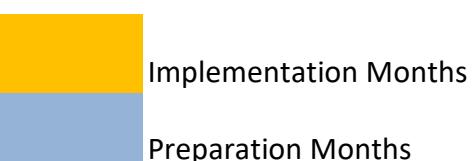


Stormwater Public Outreach Program 2022-2023																																
Project Number	Project Name	Activity Performed / Planned		Evaluation Measure (Public)		Evaluation Measure (Internal)		Lead	Jan 2022	Feb 2022	Mar 2022	April 2022	May 2022	June 2022	July 2022	Aug 2022	Sep 2022	Oct 2022	Nov 2022	Dec 2022	Jan 2023	Feb 2023	Mar 2023	April 2023	May 2023	June 2023	July 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec 2023
<b>1 General Public</b>																																
1a	Central Washington State Fair	Participate in a stormwater awareness booth and have personnel available to answer public questions and provide proactive information.	Level of Stormwater Awareness through public interaction and event attendance	Post Event RSWG Evaluation	Yakima County																											
1b	Arbor Day ArborFEST	Provide a stormwater awareness booth with interactive educational materials and give away native tree and shrub seedlings.	Level of Stormwater Awareness through public interaction and event attendance	Post Event RSWG Evaluation	Yakima County																											
1c	Yakima County Website - RSWG Outreach Pages	Develop and provide outreach trainings, activities, and information materials through our county website for public and businesses.	Direct Public Feedback	Activity Analysis Report	Yakima County																											
1d	Phone Calls	Answer all calls related to stormwater issues within our jurisdiction.	Direct Public Feedback	Record database for all calls related to an illicit Discharge report.	All																											
1e	Public Presentations	Slide presentations available upon request for the public and businesses to use for training or information purposes.	Level of Stormwater Awareness through public interaction and event attendance	Activity Analysis Report	Yakima County																											
1f	Dozer Days	Participate in a stormwater awareness booth and have personnel available to answer public questions and provide proactive information.	Level of Stormwater Awareness through public interaction and event attendance	Post Event RSWG Evaluation	Yakima County																											
2	<b>School-Age Children</b>																															
2a	Drain Rangers	Drain Rangers contracted to provide in school stormwater awareness education.	Semiannual reports from Contractor; Teacher surveys	Activity Participation and Analysis Report	Yakima County																											
3	<b>Businesses</b>																															
3a	Facebook	Provide stormwater awareness materials, news, and recent activity updates	Level of content likes, comments and shares.	Monthly Followership Report	Yakima County																											
4	<b>Professionals</b>																															
4a	Ongoing Stormwater Awareness and Illicit Discharge Classes	Ongoing 1-Hour classes available for internal municipality employees and public.	Class Evaluation Surveys	Activity Participation and Analysis Report	Yakima County																											
4b	Permitting Early Assistance	During pre-application conferences, provide guidance to engineers, construction contractors, and developers about stormwater requirements, technical resources for SSPs, and BMPs to retain stormwater on site.	Direct Public Feedback	Activity Analysis Report	Yakima County																											
5	<b>Multiple Audiences</b>																															
5a	Information Brochures	Informational brochures available on website for the general public and businesses to use for training or information purposes. Hardcopy Brochures are also available within the Public Services Office.	Direct Public Feedback	Activity Analysis Report	Yakima County																											
5b	Quarterly Stormwater Outreach Newsletter	Quarterly outreach newsletter that details stormwater related topics, issues, or recent outreach activities.	Direct Public Feedback	Activity Participation and Analysis Report	Yakima County																											
5c	RSWG Meetings	RSWG meeting conducted quarterly on the first Thursday of March, June, September, and December. Open to the public for attendance and participation. Meeting agenda and minutes published to the public on website.	Direct Public Feedback	Activity Analysis Report	All																											



Projects listed are a draft list and dependent on funding, availability and agreements from third parties.

# STORMWATER MANAGEMENT PROGRAM FOR YAKIMA COUNTY

IN COMPLIANCE WITH THE EASTERN WASHINGTON PHASE II MUNICIPAL  
STORMWATER PERMIT

WAR04-6014; YAKIMA COUNTY

**PROGRAM - YEAR 16**

**APRIL 2022**



[Yakima County Stormwater Management Program](#)

March 19, 2022

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Appendix B - Eastern Washington Stormwater Effectiveness Study Technical Evaluation Report  
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## **Abbreviations and Acronyms**

AKART – All Known, Available, and Reasonable methods of control and Treatment

BMP – Best Management Practice

DDD - Dichlorodiphenyldichloroethane

DDE – Dichlorodiphenyldichloroethylene

DDT – Dichlorodiphenyltrichloroethane

Ecology – Washington State Department of Ecology

ESA – Endangered Species Act

GIS - IDDE – Illicit Discharge Detection and Elimination

ILA – Interlocal Agreement or Intergovernmental Local Agreement

LID – Low Impact Development

MEP – Maximum Extent Practicable

MS4 – Municipal Separate Storm Sewer System

NOI – Notice of Intent

NPDES – National Pollutant Discharge Elimination System

O&M – Operation and Maintenance

PAH – Polyaromatic Hydrocarbon

POTW – Publicly Owned Treatment Works

RCW – Revised Code of Washington State

RSL – Regional Stormwater Lead

RSWG – Regional Stormwater Working Group

RSWMP – Regional Stormwater Management Program

SWPPP – Stormwater Pollution Prevention Plan

SWMP – Stormwater Management Program

TBD – to be determined

TMDL – Total Maximum Daily Load

TSS – Total Suspended Solids

UA – Urbanized Area

UGA – Urban Growth Area

UIC – Underground Injection Control

USEPA – United States Environmental Protection Agency

VE – Value Engineering

WAC – Washington Adminstrative Code

YCHD – Yakima County Health District

## 1 Introduction

The purpose of this document is to provide compliance with the Eastern Washington Phase II Municipal Stormwater Permit issued by the Washington State Department of Ecology (Ecology) that requires written documentation of stormwater management programs (SWMPs) developed and implemented by permittees.

There are five permittees in Yakima County (Yakima County, City of Yakima, City of Selah, City of Union Gap, and City of Sunnyside) that discharge stormwater from their Municipal Separate Storm Sewer Systems (MS4s) and have obtained permit coverage from Ecology. At the issuance of the first permit, four municipalities were regional co-permittee partners described by an interlocal governmental agreement (ILA) signed July 5, 2007, amended in 2009. As of July 8, 2014, the City of Yakima withdrew from the ILA, and the City of Selah joined the regional partnership. In 2019, Yakima County amended the ILA for all regional members to obtain separate coverage permits, but retain the Regional Stormwater Working Group (RSWG) for the public benefit as a voluntary, ad-hoc regional group.

For clarity, this plan will use the term **Regional Stormwater Working Group (RSWG)** to refer to those participating regionally. If no jurisdictions are participating regionally, this plan will refer to only those activities that pertain to Yakima County. The lead municipality of the RSWG is the Water Resources Division of Yakima County Public Services Department.

The primary goal of the Stormwater Management Program (SWMP) and the RSWG is to meet permit regulatory requirements and justify commitment of resources. The permit assumes that compliance with activity-based permit requirements will improve water quality in nearby streams and lakes. A secondary goal is to provide a basis for public feedback to the management program.

The geographic area of responsibility for the activities described in this plan for Yakima County is the area that is described in the Yakima County Code 12.09. The geographic area of responsibility for the Cities are the urbanized growth areas for those respective Cities which is commonly described as all of the area that lies within the city limit boundaries. Areas of Union Gap's growth management area and US Census areas that overlap the Yakama Nation reservation are not included since Ecology and Yakima County have limited jurisdictional authority, and the U.S. Environmental Protection Agency (USEPA) regulates the National Pollutant Discharge Elimination System (NPDES) program on reservations. As a result of the 2010 US Census, new areas now meet the definition of "urban" and will be part of the permit program for Yakima County. These areas are also identified in Figure 1.

Permittees must develop SWMPs that contain minimum performance measures in eight required program elements; Public Education and Outreach, Public Involvement and Participation, Illicit Discharge Detection and Elimination, Construction Site Stormwater Runoff Control, Post-Construction Stormwater Management, Municipal Operations and Maintenance, Compliance with TMDL Requirements, and Monitoring and Assessment. Descriptions of the performance measures that Yakima County will perform are the core of this document. For context, the regulatory and physical environment as related to stormwater is provided to support the performance measures. Each performance measure identifies whether it is part of the ILA, contains a goal, describes existing or related activities, presents measurable activities to meet the goal, identifies documentation needed for assessment and describes responsibilities.

The RSWMP is based on permit requirements, previous work by consultants and an interlocal governmental agreement between the communities for stormwater permit coverage. It builds on those works by specifying actions, setting measurable activities and identifying how to measure the success of the actions. Full implementation of the stormwater program will be a long-term, iterative process, thus this document is designed as a living document, easily adapted as performance measures are implemented, evaluated, and revised if needed. The Water Resources Division of Yakima County Public Services, in collaboration with other city and county departments, developed this document. Copies, and

other regional stormwater information, can be obtained in the 4<sup>th</sup> Floor Courthouse main lobby, [the Regional Stormwater website](#), or by contacting the Yakima County SWMP at 509-574-2300.

## 1.1 Regulatory Environment

The Clean Water Act, enacted in 1972, contains the legal requirement for protecting the quality of waters of the nation. The Act authorizes the USEPA Administrator to carry out its requirements. USEPA initially focused water quality improvement efforts on reducing discharges of pollutants from pipes (point sources), primarily wastewater from industrial processes and municipal sewer treatment facilities.

Diffuse sources of pollutants (non-point sources) also contribute to water pollution nationwide. Runoff from stormwater can collect pollutants as it flows across the landscape and discharges to surface and ground water. As a result, USEPA regulates urban stormwater discharges by requiring municipalities to obtain National Pollutant Discharge Elimination System (NPDES) permits for stormwater.

