

**CITY OF KENMORE**  
**STORMWATER MANAGEMENT PROGRAM PLAN**

**Permit # WAR 04-5519**

City of Kenmore, WA



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# INTRODUCTION

This document is the City of Kenmore's (City) Stormwater Management Program (SWMP) Plan. Preparation and maintenance of this SWMP Plan is required by the Washington State Department of Ecology (Ecology) as a condition of Section S5.A.2 of the Western Washington Phase II Municipal Stormwater Permit (Permit). The Permit covers discharges from regulated municipal separate stormwater sewer systems (MS4). Based on criteria outlined in the Permit, Ecology considers the City to be an operator of a MS4 and therefore required to obtain permit coverage.

The Permit authorizes the City to discharge stormwater to surface and ground waters of the state pursuant to conditions set forth in the Permit. A component of these conditions requires the City to produce and implement a SWMP as described in section S5 of the Permit. The SWMP Plan is a "living" document and requires annual updates throughout the Permit. Implementation dates of requirements contained within S5 have been staggered throughout the Permit cycle in order to promote compliance during the transition for municipalities. The SWMP Plan is included with each Annual Report due March 31<sup>st</sup> following each Permit year and is also available on the City's website. The reported year covers January 1<sup>st</sup> through December 31<sup>st</sup>.

## REGULATORY BACKGROUND

The National Pollutant Discharge Elimination System (NPDES) permit program is a requirement of the federal Clean Water Act of 1972 (as amended in 1977 & 1987), which is intended to protect and restore waters for "beneficial uses" such as fishing and swimming. The federal Environmental Protection Agency (EPA) has delegated permit authority to state environmental agencies and these agencies can set permit conditions in accordance with and in addition to the minimum federal requirements. In Washington State, the NPDES-delegated authority is Ecology.

NPDES permits have been written for discharges from construction sites, concentrated animal feeding operations, industrial activities, publicly-owned wastewater treatment plants and municipal stormwater systems. While there are several types of NPDES permits, the municipal permit is intended to reduce the impacts from both point source (i.e. construction site run-off) and non-point source pollution carried by stormwater.

Ecology defined two types of municipal permits based upon census populations. Phase I permits were issued to municipalities with populations greater than 100,000 and Phase II permits were issued to municipalities with populations less than 100,000. Ecology issued the City its first Phase II Permit on January 17, 2007, which went into effect on February 16, 2007. The Permit was modified on June 17, 2009 and expired on February 15, 2012. The City was issued its second Phase II Permit on August 1, 2012, which went into effect on September 1, 2012 and expired on July 31, 2013. The City was issued its third (and current) Phase II Permit on August 1, 2012, which went into effect on August 1, 2013. This Permit was modified on January 16, 2014 and will expire on July 31, 2018.

## DOCUMENT ORGANIZATION

This report comprises written documentation of the City's SWMP that is required to be submitted with the Annual Report. In accordance with the Permit terms, the SWMP has been designed to reduce the discharge of pollutants to the maximum extent practicable (MEP), meet state AKART

requirements and protect water quality. The following sections describe the actions that the City has taken, or will take to comply with the requirements of the Permit.

To aid in tracking Permit requirements, this document has been organized into sections that correspond with the Special Conditions and are outlined in the Permit as follows:

- Section 1 - Public Education and Outreach (as required by S5.C.1),
- Section 2 - Public Involvement and Participation (as required by S5.C.2),
- Section 3 - Illicit Discharge Detection and Elimination (as required by S5.C3),
- Section 4 - Controlling Runoff from New Development, Redevelopment and Construction Sites (as required by S5.C.4),
- Section 5 - Municipal Operations and Maintenance (as required by S5.C.5), and
- Section 6 - Swamp Creek TMDL (as required by S7.A).

For ease of reading, each section is organized into four subsections:

Subsection 1 “Permit Requirements” begins with an overview of Permit requirements and includes a table that outlines specific section requirements and their associated date of compliance.

Subsection 2 “Current Activities” describes activities that the City has accomplished in meeting compliance deadlines in the Permit year being reported.

Subsection 3 “Previous Activities” describes activities that the City accomplished in meeting compliance deadlines in previous Permit years.

