

2025 Stormwater Management Plan Updated March 2025

CLARK COUNTY PUBLIC WORKS CLEAN WATER 1300 Franklin Street

Vancouver, WA 98666-9810

www.clark.wa.gov/stormwater



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Index to NPDES Permit Components

NPDES PE	NPDES PERMIT COMPONENT			
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 $F is hermon sitting \ by \ river \ with \ poles \ in \ the \ water \ at \ sunset$



Storm drain medallion used to mark storm drains and catch basins

Acronyms and Glossary

AKART – all known, available and reasonable methods of prevention, control and treatment as the Ecology standard for the effort required to meet wastewater discharge and NPDES permit requirements.

BMP – best management practices (controls for stormwater runoff)

Cartegraph – an asset management system used by the county

Council - Clark County Council

CCPH - Clark County Public Health

CCPW - Clark County Public Works

CCSM – Clark County Stormwater Manual 2021

CCSWMP – Clark County Stormwater Management Plan

CIP - Capital Improvement Program

County Manager – Executive officer for Clark County

CWD – the Clean Water Division of Clark County Public Works

Ecology – Washington State Department of Ecology

EPA - Environmental Protection Agency

GIS – geographic information services

GMS – grounds maintenance specialist

IDDE – illicit discharge detection and elimination

Illicit Discharge – a non-stormwater discharge or illegal connection to the storm sewer system

(e.g. a sanitary sewer line connected to storm sewer system)

LID - low impact development

LMS – Land Management System (replaces Tidemark)

MEP - maximum extent practicable

MS4 - municipal separate storm sewer system

NOAA Fisheries - National Oceanic and Atmospheric Administration, National Marine Fisheries Service

NOI - Notice of Intent

NPDES – National Pollutant Discharge Elimination Systems

PPGS – potential pollutant generating site

RCW - revised code of Washington

SMAP - Stormwater Management Asset Plan

SMED – Stormwater Management for Existing Development also referred to as retrofits.

SNAP – Stormwater Needs Assessment Program

StormwaterClk – a GIS database the county maintains for storm sewer infrastructure

SMMWW - 2019 Stormwater Management Manual for Western Washington, published by Ecology

SWMP - Stormwater Management Program

SWPPP – stormwater pollution prevention plan

TMDL - total maximum daily load

UIC - underground injection control

WAC - Washington Administrative Code

WQDB - Water Quality Database



 $\label{thm:linear} \textbf{Hidden Falls located along the Tarbell Trail in east Clark County}$

Responsibility Index

CCPW = Clark County Public Works

ABBREVIATION	FULL STAFF TITLE	JOB DESCRIPTION			
Applicant	(as stated)	Customer who utilizes the municipal code and			
		stormwater manual to guide development projects			
CCPW Answering Service	(as stated)	Coordinates after business hours service calls			
CCPW PIO	Public Information Officer	Supports the development and delivery of public			
		outreach and educational materials			
CCPW Construction	Construction Management	Reviews PW construction projects for compliance			
Mgmt. Eng.	Engineer	with approved plans and applicable regulations			
CCPW Construction	Construction Management	Conducts on-site construction inspections to ensure			
Mgmt. Inspectors	Inspectors	compliance with approved plans and applicable			
		regulations and perform county facility maintenance			
		inspections			
CCPW Construction Mgmt. OA	Construction Management Office Assistant	Coordinates document management associated with project approvals			
CCPW Construction	Construction Management	Oversees the compliance with inspections of			
Mgmt. Supervisor	Supervisor	development construction			
CCPW Construction	Construction Management	Oversees the compliance of development			
Supervisor		construction with approved plans and code			
		Supports document control and recordkeeping			
Administration					
CCPW CWD Eng.	Clean Water Division Engineer	Coordinates design and engineering of Clean Water projects			
CCPW CWD Clean Water Division		Oversees / manages stormwater capital planning,			
Infrastructure Mgr. Infrastructure Manager		infrastructure mapping and monitoring activities,			
		coordinates stormwater infrastructure inspection and maintenance			
CCPW CWD Mgr.	Clean Water Division Manager	Oversees and manages the Clean Water Division			
CCPW CWD Natural	Clean Water Division Natural	Performs monitoring and illicit discharge field work			
Res. Specialist	Resource Specialist	and analysis			
CCPW CWD NPDES	Clean Water Division National	Oversees compliance with the county's Phase I			
Mgr.	Pollution Discharge Elimination	Municipal Stormwater Permit			
	System Permit Manager				
CCPW CWD OA	Clean Water Division Office	Coordinates document control and recordkeeping			
	Assistant				
CCPW Outreach	(as stated)	Coordinates, implements and evaluates outreach			
Specialist Sr.		programs for Clean Water			
CCPW CWD	(as stated)	Supports various work projects and products			
Professional Staff					
CCPW CWD Program	(as stated)	Staffs Clean Water Commission meetings			
Asst.					

ABBREVIATION	FULL STAFF TITLE	JOB DESCRIPTION		
CCPW Mgmt. Analyst Sr.	Management Analyst Senior	Coordinates specific project tasks and work products, supports outreach / education.		
CCPW CWD Source Control Specialist	Clean Water Division Source Control Specialist	Technical assistance with citizens and businesses to comply with facility maintenance and source control regulations		
CCPW CWD Sr. Eng. Tech	Clean Water Division Senior Engineering Technician	Inventory and maps the stormwater system		
CCPW CWD Sr. Operations Specialist	Clean Water Division Senior Environmental Operations Specialist	Technical assistance with citizens and businesses to comply with private stormwater facility maintenance		
CCPW Dev. Inspectors	Development Inspectors	Coordinates inspections and compliance with code		
CCPW Director	(as stated)	Designated director for permit compliance		
CCPW Eng. Program Mgr.	Engineering Program Manager	Oversees PW engineer activities		
CCPW Eng. Program Design	Engineering Program Staff	Develops engineering designs for stormwater retrofits		
CCPW Eng. Project Mgr.	Engineering Project Manager	Manages engineering projects		
CCPW Eng. Permitting	Environmental Permitting	Coordinates environmental permitting for the		
Mgr.	Manager	department		
CCPW Land and	Land and Vegetation Manager	Oversees the operations and maintenance of the		
Vegetation Mgr.		vegetation management program		
CCPW Noxious Weed Mgmt crews	(as stated)	Perform weed management for county stormwater facilities and control noxious weeds		
CCPW Ops Admin. Operations Administration		Provides support to various tasks, such as spill response and citizen complaints		
CCPW Ops Crew Chief	Operations Crew Chief	Leads and coordinates road crew activities		
CCPW Ops Mgr.	Operations Manager	Oversees all operation and maintenance responsibilities		
CCPW Ops Road Crews	Operations Road Crews	Perform all necessary stormwater facility and road maintenance and operations activities to meet applicable standards and regulations		
CCPW Ops Road Super	Operations Road Superintendent	Oversees all elements associated road maintenance and operations		
CCPW Parks and Lands Mgr.	Parks and Lands Manager	Oversees administration, customer service, maintenance and operations of parks and other county land management		
CCPW Parks Super.	Parks Maintenance and Operations Supervisors	Oversees the maintenance and operations of the parks		
CCPW Real Property Services	(as stated)	Coordinates property acquisition and ownership information, such as titles, legal information, etc.		
CCPW Survey	(as stated)	Coordinates all necessary survey data required for a project		

CD = Community Development

ABBREVIATION	FULL STAFF TITLE	JOB DESCRIPTION
CD Building Official	(as stated)	Oversees customer application for development, all building permits and permit counter
CD Building Safety	(as stated)	Enforces erosion control regulations and stormwater for residential building permits
CD Dev. Eng. Mgr.	Development Engineering Manager	Oversees the engineering review of development applications
CD Dev. Eng. Planning Tech	Development Engineering Planning Technician	Coordinates bonds, compliance and final plat
CD Dev. Eng. Review Eng.	Development Engineering Review Engineer	Conducts the engineering development review and participates in application meetings
CD Dev. Services Mgr.	Development Services Manager	Coordinates a pre-application conference with potential applicants and provides planning approvals
CD Permit Services	(as stated)	Coordinates review of development applications
CD Permit Tech	Permit technician	Processes permit applications
CD Planner	(as stated)	Supports the land use application and approval process
GIS	(as stated)	Supports the county's GIS system including stormwater asset inventory
Internal Services Facilities Crews	(as stated)	Performs all tasks associated with the operations of the program on county properties
Internal Services Facilities Mgr.	Facilities Manager	Oversees the facilities program for county properties
Public Health	(as stated)	Coordinates illicit connection/discharge issues with CCPW staff
Council	Clark County Council	Legal Authority for budget, code revisions and contracts
County Mgr.	County Manager	Executive official for Clark County
CRWWD	Clark Regional Wastewater District	Supports the coordination of illicit discharge protection
Contract Services	Outside firm or agency contracted with Clark County	Hired to meet specific scope of work items per the appropriate fund and need



Yacolt Falls on the East Fork Lewis River

CHAPTER 1 Introduction and Background

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Clark County Stormwater Management Plan

The Clark County Stormwater Management Plan (CCSWMP) describes the various ways Clark County manages stormwater and related water resources issues in the unincorporated area. It acts as a resource for the public to learn about the county's efforts to reduce pollution in stormwater, an informative guide for staff, and a compliance measure for the county's municipal stormwater permit under permit requirement S5.C.4 and S5.A.

INTRODUCTION

As the county's unincorporated population continues to increase (over 240,000 in 2023 with 169,000 in the unincorporated Vancouver Urban Growth Area according to the Washington State Office of Financial Management data analyzed by Clark County GIS). Clark County is committed to responsible stormwater management to keep our waterways healthy for people, fish and wildlife.

The Clark County Public Works department (CCPW) utilizes the Clean Water Division (CWD) to protect surface water and groundwater resources from polluted stormwater and to coordinate compliance with state and federal water pollution laws.

Primary responsibilities of the overall stormwater program include planning and building stormwater control facilities, stormwater management planning, water quality and habitat monitoring of streams, public education and outreach, development and enforcement of water quality regulations, water quality compliance for businesses and private stormwater facility owners, coordination with other municipalities, and maintenance of the county's stormwater system.

STORMWATER AND NPDES PERMIT

Much of the pollution in Washington State waters comes from many different, hard-to-trace sources with no obvious point of collection and discharge. It is called "nonpoint source pollution" and it travels to streams, lakes and other water bodies through polluted stormwater runoff carried by the county's storm sewer system.

Most U.S. cities and counties that collect stormwater runoff in municipal separate storm sewers and discharge it to surface waters are required to obtain a permit under the federal Clean Water Act. Clark County qualifies under the Environmental Protection Agency (EPA) stormwater regulations for the National Pollutant Discharge Elimination Systems (NPDES) Phase I Municipal Stormwater Permit program. In Washington State, the EPA has delegated to the Washington Department of Ecology (Ecology) the authority to develop and administer the NPDES permitting program. Ecology issued the current NPDES Phase I Municipal Stormwater Permit to Clark County and other larger western Washington jurisdictions in July 2019, with an effective date of August 1, 2024. This permit is for a fiveyear period expiring on July 31, 2029.

Phase I municipal permittees are cities and counties that operate large and medium municipal separate storm sewer systems (MS4s). Governmental bodies within their boundaries, such as state universities, public school districts and drainage districts, are also required to meet permit requirements. The permit regulates discharges to waters of Washington State from the permittees' MS4s in compliance with Washington Water Pollution Control Law (Chapter 90.48 RCW) and the federal Clean Water Act (Title 33 USC, Section 1251 et seq.).

PERMIT COMPLIANCE

The NPDES permit prescribes a variety of requirements and actions. It lists 21 general conditions; these include, among others, a requirement to notify Ecology of spills, a duty to avoid bypassing water quality treatment and flow control facilities, and a requirement to notify Ecology of a failure to comply with the permit.

The permit also lists nine special conditions that, among other things, specify permit coverage, list permittee responsibilities, and under Special Condition S5, prescribes an eleven-component stormwater management program (SWMP).

The SWMP consists of actions meeting the eleven required components and any additional actions and activities necessary to reduce pollutant discharges to the federal maximum extent practicable (MEP) standard, meet state requirements for managing stormwater using all known, available and reasonable methods of prevention, control and treatment (AKART), and protect water quality.

The county is required to prepare a stormwater management program plan to

inform the public of planned program activities for the upcoming calendar year. The SWMP plan must be updated annually to include program changes or revisions that occur and be submitted in part or in whole with the annual report to the Department of Ecology.

THE CLARK COUNTY STORMWATER MANAGEMENT PLAN AND STORMWATER MANAGEMENT PROGRAM

This Clark County Stormwater Management Plan (CCSWMP or Plan) encompasses efforts by Clark County, primarily in the Public Works and Community Development departments for the protection of water quality and the management of stormwater and related concerns. The Plan includes, as chapter 2, the NPDES stormwater management program required by Ecology.

THE CLEAN WATER DIVISION

The Clean Water Division (CWD) in Clark County's Public Works department is responsible for a majority of the county's NPDES compliance actions and activities, coordination and reporting. The program coordinates and contracts with county departments to achieve and facilitate compliance. The CWD is the primary author of reports and other documents required by Ecology.

In addition to activities addressing NPDES permit compliance and surface water resource management, the CWD manages other important stormwater-related activities, including managing stormwater injection wells regulated under the state's Underground Injection Control Rules (173-218 WAC) pursuant to the federal Safe Drinking Water

Act, and giving engineering advice and support on flooding and drainage problems.

Funding and Budget

The Clean Water Division is funded primarily by an annual stormwater fee charged to developed parcels in the unincorporated area of the county. The county collects approximately \$14 million annually from nearly 80,200 properties. Other sources of funding may include grants and the General Fund. The Road Fund provides support for stormwater management associated with county roadways.

Clean Water Fee

Residential and multifamily properties pay a fee based on each residential dwelling.

Commercial properties, roads, churches and schools are assessed a fee based on the number of equivalent residential units (ERUs) of impervious surface measured on the parcel.

The fee varies for residents in the Urban Growth Boundary versus rural areas.

Per <u>Clark County Code 13.30A</u>, fee revenues are used to fund stormwater management activities.

Beginning in August 2017, the Clean Water Division implemented updated requirements for schools wishing to receive a Clean Water Fee reduction. Schools meeting four criteria including stormwater BMP training for staff, passing stormwater facility inspections, implementing educational activities related to stormwater, and disseminating stormwater messages to the broader school community, will receive a Clean Water Fee reduction. If all criteria are met during the school year, the Clean Water Fee will be waived for the later calendar year of the school year (e.g., 2017-2018 school year will apply to the 2018 Clean Water Fee).

Clean Water Fund

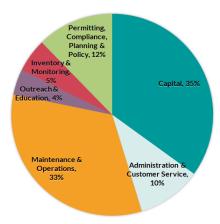
Revenues from the Clean Water Fee, from grants awarded to the Clean Water Division and from fines are deposited into the Clean Water Fund by the Clark County Treasurer. Revenues in excess of annual operating expenses for maintenance, repair, enforcement, assessment, monitoring and education remain in the fund balance for use in constructing new public storm sewer infrastructure and perform large maintenance projects on county facilities.

The Road Fund provides support for stormwater management associated with county roadways.

Commented [RS1]: This whole section needs revised

Budget

Clark County budgets on a one-year cycle. The Clean Water Division budget is set at the beginning of each cycle and modified, if necessary, through requests for additional appropriations from the Clean Water Fund during the year.



2025 Clean Water Adopted Budget

The budget is approved by the elected Clark County Council. The Council sets the Clean Water Division budget in response to state priorities, expressed through the NPDES Municipal Stormwater Permit and local priorities.

Areas of greatest expenditure include stormwater capital construction, maintenance and operation of storm sewer infrastructure, and permitting, compliance, planning and policy.

In recent years, a focus on building new stormwater facilities in underserved areas has increased the overall budget and the proportion dedicated to capital construction. The total budget for 2025 is \$17 million.

Organization & Staffing

The Clean Water Division employs a staff of scientists, engineers, technical specialists and administrators who perform essential stormwater management functions. The program also coordinates with other Public Works divisions and county departments for additional essential stormwater services that fit within those divisions or departments' core services. This organizational structure allows the Clean Water Division to minimize expenses by engaging technical and professional experts such as design engineers, road maintenance crews and educators employed by other divisions or departments to complement a core staff of stormwater specialists.

The Clean Water Division is directly responsible for storm sewer system inventory; code and manual updates; watershed planning; source control inspections; illicit connection and discharge inspections and abatement; private stormwater facility inspections; stormwater facility maintenance compliance; stormwater capital planning; coordination with other jurisdictions and entities; and surface water and stormwater assessment, planning and monitoring.



The program coordinates with other Public Works divisions and county departments to collect and process the Clean Water Fee; operate, inspect and maintain the storm sewer system; manage the design and construction of stormwater capital improvements; enforce development and building regulations related to NPDES permit compliance; inform and educate the public about stormwater problems

and solutions; and support the Clean Water Division with database programming and analysis.

County departments are responsible for complying with NPDES permit requirements in their operational activities under the adopted stormwater plan and by interdepartmental agreements.

TASK CHECKLIST

STATUS	TASK
Ongoing	The Clean Water Division administers the NPDES Municipal Phase 1 Stormwater Permit for Clark County

For more information on the county's Clean Water Division, contact:

Devan Rostorfer, Clean Water Division Manager

564.397.4264

devan.rostorfer@clark.wa.gov



Turbid urban runoff from Cougar Creek into Salmon Creek

CHAPTER 2

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Section 1 - Legal Authority

REGULATORY REQUIREMENTS SUMMARY

NPDES Permit S5.C.1 Legal Authority The NPDES permit requires the county to demonstrate that it has the legal authority to control discharges to and from its municipal separate storm sewer system (MS4).

Legal Authority to Regulate

Clark County maintains the legal authority required by the permit to control discharges to and from its MS4.

Clark County Code Chapter 13.26A Water Quality <u>Chapter 13.26A</u> prohibits illicit discharges and spills into the county's MS4, requires the control of industrial site runoff, and adopts source control requirements in the Clark County Stormwater Manual. It maintains the county's authority to inspect and enforce its provisions.

Clark County Code Title 32 Enforcement <u>Title 32</u> permits Clark County to enforce any of its civil codes through inspection, surveillance, monitoring and enforcement actions.

Clark County Code Title 40 Unified Development Code <u>Title 40</u> contains a suite of requirements regulating the design, construction and operation of stormwater controls on development and redevelopment sites that will discharge to the MS4 or to waters of the state. Stormwater and erosion control measures are required under <u>Chapter 40.386</u>

Legislative Authority of the Clark County Council

Through the legislative authority of the Clark County Council, Clark County has the ability to enter into contracts and intergovernmental agreements with other permittees and secondary permittees for the purpose of controlling pollutants entering or leaving the county MS4.

TASK CHECKLIST

STATUS	TASK
Ongoing	Maintain legal authority to control discharges to and from the MS4

For more information on the county's Clean Water Division, contact:

Devan Rostorfer, Clean Water Division Manager

564.397.4264

devan.rostorfer@clark.wa.gov

Section 2 – Taking Inventory and Mapping the Stormwater Infrastructure

Clark County operates a municipal separate storm sewer system (MS4) within unincorporated Clark County. This system includes stormwater drainage ditches and pipes in county right-of-way and county-operated conveyances on easements.

An MS4 is a conveyance or system of conveyances that meets all of the following criteria:

- Owned by a state, city, town, village, or other public entity that discharges to waters of the U.S. (and the state of Washington).
- Designed or used to collect or convey stormwater (including storm drains, pipes, ditches, etc.).
- 3. Not a combined sewer.
- 4. Not part of a publicly owned treatment works (sewage treatment plant).



Stormwater Infrastructure Mapping

A related type of infrastructure used to manage stormwater is a Class V stormwater injection well, which allows stormwater to be disposed directly into the ground instead of to a surface water body.

Clark County inventories and maps its storm sewer infrastructure and Class V injection wells to serve a variety of purposes. The inventory is a primary source of information for inspection, operation and maintenance of the MS4, illicit discharge detection and removal, drainage and source control support, stormwater assessment and monitoring, and capital planning.

Clark County administers a comprehensive program to inventory the storm sewer system in a geographic information system (GIS) database called *StormwaterClk*. All known infrastructure is inventoried and mapped. An ongoing program inventories and maps storm sewer infrastructure built in the course of development and public capital improvement projects. The inventory includes all stormwater infrastructures inside of and outside of the county MS4, including:

- Flow control and water quality treatment facilities
- UIC-regulated Class V injection wells
- County outfall locations
- Conveyances (pipes, ditches and culverts)
- Interconnections with other municipal systems
- Connections to the county MS4

REGULATORY REQUIREMENTS SUMMARY

NPDES Permit S5.C.2. Municipal Separate Storm Sewer Mapping and Documentation The NPDES permit requires the county to map and document components of the MS4 including stormwater control facilities, receiving waters and land uses within the MS4.

Chapter 173-218 WAC Underground Injection Control (UIC) Program Pursuant to Chapter 90.48 RCW, Washington Administrative Code requires owners of Class V injection wells (underground drywells and infiltration trenches with perforated pipes that dispose stormwater into the ground) to comply with regulations designed to protect groundwater quality for use as public water supplies. Clark County owns approximately 1,700 wells that are regulated under this rule.

COUNTY POLICIES, RULES AND REGULATIONS

Clark County Code Chapter 40.386 Stormwater and Erosion Control

<u>Chapter 40.386</u> describes county regulations for ownership of stormwater facilities and the lands on which they are located. Section 40.386.030 sets forth requirements to submit record drawings for completed projects and requirements to document facility ownership.

Section 40.386.030(G) requires developers to submit record drawings to the county prior to 1) the issuance of building permits for single-family/duplex residential subdivisions, 2) the issuance of occupancy permits for site plan reviews, and 3) within sixty days following completion of construction for other types of development.

Clark County Code Chapter 40.540.070 Final Plat <u>Chapter 40.540.070</u> describes county regulations for information about dedications and easements for utilities that must be contained on a plat.

Revised Code of Washington Chapter 58.17.165 Plats – subdivisions – dedications Washington state code prescribes information that must be shown on a plat when land is subdivided, including dedications of roadways and utilities and stormwater easements, tracts, or lots.

Public Project Record Drawings Policy

Clark County Public Works Engineering Program maintains a policy for the preparation and distribution of record drawings, also known as as-built drawings, after completion of county capital improvement projects such as roads, parks and stormwater facilities.

TOOLS

StormwaterClk

Clark County Public Works maintains a stormwater database called *StormwaterClk*. The database is administered by the GIS Department, while data is maintained and updated by the Clean Water Division. The GIS data can be accessed in Clark County MapsOnline in the utilities map site.