Phase I of the NPDES Stormwater Program began in 1990. Large and medium size municipalities with populations greater than 100,000 were required to develop and implement SWMPs. Phase II of the regulations requires small municipalities (<100,000) and contiguous areas with smaller – but still urban – communities to develop and implement SWMPs. In February 2007, the Department of Ecology issued the Eastern Washington Phase II Municipal Stormwater Permit, requiring permittees to submit a Notice of Intent (NOI) seeking coverage and to comply with the terms of the permit. Currently, Ecology has required permittees and co-permittees to submit an NOI for coverage and to comply with the current Phase II Municipal Stormwater Permit that became effective August 1, 2019.

Phase II communities must implement performance measures that reduce pollutants in stormwater to the “maximum extent practicable” (MEP). MEP is the technology-based standard established by Congress in CWA §402(p)(3)(B)(iii). The SWMP focuses on performance measures that are technically sound and cost effective, while meeting permit requirements.

## 1.2 Development of the SWMP

Regional stormwater programs began in 1994 when Yakima County and the City of Yakima completed a Yakima Regional Stormwater Management Plan (RSWMP). Several efforts to regionalize stormwater programs were made over the next 10 years, resulting in the RSWG being formed in 2005. The RSWG consisted of elected officials from the City of Yakima, Union Gap, Sunnyside, and Yakima County whose goal was to review overall program costs and explore mechanisms for further cost savings by regional consolidation. Following Ecology’s issuance of a final Phase II Municipal Stormwater Permit for Eastern Washington in February 2007, the three municipalities signed a three-year ILA becoming co-permittees for regional permit compliance on July 5, 2007. The original ILA was amended in 2009 for the remaining two permit years. Delay in permit issuance resulted in a subsequent ILA that extended the agreement until the second permit was in effect.

As noted in the introduction, the City of Yakima withdrew from the ILA effective April 1, 2014, and a new ILA was drafted and finalized July 8, 2014 that included the City of Selah. That ILA expired with the end of the permit cycle in 2019 and a new ILA was drafted, finalized, and executed in the first quarter of 2019 with the new cycle of the Phase II permit. The new ILA dissolved the regional compliance mechanism and establishes the RSWG as a voluntary ad-hoc regional group with each municipality being their own permittees and responsible for meeting their permit requirements and maintaining their respective stormwater management programs.

## 1.3 Responsible Departments and Officials

As noted, only the City of Selah, City of Sunnyside, City of Union Gap, and Yakima County participated in the 2019-2024 ILA, with Yakima County as the lead for the RSWG. The selected officials listed below are charged with the duties and responsibilities of representing the RSWG from each municipality:

**Table 1. RSWG Responsible Personnel under the ILA**

Yakima County	City of Selah
David Haws Environmental Services Director 128 N. 2 <sup>nd</sup> St. Fourth Floor Courthouse Yakima, WA 98901 Telephone: (509) 574-2277 Email: <a href="mailto:david.haws@co.yakima.wa.us">david.haws@co.yakima.wa.us</a>	Erin Barnett Stormwater Program Lead 222 S. Rushmore Rd. Selah, WA 98942 Telephone: (509) 698-7331 Email: <a href="mailto:ebarnett@selahwa.gov">ebarnett@selahwa.gov</a>
Jack Wells Water Resources Supervisor-Stormwater Lead 128 N. 2 <sup>nd</sup> St. Fourth Floor Courthouse Yakima, WA 98901 Telephone: (509) 574-2350 Email: <a href="mailto:jack.wells@co.yakima.wa.us">jack.wells@co.yakima.wa.us</a>	Rocky Wallace Public Works Director 222 S. Rushmore Rd Selah WA 98942 (509) 698-7365 <a href="mailto:Rocky.Wallace@selahwa.gov">Rocky.Wallace@selahwa.gov</a>
City of Sunnyside	City of Union Gap
Shane Fisher Public Works Director 818 E. Edison Ave. Sunnyside, WA 98944 Telephone: (509) 837-5206 Email: <a href="mailto:sfisher@sunnyside-wa.gov">sfisher@sunnyside-wa.gov</a>	Dennis Henne Director of Public Works & Community Development 3106 1 <sup>st</sup> St. Union Gap, WA 98903 Telephone: (509) 248-0430 Email: <a href="mailto:dennis.henne@uniongapwa.gov">dennis.henne@uniongapwa.gov</a>

## 1.4 Physical and Economic Environment

Yakima County lies east of the Cascade Range in the south-central region of Washington (Figure 1). The terrain ranges from the steep, forested slopes of the Cascade Range to relatively flat agricultural lands lying south of Ahtanum Ridge and west of the Yakima River, centered on the town of Harrah. Four ridges generally trending west-northwest to east (Umtanum, Yakima, Toppenish and Ahtanum) bisect the Yakima River basin, creating broad valleys separated by ridgeline gaps. The elevation of the County ranges from 8,184 ft. above sea level in the Cascade Range to about 630 ft. along the Yakima River near Grandview. The Yakima River basin contains a variety of landforms, including the glaciated peaks and deep valleys of the Cascade Range, broad river valleys, and the lowlands of the Columbia Plateau.

Much of the county land area is undeveloped. Agriculture, urban development, and most of the population are concentrated in a 10- to 15-mile-wide band along the Yakima River. Agricultural production ranks

first in Washington with a value of \$1.66 billion per year and is the base of the county economy. Fertile silt-loam soils of the Yakima River Valley and the availability of irrigation yield a diversified range of farm products.

Farm and forest production in the county supports a variety of manufacturing and other activities in the urbanized areas. Food processing, including fruit and vegetable canning, hops production, viticulture and meat packing, are the dominant industries. Employment in the trade, health care and government sectors are the largest of the non-farm industry sectors, accounting for 43 percent of the employment for the county (47,600 jobs estimated). Yakima County has a high concentration of wholesale trade business, reflecting warehousing of food products. Regional distribution centers, Interstate Highway 82 and one of the main Burlington Northern Santa Fe rail lines make the area a transportation focus in the central part of the state.

Sixty-six percent of the county population resides within incorporated communities. The City of Yakima is the largest municipality, with an estimated population of 95,490 in 2020 (Table 2). The Cities of Yakima and Union Gap are located between Selah Gap in the Yakima Ridge and Union Gap in the Ahtanum Ridge south of the confluence of the Naches and Yakima Rivers (Figure 1). The City of Sunnyside is located in the south-east part of the county, in the lower Yakima River basin between the Horse Heaven Hills and the Rattlesnake Hills, approximately three miles north of the Yakima River (Figure 1).

**Table 2. Summary of population and area for regional permittees.**

City/County	Population	Statewide Rank (within type)	Land Area (Sq Mi)
Yakima County	259,950	8	4,295.4
- Unincorporated County	88,955	9	4,181.6
- Incorporated County	170,995	6	113.8
City of Selah	8,365	101	4.6
City of Union Gap	6,640	113	5.6
City of Sunnyside	16,500	65	7.6

\*All numbers based on State of Washington Office of Financial Management, April 2022 estimates

Summer weather of the Yakima River basin is hot and dry, typical of a continental climate. Winters are moderately cold and relatively dry due primarily to the maritime influence of the prevailing westerly circulation from the Pacific Ocean and a rain shadow effect by the Cascade Mountains. Approximately 75 percent of the annual precipitation occurs from October through March. Annual precipitation varies from more than 100 inches in the Cascade Range to less than 10 inches in the lower elevations. Snowfall in excess of 400 inches falls on the higher slopes of the Cascade Range, and the lower valleys receive from 15 to 20 inches annually. Stormwater runoff typically occurs under rapid warming events that melt accumulated snow or during localized early summer thunderstorms. Winter temperatures normally range from approximately 20°F at night to approximately 30°F during the day. Temperatures of 0°F or below can be expected in January or February. Normal summer temperatures reach 90°F during the day but cool rapidly to near 60°F at night. Temperatures exceeding 100°F are unusual; however, a few readings over 110°F have been recorded.

## 1.5 Regional Receiving Waters and Water Quality Standards

Stormwater from the regional MS4's is discharged to the following receiving waters: Naches and Yakima Rivers, Ahtanum, Bachelor, Cottonwood, Spring and Wide Hollow Creeks; Selah Ditch and the Sulphur Creek Wasteway. Washington Department of Ecology assigns beneficial uses to these waters that determine water quality standards. Numeric criteria promulgated at Chapter 173-201A WAC protect designated beneficial uses. Regional receiving waters have a range of designated beneficial uses including salmonid spawning, domestic consumption, primary and secondary contact recreation, and aesthetics. Sulphur Creek Wasteway is assigned lesser quality beneficial uses including secondary contact recreation, industrial and stock watering, and wildlife habitat.

In addition to water quality standards, municipal stormwater permits must comply with pollutant discharge load allocations established in water quality improvement projects (also known as Total Maximum Daily Loads, or TMDLs) prepared by Ecology when stream segments do not meet water quality standards. Two (2) water quality improvement projects are “under development” or completed for receiving waters listed above:

1. Mid-Yakima River Basin-Moxee Drain, Wide Hollow Creek, and Cowiche Creek, for bacteria
2. Yakima River, for Toxics

## 1.6 Potential Stormwater Pollutants and Impacts on Water Quality

The SWMP and the permit do not focus on specific pollutants. The permit assumes that required activities will reduce stormwater pollution, unless a water quality impairment has been identified by Ecology and a specific pollutant reduction is required under the Total Maximum Daily Load (TMDL) program.

