

Washington Department of Ecology Submission Cover Letter

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Company Name	Signer Name	System Name
City of Camas	Steve Wall	WQWebPortal

Attachments:

Document Name of Description	Document File Name
WAR045004_2_03252016041741	160321 Annexation Map Update_2_03252016041741
WAR045004_5_03252016041844	PublicOutreach-EducationEffort_5_03252016041844
Submitted Copy of Record for City of Camas	Copy of Record CityofCamas Monday March 28 2016
WAR045004_20_03252016043235	2015 Illicit Discharges Summar_20_03252016043235
WAR045004_1_03252016041741	SWMP Manual_1_03252016041741

Attestation Agreed to at Signing:

I certify I personally signed and submitted to the Department of Ecology an Electronic Signature Agreement. I understand that use of my electronic signature account/password to submit this information is equal to my written signature. I have read and followed all the rules of use in my Electronic Signature Agreement. I believe no one but me has had access to my password and other account information.

I further certify: I had the opportunity to review the content or meaning of the submittal before signing it; and to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I intend to submit this information as part of the implementation, oversight, and enforcement of a federal environmental program. I am aware there are significant penalties for submitting false information, including possible fines and imprisonment.

**For Ecology Use Only ---
Dev**



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Water Quality Program

Permit Submittal Electronic Certification

Permittee: CAMAS CITY

Permit Number: WAR045004

Site Address: 616 NE 4TH AVE
Camas, WA 98607

Submittal Name: MS4 Annual Report Phase II Western

Version: 1

Due Date: 3/31/2016

Questionnaire

Number	Permit Section	Question	Answer
1	S5.A.2	Attach updated annual Stormwater Management Program Plan (SWMP Plan). (S5.A.2)	SWMP Manual_1_0325201604 1741
2	S9.D.5	Attach a copy of any annexations, incorporations or boundary changes resulting in an increase or decrease in the Permittee's geographic area of permit coverage during the reporting period per S9.D.5.	160321 Annexation Map Update_2_0325201604 1741
3	S5.A.3	Implemented an ongoing program to gather, track, and maintain information per S5.A.3, including costs or estimated costs of implementing the SWMP.	Yes
4	S5.A.5.b	Coordinated among departments within the jurisdiction to eliminate barriers to permit compliance. (S5.A.5.b)	Yes
5	S5.C.1.a.i and ii	Attach description of public education and outreach efforts conducted per S5.C.1.a.i and ii.	PublicOutreach-EducationEffort_5_0325 2016041844
6	S5.C.1.b	Created stewardship opportunities (or partnered with others) to encourage resident participation in activities such as those described in S5.C.1.b.	Yes
7	S5.C.1.b	Used results of measuring the understanding and adoption of targeted behaviors among at least one audience in at least one subject area to direct education and outreach resources and evaluate changes in adoption of targeted behaviors. (Required no later than February 2, 2016, S5.C.1.b)	Not Applicable
7b	S5.C.1.b	Attach description of how this requirement was met.	
8	S5.C.2.a	Describe the opportunities created for the public to participate in the decision making processes involving the development, implementation and updates of the Permittee's SWMP. (S5.C.2.a)	Bi-monthly Council workshops, Council Meetings, and at Ward Meetings. Public meeting on updates to SWMP to be scheduled in 2016.
9	S5.C.2.b	Posted the updated SWMP Plan and latest annual report on your website no later than May 31. (S5.C.2.b)	Yes

