	Impervious surfaces impacts	Hazards associated with illicit discharges	Hazards assciated with improper disposal of waste.	Low Impact Development, LID Best Practices	Provide subject area information to the target audience on an ongoing or strategic schedule	Residents	Landscapers	Property Managers/Owners	School-age children	businesses (including nomebased and mobile businesses)	Use and storage of automotive chemicals, hazardous cleaning supplies, ranwash snans, and other hazardinis, materials	Prevention of illicit discharges.	Yard care techniques protective of water quality	Use and storage of pesticides and fertilizers and other household chamirals	Carpet cleaning	Repair and maintenance BMPs for vehicles, equipment, and/or home huildines	Pet waste management and disposal	LID principles and LID BMPs	Stormwater facility maintenance, including LID facilities	Dumpster and trash compactor maintenance	utter and debris prevention (Audience specific) Source Control BMPs	(Audience specific) Locally important, stormwater-	Each Permittee shall provide and advertise stewardship opportunities and/or partner with existing organizations (including non- permittees) to encourage
Program name River and	Contact	Program Description		Audie	ence			ר 	opics				Audie	ence			T	opics					Aı	udienc	e					Be	est ma	inagem	nent pr	actice	es				
Floodplain Management on behalf of the King County Flood Control District	Lily Barrett	River flood hazard information on flood-prone areas and education and outreach programs to promote flood preparedness and resiliency. www.kingcounty.gov/services/environment/water-and- land/flooding/prepare.aspx	x		x		x	x	x		x				x		x	x				x		x		x	x	x		x					x	1	ĸ x		
Basin Stewards	Janne Kaje	Work with rural landowners, communities and agencies to implement WRIA and conservation plans, on habitat protection and restoration projects, offer technical services and information on stream basin health and water resources.	x		х	x	x	x			:	×	x x	x	x	x	x		x		x	x	x	x		x	x	x					x	x	x	1	ĸ		
Solid Waste Division No to all	Jennifer Keune	Recycling, waste reduction, environmental programs, schools outreach and education services.	x	x	x	x			x	x					x	x	x	x	x		x	x	x	x	x	x	x	x	x	x		x	x		x	x	ĸ x		x
Water and Land Resources Division	Mary Rabourn	Environmental programs for residents, property owners, businesses.	x	x	x	x	x	x	x	x	x	×)	x x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	×	x x	x	
Stormwater Services Section	Mary Rabourn	Environmental programs for residents, property owners, businesses.	x	x	x	x	x	x	x		x	x)	k x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x 1	k x	x	x
Facilities Management Division No Response	Sumeet Adams	King County facilities										,	ĸ		x						x			x		x						x			x	x	ĸ x	x	x
Natural Yard Care	Susan Tallarico; Mary Rabourn	 WTD hosts a series of classes surrounding sustainable landscape practices, including watering wisely and reducing stormwater runoff. WLRD hosts regional website with links to Puget Sound wide trainings. SWD offers online information on 5 Steps to Natural Yard Care. 	x	x	x	x	x	x	x	x					x	x	x	x	x	x	x	x	x	x					x	x			x	x			×	x	x