Subsection 4 “Planned Activities” describes activities that the City plans to accomplish in order to meet upcoming compliance deadlines.

Special Conditions S1 through S4 and General Conditions G1 through G20 apply to permit holders, though they do not result in specific program activities, nor is the SWMP required to document compliance with these activities. These conditions cover topics such as who is covered by the Permit, what discharges are authorized under the Permit and legal guidelines for transferring, revoking and appealing the Permit. Penalties for non-compliance are also included in these conditions.

Special Condition S7 *Compliance with Total Maximum Daily Load Requirements* is not a required section of the SWMP Plan. However, the City is required to document TMDL actions and submit to Ecology on an annual basis so it is logical to utilize the SWMP Plan as the mechanism for documenting compliance. TMDL documentation is included as Section 6 of the SWMP Plan.

# SECTION 1 - PUBLIC EDUCATION AND OUTREACH

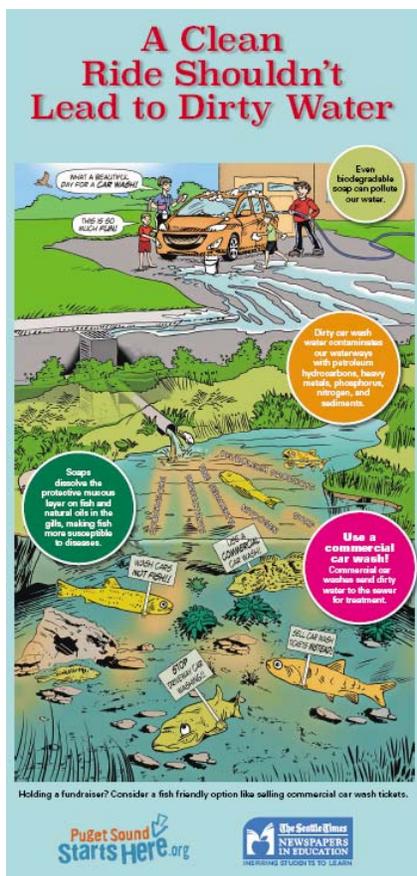
## 1.1 PERMIT REQUIREMENTS

The SWMP shall include an education program aimed at residents, businesses, industries, elected officials, policy makers, planning staff and other employees of the City. The goal of the education program is to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts. An education program may be developed locally or regionally. Table 1-1 outlines specific Permit requirements.

Table 1-1			
Minimum Performance Measure	Permit Section	Compliance Date	Compliance
Education and outreach program	S5.C.1.a	8/1/2013	YES
Stewardships & Partnerships	S5.C.1.b	8/1/2013	YES
Measure Behaviors	S5.C.1.c	2/2/2016	NA

## 1.2 CURRENT ACTIVITIES

### Seattle Times – Newspapers in Education



Kenmore partnered with its local Stormwater Outreach Group (SOGgies) to put together an outreach campaign with the Seattle Times' Newspapers in Education program. The full page insert shown to the left was published on September 16, 2015. The Puget Sound Starts Here inspired message focused on the issue of discharging contaminated runoff from car washing. Surveys from 2009, 2012 and 2015 have shown that this is still a behavior that needs attention in Kenmore.

The photo below shows a sample from the 8-page insert that was published in the Seattle Times on October 1, 2015. This insert was provided in the print edition of the Seattle Times, on their webpage and 10,000 copies were provided around the region to 491 participating schools all over Puget Sound, including Kenmore. It provided a broad range of information covering general stormwater information, low impact development, and specific behaviors such as car washing, pet waste, vehicle leaks and yard care.



### ***STORM (STormwater Outreach for Regional Municipalities)***

Kenmore continues to be an active participant in the regional STORM (STormwater Outreach for Regional Municipalities) group. This group meets regularly and develops and implements regional outreach programs around Puget Sound. Puget Sound Starts Here, Don't Drip and Drive and Drain Rangers and are all programs that originated from this group.