Land Development Records

Clark County Community Development maintains the *Land Management System*, a database of regulatory and enforcement cases, including permits for land division and development projects.

Annexation Tracker

Annexation Tracker is an application developed by the GIS Department that helps county departments track annexations.

ONGOING INVENTORY AND MAPPING

Purpose

Clark County maps and inventories stormwater treatment and control infrastructure because an accurate and complete inventory is critical to a successful program to inspect, maintain and regulate stormwater conveyances and stormwater treatment and flow control facilities.

As part of the process, new outfalls, Class V injection wells, and connections also are documented.

Background

Most stormwater infrastructure and conveyances in the county are built by the private sector during residential and commercial development. Other facilities are built by the county to retrofit previously developed areas or to handle runoff from new

roads, parks and other construction projects. The Clean Water Division builds a limited number of stormwater facilities to retrofit developed areas that lack adequate flow control or treatment. (See County Capital Improvements below.)

After a project is constructed, Clean Water Division staff inventory the new facility and its related conveyance infrastructure including pipes, catch basins and connections in StormwaterClk.

Responsibilities Matrix

Task	CCCD CWD Mgr.	CCPW CWD Infra. Mgr.	CCPW CWD Sr. Eng. Tech	CCCD Dev. Engineering Planning Tech	CCCD Dev. Engineering Mgr.	CCPW Construction Mgmt. Engineer	CCPW Construction Mgmt. OA	CCPW Construction Manager	CCPW Engineering Program Manager	CCPW Survey	CCPW Real Property Services
Notify CWD of new private development completion	0	0	ı	Р	А	0	0	0	0	0	0
Notify CWD of new county capital improvement project physical completion	0	0	-	0	0	0	Р	А	0	-	0
Notify CWD of new county capital improvement project final acceptance	0	0	-	0	0	0	Р	А	0	-	0
Gather project information	0	Α	Р	С	0	С	0	0	Α	С	С
Notify CWD of county project As-built location	0	0	1	0	0	S	0	S	0	A/P	0
Make final decision on maintenance owner	0	А	Р	0	S	С	0	0	0	U	С
Inventory/ Map infrastructure	0	Α	Р	0	0	0	0	0	0	0	0
Track progress	0	Α	Р	0	0	0	0	0	0	0	0
Transfer information to Operations	0	А	Р	0	0	0	0	0	0	0	0
A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted											

Notification and Tracking

The first step of inventorying is becoming aware that a new development or county project, potentially with stormwater infrastructure, has been completed. The senior engineering technician will regularly query the LMS for new Development Inspection Numbers (DINs), which are created when engineering plans have been approved for construction.

The senior engineering technician will create a folder for the project on the Clean Water Division's network drive, where copies of relevant documents relating to the project's storm sewer infrastructure will be stored.

Private Sector Projects Notification

The CD Development Engineering planning technician will notify the CCPW CWD senior engineering technician that a new residential or commercial development has been completed by forwarding a copy of the completion of construction letter sent to the developer.

In some cases, the first notification to the Clean Water Division may be a different document, such as notice of a plat recording.

County Projects Notification - Physical Completion

The Public Works Engineering Program Construction Management section will notify the senior engineering technician that new public project is physically complete with a copy of the letter sent to the construction contractor.

Notification of Existing Projects

Infrequently, the senior engineering technician will discover engineering drawings or other evidence of an existing project that does not appear in the inventory. In those cases, the

senior engineering technician will begin the mapping process as though it were a new facility by researching information about the project (see below), potentially using legacy data storage systems not discussed here.

Research

The senior engineering technician will research and assemble relevant documentation about the project from various sources, including Development Engineering and the Auditor.

To inventory and map the stormwater infrastructure, the senior engineering technician needs:

- Engineering drawings of the project.
- For private sector projects, the preferred source is a record drawing (sometimes also called an as-built). An acceptable alternate source is an approved construction plan.
- For county projects, the preferred source is a record drawing; however, most projects will be documented initially from the final construction plan with as-built notes from the construction manager.
- Geographic location of the infrastructure.
- Maintenance responsibility for the infrastructure.
- Ownership of tracts or parcels containing the facilities, if any.
- Location of easements containing the facilities and related infrastructure, if any.

Finding documentation may take several steps, outlined below.

Locate and Verify Engineering Drawings

For private sector projects, record drawings are submitted by the private developer to the Development Engineering program in electronic format. The senior engineering technician is then notified of the availability of record drawings.

For county capital improvement projects, Public Works Survey section maintains electronic copies of county projects and places them on the county Olympus server, where they are accessible to the senior engineering technician.

Determine Ownership and Maintenance Responsibility

The senior engineering technician will look for several types of information, including:

- The party responsible for maintaining the stormwater infrastructure.
- The owner of parcel(s) underlying any treatment or flow control facilities.
- The existence of easements for access to stormwater facilities and conveyances.

Responsibility for maintaining facilities may change over time. At this stage, the senior engineering technician will determine the current maintenance responsibility.

The senior engineering technician will evaluate information on legal documents such as the plat map, full plat recordings, covenants and recorded surveys. Ultimately, citing the owner of the land where a facility is located.

Inventory and Map (Digitize)

The senior engineering technician will find the project's location in the GIS. Using the assembled information, the technician will digitize the project's stormwater facilities and related infrastructure, such as conveyance and drywells, in *StormwaterClk*.

The senior engineering technician also will enter attributes of storm system features in the database. Attributes are unique to each feature type. Some of the most important attributes that are common to most types of features include:

- Subwatershed (auto-populated)
- Custodial county department
- Service status
- Installation date
- Flevations
- Dimensions (pipe diameter, length, etc.)
- Facility name (for facility polygons only)
- Serial number of the parcel containing the facility (if relevant)

Transfer Information

Information in *StormwaterClk* is nightly uploaded electronically into the Public Works Cartegraph asset management database which is used to track and schedule inspection and maintenance activities for stormwater infrastructure.

Outputs

- Updates to StormwaterClk
- Asset data in Cartegraph

OTHER PERMIT-REQUIRED MAPPING / INVENTORY

Background

The NPDES permit requires both continuation of ongoing inventory/mapping activities (S5.C.2.a) and completion of several additional mapping tasks under (S5.C.2.b).

Specific requirements under permit section S5.C.2.a are addressed through already completed mapping efforts and the ongoing inventory and mapping program includes updates as new development is inventoried.

New mapping requirements under S5.C.2.b are partially addressed through already completed mapping efforts; additional efforts to address specific requirements are described below.

A specific project to complete new mapping will be developed in 2025. The Fee Increase Rate Study will allow Clean Water to complete this mapping.

New mapping requirements are:

- Submitting all outfall locations by March 31, 2026,
- Mapping tree canopy on county property by December 31, 2026
- Complete outfall catchment mapping for nominal 24-inch outfalls for

- conveyance systems that contain county-owned treatment and flow control facilities by March 31, 2028,
- Map overburdened communities by December 31, 2028,
- Complete conveyance mapping for nominal 24-inch outfalls by December 31, 2028

Responsibilities Matrix

Task	CCPW CWD Mgr.	CCPW CWD Infrastructure Mgr.	CCPW CWD Sr. Eng. Tech	GIS		
Map land use	0	0	0	A/P		
Map connections to tributary conveyances	O A P O			0		
Map connections between BMPs and tributary conveyances	Completed – updated as needed (CCPW CWD Sr. Eng. Tech)					
Map receiving waters	* Completed for urban area*					
Map areas not draining to outfalls	* Completed for urban area *					
Map outfall catchments	Completed for urban area – updated as needed (CCPW CWD Sr. Eng. Tech)					
Map tributary conveyances	Completed for urban area- updated as needed (CCPW CWD Sr. Eng. Tech)					
A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted						

Procedures

Map Tributary Conveyances

Clark County completed an inventory of the conveyance system in early 2010.

Map Connections to Tributary Conveyances

This effort primarily involves mapping private road ditch connections to public road ditches and now applies to areas outside the UGA where the public ditch leads to an outfall with nominal diameter of at least 24 inches. Most

county roadside ditches have nominal diameters of 24 inches.

The Clean Water Division is completing an updated inventory of road ditches and stormwater outfalls outside the UGA. Field mapping is accomplished by a driver and GPS operator to record the location of ditches and outfalls. Office post-processing ultimately results in updated ditch and outfall records digitized in the *StormwaterClk* database.

Map Connections between BMPs and Tributary Conveyances

Existing connections, including overflows between BMPs and tributary conveyances are mapped, and new connections will be mapped as part of the ongoing inventory and mapping program.

Map Outfall Catchments

The Clean Water Division completed mapping catchments to most urban area outfalls. This includes nearly 500 outfalls, most of which are smaller than 24 inches of nominal diameter. Catchments to new outfalls will be mapped as outfalls are added.

Map Outfall Land Use

Known outfalls are mapped, and new outfalls will be mapped as part of the ongoing inventory and mapping. As a result of Clark County's function as a land use regulator, the Clark County Assessor maintains land use data at the parcel scale in GIS. To produce a map of land uses for outfalls, Clean Water Division staff or GIS Department staff will overlay land use data with outfall catchments and conveyance systems in the GIS upon request or as needed.

Map Areas Not Draining to Outfalls

In 2010, the CWD and GIS Department mapped areas served by the MS4 that do not drain to surface water within the UGA. For outfalls outside the UGA, areas not mapped as an outfall catchment fulfill this requirement.

Outputs

- Updated inventory of Stormwater infrastructure in *StormwaterClk*
- Inventory of connections to tributary conveyances in *StormwaterClk*.
- A plan to complete mapping requirements due by March 31, 2026

INVENTORY QUALITY ASSURANCE AND REPORTING

Purpose

To continuously improve accuracy and data completeness in StormwaterClk and the Maintenance Management System.

Responsibilities Matrix

Task	CCPW CWD Mgr.	CCPW CWD Infrastructure Mgr.	CCPW CWD Sr. Eng. Tech	GIS			
Ongoing Data Updates	0	А	Р	0			
Reporting	0	А	Р	S			
A = Accountable B = Primary (doer) S = Supports C = Consulted I = Informed O = Omitted							

A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted

Ongoing Data Updates

The CWD Infrastructure manager and the senior engineering technician will verify accuracy of stormwater infrastructure in the GIS as annexations occur and as more accurate project plans are produced or discovered.

Annexation Updates

Annually, the Infrastructure manager will check Annexation Tracker to determine if stormwater infrastructure has been annexed to a city. The senior engineering technician will change facility ownership attributes and update county MS4 municipal connection points in StormwaterClk where infrastructure has been annexed.

Ongoing Corrections

As possible errors in inventory data or needed revisions are discovered, the senior engineering technician will keep a list of possible corrections, then periodically research and, if necessary, correct StormwaterClk. Possible sources of discovery include Public Works Operations and Maintenance personnel, annual stormwater facility inspectors and Clean Water Division engineers. These corrections are addressed in GIS and in updated links to facility assets in the maintenance management system.

Review of Older Paper Plans

The senior engineering technician will review the archive of older paper plan sets to fill gaps in mapping and attributes of existing infrastructure.

Outputs

- Data updates in StormwaterClk
- Reports from StormwaterClk

UNDERGROUND INJECTION CONTROL (UIC) REGISTRATION

Purpose

Pursuant to the Safe Water Drinking Act and Chapter 90.48 RCW. Washington
Administrative Code 173-218 requires new
UIC-regulated stormwater disposal wells, also called Class V injection wells, to be registered with the Department of Ecology prior to construction.

Responsibilities Matrix

Task	CCPW CWD Infrastructure Mgr.	CCPW CWD Sr. Eng. Tech	CCPW CWD Engineer	CCPW Project Mgr.	CCPW Const. Mgr.	Applicant	CD Dev Eng. Mgr.	
Map new Class V injection wells	Α	Р	0	0	0	0	0	
Locate unregistered Class V injection wells	А	Р		0	0	0	0	
Submit private project registrations to Ecology	0	0	0	0	0	Р	А	
Submit public project registrations to Ecology	0	0	0	Р	А	0	0	
A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted								

UIC Registration for County Projects

The CCPW CWD senior engineering technician will add new UICs to *StormwaterClk* upon project completion as part of ongoing inventory and mapping activities.

UIC Registration for Private Projects Having Public UICs

For privately built projects that include new UICs in the public ROW or that are intended to be turned over to the county, the developer will register the UICs with the Washington Department of Ecology. For all such UICs, Clark County will be designated the owner on the registration form. Registration materials

must be submitted to Ecology prior to construction.

When a developer submits plans for review, CD Development Engineering staff will confirm if UIC-regulated systems are included and inform the applicant of registration requirements. Registrations are verified prior to construction by Development Engineering at the pre-construction conference.

The CCPW CWD senior engineering technician will add new UICs to StormwaterClk upon project completion as part of ongoing inventory and mapping activities.

Outputs

- Updates to StormwaterClk
- UIC wells registered with Ecology

TASK CHECKLIST

STATUS	TASK
ONGOING	Map all known MS4 outfalls and receiving waters, and structural stormwater treatment and flow control BMPs operated by Clark
	County
ONGOING	Map connection points between the MS4 and other municipalities
ONGOING	Map existing 8" and greater connections to the MS4
ONGOING	Map tributary conveyances and associated drainage areas
ONGOING	Map geographic areas served by the MS4 that do not drain to
	surface water
ONGOING	Map connections between BMPs and tributary conveyances
ONGOING	Continue ongoing inventory and mapping
ONGOING	Continue to map connections to tributary conveyances
March 31, 2026	Submit known outfall locations to Ecology
December 31, 2026	Map canopy cover for county properties
March 31, 2028	Map rural outfall catchments with county stormwater facilities
December 31, 2028	Map overburdened communities in relation to stormwater mapping
December 31, 2028	Complete mapping rural conveyance systems

For more information on the county's Clean Water Division, contact:

Jeff Schnabel, Clean Water Division Infrastructure Manager 564.397.4583 jeff.schnabel@clark.wa.gov

Section 3 – Operating and Maintaining the Storm Sewer System, County Property and Roadways

The county inspects and maintains storm sewer infrastructure to maintain its ability to convey, detain, infiltrate and treat stormwater. Clark County also manages its properties and roadways to reduce stormwater impacts from potential pollutant sources such as erosion, fertilizers and pesticides.



County crew replacing filters in a stormwater treatment filter vault system

REGULATORY REQUIREMENTS SUMMARY

NPDES Permit – S5.C.10 Operations and Maintenance

The NPDES permit requires the county to manage its maintenance activities and regulate non-county stormwater facilities to prevent or reduce stormwater impacts. The program must include:

- Maintenance standards and schedules for public and private stormwater facilities including catch basins.
- Street operation and maintenance practices that reduce stormwater impacts.
- Policies and procedures to reduce pollution from pesticides, herbicides and fertilizers used by the county.

- Operational practices that reduce stormwater impacts for equipment yards and storage facilities.
- Staff training.

The 2024 permit adds several new Operations and Maintenance requirements that Clean Water and Road Operations will begin working to implement in 2025. These are:

- Updating county property operation practice to include PCBs in boiling exteriors by December 31, 2027.
- Implement a street sweeping program by July 1, 2027.
- Begin detailed sweeping program reporting by March 31, 2028.
- Update training to meet more detailed permit requirements.

Stormwater Management Manual for Western Washington

The permit requires the use of source control BMPs equivalent to Volume IV of the Stormwater Management Manual for Western Washington (SMMWW) or an approved manual. The Clark County Stormwater Manual, Book 4 contains BMPs equivalent to the SWMMWW and has greater detail than the state guidance.

The permit also requires a stormwater facility maintenance inspection program equivalent to Appendix V-A of Volume V of the SMMWW.

Chapter 173-218 WAC – Underground Injection Control (UIC) Program

Pursuant to <u>Chapter 90.48 RCW</u>, Washington Administrative Code requires the county to comply with regulations controlling the discharge of fluids, such as stormwater, into Class V injection wells. Examples of wells that handle stormwater include drywells and infiltration trenches. The stormwater management program addresses the UIC Program requirement to maintain wells and address pollutant sources.

Endangered Species Act 4(d) Rule

The federal Endangered Species Act prohibits "take" of threatened or endangered salmon. Take is harassment, harm, wounding or killing of an ESA-listed salmon, or harming the critical habitat upon which it depends. The 4(d) rule directly prohibits take without authorization. However, the prohibition is limited under 13 different programs that describe procedures and processes by which an activity may be conducted to contribute to the conservation of the species overall. Road maintenance is an activity that, when conducted according to the Regional Road Maintenance Forum guidelines, is certified by National Marine Fisheries Service to contribute to the conservation of listed salmon.

COUNTY POLICIES, RULES AND REGULATIONS

Clark County Code Chapter 40.386 – Stormwater and Erosion Control

<u>Chapter 40.386</u> requires newly constructed stormwater treatment and flow control facilities to be maintained in accordance with the Clark <u>County Stormwater Manual, Book 4</u> – Operations and Maintenance, and it gives the county authority to inspect privately-operated facilities for compliance.

The chapter also requires ownership and maintenance responsibility of private facilities to be noted on subdivision final plats.

The <u>Clark County Stormwater Manual's Book 3-Source Control</u> adopts source control and treatment standards for public and private properties equivalent to Volume IV of the SMMWW.

Clark County Code Chapter 13.26A – Water Quality

Chapter 13.26A requires inspection and maintenance of all public and private stormwater facilities and Class V injection wells in accordance with the Clark County Stormwater Manual, that provides BMPs for business and public agency activities such as materials handling, landscape management, trash management and building exterior maintenance.

ENFORCEMENT PROCEDURES FOR UN-MAINTAINED PRIVATE STORMWATER FACILITIES

The Clark County Clean Water Division has a written procedure for responding to non-compliant private regulated stormwater facilities.

Environmentally Responsible Purchasing Policy

Clark County adopted its Environmentally Responsible Purchasing Policy in 2004. One element addresses purchase of landscaping and vegetation maintenance products, including pesticides. The policy establishes a set of criteria, any of which will disqualify a pesticide from purchase, and a waiver system, allowing chemicals with no equivalent that is more environmentally friendly to be used within specific limiting guidelines.

ESA Regional Road Maintenance Forum

Clark County Public Works has been a member of the ESA Regional Road Maintenance Forum since 2003. The group assisted the county in developing a regional road maintenance program designed to meet the requirements of the Endangered Species Act (ESA). In 2004, NOAA Fisheries approved the program and determined that it was compliant with the ESA 4(d) rule. The program seeks to protect salmon and steelhead by relying on the extensive use of pre-approved BMPs for routine maintenance activities.

TOOLS

Cartegraph Asset Management System (Cartegraph)

The Cartegraph Asset Management System (Cartegraph) is a database operated by Public Works for tracking infrastructure assets, recording condition, and scheduling inspections and maintenance. Cartegraph was implemented in 2023 and replaced the county's previous Maintenance Management System database in use since 2011. Cartegraph is used to prioritize, schedule and track stormwater infrastructure inspections and maintenance by Public Works crews.

For stormwater facilities and related infrastructure, the inventory in Cartegraph is uploaded directly from *StormwaterClk* (see Inventorying and Mapping the Storm Sewer Infrastructure in Section 2).

INSPECTIONS

Purpose

Clark County inspects both county-owned and regulated non-county stormwater facilities to evaluate condition and function and to determine if maintenance or repairs are warranted. In the case of regulated non-county facilities, follow-up actions include technical support to the BMP owner and, in some cases, enforcement.

Responsibilities Matrix

CCPW CWD Mgr	CCPW CWD Infrastructure Mgr.	CCPW CWD Sr Operations Spec.	CCPW CWD Sr. Eng. Tech	CCPW Construction Mgmt.OA	CCPW Construction Mgmt. Supervisor	CCPW Construction Mgmt. Inspectors	CCPW Ops Road Crews	CCPW Ops Road Supervisor
Α	-	Р	S	0	0	S	0	0
I	I	0	S	S	Α	Р	0	0
I	I	0	S	S	А	Р	0	0
I	I	0	S	0	0	0	Р	Α
	A I	A 1 1 1 1 1	CCPW CV CCPW CV CCPW CV O O O O O O O O O O O O O O O O O O	CCPW CW	CCPW CW	A I P S O O I I O S S A I I O S S A I I O S O O	A I P S O O S I I O S S A P I I O S S A P	A I P S O O S O I I O S S A P O I I O S S A P O I I O S O O O P

Inspect Regulated Facilities

Regulated facilities are treatment and flow control facilities including low impact development BMPs owned and operated by private parties and non-county governmental bodies. Clark County plans to annually inspect 100% of regulated facilities with a permit mandate to inspect at least 80% of regulated facilities connected to the MS4.

County responsibility for inspecting regulated facilities will begin at issuance of the completion of construction letter by CD Development Engineering or the occupancy permit for individual residence projects subject to maintenance requirements. (See Regulatory Program for Development, Redevelopment and Construction Projects in Section 5)

For facilities not in compliance with maintenance standards, the county will follow procedures to compel compliance through follow-up technical assistance and enforcement actions if needed.

Track and Schedule Annual Inspections

Public Works Clean Water Division will use Cartegraph applications on iPad devices to schedule, log and track regulated facility inspections.

Inspection

Inspections will be completed by Public Works Clean Water Division operations specialists. Inspections are also combined with business source control inspections. The inspectors will compare facility condition with maintenance standards from the Clark County Stormwater Manual.



Facility inspection

Contact Owners of Non-Compliant Facilities

If an inspection shows that a facility is out of compliance, the Clean Water Division senior operations specialist will send a mailing to the owner(s) and/or responsible party.

In many cases, a meeting with the owner will be sufficient to identify needed maintenance.

Facility ownership or homeowner association leadership may change. In some cases, no viable homeowner association exists. The Clean Water Division senior operations specialist will research and follow up in these cases.

Follow-Up Technical Assistance

The Clean Water inspectors will assist owners who reply to the initial letter by giving advice on maintenance. The assistance may include phone calls, additional correspondence and site visits. The inspector will facilitate compliance and use professional judgment to set deadlines for compliance activities.

Further Enforcement

If the owner or owners of a non-compliant facility are unresponsive, then the senior operations specialist will refer the case to the code enforcement officer.

The code enforcement officer will use progressive enforcement methods, terminating with a Notice and Order and issuance of fines and liens in cases where the owner refuses to comply.

Alternate Compliance Strategy

The county retains the option of maintaining the facility and billing the owner at any point after an inspection demonstrates that a facility is out of compliance. This is a costly and time-consuming option, so it is generally avoided.