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			Public: English language, school age children, overburdened communities	Public: Other languages than English, school are childron, mechurdaned	School Age Children (English, other Iangurae)	Businesses (including home-based and mobile business)	General impacts of stormwater on surface waters	Impervious surfaces impacts	Hazards associated with illicit discharges	Hazards assciated with improper disposal of waste	Low Impact Development, LID Best Practices	Engineers	Contractors	Developers	Land Use Planners	Property Managers/Uwners		Impervious surfaces impacts Hazards associated with illicit discharges	ards assciated wit	waste Low Impact Development, LID Best	Provide subject area information to the	audience	Residents	Landscapers	Property Managers/Owners School-age children	Businesses (including homebased	Use and storage of automotive chemicals,	hazardous cleaning supplies, and athor har second arbor harvedour	Prevention of illicit discharges.	ides	and other household مالمناقبهمام	Carpet cleaning	Repair and maintenance BMPs for vehicles, equipment, and/or home	Pet waste management and disposal	LID principles and LID BMPs	Stormwater facility maintenance, including	Dumpster and trash compactor	maintenance Litter and debris prevention	(Audience specific) Source Control BMPs	(Audience specific) Locally important, ctormwate.cralated subiect area	Each Permittee shall provide and advertise stewardship opportunities and/or partner with existing organizations (including non-permittees) to encourage
STORM (Stormwater Outreach for Regional Municipalities)	Mary Rabourn	Over 85 regional participating permittees. King County is a member of the core team. The team assists members in planning, grant applications, outreach campaigns, development of BMPs and capacity building. The goal is to coordinate regional outreach and education for the best efficiency and effectiveness.	x	x	x	x	x	x	x	x	x	x	x	x :	×	κ >	()	ĸx	x	x	:	x	x :	κο	x x	x	,	: :	¢ x	:	¢	x	x	x	x	x	x	x	x	x	x
Natural Yard Care classes	Kristin Covey	WTD hosts a series of classes surrounding sustainable landscape practices, including watering wisely and reducing stormwater runoff.				x	x	x			x				,	к)	. ,	ĸ		x	:	x	x	κ ,	«				×		(x	x				x	x	x
Stormwater Presentations for Elementary / Middle School	Susan Tallarico	Educators provide a 1-hour stormwater presentation in elementary and middle school classrooms for teachers who would like an outside professional to provide a real-world perspective. Presentations are hands-on and interactive. Students learn how they can help prevent stormwater issues.	x	x	x		x	x	x	x	x												x		x		,		< >		4			x	x	x		x	x	x	x
Illicit Connection/Illic it Discharge Detection & Elimination	Cameron Chapman	Public outreach events related to programs and projects run by King County Stormwater Services to seek and eliminate pollutant discharges to the stormwater conveyance system (storm drains, stormwater pipes and ditches).	x	x	x		x		x	x					,	к ,	()	ĸ x	x	x	:	x	x)	x x	x	,	: :	с х		¢			x	x	x	x	x	x		
Source Control	Bob Bernhard	Inspect commercial and multifamily properties to ensure best management practices are being followed to protect rainwater and ultimately surface and groundwaters.	x	x		x	x		x	x		x	x	x :	x	к >	(x	x		:	x	:	к)	ĸ	x)	: :	< >		¢	x	x	x		x	x	x	x	x	x
Water Quality Compliant Investigation	Bob Bernhard	Respond to, investigate and resolve complaints regarding stormwater and surface water problems. Refer to other agencies as necessary. Provide technical education.	x	x		x	x	x	x	x		x	x	x	x >	ĸ >	ι,	x x	x			x	x	ĸ	x	x	,	: :	< >			x	x	x	x	x	x	x	x	x	
PHSKC, OSS Operation & Maintenance and Water Quality	Henry Doan	The OSS O&M and water quality program promotes healthy communities and healthy environments by optimizing the long-term performance of OSS through proper operation and maintenance and supporting communities in improving water quality.	x	x			x		x				x		,	ĸ >	Ľ	x			:	x	x	,	ĸ				к х					x					x	x	

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			Public: English language, school age children, overburdened communities	Public: Other languages than English, school age children overburdened communities	School Age Children (English, other languges)	Businesses (including home-based and mobile husinese)	General impacts of stormwater on surface waters	Impervious surfaces impacts	Hazards associated with illicit discharges	Hazards assciated with improper disposal of waste	Low Impact Development, IJD Best Practices	Engineers	Developers	l Inco Dismore	Land Use Planners Pronerty Managers (Owners	acts	Impervious surfaces impacts	Hazards associated with illicit discharges	Hazards assciated with improper disposal of	waste Low Impact Development, LID Best Practices	Provide subject area information to the target audience on an ongoing or strategic schedule	Residents	Landscapers	Property Managers/Owners	school-age children	pushresses (including nonreuased and mobile businesses)	Use and storage of automotive chemicals, hazardous cleaning supplies, councer coard, and athor branchour matoriale	Prevention of illicit discharges.	Yard care techniques protective of water quality	Use and storage of pesticides and fertilizers and other household	Carpet cleaning Repair and maintenance BMPs for vehicles,	equipment, and/or home المناطقين	Pet waste management and disposal	LID principles and LID BMPs	stormwater facility maintenance, including LID facilities Dumpster and trash compactor maintenance	Litter and debris prevention	(Audience specific) Source Control BMPs	Audience spe	formwaterealstad sublect area Each Permittee shall provide and advertise stewardship opportunities and/or partner with existing organizations (including non-nermittees) to encourage	
Stormwater Mapping	Andrea Wong/Mark Preszler	Program develops and maintains a GIS-based inventory of the county's stormwater assets which it owns, operates or regulates. The purpose of this inventory is to meet business needs (e.g. asset management), protect water quality and meet stormwater permit requirements.				x	x	x			:	к х	××	×	x		x					x																		
Parks and Recreation	Brian Lund	Volunteer events, native plant restoration projects planting roughly 30K to 40K trees per year trees, shrubs, etc. or grubbing out blackberries etc.	x	x	x		x	x				,		×	x x	x	x														,	x	x			x				
Metro Transit	Talon Swanson	Fleet maintenance									:	ĸ				x	x	×	x		х										1	x								
Dumpster Outreach Program	Bob Bernhard	Regional partnership on source control connecting dumpster practices with water quality.		x			x	x	x	x					×	ι x	x	x	x					x				x							x	x		x		
Asset Management Program	Matt Anderson	Inspection and maintenance of stormwater facilities									:	к >	x	×	x x	x	x	x	x	x	x	x		x		x	x	x	x					:	ĸ		x	x		
Source Control Program	Bob Bernhard	Outreach to businesses		x		x	x	x	x	x	x				x	x	x	x	x	x	x			x		x	x	x	x	x	x	x			x	x	x	x		
Stormwater general awareness & behavior change	Mary Rabourn	Website programming, sponsorship, maintenance, security, social media: PugetSoundStartsHere.org https://www.naturalyardcare.org/ https://pugetsoundstormgroup.org/	x	x	x		x	x	x	x	x					x	x	x	x	x	x	x	x		x	x	x	x	x	x		x	x	x	x x	x	x		x	
Stormwater educator resources	Rabourn,	K-12 educator resources, updated for online and equity teaching activities at: https://kingcounty.gov/services/environment/ stewardship/tea chers-students.aspx Regional Resources at: https www.pugetsoundstormgroup.org/	. ×	x	x	x	x	x	x	x	x										x	x			ĸ				x	x			x	x		x				
STORM Fest	Iris Kemp	Annual program to engage Highline School District 6th graders in outdoor environmental education and STE(A)M.	×	x	x	x	x	x	x	x	x										x	x			ĸ				x	x			x	x		x				