### ***Mobile Watershed Model Events***

City staff conducted watershed demonstrations using a mobile watershed model at several public events. Staff utilized the model to educate the public about the general impacts of stormwater on surface water, impacts from impervious surfaces, impacts of illicit discharges and how to report them and low impact development practices (and how they compare to conventional practices). Staff also educated residents on water quality issues such as how pet waste, vehicle maintenance and landscaping activities can affect stormwater runoff by utilizing dyes and props with the watershed model. The following photo shows the model being used at a public event in 2015.



### ***Public Participation***

The City continues to fund a Volunteer Coordinator staff position in order to accommodate Kenmore residents' desire to volunteer their time and effort for City events. Events have included riparian/wetland restorations and plantings and youth projects to construct information stations at Lake Washington and Sammamish River, which have been used for surface water outreach.

The City continued talks with Kenmore citizens interested in forming a stewardship group for a local watershed, Swamp Creek. Initial discussions have explored ideas on what roles the group and City would have, the scope of activities that the group could accomplish and how the relationship can most benefit Swamp Creek. The City plans on further promoting and exploring this opportunity.

The City received a grant request from the Sno-King Watershed Council and is reviewing options to provide grant funds for this non-profit watershed group that works to improve the health of

streams and watersheds in north King and south Snohomish Counties. This group is very active in the Swamp Creek Watershed and their activities provide a beneficial services to the citizens of Kenmore.

### ***Measurement and Understanding of Behavior***

Summer inspection crews surveyed random Kenmore residents while they were working throughout the City in 2015. The questions were the same as those used by Elway Research, Inc. in 2012. The results of this survey are being evaluated and will be used to measure the understanding and adoption of behaviors in order to update and evaluate the overall program in 2016.

### ***Catch Basin Marking***

The City continues to provide highly visible plastic markers for placement next to catch basins within the City. The markers state “Only Rain Down The Drain” and present the logo for Puget Sound Starts Here. Markers were provided for both public and private use. A photo of the catch basin marker is shown below.



## **1.3 PREVIOUS ACTIVITIES**

### ***2014 Metro Bus Ad Campaign***

In collaboration with neighboring cities, the City ran a Metro bus advertisement campaign in spring of 2014 focusing on “Only Rain Down the Drain”. This behavior was identified as a “priority behavior” in the City’s Stormwater Community Research Report requiring further education and outreach effort. The bus ad utilized the same photo shown below in the newspaper ad campaign.

### ***Measurement and Understanding of Behavior***

In 2008, the City performed an analysis of its Surface Water Management Program, including Public Education and Outreach components. The final report, completed in October 2008, identified needs in the Public Education and Outreach Program. Additional staff time and funding was arranged for the program. By March 2009, the City contracted with Otak to further assist with program implementation.

The City, partnering with the cities of Duvall, Mill Creek, Mountlake Terrace and Woodinville, contracted with Hebert Research, Inc. in 2009 to conduct a community survey to measure the public’s knowledge and understanding regarding stormwater. Areas of educational need were

identified and prioritized based upon the results. Specific details can be found in the Stormwater Community Research Report available on the City's website or in person at City Hall.

The City conducted a follow up survey to the 2009 community survey measuring the community's awareness, attitude and behavior towards stormwater. In 2012 there appeared to be an increase in understanding that untreated stormwater runoff flows into local waterways and Puget Sound. However, only 36% of respondents stated that they were aware of any water pollution problems in their local waterways. When asked to what degree actions taken by their family affect the health of local streams, lakes and rivers, respondents stated the following; significant (34%), insignificant (43%), none (22%) and no answer (1%). Continued efforts to educate and inform citizens about local issues and actions on how to improve water quality will continue.

Additional information can be found in the final 2012 report, compiled by Elway Research, Inc. for the cities of Kenmore, Bellevue, Bothell, Kirkland, Redmond and Shoreline.

### ***Newspaper Ad Campaign***

The City purchased space in the Bothell/Kenmore Reporter and ran a water quality message twice during April and May 2012. The advertisement was done in partnership with several other municipalities in the north Lake Washington area. The following photo shows an example of the advertisement.