Compliance Tracking

Public Works Clean Water will update facility records with compliance information on a regular basis, including inspection results, contact information and other relevant facility information. Follow-up and enforcement actions will be tracked by the Clean Water Division senior operations specialist and tracked as case files.

Inspect Facilities During Heaviest Home Construction

Clark County will inspect permanent stormwater treatment and flow control facilities, including catch basins, in new residential developments every six months during the period of heaviest construction. The NPDES permit defines the period of heaviest construction as the time until 90 percent of the lots are built-out (see condition S5.C.5.b.vi.d).



Residential development

Maintain Inspection List

Construction Management runs a report from permit tracking software listing the number of lots in the subdivision and the number of lots having active building permits.

Schedule Inspections

The Public Works Construction Management lead inspector will consult the inspection list monthly and schedule project sites requiring inspection for the following month. Any subdivision with less than 90 percent of the lots built out will be scheduled. The Public Works Construction Management lead inspector will schedule six-month inspections for each project using the inspection list.

Inspection

Public Works Construction Management inspectors will inspect project sites using standards from the *Clark County Stormwater Manual*.

Track Inspections

The Public Works Construction Management inspector or office assistant will enter the inspection results into permit tracking software under the DIN (development inspection number). The electronic field inspection form is attached to the DIN case.

Enforcement

The method used to enforce maintenance compliance of a facility found to be out of compliance will depend on its ownership.

When a private facility or catch basin is out of compliance, the standard process for enforcement on a regulated facility will be followed.

When a county-owned facility or catch basin on maintenance warranty is out of compliance, the inspector will refer the issue to the Public Works development inspector assigned to that development project.

When a county-owned facility or catch basin is out of compliance after the warranty period,

the facility will be treated as any other countyowned facility.

Inspect County-Owned Facilities

The Clark County Public Works Construction Management Program annually will inspect at least 95% of county-owned stormwater treatment and flow control facilities. Facilities with known problems may be spot-checked by Public Works Operations and Maintenance after significant storm events in addition to routine inspections.

- For county capital improvement projects, inspection responsibility will transfer to the county at the issuance of the final acceptance letter to the contractor by Public Works Construction Management.
- For facilities constructed as part of a private-sector development project that did not include a warranty period, maintenance responsibility will transfer to the county two years after issuance of the completion of construction letter to the developer. (See Regulatory Program for Development, Redevelopment and Construction Projects in Section 5.)

Inspection

Public Works Construction Management will inspect facilities using standards from the Clark County Stormwater Manual. Crews will note compliance and defects using the same field applications used for regulated facilities.

Tracking

Public Works Construction Management inspection results are collected in Cartegraph using the iPad-based field applications.

Spot Checks

After significant storms, Public Works Road Operations will inspect facilities that have known problems associated with heavy rainfall.

Photo Documentation

The Fee Increase Rate Study will allow Clean Water to complete photo documentation of county stormwater assets.

Inspect Catch Basins

Inspect and Clean Catch Basins
The Clark County Public Works Operations
and Maintenance Program will inspect catch
basins in road right-of-way annually. Each
catch basin is inspected, and those exceeding
sediment depth standards are scheduled for
cleaning.

Catch basins in parks and other county facilities will be inspected and cleaned as part of routine maintenance by Public Works.

Training

The Fee Increase Rate Study will allow Clean Water to fund a more rigorous training program to meet the requirements of perm component S5.C.10.

Outputs

- Cartegraph records of regulated facility inspections
- Updates to six-month inspection list
- Spot checks of public facilities after severe storms
- Catch basin cleaning
- Cartegraph records of public facility inspections
- Asset photo documentation in Cartegraph

COUNTY STORMWATER FACILITY AND CLASS-V INJECTION WELL MAINTENANCE

Purpose

Maintenance of stormwater facilities and stormwater disposal wells ensures that facilities continue to perform their important environmental and drainage functions. Clark County Public Works is responsible for maintenance of most county stormwater infrastructure when it fails to meet a maintenance standard established by permit and county standards.

County responsibility for maintaining countyowned stormwater treatment and flow control facilities will begin at issuance of the final acceptance letter for those constructed as part of a county capital improvement and at the end of the maintenance warranty period for those built as part of a private-sector development project. (See Regulatory Program for Development, Redevelopment and Construction Projects.)

The county does not maintain private stormwater facilities except in emergency situations or when pursuing an alternate compliance strategy for a non-compliant facility, whereby the county maintains the private facility at the owner's expense.

Responsibilities Matrix

Task	CCPW CWD Infrastructure Mgr.	CCPW CWD NPDES Mgr.	CCPW CWD Sr. Eng. Tech	CCPW Road Ops and Parks Supers	CCPW Ops Roads and Parks Crews	Contract Services
Routine Facility Maintenance	I	I	S	А	Р	0
Non-routine Facility Maintenance	С	С	S	А	Р	Р

A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted

Typical Facility Maintenance

Clark County will perform routine maintenance, such as litter removal, mowing and weed control, on swales, ponds, filter strips and LID BMPs that it owns. Typical maintenance is regular activities that maintain a facility's function that can be accomplished primarily with hand tools, lawn mowers and weed whackers, and do not require engineering evaluation or heavy equipment. It does include cleaning sediment traps using vacuum trucks.

The following procedure applies to stormwater facilities maintained by Public Works, such as those in subdivisions and road right-of-way. Maintenance of other county stormwater facilities located in parks and on county campuses is covered in the section pertaining to operation of county lands (below).



Stormwater facility maintenance

Schedule and Prioritize

Most of the typical facility maintenance will occur during the growing season (April to September). The Clark County Public Works water quality crew chief will schedule the work.

Maintenance

Mowing grass, controlling weeds and litter or debris removal are the primary typical

maintenance activities. Other maintenance for defects including sediment accumulation in sediment traps, minor erosion, presence of trees in pond or swale bottoms, etc., is also part of typical maintenance.

Capital Construction Facility Maintenance

Prioritization and Budget

The Clean Water Division and Road Operations will develop an annual work plan for maintaining and repairing facilities that require capital construction under \$25,000 as indicated by inspection results and repair tasks created in Cartegraph.

Individual maintenance projects estimated to cost more than \$25,000 are referred to the Stormwater Capital Program.

The Fee Increase Rate Study will allow Clean Water to improve long term facility repair and replacement.

Inspection Data Review

The Public Works Road Operations
Superintendent and crew chief will schedule
facility maintenance requiring construction in
consultation with the Clean Water Division
Infrastructure Manager.



Filter vault cartridges

Implementation

Maintenance requiring construction is accomplished as resources and weather allow within permit timelines.

Pipe Asset Inspections

The Fee Increase Rate Study will allow Clean Water and Public Works to provide prioritized inspections of previously uninspected pipes. This work will be coordinated with pavement preservation.

Switch to Phosphorus Treatment Cartridges

The Fee Increase Rate Study will allow Clean Water to switch from ZPG cartridges to Phosphosorb cartridges which are easier to use and remove phosphorus for drainages to sensitive water bodies.

Stormwater Pond Sediment Survey

The Fee Increase Rate Study will allow Clean Water to fund a survey to prioritize ponds that need sediment removal to restore pond hydrologic function and sediment trapping capacity.

Permeable Pavement Maintenance

The Fee Increase Rate Study will allow Clean Water and Public Works to increase

maintenance o permeable road surfaces. This will double the amount of sweeping to extend pavement life.

Drywell Maintenance

Public Works Road Operations maintenance crews will maintain drywells (Class V stormwater injection wells) as necessary based on a visual inspection of defects. Drywells in stormwater facilities will be inspected annually as part of routine facility inspections. Drywells in streets and roads will be inspected at the time catch basins are inspected.

Proactive Drywell Inspection and maintenance

The Fee Increase Rate Study will allow Clean Water to perform proactive drywell inspection and maintenance. Currently, work on drywells is triggered by failure such as street flooding.

Outputs

- Stormwater facilities maintained and repaired to meet county standards.
- Permeable pavement maintained more frequently.
- List of projects referred to the capital planning program for repairs greater than \$25,000.
- Database records of facility maintenance work (Cartegraph.

County Property and Roadways

USE OF WATER QUALITY BMPS DURING ROADWAY AND COUNTY PROPERTY OPERATION AND MAINTENANCE

Purpose

Clark County maintains its properties and roadways in a manner that prevents or reduces stormwater impacts.



Stormwater facility with recently planted vegetation

Responsibilities Matrix

Task	CCPW CWD Infrastructure Mgr.	CCPW CWD Permit Mgr.	CCPW CWD Sr. Operations Specialist	CCPW Ops or Parks Mgrs	CCPW Road Ops Super	CCPW Ops Roads Crews	CCPW Parks Super	CCPW Parks Crews	CCPW Land and Noxious Weeds Mgr.	CCPW Noxious Weeds Mgmt. Crews	Internal Services, Facilities Mgr.	Internal Services, Facilities Crews
Annually inspect and maintain catch basins in parks	- 1	1	0	А	0	S	А	Р	0	0	0	О
Annually inspect and maintain catch basins on campuses	I	I	0	I	0	S	А	Р	0	0	Α	0
Road maintenance practices	ı	ı	0	Α	С	Р	0	0	0	0	0	О
Landscape maintenance on campuses	I	I	С	С	0	0	Α	Р	0	0	Α	О
Landscape maintenance in parks	I	I	С	А	0	0	А	Р	0	0	0	0
Noxious weed removal practices	1	I	С	0	0	0	0	S	А	Р	0	0
Exterior building and grounds maintenance	I	I	С	0	0	0	0	S	0	0	А	Р
Training road maintenance crews	1	S	S	А	Р	I	0	0	0	0	0	0
Training parks maintenance crews	1	S	S	А	0	0	Р	I	0	0	0	0
Training weed management crews	I	S	S	0	0	0	0	0	Α	Р	0	0
Training Facilities Maintenance crews	I	S	S	0	0	0	0	0	0	0	Α	Р
Check SWPPPs	I	S	0	Α	0	Р	0	0	0	0	0	0

A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted

Maintain Roadways

Road maintenance and operation will be conducted by the Public Works Road Maintenance and Operations Division.

Clark County will maintain roadways and other traveled surfaces using pollution reduction practices defined by the ESA Regional Road Maintenance Program and in Clark County Stormwater Manual.

In 2025, Public Works will begin planning for permit-mandated sweeping in 2027. Currently, Sweeping is performed on a schedule different than the permit mandated program.

The Fee Increase Rate Study will allow Clean Water to support more frequent street sweeping under an enhanced sweeping plan.

Maintain Pervious Sidewalks

The Fee Increase Rate Study will allow Clean Water to fund pervious sidewalk maintenance.

Specific pollution-reduction activities include:

- Periodic removal of litter from conveyances, such as ditches.
- Catch basin cleaning.
- Sweeping curbed roads in priority areas.

Practices to prevent pollution will be implemented whenever the following maintenance activities are conducted:

- Pipe cleaning
- Culvert cleaning
- Ditch maintenance
- Street cleaning
- Road repair and resurfacing, including pavement grinding
- Snow and ice control
- Utility installation
- Maintaining roadside areas, including vegetation management
- Dust control

- Pavement striping maintenance
- Application of fertilizers, pesticides and herbicides
- Sediment and erosion control
- Landscape maintenance and vegetation disposal
- Trash and pet waste management



Street sweeper with clean water message

Maintain Parks

Parks may contain any or all of the following types of land cover: pavement, landscaped areas, natural areas, structures and stormwater facilities. Parks will be maintained by Public Works Parks and Lands Division.

Clark County will maintain park vegetation and structures according to Clark County
Stormwater Manual, county policies and procedures, and current pesticide application rules. Pesticides will be purchased according to the county's Environmentally Responsible Purchasing Policy. Parks maintenance crew members are trained under the ESA Regional Forum and are state licensed pesticide operators.

Parks crews will inspect catch basins within parks during routine park maintenance and will clean them as needed.

Parks crews will mow and remove litter from stormwater facilities within parks during

routine park maintenance. Public Works Road Maintenance and Operations will provide the balance of the maintenance.

Maintain County Property

County campuses are managed by the Internal Services department Facilities Division.
Facilities personnel maintain pavement and building exteriors; Facilities has an agreement with Public Works Parks and Lands Division for most outdoor vegetation management activities.

Building exteriors are maintained by Internal Services Facilities Division. Facilities will inventory buildings built or renovated from 1950 to 1980 due to concern about PCBs in building materials,



Salmon Creek at Highway 99

Clark County will maintain landscaping and hard surfaces on its campuses according to the *Clark County Stormwater Manual*. Pesticides will be purchased according to the county's Environmentally Responsible Purchasing Policy. Parks maintenance crew members are

trained under the ESA Regional Forum and are state licensed pesticide operators.

Parks crews will inspect and maintain catch basins on county campuses.

Parks crews will mow and remove litter from stormwater facilities on county campuses as needed based on visual inspection.

Clark County implements a Stormwater Pollution Prevention Plan (SWPPP) for each of its heavy equipment and materials storage yards, operated by Public Works. Copies of the SWPPPs are kept at each site. Areas of maintenance facilities covered by the Ecology Sand and Gravel General Permit will operate under that permit.

Control Weeds on County Property

State regulated noxious weed control on county properties is provided by Public Works Parks and Lands Division.

Clark County will control weeds according to current pesticide application rules. Pesticides will be purchased and used according to the county's Environmentally Responsible Purchasing Policy.

Noxious Weed Management field crews are state licensed pesticide operators.

For some areas, such as mitigated wetlands and properties with Legacy Lands designation, Noxious Weed Management will compose a Site-Specific Plan to ensure that compliance with all environmental regulatory requirements, including NPDES permit requirements, will be achieved.

Employee Training

Crews from Public Works Operations and Maintenance and Public Works Parks and

Lands are trained under the ESA Regional Road Maintenance tracks 2 and 3. Track 2 coursework describes the biology of endangered fish and how road and park maintenance activities can harm them; it is generally provided to supervisors and managers. Track 3 provides crew chiefs and crew members with maintenance guidelines and procedures to protect endangered species during maintenance work.

In addition to task specific training, county personnel who as part of their field work may encounter a spill or non-stormwater discharge are trained on how to respond.

Train New Personnel

Clark County Public Works will provide ESA Regional Road Maintenance training using an approved vendor for new or promoted staff, as necessary.

Outputs

- Maintenance of county property using proper BMP manuals
- Employee training
- Stormwater Pollution Prevention Plan at each heavy equipment and storage yard.

TASK CHECKLIST

STATUS	TASK
ONGOING	Spot check facilities with known problems after significant storms
ONGOING	Annually inspect and clean, if needed, county-owned catch basins
ONGOING	Implement established practices to reduce stormwater impacts
	from property and landscape maintenance activities
COMPLETED	Document practices to reduce stormwater impacts from property
	and landscape maintenance activities for county property
ONGOING	Employee training
ONGOING	Update SWPPPs for county equipment yards
ONGOING	Adopt and implement maintenance standards equivalent to the
	SMMWW
ONGOING	Require maintenance of regulated facilities to the SMWW
July 1, 2027	Begin mandated road sweeping in curbed priority areas
ONGOING	Implement program to annually inspect all regulated facilities
ONGOING	Inspect all new facilities in new residential developments every 6
	months during the period of heaviest construction
ONGOING	Inspect all county-owned facilities annually

For more information on county operation and maintenance of the MS4:

Jeff Schnabel, Clean Water Division Infrastructure Manager 564-397-4583 Jeff.Schnabel@clark.wa.gov

Section 4 – Detecting and Reducing Pollutants and Contamination

Contaminants may enter the MS4 through improper connections and through discharge of contaminants from sites with private storm systems that are connected to the MS4. Eliminating illicit connections and discharges of contaminants is an important part of the county's Stormwater Management Program.

Improper non-stormwater connections may be discovered through routine screening of the system, site inspections or by complaint. When an improper connection is discovered, removal and disconnection is a high priority.

Regular and wide-spread inspections of business and multi-family sites helps ensure that sites are properly managing potential contaminants, maintaining catch basins and conveyance systems, and preventing non-stormwater discharges into their private systems that discharge to the MS4. Along with meeting NPDES permit requirements, the program also addresses sources that do not discharge to the Permit-regulated MS4, including discharges to Class V injection wells, non-county storm drains and other conveyances to surface water and groundwater.

Source Control Program

REGULATORY REQUIREMENTS SUMMARY

NPDES Permit S5.C.8 – Source Control Program for Existing Development The NPDES permit requires the county to reduce pollutants in runoff from areas that discharge to the MS4 by applying operational, structural source control and treatment Best Management Practices (BMPs); enforcing proper BMPs on commercial, industrial and multifamily properties; enforcing water quality ordinances; and reducing pollutants from pesticides, herbicides and fertilizers entering the MS4.

COUNTY POLICIES. RULES AND REGULATIONS

Clark County Code Chapter 40.386 – Stormwater and Erosion Control <u>Chapter 40.386</u> adopts the *Clark County Stormwater Manual* as the technical manual for meeting the Minimum Requirements of the Permit, including Minimum Requirement 3, Pollution Source Controls.

Clark County Code Chapter 13.26A – Water Quality Clark County prohibits non-stormwater discharges to the MS4 and regulates the discharge of contaminants to surface water, stormwater and groundwater to protect the county's surface and groundwater quality. The code and stormwater manual provide requirements for reducing and controlling the discharge of contaminants by requiring all sites and activities to utilize source control Best Management Practices (BMPs) to control release of contaminants.

Chapter 13.26A adopts the *Clark County Stormwater Manual* that provides BMPs for materials handling, landscape management, trash management and building exterior maintenance.

Clark County Stormwater Manual

The Clark County Stormwater Manual contains technical requirements for meeting Minimum Requirement #3, Source Control of Pollution under county code Chapter 40.386 for development projects The manual also applies to existing land uses under Chapter 13.26A.



Sunset reflecting off the water at Vancouver Lake

INVENTORY POTENTIAL POLLUTANT GENERATING SITES

Purpose

The Potential Pollutant Generating Site inventory helps target education and enforcement of source control requirements on commercial, industrial and multifamily sites. The site inventory also meets a requirement of the NPDES permit.

Responsibilities Matrix

Task	CCPW CWD Source Control Specialist	GIS	CCPW CWD NPDES Mgr.		
Update inventory of sites	S	Р	Α		
A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted					

Inventory Maintenance

The Clean Water Division uses several sources to identify commercial, industrial and multifamily sites in the county that have impervious surfaces.

The database is derived from the Clark County Assessor personal property tax database and fire marshal inspection data. As inspections progress to include most permanent business sites, the site information such as contact information updated based on site-specific information. The inventory will be updated once during the permit term.

Outputs

 \bullet Inventory of business and multifamily sites

SOURCE CONTROL AT BUSINESS AND MULTIFAMILY SITES

Purpose

Clark County inspects business sites and many multifamily sites for compliance with source control requirements to ensure pollutants are not discharged to the MS4 or groundwater via Class V stormwater infiltration wells.



Typical residential catch basin

Responsibilities Matrix

Task	CCPW CWD Mgr.	CCPW CWD Source Control Specialist	CCCD Code Enforcement Officer	CCPW CWD Outreach Specialist Sr.	CCPW CWD OA
Site selection	Α	Р	0	0	0
Inspection / education	Α	Р	S	S	0
Follow-up for compliance	Α	Р	S	0	0
Referral	Α	Р	S	0	0
Recordkeeping	А	Р	S	0	Р

A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted

Site Selection

Each year, a group of sites are selected for inspection based on land use risk and results from past inspections.

Inspection and Education

Inspections are conducted by qualified county staff. Clean Water Division source control specialists inspect sites.



Grease trap in need of maintenance

At each business site, county staff will approach the owner, manager, or other employees to obtain access to the storm system on the site and to ask questions about source control practices, drainage plumbing, materials storage, and, if relevant, structural source control BMPs.

Staff will note inspection findings using the ipad field form and enter results into the Pollution Prevention Assistance database in Secure Access Washington (SAW).

During the visit, county staff will provide education and technical assistance as judged necessary or beneficial. Education or assistance could include brochures, BMP handouts, general information on stormwater pollution topics, information about managing hazardous materials, and referrals to a maintenance company for catch basin cleaning.

Follow-up Actions for Compliance

If a business is not in compliance, the source control specialist will work with the manager or owner to reach compliance. Follow-up actions may include phone calls, additional site visits and letters. County staff may give additional technical assistance such as locating engineering drawings, providing handouts from the Clark County Stormwater Manual or Ecology and recommending new source control BMPs.

The source control specialist will set deadlines as necessary for compliance actions (e.g. cleaning catch basins).

Follow-up actions will also be recorded using the iPad field form.

Catch Basin Cleaning Assistance

In late 2018, a new program was implemented to provide catch basin cleaning services for a rate that is currently about \$50 per catch basin. Out of compliance businesses are referred to the county webpage where businesses can register for the service. The contractor then performs the catch basin cleaning, properly disposes of waste material and invoices the business and provides a manifest of proper waste disposal. Mailers were sent to all business sites draining to the county storm sewer system.

Referral

If necessary to gain compliance, the source control specialist will refer the case to another agency such as Clark County Public Health, Ecology or the Clark Regional Wastewater District. The source control specialist will continue to follow the case to conclusion.

Further Enforcement Actions

Further enforcement will be provided by the Community Development Code Enforcement Division or by referral to Ecology in cases of continued inaction.

Recordkeeping

Information status is stored in a database linked to the iPad Survey 123 and Collector applications. Non-stormwater discharges are logged in the county IDDE database and site visit information is logged in the state SAW database under the Pollution Prevention Assistance program. The SAW PPA database is used to create a report to include in the permit annual report.

Training

All county employees who conduct field work need to be aware of spill response procedures and protocols. A training program is established using the county's Workday online training program. Field personnel from multiple departments will be required to complete the training annually to ensure they are familiar with illicit discharge, illicit connections, use of spill kits, and what to look for in the field.

Outputs

- Records of inspections and follow-up cases
- Report of numbers of inspections and referrals
- Case files



A typical spill kit

WATER QUALITY COMPLAINT INVESTIGATIONS

Purpose

Clark County investigates all legitimate complaints about water quality problems to reduce contamination of stormwater, surface water and groundwater as well as to comply with its NPDES Permit

Responsibilities Matrix

Task	CCPW CWD Mgr.	CCPW CWD Source Control Specialist	CCPW CWD OA	CCPW CWD Natural Res. Specialist	CCCD Code Enforcement Officer	
Open case	Α	Р	0	0	S	
Investigation	А	Р	0	S	S	
Education and compliance	А	Р	0	0	S	
Recordkeeping	Α	Р	S	S	S	
A = Accountable, P = Primary (doe	A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted					

Open Case

Water quality complaints may arrive in a variety of ways, including the 24-hour water quality complaint line, referral from other agencies, referrals from Community Development Code Enforcement Officers, email to the Clean Water Division general address, and phone calls to the Clean Water Division. Complaints may be made by the general public or agency staff.