9b	S5.C.2.b	List the website address.	www.cityofcamas.us/index.php/engmain
10	S5.C.3.a.i - vi	Maintained a map of the MS4 including the requirements listed in S5.C.3.a.i.-vi.	Yes
11	S5.C.3.b.v	Implemented a compliance strategy, including informal compliance actions as well as enforcement provisions of the regulatory mechanism described in S5.C.3.b. (S5.C.3.b.v)	Yes
12	S5.C.3.b.vi	Updated, if necessary, the regulatory mechanism to effectively prohibit illicit discharges into the MS4 per S5.C.3.b.vi. (Required no later than February 2, 2018)	Yes
12b		Cite the Prohibited Discharges code reference	CMC 14.04
13	S5.C.3.c.i	Implemented procedures for conducting illicit discharge investigations in accordance with S5.C.3.c.i.	Yes
13b	S5.C.3.c.i	Cite methodology	City's IDDE Program Manual
14	S5.C.3.c.i	Percentage of MS4 coverage area screened in reporting year per S5.C.3.c.i. (Required to screen 40% of MS4 no later than December 31, 2017 (except no later than June 30, 2018 for the City of Aberdeen) and 12% on average each year thereafter. (S5.C.3)	0
15	S5.C.3.c.ii	List the hotline telephone number for public reporting of spills and other illicit discharges. (S5.C.3.c.ii)	IDDE Hotline: 360-817-1565; After Hours Emergencies: 360-737-0592; Sanitary Sewer Hotline: 360-817-1531
15b	S5.C.3.c.ii	Number of hotline calls received.	0
16	S5.C.3.c.iii	Implemented an ongoing illicit discharge training program for all municipal field staff per S5.C.3.c.iii.	Yes
17	S5.C.3.c.iv	Informed public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste. (S5.C.3.c.iv)	Yes
17b	S5.C.3.c.iv	Describe the information sharing actions. (S5.C.3.c.iv)	Shared Ecology's info on Vehicle & Equipment Washwater Discharges and CMC 14.04
18	S5.C.3.d	Implemented an ongoing program to characterize, trace, and eliminate illicit discharges into the MS4 per S5.C.3.d.	Yes
19	S5.C.3.d.iv	Number of illicit discharges, including illicit connections, eliminated during the reporting year. (S5.C.3.d.iv)	3
20	S5.C.3.d.iv	Attach a summary of actions taken to characterize, trace and eliminate each illicit discharge found by or reported to the permittee. For each illicit discharge, include a description of actions according to required timeline per S5.C.3.d.iv	2015 Illicit Discharges Summar_20_03252016 043235
21	S5.C.3.e	Municipal illicit discharge detection staff are trained to conduct illicit discharge detection and elimination activities as described in S5.C.3.e.	Yes

22	S5.C.4.a	Implemented an ordinance or other enforceable mechanism to address runoff from new development, redevelopment and construction sites per the requirements of S5.C.4.a.	Yes
24	S5.C.4.a.i	Number of exceptions granted to the minimum requirements in Appendix 1. (S5.C.4.a.i., and Section 6 of Appendix 1)	0
25	S5.C.4.a.i	Number of variances granted to the minimum requirements in Appendix 1. (S5.C.4.a.i., and Section 6 of Appendix 1)	0
26	S5.C.4.b.i	Reviewed Stormwater Site Plans for all proposed development activities that meet the thresholds adopted pursuant to S5.C.4.a.i. (S5.C.4.b.i)	Yes
26b	S5.C.4.b.i	Number of site plans reviewed during the reporting period.	11
27	S5.C.4.b.ii	Inspected, prior to clearing and construction, permitted development sites that have a high potential for sediment transport as determined through plan review based on definitions and requirements in Appendix 7 Determining Construction Site Sediment Damage Potential, or alternatively, inspected all construction sites meeting the minimum thresholds adopted pursuant to S5.C.4.a.i. (S5.C.4.b.ii)	Yes
27b	S5.C.4.b.ii	Number of construction sites inspected per S5.C.4.b.ii.	10
28	S5.C.4.b.iii	Inspected permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls. (S5.C.4.b.iii)	Yes
28b	S5.C.4.b.iii	Number of construction sites inspected per S5.C.4.b.iii.	10
29	S5.C.4.b.ii, iii and	Number of enforcement actions taken during the reporting period (based on construction phase inspections at new development and redevelopment projects). (S5.C.4.b.ii, iii and v)	0
30	S5.C.4.b.iv	Inspected all permitted development sites that meet the thresholds in S5.C.4.a.i upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater facilities. (S5.C.4.b.iv)	Yes
31	S5.C.4.b.ii-iv	Achieved at least 80% of scheduled construction-related inspections. (S5.C.4.b.ii-iv)	Yes
32	S5.C.4.b.iv	Verified a maintenance plan is completed and responsibility for maintenance is assigned for projects. (S5.C.4.b.iv)	Yes
33	S5.C.4.c	Implemented provisions to verify adequate long-term operation and maintenance (O&M) of stormwater treatment and flow control BMPs/facilities that are permitted and constructed pursuant to S5.C.4. a and b. (S5.C.4.c)	Yes
35	S5.C.4.c.iii	Annually inspected stormwater treatment and flow control BMPs/facilities per S5.C.4.c.iii.	Yes