Pollutants typically found in urban runoff include sediments, nutrients, pathogens, oxygen-demanding substances, petroleum hydrocarbons, heavy metals, floatables, polycyclic aromatic hydrocarbons (PAHs), trash, and pesticides and herbicides. To date, no comprehensive analysis of stormwater runoff from the regional MS4 has been conducted to determine relative magnitude of these potential pollutants in regional stormwater; however, specific pollutants have been identified in some regional receiving waters. Documentation of other illicit stormwater pollutant discharges is anecdotal or limited in documentation in County records (e.g. anti-freeze and apple process wastewater from a fruit packing warehouse).

The following is a description of typical stormwater pollutants that may occur in the regional stormwater discharge and their impacts.

Sediment is a common component of stormwater and can be a pollutant when it is detrimental to aquatic life (primary producers, benthic invertebrates, and fish). Sediment can interfere with photosynthesis, respiration, growth, reproduction, and oxygen exchange between aquatic organisms and the surrounding water. In addition, sediment can transport other pollutants that attach to it including nutrients, trace metals, and hydrocarbons. Sediment is the primary component of total suspended solids (TSS), a common water quality analytical parameter. Ecology conducted a total maximum daily load (TMDL) evaluation of the lower Yakima River basin in 1994-1995. Historical and TMDL data indicated significant correlations between TSS and turbidity, and between TSS and total DDT.

Nutrients, such as nitrogen and phosphorous, are essential substances needed by most organisms in some form to sustain life. In particular, nitrogen and phosphorous are commonly found in plant fertilizers that are used on all types of vegetation to promote growth, from residential lawns to agricultural crops, and are often found in stormwater runoff. Excess nutrients in water can accelerate the growth of vegetation, particularly algae, resulting in excessive concentrations that can be toxic to fish and impair the use of water in streams, lakes and rivers. In response to concerns about excessive plant growth degrading the

water quality of the lower reaches of the Yakima River, a study was conducted in 2004-07 by the USGS and the South Yakima Conservation District to characterize the nutrient and suspended sediment conditions in these lower reaches, record the extent and severity of exceedance of the state water quality standards and determine if any patterns or conditions related to their testing could be made. Results, published in 2009, indicated that there were elevated concentrations of nitrogen and phosphorous in the lower reaches during certain times in the study period. These higher concentrations of nutrients lead to abundant growth of algae and other aquatic plants that also negatively affected the pH, temperature and dissolved oxygen in the river.

Pathogens (bacteria and viruses) are common contaminants of stormwater. Sources of these contaminants include animal excrement, sanitary sewer overflow or cross connection, and soil. A TMDL for total coliform bacteria, temperature, and dissolved oxygen is in place for Selah Ditch, primarily due to stormwater sources from the City of Selah stormwater system. Sulphur Creek Wasteway is under development of a TMDL because it has not met State criteria for fecal coliform. In late 2020 a TMDL for the Mid-Yakima River Basin has been established for e-coli bacteria.

Oils and grease includes a wide array of petroleum hydrocarbons, some of which are toxic to aquatic organisms at low concentrations. The main sources of oil and grease are leakage from engines, spills at fueling stations, overfilled tanks, restaurant waste or illegal oil disposal. No TMDL studies for oil and grease are currently underway in the Yakima River basin.

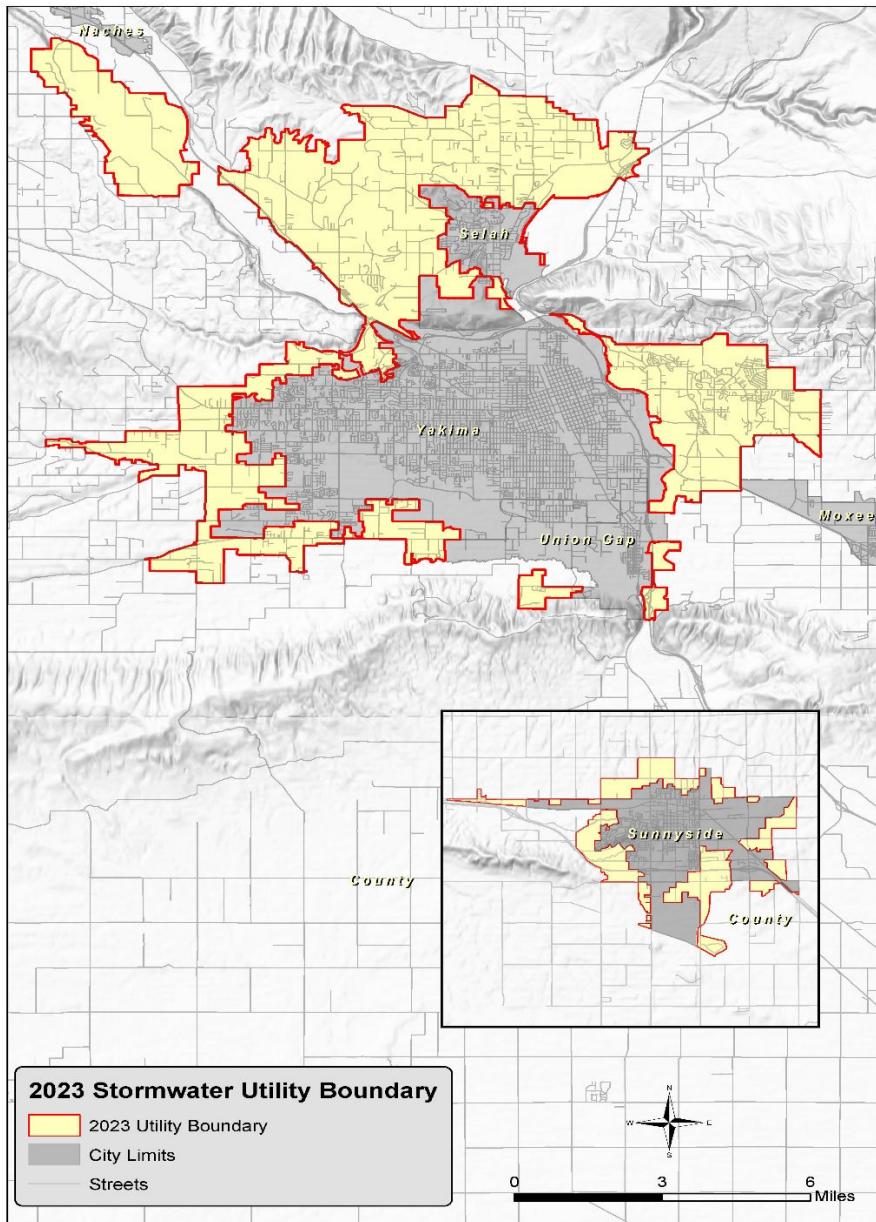
Metals (including lead, zinc, cadmium, copper, chromium and nickel) are commonly found in stormwater. Many of the artificial surfaces of the urban environment (e.g., galvanized metal, paint, automobiles or preserved wood) contain metals, which enter stormwater as the surfaces corrode, flake, dissolve, decay, or leach. Metals are of concern because they are toxic to aquatic organisms, can bio-accumulate (accumulate to toxic levels in aquatic animals such as fish), and have the potential to contaminate drinking water supplies. In 2000 Ecology reported low concentrations of copper, cadmium, mercury, silver, zinc and lead in the Upper Yakima River (Kittitas County).

Organic compounds (including toxic synthetic compounds such as adhesives, cleaners, sealants and solvents) are widely applied and may be improperly stored and disposed. In addition, deliberate dumping of these chemicals into storm drains and inlets causes environmental harm to waterways. No TMDL studies for organic compounds are currently underway in the Yakima River basin.

Pesticides (including herbicides, fungicides, rodenticides and insecticides) have been repeatedly detected in urban stormwater around the country. As use of pesticides has increased, so too have concerns about the potential adverse effects of pesticides on the environment and human health. Accumulation of these compounds in simple aquatic organisms, such as plankton, provides an avenue for bio-magnification through the food web, potentially resulting in elevated levels of toxins in those organisms that feed on them, such as fish and birds. DDT, associated with sediment in irrigation return water to the lower Yakima River basin is currently under a TMDL management plan. Additionally, the Yakima River, Moxee Drain, Wide Hollow and Spring Creeks are under study for DDT, DDD, DDE, chlordrifos, dieldrin and endosulfan due to past monitoring that indicated the water bodies don't meet water quality standards for those pollutants. Most of these pollutants are associated with agricultural chemicals that are no longer used and are entering streams through sediments eroding off farmland. In 2009, Ecology reported results for twelve samples collected during six rain storms for runoff in the Cities of Yakima and Union Gap. Stormwater exceeded human health criteria for DDE and PCBs in almost all samples and for DDT, DDD and dieldrin in almost half the samples. However, due to the low number of samples collected and wide range of concentrations found, conclusions about the absolute levels of legacy pesticides in Yakima and Union Gap stormwater are inappropriate without greatly increasing the number of samples collected and the number of collection points. The presence of legacy pesticides suggests that the agricultural history of the area is having an impact on urban stormwater discharges.

Gross Pollutants (trash, debris, and floatables) are common to urban environments and industrial sites and may create an aesthetic “eye sore” in waterways. Gross pollutants also include plant debris (such as leaves and lawn-clippings from landscape maintenance), animal excrement, street litter, and other organic matter. When these substances decay in streams, lakes, and estuaries dissolved oxygen levels are depressed, sometimes causing fish kills. No TMDL studies for aesthetics are currently underway in the Yakima River basin.

**Figure 1. Yakima County SW Utility Boundary**



## 2 Program Elements and Performance Measures

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This section describes the eight SWMP elements (program elements) contained in the permit:

- 1) Public Outreach and Education
- 2) Public Involvement and Participation
- 3) Illicit Discharge Detection and Elimination
- 4) Construction Stormwater
- 5) Post-Construction Stormwater
- 6) Municipal Operations and Maintenance
- 7) Compliance with TMDL Requirements
- 8) Monitoring and Assessment

The SWMP addresses the program elements above through the development of performance measures. Each performance measure contains measurable activities that describe specific actions taken to implement the performance measure.