### ***Puget Sound Starts Here***

Stormwater Outreach for Regional Municipalities (STORM), Washington State Puget Sound Partnership (PSP) and Ecology launched Puget Sound Starts Here (PSSH) in September, 2009. The City, as an active member of STORM, utilizes this platform to educate Puget Sound citizens of the effects that stormwater has on local streams, rivers, lakes and Puget Sound. Currently, PSSH efforts include focused education on car-washing, pet waste and yard care behaviors that negatively impact stormwater quality. A series of television ads were run in 2009 and another round of ads will be broadcast in 2010.

### ***Source Control BMPs***

On November 2, 2009, City Council adopted the 2009 Kenmore Stormwater Pollution Prevention Manual (Ordinance 09-0299). This manual provides best management practices for commercial, multi-family and residential properties in Kenmore. The manual is available online and citizens are encouraged to call the City with any questions or concerns.

### ***2010-2011 Metro Bus Ad Campaign***

In collaboration with neighboring cities, the City ran a Metro bus advertisement campaign in spring and fall of 2010 focusing on “Only Rain Down the Drain”. This behavior was identified as a “priority behavior” in the City’s Stormwater Community Research Report requiring further education and outreach effort. Bus ads were still spotted on buses throughout 2011. The bus ad utilized the same photo shown above in the newspaper ad campaign.

### ***Catch Basin Marking***

The City placed highly visible plastic markers next to catch basins on City roads. The markers state “Only Rain Down The Drain” and present the logo for Puget Sound Starts Here.

### **1.4 PLANNED ACTIVITIES**

The City will continue implementing many of the activities described above and will continue participating regionally with the multi-jurisdictional outreach group “STORM” and the local Stormwater Outreach Group called “SOGgies”. The City will also continue working with the regional campaign “Puget Sound Starts Here”.

In 2016, the City will be measuring the understanding that the general public has in regards to the impacts that stormwater has on local waterbodies and how their behavior and awareness has changed throughout previous outreach efforts, particularly for issues such as vehicle maintenance, pet waste management and yard care.

## SECTION 2 - PUBLIC INVOLVEMENT AND PARTICIPATION

### 2.1 PERMIT REQUIREMENTS

The SWMP shall include ongoing opportunities for public involvement through advisory councils, watershed committees, participation in developing rate-structures, stewardship programs, environmental activities or other similar activities. The City shall comply with applicable State and local public notice requirements when developing their SWMP.

Table 2-1			
Minimum Performance Measure	Permit Section	Compliance Date	Compliance
SWMP public input	S5.C.2.a	Annually	YES
SWMP availability	S5.C.2.b	Annually	YES

### 2.2 CURRENT ACTIVITIES

The annual report and Surface Water Management Program (SWMP) Plan is available online and comments are encouraged and accepted throughout the year. Contact information is provided for providing comment.

#### *Surface Water Element of Comprehensive Plan Update*

Following a year long process to update the Surface Water Element of the City's Comprehensive Plan, which included public, planning commission and council meetings, the plan was approved by City Council in June 2015. The update included changes to address upcoming low impact development requirements in the Permit. This Plan is available on the City's website.

### 2.3 PREVIOUS ACTIVITIES

#### *Public Hearing – KMC 13.45 Water Quality*

A public hearing was held on September 28, 2009 regarding the adoption of Kenmore Municipal Code 13.45. Citizens provided comment at the hearing.

#### *Public Hearing – KMC 13.35 Surface Water Runoff Policy*

A public hearing was held on December 7, 2009 regarding the adoption of Kenmore Municipal Code 13.35. Citizens provided comment at the hearing.

### 2.4 PLANNED ACTIVITIES

Each year, the city will update the SWMP and Annual Report and post it online. Citizens are encouraged to provide comment at any time throughout the year.

The City is updating their Surface Water Master Plan, which includes sections related to the Permit and implementation of the SWMP. The update process will include public meetings in early 2015.

# SECTION 3 - ILLICIT DISCHARGE DETECTION AND ELIMINATION

## 3.1 PERMIT REQUIREMENTS

The SWMP shall include an ongoing program to detect and remove illicit connections and discharges as defined in 40 CFR 122.26(b)(2), including any spills not under the purview of another responding authority, into the MS4 owned or operated by the City.