Complaints will be referred or forwarded to the Public Works Clean Water Division source control specialist.

Investigation

The source control specialist will investigate every legitimate complaint beginning with a phone call and site visit.

The source control specialist will fill out the information in the IDDE database. and begin a case file id appropriate.

Education and Compliance

If a water quality or source control violation is found, the source control specialist will work with the property owner or property manager on compliance or refer the case to another agency. The source control specialist generally follows the procedures for source control follow-up (above), and, if necessary, further enforcement actions.

Recordkeeping

A Public Works Clean Water Division source control specialist will enter the data into the IDDE tracking database and maintain a case

Outputs

- Records of complaints, investigations and follow-up
- Case files

Training

Clean Water Division personnel have been performing source control inspections,

technical assistance and enforcement since 2000. When applicable, new staff will be trained on enforcing the Water Quality Ordinance, including legal basis, BMPs, inspection procedures, enforcement process and recordkeeping. When changes to manuals or procedures are made, all appropriate staff will be trained.

TASK CHECKLIST

STATUS	TASK
ONGOING	Source control inspections and enforcement
ONGOING	Staff training for source control
ONGOING	Update inventory of pollution-generating sites
ONGOING	Inspect sites, enforce and respond to complaints
Completed	Update county municipal code per permit requirements
Completed	Update county stormwater manual per permit requirements

For more information on the Source Control program:

Rod Swanson, Clean Water Division NPDES Permit Manager 564-397-4581 Rod.Swanson@clark.wa.gov

Illicit Connections and Illicit Discharges Detection and Elimination (IDDE)

REGULATORY REQUIREMENTS SUMMARY

NPDES Permit S5.C.9 – Illicit Connections and Illicit Discharges Detection and Elimination (IDDE) The NPDES permit requires the county to have a program to detect, remove and prevent illicit connections and illicit discharges, including spills, into the MS4. Illicit connections are man-made conveyances connected to the MS4 without a permit, such as sanitary sewers and floor drains that can carry materials other than stormwater. Illicit discharges are discharges to the MS4 not composed entirely of storm water, except where allowed by a state waste discharge permit.

The Permit designates timelines for beginning an investigation of a suspected illicit connection and for terminating a confirmed illicit connection.

Revised Code of Washington Chapter 90.48 – State Water Pollution Control Act The State Water Pollution Control Act prohibits the discharge of contaminants to waters of the state.

COUNTY POLICIES, RULES AND REGULATIONS

Clark County Code Chapter 13.26A - Water Quality Chapter 13.26A prohibits the discharge of contaminants into surface water, stormwater or groundwater, and it defines contaminants and illicit connections. It gives inspection and enforcement authority to authorized representatives of the County Manager to enforce that chapter.

Clark County Code Chapter 13.10 - Use of Sewer

Chapter 13.10 requires the use of sewers to dispose of liquid wastes and water carrying waste materials.

Clark County NPDES Illicit Discharge Detection and Elimination Screening Quality Assurance Project Plan The Project Plan addresses project design, schedule, methods of data collection and management, quality assurance and control requirements, data analysis, thresholds for further investigation, and reporting for the county's program to screen the MS4 for illicit connections.

ILLICIT DISCHARGE AND CONNECTION SCREENING

Purpose

Screening for evidence of illicit discharges and connections helps county staff identify outfalls or points in the MS4 that appear to convey something other than stormwater, as well as meeting Permit requirements for ongoing screening.

Responsibilities Matrix

responsibilities Matrix					
Task	CCPW CWD Mgr.	CCPW CWD NPDES Mgr.	CCPW CWD Natural Res, Specialist		
Screening area selection	Α	S	Р		
Outfall selection	Α	I	Р		
Site visits / screening	А	I	Р		
Sampling / evaluation	A	I	Р		
Recordkeeping	A	I	Р		
A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted					

Ongoing Work

Clark County carries out an extensive screening program and has screened the entire urban area and several rural subwatersheds at least once.

Public Works Clean Water Division natural resource specialists will continue effectiveness monitoring on illicit connections discovered during previous field screening operations (see Illicit Connection and Discharge Response and Removal). In addition, a natural resource specialist or source control specialist will respond to any complaints and referrals.

Source control inspections are an important element of illicit discharge detection (see Source Control Program).

Screening Site Selection

In 2025, a Clean Water Division natural resource specialist will select subwatersheds for screening based on professional judgment.

Rural ditch sites are selected to ultimately screen all roadside ditch conveyance systems.

Outfall Selection and Scheduling

A Clean Water Division natural resource specialist will use the county stormwater infrastructure inventory GIS database, *StormwaterClk*, to locate and map all outfalls within chosen screening area. Staff will schedule site visits using this information.

Site Visits

During the summer season, a natural resource specialist will screen outfalls for indicators of illicit connections, such as flow or deposits.

Rural ditch conveyance systems are screened for possible non-stormwater discharges from businesses and farms. Screening is performed through a windshield survey using a driver and an observer concurrently with ditch and outfall mapping efforts (see Other Permit-required Mapping/Inventory in Section 2)

Potential illicit discharges are documented by the observer and referred to the source control specialist to schedule a site visit.

Sampling and Evaluation

The natural resource specialist will take samples at flowing outfalls, use field tests and send them for laboratory analysis, and then evaluate the results using defined protocols to determine if an investigation is warranted. In cases where an investigation is warranted, the discharge is called a suspected illicit discharge or connection.

Investigations and follow-ups are part of the Illicit Connections and Discharge Response program (below).

Recordkeeping

The natural resource specialist will track all information regarding screening, illicit connection investigations and response to illicit discharges if applicable, in the IDDE

screening iPad application. Database fields are based on those described in the 2024 permit Appendix 14.

Reporting

Each year, the natural resource specialist will complete a report describing the year's work from planning through removal of any discovered illicit connections or discharges, including those discovered by source control inspections. The report will be stored in the project folders by year.

In addition, database information is reported to Ecology in the annual report.



Stormwater outfall

Awareness Training

A training program was established using the county's Workday training online program. Field personnel from multiple departments will be required to complete the training annually to ensure they are familiar with illicit discharge, illicit connections, use of spill kits, and what to look for in the field.

Outputs

- Records in the IDDE screening database
- Annual written summary of screening activities, investigations and results
- Report of data from the Permit Appendix 14 database
- Laboratory data and field measurements entered in the Water Quality Database

ILLICIT CONNECTION AND DISCHARGE RESPONSE AND REMOVAL

Purpose

Clark County responds to all suspected illicit discharges and connections to the MS4 that it identifies through screening or other methods. Response is designed to eliminate the source of the discharge or the connection.

Responsibilities Matrix

Task	CCPW CWD NPDES Mgr.	CCPW CWD Natural Res. Specialist	CCPW CWD Source Control Specialist	Public Health	CRWWD	Ecology
Open case	Α	1	Р	0	0	0
Investigation	Α	S	Р	S	S	S
Follow-up / removal	А	I	Р	S	S	S
Continued follow-up	Α	S	Р	S	S	S
Recordkeeping	Α	Р	S	0	0	0
A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted						

Suspected Illicit Connection and Discharge Response

The CCPW Clean Water Division and Public Works Operations Division will receive and respond to reports of suspected illicit discharges; however, some illicit connections or discharges due to on-site sewage treatment systems are discovered and terminated by Clark County Public Health. The process described here is that used by the Clean Water Division and Public Works.

Notify Ecology

The county immediately will notify Ecology if an illicit discharge or connection poses a threat to human health or the environment.

Open Case

The process begins with notification about a suspected illicit discharge or connection through referral from illicit detection screening (above), discovery through source control inspections (above), or complaint.

The source control specialist will open a case file.

Investigation

Within 21 days, the Clean Water Division source control specialist and a natural resource specialist will attempt to trace a suspected illicit discharge or connection back to its source to identify the problem. If tracing back to the source is not possible, they may elect to follow other protocols established in the IDDE Project Plan

The source control specialist will confirm the presence or absence of the suspected illicit discharge or connection based on the findings, and, when possible, will specify the source.

Follow-up and Removal

For confirmed illicit discharges or connections, the source control specialist will work with the property owner and, if necessary, other county departments or agencies to eliminate the illicit connection. If relevant, Clark Regional Wastewater District, Public Health, cities, or the Department of Ecology may be requested to assist in areas where they have responsibility.

Addressing illicit discharges will follow standard source control procedures for follow-up actions (e.g. personal contacts) and further enforcement by a Code Enforcement Officer, if necessary.

Removal of illicit connections will be completed within six months of confirmation of an illicit connection through field verification.

Continued Follow-up

Following the IDDE Project Plan, questionable outfalls require continued follow up, which may include effectiveness monitoring at sites where illicit connections or discharges were found, repeat screening where low levels of pollutants were found, or additional visits by the source

control specialist to verify that actions leading to an illicit discharge have ceased.



Culvert under a field road

Recordkeeping

The source control specialist will inform the natural resource specialist of the results of the follow-up actions involving illicit discharge or connection abatement. The natural resource specialist will enter information into the IDDE screening database.

If the case is a suspected illicit connection, the date it was first discovered or reported will be used to track the requirement to initiate an investigation with 21 days.

After the illicit connection is confirmed, the requirement to terminate the connection within six-months will apply. If the suspected connection was identified through field observation, source control inspection, or complaint, the discovery date is the date the

observation or complaint was made. If the suspected connection was identified through laboratory analysis, the discovery date is the date of the official laboratory report. Discovery dates will be recorded and tracked in the IDDE database. A record is kept for every illicit connection referred to Ecology as a severe

threat to human health or the environment. These are entered into the IDDE database.

Outputs

- Removal of illicit connections and reduction of illicit discharges to the MS4.
- Entries in the IDDE database.

SPILL RESPONSE

Clark County responds to spills on surfaces, such as roadways, that discharge to the MS4, surface water or groundwater, and to improper dumping into the MS4.

Purpose

The purpose is to reduce and prevent contamination of surface water, groundwater and stormwater.

Responsibilities Matrix

Task	CCPW Ops Admin.	CCPW Ops Crew Chief	CCPW Ops Road Crews	CCPW Operations OA	
Open case	1	Α	1	Р	
Spill response / clean-up	1	Α	Р	0	
Notify Ecology	Α	Р	S	Р	
Recordkeeping	А	Р	С	S	
A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted					

Notification

Spill notification can arrive in a variety of ways, including detection by Public Works
Operations and Maintenance roads crews,
Ecology ERS reports or citizen complaint to
Clark County or Ecology.

Clark County staff receiving notification of a spill will immediately notify Public Works Operations and Maintenance dispatch. Public Works Operation and Maintenance staff will then notify the Clean Water Division senior operations specialist. For spills responded to by Public Works crews, the Crew Chief will call Ecology's spill response team in the Vancouver Field office, if necessary. The Clean Water Division senior operations specialist will also be responsible for ensuring spills are reported to Ecology's 24-hour spill reporting number.

County personnel also will immediately refer significant spills to Department of Ecology

Response

Spill reports received by Public Works generate a Cartegraph service request, the appropriate crew responds to work order and, if necessary, they call Ecology or notify the Clean Water Division senior operations specialist who will report the spill to Ecology. For urgent complaints arriving after hours via telephone, the answering service will page the Public Works Operations and Maintenance oncall crew chief, who will determine the level of response following established Public Works guidelines.

Recordkeeping

Records of spill incidents and responses will be kept in the Public Works customer service database. If there is a discharge is to the MS4, the Clean Water Division senior operations specialist responds, the spill will be recorded in the IDDE database. The Public Works phone operator enters the phoned-in spill report into the tracking system. The crew chief enters all follow-up information and closes out the work order.

Outputs

- Spill clean-up
- Records of incidents responses

WATER QUALITY PROBLEM REPORTING

Purpose

Clark County advertises Ecology's spill response hotline as a water quality complaint line. The line gives citizens an opportunity to report spills, dumping and other water quality concerns at any time. The Clark County webpage also includes a web-form to report a spill or environmental problem in the home page "How do I" tab. The webpage includes contacts for non-emergency concerns and has phone numbers for reporting at: clark.wa.gov/public-works/report-stormwater-erosion-or-drainage-concerns.

Responsibilities Matrix

Task	CCPW Ops Admin.	CCPW Ops OA	CCPW Answering Service	CWD Code Enforcement Officer	Public Health	CCPW CWD Source Control Specialist
Take calls during business hours	Α	Р	0	Р	Р	Р
Take calls after hours	Α	I	Р	0	0	0
Receive web comment form via email	Α	Р	I	0	0	Р
Referral	Α	Р	Р	Р	Р	Р
Log calls in database	Α	Р	0	Р	0	Р
Log calls in database A P O P O P A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted						

Complaint and Referral

Complaints arriving on the Public Works 24-hour line are logged to the Public Works customer service database by Public Works office assistants. Incidents are generally routed to the Public Works source control specialist or Department of Ecology, depending upon the nature of the incident.

Web form comments, at the site noted above, are sent via email to the Clean Water Division who directs the report to the appropriate response staff as per phone call protocols.

Water quality complaints are also received by other agencies or county departments including Ecology, Clark County Code Enforcement and Clark County Public Health.

Response to complaints is described under Water Quality Complaint Investigation.

Outputs

- Report of number of calls and emails to the general customer service line.
- Water quality complaint response report records in the IDDE database.

TASK CHECKLIST

STATUS	TASK
ONGOING	Continue implementing on-going program to prevent, identify and respond to illicit connections and illicit discharges
ONGOING	Screen an annual average of 12% of MS4
ONGOING	Procedures for addressing pollutants entering MS4 from interconnected MS4s
ONGOING	Staff training
ONGOING	Implement procedures to respond to spills
ONGOING	Operate a water quality citizen complaint line

For more information on the program to detect and eliminate illicit connections and discharges to the MS4:

Rod Swanson, Clean Water Division NPDES Permit Manager 564-397-4581 Rod.Swanson@clark.wa.gov

Section 5 - Expanding and Improving the Stormwater Management Infrastructure

As county population and development increase, the primary means of controlling runoff from areas of new growth and for fixing problems caused by uncontrolled runoff from existing developed areas is by expanding and improving the existing stormwater management infrastructure.

In Clark County, stormwater management infrastructure is expanded in two ways:

County Stormwater Capital Improvement Projects

The county has a program to plan and construct new stormwater infrastructure and improve existing infrastructure to better control and treat runoff from areas where existing development does not include adequate stormwater controls. This addresses the permit requirement to mitigate for stormwater impacts from existing development.

Regulation of Development, Redevelopment and Construction Projects

As private entities and government agencies develop land, the county regulates the design and construction of stormwater controls constructed. Many of these eventually become part of the county's own stormwater infrastructure.

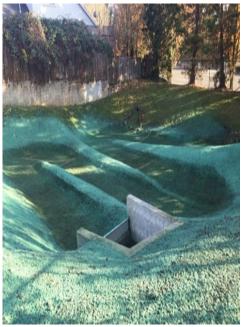
The process for each of these types of projects is described in this section.



Roadway flooding during winter storm, 2007

County Stormwater Capital Improvements

Past stormwater management and drainage practices and development regulations have proven inadequate to prevent impacts of runoff on surface water, and thousands of developed acres in Clark County contribute to problems in streams, lakes and rivers. Accordingly, the county has a program to construct stormwater capital improvements primarily to control and treat stormwater from areas of existing development with inadequate stormwater controls. In addition, the county may take opportunities to expand the treatment and flow control capacity of existing facilities when making repairs. These activities all are part of the county's stormwater capital improvement program.



Recently reseeded stormwater facility biofiltration swale

REGULATORY REQUIREMENTS SUMMARY

NPDES Permit – S5.C.7. Stormwater Management for Existing Development (Formerly Structural Stormwater Controls)

The NPDES permit requires the county to implement a program to reduce impacts to waters of the state caused by discharges from existing development. The program considers projects including new flow control facilities, new water quality treatment facilities, retrofits of existing facilities, property acquisition, and facility maintenance capital construction having costs greater than \$25,000. Other means to reduce impacts are also considered, including riparian habitat acquisition, restoration of forest in upland areas and in riparian buffers, and floodplain reconnection projects. Small-scale projects that are not planned in advance may also be included in meeting this requirement.

Clark County must include a list of planned individual projects updated in each annual report to Ecology.

In 2025, Public Works Clean Water Division will update its stormwater capital plan for the 20265 to 2031 period.

The description of the structural stormwater control program in the SWMP must include the program's goals and the planning process, including budget and public involvement, and a table describing the capital projects.

The Stormwater Capital Plan includes a table and detailed program description and can be found at: clark.wa.gov/public-works/clean-water-projects

Chapter 173-218 WAC – Underground Injection Control (UIC) Program

Pursuant to Chapter 90.48 RCW, the state's requirements for stormwater infiltration wells may result in capital improvements associated with county systems that are found to pose a threat to groundwater.

COUNTY POLICIES, RULES AND REGULATIONS

The Clean Water Division has the following policies for county stormwater capital improvements:

 Meet NPDES Permit requirements for the structural stormwater control program through stormwater capital planning and capital construction.

County goals for stormwater capital improvements include:

- Protect and enhance streams and wetlands in Clark County through planning and constructing modifications to the stormwater infrastructure.
- Minimize the degradation of receiving waters caused by stormwater runoff in urban areas.
- Maximize public benefits of county-owned land by providing multiple uses, including recreation, and by leveraging funding from multiple sources.

GUIDING PRINCIPLES

In support of county policies and goals, the capital planning process strives to:

- Prioritize projects with the greatest potential to support multiple county programs and goals, including local and regional fish recovery, habitat enhancement, and pollution prevention goals.
- Ensure a reliable scientific and engineering basis for projects.
- Establish that each project in the plan is needed, feasible and cost-effective.
- Focus limited resources on cost-beneficial solutions to the most pressing concerns.
- Incorporate environmental benefits into needed infrastructure repair projects.
- Maintain a list of potential projects to take advantage of funding opportunities.

As-Built Plan Preparation

Clark County Public Works follows a management practice for the production of record drawings at the final acceptance of a public capital project.

STORMWATER CAPITAL PLANNING

Clean Water plans to lead a process in 2025 to develop the next 6-year stormwater capital program covering 2026-2031.

Purpose

Planning ensures that stormwater capital improvements meet the county's goals.

Capital planning is a process for identifying potential projects, deciding if they are feasible, selecting the best for further development, and tracking their progress from inception through construction. The stormwater capital plan will list projects scheduled for implementation on a six-year horizon.

 The proposed projects are considered to comply with requirements under Permit Condition S5.C.7.

- Projects reflect what Clark County is best able to implement within its available funding and demands for projects.
- Projects address stormwater impacts not adequately controlled by other permitrequired actions, chiefly those caused by uncontrolled or untreated runoff from existing development, and habitat degradation that has already occurred.

By complying with permit condition S5.C.7, together with all other permit requirements, Clark County complies with MEP and AKART as set forth in the county's NPDES Municipal Stormwater Permit condition S4.D.

REPAIR AND REPLACEMENT OF AGING PIPE SYSTEMS

The Fee Increase Rate Study will allow Clean Water and Public Works to begin systematically addressing repair, refurbishment and replacement of aging county stormwater pipes. The goal is to begin replacing one percent of the pipes each year, beginning in 2028.

ENHANCED CAPITAL PLANNING FROM RATE INCREASE EXPAND

The Fee Increase Rate Study will allow Clean Water to expand implementation of capital projects to improve water quality, in excess of projects needed to meet Phase 1 stormwater permit requirements. It will allow Clark County to Implement watershed projects to support lake management initiatives.

NEIGHBORHOOD DRAINAGE PROJECTS

The Fee Increase Rate Study will allow Clean Water to expand implementation of capital

projects to begin planning and design of largescale neighborhood drainage improvements and flood reduction projects

LARGE COLLABORATIVE PROJECTS

The Fee Increase Rate Study will allow Clean Water to expand implementation of capital projects that leverage other county projects for road and park improvements.

WATERSHED AND NATURE-BASED CAPITAL PROJEXCTS

The Fee Increase Rate Study will allow Clean Water to increase delivery of nature-based planning such as wetland, flood planning and reforestation projects. It will also lead canopy restoration and coordinate with Legacy Lands.

DEVELOP A 20-YEAR CAPITAL PLAN

The Fee Increase Rate Study will allow Clean Water to develop a 20-Year Capital Plan. The plan will ensure county access to REET II funds and support overall capital planning.

Lessons from the 2013 permit stormwater planning effort

Clark County applied lessons learned from its 2013 permit work on the Whipple Creek watershed-scale plan to inform its stormwater capital planning program. A key finding was that it is infeasible to restore forested stream hydrology in basins where LID is infeasible. This led to a subwatershed-scale review of Vancouver UGA subwatersheds to identify areas where detention retrofit projects should be avoided.

Responsibilities Matrix

Task	CCPW CWD Infrastructure Mgr.	CCPW CWD Eng.	CCPW Eng. Program Mgr.	CCPW Eng. Program Staff	Council	CCPW Director
Accept referrals	A/P	P/S	0	0	0	0
ID potential projects	A/P	P/S	0	S	0	0
Database entry & updates	A/P	P/S	0	0	0	0
List of potential projects	A/P	P/S	I	С	0	0
Formulate selection criteria	Α	Р	I	S	С	С
Apply selection criteria	A/P	P/S	С	S	0	С
Scoping and Selection	A/P	P/S	0	S	0	I
Six-year capital plan	A/P	S	С	S	С	С
A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted						

Referrals

Project ideas may be referred to the Clean Water Division from several sources, including field work completed by the Assessment and Monitoring Section, CWD engineer review of watershed plans • and water quality reports, problems identified by Road Operations crews and projects suggested by the public.

Referrals can arrive throughout the year.

Project Tracking / Capital Planning Database

CWD infrastructure manager will enter potential capital projects selected for further consideration into the Capital Planning Database as they are evaluated.

The database tracks stormwater capital projects from inception to construction and close-out, or their status as shelved or dropped, including the following attributes:

- Project category/type.
- Description and basis of the project and the problem being addressed.

- Estimated project benefits including flow control, pollutant load reduction, habitat enhancements and other environmental benefits.
- Status of preliminary engineering and construction.
- Funding summary.
- Types of potential environmental impacts, including wetland, priority habitat, cultural resource, floodplain impacts, etc.

As projects advance and more information is developed, CWD infrastructure manager will update the database with new details on a regular basis.