The program elements are organized consistent with the permit structure in Sections S5, S7 and S8. Each program element contains an introductory statement that generally discusses permit requirements and identifies other program elements related to the current program element, called supporting program elements. Fact sheets then describe the performance measures within the program element, state goals, identify existing activities, provide measurable activities, and identify assessment documents. A performance measure fact sheet example is provided ([Figure 2](#)). A table summarizing the performance measures, implementation schedules and responsible departments is provided at the end of each program element.

**Figure 2. Performance Measure Template**

<b>PERFORMANCE MEASURE</b>
<i>Permit section, name of Performance Measure, implementation deadline</i>
<b>GOAL</b>
An anticipated outcome that guides the use of the performance measure.
<b>EXISTING ACTIVITIES</b>
This section describes existing activities associated with the performance measure. The regional municipalities may not be responsible for all activities (e.g., volunteer groups and countywide programs), but they affect the local community and represent stormwater management activities already underway. Additional actions implemented by the permittees relating to S5.B of the permit are described here.
<b>MEASURABLE ACTIVITIES</b>
This section lists the quantifiable activities that describe how the performance measure will be accomplished and the responsible party. Measurable activities are those actions describing what will be done to comply with the permit. Activities include such things as reviewing or developing a specific number and type of document or procedure, providing a specific number and type of training, etc.
<b>ASSESSMENT</b>
This section identifies documentation needed to assess performance measures as required by the permit. The SWMP Administrator is responsible for assessment documentation.
<b>ACCOMPLISHMENTS</b>
This section will list measurable activities accomplished during the previous calendar year. A statement is provided if no activities were required during the previous calendar year.
<b>APPROPRIATENESS</b>
This section will contain an evaluation of the appropriateness of the Performance Measure, as required by permit section S8.B.2.

## **2.1 Public Education and Outreach Program Element**

The Public Education and Outreach Program Element focuses on educating the public about the potential impact of stormwater discharges on receiving waters. Increased public knowledge about how their actions and choices affect stormwater and ultimately the water bodies of Yakima County. Public Education should result in increased public acceptance and support of the stormwater program.

### *2.1.1 Permit Requirements for Public Education and Outreach*

Section S5.B.1 of the Eastern Washington Phase II NPDES Stormwater Permit requires permittees to continue to implement public education and outreach program strategies and activities. The strategies shall be designed to reach all target audiences in the jurisdiction.

### *2.1.2 Supporting Program Elements*

The Public Participation and Involvement Program Element works with the Public Education and Outreach Program Element by encouraging citizens to become informed and involved in the stormwater program. Specific outreach tasks are also identified in the Illicit Discharge and Detection Elimination, Construction and Post-Construction Program Elements.

### *2.1.3 Performance Measures*

The 2021-2022 Stormwater Public Outreach plan (Appendix A) will be implemented. The Stormwater Public Outreach plan will be updated annually in an effort to better awareness levels throughout the community, and to continue educate and evaluate current messages and message types, improving message deliverables to target audiences.

## Performance Measure

***S5.B.1a. Implement the 2021-2022 Public Outreach Plan***

***ILA=No***

### GOAL

Educate the public, businesses and the development community about:

- 1) Potential pollution impacts of stormwater on receiving waters.
- 2) Illicit discharges.
- 3) The impact of development on stormwater pollution.

### EXISTING ACTIVITIES

In accordance with the 2022-2023 Public Outreach Plan, a general public message of “Only Rain in the Drain!” is being distributed. See current accomplishments and planned activities below.

### MEASURABLE ACTIVITIES

Measurable activities for Public Outreach and Education will be in accordance with the 2022-2023 Public Outreach Plan.

### ASSESSMENT

The county along with the RSWG has contracted with the Franklin Conservation District to provide an in school and online training curriculum related to stormwater awareness and prevention called Drain Rangers. The goal of the Drain Rangers program is to provide participating elementary and middle schools within the RSWG’s jurisdiction with the course material as well as provide progress and assessment reports semiannually to the RSWG for feedback. Additionally, and in support of several non-profit organizations throughout the RSWG region, the RSWG provides an “Only Rain in the Drain!” educational course about stormwater awareness and pollution prevention. This course is provided on an as requested basis, depending on the organization the RSWG is supporting. Students range between the ages of 6-14. At the end of each class, students participate in a check on learning activity. Students are asked to reciprocate one thing they learned during the class, and then they participate in a question and answer activity to reinforce the knowledge learned. They are also provided activity books to help the retention of new information. Upon completion of each class, the total number of students is recorded, as well as the location in which they reside within our community. In 2022, the Drain Rangers program had a remarkable year and reached over 8600 students and nearly 500 teachers across the county in 20 different elementary, intermediate, and middle schools in the fall months. The contract for Drain Rangers expired the end of June of 2021 and was re-negotiated through the end of the permit cycle to continue instructing schools on stormwater awareness and pollution prevention.

### ACCOMPLISHMENTS

The 2022-2023 Public Outreach Plan focused on a broad range of audiences, with a majority being directly focused on youth education and awareness. Utilizing the “Only Rain in the Drain!”, originally developed by Asotin County under an Ecology Grant of Regional or Statewide Significance (GROSS) grant, the RSWG continues to develop awareness and prevention materials to educate our youth and provide training tools through several channels. The message was distributed through extensive

community program activities, website outreach services, and online videos. This year's efforts continued into the broadening our direct "community marketing" concepts.

The first public education and outreach event scheduled in 2022 by the Yakima County Stormwater Department was the Central Washington Home Builders Association's Dozer Days Event held on March 26th & 27th at State Fair Park in Yakima Washington. Yakima County staff hosted an informational booth at the event that educated the public on the importance of trees in our urban environment and their benefits to stormwater treatment. We provided the Yakima County Roads Division vacuum truck as a static display and discussed cleaning and maintenance operations with over 500 families.

**Figure 3. 2022 Dozer Days Event Central Washington State Fair Grounds**



Yakima County along with other members of the RSWG and the City of Yakima provided a Stormwater Public Education and Outreach booth at the 2022 Central Washington State Fair. Yakima County Staff members logged over 100 hours at the Stormwater information booth. A key focus of the education and outreach program at the CWSF was to follow up on the City of Yakima's Car Wash BMP Effectiveness Study from the previous year. Yakima County and other members of the RSWG were a part of the Technical Advisory Group for this study. Attendance numbers seemed to rebound compared to previous year, the overall feeling from the Yakima County members was a successful outreach effort.

Two members of the Yakima County Water Resources Department perform an annual educational outreach program on Flood Control and Stormwater processes and procedure to a group of (20-30) local college students pursuing careers in civil engineering.

Training materials that target sources of stormwater pollution such as construction site track out and other forms of illicit discharge are always available, in English and Spanish, to our ILA partners and through our stormwater outreach website for dissemination. Brochures and newsletters are also available at the front counter of Public Services Department offices that provide details on BMPs and recent stormwater activities. Brochures are included in Notice of Violation letters to reinforce County BMP policies.

**Figure 4. 2022 Central Washington State Fair Booth.**



## APPROPRIATENESS

The County's Public Outreach was appropriate. A significant portion of the permit compliance efforts in 2022 were focused on Public Outreach.

## **2.2 Public Involvement and Participation Program Element**

The Public Involvement and Participation Program Element provides opportunities for the public to become involved in decisions related to reducing pollutants in stormwater. Through participation, the public provides valuable input and assistance in program development and implementation. Increased public involvement and participation result in increased public acceptance and support of the program, and help to ensure a successful and effective program.

### *2.2.1 Permit Requirements for Public Involvement and Participation*

Continue to provide ongoing opportunities for the public to participate in SWMP decision-making. Post online annual reports and SWMP Plan for previous calendar year by May 31 of each year.

### *2.2.2 Supporting Program Elements*

The regional stormwater website (Public Education and Outreach Program Element) will provide an accessible means of disseminating the SWMP information.

### *2.2.3 Performance Measures*

## PERFORMANCE MEASURE

***S5.B.2 Public Input on SWMP***

***ILA=No***

### GOAL

Promote public participation in the design and implementation of the SWMP. The SWMP document provides the blueprint for regional compliance with the Permit. Public input will be solicited on this document to ensure all interested parties have a voice in activities that are conducted to comply with the Permit and reduce potential impacts associated with stormwater discharge from the regional permittees.

### EXISTING ACTIVITIES

The regional municipalities comply with existing State and local public notice requirements regarding the adoption of public plans or policies implemented by their respective jurisdictions.

A specific public input opportunity has been conducted in past years to describe the program and solicit input. These meetings that are open to the public to attend take place every quarter, have been sparsely attended. Notifications of the meeting times and dates are announced on our Newsletter and Website. Due to the lack of public participation, no changes to the program have been implemented.

### MEASURABLE ACTIVITIES

1. Yakima County has posted the SWMP document on the Regional Stormwater web page and updated at least annually.
2. The RSWG publishes the date and time of each meeting on our website in an effort to bring awareness to the public and seek participation. Quarterly meetings are held in a round-robin fashion rotating from City of Selah offices, City of Sunnyside offices, City of Union Gap offices and finally back to Yakima County offices one time each calendar year.

### ASSESSMENT

1. Receive, address and log comments received at any time of the year regarding the SWMP.

### ACCOMPLISHMENTS

- No SWMP comments were received during the past calendar year.

### APPROPRIATENESS

This Performance Measure is a permit requirement and is included in the SWMP.

## **2.3 Illicit Discharge Detection and Elimination (IDDE) Program Element**

Most urban storm drain systems convey flows other than stormwater. These non-stormwater discharges enter the storm drain system from a variety of sources, such as landscape irrigation or car washing, and illicit discharges (sources of pollutants that enter the storm drain system through illicit connections and illegal dumping). Non-stormwater contributions and illicit discharges are potential sources of pollutants discharged from the MS4 that may adversely impact receiving waters. The Eastern Washington Phase II NPDES Stormwater Permit requires permittees to “detect and eliminate” non-stormwater discharges to the storm drain system.

