

STORMWATER MANAGEMENT PROGRAM FOR CITY OF YAKIMA



IN COMPLIANCE WITH THE EASTERN WASHINGTON PHASE II
MUNICIPAL STORMWATER PERMIT

WAR04-6013, CITY OF YAKIMA

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TABLE OF CONTENTS

| <u>Section</u> | <u>Page</u> |
|---|-------------|
| Contents | |
| Abbreviations and Acronyms..... | 4 |
| 1 Introduction..... | 5 |
| 1.1 Regulatory Environment..... | 5 |
| 1.2 Transition to City of Yakima Stormwater Program from Regional Stormwater Management Program | 6 |
| 1.3 Physical and Economic Environment..... | 7 |
| 1.4 Regional Receiving Waters and Water Quality Standards | 8 |
| 1.5 Potential Stormwater Pollutants and Impacts on Water Quality | 8 |
| 2 Program Elements and Performance Measures..... | 11 |
| 2.1 Public Education and Outreach Program Element..... | 12 |
| 2.2 Public Involvement and Participation Program Element..... | 14 |
| 2.2.1 Permit Requirements for Public Involvement and Participation | 14 |
| 2.2.2 Supporting Program Elements..... | 14 |
| 2.3 Illicit Discharge Detection and Elimination (IDDE) Program Element..... | 16 |
| 2.3.1 Permit Requirements for Illicit Discharges..... | 16 |
| 2.3.2 Supporting Program Elements..... | 16 |
| 2.3.3 Permit Requirements for Construction Activities | 23 |
| 2.3.4 Supporting Program Elements..... | 23 |
| 2.4 Post-Construction Stormwater Management Program Element..... | 28 |
| 2.4.1 Permit Requirements for Post-Construction Stormwater Management | 28 |
| 2.4.2 Supporting Program Elements..... | 28 |
| 2.4.3 Performance Measures | 28 |
| 2.5 Pollution Prevention & Good Housekeeping for Municipal Operations Program Element | 32 |
| 2.5.1 Permit Requirements for Pollution Prevention and Good Housekeeping | 32 |
| 2.5.2 Supporting Program Elements..... | 32 |
| 2.5.3 Performance Measures | 32 |
| 2.6 Monitoring and Program Evaluation Element..... | 35 |
| 2.6.1 Permit Requirements for Monitoring and Program Evaluation | 35 |

| <u>Figures</u> | <u>Page</u> |
|--|-------------|
| Figure 1 The City of Yakima Stormwater Collection System area (from City of Yakima 2013Stormwater Collection System Master Plan, Akel Engineering 2013)..... | 6 |

Abbreviations and Acronyms

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

BMP – Best Management Practice

Co-permittees – YakimaCounty, City of Yakima, City of Union Gap, City of Sunnyside

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 WashingtonState

RSL – Regional Stormwater Lead

RSPG – Regional Stormwater Policy Group

RSWG – Regional Stormwater Working Group

RSWMP – Regional Stormwater Management Program

SWMP –Stormwater Management Program

SWPPP – Stormwater Pollution Prevention Plan

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 Eastern Washington Phase II Municipal Stormwater Permit issued by the Washington State Department of Ecology (Ecology) requires written documentation of stormwater management programs developed and implemented by permittees. Four permittees (Yakima County, City of Yakima, City of Union Gap, and City of Sunnyside) discharge stormwater from their Municipal Separate Storm Sewer Systems (MS4s) and obtained permit coverage from Ecology as regional co-permittee partners described by an interlocal governmental agreement (ILA) signed July 5, 2007, amended in 2009. The ILA described specific permit compliance activities that each regional partner will implement.

The geographic area for activities described in this plan is the city limits of Yakima, Washington.

Permittees must develop stormwater management programs that contain minimum performance measures in eight required program elements. Descriptions of the performance measures that the regional co-permittees 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 was 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 was based on the 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. Eventually, full implementation of the City of Yakima 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.

