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# Acronyms and Abbreviations

BMP Best Management Practice

Ecology Washington State Department of Ecology

EPA Environmental Protection Agency

FTE Full Time Employee

IDDE Illicit Discharge Detection and EliminationMS4 Municipal Separate Storm Sewer System

NPDES National Pollutant Discharge Elimination System

O&M Operation and Maintenance

Permit Eastern Washington Phase II Municipal Stormwater Permit

SWMP Stormwater Management Program

TESC Temporary Erosion and Sedimentation Control

TMDL Total Maximum Daily Load UIC Underground Injection Control

WVSTAC Wenatchee Valley Stormwater Technical Advisory Committee

# Wenatchee Valley Stormwater Management Program

## 1.0 Introduction and Background

In 1999, the Environmental Protection Agency (EPA) introduced Phase II of the National Pollutant Discharge Elimination System (NPDES) program requiring a permit for stormwater discharges to certain municipal separate storm sewer systems (MS4s) and construction sites greater than one acre of land. In Washington State, the Department of Ecology (Ecology) was delegated authority to administer the NPDES program on behalf of the EPA.

On January 17, 2007, Ecology issued the first Eastern Washington Phase II Municipal Stormwater Permit (hereinafter referred to as "permit") which authorized permittees to discharge to waters in Washington in accordance with the Clean Water Act and the State of Washington Water Pollution Control Act. As owners and operators of regulated small MS4s, Douglas County, Chelan County, City of Wenatchee, and City of East Wenatchee were required to obtain coverage under the first permit. In 2012 Wenatchee Valley College was notified that coverage was required as a secondary permitee. On August 1, 2012, the first permit was reissued without any changes for a period of two years and Ecology issued the revised Eastern Washington Phase II Municipal Stormwater Permit effective August 1, 2014 through July 31, 2019. Each jurisdiction is permitted separately with the exception of the City of Wenatchee and Wenatchee Valley College. The college and the city completed an interlocal agreement in July 2013 to be covered under the permit as co-permittees.

The Wenatchee Valley Stormwater Advisory Committee (WVSTAC) was formed in 2004 during the development of the first permit. The committee, which is comprised of agency representatives from Douglas County, Chelan County, City of Wenatchee, and City of East Wenatchee was formed under an interlocal agreement and has worked to develop and implement a regional stormwater management program.

The permit requires that the stormwater management program be documented in a plan. The SWMP plan is required to contain documentation of the following program components:

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination
- Construction Site Stormwater Runoff Control
- Post-Construction Stormwater Management for New Development and Redevelopment
- Municipal Operations and Maintenance
- Compliance with Total Maximum Daily Load Requirements
- Monitoring

#### 2.0 Stormwater Utilities

#### 2.1 Chelan County

Chelan County's stormwater utility was created in 2008 to manage stormwater needs in the federally recognized urbanized area around the City of Wenatchee. The utility is funded through a service fee on all developed properties containing impervious surfaces. In December of 2012, the Board of Chelan County Commissioners adopted the 2012 Comprehensive Stormwater Plan.

#### 2.2 City of Wenatchee and Wenatchee Valley College

The City of Wenatchee's separate municipal stormwater system consists of approximately 75 miles of stormwater mains, 12 outfalls to the Columbia River, and 14 water quality facilities. The City's stormwater utility was established in 1994 to fund capital improvement projects and maintenance of the stormwater system. Today the stormwater utility also funds implementation of the stormwater management program. The Wenatchee Valley College campus is located within the City of Wenatchee's stormwater utility boundary and covers approximately 52 acres.