### *2.3.1 Permit Requirements for Illicit Discharges*

The Eastern Washington Phase II NPDES Stormwater Permit requires the Permittees to continue implementing the enforceable mechanism to prohibit illicit discharges, compliance strategy, IDDE and municipal staff training, citizen hotline and IDDE response, and maintain an electronic map of the MS4.

### *2.3.2 Supporting Program Elements*

Many City and County operations, such as hazardous waste pickup activities, MS4 maintenance, street sweeping and roadwork, partially address this program element’s intent. Regional permittees have some form of prohibition in their code making it illegal to pollute the storm drain system. The Public Education and Outreach Program and Municipal Operations/Good Housekeeping Program elements also inform public employees, businesses, and the public of hazards including human and environmental health risks associated with illegal discharges and improper disposal of waste.

### *2.3.3 Performance Measures*

## PERFORMANCE MEASURE

***S5.B.3 Maintain map of MS4***

***ILA=No***

### GOAL

A map of the MS4 is required to effectively identify extent of the storm drain system, identify where pollutants may enter the system and prevent illicit discharges. Ecology requires permittees to maintain a map of their stormwater system and update the map as changes occur.

### EXISTING ACTIVITIES

The MS4 has been mapped in the County and cities in accordance with the current permit.

The Construction Activities and Post-Construction SWMP Elements both require knowledge of the MS4 location to determine if proposed activity will discharge to the MS4 and is therefore regulated. A general permit requirement is to conduct spot checks of the MS4 following storms with a return frequency greater than the 10 year event. A knowledge of the system location is critical to this task.

### MEASURABLE ACTIVITIES

Document changes made to GIS layers that were used to develop the system maps.

### ASSESSMENT

1. List of changes made to map layers. GIS metadata is an ideal vehicle to maintain a log or list of changes.

### ACCOMPLISHMENTS

- GIS mapping is continuously updating as new MS4 locations are installed.
- MS4s are also being updated directly via ArcGIS Field Maps.
- Stormwater Facility points and lines available for public viewing on the Yakima County Planning Portal Map. [Yakima County Planning Portal \(arcgis.com\)](http://Yakima County Planning Portal (arcgis.com))

### APPROPRIATENESS

This Performance Measure is a permit requirement and is included in our SWMP. Mapping, followed by smoke testing to confirm connections, has resulted in removal of illicit and non-stormwater connections from the MS4. Mapping has also identified areas where outfalls can be eliminated, reducing the impact of flow and pollutants to receiving waters. Improvements to water quality should result from removal of illicit connections and elimination of outfalls.

## PERFORMANCE MEASURE

***S5.B.3 Continue Enforcement of Illicit Discharge Ordinances***

***ILA=No***

### GOAL

Enforce ordinances to prohibit illicit discharges to the storm drain system.

### EXISTING ACTIVITIES

Yakima County Health District (YCHD) enforces County ordinances for solid waste disposal, sewage disposal, and does outreach, inspections, and enforcement particularly as relates to septic tanks and septic tank pumps. YCHD investigates improper sewage disposal practices as reported by the public. These activities reduce the likelihood of stormwater contamination from improperly maintained or sited septic systems.

Garbage collection is voluntary in the unincorporated County, although there are ordinances against unauthorized dumping and unlawful accumulation. Garbage service is required in Yakima, Sunnyside, Selah, and Union Gap.

All jurisdictions have ordinances prohibiting illicit connections and discharges to their MS4.

### MEASURABLE ACTIVITIES

Yakima County will maintain a log of illicit discharge and connection calls, observations and complaints; maintain a record of their notification and follow-up to resolve the discharge or connection. All illicit discharge reports will be recorded according to the requirements of Appendix 7 of the Permit.

### ASSESSMENT

Number and types of cases will be reviewed and used for input into the Public Outreach program as appropriate. Construction track-out has been identified as a consistent IDDE issue and will continue to be included as a targeted outreach campaign in 2022-2023.

### ACCOMPLISHMENTS

In 2022, Yakima County responded to 7 illicit discharge reports within the County's Stormwater Utility Boundary. 4 of the IDDE reports were construction or commercial/agricultural related track out cases. One was a report of a discharge of wastewater from a trailer park and the other was an illegal dumping of a stone cutting fines into a private BMP, the businesses/property managers were notified and educated on proper BMP's O&M. The final IDDE was an oil spill that was cleaned up by the property tenant prior to entering a catch basin. None of the discharges reached any surface waters.

### APPROPRIATENESS

This Performance Measure is a permit requirement and is included in the SWMP. Water quality should improve over time as code enforcement personnel contact potential violators, public education messages highlight the new requirements and illicit connections are removed as a result of the ordinance.

## PERFORMANCE MEASURE

*S5.B.3 Continue IDDE Response Activities*

*ILA=No*

### GOAL

Continue procedures for consistent regional investigations to detect and address non-stormwater discharges to the regulated MS4, including spills, illicit connections, and illegal dumping.

### EXISTING ACTIVITIES

Yakima County has an existing Illicit Discharge Detection and Elimination (IDDE) program to address spills and illegal dumping of hazardous materials, including those that may reach the MS4. In the event of a spill, local emergency response agencies within the County are supplemented by a Regional Response Team and Ecology. Illegal dumping of hazardous materials is regulated by State Dangerous Waste requirements (WAC 173-303-145) and the Uniform Fire Code.

### MEASURABLE ACTIVITIES

1. Each jurisdiction will continue to implement procedures for the following activities required by the permit:
  - Locating priority areas; evaluate land use, business/industrial activities, past complaints, and areas with storage of large quantities of materials
  - By 12/31/2021, the County field screened =100% of the MS4 and will continue to assess >12% each year, on average thereafter, to verify outfall and discharge point locations and detect and identify illicit discharges and connections
  - Characterizing discharges found by or reported;
  - Tracing the source of illicit discharges;
  - Ending the discharge.

The collection of procedures and their implementation shall constitute the illicit discharge detection and elimination “program” required by §S5.3.c of the permit.

2. Yakima County will report all illicit discharge activity according to the format of Appendix 7 in the Permit and utilize Ecology’s Water Quality Permitting Portal (WQWebPortal).
3. Yakima County will report all illicit discharge activity in their annual reports and SWMP.

### ASSESSMENT

1. Document activities to identify and eliminate non-stormwater discharges.
2. Record citizen complaints and responses regarding illicit discharges to the storm drain system.
3. Record illicit discharges identified, investigated, including date and location of incident, type and quantity of material dumped or discharged, municipal response, and all other information required by Appendix 7 of the permit.
4. Document enforcement actions taken to eliminate illicit discharges.

### ACCOMPLISHMENTS

- Dry weather inspections were undertaken during maintenance activities.
- No inspections resulted in source tracing.

- No formal enforcement actions were taken by Yakima County in 2022.

## **APPROPRIATENESS**

Identification and removal of illicit discharges and connections will improve water quality discharged from the regional MS4s to area water bodies.

## PERFORMANCE MEASURE

***S5.B.3 Maintain Illicit Discharge Hotline***

***ILA=No***

### GOAL

Advertise and maintain a regional hotline for receipt of calls reporting illicit discharges. A hotline or telephone number for receiving public observations or complaints related to illicit discharge is required by the Permit.

### EXISTING ACTIVITIES

Related activities include those systems in place to take emergency calls related to hazardous materials or illegal dumping.

### MEASURABLE ACTIVITIES

1. Yakima County will use a call log spreadsheet and Ecology's IDDE database to track illicit discharge reports and follow-up actions.
2. Regional permittees will forward calls to the hotline when appropriate or notify County stormwater staff when illicit discharge calls are received by their jurisdictions.

### ASSESSMENT

1. Maintain a database of calls received and follow-up actions taken.

### ACCOMPLISHMENTS

- Hotline was established in 2007. The number is 509-574-2300.
- 5 calls were received in 2022 and logged into the database, 4 of which were located within the Stormwater Utility Boundary and logged into the WQWeb Portal.
- Yakima County administration call taking staff were trained on how to use the call log.

### APPROPRIATENESS

This Performance Measure is a permit requirement and is included in the SWMP. It is anticipated that hotline use will increase as the public becomes more aware of stormwater problems through the public education program.

## PERFORMANCE MEASURE

***S5.B.3 IDDE and Municipal staff training***

***ILA=No***

### GOAL

Train staff that 1) receive calls about illicit discharges, 2) may encounter illicit discharges in the course of their work, and 3) will investigate illicit discharges. Training will be tailored to each group of employees and focus on specific procedures developed under other Performance Measures in this Program Element.

### EXISTING ACTIVITIES

Most employee groups already conduct some form of regular training on procedures, safety, or trade specific practices. Illicit discharge training is also available at any time upon request of the department. Each training class is one hour in length. Field employees in the county are supposed to undergo training. The class is also open to public members to register. Each class has seating for 20 persons.

### MEASURABLE ACTIVITIES

1. Yakima County presently offers training classes on an annual and as requested basis; which is available for all RSWG members, their employees, and the public for participation.
2. Yakima County will identify appropriate personnel within their municipalities and provide opportunities for staff to be trained.

### ASSESSMENT

1. Document training events. Include dates, activities/course descriptions, location, and names and positions of staff in attendance.
2. Maintain training presentations for each group of employees.

### ACCOMPLISHMENTS

- Individual refresher trainings are available upon request for ILA partners and personnel within their municipality.

### APPROPRIATENESS

It is anticipated that as employee awareness goes up, the number of reported discharges to the MS4 will also increase, and the number of municipal spills will go down.