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 has begun to regulate 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 stormwater management programs. Phase II of the regulations requires small municipalities (<100,000) and contiguous areas with smaller – but still urban – communities to develop and implement stormwater management programs. In February 2007, the Department of Ecology issued the Eastern Washington Phase II Municipal Stormwater Permit, requiring Yakima County and the Cities of Yakima, Union Gap, and Sunnyside to submit a Notice of Intent (NOI) seeking coverage and to comply with the terms of the permit.

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 City of Yakima focuses on performance measures that are technically sound and meet permit requirements.

In 2013, the City of Yakima adopted its first City Strategic Plan. The City priorities include:

- Economic Development
- Public Safety
- Public Trust
- Partnership Development
- Built Environment

Also in 2013, the City completed a draft Stormwater Collection System Master Plan (master plan) that identified and prioritized necessary capital improvements and investments for its MS4. The plan identified \$672 million in needed infrastructure improvements throughout the MS4. The City’s stormwater budget has allocated \$600,000 in capital improvement funds for the FY 2014 fiscal year. This is the first time the City has allocated money for stormwater capital improvements. The priorities identified in the master plan, if implemented, will reduce the risk of localized flooding and will help with compliance of the City’s municipal stormwater permit.

1.2 Transition to City of Yakima Stormwater Program from Regional Stormwater Management Program

Regional stormwater programs began in 1994 when Yakima County and the City of Yakima completed a Yakima Regional Stormwater Management Plan. Several efforts to regionalize stormwater programs were made over the next 10 years, resulting in the Regional Stormwater Policy Group (RSPG) being formed in 2005. The RSPG 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 co-permittees signed a three-year ILA 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 extends the agreement until the second permit is in effect. In August 2012 the RSPG decided to reduce oversight of the ILA partnership and delegated staff to continue to work cooperatively, bringing permit updates and issues to the respective boards and councils at least once per year to each jurisdiction.

In February of 2014, the Yakima City Council voted to separate from the RSPG and directed City of Yakima staff to implement all requirements of the Eastern Washington Phase II Municipal Stormwater Permit. A letter was sent from the City of Yakima to the Yakima County Board of Commissioners, the City of Sunnyside and the City of Union Gap. The City of Yakima’s 2013 stormwater report is being provided by Yakima County with this document supporting it.

This plan is intended to document the work accomplished by the City of Yakima and the RSPG and to provide assurance that the City will continue to implement each required element of the Eastern Washington Phase II Municipal Stormwater Permit (the permit). This version of the document is intended to be adapted and updated so that the Yakima Stormwater Management Program (YSMP) will be prepared to implement the new permit which takes effect in August 2014. City staff will continuously update this document as necessary.

1.3 Physical and Economic Environment

The City of Yakima is located in Yakima County in the central part of Washington, approximately 60 miles southeast of Mount Rainier in the Yakima Valley. The City is approximately 110 miles southeast of Seattle and 171 miles southwest of Spokane, Washington. Interstate 82 runs in a north-south direction along the eastern side of the City. The City limits currently encompass 28 square miles, with an approximate population of 92,000 residents.

The City is topographically bound to the north by the Naches River and Cowiche Creek, the east by the Yakima River, the south by Wide Hollow Creek, and the west by the foothills of the Cascade Mountain Range. The general topography of the City slopes from west to east, with sloping to the Yakima River, which flows from Selah, south through Union Gap. Figure 1 displays the city limits, as well as the Urban Growth Boundary of the City and the locations of adjacent communities.