35b	S5.C.4.c.iii	If using reduced inspection frequency for the first time during this permit cycle, attach documentation per S5.C.4.c.iii	Not Applicable
36	S5.C.4.c.iv	Inspected new residential stormwater treatment and flow control BMPs/facilities and catch basins every 6 months per S5.C.4.c.iv to identify maintenance needs and enforce compliance with maintenance standards.	Yes
37	S5.C.4.c.v	Achieved at least 80% of scheduled inspections to verify adequate long-term O&M. (S5.C.4.c.v)	Yes
38	S4.C.4.c.vi	Verified that maintenance was performed per the schedule in S5.C.4.c.vi when an inspection identified an exceedance of the maintenance standard.	Not Applicable
38b	S5.C.4.c.vi	Attach documentation of any maintenance delays. (S5.C.4.c.vi)	Not Applicable
39	S5.C.4.d	Provided copies of the Notice of Intent for Construction Activity and Notice of Intent for Industrial Activity to representatives of proposed new development and redevelopment. (S5.C.4.d)	Yes
40	S5.C.4.e	All staff responsible for implementing the program to control stormwater runoff from new development, redevelopment, and construction sites, including permitting, plan review, construction site inspections, and enforcement are trained to conduct these activities. (S5.C.4.e)	Yes
42	S5.C.4.g	Participated and cooperated with the watershed-scale stormwater planning process led by a Phase I county. (S5.C.4.g)	Yes
43	S5.C.5.a	Implemented maintenance standards as protective, or more protective, of facility function as those specified in Chapter 4 of Volume V of the 2005 Stormwater Management Manual for Western Washington.	Yes
44	S5.C.5.a	Applied a maintenance standard that is not specified in the Stormwater Management Manual for Western Washington.	No
44b	S5.C.5.a	Please note what kinds of facilities are covered by this alternative maintenance standard. (S5.C.5.a)	
45	S5.C.5.a.ii	Performed timely maintenance per S5.C.5.a.ii.	Yes
46	S5.C.5.b	Annually inspected all municipally owned or operated permanent stormwater treatment and flow control BMPs/facilities. (S5.C.5.b)	Yes
46b	S5.C.5.b	Number of known municipally owned or operated stormwater treatment and flow control BMPs/facilities. (S5.C.5.b)	28
46c	S5.C.5.b	Number of facilities inspected during the reporting period. (S5.C.5.b)	28
46d	S5.C.5.b	Number of facilities for which maintenance was performed during the reporting period. (S5.C.5.b)	28
47	S5.C.5.b	If using reduced inspection frequency for the first time during this permit cycle, attach documentation per S5.C.5.b.	Not Applicable

48	S5.C.5.c	Conducted spot checks and inspections (if necessary) of potentially damaged stormwater facilities after major storms as per S5.C.5.c.	Yes
49	S5.C.5.d	Inspected all municipally owned or operated catch basins and inlets as per S5.C.5.d, or used an alternative approach. (Required once no later than August 1, 2017 and every two years thereafter, except once no later than June 30, 2018 and every two years thereafter for the City of Aberdeen)	Not Applicable
49b	S5.C.5.d	Number of known catch basins.	2108
49c	S5.C.5.d	Number of catch basins inspected during the reporting period.	148
49d	S5.C.5.d	Number of catch basins cleaned during the reporting period.	148
50	S5.C.5.d.i-ii	Attach documentation of alternative catch basin cleaning approach, if used. (S5.C.5.d.i or ii)	Not Applicable
51	S5.C.5.f	Implemented practices, policies and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the Permittee, and road maintenance activities under the functional control of the Permittee. (S5.C.5.f)	Yes
52	S5.C.5.g	Implemented an ongoing training program for Permittee employees whose primary construction, operations or maintenance job functions may impact stormwater quality. (S5.C.5.g.)	Yes
53	S5.C.5.h	Implemented a Stormwater Pollution Prevention Plan for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the Permittee in areas subject to this Permit that are not required to have coverage under an NPDES permit that covers stormwater discharges associated with the activity. (S5.C.5.h)	Yes
54	S7.A	Complied with the Total Maximum Daily Load (TMDL)-specific requirements identified in Appendix 2. (S7.A)	Not Applicable
55	S7.A	For TMDLs listed in Appendix 2: Attach a summary of relevant SWMP and Appendix 2 activities to address the applicable TMDL parameter(s). (S7.A)	Not Applicable
56	S8.A	Attach a description of any stormwater monitoring or stormwater-related studies as described in S8.A.	Not Applicable
57	S8.B.1	Participated in cost-sharing for the regional stormwater monitoring program (RSMP) for status and trends monitoring. (S8.B.1)	Yes
57B	S8.B.2	If choosing to conduct individual status and trends monitoring, attach an annual stormwater monitoring report in accordance with S8.B.2. (Required to submit reports beginning March 31, 2016)	