Project Identification

Stormwater capital projects typically originate from systematic capital planning efforts, routine stormwater facility inspections, observations by maintenance crews, or evaluation of underground injection control wells.

Clean Water completed significant county-wide project identification and screening efforts between 2006 and 2011 under the Stormwater

Needs Assessment Program (SNAP). The program identified many potential project opportunities, which formed the basis for much of the stormwater capital plan through 2018. During that time, most priority opportunities identified through the SNAP have either been constructed or were found to be infeasible. The remaining potentially viable projects from the SNAP effort are being re-evaluated in light of updated priorities during sub-basin retrofit studies.

Urban area sub-basin retrofit studies follow up on earlier stream assessments, refining county efforts to plan and build stormwater controls that meet permit requirements and reduce pollutant discharges to receiving waters. The process for sub-basin retrofit studies was developed in 2018 and first applied to Cougar and Suds Creeks in the Salmon Creek watershed. Additional studies in the Tenny Creek and 114th Street Tributary sub-basins in the Salmon Creek watershed were completed in 2022. The LaLonde Creek sub-basin was studied in 2024, and additional high-priority drainages will be evaluated beginning in 2025 or 2026 as needs and resources dictate.

Studies identify an array of projects that will improve stream conditions, applying consistent objectives and specific project types tailored to practical goals for each sub-basin. The process incorporates information from multiple county capital efforts and is intended to promote collaboration between county programs. The studies apply a series of tools to identify projects, including making a series of project area maps depicting existing conditions and needs, long-plot maps of high traffic roadway corridors, stormwater outfall verification, review of underutilized and county lands, headwater wetland project assessment, right-of-way retrofitting assessment, and channel/floodplain restoration project assessment.

Results are managed in a series of project maps and spreadsheets. Highly rated projects are promoted to the Capital Planning Database for possible inclusion in the Stormwater Capital Plan.

A Project Identification Worksheet is first compiled, identifying purpose and level of need (1-5) for each identified project and performing a preliminary high-level verification. The end result is a list of all identified projects shown in three categories: viable; needs more information or rejected.

Project Verification

Viable projects from the identification spreadsheet are run through a more detailed verification process in a second spreadsheet called the Project Verification Worksheet.

The primary verification checks are based on detailed Technical Information Report maps automatically generated for each project. These maps inform project verification with current information and also identify whether additional field visits are necessary to perform verification. The end result is a list of projects shown in three categories: verified, additional field information needed or rejected.

Verified projects with a need level of 1, 2, or 3 are carried over into the database for consideration in the Stormwater Capital Plan.

Programming Projects

Programming applies regulatory requirements and available funding to the list of scoped projects to develop a six-year program matrix that can meet Permit requirements and program goals. Permit requirements for SMED are stated in the 2024 permit as a number of "SMED Program Points"

Funding

The anticipated budget for the 2025-2030 plan is approximately \$17.9 million. Completion of these projects is dependent on funding through the Clean Water Fee, Road Fund, Clark County Conservation Futures Fund and grants.

Outputs

- Database entries of potential and scoped projects and detailed project attributes for consideration in subsequent years.
- Submittal of NPDES permit report Appendix 12.

- Meet permit required SMED points by March 2028.
- Stormwater Capital Plan with funding allocation
 - Enhanced water quality project planning beyond permit requirements
 - Neighborhood drainage projects in Plan
 - Large Collaborative projects
 - Nature-based projects
 - Plan to replace aging pipes
 - 20-year capital plan



Construction of the Thomas Wetland East Stormwater Facility

CAPITAL PROJECT CONSTRUCTION PROGRAM

Purpose

The construction program is the engine for designing, permitting and building stormwater capital projects. The Public Works Engineering and Construction Division leads the effort through established project management systems.

The Public Works Engineering and Construction Division designs and oversees construction of all types of capital improvement projects, including county stormwater projects. Their services include project management, survey, property acquisition, engineering and construction management.

The program is responsible for the advancement of most stormwater capital projects from the Stormwater Capital Plan to construction. The responsibilities and procedures for this program are briefly reviewed below.

Responsibilities Matrix

Task	CCPW CWD Infrastructure Mgr.	CCPW CWD Eng.	CCPW Enhance, and Permitting Mgr.	CCPW Env. Permitting Mgr.	CCPW Eng. Program Mgr.	CCPW Eng. Project Mgmt. Mgr.	CCPW Eng. Project Mgr.	CCPW Eng. Program Design	CCPW Eng. Construction Mgmt. Supervisor.	CCPW Eng. Construction Mgmt. Inspectors	CCPW Outreach Specialist Sr.
Assign Project Team	1	1	S	S	Α	Р	S	S	S	S	0
Schedule and Budget	S	S	S	S	А	С	Р	S	S	S	1
Preliminary Engineering	С	0	0	0	Α	S	S	Р	0	0	0
Permitting	С	0	А	Р	I	0	1	С	С	0	0
Construction Management	С	- 1	1	С	I	S	S	С	Α	Р	0
Public Outreach	С	0	1	1	I	S	1	0	0	0	A/P
Project Close Out	I	S	I	С	Α	I	Р	С	С	С	I
Update Capital Planning Database	A/P	S	0	0	0	0	0	0	0	0	0
A = Accountable, P = Primary	A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted										

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Team, Schedule and Budget

The Project Management section manager will assign a team of professionals, led by a project manager.

The project manager, with the help of the team, will develop a detailed scope, schedule and budget for his/her assigned projects. The project manager will monitor each item closely throughout the life of each project.

Preliminary Engineering and Environmental Permitting

Public Works engineers will create engineering plans, design specifications and cost estimates for each project in the plan. Public Works Permitting Coordinators will guide each project through local, state and federal permitting processes.

As projects near engineering design completion, the Engineering Program manager, in consultation with the Clean Water Infrastructure manager, will make the final decision to advance selected projects to construction.



Encore stormwater facility retrofit

Bid

The project manager will coordinate with the Clean Water Division Infrastructure Manager and the team to prepare and execute a project bid schedule.

Construction Management

The Public Works Engineering and Construction Division Construction Management team will review bids and prepare an award recommendation for the Clark County Council. Once the contract is awarded, Construction Management will administer it and oversee construction.

As a project reaches completion, the construction manager will send a copy of the letter of physical completion to the Clean Water Division and Public Works Road Operations Division . The Clean Water Division also will be copied on the letter of final acceptance.

Receipt of the physical completion and final acceptance letters by the Clean Water Division will initiate stormwater inventory tasks.

Receipt of the final acceptance letter by

Operations will initiate maintenance and operations tasks.

Public Outreach

The Public Works Community Engagement and Inclusion team will coordinate outreach about the project including news releases, information on the Public Works website and signage.

Close Out

The project manager and construction manager will coordinate preparation of close out documents, including final expenditures.

CWD engineers will update the Capital Planning Database with metrics from the final report.

Construction Management will oversee the production of record drawings, and Survey staff will notify the Clean Water Division of their location. The receipt of record drawings by Clean Water Division will initiate tasks to verify the stormwater infrastructure inventory.

Outputs

- Project plans, specifications and estimates
- Completed stormwater capital projects
- As-built drawings (record drawings)
- Final expenditures and metrics for each project

TASK CHECKLIST

STATUS	TASK	
ONGOING	Implement structural stormwater controls program	
ONGOING	Stormwater capital planning	
ONGOING	Annual reporting on capital projects	
ONGOING	Update structural stormwater controls projects	
ONGOING	Update Stormwater Capital Plan	
ONGOING	Annual reporting on capital projects	
March 31, 2028	Acquire 1000 SMED points	
2027?	Water quality projects beyond permit requirements	
2027	Neighborhood drainage projects	
2028	Begin replacing aging pipes	
2027/	20-year capital plan	

For more information on planning and building county stormwater infrastructure:

Jeff Schnabel, Clean Water Division Infrastructure Manager 564.397.4583 Jeff.Schnabel@clark.wa.gov

Regulatory Program for Development, Redevelopment and Construction Projects

The county is the local land use regulator in unincorporated Clark County. As such, the NPDES Permit requires the county to regulate the discharge of runoff from new development, redevelopment and construction activities in the county.

In 2013, the county began a project to update its regulations in response to the newly issued 2013-2018 NPDES Permit. During 2015, Clark County completed the equivalent code and manual adoption and implementation under the schedule prescribed by the Permit. The 2015 manual was updated in 2021 to include permit-mandated changes and other changes proposed by manual users.

The Clark County Stormwater Manual will be updated again by July 2026 to include mandated changes and revisions based on user input.

REGULATORY REQUIREMENTS SUMMARY

NPDES Permit S5.C.5.a & b.
- Controlling Runoff from
New Development,
Redevelopment and
Construction Sites

The NPDES Permit requires the county to have a program to prevent and control the impacts of runoff from new development, redevelopment and construction activities. The program applies to all development activity, including private-sector development and county projects such as roads and parks. The program enforces development regulations that provide protection equivalent to the minimum requirements, thresholds and definitions in Appendix 1 of the NPDES Phase I stormwater permit and design standards equivalent to the 2024 version of the Stormwater Management Manual for Western Washington. The program also revised code and manuals to make low impact development a standard approach for stormwater management.

The 2024 Permit requires specific updates set forth in Appendix 10 and for the county to document significant changes. Both of these will be submitted to Ecology for approval in 2025 and adopted by Clark County Council in June 2026 to become effective on July 1, 2026.

COUNTY POLICIES. RULES AND REGULATIONS

Clark County Code 40.386 – Stormwater and Erosion Control

Clark County regulates stormwater runoff and erosion control on development, redevelopment and construction sites primarily in Chapter 40.386 Stormwater and Erosion Control. The purpose of the code is to safeguard public health, safety and welfare by protecting the quality of surface water and groundwater for drinking water supply, recreation, fishing and other beneficial uses through the application of best management practices (BMPs) for stormwater management and erosion control by following the requirements of the Clark County Stormwater Manual.

The regulations generally apply to all development and construction projects, including county roads and parks whether or not they discharge to county storm sewers or to waters of the state.

Clark County Code 40.430 – Geologic Hazard Areas

Geohazard code regulates development at sites where geologic concerns such as high soil erosion risk, potential landslides and steep slopes will influence preparation of erosion control and stormwater site plans.

Clark County Stormwater Manual

The Clark County Stormwater Manual is adopted under Chapter 40.386 and contains the technical and administrative standards that project proponents follow to meet the Permit minimum requirements and county stormwater management requirements for development and construction projects in the county. The manual contains county requirements and procedures specific to Clark County, is equivalent to the Ecology SMMWW, and is referenced in Permit Appendix 10.

Clark County Code 40.4450 and 40.440 – Wetlands and Habitat Protection

<u>Chapters 40.44</u>. Wetland and Fish and Wildlife Conservation Areas regulates some stormwater discharges and the placement of treatment and control facilities in habitat and wetland buffers.

Clark County Code 40.510 – Application and Review Requirements

Applications for development, redevelopment and construction require different levels of review depending on their impacts to the community, which are defined in <u>Chapter 40.510</u>. The levels of review are ministerial decisions (Type I), administrative decisions (Types II and II-A) and quasi-judicial decisions (Type III).

STORMWATER REVIEW AND ENFORCEMENT OF DEVELOPMENT AND CONSTRUCTION APPLICATIONS

Purpose

Clark County has a system of ordinances, technical manuals, plan review, inspection and enforcement to apply the NPDES Permit minimum requirements to development, redevelopment and construction projects.

For stormwater, the purpose of the review is to determine:

- Applicability of the stormwater and erosion control minimum requirements.
- Compliance with applicable minimum requirements.
- Compliance with other county-specific stormwater requirements listed in the Clark County Stormwater Manual.

Inspection and enforcement strive to ensure that construction sites correctly and consistently use erosion control BMPs to prevent sediment-laden runoff from leaving the sites, and that permanent stormwater conveyance systems and BMPs for LID, treatment and flow control are properly installed, constructed and transferred in good condition to the ultimate owners/operators with a maintenance manual for each facility.

Interdepartmental Responsibilities Summary

Responsibility for implementing the stormwater code is shared by Public Works and the Community Development departments.

Community Development Department – Permit Services

Permit Services will accept development and construction applications and determine if applications include the required submittals. Permit Services staff review residential building permit applications and accept and review stormwater small project site plans for building sites in new residential subdivisions for stormwater compliance and condition building permits for stormwater requirements.

Community Development Department – Building Safety

Building Safety will inspect building construction sites for compliance with erosion control, source control, preservation of natural drainage and post-construction stormwater management BMPs.

Community Development Department – Development Engineering

Development Engineering staff will provide engineering review of stormwater and erosion control plans on development sites, including residential subdivision and non-residential development sites. Residential building permit projects outside of new subdivision are also reviewed. Development Engineering staff will oversee the issuance of the plat, the final engineering as-built documents (record drawings) and the maintenance warranty, if applicable.

Public Works Department – Construction Management

Construction Management staff will inspect development sites, including county projects, for compliance with stormwater engineering plans and erosion control plans. Construction Management also inspects residential subdivisions for facility maintenance during the period of new home construction.

Public Works Department - Clean Water DivisionClean Water Division staff will support
decision-making regarding interpretation of
the code and manuals, providing
documentation of their findings.

Community Development Department – Code Enforcement

Code Enforcement will enforce erosion control violations on development and building construction sites as needed.

Responsibilities Matrix

The review and enforcement process varies depending on complexity and scope of the project. For stormwater review purposes, projects generally can be divided into residential development projects (subdivisions), non-residential development projects, residential construction projects (individual home construction) and Public Works projects.

The matrix on next page describes responsibilities at the department and division level.

Overview of Regulatory Review and Enforcement Responsibilities

Task	CD Permit Services	CD Building Safety	CD Building Official	CCPW Code Enforcement Officer	CD Dev. Eng.	CD Dev. Eng. Mgr.	CCPW Construction Mgmt.	CCPW Construction Mgr.	CCPW CWD	
Plan Review - residential construction	P/A	1	0	0	P/A	Α	0	0	S	
Inspect building construction sites	1	Р	Α	0	0	0	0	0	I	
Engineering review – development	S	0	0	0	Р	А	С	0	I	
Inspect development sites	0	0	0	0	S	0	Р	Α	I	
Inspect Public Works sites	0	0	0	0	S	0	Р	Α	I	
Enforce erosion control	I	Р	А	Р	0	0	Р	Α	I	
Maintenance warranty inspection	0	0	0	0	S	0	Р	А	I	
A = Accountable, P = Primary (doe	A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted									

Residential Subdivision Development Project Review

Residential development projects are divisions of land to create individual lots and construction of infrastructure such as roads and storm sewer. Many aspects of residential development project review will not concern stormwater; only aspects concerning stormwater are covered in this plan.

Pre-Application Phase

Applicants typically submit initial information and may meet with a planner, engineer and other pertinent staff in a Pre-application Conference (PAC) before an applicant submits a completed development application. The PAC will help determine options and likely requirements for stormwater control, among many other regulations and requirements.

Preliminary Land Division and Preliminary Engineering Review Phase

The applicant will submit an application for residential land division (subdivision or short plat) to the Permit Center along with a preliminary stormwater plan in accordance with section 1.8.1 of Clark County Stormwater Manual - Book 1.

Development Engineering staff will review the preliminary stormwater plan to evaluate whether the proposal for stormwater controls is feasible given existing site conditions and constraints. The engineer's Findings and Conditions of Approval will appear in the Staff Report, which will be forwarded to the applicant.

Findings describe the engineer's determination of whether or not each aspect of the stormwater proposal meets county code.

Conditions of Approval list the engineer's requirements for how to meet code, in cases

where the proposal does not meet it, and they must be met in the final engineering plan.

Final Engineering Review Phase

The applicant will submit final plans for the residential development, including a final stormwater plan in accordance with section 1.8.2 of Clark County Stormwater Manual - Book 1. The final stormwater plan will provide final engineering design (Technical Information Report) and construction drawings for the stormwater aspects of the proposed project and a construction Stormwater Pollution Prevention Plan (SWPPP).

Development Review engineers will:

- Ensure that the Conditions of Approval from the preliminary land division have been met.
- Verify that applicable county and NPDES permit requirements have been met.
- Review engineering calculations of stormwater flows, sizing of stormwater facilities, and sizing of conveyances.
- Verify adequacy of erosion control BMPs before preconstruction conference.
- Perform any other engineering review required for stormwater.

Responsible officials from Public Works, Community Development and Public Health will sign the final plans. The Development Engineering manager will make the final approval. Then the planning technician will return the approved plans to the applicant.

The Development Engineering office assistant will open a development inspection case in LMS in preparation for the next phase of the process.

Development Inspection Phase

During development inspection, the applicant will construct the development's infrastructure, including grading, roads and stormwater controls, according to the approved final plans. Public Works development inspectors will inspect the site for conformity with the plans.

The process begins when the applicant submits the final construction plan and application for development inspection. They also submit the final erosion and sediment control plan.

The assigned development inspector will hold a Preconstruction Conference with the applicant. During the Preconstruction Conference, the inspector will review erosion control requirements, including requirements related to a high potential for sediment to be discharged from the site with the applicant and will receive the name of the Certified Erosion Control and Sediment Lead (CECSL) for the site. The inspector will reiterate storm system requirements and additional inspection-related policies for storm system installation. Department of Ecology state construction stormwater permit enforcement staff are also invited to each Preconstruction Conference. After the conference, the development inspector will give approval to begin constructing the project after completion of a preconstruction inspection to verify proper installation of erosion control BMPs.

During construction, the development inspector will inspect the site to ensure that erosion control measures are operational and effective. The inspector will work with the developer to achieve compliance, using technical assistance, correction notices and stop work orders if necessary. If there is evidence of continued neglect, the inspector will call a code enforcement officer to enforce

erosion control measures through citations and penalties. Referral to Ecology for enforcement under the NPDES Construction Stormwater General Permit is also an option.

The development inspector also will verify that stormwater facilities are constructed as designed.

At the end of construction, the applicant will submit record drawings and a maintenance bond, if applicable, for any public improvements. (Public improvements are roads and stormwater drainage facilities that will fall into public ownership upon acceptance of the development.) A Development Engineering engineer will approve the record drawing and then a Development Engineering planning technician will accept the maintenance bond, if applicable.

Development Engineering staff will provide an electronic record drawing file to Public Works and then send the Mylar plan to the state archives.

After these steps are complete, the planning technician will issue a notice of completion of construction to the applicant and copy it to several departments, including the Clean Water Division and Public Works Maintenance and Operations. The notice signals the start of the stormwater facility maintenance warranty period, if applicable (see below).

The notice of completion of construction constitutes provisional county acceptance of the public infrastructure, including public stormwater facilities. In the case of private facilities, completion of construction is the end of county involvement in construction and the regulated facility operation and maintenance inspection process will begin.

Receipt of the notice of completion of construction will initiate some stormwater mapping tasks (see Section 2) and some maintenance inspection tasks (see Operating and Maintaining the Storm Sewer System, County Property and Roadways in Section 3).

Final Land Division Phase

The final land division will begin after the development inspection phase begins but before it ends.

The applicant will submit the final land division application and the draft plat. The plat will contain required information describing facility ownership and maintenance responsibility, stormwater tracts and drainage easements. The plat will be routed to several departments for review and approval. If there are private stormwater facilities, an HOA will be formed before plat approval.

After approval of the draft plat, the applicant will submit a Mylar version that will be signed by the Planning Director, the County Engineer and the Clark County Council. Development Engineering staff then will record the final plat with the Auditor and issue a plat notification to the developer, copied to several departments, including the Clean Water Division.

Receipt of the plat notification by Clean Water Division may initiate some stormwater mapping tasks.

The final plat must be recorded before building permits for home construction will be issued for lots in the development.

Maintenance Warranty Period

Most, but not all, residential developments will have public improvements, including public stormwater infrastructure.

For residential developments with public improvements, a two-year maintenance warranty period will begin at completion of construction. During the maintenance warranty period, the developer will be responsible for continued maintenance of the stormwater facilities. During the 22nd month of the maintenance warranty, a development inspector will inspect the public stormwater facilities for compliance with maintenance standards.

If the stormwater facilities are found to be in good condition and properly maintained, the development inspector will recommend release of the maintenance bond. The Development Engineering planning technician will release the bond and notify the Clean Water Division and Public Works Maintenance and Operations.

If the facility has components that fail the maintenance inspection, the planning technician and development inspector will work with the developer to obtain needed repairs. If the developer fails to make repairs, the planning technician will demand the bond from the surety company.

After repairs are made, the Clean Water Division will update stormwater mapping tasks, if necessary (see Mapping the Storm Sewer Infrastructure on page 10), and Public Works Maintenance and Operations will initiate maintenance and operations tasks.

Under the Clark County Stormwater Manual, private stormwater facilities will be maintained by the applicant for two years after completion of construction.

MAINTENANCE WARRENTY BOND STUDY

The Fee Increase Rate Study will allow Clean Water to evaluate the current maintenance bond approach for stormwater facilities donated to Clark County. It will develop appraise bond rates and methods to ensure donated infrastructure is fully established and in proper repair when transferred to county ownership.

Non-Residential Development Project Review

Non-residential developments include commercial and industrial projects as well as schools, churches and other non-residential land uses. These projects construct infrastructure such as roads and stormwater drainage along with the buildings. Multifamily housing projects also are reviewed using this process. Occasionally, commercial projects may also go through a land division. Many aspects of non-residential development project review will not concern stormwater and are not covered in this plan. Also, many projects do not trigger stormwater requirements because they do not add or replace a sufficient amount of impervious surface; examples include cell tower placement, sign construction and building façade replacement.

Pre-Application Phase

Applicants typically submit initial information and meet with a planner, engineer and other pertinent staff in a Pre-application Conference (PAC) before submitting a completed development application. The PAC will help determine options and tentative requirements for stormwater control, among many other regulations and requirements.

Preliminary Site Plan and Preliminary Engineering Phase

To begin the process, the applicant submits an application for preliminary site review to the Permit Center along with a preliminary stormwater plan in accordance with section 1.8.1. of the Clark County Stormwater Manual Book 1.

The assigned Development Engineering engineer will review the preliminary stormwater plan to evaluate whether the proposal for stormwater controls is feasible given the available information on existing site conditions and constraints. The engineer's Findings and Conditions of Approval will appear in the Staff Report and Decision (or Land Use Hearing Examiner Decision), which will be forwarded to the applicant.

Findings describe the engineer's determination of whether or not each aspect of the stormwater proposal meets county code. Conditions of Approval list the engineer's requirements for how to meet code, in cases where the proposal does not meet it, and they must be met in the final engineering plan.