Table 3-1			
Minimum Performance Measure	Permit Section	Compliance Date	Compliance
MS4 Mapping	S5.C.3.a.i-ix	8/1/2013	YES
Water Quality Ordinance	S5.C.3.b.i-iv	8/1/2013	YES
Water Quality Ordinance Compliance Strategy – Updated Standards	S5.C.3.b.v-vi	2/2/2018	NA
Field Screening – 40%	S5.C.3.c.i	12/31/2017	NA
Field Screening – 12% Annually	S5.C.3.c.i	12/31/2018	NA
Publicly listed IDDE Hotline	S5.C.3.c.ii	8/1/2013	YES
Field Staff Training	S5.C.3.c.iii	8/1/2013	YES
IDDE Public Outreach	S5.C.3.c.iv	8/1/2013	YES
IDDE Program Implementation	S5.C.3.d.i-iv	8/1/2013	YES
IDDE Staff Training	S5.C.3.e	8/1/2013	YES
Recordkeeping	S5.C.3.f	8/1/2013	YES

## 3.2 CURRENT ACTIVITIES

### *Mapping/Inspections*

The City continues to update MS4 maps and inspects the entire MS4 each year. The City also maps and inspects non-MS4 components of the surface and storm water system. The City’s MS4 is currently comprised of approximately; 4,100 catch basins, 74 miles of enclosed conveyance, 15 miles of open conveyance and 152 public stormwater facilities. The City also inspects over a hundred private stormwater facilities each year which discharge into the City’s MS4 or directly into Waters of the State. Current stormwater maps are available on the City’s webpage or upon request.

### *Field Screening*

City staff conducted IDDE field screening activities during annual catch basin inspections. Inspection staff were trained to conduct visual inspections to identify potential illicit discharges or illicit connections per the City’s IDDE Manual and Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments.

### **3.3 PREVIOUS ACTIVITIES**

#### ***2011 Kenmore IDDE Program Manual***

The City developed a manual that outlines all IDDE program elements required by the Permit. The manual is comparable to the Center for Watershed Protection's 2004 *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments*.

#### ***Illicit Discharge Telephone Number "Hotline"***

During business hours, illicit discharges and spills are reported to the City's main phone line (425-398-8900). The City contracts with King County to receive phone calls after business hours (206-296-8100). These phone numbers are listed on the "Contact Information" page of the City's webpage and are advertised in City newsletters. The City maintains records of illicit discharges and connections, response actions taken and enforcement actions.

#### ***Water Quality Ordinance***

The City was required to develop and implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater, illicit discharges into Kenmore's municipal separate storm sewer system to the maximum extent allowable under State and Federal law.

On November 2, 2009 Kenmore City Council passed ordinance 09-0299 amending Kenmore Municipal Code, Chapter 13.45 "*Water Quality*". KMC 13.45 also adopted the Kenmore Stormwater Pollution Prevention Manual. Kenmore Municipal Code and the Stormwater Pollution Prevention Manual are available online.

#### ***Receiving Water Visual Inspections - Outfall Reconnaissance Inventory (ORI)***

Outfall Reconnaissance Inventories (ORI) were conducted on Swamp Creek, Muck Creek, Little Swamp Creek, Sammamish River, Lake Washington and Tributary 0057 during previous Permit cycles. The ORI consisted of dry weather outfall screening in an effort to identify potential illicit discharges from the MS4.

#### ***Training***

City staff responsible for identification, investigation, termination, cleanup and reporting of illicit discharges, including spills and illicit connections were trained to conduct these activities.

### **3.4 PLANNED ACTIVITIES**

The City will continue to implement the Kenmore IDDE Manual and update as needed.

The City will continue to conduct annual field screening of the MS4. Field screening is conducted in conjunction with annual maintenance inspections.

# SECTION 4 - CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT AND CONSTRUCTION SITES

## 4.1 PERMIT REQUIREMENTS

The City shall develop, implement and enforce a program to reduce pollutants in stormwater runoff to the MS4 from new development, redevelopment and construction site activities.