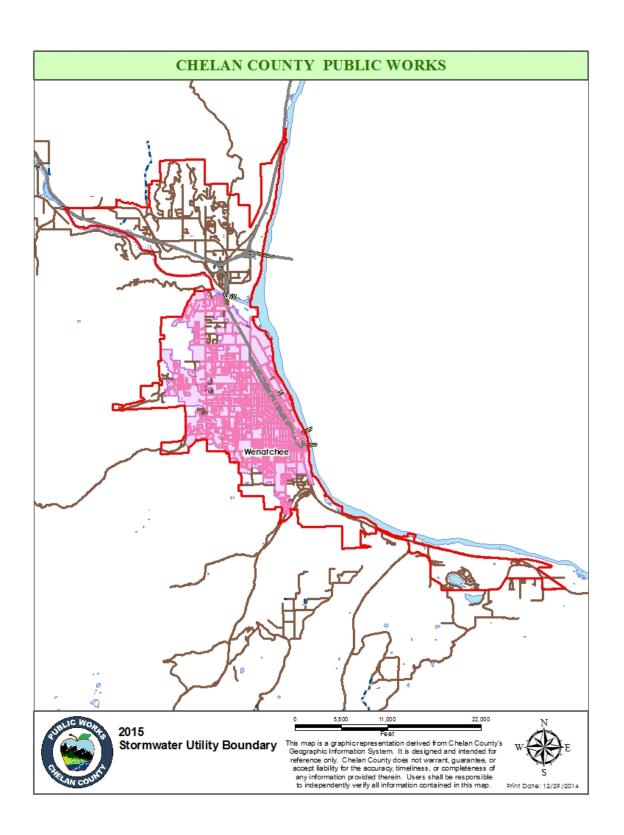
#### 2.3 Douglas County and City of East Wenatchee

The permit coverage areas of the City of East Wenatchee and Douglas County are served by the Greater East Wenatchee Storm Water Utility. The utility was established to create an entity that, working cooperatively with Douglas County, would be responsible for all publicly owned storm water facilities within the greater East Wenatchee urban area. The utility provides funding for the construction of needed storm water improvements, as well as operation and maintenance of all existing and planned storm water facilities. Through the utility, East Wenatchee and Douglas County have completed capital improvement projects in flood-prone areas.

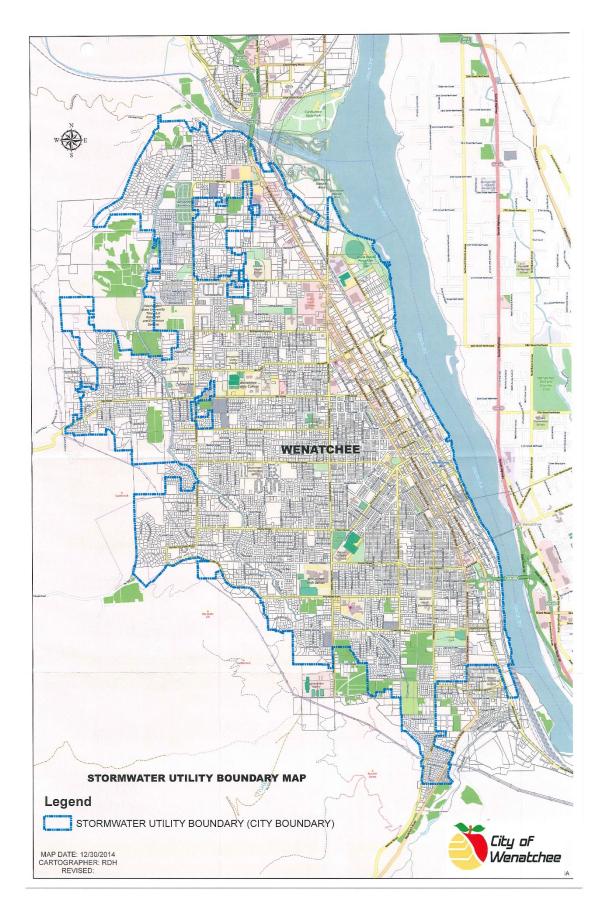
# 3.0 Permit Coverage Area

The permit is applicable to owners or operators of regulated small MS4s located in eastern Washington State. For all cities required to obtain coverage under this permit, the permit coverage area is the entire incorporated area of the city. For all counties required to obtain coverage under this permit, the permit coverage area is the urbanized areas and the urban growth areas associated with cities within the urbanized areas that are under the jurisdictional control of the county. The geographic area of coverage also includes any urban growth areas that are contiguous to urbanized areas under County jurisdictional control. To assure compliance with Federal and State stormwater requirements as specified in the Clean Water Act and the National Pollutant Discharge Elimination System Phase II regulations, Chelan County and Douglas County were required to update their utility service areas in 2014 to, at a minimum the federally urbanized area, as result of the 2010 Census data conducted by the U.S. Census Bureau.