Final Site Plan and Final Engineering Review Phase

The applicant will submit final plans for the development, including a final stormwater plan in accordance with section 1.8.2 of Clark County Stormwater Manual - Book 1. The final stormwater plan will provide final engineering design and construction drawings for the stormwater aspects of the proposed project. A construction Stormwater Pollution Prevention Plan (SWPPP) is required before the Preconstruction Conference.

The assigned Development Review engineer will:

- Ensure that the Conditions of Approval from the Final Decision have been met.
- Verify that applicable NPDES permit, and county code minimum requirements have been met.
- Review engineering calculations of stormwater flows, sizing of stormwater facilities, and sizing of conveyances.
- Verify adequacy of erosion control BMPs before the preconstruction conference.
- Perform any other engineering review required for stormwater.

Responsible officials from Public Works, Community Development and Public Health will sign the final plans. The Development Engineering manager will make the final approval. The approved plans are returned to the applicant.

Development Engineering will open a development inspection case in LMS in preparation for the next phase of the process.

Building Permit Review

The applicant will submit building permit applications to Permit Services. Construction of structures will be concurrent with construction of the development; therefore, most stormwater review will have already occurred.

The building permit must be issued before construction of structures may begin.

Development Inspection Phase

During development inspection, the applicant will construct the development's infrastructure, including grading, roads and stormwater controls. The project's buildings are also erected during this phase.



A recently constructed stormwater facility

The process begins when the applicant submits the final construction plans and application for development inspection.

The assigned Public Works development inspector will hold a preconstruction conference with the applicant. The inspector will review erosion control requirements with the applicant, including requirements related to a high potential for sediment to be discharged from the site and will receive the name of the Certified Erosion Control and Sediment Lead worker (CECSL) for the site. Department of Ecology state construction stormwater permit enforcement staff are also invited to each Preconstruction Conference. The inspector will reiterate storm system requirements and additional inspection-related policies for storm system installation. After the conference, the development inspector will give approval to begin constructing the project after completion of a preconstruction inspection to verify proper installation of erosion control BMPs.

During construction, the development inspector will inspect the site as needed to ensure that erosion control measures are operational and protective. If necessary, a code enforcement officer will be called to enforce erosion control measures. If the project has a

state-issued NPDES construction permit, then violations may be referred to Ecology. The inspector also will ensure that stormwater facilities are constructed as designed.

At the end of construction, the inspector will verify that the facility was built as shown on approved design plans. The applicant will submit record drawings and, if applicable, a maintenance bond for any public improvements in the right-of-way. A Public Works engineer will review the record drawing set for accuracy before approving it. After approval of the completed facilities and record drawings, a Development Engineering planning technician will accept the maintenance bond.

When a record drawing is received, Development Engineering staff will give an electronic file to Public Works and send the Mylar plan to the state archives.

The planning technician will issue the notice of completion of construction to the applicant and copy it to several county agencies, including the Clean Water Division. The notice signals the start of the maintenance warranty period, if applicable.

Receipt of the completion of construction by the Clean Water Division will initiate some stormwater mapping tasks for projects with either public or private stormwater facilities.

Maintenance Warranty Period

The maintenance warranty period is relevant for those few non-residential developments that have public stormwater infrastructure in public right-of-way.

A two-year maintenance warranty period will begin at completion of construction. During the period, the developer will be responsible for

continued maintenance of the stormwater facilities.

During the 22nd month of the warranty, a development inspector will inspect the public stormwater facilities for compliance with maintenance standards.

If the stormwater facilities are found to be in good condition and properly maintained, the development inspector will authorize release of the maintenance bond and will notify the Clean Water Division and Public Works Maintenance and Operations that the bond has been released.

Receipt of the bond release notification will initiate maintenance and operations tasks (see Operating and Maintaining the Storm Sewer System, County Property and Roadways.

If the facility has components that fail the maintenance inspection, the planning technician and development inspector will require the developer to obtain needed maintenance and repairs. If the developer fails to make repairs, the county will demand the bond from the surety company.

After repairs are made, the Clean Water Division will update stormwater mapping tasks, if necessary, and Public Works Maintenance and Operations will initiate maintenance and operations tasks.

Under the *Clark County Stormwater Manual*, all private stormwater facilities will be maintained by the applicant for two years.

Single Lot Residential Construction Project Review

Single lot residential construction projects include construction or expansion of single-family and duplex homes and their

appurtenances, such as decks, garages and driveways, and outbuildings. Many aspects of residential construction project review will not concern stormwater and are not addressed here.

Building Permit Application Review – Stormwater

The applicant will submit a residential building permit application including a stormwater site plan showing proposed building footprint(s), erosion control measures and on-site stormwater control BMPs to the Permit Center. Projects triggering Minimum Requirements 1-9 require and engineered application and are referred to Development Engineering for review. Smaller projects on lots that are not part of a new subdivision are also forwarded to Development Engineering for review.

The engineering review staff will review the residential building permit application to verify applicability of the minimum requirements and selection and use of allowed stormwater BMPs and erosion control BMPs. They will also check for the mapped presence of steep slopes or geo-hazard areas. If they conflict with the proposed stormwater BMPs, the applicant will be required to consult a licensed geotechnical engineer to design stormwater controls.

If the residential construction site is within an existing subdivision with an approved stormwater plan that provides flow control and treatment, then the reviewer will recommend that the applicant consult the development project's engineering plans to determine stormwater requirements, such as roof drain infiltration and amended soils, for the lot. In those cases, the reviewer also will include requirements from the recorded plat and design requirements from the subdivision

engineering drawings and attach them as conditions on the building permit.

If the residential construction site is not part of an existing subdivision with an approved stormwater plan, then applicants will follow minimum requirements applicable to their projects. If minimum requirements 1- 5 apply, the applicant can complete the stormwater plan or hire a contractor. If minimum requirements 1-9 apply, the applicant must use an engineer to complete a stormwater plan that complies with county code under an engineering review by Development Engineering.

The Permit Center will issue the building permit with stormwater plan approval before construction may begin.



Excavator preparing land for a development.

Construction Inspection

Before construction is allowed to begin on the site, a Building Safety Division inspector will inspect the site as part of a foundation inspection to also verify that the erosion control BMPs are properly installed and that any unusual site conditions that might lead to sediment transport off site are addressed. All sites are required to maintain an erosion control log with an attached site plan and form that includes the required onsite stormwater management BMPs. Erosion control inspections are made at the time of each building inspection.

Public Works Project Review

Projects built by the Public Works department, including roads, parks and stormwater facilities will be reviewed by the Public Works
Engineering and Design section independently from the design team for compliance with county stormwater standards. Many Public Works projects will not require land use review, including roadways through existing right-of-way; therefore, the process will frequently begin at the final engineering review phase. Those that require land use review will begin at the preliminary site plan and preliminary engineering phase (above).

Additionally, the development inspection phase is replaced by a construction management phase. Public Works will use its own construction inspectors to oversee the construction of the project to ensure that it is built as designed and bid. Enforcement of erosion control and other measures is through contract management.

Before completion of a project, the construction engineer will invite stakeholders, including the Public Works Maintenance and Operations water quality crew chief, to a walkthrough of the new roadways and/or facilities. The construction manager also will copy the Clean Water Division and the Public Works Operations and Maintenance Division on the letters of physical completion and final acceptance of the project.

At the final acceptance, Public Works will develop a record drawing according to its As-Built Plan Preparation Policy, dated May 7, 2009.

Training for Regulators

The Fee Increase Rate Study will allow Clean Water to develop a training program for county staff who review stormwater plans, inspect construction sites, approve completed

projects and understand maintenance requirements.



Hidden Falls in east Clark County

OUTPUTS

General Outputs:

- Stormwater site plans that meet county standards
- Construction site management
- Completed projects include stormwater facilities meeting county standards
- Assigned ownership and maintenance responsibility for stormwater control facilities
- Record drawings are completed
- Completed project notifications to programs

Residential Development Project Review Outputs:

- Final Decision denying, approving, or approving with conditions the proposed development project
- Technical Information Report
- Approved final construction plan
- SWPPP

- Record drawings
- Approved final plat
- Notice of completion of construction
- Maintenance bond release letter, if applicable

Non-Residential Development Project Review Outputs:

- Final Decision denying, approving, or approving with conditions the proposed development project
- Technical Information Report
- Approved Final Site Plan
- Approved final construction plan
- SWPPP
- Record drawings
- Erosion control log
- Building plan
- Notice of completion of construction
- Maintenance bond release letter, if applicable

Residential Construction Project Review Outputs:

- Building Permit including site plan with stormwater requirements and stormwater plan
- Erosion control plan
- Erosion control log

Public Works Project Review Outputs:

- Technical Information Report
- Approved final construction plan
- Record drawings
- Completion of Construction notice
- Physical Completion letter
- Final Acceptance letter

TASK CHECKLIST

STATUS	TASK
ONGOING	Legal authority to require maintenance of facilities
ONGOING	NOI forms available
ONGOING	Legal authority to require maintenance of facilities
ONGOING	Procedures to implement the SMMWW
ONGOING	Staff training on SMMWW
ONGOING	Enforce stormwater regulations
Due by July 1, 2026	Revise stormwater regulations for equivalence to Permit
	Appendix 10
2027	Maintenance warranty bond study

For more information on how development, redevelopment and construction sites are regulated for stormwater and erosion control:

Rod Swanson, Clean Water Division NPDES Permit Manager 564-397-4581 Rod.Swanson@clark.wa.gov

Stormwater Planning

The 2024 permit continues stormwater planning. The stormwater planning component has these elements:

- Have an interdisciplinary team.
- Coordination of stormwater activities with other long-range planning.
- LID code review for barriers.
- Stormwater Management Action Planning (SMAP).

Each element is described separately in the following pages.

REGULATORY REQUIREMENT

NPDES phase I permit requirement S5.C.6. a-d.

CONTINUE AN INTERDISCIPLINARY TEAM

Clark County Clean Water established a team consisting of staff from:

- Public Works Engineering and Construction Division.
- Public Works Clean Water Division
- Community Planning.
- Community Development Planning and Development Engineering divisions.

Outputs

- · List of team members.
- Correspondence and meeting records.

LONG-RANGE PLANNING COORDINATION

Purpose

The long-range planning coordination is intended to create a report describing how stormwater management needs and receiving

water health are informing comprehensive land use planning under GMA and any other county long-range land use planning efforts. Other efforts include Regional Transportation Council planning, Clark County transportation planning, Clark County Parks planning and Legacy Lands planning. Stormwater planning efforts include the 2017 Whipple Creek study, the 2022 Mill Creek tributary study and Stormwater Structural Controls planning under the permit.

Planning Document Review

The planning mandates and goals were listed and their relationship to stormwater management and receiving water protection will be documented.

The required reporting will address the annual report questions in Permit Appendix 3 regarding planning coordination.

Schedule

The planning coordination report was submitted with the March 31, 2027 annual report submittal for calendar year 2026.

Outputs

 Long-range planning coordination reporting in the annual report.

ANNUAL LID BARRIER ASSESSMENT Purpose

The permit goal is to make LID the preferred approach to site development. This task will annually document any newly discovered barriers to LID development.

LID Barrier Review

The NPDES permit manager in collaboration with staff from CD Development Engineering and CD Planning will review current status of LID implementation and identify any current barriers.

Adopt Tree Canopy Goals and Policies The LID section includes a requirement to adopt and implement tree canopy goals and policies intended to maintain or increase canopy in overburdened communities and maintain existing mature canopy.

Schedule

LID barrier review is annual. Tree canopy goals and policies are due by December 31, 2028.

Outputs

- Documentation from staff review.
- Short report to support annual report question response.
- Tree canopy goals and policies.

STORMWATER MANAGEMENT ACTION PLANNING (SMAP)

The SMAP is a plan considering options for managing land use and stormwater to meet specific objectives for receiving water health. The permit references the most recent SMAP guidance document as identifying SMAP content.

Purpose

The SMAP requirement is intended to be an extension of the stormwater planning required by the 2013 permit. This includes describing how the Whipple Creek plan informs stormwater structural control project selection and a sub-basin catchment for completing the SMAP. Clark County selectee a catchment in a

sub-basin other than Whipple Creek based on the results of that study and county priorities.

Lessons from the Whipple Creek Study

Clark County found that areas where LID was infeasible are impossible to restore forested stream hydrology using the standard SWMMWW flow control BMPs. Instead, the study suggested the much cheaper option of projects to add channel complexity and reconnect flood plains to manage higher storm flows. This led Clean Water to evaluate streams in the urban area for flow control retrofit suitability. The evaluation found that almost none of the Vancouver UGA streams are suitable for flow control retrofits using detention ponds. This led to a focus on water quality retrofits for high traffic areas and promotion of infiltration retrofits where conditions permit.

Catchment Selection/Sub-basin Prioritization

Clean Water used existing data and reports as the principal tools to complete the analysis. Examples include steam health data, the detention facility retrofit suitability report, ESA priorities, inventoried fish use, Regional Transportation Council traffic model vehicle trip density, and percent urban and rural area to evaluate sub-basins. Clean Water consulted with WDFW and the LCFRB.

SMAP for Mill Creek Tributary MIL2 Catchment

In 2022 Clark County completed the watershed inventory, sub-basin prioritization, catchment selection, and SMAP plan for MIL2 Catchment.

2024 Permit SMAP

Clark County is using the SMAP program to produce a larger project in the urban and

urbanizing area of Salmon Creek watershed. The project began in early 2024 and will use consultants to complete by spring 2027.

The project is still being scoped at this time, but y will include stormwater capital planning, enhance sweeping, enhanced pipe maintenance, outreach materials and other operational actions.

Outputs

- Watershed Inventory
- Sub-basin prioritization
- Selected Study Catchment
- MIL2 Study and Plan
- Lower Salmon Creek Plan

TASK CHECKLIST

STATUS	TASK
Completed	Describe how Whipple Creek planning is used for SSC planning)
Completed	Sub-basin prioritization and catchment selection
Completed	Complete 2022 SMAP report
Due March 31, 2027	Complete lower Salmon Creek SMAP report

For more information on how development, redevelopment and construction sites are regulated for stormwater and erosion control:

Rod Swanson, Clean Water Division NPDES Permit Manager, 564-397-4581

Rod.Swanson@clark.wa.gov

Section 6 - Public Involvement, Education and Outreach

Clark County provides ongoing opportunities for the public to review and comment on the stormwater management program activities through various mechanisms. Public input is one way to tailor policy within the guidelines of the NPDES permit. The county also offers numerous stormwater education opportunities for the public. The education program is aimed at various audiences and is designed to help raise awareness to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts.

Public Information, Involvement and Participation (\$5.C.4)

REGULATORY REQUIREMENTS SUMMARY

NPDES Permit S5.C.4 Public Involvement and Participation The NPDES permit requires the county to provide ongoing opportunities for public involvement in the stormwater management program development and implementation. The public, including overburdened communities, must have opportunities to participate in the development, implementation and update of the *Stormwater Management Plan* and the county must consider public comments on it. The county must annually document specific public involvement and participation opportunities provided to overburdened communities and specifically, highly impacted communities, and document methods used to identify overburdened communities. The SWMP, annual report and other submittals required by the permit must be posted on the Clean Water Division's website.

COUNTY POLICIES, RULES AND REGULATIONS

Clark County Code Chapter 13.30A.040 Clean Water Commission County Code <u>Chapter 13.30A.040</u> defines the role of the Clark County Clean Water Commission (CWC), a citizen commission formed to advise the Clark County Council. The CWC will advise the Council on policies on surface and stormwater issues, and citizen outreach.

PUBLIC INFORMATION

Purpose

The Clean Water Division provides information to the public about the stormwater management program to publicize the program's services to rate payers and keep the community abreast of current stormwater management issues at: www.clark.wa.gov/stormwater.

Responsibilities Matrix

Task	CCPW CWD Mgr.	CCPW	CCPW Outreach Mgr.	CCPW Outreach Specialist Sr.	CCPW CWD Professional Staff	
Provide content	Α	I	Р	Р	Р	
Web updates	I	С	S	Р	S	
Write media releases	S	А	Р	S	S	
A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted						

Clean Water Division Website

Clark County Public Works Clean Water Division's website offers an opportunity for the public to review program activities, services and documents, as well as receive educational messages about stormwater. The website address is: clark.wa.gov/stormwater. It can be viewed in more than 100 languages. Older technical reports and information formerly on the web are available to the public upon request.

Media Releases

The Clean Water Division releases information on various topics to the media to publicize noteworthy events. The Clean Water Division manager will call for a media release on timely matters. The outreach manager will write the release with the support of the Public Works public information officer. Releases will be



reviewed, edited and distributed to the media by the public information officer.

Outputs

- Content on CWD website
- Media releases

PUBLIC INVOLVEMENT AND PARTICIPATION

Purpose

The purpose of involving the public in the SWMP is to try to tailor the program, while considering the prescriptive nature of the permit, to the local community's priorities. Public feedback about program effectiveness and the public's needs also helps the Clark County Council set policies for stormwater management.

Responsibilities Matrix

Task	Council	CCPW CWD Mgr.	CCPW Outreach Mgr.	CCPW Outreach Specialist Sr.	CCPW CWD NPDES Permit Mgr.	CCPW CWD OA	CCPW CWD Program Asst.	CCPW Enhance. and Permitting Mgr.	CCPW Eng. Permitting Mgr.
Appoint Clean Water Commission	A/P	I	I	I	I	I	S	0	0
CWC liaison	С	Α	S	0	S	S	Р	0	0
CWC secretary	0	Α	S	0	0	S	Р	0	0
Respond to SWMP public comments	I	Α	S	0	Р	I	I	0	0
Respond to SEPA comments for stormwater capital projects	ı	ı	0	0	0	0	S	А	Р
Community presentations	I	А	S	Р	S	S	S	0	0
Other code update coordination	I	А	responsibilities assigned as needed					0	0
Customer service adaptive management	I	А	any CWD staff may be primary in his/her area						0
presentations Other code update coordination Customer service adaptive management	l I I ntable, P =	A	r any C\	esponsibil WD staff n	ities assigned	d as needed	d er area	0	0

Clean Water Commission

The Clean Water Commission (CWC) is a ninemember advisory panel appointed by the County Manager and confirmed by the Clark County Council. It provides a forum for public participation in the stormwater management program and also informs the Council about stormwater topics and policy recommendations.

Staff Support

Clean Water Division staff support the CWC in a variety of ways. A program assistant is the primary staff liaison to the CWC. The liaison will attend each meeting to take notes, distribute meeting materials, provide minimal facilitation when required, and respond to requests for information from CWC members. The CWC webpages will be updated with current commission member information and terms, agendas, meeting summary notes and audio files, as well as any handouts.

Other Clean Water Division staff members may attend meetings, as required, to present updates on program activities or documents.

Member Appointments

Public notice of openings on the CWC will be listed in a news release issued by the public information officer and sent directly to local organizations representing overburdened communities. Interested applicants, including incumbents seeking another term, must submit a letter of interest and a resume to the Clean Water Division manager. Clean Water Division staff and Clean Water Commissioners will conduct interviews and select candidates to fill vacant positions. Selected candidates are recommended to the county manager for approval and submitted to the Clark County Council for confirmation.

Public Meetings

The CWC will hold a minimum of six public meetings each year, every other month starting in February. Meetings are held in a hybrid format allowing for both virtual and in-person participation on the first Wednesday of every other month at 6:00 pm. Public notice of meetings are issued in the county paper of record (The Columbian) prior to the meeting date.

Discussion topics will include updates from staff on the stormwater management program, education and outreach activities, surface water / stormwater monitoring, capital project planning and regulatory changes.

At meetings, the CWC will review and discuss major stormwater policy recommendations. All meetings will be documented with a meeting

summary (.pdf file) and an audio recording (.mp3 file) or link to a video recording. The meeting documentation will be available on the CWC webpage.

The CWC will hear public comment at the meeting.

Communications with Clark County Council

Each year, the CWC will provide an annual report to the County Manager and Clark County Council in a public meeting during the first half of the year. The annual report should summarize CWC discussions, actions and recommendations from the previous year, as well as include a work plan for the upcoming year.

The CWC may elect to communicate with the Council at any time via letter, memorandum, or during scheduled public comment periods at Council Work Sessions and Hearings.

Stormwater Management Plan Review and Input

Clark County places its Stormwater
Management Plan each year on the Clean Water
Division website for review and comment by
the public. A one-page summary of the
Stormwater Management Plan sections and
instructions on how to provide input is also
used to solicit feedback at in-person events and
on social media. The summary is translated in
Spanish, Russian and other languages upon
request. All documents are available at:
clark.wa.gov/public-works/clark-countystormwater-management-plan.

The Clean Water Division manager or a designee will respond to comments.

Stormwater Capital Projects SEPA

As the Clean Water Division builds stormwater capital projects (see County Stormwater Capital Projects in Section 5), each project will be subject to public review and comment under the Washington State Environmental Policy Act (SEPA).

Along with the individual projects, the annual Stormwater Capital Plan is subject to public review and comment under SEPA.

The CCPW Public Works Environmental Permitting coordinator assigned to the project will write and distribute to stakeholders a Determination of Significance or a Determination of Non-Significance. The required public comment period will be held. The coordinator will respond to any comments received, and if warranted, require changes to the project's design.

Each capital project may also include a package of outreach materials to inform potentially impacted citizens and stakeholders of the project. Typical products include a "Heads-up" notice to citizens in the immediate project area in multiple languages, a detailed project letter to adjacent property owners (describing project timeline and potential impacts), a project sign at the construction site and informational fliers. Materials may also be posted on the CWD stormwater capital project webpage.

Community Presentations

As requested, Clean Water Division staff will provide information on the program's activities to community, neighborhood and civic groups, at times in concert with the Clean Water Commission, to distribute information about the stormwater management program and get feedback on community priorities. A program slideshow is available for presentations.

INCREASED COMMUNITY INVOLVEMENT

The Fee Increase Rate Study will allow Clean Water Increase administrative support for the Community Engagement & Inclusion team and provide resources to support additional public involvement, open houses, surveys, educational materials, and website updates.

Code Updates

Code revisions for water quality, stormwater and erosion control and Clean Water Fee regulations require extensive public outreach, review and comment, which will be coordinated by the Clean Water Division.

Per the 2024 NPDES Municipal Stormwater Permit, a public outreach plan was developed to inform the public and solicit input on stormwater code and manual updates. Any code updates utilize a variety of outreach strategies including emails to internal and external stakeholders, as well as website updates.

Customer Service / Adaptive Management

The Clean Water Division and its designees maintain regular contact with the public through daily programmatic activities such as customer service for the Clean Water Fee, source control inspections (Section 4), inspections of regulated stormwater control facilities at businesses and subdivisions (Section 3), information requests, social media and complaint response. Staff receive feedback during these contacts and often incorporate suggestions into their daily procedures and processes.