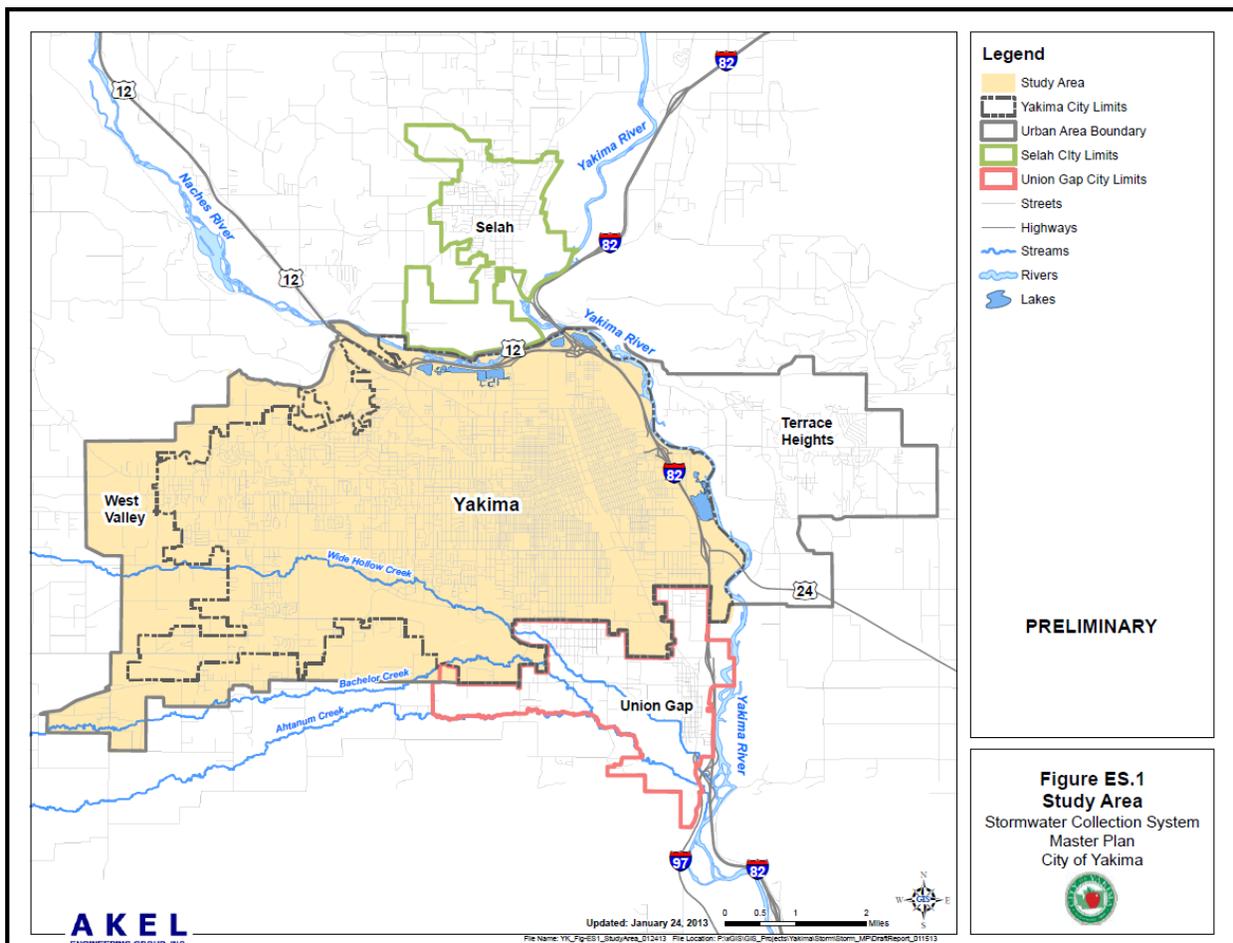


Figure 1: The City of Yakima Stormwater Collection System area (from City of Yakima 2013 Stormwater Collection System Master Plan, Akel Engineering 2013)

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. 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.

1.4 Regional Receiving Waters and Water Quality Standards

Stormwater from the City of Yakima MS4 is discharged to the following receiving waters: Naches and Yakima Rivers, Spring, Ahtanum, Bachelor, and Wide Hollow Creeks. Washington Department of Ecology assigns designated uses to these waters that determine water quality standards. Numeric criteria promulgated at Chapter 173-201A WAC protect designated uses. Regional receiving waters have a range of designated uses including salmonid spawning, domestic consumption, primary contact recreation, and aesthetics.

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 water quality improvement projects are “under development” for receiving waters listed above:

Yakima River, for Toxics

Mid Yakima River Basin Fecal Coliform Bacteria TMDL

Neither project has been completed and submitted to EPA, so the local permittees have no additional requirements beyond the permit. The City of Yakima and other permittees will continue to participate in technical review discussions with Ecology to ensure that pollutant sources are accurately identified and that additional required stormwater BMPs will be effective in reducing the pollutants of concern.