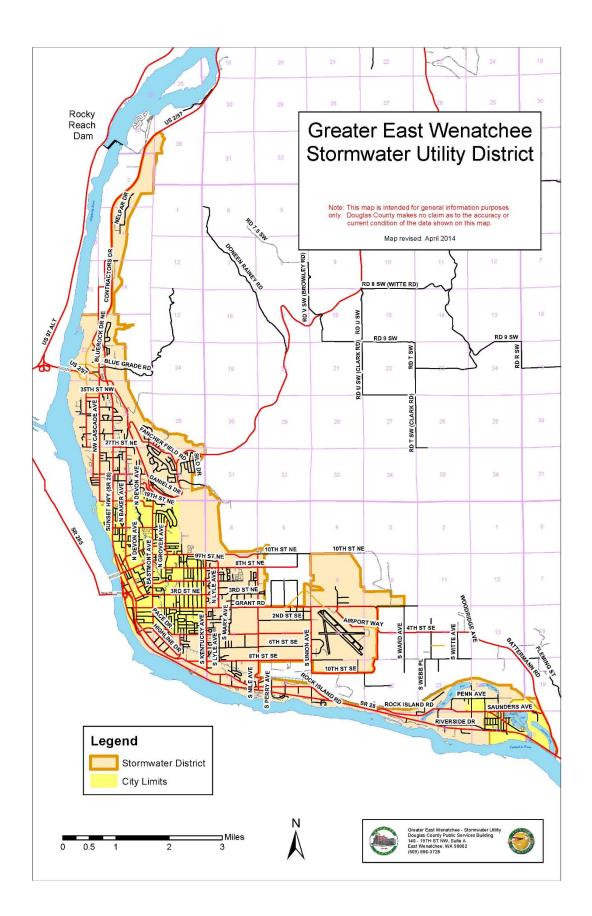
The permit coverage areas for Douglas County, City of East Wenatchee, Chelan County, and City of Wenatchee, ("Cities and Counties") are shown in Exhibit 1, Exhibit 2 and Exhibit 3. The city limits of Rock Island were excluded from the permit coverage area because, at the time of Ecology's decision, the City did not have a population of 1,000. The urban growth area and census defined urban area for Rock Island, however, are included in Douglas County's permit coverage area.



Program Description January 2016



Wenatchee Valley Stormwater Management Program Program Description January 2016



Program Description January 2016

## 4.0 NPDES Phase II Permit Requirements

The Cities and Counties have developed a regional stormwater management program that consists of collaborative efforts among the jurisdictions in addition to individual activities to meet permit requirements. Program activities are defined in terms of regional, semi-regional, and local efforts:

- Regional efforts are collaborative efforts between the four jurisdictions or have shared funding arrangements between the four jurisdictions
- Semi-regional efforts are collaborative efforts between jurisdictions or have shared funding arrangements between two or three of the jurisdictions
- Local efforts are completed individually by each jurisdiction.

The Stormwater Management Program Plan for 2015 can be found in Appendix A.

#### 4.1 Public Education and Outreach (Permit Requirement S5.B.1)

The Public Involvement, Education and Outreach Plan describes the activities for complying with the Sections S5.B.1 and S5.B.2 (provided in Appendix B). The public education and outreach activities are primarily regional efforts. The WVSTAC maintains a target audience lists and each year looks at what types of education are needed based on illicit discharge complaints, public feedback and permit requirements. The regional website (<a href="https://www.wenatcheewa.gov/wvstac">www.wenatcheewa.gov/wvstac</a>) is used to provide educational information on stormwater pollution prevention. The WVSTAC also provides educational information at public facilities, community events and occasionally sends information by mail. Other public education and outreach components include storm drain stenciling and media involvement. Details of these activities, as well as an implementation schedule, are provided in Appendix B.