Appendix G: Funding

Many permit compliance activities are conducted by WLR and financed through the County's Surface Water Management (SWM) Fee. Due to increased Permit requirements, increases to the SWM Fee have been implemented.

The Metropolitan King County Council has also approved an increase to the Surface SWM fee of approximately 40 percent in 2017-2018, from the current fee of \$258 per year to \$289 per year for a single family residence.

The top program priorities for these fee increases include:

- Funds contractor work to maintain WLRD-owned stormwater facilities, including stormwater ponds, vaults, and swales.
- Implement recommendations of the 2018 Bear Creek Watershed Management Study, including implementing stormwater controls and habitat improvement projects requiring the acquisition of land and easements and stakeholder engagement.
- Our Green Duwamish Initiative + Water Quality Planner/Project Manager.
- Strategic Plan for Stormwater Services Section. Design and manage a strategic plan for the Stormwater Services Section. Includes a repurposed staff position and consultant work for stakeholder engagement.

For further information about the SWM fee, visit <u>http://www.kingcounty.gov/environment/wlr/surface-water-mgt-fee.aspx.</u>

Potential future cost increases have not yet been estimated or budgeted. The cost of compliance is expected to rise as new and expanded Permit requirements take effect during the Permit term and the rate payer base shrinks with annexations of urban areas.

The County's remaining unincorporated urban areas will continue to include higher-density areas (more than one dwelling unit/acre), which require suburban levels of service and significant traditional stormwater management. Consequently, the County will continue to fund the full range of stormwater management services required by the Permit.

As single-lot and lower-density subdivision development continues in the rural area, there will be an increase in nontraditional stormwater controls. These include forest retention, reduced impervious surface footprints and other LID techniques such as flow dispersion and infiltration, rain gardens, and the use of pervious surfaces. Where stormwater in a subdivision may have traditionally been managed by a few large stormwater ponds or vaults, a similar subdivision built considering LID principles would incorporate many small treatment and flow control devices distributed throughout the neighborhood. Therefore, LID features will require additional construction and maintenance inspections by the County to ensure new types of controls are properly installed and maintained. This will add to the challenges for Permit compliance and public funding.

Increasingly, the stormwater management program will be addressing a landscape made up of agricultural and forest lands interspersed with rural residential and rural town centers with concentrations of suburban service areas. The stormwater and water quality service needs of these diverse landscapes will be quite different but often not less expensive than those defined in more urban areas.

Appendix H: IDDE Reporting Data and Format

Ecology has added required information for spills. This Appendix is a copy of **Appendix 14 of the Phase I Municipal permit**. This appendix lays out the required information needed for each incident including G3 reporting.

Permittees are required to submit the following information with the online annual report form, pursuant to Special Condition S9.A.

This is the complete list of information that all Permittees are required to report for each IDDE incident found, reported to, or investigated by the Permittee. Each Permittee may use either their own system or the WQWebIDDE form for recording this data.

Permittees may begin using the form to report as soon as March 31, 2020. The form is required for reporting by March 31, 2021, unless you are using your own tracking system. If using your own tracking system, this information must be provided in an electronic format that follows the data schema provided at the end of this document and is easily transferred to a database. For the March 31, 2020 annual report, permittees are required to submit as much of this information as possible, and in a format that is as close to this as feasible. For the March 31, 2021 annual report, Ecology would prefer a zipped .xml file that follows the schema, but it is acceptable to submit an Excel spreadsheet, .csv, or tab- delimited (.txt) file that includes all of this information. For annual reports due on March 31, 2022 and beyond, a zipped .xml that follows the schema is required.