## **Construction Activities Program Element**

Stormwater draining from construction sites can be a significant source of sediment and attached pollutants. Failure to implement adequate erosion and sediment performance measures can result in higher contributions of sediment to waters than previously contributed from undisturbed land. Excessive sediment loading can result in impacts to water quality. In addition, erosion and sediment transport are vehicles for other pollutants associated with construction activities (such as solvents, petroleum products, trash, pesticides, fertilizers, concrete and paint). Track-out from construction sites continues to be a common source of illicit discharge complaints.

### *2.3.4 Permit Requirements for Construction Activities*

The Eastern Washington Phase II NPDES Stormwater Permit requires municipalities to continue implementing and enforcing program to reduce pollutants from construction activities, including ordinance, providing information to construction operators on training; site plan review and permitting, inspections, and training.

### *2.3.5 Supporting Program Elements*

Local citizens will be more aware of the importance of protecting stormwater quality through public outreach activities. The public participation and IDDE program elements provide mechanisms for the public to notify inspectors of potential water quality issues.

### *2.3.6 Performance Measures*

## PERFORMANCE MEASURE

***S5.B.4 Enforce Construction Site Stormwater Ordinance***

***ILA=No***

### GOAL

Enforce an ordinance to require implementation and maintenance of BMPs for erosion and sediment controls at defined construction sites.

### EXISTING ACTIVITIES

Construction Stormwater Permits are required by State regulation for construction sites impacting or disturbing one acre or more of land.

Ordinances were adopted and revised as follows:

Jurisdiction	Date Adopted	Ordinance/Resolution Number
Yakima County	February 16, 2010	1-2010
Yakima County	July 18, 2017	3-2016
Yakima County	December 27, 2022	8-2022

### MEASURABLE ACTIVITIES

1. Each jurisdiction will enforce its own ordinance.

### ASSESSMENT

1. The number of ordinance enforcement actions will be reported in the annual report.

### ACCOMPLISHMENTS

- Three enforcement letters were sent out by Yakima County during the 2022 calendar year for track out. All other responses to construction related track out was handled within 48 hours of discovery through voluntary compliance. When discovered during the course of construction inspections, track out was cleaned immediately and site supervisors were provided education and technical assistance to ensure proper BMPs were used to retain stormwater on site.

### APPROPRIATENESS

This Performance Measure is a permit requirement and is included in the SWMP. Water quality should improve over time as code enforcement personnel contact violators, and the public education message regarding illicit discharges becomes better known.

## PERFORMANCE MEASURE

***S5.B.4.b. Continue Construction Site Plan Review***

***ILA=No***

### GOAL

Implement procedures for review and approval of stormwater best management practices used during construction activities.

### EXISTING ACTIVITIES

Construction and development projects are currently required to obtain coverage under the Ecology General Permit for Construction Sites, using BMPs and standards found in the *Yakima County Regional Stormwater Manual (2010)*, and in the *Stormwater Management Manual for Eastern Washington (2019)*.

### MEASURABLE ACTIVITIES

1. Yakima County will review construction project plans that require erosion and sediment control BMPs identified in the ordinance adopted in §S5.B.4.a of the permit.

### ASSESSMENT

1. Record the number of erosion and sediment control plans received, reviewed, and approved/disapproved by staff.

### ACCOMPLISHMENTS

- Number of construction site plans reviewed and approved in 2022:

<u>Plans Reviewed</u>	<u>Plans Approved</u>
10	9

\* One plan was still review

### APPROPRIATENESS

This Performance Measure is a permit requirement and is included in the SWMP. The procedure and training should help reviewers assure projects are compliant with the ordinance and minimize construction stormwater runoff and improve water quality.

## PERFORMANCE MEASURE

***S5.B.4.c. Continue Construction Site Inspection***

***ILA=No***

### GOAL

Inspect construction sites to ensure that BMPs are installed and functioning correctly to prevent discharge to the MS4.

### EXISTING ACTIVITIES

Regional municipalities have established construction inspection programs that ensure building code compliance. Inspectors visit each site during active phases of construction to record the activities conducted at the site and to ensure construction is being completed according to plans.

Public complaints for construction activities are routed to local building departments; some stormwater construction complaints are routed to stormwater staff. All jurisdictions require applicants to obtain an Ecology Construction Stormwater Permit when projects will meet certain thresholds. Erosion and sediment control permit issues with these permits are referred to the Washington Department of Ecology. Construction sites, regardless of size or Ecology permit status, must retain construction sediment on site in all jurisdictions under the illicit discharge ordinances.

### MEASURABLE ACTIVITIES

1. Yakima County will keep records of inspections and enforcement actions by staff.
2. Yakima County will provide training to construction site inspection staff including:
  - Erosion and sediment controls and other stormwater quality control requirements for construction activities.
  - Procedures for enforcing code compliance, such as issuance of citations or notices of noncompliance.
  - Yakima County Water Resources added 2 CESCL trained members in 2022 and will have staff maintain their certification.

### ASSESSMENT

1. Document training events. Include number of employees, class rosters, locations.
2. Record the number of inspections and enforcement actions performed by staff.

### ACCOMPLISHMENTS

- Number of construction site inspections and enforcement actions in 2022:

	<u>Sites Inspected</u>	<u>Enforcement Actions</u>
Yakima County	8	3

\* This value does not include the sites that were visited multiple times and or periodically to verify Construction BMP's remain in place.

\* Enforcement Letters sent to address track out.

## **APPROPRIATENESS**

This Performance Measure is a permit requirement and is included in the SWMP. The procedure and training should help inspectors assure projects are compliant with the ordinance during inspections. The inspections should help resolve any deficiencies in BMP selection or installation this minimizing construction stormwater runoff and improving water quality.

## PERFORMANCE MEASURE

***S5.B.4.d Provide Construction Training Opportunity Information***

***ILA=No***

### GOAL

Gather and provide information on training opportunities in the Pacific Northwest and nationally that are applicable to the proper selection, installation, and maintenance of construction site sediment control BMPs.

### EXISTING ACTIVITIES

Yakima County provides periodic training opportunity information to the RSWG members and the public on Yakima County's Stormwater Management website, <https://www.yakimacounty.us/1749/Training>

Yakima County has a pre-application assistance program to help applicants navigate the county's permitting process for projects requiring environmental review, land use approval, building and fire safety permits, or other permitting requirements, including stormwater site plan preparation and review. The Water Resources Division of Yakima County Public Services reviews all early assistance applications, attends early assistance meetings with applicants, design professionals, and construction contractors, provides comments and information on stormwater site plan requirements, provides information on erosion and sediment controls required during construction, and training opportunities available to assist in compliance with stormwater requirements.

### MEASURABLE ACTIVITIES

1. Yakima County will provide a quarterly list of erosion and sediment control BMP training opportunities on the regional stormwater website. Sources will include the internet, social media, and newsletters.
2. Regional permittees will provide information they receive on training opportunities through professional contacts or other sources.

### ASSESSMENT

1. Maintain a record of training opportunities identified and made available.

### ACCOMPLISHMENTS

- Training opportunities were provided on the Regional Stormwater web site as they were available.
- Water Resources provides Stormwater guidance and direction through the Early Application Coordination (EAC) meeting with the planning department and applicants for pre-permit submittals.

### APPROPRIATENESS

This Performance Measure is a permit requirement and is included in the SWMP. Training opportunities were regularly visited on the Regional Stormwater web site.

## **2.4 Post-Construction SWMP Element**

Impacts to water quality caused by development can be minimized through implementing post-construction stormwater quality performance measures. The performance measures and tasks outlined in this section require new development and major redevelopment projects to incorporate post construction stormwater BMPs and to ensure that the measures are operated and maintained once construction is complete.

### *2.4.1 Permit Requirements for Post-Construction Stormwater Management*

The Eastern Washington Phase II NPDES Stormwater Permit requires the permittees to address post-construction stormwater runoff to the MS4 from new development and redevelopment projects within the permit area. Continue to implement ordinance addressing post-construction runoff controls; site plan review and permitting, requiring long-term maintenance; inspections; staff training; and enforcement.

### *2.4.2 Supporting Program Elements*

Public education and outreach programs promote awareness of the importance of stormwater quality controls. Public participation in the development and implementation of the SWMP will be critical to the plan's success. The Construction Program works in parallel with this program element as sites are inspected during construction and post-construction.

### *2.4.3 Performance Measures*

## PERFORMANCE MEASURE

**S5.B.5 Enforce Post-Construction Stormwater Ordinances and Conduct Stormwater Plan Review ILA=No**

### GOAL

Enforce ordinances to require post-construction stormwater runoff controls for discharges to the MS4 from new development or re-development projects discharging to public MS4s.

### EXISTING ACTIVITIES

Regional municipalities require new developments to retain stormwater on site, up to a 10- or 25-year design storm depending on watershed, using methods found in the Yakima Regional Stormwater Manual. To obtain short or long subdivision approval, proposed development projects in Yakima County require a site drainage plan demonstrating how stormwater will be retained and infiltrated on site (County Ordinance 12.10.250).

Ordinances were adopted and revised as follows:

<u>Jurisdiction</u>	<u>Date Adopted</u>	<u>Ordinance/Resolution Number</u>
Yakima County	February 16, 2010	1-2010
Yakima County	July 18, 2017	3-2016
Yakima County	December 17, 2022	8-2022

### MEASURABLE ACTIVITIES

1. Yakima County will review construction project plans that require post-construction stormwater BMPs identified in the ordinance adopted in §S5.B.5.a. of the permit.
2. Yakima County will conduct annual training sessions for post-construction plan review staff as needed, depending on staff turnover.
3. Yakima County revised the post-construction stormwater management ordinance by the deadline of December 31, 2022.

### ASSESSMENT

1. Record the number of post-construction stormwater control plans received, reviewed and approved/disapproved by staff.
2. Document training events. Include dates, names of employees in attendance, activity/course descriptions, and location.

### ACCOMPLISHMENTS

- Number of post-construction site plans reviewed and approved in 2022.