#### 4.2 Public Involvement and Participation (\$5.B.2)

In 2008, the WVSTAC organized the Wenatchee Valley Stormwater Program Development Steering Committee. The committee consists of elected officials, local business owners, engineers, real estate agents, developers, home builders, citizens and environmental groups. The purpose of this group is to provide an opportunity to provide feedback on the regional stormwater management program. Public meetings, open houses, community events and the regional website are also used to gather input from the public. More details can be found in the Public Involvement, Education and Outreach Plan in Appendix B.

### 4.3 Illicit Discharge Detection and Elimination (S5.B.3)

The WVSTAC has developed a regional Illicit Discharge Detection and Elimination (IDDE) program to detect and address non-stormwater discharges to the MS4, which is provided in Appendix C. The IDDE program is comprised of the following measures to address permit requirements:

- MS4 Mapping and Outfalls
- **Illicit Discharge Detection Plan**: A regional illicit discharge detection plan to find, identify, and eliminate unknown pollutant discharges to the storm drainage system (Appendix C).
- **IDDE Ordinance or Resolution**: The Cities and Counties adopted consistent IDDE rules in 2009 to prohibit certain non-stormwater discharges into the MS4. A link to the ordinances and resolutions can be found in Appendix I.
- **Enforcement**: Based on the local ordinance or resolution, each City and County has developed an Enforcement Action Plan. Enforcement of ordinances and resolutions is handled locally, though some issues do involve both the city and county.

- **Public Education and Outreach**: As part of the regional Public Involvement, Education and Outreach Plan, the WVSTAC provides educational information to targeted audiences on illicit discharges and stormwater pollution prevention. A key component of the educational materials is the stormwater hotline. The City of Wenatchee and Chelan County each have their own hotline, while the City of East Wenatchee and Douglas County share a hotline.
- **Staff Training**: General training for City and County municipal staff (including office and field staff) responsible for the identification, investigation, termination, cleanup, and reporting of illicit discharges, is developed and administered regionally whenever possible. Enforcement training specific to the Cities and Counties will be given to staff at the local level.

The IDDE program is evaluated annually and a summary of the program activities is included in the jurisdictions' annual reports. The IDDE program is assessed using information from illicit discharge/spill reports, inspections reports, and feedback from public education efforts.

#### 4.4 Construction Site Stormwater Runoff Control (\$5.B.4)

The goal of the construction site stormwater runoff control program is to reduce pollutants in stormwater runoff from construction activities that disturb one acre or more, and from construction projects of less than one acre that are part of a common plan of development or sale. The regional construction site runoff control program that addresses the requirements of the permit is provided in Appendix D.

In 2010 the Cities and Counties adopted construction site stormwater ordinances or resolutions which became effective in February 2011(Appendix I). The ordinances/resolutions require erosion and sediment controls in compliance with the Stormwater Management Manual for Eastern Washington and other construction-phase stormwater pollution controls at new development and redevelopment projects. The Enforcement Action Plan prepared for the IDDE program will also be followed for the construction site stormwater runoff control ordinance.

# 4.5 Post-construction Stormwater Management for New Development and Redevelopment (\$5.B.5)

The post-construction stormwater runoff management program for new development and redevelopment projects was developed in conjunction with the construction site stormwater runoff control requirements. Projects that meet the criteria for construction site stormwater runoff management must also install and maintain best management practices to provide long-term water quality and flow control. Detailed information on this program element can be found in Appendix E.