Table 4-1			
Minimum Performance Measure	Permit Section	Compliance Date	Compliance
Ordinance	S5.A.4 S5.C.4.a	8/1/2013 12/31/2016	YES NA
Ordinance shall include equivalent language to Appendix 1 of the Permit	S5.A.4 S5.C.4.a.i	8/1/2013 12/31/2016	YES NA
Ordinance shall include a site planning process and BMP selection/design criteria	S5.A.4 S5.C.4.a.ii	8/1/2013 12/31/2016	YES NA
Ordinance shall provide legal authority to inspect	S5.A.4 S5.C.4.a.iii	8/1/2013 12/31/2016	YES NA
Review all applicable site plans	S5.A.4 S5.C.4.b.i	8/1/2013 12/31/2016	YES NA
Pre-inspect high sediment transport sites	S5.A.4 S5.C.4.b.ii	8/1/2013 12/31/2016	YES NA
Inspect and enforce ESC	S5.A.4 S5.C.4.b.iii	8/1/2013 12/31/2016	YES NA
Permanent Stormwater Facilities	S5.A.4 S5.C.4.b.iv	8/1/2013 12/31/2016	YES NA
Achieve at least 80% inspections	S5.A.4 S5.C.4.b.v	8/1/2013 12/31/2016	YES NA
Developed enforcement strategy	S5.A.4 S5.C.4.b.vi	8/1/2013 12/31/2016	YES NA
Ordinance requires O&M	S5.A.4 S5.C.4.c.i	8/1/2013 12/31/2016	YES NA
Establish maintenance standards equivalent to Ecology Manual	S5.A.4 S5.C.4.c.ii	8/1/2013 12/31/2016	YES NA
Annual inspections of flow control and stormwater treatment facilities	S5.A.4 S5.C.4.c.iii	8/1/2013 12/31/2016	YES NA
Inspections of facilities and catch basins in residential developments until 90%	S5.A.4 S5.C.4.c.iv	8/1/2013 12/31/2016	YES NA
Achieve at least 80% inspections	S5.A.4 S5.C.4.c.v	8/1/2013 12/31/2016	YES NA
Conduct maintenance when standard is exceeded	S5.A.4 S5.C.4.c.vi	8/1/2013 12/31/2016	YES NA
Recordkeeping	S5.A.4 S5.C.4.c.vii	8/1/2013 12/31/2016	YES NA

Table 4-1 Continued			
Minimum Performance Measure	Permit Section	Compliance Date	Compliance
NOIs for construction and industrial activity are available	S5.C.4.d	8/1/2013	YES
Applicable staff are trained	S5.C.4.e	8/1/2013	YES
LID Codes/Standards Update	S5.C.4.f.i	12/31/2016	NA
LID Code/Standards Update Report	S5.C.4.f.ii	3/31/2017	NA
Watershed-scale stormwater planning Not applicable for the City of Kenmore	S5.C.4.g	NA	NA

## 4.2 CURRENT ACTIVITIES

The City continues to implement all Permit, code and development requirements for development, redevelopment and construction sites in the City. In 2015, the City had 8 active projects over 1-acre applied for and approved on or after February 16, 2010 (the City's current reporting threshold).

SITE	TYPE	STATUS (2014)	APPROVAL
Creektree Plat	Residential	Site Construction Completed Home Construction Phase	2012
Spencer 68	Multi-Family	Site Under Construction Construction Inspection Phase Home Construction Phase	2013
522 West A	Road Improvement	Construction in Progress Construction Inspection Phase	2014
Simonds Court Plat	Residential	Construction in Progress Construction Inspection Phase	2014
Double Eagle Plat	Residential	Site Construction Completed Home Construction Phase	2015
Glenmoor Plat	Residential	Site Under Construction Construction Inspection Phase	2015
Spencer Square	Multi-Family Mixed-Use	Site Under Construction Construction Inspection Phase	2015
Redhawk Plat	Residential	Site Construction Completed Home Construction Phase	2015

## 4.3 PREVIOUS ACTIVITIES

### *Surface Water Runoff Ordinance*

The City council passed Ordinance 10-0305 on January 11, 2010 amending Kenmore Municipal Code 13.35 *Surface Water Runoff Policy*. The ordinance also adopted the King County 2009 Surface Water Design Manual.