1.5 Potential Stormwater Pollutants and Impacts on Water Quality

The permit does 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.

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 (typically nitrogen and phosphorous) are the major plant nutrients used for fertilizing and are often found in stormwater. Nutrients can accelerate growth of vegetation, particularly algae, resulting in excessive concentrations that impair use of water in lakes and other sources of water supply. In addition, un-ionized ammonia (one of the nitrogen forms) can be toxic to fish. A study by USGS and the South Yakima Conservation District on nutrient enrichment processes in the lower Yakima River was published in 2009. The study showed that low stream flow, high nutrient loading and habitat degradation resulted in violations of dissolved oxygen and pH standards.

Pathogens (bacteria and viruses) are common contaminants of stormwater. Sources of these contaminants include animal excrement, sanitary sewer overflow or cross connection, and soil.

Oil 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.

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 improving under a TMDL management plan. Additionally, the Yakima River, Moxee Drain, Wide Hollow and Spring Creeks are under study for DDT, DDD, DDE, chlorpyrifos, 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. 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.

2 PROGRAM ELEMENTS AND PERFORMANCE MEASURES

This section describes the eight 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) Pollution Prevention and Good Housekeeping
- 7) Monitoring and Program Evaluation
- 8) Reporting and Record Keeping.

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. The City is developing a table that will track the performance measures relative to each permit element. This will be published later in 2014.

2.1 Public Education and Outreach Program Element

Permit requirements for the permit include targeting three general audiences with multi-media messaging about local waterways, stormwater affects to water quality and actions that can be taken to improve stormwater quality.

The three general audiences are:

General Public

Business

Engineers, construction contractors, developers and, development review staff and land use planners.

General Public:

The City of Yakima partnered with the RSPG on public education and outreach. It is currently developing a public education and outreach plan that will build on the public education and outreach completed in the past. The City has participated in the Central Washington State Fair booth and will continue to do so in partnership with the RSPG in the future.

The City of Yakima posts stormwater education materials in public places for general audiences. This includes distributing videos in the lobby of City Hall and on Y-PAC TV. The City will continue to distribute information in this manner.

The City provides information on the City of Yakima web site. Right now, most of the City web site directs users to other web sites for further information on stormwater. In 2014, the City of Yakima will construct a more user friendly and comprehensive web site that helps users learn basic information about local waterways and stormwater impacts. In addition, the web site will provide resources for the general public to learn about how to reduce stormwater pollution.

The City of Yakima is partnering with Mid Columbia Regional Fisheries Enhancement Program (MCRFEG). The City and MCRFEG are developing a scope of work to provide stormwater education to local school age children. The goal of the program is to provide educational opportunities for school aged children, field trips and hands on-experiences that help students connect stormwater improvement and salmon/steelhead recovery.

The City is also proposing to partner with local art groups to sponsor a steelhead art contest. The contest would be promoted as a way to highlight the importance of clean water and steelhead. Steelhead is listed as a threatened species under the endangered species act. The art will be used to promote the importance of clean water, steelhead recovery, and community involvement.

The City of Yakima also direct mails homeowners when a complaint about stormwater is received related to residential activity. If the City's stormwater crew notices material in the City of Yakima MS4, they notify our pre-treatment program manager, wastewater operations manager and hydrologic engineer. Then, a notice to all homes in the neighborhood is mailed indicating that, for example, grass clippings or motor oil, are not acceptable material to place in the storm drainage system.

Businesses:

The City of Yakima works with businesses on a complaint driven basis and when City staff note illicit discharges to storm systems. If the City receives a complaint or makes an observation about illicit stormwater discharges from one type of business, then the City develops a mailer with stormwater education and pollution prevention material for all of the businesses with similar potential to pollute.

Engineers, construction contractors, developers and, development review staff and land use planners:

The City of Yakima will work with regional partners, the Eastern Washington Stormwater Permit group, and the Department of Ecology to develop educational and outreach material for this group.

The City of Yakima stormwater staff will provide stormwater related training to its planning division, Utilities and Engineering Department, Public Works Department and others in order to educate all City staff that interact with development professionals.