#### 4.6 Municipal Operations and Maintenance (\$5.B.6)

The Cities and Counties developed a regional operations and maintenance plan template under a grant from Ecology in 2010, completed their individual plans early in 2011 (Appendix F), and have updated them as needed. The operations and maintenance plans were required to include best management practices and procedures for preventing stormwater pollution from municipal activities such as streets, stormwater conveyance and treatment systems, parks, municipal buildings, fleets, and construction projects. Staff training has been conducted on a regional basis whenever possible.

#### 4.7 Other Permit Requirements

In addition to the required SWMP, the permit contains additional requirements, which are outlined below.

#### 4.7.1 Total Maximum Daily Load Requirements (S7)

A TMDL, or total maximum daily load, is the maximum amount of pollutant that a water body can receive and without exceeding water quality standards. In Washington State, "TMDL" also refers to the planning process where water bodies that do not meet water quality standards are studied and strategies to reduce pollutants are developed and implemented. The TMDL for the Wenatchee River is the only active TMDL process in the Cities' and Counties' permit coverage area affecting storm drainage. The City of Wenatchee and Chelan County will address this TMDL and participate in future TMDL development as a semi-regional effort. The City and County will develop specific BMPs to address discharges into the Wenatchee River for affected basins. East Wenatchee and Douglas County will participate in future TMDL development individually, as necessary.

#### Monitoring (S8)

Under the first permit, the Cities and Counties developed a regional effectiveness monitoring plan that is currently is being finalized (Appendix G). During development of the current permit, Ecology developed a new approach to monitoring. The permit effective August 1, 2014, requires that each City and County collaborate with other permittees to develop and implement "Stormwater Management Program Effectiveness Studies." The City of Spokane Valley received funding from Ecology to lead a process to develop effectiveness study ideas for Eastern Washington. Representatives of the WVSTAC have been participating in this process. The permit requires that a ranked list of twelve to fifteen studies be submitted to Ecology before June 30, 2016.

#### 4.7.2 Reporting Requirements (S9)

Each jurisdiction individually prepares the annual report using a template provided by Ecology (Appendix H). Annual reports must be submitted to Ecology by March 31 for the previous calendar year. Because of the new permit effective August 1, 2014, an annual report will not be submitted until March 2016. For regional efforts, the lead City or County for a particular activity will provide the other jurisdictions with information to be included in their individual annual reports. Each City and County currently has a system to track SWMP activities and expenditures.

#### 4.8 Implementation Schedule

Exhibit 4 shows the NPDES Phase II Timeline for the Cities and Counties for the new permit effective August 1, 2014.

# Eastern Washington Phase II Municipal Stormwater Permit Implementation Timeline (2014-2018)

The first Eastern Washington Phase II Municipal Stormwater Permit was issued on January 17, 2007 and modified on June 17, 2009. This permit was re-issued without changes in 2012 and will expire on July 31, 2014. The second Eastern Washington Permit was issued on August 1, 2012 and will be effective August 1, 2014. The new permit will expire on July 31, 2019. This implementation schedule shows the deadlines for implementing the new requirements in the second permit.

Monitoring & Assessment	Municipal Operations &	Construction Stie Storwmater Runoff Control/Post-Construction Stormwater Management for New Development and Redevelopment	Illicit Discharge Detection & Elimination	Public Education & Outreach/ Public Involvement & Participation	Stormwater Management Program (SWMP)	Program Component
			Update IDDE Code, Program & Procedures (SS.B.3)	Update Public Education Outreach & Involvement Plan (55.B.1 & 2)	Update SWMP to include Written description of planned activities for the internal coordination upcoming year (\$5.A.3) mechanisms (\$5.A.5.b	August 1, 2014
					Written description of internal coordination mechanisms (SS.A.S.b)	March 31, 2016
Submit ranked list of SWMP Effectiveness Studies (S8.B.3)						June 30, 2016
Determine SWMP Effectiveness Study Lead & Submit Detailed Proposal (S8.B.4 & 5)						June 30, 2017
	Update Operations & Maintenance Plan					August 1, 2017
Submit Quality Assurance Project Plan for SWMP Effectiveness Study (S8.B.6)		Update Construction/Post- Construction Code, Program & Procedures (SS.B.4 & 5)				December 31, 2017
		Summary of Criteria Defining Low Impact Development Infeasibility (S5.B.5.b.2)				March 31, 2018
	Inspect all catch basins & inlets at least once. (Inspect every 2 years after 2018 unless otherwise documented) (S.S.B.G.a.ii)		Field Assessments of 40% of the MS4 (Average of 12% of the MS4 assessed each year after 2018) (S5.B.3.c.iii)			December 31, 2018