<u>Plans Reviewed</u>	<u>Plans Approved</u>
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Yakima County	0	0
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- Yakima County did not have any qualifying private post-construction BMP's that required inspection.

## **APPROPRIATENESS**

This Performance Measure is a permit requirement and is included in the SWMP. Water quality should improve over time as code enforcement personnel contact potential violators, public education messages highlight the new requirement and that proper BMP facilities are selected and designed correctly as a result of the ordinance.

## PERFORMANCE MEASURE

**S5.B.5. Continue Post-Construction Site Inspections**

**ILA=No**

### GOAL

Inspect sites discharging to the MS4 to ensure appropriate post-construction BMPs are installed and functioning correctly.

### EXISTING ACTIVITIES

Yakima County has established construction inspection programs. Inspectors visit each construction site during active phases of public improvements and private development to record the activities conducted at the site and to ensure construction is completed according to approved plans. For privately owned stormwater facilities that discharge to the MS4, owners have the option of scheduling the county to inspect the privately-owned facility on a 5-year cycle, or obtain annual certification from a qualified third party that the facility continues to function according to its intended design.

Public complaints for flooding and water quality are routed to the Yakima County Flood Control Zone District (FCZD), city public works, or wastewater departments. Response generally consists of a site visit to view the problem and check for physical obstruction, blockage or source control needs to resolve the complaint and follow-up activities to verify the issue is resolved.

### MEASURABLE ACTIVITIES

1. Yakima County will inspect post-construction BMP sites that discharge to the MS4 to ensure that BMPs are installed in accordance with approved designs.
2. Yakima County will inspect newly constructed and existing BMPs that discharge to the MS4 to ensure they are performing as designed.
3. Yakima County will provide training to post-construction site inspectors including BMP types and functions.

### ASSESSMENT

1. Record the number of post-construction stormwater control site inspections performed by staff.

### ACCOMPLISHMENTS

- Number of post-construction BMPs inspections in 2022:

#### BMPs Inspected

Yakima County	39
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- 3 sites were inspected, some sites have multiple BMPs attached.

Private post construction BMPs are required to retain either the 10-year or 25-year storm event and do not discharge to the public MS4. Sites are inspected during rain events to ensure compliance. Public post construction BMPs are inspected during construction to ensure that they are constructed in accordance with design before the jurisdiction takes ownership of the facility. Following construction, publicly owned and operated BMPs are inspected according to inspection requirements in Illicit Discharge Detection and Elimination (S5.B.3) and Municipal Operations and Maintenance (S5.B.6).

## **APPROPRIATENESS**

This Performance Measure is a permit requirement and is included in the SWMP. The procedure and training should help inspectors assure projects are compliant with the ordinance during inspections. The inspections should help resolve any deficiencies in BMP installation improving water quality by providing for adequate treatment and flow control.

## PERFORMANCE MEASURE

***S5.B.5 Provide Post-Construction Training Information***

***ILA=No***

### GOAL

Gather and provide information on training opportunities in the Pacific Northwest and nationally applicable to the proper selection, installation, and maintenance of post-construction stormwater control BMPs.

### EXISTING ACTIVITIES

Yakima County provides periodic reports containing training opportunities to the regional permittees. Training information is available on the Regional Stormwater website. Training opportunities are also widely available on Ecology's list-serves, via corporate mailings and online.

### MEASURABLE ACTIVITIES

1. Yakima County provides a list of post-construction BMP training opportunities on the Ecology website. Sources include the internet, newsletters, and social media.
2. Regional permittees provide information they receive on training opportunities through professional contacts or other sources.

### ASSESSMENT

1. A record of training opportunities are identified and made available.

### ACCOMPLISHMENTS

- Training opportunities were made available on the stormwater web site as they became available.

### APPROPRIATENESS

This Performance Measure is a permit requirement and is included in the SWMP. Training opportunities were regularly visited pages on the Regional Stormwater web site.

## **2.5 Pollution Prevention & Good Housekeeping for Municipal Operations Program Element**

Stormwater discharges from municipal operations conducted by public agencies with permitted MS4's are regulated under the Eastern Washington Phase II NPDES Stormwater Permit.

### *2.5.1 Permit Requirements for Pollution Prevention and Good Housekeeping*

Regulated communities must continue implementation of MS4 O&M plan; inspect stormwater treatment and flow control facilities every two years; conduct spot checks after storm events; conduct O&M and SWPPP requirements for municipal lands and facilities; and train staff.

### *2.5.2 Supporting Program Elements*

Additional performance measures that partially address this program element include detecting and eliminating illicit discharges to the storm drain systems described above in Section [2.3](#).

Some key municipal facilities are already required to develop SWPPP plans for compliance with the Washington Department of Ecology Industrial Stormwater General Permit.

### *2.5.3 Performance Measures*

## PERFORMANCE MEASURE

***S5.B.6 Follow O&M Plans at Municipal Facilities***

***ILA=No***

### GOAL

Perform activities identified in existing Operation and Maintenance Plans (O&M Plans) for designated publicly owned facilities.

### EXISTING ACTIVITIES

Yakima County operates several properties to facilitate their operations: The County Jail, County and corporation yards, wastewater treatment plant, a solid waste transfer station, and a landfill. Many of these facilities are hazardous waste generators and must already have pollution prevention plans to comply with Ecology hazardous waste regulations. Stormwater Pollution Prevention Plans (SWPPP) are required for many of these same sites under the Ecology Industrial Stormwater Permit.

### MEASURABLE ACTIVITIES

1. Yakima County will perform activities identified in O&M plans for municipal facilities.

### ASSESSMENT

1. Record O&M Plan implementation and monitoring of activities or operations that potentially impact stormwater quality.

### ACCOMPLISHMENTS

- O&M plans were followed in accordance with O&M manuals developed for regional municipal facilities.
- Staff completed a required update of the Good Housekeeping and O&M plans during 2022.
- Stormwater Pollution Prevention Plans were developed for Yakima County Roads Shop on 18<sup>th</sup> Street in Yakima and the Sunnyside shop.

### APPROPRIATENESS

This Performance Measure is a permit requirement and is included in the SWMP. It is anticipated that implementation of the practices identified in the O&M plans will improve water quality discharged from the MS4.

## PERFORMANCE MEASURE

***S5.B.6 Spot Check MS4s Following >10 Year Events***

***ILA=No***

### GOAL

Conduct infrastructure spot checks following storm runoff events following larger storms that may damage the MS4.

### EXISTING ACTIVITIES

The regional permittees have ongoing responses to major runoff and flood events. The Yakima County FCZD has a flood response plan. A GIS data layer of runoff has been developed, based on precipitation and impervious surface.

### MEASURABLE ACTIVITIES

1. Yakima County will identify >10 year event conditions.
2. Yakima County will spot check the MS4 following events meeting the >10 year event.
3. Yakima County will perform needed repair or maintenance as soon as practicable pursuant to the findings of a regular inspection or spot check.
4. Yakima County will collect inspection form data and compile it for the annual permit report.

### ASSESSMENT

1. Retain inspection forms.
2. Report results of inspections and repairs made following >10 year events or regular inspections

### ACCOMPLISHMENTS

- No event equal to or greater than the 10-year, 24-hour event was recorded in 2022.

### APPROPRIATENESS

This Performance Measure is a permit requirement and is included in the SWMP. Spot inspections are an effective method to assess any damage to stormwater flow control and treatment facilities after large storm events (10 year, 24 hour recurrence interval).

## PERFORMANCE MEASURE

***S5.B.6 Conduct Employee Education and Training***

***ILA=No***

### GOAL

Increase regional municipal employee awareness of stormwater pollutants and BMPs for reducing pollutants from municipal operations. Educate employees in facilities with stormwater O&M plans about plan components and requirements.

### EXISTING ACTIVITIES

Training is required by the permit for staff in the illicit discharge and detection program at Section 2.3. Permittees have departments that currently train staff on a variety of topics including hazardous materials and safety, which overlaps with pollution prevention and stormwater. Spill prevention plans are already required for hazardous material storage and handling.

Yakima County Water Resources developed a training program in 2015 and continues implementation. County staff are able to receive training on an annual and as needed or requested basis from the Water Resources Division or their Department Director. This training is also available for the public and the RSWG members at no added costs.

### MEASURABLE ACTIVITIES

1. Yakima County will continue to identify groups of employees and departments that require training.
2. Yakima County Water Resources will develop and provide training programs for groups of employees identified above.

### ASSESSMENT

1. List regional municipal staff groups identified to receive training.
2. Keep a record of training events provided and the training materials presented. Record the date, location and employees in attendance.

### ACCOMPLISHMENTS

- Refresher training was made available to all RSWG members through the publication of training materials on the RSWG website.

### APPROPRIATENESS

This Performance Measure is a permit requirement and is included in the SWMP. It is anticipated that as employees learn about and implement stormwater O&M plans, better BMP maintenance and practices will result in improved water quality discharged from the MS4.

## **2.6 Monitoring and Assessment Element**

The Monitoring and Assessment portion of the permit consists of two sections: Stormwater Management Program Effectiveness Studies and Reporting.

Stormwater Management Program Effectiveness studies are studies designed to evaluate the effectiveness of permit-required stormwater management program elements, activities, and best management practices and were a requirement added to the 2014-2019 cycle of the permit. These studies are selected, proposed, developed, and conducted by the Permittees during each permit cycle. Permittees are required to collaborate with other permittees in the development of these studies. When the studies are completed, the lead entity of each study reports the final results and recommendations for future actions. The results of effectiveness studies are used by Ecology to revise compliance requirements and make in future versions of the permit. Permittees are required to report on effectiveness study activities with each Annual Report.

### *2.6.1 Permit Requirements for Monitoring and Assessment*

Annual reports must include a summary of effectiveness study activities, both for studies developed during the 2014-2019 Permit that are still being conducted and activities related to development of effectiveness studies for the 2019-2024 permit. Lead entities are required to summarize interim results and status of the study with each annual report. All Permittees are required to include effectiveness study activities in annually updated SWMPs.