The City conducted plan review, inspection and enforcement on applicable projects. Post project inspections for long term operations and maintenance were conducted.

#### **4.4 PLANNED ACTIVITIES**

The City will continue implementing the 2009 King County Surface Water Design Manual and all other relevant standards required by the 2007 and 2012 Western Washington Phase II Municipal Stormwater Permits until such standards are updated as required by the 2013 Western Washington Phase II Municipal Stormwater Permit on or before December 31, 2016 (S5.A.4).

The City is hiring AHBL to assist City staff in the LID code integration process. AHBL worked with Ecology and Puget Sound Partnership to author “Integrating LID into Local Codes: A Guidebook for Local Governments” in 2012 and is one of the leading experts on this topic. The process will be completed by December 31, 2016.

# SECTION 5 - POLLUTION PREVENTION AND OPERATIONS AND MAINTENANCE FOR MUNICIPAL OPERATIONS

## 5.1 PERMIT REQUIREMENTS

The City shall develop and implement an operations and maintenance (O&M) program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

Table 5-1			
Minimum Performance Measure	Permit Section	Compliance Date	Compliance
Adoption of maintenance standards as protective of SMMWW	S5.A.4	8/1/2013	YES
	S5.C.5.a	12/31/2016	NA
Annual inspection of flow control and WQ treatment facilities	S5.A.4	8/1/2013	YES
	S5.C.5.b	12/31/2016	NA
Spot check facilities after major storms	S5.A.4	8/1/2013	YES
	S5.C.5.c	12/31/2016	NA
Inspect and clean all applicable catch basins	S5.A.4	8/1/2013	YES
	S5.C.5.d	12/31/2016	NA
Achieve 95% inspection rate	S5.A.4	8/1/2013	YES
	S5.C.5.e	12/31/2016	NA
Practices and policies to reduce stormwater impacts	S5.A.4	8/1/2013	YES
	S5.C.5.f	12/31/2016	NA
Develop an ongoing training program	S5.A.4	8/1/2013	YES
	S5.C.5.g	12/31/2016	NA
Develop a SWPPP for applicable sites	S5.A.4	8/1/2013	YES
	S5.C.5.h	12/31/2016	NA
Records of inspections and maintenance	S5.A.4	8/1/2013	YES
	S5.C.5.i	12/31/2016	NA

## 5.2 CURRENT ACTIVITIES

The City continues to implement the Operations & Maintenance Practices and Policies Manual. The City inspected and cleaned all publically operated catch basins within the City. The City inspected and conducted applicable maintenance on all publically maintained surface water flow control and water quality facilities within the City.

## 5.3 PREVIOUS ACTIVITIES

### *Adoption of Maintenance Standards*

The City council passed Ordinance 10-0305 on January 11, 2010 amending Kenmore Municipal Code 13.35 *Surface Water Runoff Policy*. The ordinance also adopted the King County 2009 Surface Water Design Manual, which contains the City's maintenance standards (Appendix A).

## ***Operations & Maintenance Practices and Policies Manual***

In order to comply with many of the O&M requirements set forth in the Permit, the City developed the Operations & Maintenance Practices and Policies Manual (OMPPM). The OMPPM contains inspection program details, O&M practices, O&M policies, SWPPPs, maintenance standards, nutrient management plan, integrated pest management plan and current O&M contracts.

### **5.4 PLANNED ACTIVITIES**

The City will continue to implement the practices and policies outlined in the Operations & Maintenance Practices and Policies Manual (OMPPM). The City will adopt any new O&M standards required by the Permit by December 31, 2016 and update the OMPPM as needed. Until that time, the City operates under standards established under the 2007 Western Washington Phase II Municipal Stormwater Permit, which are in effect until December 31, 2016 per S5.A.4.

## SECTION 6 – SWAMP CREEK TMDL

### 6.1 PERMIT REQUIREMENTS

The City has an applicable TMDL as described under Special Condition S7 (TMDL) of the Permit. The *Swamp Creek Fecal Coliform Bacteria TMDL Water Quality Improvement Report and Implementation Plan*, dated May 2006, identified Swamp Creek as a TMDL for fecal coliform. The Permit requires that TMDL implementation activities be annually reported by the City. Implementation activities are described in Appendix 2 of the Permit.