For example, as a result of public feedback, the Clean Water Division provides a program to educate residential subdivision homeowners associations about proper maintenance of their stormwater facilities at:

stormwaterpartners.com/facilities.

Outputs

- Clean Water Commission notes including public comments.
- Clean Water Commission Annual Report to the County Manager and Clark County Council.

- Log of public comments on the stormwater code and manual updates.
- Log of public comments from community presentations.
- SEPA file for each stormwater capital project and annual Stormwater Capital Plan update.
- Media releases.
- Email updates.
- Web content
- .

TASK CHECKLIST

STATUS	TASK
ONGOING	Create opportunities to the public, including overburdened communities, to participate in the decision-making process involving the development, implementation and update of the SWMP
ONGOING	Implement processes to involve public in the SWMP
ONGOING	Display SWMP and other NPDES submittals on the website

For more information on efforts to inform and involve the public in the stormwater management program:

Devan Rostorfer, Clean Water Division Manager 564.397.4345 cleanwater@clark.wa.gov

Education and Outreach Program (S5.C.11)

REGULATORY REQUIREMENTS SUMMARY

NPDES Permit S5.C.11 Education and Outreach Program The NPDES permit requires the county to have an educational program to build general awareness about methods to address and reduce impacts from stormwater runoff and effect behavior change to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts. The permit also requires the county to create stewardship opportunities that encourage community engagement in addressing the impacts from stormwater runoff.

COUNTY POLICIES, RULES AND REGULATIONS

Clark County Code Chapter 13.26A.010 Education and Technical Assistance <u>County Code Section 13.26A.010</u> describes the use of education and technical assistance to business owners and the general public as a primary means of implementing a successful pollution source control and prevention program.

EDUCATION FOR THE GENERAL PUBLIC

Purpose

The goal of the stormwater education and outreach program is to build general awareness and influence behavior changes to reduce or eliminate activities with adverse stormwater impacts. The support and awareness of the general public is crucial to achieving this goal, including options to deliver selected messages to target audiences in languages other than English. Education for the general public will focus on the following topics:

- Importance of clean water for local waterways
- General impacts of stormwater on surface waters, including watershed management
- Impacts from impervious surfaces
- How people contribute to the problem through daily activities including illicit discharges and improper disposal of waste
- Each person's ability to help protect and improve the quality of Clark County's water resources through source control BMPs and environmental stewardship
- Low impact development principles and BMPs
- Information about water quality and stream health

The Fee Increase Rate Study will allow Clean Water to increase education and outreach under the stormwater permit program

Responsibilities Matrix

Task	CCPW CWD Mgr.	CCPW PIO	CCPW Outreach Mgr.	CCPW Outreach Specialist Sr.	Partner Agencies / Contractors		
Coordinate education programs	Α	С	Р	S	С		
Track and measure deliverables	Α	С	Р	S	S		
Create messages, programs and collateral	А	С	S	Р	Р		
Distribute messages and collateral	Α	С	S	Р	Р		
A = Accountable, P = Pri	A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted						

Canines for Clean Water

The Canines for Clean Water program is a behavior change campaign to encourage dog owners to properly manage and dispose of pet waste. The program's webpage (cleanwaterdogs.com) provides educational information in multiple languages, directions

for properly managing and disposing of pet waste, free resources to help residents overcome barriers, and a pledge for owners to pick up after their dogs. The program uses social marketing strategies such as prompts and public and durable commitments that normalize desired pet waste disposal practices.

An outreach specialist senior will oversee the program and coordinate most of the tasks including receiving pledges, mailing materials, keeping program materials up to date, having a table at events, and coordinating with local partners to share the message.





The program webpage also provides information in multiple languages for community members to work in their neighborhood to support pet waste pick-up. Signs are available to place in yards and common pet walking areas.

Public Works also partners with Community Development to educate the public on the need to pick up pet waste (stormwater protection and solid waste management issues) through the promotion of Canines for Clean Water. Informational fliers are sent out in pet license renewal notifications informing dog owner of the harms pet waste poses and encouraging them to take the pledge.

Green Neighbors Program

Clark County launched the Green Neighbors program in 2012. Promoting sustainable practices (including stormwater pollution prevention) to homeowners via their webpage clarkgreenneighbors.org, the program also hosts workshops and other educational events. The program is administered within the Public

Health Department and provides timely messaging about proper disposal of waste, educational opportunities and stewardship activities through a community event calendar.

Website

Public Works maintains a website at clark.wa.gov/stormwater, as well as specific program webpages, that showcase information about stormwater pollution prevention practices aimed at priority audiences. The site also contains information on endangered species at clark.wa.gov/public-works/endangered-species-act, with multiple links to additional resources on endangered species.

A webpage dedicated to "What you can do for clean water" includes educational information and stewardship opportunities for home, community, schools, businesses and property managers.

The website is updated as needed by the Public Works staff.

Clark County Stream Health Report

In 2024, Public Works and GIS staff updated the Clark County Stream Health Report StoryMap with data from water year 2023 and incorporated a section for hydrology data. The report is part of the existing Explore Your Watershed story map at

www.clarkwatersheds.org. The report: presents data from 51 stream sites using water quality and biological health indicators to compare 2010 conditions to 2023; evaluates water quality parameters based on the Washington State water quality standards; evaluates stream flow and rainfall; and explores water quality trends at nine long-term index stream sites.

Publications and Displays

Public Works staff produce displays and publications generally as part of specific program areas, such as pet waste management, natural gardening to reduce pesticide use, pollution prevention techniques, watershed education and others.

Many displays and publications are in stock and ready for distribution. Staff continues to display and distribute materials at community events, targeted environmental events, Clean Water Division presentations and Clean Water Commission meetings.



Other displays include interpretive signs on county capital projects and park trails. Interpretive / educational messages are tailored to each site. Typical messaging includes information on watersheds, the value of the stormwater project, the value of protecting water quality, actions residents can take to protect water quality, and contact information for the Green Neighbors program or Stormwater Partners of SW Washington. Public Works staff also refer residents to the Clark County Stream Health Report for information about their local watersheds.

Outreach Events

Public Works Clean Water Division staffs informational booths at a variety of community events, such as the Klineline Kids Fishing Derby, Multicultural Resource Fair and Home and Garden Idea Fair. Outreach includes information about water quality, the effects of stormwater pollution, pollution prevention and other targeted environmental protection messages.

Social Media









Public Works utilizes several forms of social media to increase outreach messaging effectiveness including:

- Facebook Clean Water messages are included in content posted through the Public Works department profile at facebook.com/clarkcowa.pw
- Twitter The Twitter handle is @ClarkCoWa_
- Instagram Clean Water messages are included in content posted through the Public Works department profile, @clarkcowa_pw, including the Clean Water Division.
- Nextdoor.com The Clean Water Division posts on the Clark County Communications agency account.

Stormwater Partners of SW Washington

Clark County participates is a member of Stormwater Partners of SW Washington, a regional group of NPDES permittees across the county who collaborate to meet education and outreach requirements. Each partner contributes financially and in-kind to develop and implement an annual workplan. Stormwater Partners meet monthly and hold an annual symposium that includes the broader water outreach and education community.

In 2024 Stormwater Partners will fund the Watershed Alliance to conduct outreach to college, university and trade students, the Clark Conservation District to hold a watershed stewardship course, collaborate on a behavior change campaign focused on dumpster maintenance and hold a Students for Clean Water Video Contest.

The Stormwater Partners of SW Washington website (stormwaterpartners.com) includes resources on stormwater facility maintenance and LID BMPs, in addition to pollution prevention resources pertinent to audiences including businesses, residents, schools, property managers, contractors and developers.

Regional Clean Water Campaigns

The Clean Rivers Coalition is a group of Oregon and Southwest Washington cities, counties, stormwater utilities and nonprofit organizations committed to water quality and protection. The coalition supports an identified need for a regional public awareness campaign and development of strategies connecting behavior change messaging to local programs. Public Works clean water outreach specialist senior sits on the steering committee of the coalition.

In 2023, the Clean River Coalition launched the Follow the Water (followthewater.info), an awareness campaign aimed at connecting people to water, their behaviors to water and providing resources for behavior change. They also launched a What's Your Lawn Style pesticide and nutrient reduction behavior change campaign.

Public Works is collaborating with regional partners and KPTV - Fox 12 on a media

campaign promoting stormwater pollution prevention for residents.

Outputs

- Clean Water Division webpages <u>clark.wa.gov/stormwater</u> and <u>cleanwaterdogs.com</u>
- Public contacts at events
- Fact sheets / brochures / informational signage
- Pledges to pick up pet waste
- Promotional materials such as water bottles, pens, etc.
- Social media outreach
- Stormwater Partners of SW Washington
- Regional clean water campaigns
- Clark County Stream Health Report

EDUCATION AND TECHNICAL ASSISTANCE FOR BUSINESSES

Purpose

Education for businesses helps meet county goals for assisting commercial, industrial and governmental enterprises in preventing contribution of pollutants to stormwater runoff or to receiving waters.

Outreach and assistance will focus on:

- General stormwater issues
- Information about illicit discharges
- Preventing and controlling the discharge of contaminants through proper use of Best Management Practices (BMPs)
- Equipment maintenance

Responsibilities

Most activities for this requirement are conducted concurrently or in association with procedures described elsewhere in the SWMP to complete source control inspections and follow-up technical assistance. Responsibilities are described in their respective sections.

Clark County Green Business Program

Clark County's Green Business Program (clarkgreenbiz.com) recognizes and promotes local businesses that document "green" practices, including stormwater BMPs. The program currently supports local businesses that have completed sustainability assessments and have met the requirements to be a Clark County Green Business. The program is managed through Clark County Public Health.

An integral part of the program is the technical assistance visits and education to promote proper handling and disposal of toxic and hazardous materials and stormwater BMPs.

Targeted Messaging

The Clean Water Division has identified a number of businesses that will benefit from targeted messaging on how their business can modify everyday practices to minimize pollution to stormwater. A series of brochures developed in 2017 are used to educate businesses and assist in finding solutions for their pollution prevention strategy. The brochures include messaging in Spanish and Russian.



Targeted business practices inserts include:

- Dumpster/Compactor management
- Spill kit / drum lid use
- Landscaping
- Surface cleaning

Staff created English and Spanish language mop bucket management posters for businesses that routinely mop floors, such as restaurants. In the 2015 fuel station assessment program, Clean Water Division staff developed messaging tools specific to fueling stations.

Pollution Prevention Assistance Program

The Clean Water Division, through a Department of Ecology Pollution Prevention Assistance (PPA) contract, provides targeted outreach to businesses to address pollution source control. There are several aspects to the project, including technical assistance visits, messaging and materials. Available materials include 5-gallon emergency spill kits and drum lid covers, as part of the "Keep a lid on it" program.

In 2025, Clean Water Division staff will continue meeting with businesses and support pollution prevention efforts for business and property managers.

Clean Water Division staff also lead a regional PPA workgroup. PPA specialists from the region meet bi-monthly to discuss challenges, share resources and collaborate on strategies for supporting pollution prevention outreach to businesses.

Catch Basin Cleanout Program

The Clean Water Division will continue the Catch Basin Cleanout Program aimed at increasing routine maintenance of privately

owned catch basins. The program partners with a vendor to provide catch basin cleaning for an agreed upon price of \$50 per catch basin. The vendor then performs the catch basin cleaning, properly disposes of waste material, invoices the business, and provides a manifest of appropriate waste disposal.

Clean Water Division staff created a webpage where owners of private catch basins sign up to have catch basins cleaned for the fixed rate (clark.wa.gov/catchbasincleanout).

Clean Water Division staff promote the program to businesses with stormwater facilities and catch basins draining to the county storm sewer system.



Carpet Cleaner Notices

Public Works, in partnership with regional cities and counties, mails a notice to local carpet cleaners informing them of proper waste disposal options, illicit discharges, and enforceable stormwater pollution laws.

Approximately 40 Washington carpet cleaning business receive English and Spanish versions of the notices. Oregon carpet cleaners who may work in Washington also receive the notices.

Outputs

- Clark County Green Business Program <u>clarkgreenbiz.com</u>
- Targeted business materials, spill response,
 etc.
- Pollution Prevention Assistance brochures
- Pollution Prevention Assistance oil/water separator user's guide
- Catch Basin Cleanout Program <u>clark.wa.gov/catchbasincleanout</u>
- Carpet cleaner notices mailed

EDUCATION FOR HOMEOWNERS, LANDSCAPERS AND PROPERTY MANAGERS

Purpose

Homeowners, landscapers and property managers are caretakers for a large percentage of the county's impervious surfaces, such as roofs and driveways, as well as lawn and landscaped areas that may contribute pollutants to runoff. Education messages will focus on the following topics:

- Impacts of stormwater on surface waters
- Rural property management techniques
- Yard care techniques
- Proper storage and use of pesticides, fertilizers and other chemicals
- Proper maintenance of stormwater treatment and flow control facilities
- Low Impact Development principles and practices
- Proper maintenance of vehicles, equipment and home/buildings
- Proper techniques for carpet cleaning and auto repair
- Street and sidewalk wash water discharge reduction

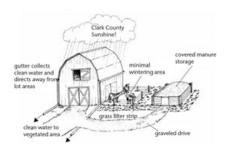
Responsibilities Matrix

Task	CCPW CWD Mgr.	CCPW PIO	CCPW Outreach Specialist Sr.	Agencies Providing Services			
Coordinate education programs	Α	С	Р	С			
Track and measure deliverables	Α	С	Р	S			
Create messages, programs and collateral	Α	С	Р	Р			
Distribute messages and collateral	Α	С	Р	Р			
A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted							

Small Acreage Education Program

The Small Acreage program, funded by the Clean Water Division in partnership with WSU Clark County Extension, provides educational workshops and other outreach to residents on water quality topics unique to rural properties. Topics include mud and manure management, pasture management, well and septic maintenance, and fencing for livestock.

The goal of the Small Acreage program is to reduce pollution entering storm and surface water from residential and agricultural properties by giving residents the knowledge and skills necessary to manage their land and animals.



WSU Clark County Extension will provide one full-time program coordinator and oversight by an Extension faculty member. The coordinator will facilitate workshops, model property tours and follow-up activities. The coordinator also will attend community events to recruit new participants.

Clark County Public Works staff track deliverables of the program and negotiate the annual scope of work with the Extension director. WSU Clark County Extension submits quarterly and annual reports detailing deliverables.

What's Your Lawn Style

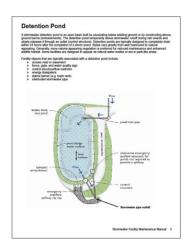
Clark County received an Ecology grant to implement the Clean Rivers Coalition's (CRC) pesticide and fertilizer reduction behavior change campaign, What's Your Lawn Style.. The social marketing campaign aims to reduce weed'n'feed products commonly used on residential lawns. The campaign is informed by prior research with the priority audience and Latino community members and includes short videos in multiple languages and websites hosted on the Oregon State University Master Gardeners (whatsyourlawnstyle.org) and Follow the Water (followthewater.info) websites. The campaign will utilize paid media and work with WSU Master Gardeners to engage county residents through in-person outreach and activities about reducing pesticides and fertilizer use.

Targeted Outreach for Agency Partners

Clark County participates in the Local Interagency Networking Cooperative (LINC), a regulatory-focused education and outreach partnership between Clark County departments of Public Works and Public Health, City of Vancouver Department of Public Works, Clark Regional Wastewater District, Southwest Washington Clean Air Agency, the Washington State Departments of Agriculture, Ecology and Labor & Industries and others.

Regulated Facility Maintenance Inspections

Clark County combines site visits for regulated stormwater facility maintenance inspections with delivery of technical assistance materials such as relevant pages from the Stormwater Facility Maintenance Manual. Refer to Section 3 – Operating and Maintaining the Storm Sewer System, County Property, and Roadways for a complete description of the process.



Stormwater Facility Assistance & Stormwater Partners

Clark County continues to partner with municipalities and regional partners within the county through Stormwater Partners of SW Washington, a program to provide common stormwater messages, education and guidance to the public on how to properly maintain privately owned stormwater treatment and flow control facilities.

The Stormwater Partners website (<u>stormwaterpartners.com/facilities</u>) contains how-to videos and user-friendly outreach materials.





The Public Works outreach specialist, senior will continue to work with the Stormwater Partners to develop this program as needs are identified. Quarterly meetings and an annual symposium will be ongoing and include partners who have a role in educating the public about stormwater.

Low Impact Development (LID) Training

Clark County staff have several tools for educating the public on LID, including a tour book of LID sites in Clark County. The book is in hard copy, as well as a Google map on the Stormwater Partners webpage (tinyurl.com/bddfj5tp).

In 2021, Stormwater Partners added new materials on specific stormwater features and LID. Public Works staff share these resources with various audiences including realtors, landscape professionals, contractors, single family residential homeowners and property managers. Some of the materials may be presented in workshops and trainings, including in collaboration with partners such as Community Development.

Homeowner Targeted Messaging

The Clark County Green Neighbors program (clarkgreenneighbors.org) offers residents tips and resources to maintain their homes and yards while minimizing adverse stormwater impacts including:

- Natural Garden Demonstration Site A demonstration home garden site has been established at a local park (Pacific Community Park) to show how to manage diverse home landscapes while conserving and protecting water.
- Technical Assistance for Natural Gardening Green Neighbors offers technical assistance through a web-based platform to homeowners to improve yards and minimize water use, pesticides and runoff. It also aims to encourage the use of native plants and creation of wildlife habitat.

Backyard Habitat Certification Program

The Clean Water Division provides funding for the Backyard Habitat Certification Program, a collaboration of Columbia Land Trust, Portland Audubon and Watershed Alliance of SW Washington. The program provides stewardship opportunities to owners of private property sized up to one acre in unincorporated Clark County. Participants receive technical assistance, incentives and recognition to restore native wildlife habitat, control noxious weeds, reduce pesticide use and manage stormwater on-site.



Related Messaging

Other Clean Water Division efforts distribute information about water quality, the effects of stormwater pollution, and pollution prevention techniques as integral parts of their program outreach and education messages to the general public. Many of these messages are with partner agencies, such as Public Health.

- WSU Clark County Extension's Master Gardeners program – Public Health contracts for natural gardening workshops
- Composter Recyclers less toxic gardening and yard care

- Hazardous Waste Reduction proper disposal of household and business hazardous wastes
- Recycling A-Z website at www.recyclingaz.com – proper disposal of tires, electronics and household hazardous waste
- Poop Smart Clark pollution identification and control program focused on reducing bacteria pollution sources
- Clark County Community Development -Building Safety - information for homeowners on erosion and stormwater requirements
- Green Apartment Living pollution prevention assistance webinar series for multifamily property managers
- Other local grant programs provide additional messaging about stormwater management and pollution prevention.

Outputs

- Rural land manager fact sheets and videos
- Rural land manager workshops and trainings
- LID educational materials
- Lawncare BMP materials
- Waste disposal materials

EDUCATION FOR DEVELOPMENT AND CONSTRUCTION COMMUNITY, COUNTY PLANNERS AND REVIEWERS

Purpose

The individuals, businesses and agencies involved in development project planning and construction (both regulated communities and the regulators) have great influence on the impacts of stormwater from new development and redevelopment. Education to these communities will focus on the following topics:

- Technical standards for stormwater site and erosion control plans
- Low impact development techniques
- Stormwater treatment and flow control BMPs and facilities

Responsibilities Matrix

Task	CCPW CWD Mgr.	CCPW Outreach Specialist Sr.	CCPW CWD Permit Mgr.	CCPW CWD Operations Specialist	CD Dev. Services Mgr.	CCPW Dev. Eng.	
Code update outreach	Α	S	Р	0	I	S	
Construction Management training	А	0	Р	0	0	0	
Facility inspection training	Α	0	S	Р	0	0	
WWHM training	Α	0	S	0	I	I	
CD website	0	0	0	0	A/P	С	
Pre-application conference	0	0	0	0	A/P	Р	
Small Projects BMP handout	А	S	S	0	Р	0	
DEAB	I	0	0	0	I	Р	
A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted							

WORKSHOPS AND PRESENTATIONS

Stormwater Facility Inspection Training

Public Works Construction Management has an ongoing stormwater facility inspection program. Training will be provided to new inspectors and when there is a change in procedures or manual requirements. Staff are trained to be certified erosion and sedimentation control leads.

Training on Demand

Clean Water Division staff will provide training, code interpretation, BMP manual interpretation and informational materials to technical, professional, and field workers as requested. Clark County departments with employees who work with the development community are trained by CWD staff on topics such as understanding "Pollution by Design" conflicts in development designs (e.g., dumpsters that include covers and separate drain systems).

Education Delivered Through Development Review

Many active development community stakeholders receive educational and outreach messages about water quality, stormwater, and erosion control topics as an integral aspect of the regulatory development review process, including individual residential building permits.

For detailed information on the development review process, see Section 5 – Regulatory Program for Development, Redevelopment and Construction Projects.

Community Development Website

The Clark County department of Community Development hosts a website devoted to compliance with erosion control measures at: clark.wa.gov/community-development/erosion-control.

Pre-Application Conference

All Type II and Type III development applications require the applicant to attend a pre-application conference with county planners and engineers where, among other topics, stormwater, erosion control and submittal requirements are reviewed.

Clark County Stormwater Manual

The Clark County Stormwater Manual, which guides applicants for development and new development through stormwater and submittal requirements, contains educational messages about the importance of stormwater

management. Training materials are posted on the county stormwater manual webpage at: <u>clark.wa.gov/public-works/stormwater-code-</u> and-manual.

Small Project BMP Handouts for Permit Center

Clark County provides BMP packet handouts for small projects that are required to have stormwater site plans, erosion controls and onsite stormwater management BMPs, but don't require an engineered design. The target audience is mainly applicants for single family residential building permits and other small building projects.

Development Engineering Advisory Board

The Development Engineering Advisory Board (DEAB) is a technical and policy review body reporting to the Clark County Council. The DEAB also serves as a mechanism for coordinating with the development community and consulting engineers to distribute information and organize training.

Outputs

- Presentations
- Employee training
- Development community training
- Small Project BMP handout
- Sustainable and affordable development reports
- Educational messages in Clark County Stormwater Manual

EDUCATION FOR STUDENTS

Purpose

Students are the next generation to manage property, own or manage businesses, or simply live, work and recreate in Clark County. Education for students will focus on the following topics:

- Raising awareness of the importance of clean water.
- Introducing the idea of pollutants entering water through stormwater.
- Introducing LID principles and BMPs.
- Impacts from impervious surfaces and improper disposal of waste.