The City will develop a more comprehensive education program for this element as part of its transition to a program independent of the RSPG.

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

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

The City of Yakima will post a phone number to call in order to report a potential violation or other problem with the MS4. This number will be posted on-line, shared during press releases or press inquiries, and made available through other public education and outreach avenues.

PERFORMANCE MEASURE

GOAL

Promote public participation in the development and review of the City of Yakima Stormwater Management Plan (YSMP). The YSMP document provides the blueprint for 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 MS4.

EXISTING ACTIVITIES

The City of Yakima complies 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 by the RSPG in past years to describe the program and solicit input. These annual invitation meetings have been sparsely attended. No change to the program has been implemented as a result. Annual input opportunities as conducted in past years will not be continued.

MEASURABLE ACTIVITIES

1. The City of Yakima will post the YSMP document on the City web page and update at least annually.

ASSESSMENT

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

ACCOMPLISHMENTS

- No program comments were received by the RSPG during the past calendar year.

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 City of Yakima to continue implementing the enforceable mechanism to prohibit illicit discharges, compliance strategy, IDDE and municipal staff training, citizen hotline and IDDE response, and maintain map of MS4.

2.3.2 Supporting Program Elements

Many City operations such as hazardous waste pickup activities, MS4 maintenance, street sweeping and roadwork, partially address this program element’s intent. The City of Yakima code makes 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.

PERFORMANCE MEASURE

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 City of Yakima in accordance with the 2007-2012 permit.

The Construction Activities and Post-Construction Stormwater Management Program 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.

The City of Yakima is utilizing GIS based software to inspect and track needs of its MS4. ICOM is an infrastructure program management system that will be used to assign and track work associated with inspections and preventative maintenance of the City's stormwater system. The system is GIS based and will allow the city to increase efficiency in our operations and provide for organized data collection that will provide a more robust reporting system to track costs associated with maintenance and operation of the system. It was specifically designed for collection system operations.

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

- No activities were required during the previous calendar year.

APPROPRIATENESS

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

PERFORMANCE MEASURE

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 service is required in the City of Yakima. The City of Yakima has and enforces ordinances prohibiting illicit connections and discharge to their MS4.

MEASURABLE ACTIVITIES

1. Each jurisdiction 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.

ASSESSMENT

2. Number and types of cases will be reviewed and used for input into the Public Outreach program as appropriate.

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 illicit connections are removed as a result of the ordinance.

PERFORMANCE MEASURE

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

The City of Yakima runs a 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.

The City of Yakima is utilizing ICOM asset management software to evaluate and track necessary repairs or other concerns (such as illicit discharges) in its MS4. ICOM is an infrastructure program management system that will be used to assign and track work associated with inspections and preventative maintenance of the City's stormwater system. The system is GIS based and will allow the city to increase efficiency in our operations and provide for organized data collection that will provide a more robust reporting system to track costs associated with maintenance and operation of the system. It was specifically designed for collection system operations

MEASURABLE ACTIVITIES

1. The City of Yakima will continue to implement procedures for the following activities required by the permit:
 - Locating priority areas;
 - Dry weather field assessments of outfalls or facilities serving priority areas;
 - Characterizing discharges found by or reported to the Permittees;
 - 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. The City will report illicit discharge activity in the annual reports.

ASSESSMENT

1. Document activities identified in existing written procedures 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, and municipal response.

4. Document enforcement actions taken to eliminate illicit discharges.

ACCOMPLISHMENTS

- No incidents were logged in the RSPG Regional IDDE database. The County, City of Sunnyside and City of Union Gap reported zero incidents, and 27 incidents were reported by the City of Yakima in the past.

APPROPRIATENESS

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

PERFORMANCE MEASURE

GOAL

Develop a City of Yakima IDDE Hotline and advertise the hotline number.

EXISTING ACTIVITIES

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

MEASURABLE ACTIVITIES

1. The City of Yakima will use a call log database to track illicit discharge reports and follow-up actions.

ASSESSMENT

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

PERFORMANCE MEASURE

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 will be coordinated with existing training to minimize interruption of staff duties.