# **MEMORANDUM**

Date: January 25, 2016

Re: Stormwater Management Program - Internal Coordination Mechanisms

#### Description of Coordination among Departments to ensure Municipal Permit Compliance

One mission for Chelan County's Public Works Department is to meet all stormwater related regulatory requirements set forth in the Eastern Washington Phase II Municipal Stormwater Permit (Municipal Permit) administered by the Department of Ecology. In order to do so, coordinating the implementation and documentation of Municipal Permit requirements is necessary. This document has been prepared to generally describe the responsibilities and activities carried out by each affected department and division that contributes to compliance with the Municipal Permit, which is detailed in Section S5.A.5.b:

The Stormwater Management Program (SWMP) shall also include coordination mechanisms among departments within each jurisdiction to eliminate barriers to compliance with the terms of this permit. Permittees shall include a written description of internal coordination mechanisms in the Annual Report due no later than March 31, 2016.

The Public Works Department is responsible for informing staff of permit requirements, providing training when necessary, and ensuring mechanisms for coordination are in place. Most County departments have some responsibility under this permit and interdepartmental coordination and ongoing communication is the key to successful permit compliance. County staff communicates regularly in person, by phone, and via email regarding the stormwater program. The following is a list of departments in the County that are most affected by the Municipal Permit:

#### Public Works Department

- ✓ Street Maintenance
- ✓ Administration
- ✓ Engineering
- ✓ Construction inspection

#### Community Development Department

- ✓ Code Enforcement
- ✓ Building Official

#### Administration

- ✓ County Commissioners
- ✓ Campus Facilities Maintenance
- ✓ Parks and Open Space (Ohme Gardens & Wenatchee River County Park)

The content in this document is based upon the Municipal Permit requirements and is organized according to the SWMP components required in Section S5.C:

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination
- Construction Site Stormwater Runoff Control
- Post-Construction Stormwater Management for New Development and Redevelopment
- Municipal Operations and Maintenance
- Compliance with Total Maximum Daily Load
- Monitoring and Assessment
- Reporting and Recordkeeping

#### Public Education and Outreach

The Municipal Permit requires implantation of an education and outreach program that is designed to reduce behaviors and practices that contribute to or cause stormwater pollution. County employees, contractors, businesses, property managers, homeowners, school aged children, and the general public are all target audiences. Topics of public education include, but are not limited to: general impacts of stormwater on surface waters, impacts of illicit discharges and how to report them, maintenance of stormwater facilities, best management practices (BMPs), natural yard care, mobile businesses, portable toilet placement, and vehicle maintenance.

The Environmental Manager within the Public Works Department with assistance from the Wenatchee Valley Stormwater Technical Advisory Committee (WVSTAC) develops and prepares public education materials.

#### Public Involvement and Participation

The Environmental Manager ensures the public has the opportunity to participate in the decision-making process involving the development and implementation of the Municipal Permit's related activities and programs. This is accomplished by making the SWMP document and the most recent Annual Report available to the public on the WVSTAC website, annual steering committee meeting, and providing for program input by County Commissioner's.

#### Illicit Discharge Detection and Elimination

Chelan County implements an Illicit Discharge Detection & Elimination (IDDE) program designed to prevent, detect, characterize, and eliminate illicit connections and illicit discharges into the county's stormwater system (MS4). Required components of the program include mapping the MS4, development of a regulatory and enforcement mechanism, and an ongoing process to identify and eliminate sources of stormwater pollution. The County's ordinance, which prohibits

non-stormwater discharges, spills, illicit connections, and illegal dumping into the stormwater system is enforced by either the Environmental Manager, Code Enforcement Officer, or the Sheriff's Department.