Minimum Performance Measure	Permit Section	Compliance Date	Compliance
Business Inspections	Appendix 2	8/1/2016	NA
Public Education and Outreach	Appendix 2	8/1/2013	YES
Operations and Maintenance	Appendix 2	8/1/2013	YES
IDDE	Appendix 2	12/31/2017	NA
Targeted Source Control & Elimination	Appendix 2	2/2/2014	YES
Surface Water Monitoring	Appendix 2	8/1/2015	YES

### 6.2 CURRENT ACTIVITIES

#### 2015 Sampling Results

The City was required to start collecting water samples from five locations in August 2015 per the City's Swamp Creek Fecal Coliform Bacteria TMDL Quality Assurance Project Plan (QAPP), which was approved by Ecology on March 26, 2015. This section provides sampling data for the reporting year at those locations. All Swamp Creek TMDL participants informally agreed to collect samples on the third Wednesday of each month if possible.

DATE	SWAMP 1		SWAMP 2		SWAMP 3		SWAMP 4		SWAMP 5	
	MAIN CHANNEL @ 522 BRIDGE		MAIN CHANNEL @ 73RD BRIDGE		MUCK CREEK		TRIB @ 192ND ST		LITTLE SWAMP CREEK @ 192ND	
	Fecal Coliform (CFU/100mL)		Fecal Coliform (CFU/100mL)		Fecal Coliform (CFU/100mL)		Fecal Coliform (CFU/100mL)		Fecal Coliform (CFU/100mL)	
	Sample	Sample Replicate								
7/15/2015	190	NC	220	NC	1300	NC	NF	NF	480	NC
8/19/2015	160	170	190	210	250	290	NF	NF	350	200
9/16/2015	160	150	170	120	120	150	NF	NF	210	230
10/21/2015	500	350	56	66	110	90	NF	NF	90	150
11/18/2015	55	NC	110	NC	30	NC	95	NC	45	NC
12/16/2015	28	NC	35	NC	33	NC	46	NC	1100	NC

NC – Not Collected

NF – No Flow

### ***Public Education and Outreach***

The parks maintenance program promotes pet waste removal. Visible signs and pet waste bags are provided in City parks.

The City provides stormwater education materials in the City Newsletter and at City events regarding domestic pet waste. The City’s mobile watershed model (used at public events) is also used to demonstrate how pet waste is introduced into the watershed and to educate citizens on pet waste BMPs. Staff provide a “poop toss” game to educate children and parents on proper pet waste management. The following photo shows children and parents enjoying the game at a public event.



### ***Operations and Maintenance***

Municipal parks and other City owned and operated lands that are reasonably expected to have substantial domestic animal (dog and horse) have waste collection stations. Waste collection stations provide plastic bags to the public for collecting the pet waste.

### ***Targeted Source Control & Elimination***

The City identified the Muck Creek sub-basin as the high priority area that will be the focus of source identification and elimination efforts during this permit cycle. This sub-basin had some of the highest concentrations of bacterial pollution measured during the previous monitoring project.

### **6.3 PREVIOUS ACTIVITIES**

This City conducted monitoring for bacterial pollution in Swamp Creek during previous Permit cycles. This information was used to update the City’s QAPP in 2015, which is effective through the remainder of this Permit.

Ordinance 09-0299, amending KMC Chapter 13.45 “*Water Quality*”, effectively prohibits non-stormwater, illegal discharges from commercial animal handling areas and commercial composting facilities. The ordinance also adopts the 2009 Kenmore Stormwater Pollution Prevention Manual which contains BMPs addressing commercial composting and animal handling areas.

#### **6.4 PLANNED ACTIVITIES**

The City will evaluate the Swamp Creek basin to identify commercial animal handling areas and commercial composting facilities and conduct inspections of these facilities, if any are identified, by August 1, 2016.

The City will be measuring the understanding that the general public has in regards to the impacts that stormwater has on local waterbodies and how their behavior and awareness has changed throughout previous outreach efforts. Pet waste management behaviors are being evaluated as part of that process and appropriate changes, if needed, will be made to the pet waste management outreach program.