MEASURABLE ACTIVITIES

1. The City of Yakima will train employees annually.
2. The City will identify appropriate personnel and provide opportunities for staff to be trained.

ASSESSMENT

1. Document training events. Include number of employees, class rosters, locations.
2. Maintain training presentations for each group of employees.

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.

2.3.3 Permit Requirements for Construction Activities

The Eastern Washington Phase II NPDES Stormwater Permit requires the regional 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.

2.3.4 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 the City of potential water quality issues.

PERFORMANCE MEASURE

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 one acre or more.

Ordinances were adopted in February 2010 as follows:

City of Yakima February 16, 2010 Municipal Code 7.82

MEASURABLE ACTIVITIES

1. The City of Yakima will enforce its own ordinance.

ASSESSMENT

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

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 illicit discharges are removed as a result of the ordinance.

Performance Measure

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 *Stormwater Management Manual for Eastern Washington*.

MEASURABLE ACTIVITIES

1. The City of Yakima 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.

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 improving water quality.

Performance Measure

GOAL

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

EXISTING ACTIVITIES

The City of Yakima executes 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. The City requires 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. The City of Yakima will keep records of inspections and enforcement actions by staff.
2. The City of Yakima 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.
 - Jurisdictions may opt to send staff to CESCL training and 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.

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 and eliminate or minimize construction stormwater runoff and improving water quality.

PERFORMANCE MEASURE

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

The RSL provided periodic training opportunity information to the RSPG members and public on the Regional Stormwater Management website. The City of Yakima will build on this and continue to also provide this information on its web site.

MEASURABLE ACTIVITIES

1. The City of Yakima will provide a list of erosion and sediment control BMP training opportunities on the City stormwater website. Sources will include the world wide web (internet), trade magazines, and product mailings.
2. The City of Yakima 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

- A current list of training opportunities is provided on the regional stormwater web site.

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.

2.4 Post-Construction Stormwater Management Program 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

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, using methods found in the Yakima Regional Stormwater Manual. The City of Yakima requires all off street parking drainage to be disposed of onsite (Yakima Municipal Code 15.06.110).

Ordinances were adopted in February 2010 as follows:

| <u>Jurisdiction</u> | <u>Date Adopted</u> | <u>Ordinance/Resolution Number</u> |
|---------------------|---------------------|------------------------------------|
| City of Yakima | February 16, 2010 | Municipal Code 7.85 |

MEASURABLE ACTIVITIES

1. The City of Yakima will review construction project plans that require post-construction stormwater BMPs identified in the ordinance adopted in §5.B.5.a of the permit.
2. The City of Yakima will conduct annual training sessions for post-construction plan review staff as needed, depending on staff turnover.

ASSESSMENT

1. Record the number of post-construction stormwater control plans received reviewed and approved/disapproved by staff.
2. Document training events. Include number of employees, class rosters, locations.

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

GOAL

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

EXISTING ACTIVITIES

The City of Yakima 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. No similar program exists for follow-up once construction is completed.

Public complaints for flooding and water quality are routed to the City of Yakima wastewater department. 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.

MEASURABLE ACTIVITIES

1. The City of Yakima will inspect post-construction BMP sites that discharge to the MS4 to ensure that BMPs are installed in accordance with approved designs.
2. The City of Yakima will inspect newly constructed and existing BMPs that discharge to the MS4 to ensure they are performing as designed.
3. The City of Yakima 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.

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

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

The RSL provides periodic reports containing training opportunities to the RSPG members. Training information is available on the Regional Stormwater Management website. The City will continue to make information available on its web site.

MEASURABLE ACTIVITIES

1. The City of Yakima will provide a quarterly list of post-construction BMP training opportunities on its website. Sources will include the world wide web (internet), trade magazines, and product mailings.
2. The City of Yakima 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.

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

GOAL

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

EXISTING ACTIVITIES

The City of Yakima operates several properties to facilitate their operations: The City of Yakima operates a golf course, airport and cemetery as well as several parks. 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. The City of Yakima will perform activities identified in O&M plans formunicipal 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.