The Environmental Manager updates county code, oversees enforcement actions, reports to Ecology on spills and illicit discharges, coordinates staff training and establishes priority areas. Other Public Works staff assist in field surveys, complaint investigation, initial enforcement action, updating the stormwater system map, monitoring the stormwater hotline and inspecting outfalls and water quality facilities. Under the direction of the County Engineer, GIS staff are responsible for adding new subdivisions and stormwater projects to the stormwater system map, managing the geodatabase and providing technical support to staff. Under the direction of the Road Supervisor, the Street Maintenance Department responds to spills and provides information to the Environmental Manager. Staff in all divisions of Public Works are responsible for identifying and reporting illicit discharges. In addition, the Sherriff's Office and the Code Enforcement Officer and Building Official within the Community Development Department, forward information regarding illicit discharges to the Public Works Department. The public can call the Stormwater Hotline at 509-667-6415 to report and stormwater-related problems and/or concerns.

#### Construction Site Stormwater Runoff Control

Any new construction project that meets the applicability criteria within Chelan County Code chapter 13.16, such as a single-family home, business, apartment building, parking lot, etc., is required to submit drainage plans and reports for review and approval. The Environmental Manager under the direction of the County Engineer is responsible for reviewing all stormwater site plans for development activities and ensuring that projects meet standards in the most current Department of Ecology *Stormwater Management Manual for Eastern Washington*. Public Works conduct inspections for construction site stormwater runoff control, investigation of complaints, and enforcement of county code. Additionally, the Environmental Manager coordinates with the Sherriff's Office, the Code Enforcement Officer, and also the Building Official for enforcement.

The Environmental Manager coordinates training on construction site stormwater runoff control and is responsible for enforcement beyond the initial steps including notices of violations and other administrative actions. Departments including Engineering, Street Maintenance, Campus Facilities Maintenance and Parks and Open Space are all individually responsible for implementing stormwater best management practices on construction projects.

#### Post-Construction Stormwater Management for New Development and Redevelopment

The Environmental Manager under the direction of the County Engineer reviews post-construction stormwater site plans and completes operations and maintenance agreements for post-construction stormwater facilities. Public Works field staff conduct construction-phase inspections of structural post-construction best management practices as well as follow-up inspections upon completion of construction. Code enforcement for this program element is the responsibility of the Public Works Department.

#### Municipal Operations and Maintenance

All departments associated with Chelan County are responsible for implementation of the Chelan County's Stormwater Pollution Prevention Operations and Maintenance Plan. The Road Maintenance division of the Public Works Department is responsible for the maintenance of the County's drainage infrastructure, which includes catch basins, pipes, open ditches, as well as regional retention/detention facilities. Maintenance staff annually inspects County owned stormwater infrastructure, while treatment and flow control facilities and stormwater retention/detention ponds are inspected by the Environmental Manager. Maintenance requirements for facilities are consistent with the adopted standards found in the *Stormwater Management Manual for Eastern Washington*.

#### Compliance with Total Maximum Daily Load

Under the direction of the County Engineer, the Environmental Manager oversees compliance with the municipal stormwater permit which meets the requirements of this element.

#### Monitoring and Assessment

The Environmental Manager represents Chelan County on regional and local stormwater groups for the purpose of complying with the requirement to complete Stormwater Management Program Effectiveness Studies.

#### Reporting and Recordkeeping

The Annual Report is prepared by Chelan County staff and is due on March 31 of each year. The report consists of questions related to compliance with the requirements and deadlines in the Municipal Permit. Public Works coordinates with the other affected department staff to collect data that is tracked for compliance. Additionally, updates to the SWMP occur annually.

The Environmental Manager prepares the annual report and oversees recordkeeping activities for the stormwater management program with assistance from Public Works staff, including the GIS division.