Responsibilities Matrix

Task	CCPW CWD Mgr.	CCPW Mgmt. Analyst Sr.	CCPW Outreach Specialist	Agencies Providing Services				
Coordinate education programs	Α	Р	Р	С				
Track and measure deliverables	Α	Р	Р	S				
Create messages, programs and collateral	Α	S	Р	Р				
Distribute messages and collateral	Α	S	Р	Р				
A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted								

Student Watershed Monitoring Network Program

In partnership with the City of Vancouver, Clark County involves students grade K-12 in water quality monitoring of sites near their schools. Teachers and students receive mentoring in water quality and macroinvertebrate monitoring and conduct stream studies. Students share their findings with peers and the community with an annual culminating activity in late spring.

Program activities and outreach will be conducted primarily by City of Vancouver staff. Clark County staff will negotiate the annual scope of work and track deliverables.

County staff may participate in the annual culminating activity where needed.

Student Video Contest

Stormwater Partners of SW Washington will hold the Students for Clean Water Video Contest (stormwaterpartners.com/videocontest). Open to Clark County middle and high school students, contest submissions include short videos on topics related to pollution prevention, stewardship, and cultural connections to local water. Prizes are awarded for five categories, and winning videos are promoted on social media and recognized at movies in the park events during the summer.

Clark County Green Schools

Clark County Public Health continues to manage the local Green Schools program (www.clarkgreenschools.org). The program provides environmental education opportunities, offers technical assistance for green school initiatives and supports school green teams seeking environmental certification. The program partners with the Seattle non-profit organization EarthGen, formerly Washington Green Schools, to provide their statewide environmental certification program.

Schools can complete assessments in six environmental categories, including water and school grounds, to achieve certification. More than 70 schools in Clark County currently participate in the program. A Public Works outreach specialist senior serves as a resource for local participating Green Schools.

The School Grounds certification covers stormwater management and natural landscaping techniques to reduce chemical use on school grounds. The Water certification covers watershed identification, the path of stormwater from the school campus, LID or stormwater facilities, and possible sources of pollution. Public Works outreach staff provide activity sheets related to stormwater to assist schools with completing the forms. Activity sheets are available on the "What You Can Do for Clean Water" webpage. A Public Works outreach specialist senior also participates in annual teacher trainings to offer support to green teams seeking certifications in school grounds and water. Staff also attend the student summit to provide educational activities to green team students on stormwater topics.

Experience Vancouver Lake

Clark County partners with the Port of Vancouver and City of Vancouver to fund the Lower Columbia Estuary Partnership (LCEP) to implement the Experience Vancouver Lake program. The program provides a variety of educational activities related to Vancouver Lake including in-class instruction and handson educational science kits. LCEP educators conduct Vancouver Lake field trips that include water quality monitoring, stewardship projects and educational messaging about the lake. To engage community and encourage residents and their families to visit the lake LCEP educators lead on-water community paddles and family nature hikes. LCEP focuses on providing opportunities for overburdened community members to get on the lake with no paddling skills required. LCEP also provides a highly visual, illustrated trail map available as a community and school resource in English and Spanish.

College, University and Trade Students

Through Stormwater Partners of SW Washington, the county contracts with the Watershed Alliance of SW Washington to conduct outreach and education to local colleges, universities and trade students. The Watershed Alliance seeks on-campus outreach opportunities and organizes class presentations for Stormwater Partners to share information about impacts of stormwater, hazards associated with illicit discharges and improper waste disposal, LID principles and BMPs and careers in the stormwater field

Enviroscape

The Clean Water Division has an Enviroscape watershed model available for schools to use for watershed and stream health lessons. Utilized by classes K-12, the model helps illustrate how a variety of "pollutant" types such as soaps, dirt, oils and pet waste, can reach waterways.



Enviroscape watershed model

Outputs

- Student Watershed Monitoring Network
- Students for Clean Water Video Contest
- Clark County Green Schools (school grounds and water activity sheets)
- Experience Vancouver Lake student and community outreach activities
- College, university and trade student outreach
- Enviroscape models for classroom use

STEWARDSHIP OPPORTUNITIES

Purpose

Clark County creates stewardship opportunities and/or partners with existing organizations to encourage residents to participate in stewardship activities. The county offers hands-on activities including the following:

- Storm drain marking Kits are available to residents, businesses, scouts, and community groups to mark drains on private property or local roads with speed limits 25 miles per hour or less (both metal medallions and paint stencil kits).
- Adopt a Drain Residents can adopt neighborhood storm drains by sweeping up around the drain each month on roads with speed limits 25 miles per hour or less.
- Planting projects are available to residents through local organizations such as the Watershed Alliance of Southwest Washington, Clark Public Utilities StreamTeam and the Lower Columbia Estuary Partnership along riparian areas and critical habitat zones.
- Clark County Parks Beach clean ups and invasive plant removal events are offered in many county parks.
- Backyard Habitat Certification Program Technical assistance for property owners to restore native wildlife habitat, control noxious weeds, reduce pesticide use and manage on-site stormwater.
- Students for Clean Water Video Contest Students create short videos about pollution prevention practices that are shared at community events and on social media.
- River-friendly car wash kit This kit is available to businesses that host charity car washes for local community groups.
- Watershed Stewardship Clark
 Conservation District offers a six-week
 course on watershed topics and volunteer
 opportunities. Participants share
 knowledge and volunteer in their
 community.
- Other individual site projects Other projects are available based on the site, such as informational kiosk construction. Community-led projects build the kiosk, and the county provides signage / poster /

- educational materials about the site, the watershed and key messages.
- Informational sign installations –
 Community groups, such as scouts, can install watershed specific messaging signs.
- Experience Vancouver Lake Lower Columbia Estuary Partnership provides service-learning opportunities at Vancouver Lake.

Other Community Partner Stewardship Opportunities

There are numerous agencies and nonprofits that provide stewardship opportunities throughout Clark County, including in the jurisdictional area of Clark County. Many of these partners offer educational and stewardship opportunities. Clark County does not partner on funding, but these programs continue to increase awareness of stormwater related issues in our community. Some of the programs anticipated to continue in 2025 include:

Clark Conservation District - Best
 Management Practices program (providing

- technical assistance for agricultural properties to manage pollution sources)
- Clark Public Utilities StreamTeam (tree plantings, invasive species removal, education/outreach, events)
- Columbia Springs Environmental
 Education Center hosts various outreach
 events and programs including Salmon in
 the Classroom (raise and release baby
 salmon) and community events focused on
 river health
- Lower Columbia Estuary Partnership provides restoration projects, outreach and education, including big canoe tours and working with students in classroom education
- City of Vancouver Water Resources Education Center – hosts a number of programs to schools and the community about water, water quality, fish and other environmental messages

BEHAVIOR CHANGE PROGRAM

Purpose

Develop a behavior change program based on local water quality information to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts for at least one target audience and one best management practice (BMP). Regional collaboration on a behavior change program enables development and promotion of consistent messaging and leverages resources.

Responsibilities Matrix

Task	CCPW CWD Mgr.	CCPW PIO	CCPW Outreach Specialist	Agencies Providing Services
New evaluation of ongoing behavior change program	А	0	Р	С
Develop campaign strategy, schedule and evaluation plan	А	I	Р	S
Implement campaign strategy	Α	С	Р	Р
Evaluate and report	Α	0	Р	S
A = Accountable, P = Primary (doer), S = Supports, C = Consulted, I = Informed, O = Omitted				

Develop a Behavior Change Campaign

In collaboration with Stormwater Partners of SW Washington, Clark County will develop a behavior change campaign to address dumpster maintenance. The campaign, including an evaluation plan will follow social marketing practices and be completed by July 1, 2025. The behavior is to close and keep dumpster lids shut. Commercial businesses are the priority audience.

Implement Behavior Change Campaign

Clark County and Stormwater Partners of SW Washington will implement the dumpster lid behavior change campaign by September 1, 2025.

Outputs

- Develop behavior change campaign and evaluation plan.
- Implement behavior change campaign.

TASK CHECKLIST

STATUS	TASK
ONGOING	Educate the general public
ONGOING	Educate businesses
ONGOING	Educate residents, landscapers and property managers
ONGOING	Educate the development and land use planning community
ONGOING	Provide and advertise stewardship opportunities
ONGOING	Increase awareness and education of homeowners, landscapers and
	property managers
ONGOING	Affect behavior through hands on activities, workshops, trainings and
	stewardship
ONGOING	Apply social marketing practices and methods
IN PROGRESS	Develop behavior change campaign and program evaluation plan
IN PROGRESS	Implement behavior change campaign
BY MARCH 31, 2029	Evaluate and report on behavior change campaign

For more information on programs providing education and outreach about stormwater and the SWMP:

Devan Rostorfer, Clean Water Division Manager 564.397.4345 cleanwater@clark.wa.gov

Section 7 - Coordination

Clark County coordinates internally and with other local governments and agencies on a variety of environmental and planning topics.

REGULATORY REQUIREMENTS SUMMARY

NPDES Permit S5.C.3 - Coordination

The NPDES permit requires the county to coordinate among its own departments and with neighboring jurisdictions to eliminate barriers to permit compliance and to encourage coordinated stormwater policies, programs and projects within a watershed.

COUNTY POLICIES, RULES AND REGULATIONS

The following policies and regulations promote permit implementation by county departments.

Clark County Code Chapter 13.26A – Water Quality

Chapter 13.26A requires inspection and maintenance of all public and private stormwater facilities and stormwater disposal wells in accordance with the Clark County Stormwater Manual that provides source control BMPs for materials handling, landscape management, trash management and building exterior maintenance. This manual is equivalent to maintenance standards in Volume V and source control standards in Volume IV of the SMMWW.

Environmentally Responsible Purchasing Policy

Clark County adopted its Environmentally Responsible Purchasing Policy in 2004. One element addresses purchase of landscaping and vegetation maintenance products, including pesticides. The policy establishes a set of criteria, any of which will disqualify a pesticide from purchase. A waiver process requires further examination of the pesticide by the Environmentally Responsible Purchasing Team to determine if a more environmentally friendly alternative exists. If no alternative is found, the pesticide can be purchased and used within specific limiting guidelines. The policy promotes a coordinated approach to the pesticide and fertilizer use reduction.

Regional Road Maintenance Program

Clark County has been a member of the ESA Regional Road Maintenance Forum since 2003. The group assisted the county in developing a Regional Road Maintenance Program that is designed to meet the requirements of the Endangered Species Act (ESA). In 2004, NOAA Fisheries approved Clark County's Regional Road Maintenance Program and determined that it was compliant with the ESA. The program seeks to protect salmon and steelhead by relying on the extensive use of preapproved BMPs for routine maintenance activities. The program promotes systematic adherence to pollution control standards for road operations.

INTRA-GOVERNMENTAL COORDINATION

Purpose

Intra-governmental coordination helps ensure cooperation of all Clark County departments in meeting the terms of the NPDES Municipal Stormwater Permit and in protecting local water resources.

Responsibilities

Responsibility for negotiating interdepartmental and programmatic agreements lies with the Clean Water Division manager or a designee and with managers of coordinating programs and departments.

Responsibilities for implementing the agreed upon activities are shown in detail in responsibility matrices and program descriptions in the appropriate SWMP sections.

Agreements

The Clean Water Division coordinates the county's NPDES permit compliance efforts. Although the program coordinates with other departments, it is not responsible for all compliance actions. The Clean Water Division maintains interdepartmental agreements or other agreement mechanisms with several county departments to support compliance. Agreements include services provided for payment by the CWD and description of permit requirements that must be met by departments.

Public Works Road Operations, Parks, and County Land Management Divisions

Public Works completed an intra-departmental agreement between the Clean Water, Road Operations and Maintenance, Parks, and County Lands Management Divisions to implement requirements under permit requirements S5.C.10, Operations and Maintenance Program, including:

- Standards and schedules for stormwater facility and catch basin maintenance
- Practices for operating streets, roads and highways
- Street sweeping
- Spill response practices
- Stormwater facility inspection and Maintenance
- Water quality BMPs for maintaining public land
- Training
- Stormwater Pollution Prevention Plans (SWPPs) for heavy equipment yards
- Recordkeeping
- Reporting requirements for the NPDES permit annual report

Public Works Engineering and Construction Division

Public Works provides services to implement permit requirements under S5.C.5, S5.C.6 and S5.C.7.

Public Works provides the following services:

- Project management for stormwater capital improvements
- Design and construction management for stormwater capital improvements
- Capital planning assistance
- Development site inspection
- Program to inspect stormwater facilities during maintenance warranty
- Enforce stormwater, erosion control and water quality codes
- Inspection program recordkeeping
- County stormwater facility annual maintenance inspection
- Training for staff whose primary job duties include design, construction site inspection and enforcement

Community Development Building Safety and Permit Services

Department of Public Works maintains an interdepartmental agreement with Community Development to implement requirements under permit requirement S5.C.5, including:

- Accept development applications
- Review site plans for residential building projects that do not require engineered designs
- Review and inspect erosion controls, onsite stormwater controls at residential building sites, primarily single-family residential construction sites
- Enforce stormwater, erosion control and water quality codes
- Maintain records of applications, reviews, inspections and enforcement actions
- Train staff whose primary job duties include permitting, plan review and BMP compliance
- Referring water quality complaints to the Clean Water Division

Community Development Planning and Development Engineering

Community Development provides development review services for enforcing Clark County Code Chapter 40.386 Stormwater and Erosion Control. Community Development provides the following services:

- Review and approval of development project applications
- Administration of development project recordkeeping
- Train for staff whose primary job duties include permitting and plan review

Internal Services Facilities

The Clean Water Division has an interdepartmental agreement with Internal Services that includes operation and maintenance of stormwater facilities, use of

source control BMPs, and technical assistance and training from Public Works.

Public Health

The Clean Water Division coordinates with Clark County Public Health on spill responses, illicit discharge investigations and other environmental complaints.

Public Health's agreement includes referring illicit discharges to Clean Water Division when discovered during routine work such as restaurant inspections, swimming pool inspections and other field activities that may discover illicit discharges. Field staff are trained to report spills and refer sites having illicit discharges to the Clean Water Division. Public Health is also responsible for addressing illicit discharges caused by on-site sewage disposal facilities.

GIS Department and Application Services

Department of Public Works maintains an agreement with the GIS Department for various services that support SWMP implementation, including administration of the county's storm sewer infrastructure asset database, StormwaterClk, the Cartegraph asset management system, stormwater fee database administration, software support, GIS data used for capital planning and monitoring studies, developing Web applications and internet access to program information, and database development.

Other Intragovernmental Coordination

The Clean Water Division also coordinates informally with other county programs and departments on various stormwater-related and environmental efforts and projects such as development code and comprehensive plan updates.

Outputs

 Interdepartmental memoranda of understanding for services and permit requirements performed

INTERGOVERNMENTAL COORDINATION PURPOSE

Clark County informally coordinates with Phase II permittees and other local organizations to control pollutants between physically interconnected storm sewer systems, to attempt to provide consistent stormwater management for shared water bodies, and to collaborate on permit implementation tools and TMDL implementation.

Coordination to Clarify Roles and Responsibilities for Interconnected Systems

The Clean Water Division has identified approximately 500 connection points between the county MS4 and other municipal entities such as cities and WSDOT right of way. Within the urban area, the Clean Water Division assesses the potential for intersystem pollutant discharges using IDDE procedures.

Clark County has informal discussions with local NPDES Phase II permittees regarding mapping and illicit discharge screening programs.

The regional Stormwater Partners web page has a list of contacts for local municipalities.

General Intergovernmental Coordination

Clark County participates with other local governments and agencies on several joint efforts, including:

 Shared education and outreach programs with the City of Vancouver

- Operation of the regional street waste decant facility with WSDOT, Vancouver, Battle Ground, Camas and Washougal
- Pet waste behavior change campaign with Battle Ground, Camas and Washougal
- Regional media buy for stormwater education and outreach messaging with Battle Ground, Camas, Washougal
- Stormwater Partners of SW Washington to produce shared education and outreach products
- Clean Rivers Coalition collaborates regionally, including Oregon jurisdictions, on education, outreach and behavior change programs
- Hosting quarterly Southwest Washington permittee meetings to coordinate activities including roles and responsibilities for our interconnected systems.

Stormwater Partners of SW Washington

Clark County coordinates Stormwater
Partners of SW Washington to collaborate
with other local governments and agencies on
outreach and education efforts. Stormwater
Partners is led by a steering committee
consisting of staff representing Clark County,
the cities of Battle Ground, Camas, Ridgefield,
Vancouver and Washougal and the Port of
Vancouver. In 2024, the partners entered into
a formal ILA to continue joint efforts, including:

- Watershed Stewardship course with Clark Conservation District
- College, university and trade student outreach.
- Dumpster lid behavior change campaign
- A regional education program covering facility maintenance to stormwater facility owners within Vancouver, Battle Ground, Camas, Washougal, Ridgefield and La Center
- The Students for Clean Water Video Contest

- Canines for Clean Water pet waste program
- Mobile carpet cleaner outreach

Pollution Prevention Assistance Program Coordination for Source Control Work

Clark County Public Works, Clark County Public Health, Vancouver and Longview are all member agencies in Ecology's Pollution Prevention Assistance Program. Clark County is leading an effort to coordinate our efforts and outreach materials. Non-PPA jurisdictions are allowed to attend coordination meetings.

Coordination for Shared Water Bodies

Vancouver Lake Watershed Partnership
The Vancouver Lake Watershed Partnership
(VLWP) steering committee meets periodically.
The original funding partners (Clark County,
City of Vancouver and Port of Vancouver)
continue to provide financial support for
community outreach, education and volunteer
activities as Experience Vancouver Lake under
a contract with the Lower Columbia Estuary
Partnership (LCEP). The Clean Water Division
manager administers the contract with LCEP
and serves as representative to coordinate
with the other funding partners.

Vancouver Lake Legislative Proviso
The Washington State Legislature allocated
\$330,000 to Department of Ecology in the
2023-2025 budget bill to provide a grant to
Clark County for the purpose of developing
and implementing a lake management plan for
Vancouver Lake. In 2025, Clark County will
complete an RFP process and hire a consultant
team to work on several aspects of plan
development and implementation, including:

 Framework for a Vancouver Lake Management Special District and Governance Structure

- Beach Algaecide Treatment Implementation Plan
- Flushing Enhancement conceptual designs and alternatives analysis

Clark County will also implement additional monitoring and watershed activities funded by the Proviso.

Lacamas Lake Interlocal Agreement
Clark County worked with the City of Camas in
2024 to finalize and adopt an Interlocal
Agreement for cooperative efforts managing
Lacamas, Round, and Fallen Leaf Lakes and
their associated watersheds.

TMDL Coordination

Clark County coordinates with Ecology and local entities on TMDL implementation. Upon request, the NPDES Permit manager and Stormwater Infrastructure manager will provide input to Ecology in development and update of Detailed Implementation Plans. The Stormwater Infrastructure manager and Natural Resource Specialists will continue to participate on the local advisory committees for the following existing or upcoming cleanup plan water bodies:

- Burnt Bridge Creek
- East Fork Lewis River Plan
- Gibbons Creek
- Salmon Creek
- Lacamas Creek

In 2024, the focus will be on implementing the cleanup plan for bacteria in the East Fork Lewis River and the multi-parameter Salmon Creek cleanup plans in collaboration with Ecology and local stakeholders. Other work includes, ongoing development of multi-parameter TMDLs in Burnt Bridge Creek and Lacamas Creek.

Clark County complies with TMDL requirements by implementing its Stormwater Management Program.

Coordinated Lake Treatment

The Fee Increase Rate Study will allow Clean Water to financially support in-lake treatment

activities in Vancouver and Lacamas Lakes to implement Lacamas Interlocal Agreement & Vancouver Lake Management Plan.

Outputs

 Various outputs from education and outreach programs (see section 6) Environmental benefits

For more information on ways the county coordinates with other jurisdictions and permittees:

Devan Rostorfer, Clean Water Division Manager 564.397.4345 cleanwater@clark.wa.gov



 $County \, staff \, monitoring \, water \, quality \, at \, the \, Jones \, Creek \, stream \, gauge \,$

CHAPTER 3Assessment and Monitoring

Assessment and Monitoring

Clark County is a regional leader in natural resource monitoring and assessment. The Assessment and Monitoring section implements a variety of projects to collect scientific data about stormwater, surface waters, stream corridor condition and habitat to support and implement NPDES permit requirements.

The core goal is to provide information leading to successful on-the-ground actions that improve natural resources in Clark County. The program utilizes sound science and data collection practices to inform the county's policy and program management decisions and provide information vital to the success of Clark County programs.

REGULATORY REQUIREMENTS SUMMARY

NPDES Permit - S8 Monitoring

Clark County meets requirements S8.A Regional Status and Trends Monitoring and S8.B Stormwater Management Effectiveness and Source Identification Studies by using the pay-in option.

Standard Procedures for Monitoring Activities

The Clean Water Division maintains the Standard Procedures for Monitoring Activities for use in guiding field and laboratory work. It details the protocols and means used to generate data.

Water Quality Database

The Water Quality Database (WQDB) is a centralized repository for the Clean Water Division's water quality and benthic macroinvertebrate data. The WQDB is a SQL 2000® database with Access® interfaces for data entry and retrieval. A batch uploading tool enables rapid entry of large datasets.

TOOLS THAT SUPPORT PERMIT COMPLIANCE

The Assessment and Monitoring section provides tools and staff to support completion of permit-required stormwater planning technical analysis. These are standard procedures for collecting environmental data, database systems for storing data, quality assurance and quality control procedures, and methods to analyze and present data results.

Quality Assurance Project Plans

Each monitoring project follows a Quality Assurance Project Plan or QAPP to ensure that data are of adequate quality to meet project objectives. Each QAPP follows guidelines published by Ecology.

Hydrology Databases

Data from the county's hydrologic and stormwater monitoring sites (storm flow, stream flow and rainfall gages) is stored in an Aquarius® database.

BMP EFFECTIVENESS MONITORING

Clark County is not conducting Best Management Practice Effectiveness Monitoring as a permit requirement. The project 2013 permit effectiveness project began implementation in late 2015 and was completed under the 2013 permit in 2018.

ILLICIT DISCHARGE MONITORING

This activity is described in detail in Illicit Connections and Illicit Discharges Detection and Elimination (IDDE) in Chapter 2.

For more information on services provided by the Assessment and Monitoring section:

Jeff Schnabel, Clean Water Division Monitoring Manager 564-397-4583 Jeff.Schnabel@clark.wa.gov