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

GOAL

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

EXISTING ACTIVITIES

The City of Yakima has ongoing responses to major runoff and flood events. The Yakima County Flood Control Zone District has a flood response plan. A GIS data layer of runoff has been developed, based on precipitation and impervious surface. City of Yakima stormwater and collection system crews inspect the City MS4 and respond to complaints during and after large storm events.

MEASURABLE ACTIVITIES

1. The City of Yakima will identify >10 year event conditions.
2. The City of Yakima will spot check the MS4 following events meeting the >10 year event.
3. The City of Yakima will repair, perform needed repair or maintenance as soon as practicable pursuant to the findings of a regular inspection or spot check.
4. The City of Yakima compiles 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

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

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. City departments 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.

MEASURABLE ACTIVITIES

1. The City of Yakima will identify groups of employees and departments that require training.
2. The City of Yakima 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.

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 Program Evaluation Element

The Eastern Washington Phase II Municipal Stormwater Permit contains sampling and program evaluation requirements.

2.6.1 Permit Requirements for Monitoring and Program Evaluation

Ecology does not require permittees to collect water samples during the term of the current permit unless they are characterizing an illicit discharge or complying with a TMDL. Annual reports must include a description of any sampling conducted. The annual report must also include an assessment of the appropriateness of each component of the SWMP and, if changes are anticipated, why those changes are being implemented. Municipalities must prepare for sampling in the next permit cycle by developing a monitoring plan that identifies two monitoring questions, identifies three outfalls, and identifies at least two BMPs for effectiveness monitoring.

Performance Measure

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

No TMDLs have been established in the permit area to date that impact the City's MS4s. The City participates in TMDLs under development as members of technical advisory groups, including the Yakima Area Creeks projects.

MEASURABLE ACTIVITIES

1. The City of Yakima will identify TMDL projects that may involve their MS4 discharges.
2. The City of Yakima will participate as Technical Advisory Group members during the TMDL process.

ASSESSMENT

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

ACCOMPLISHMENTS

- No activities were required during the previous calendar year.
- Status of TMDLs potentially affecting RSPG partners, as of March 19, 2013 on Ecology's [web site](#).

| Waterbody | Pollutant(s) | Status |
|--------------------------|-----------------------------|-------------------|
| Yakima Area Urban Creeks | Fecal coliform, Temperature | Under Development |
| Yakima River | Toxics | Under 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

GOAL

Collect and report water samples in response to illicit discharge investigations and TMDL requirements.

EXISTING ACTIVITIES

MEASURABLE ACTIVITIES

1. The City of Yakima will sample in accordance with the illicit discharge investigation procedure (TBD).
2. The City will document sampling activity annually if needed.

ASSESSMENT

1. Report sampling information in the annual report.

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

GOAL

Assess the appropriateness of performance measures for each program element.

EXISTING ACTIVITIES

None to date.

MEASURABLE ACTIVITIES

1. The City of Yakima will perform assessments of the six stormwater program element performance measures identified by permit sections S5.B.1 through S5.B.6.
2. The City of Yakima will provide information and feedback on the appropriateness of each performance measure.
3. The City of Yakima will report the assessments in each annual report.

ASSESSMENT

1. Document the assessment process.
2. Retain annual reports.

APPROPRIATENESS

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

PERFORMANCE MEASURE

GOAL

Prepare to participate in the implementation of a future comprehensive long-term monitoring program described in the permit.

EXISTING ACTIVITIES

The City of Yakima will collaborate with other Eastern Washington (EWA) Phase II permittees to review effectiveness study ideas, define sub-regions/groups and potential partnerships, compile list of 12-15 study ideas for EWA and identify lead entity for each.

MEASURABLE ACTIVITIES

1. EWA permittees will collaborate to submit a ranked list of 12 to 15 study ideas for EWA, and for each idea a summary of data collection needed, lead entity, and participating permittees.

ASSESSMENT

1. Activities are required by June 30, 2016.

ACCOMPLISHMENTS

- No activities were required during the previous calendar year.

APPROPRIATENESS

This Performance Measure is a permit requirement and is included in the SWMP. Development of monitoring studies is generally considered good practice to direct future monitoring efforts to ensure monitoring is effective and cost effective.

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.

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.