A complete report will include a separate entry (even if left blank) for every line below and must use the precise verbiage and spelling below. For all incidents where the answer to #6 is no, #7-12 are not required. All dates are in MM/DD/YYYY format.

- 1. Jurisdiction name and permit number
- 2. Date incident discovered or reported to you
- 3. Date of beginning your response
- 4. Date of end of your response
- 5. How was the incident discovered or reported to you? (select all that apply)
 - Pollution hotline (phone, web, app)
 - Direct report to your staff
 - Staff referral
 - Another agency referral
 - ERTS referral
 - Business inspection
 - Construction inspection
 - MS4 inspection or screening
 - Other (Explanation required)
- 6. Discharge to MS4? (select one)
 - Yes notified Ecology
 - Yes notified DOH and Ecology
 - Yes did not notify
 - Yes allowable or conditionally allowable
 - No none found
 - No cleaned up before reached MS4
 - No discharge to Underground Injection Control (UIC) well
 - Unknown

- Other (Explanation required)
- 7. Incident Location
 - Address/Intersection
 - City
 - Zip (optional)

And / Or

- Latitude
- Longitude
- 8. Pollutants Identified (select all that apply)
 - Unconfirmed, unspecified, or not identified
 - Fuel and/or vehicle related fluids
 - Food-related oil/grease
 - Sediment/soil
 - Solid waste/trash
 - Sewage/septage/pet waste/human waste
 - Other wastewater
 - Paint
 - Firefighting foam
 - Soap or cleaning chemicals
 - Other (Explanation required)
- 9. Source or Cause (select all that apply)
 - Unconfirmed, unspecified, or not identified
 - Vehicle-related business
 - Food-related business
 - Landscape-related business
 - Mobile business
 - Construction activity
 - Other commercial/industrial activity
 - Vehicle collision
 - Other accident/spill
 - Intentional dumping
 - Illicit connection
 - Other (Explanation required)
- 10. Source tracing approach(es) used (select all that apply)
 - Not applicable
 - Observation (color/sheen/turbidity/floatables/odor)
 - Map analysis
 - Dye, smoke, or pressure testing
 - Field indicator measurements
 - Analytical laboratory indicators
 - Other (Explanation required)
- 11. Correction/elimination methods used (select all that apply)
 - Clean-up
 - Education/technical assistance

- Add or modify operational source control BMP
- Add or modify structural source control BMP
- Add or modify treatment BMP
- Enforcement
- Referred to other agency or department
- Other (Explanation required)
- 12. Field notes, explanations, and/or other comments

Appendix I: Underground Injection Control Program

Ecology has added requirements for Underground Injection Control (UIC) wells. This appendix lays out the reference material for installation, operation and maintenance, education and outreach, illicit discharge and elimination, and annual reporting of changes.

Permit Requirements	Planned and Ongoing Activities
S2.A.1 Discharges to groundwaters of the State through facilities regulated under the Underground Injection Control (UIC) program, Chapter	The Underground Injection Control Program (UIC) administered by WA Ecology protects groundwater quality by regulating discharges to UIC wells.
173-218 WAC, are not authorized under this Permit.	UIC wells are manmade structures used to discharge fluids into the subsurface. Examples are drywells, infiltration trenches with perforated pipe, and any structure deeper than the widest surface dimension (see Reference 6 or Chapter I-4 UIC Program in the 2019 Stormwater Management Manual for Western Washington (SWMMWW) 2019SWMMWW (wa.gov). For single family projects, drywells that are located immediately adjacent to buildings and infiltrate roof runoff directly from the gutters and downspouts do not need Ecology registration. Open ponds are not considered injection wells.
	King County uses the presumptive approach to meet UIC Program rule authorization as allowed by Ecology. The County has a single Stormwater Management Program (SWMP) across unincorporated King County that combines requirements for both the municipal UIC wells and the municipal separate storm sewer system (MS4).
	The King County Surface Design Manual requires permit applicants to provide proof of UIC registration if it is required by Ecology prior to plan approval or permit issuance (see Section 2.3.1.1 Technical Information Report (TIR), TIR Section 7 Other Permits and Section 5.2.1). Ecology approved the King County Surface Design Manual as an equivalent to the SWMMWW.
	Note that existing UIC wells that are unable to obtain Ecology rule authorization and UIC Site ID number without modification may require design review and permit approval per King County requirements for such
	Operation and maintenance, Illicit discharge detection and elimination, and education and outreach programs are provided as part of the County's SWMP.

See <u>2021-kcswdm-full-manual.pdf (kingcounty.gov)</u> for a program description that addresses UIC well registration.