### *2.6.2 Supporting Program Elements*

The Ecology-approved *BMP Inspection and Maintenance Responsibilities for Privately Owned Facilities* Quality Assurance Project Plan (QAPP) (Appendix B) will be implemented and reported according to the timelines given in the QAPP. Following completion of the study, Yakima County will report results to Ecology and provide recommendations based on the results of the study.

### *2.6.3 Performance Measures*

## PERFORMANCE MEASURE

***S7. TMDL Technical Participation (If Appropriate)***

***ILA=No***

### GOAL

Increase permittee participation in the TMDL process to reduce stormwater contribution of pollutants in a specific reach of water potentially impacted by MS4 discharges.

### EXISTING ACTIVITIES

City of Selah discharges to a waterbody with a TMDL. Yakima County participates in TMDLs under development as members of technical advisory groups, including the Yakima Area Creeks projects.

### MEASURABLE ACTIVITIES

1. Yakima County will identify TMDL projects that may involve their MS4 discharges.
2. Yakima County will comply with TMDL requirements, when a TMDL is approved and implemented.
3. Yakima County will participate as Technical Advisory Group members during the TMDL process.

### ASSESSMENT

1. List of TMDL projects in proximity to regional permittee MS4 boundaries.
2. Maintain a record of TAG attendance.

### ACCOMPLISHMENTS

- No activities were required during the previous calendar year.
- Status of TMDLs potentially affecting RSWG partners, as of the end of 2021 on Ecology's [website](#).

Waterbody	Pollutant(s)	Status
Yakima River: Mid Basin	e-coli	Issued 2021, QAPP in development
Yakima River	Toxics	In Development

### APPROPRIATENESS

This Performance Measure is a permit requirement and is included in the SWMP. It has not been fully implemented, therefore appropriateness cannot be evaluated.

## PERFORMANCE MEASURE

**S8.A Stormwater Management Program Effectiveness Studies**

**ILA=No**

### GOAL

Improve water quality of local receiving waters through continual evaluation of the effectiveness of program elements and best management practices required by the Eastern Washington Phase II Municipal Stormwater Permit.

### EXISTING ACTIVITIES

Yakima County is currently the lead entity of the effectiveness study titled *BMP Inspection and Maintenance Responsibilities for Privately Owned Facilities*. This study will identify commonly used inspection, maintenance, and enforcement strategies for privately-owned stormwater facilities and evaluate the effectiveness of those practices. This study was developed during the 2014-2019 Permit and the Quality Assurance Project Plan (QAPP) was approved by Ecology in December 2019.

Eastern Washington permittees are required to coordinate between each other to plan and begin an additional Stormwater Management Program effectiveness study. Permittees are split up into ten Urban Areas around the state and two or more Urban Areas may collaborate on a single study. Permittees are required to submit a brief description of the study and list of project participants and their associated roles on or before June 30, 2021. A detailed study proposal is due to Ecology by September 30, 2022. For study lead entities, a QAPP must be submitted to Ecology by July 31, 2023 and the study must begin to be conducted on or before December 1, 2023.

Permittees will collaborate with other as members of the Eastern Washington Stormwater Group (EWSG) to review effectiveness study ideas, define sub-regions/groups and potential partnerships, compile a list of potential study ideas for EWSG and identify lead entity for each.

### MEASURABLE ACTIVITIES

1. Yakima County will continue to conduct the BMP Inspection and Maintenance Effectiveness Study as detailed in the QAPP.
2. Yakima County will include effectiveness study activities in the annual report and SWMP.
3. Yakima County will publish a final report and factsheet following completion of the BMP Inspection Effectiveness Study according to the timelines provided in S8.B.2 of the permit.
4. Yakima County will begin coordinating and planning a new effectiveness study with the other Eastern Washington Permittees and complete study submittals according to the timelines provided in the Permit

### ASSESSMENT

1. Conduct the BMP Inspection and Maintenance Effectiveness Study according to the Ecology-approved QAPP
2. Include summaries of Effectiveness Study activities in the annual report and updated SWMP
3. Publish a final report and factsheet following completion of the BMP Inspection and Maintenance Effectiveness study
4. Submit study descriptions, proposals, QAPPs, and other required study development documentation according to the timelines given in the Permit

## ACCOMPLISHMENTS

- Yakima County contracted with Osborn Consulting to complete the *BMP Inspection and Maintenance Responsibilities for Privately Owned Facilities Effectiveness Study*. In 2021 The survey and interview portion were completed to obtain the data necessary for in-depth analysis. Several TAG meetings were held to review the data and findings. The Technical Evaluation Report (TER) was submitted to Ecology for review. The final TER was completed in December. Due to the lack of a one size fits all approach to privately owned BMP's, a desired outcome of the study was to develop a Manual to address BMP strategies for privately own structures. Yakima County applied for Grants of Regional or Statewide Significance (GROSS) and was awarded the grant to develop the manual. Manual will be completed by the end of 2023.
- Yakima County also participated in the City of Yakima's Effectiveness Study on Car Washing BMP's. Yakima County role was a financial supporter, data collector and TAG member for the study. The study was completed in 2021, public educational and outreach material were developed to further make the community aware of best practices and places to wash vehicles. There will be an ongoing effort to educate the people of Yakima County.
- Yakima County participated in the TAC for the City of Kennewick's Drain Ranger's Effectiveness Study. This study was performed before and after testing on students in several elementary school classes to measure the effectiveness of the Drain Rangers program, in areas of Action, Knowledge and Attitude. The study results indicate that the Drain Rangers program has a very positive effect on educating students about stormwater effects and solutions. This included a 22% increase in expressed actions to address stormwater issues, a 67% increase in scoring for stormwater knowledge and solutions, and a 17% increase in expressed attitude that personal actions can make a positive difference to keep waterways clean and healthy. Based on those scores, this report enthusiastically recommends the continuation and further implementation of the Drain Rangers program to educate elementary school students in the stormwater world. The study includes recommendations for future implementation of the program.

## APPROPRIATENESS

This Performance Measure is a permit requirement and is included in the SWMP. Development of effectiveness studies is generally considered good practice to direct future efforts to ensure stormwater management program elements are effective at improving water quality and cost-effective. As lead entities complete effectiveness studies and provide results and recommendations, it is anticipated that implementation of effectiveness studies will result in reduced pollution and improved water quality of stormwater discharged from the MS4.

## **GLOSSARY**

**Best Management Practices (BMPs)** – Best management practices are the schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices approved by Ecology that, when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to receiving waters.

**Maximum Extent Practicable (MEP)** – MEP refers to paragraph 402(p)(3)(B)(iii) of the Federal Clean Water Act, which reads as follows: Permits for discharges from municipal storm sewers shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system, design, and engineering methods, and other such provisions as the Administrator or the State determines appropriate for the control of such pollutants.

**Measurable Goal** – Definable tasks or accomplishments that are associated with a performance measure.

**Municipal Separate Storm Sewer System (MS4)** – A conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains): (i) owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State Law) having jurisdiction over disposal of wastes, stormwater, or other wastes, including special districts under State Law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) designed or used for collecting or conveying stormwater; (iii) which is not a combined sewer; and (iv) which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

**National Pollutant Discharge Elimination System (NPDES)** - The national program for issuing, modifying, revoking, and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of pollutants to surface waters of the state from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington State Department of Ecology.

**New Development** – Land disturbing activities, including Class IV general forest practices that are conversions from timber land to other uses; structural development, including construction or installation of a building or other structure; creation of impervious surfaces; and subdivision, short subdivision and binding site plans, as defined and applied in Chapter 58.17 RCW. Projects meeting the definition of redevelopment shall not be considered new development.

**Outfall** – Means point source as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the State and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the State and are used to convey waters of the State.

**Performance Measure** – An activity performed to implement one of the eight permit program elements.

**Point Source** – Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural runoff.

**Program Element** – One of the eight program components included in Sections S5.B.1 through S5.B.6, S7, and S8 of the Eastern Washington Phase II Municipal Stormwater Permit.

**Redevelopment** - The replacement or improvement of impervious surfaces on a developed site.

**Return Frequency or Recurrence Interval** - A statistical term for the average expected time interval between events (e.g., flows, floods, droughts, or rainfall) that equal or exceed given conditions.

Recurrence interval can be converted to probability by dividing the return frequency into one year. For example, a 100-year event has a one percent chance of occurring in any given year ( $1/100 = 0.01$ ); a 5-year event has a 20 percent chance ( $1/5 = 0.20$ ) of occurring in any given year.

**Runoff** - Water that travels across the land surface, or laterally through the ground near the land surface, and discharges to water bodies either directly or through a collection and conveyance system. Runoff includes stormwater and water from other sources (e.g. snowmelt) that travels across the land surface.

**Stormwater Pollution Prevention Plan (SWPPP)** – A documented plan to implement measures to identify, prevent, and control the contamination of point source discharges of stormwater.

**Total Maximum Daily Load (TMDL)** – A water cleanup plan. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The calculation shall include a margin of safety to ensure that the water body can be used for the purposes the state has designated. The calculation shall also account for seasonal variation in water quality. Water quality standards are set by states, territories, and tribes. They identify the uses for each water body, for example, drinking water supply, contact recreation (swimming), aquatic life support (fishing), and the scientific criteria to support that use. The Clean Water Act, Section 303, establishes the water quality standards and TMDL programs.

**Waters of the State** – Those waters as defined as “waters of the United States” in 40 CFR 122.2 within the geographic boundaries of Washington State and “waters of the State” as defined in Chapter 90.48 RCW which includes: lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface waters and water courses within the jurisdiction of the State of Washington.

## **APPENDIX A**

### **Stormwater Public Outreach Program 2022-2023**