58	S8.C.1	Participated in cost-sharing for the regional stormwater monitoring program (RSMP) for effectiveness studies. (S8.C.1) (Required to begin no later than August 15, 2014)	Yes
58b	S8.C.2	If choosing to conduct discharge monitoring, attach an annual stormwater monitoring report in accordance with S8.C.2 and Appendix 9. (Required to submit reports beginning March 31, 2016)	
59	S8.D.1	Contributed to the RSMP for source identification and diagnostic monitoring information repository in accordance with S8.D.1. (Required to begin no later than August 15, 2014)	Yes
60	G3	Notified Ecology in accordance with G3 of any discharge into or from the Permittees MS4 which could constitute a threat to human health, welfare or the environment. (G3)	Yes
61	G3	Number of G3 notifications provided to Ecology.	3
62	G3.A	Took appropriate action to correct or minimize the threat to human health, welfare, and/or the environment per G3.A.	Yes
63	S4.F.1	Notified Ecology within 30 days of becoming aware that a discharge from the Permittee's MS4 caused or contributed to a known or likely violation of water quality standards in the receiving water. (S4.F.1)	Yes
64	S4.F.3.a	If requested, submitted an Adaptive Management Response report in accordance with S4.F.3.a.	Not Applicable
65	S4.F.3.d	Attach a summary of the status of implementation of any actions taken pursuant to S4.F.3 and the status of any monitoring, assessment, or evaluation efforts conducted during the reporting period. (S4.F.3.d)	Not Applicable
66	G20	Notified Ecology of the failure to comply with the permit terms and conditions within 30 days of becoming aware of the non-compliance. (G20)	Not Applicable
67	G20	Number of non-compliance notifications (G20) provided in reporting year.	0
67b	G20	List the permit conditions described in non-compliance notification(s).	Not Applicable

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Steve Wall

3/28/2016 1:28:21 PM

Signature

Date

City of Camas



**STORMWATER
MANAGEMENT
PROGRAM
(SWMP)**



As required by the:

***2013-2018 Western
Washington Phase II
Municipal Stormwater
Permit for MS4***

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ACRONYMS

AASF	Adopt-a-Stream Foundation
AGC	the Association of General Contractors
BMPs	Best Management Practices
CESCL	Certified Erosion and Sediment Control Lead
the City	City of Camas
DOE	Washington State Department of Ecology
EPA	US Environmental Protection Agency
LID	Low Impact Development
the Manual	Ecology's <i>2005 Stormwater Management Manual for Western Washington</i>
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
the Permit	2007 Western Washington Phase II Municipal Stormwater Permit
PSA	Professional Service Agreement
PSAT	Puget Sound Action Team
SWMP	Stormwater Management Program
SWPPP	Stormwater Pollution Prevention Plan
TESC	Temporary Erosion and Sediment Control
TMDL	Total Maximum Daily Load
CMC	Camas Municipal Code
WRIA	Water Resource Inventory Area

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INTRODUCTION

The Stormwater Management Program (SWMP) is required by Section S5.A.2 of the 2013-2018 Western Washington Phase II Municipal Stormwater Permit (Permit). The SWMP is organized per the program components in S5.C. The SWMP will be updated annually for submittal with the City of Camas's (City) annual reports to the Department of Ecology (Ecology). The SWMP will consist of the following:

- A description of the following components, each of which are outlined in S5.C of the Permit:
 1. Public Education and Outreach
 2. Public Involvement and Participation
 3. Illicit Discharge Detection and Elimination
 4. Controlling Runoff from New Development, Redevelopment, and Construction Sites
 5. Municipal Operations and Maintenance
- Any additional actions implemented by the City, pursuant to S5.C.

The SWMP is comprised of these components and is designed to protect water quality by reducing the discharge of pollutants from the regulated small municipal separate storm sewer system (MS4) to the maximum extent practicable.

The SWMP is a planning and implementation document that can be used by the City to continue to meet permit requirements in the future. The program has three separate aims depending on the intended audience:

1. Ecology – Provide written documentation on how the City will meet the permit requirements for the SWMP.
2. The Public – Solicit input and build local support for the City's SWMP by posting it on the City website as described in the Public Involvement and Participation requirements.
3. City Staff and Officials – Build support and understanding for the SWMP.

The City will apply for renewal of this Permit no later than February 2, 2018 (180 days before Permit expiration). Current Permit expiration date is July 31, 2018.

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CHAPTER 1

PUBLIC EDUCATION AND OUTREACH PROGRAM

Ensuring that your audience has the proper education is the best way of achieving the desired results. That being said the targeted audience is the public; which includes contractors, developers, homeowners, material suppliers, business owners (both public and private), and realtors. Reaching these various audiences is the primary goal of the public education and outreach program.

The City's public education and outreach program is designed to target the following audiences and subject areas:

- General Public, Schools, and Businesses
 - General impacts of stormwater that flows into surface waters.
 - Impacts from impervious surfaces.
 - Source control BMPs and environmental stewardship actions and opportunities in the areas of pet waste, vehicle maintenance, landscaping, and buffers.
 - BMPs for use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps, and other hazardous materials.
 - Impacts of illicit discharges and how to report them.
- Homeowners, Landscapers, and Property Managers
 - Yard care techniques protective of water quality.
 - BMPs for use and storage of pesticides and fertilizers.
 - BMPs for carpet cleaning and auto repair and maintenance.
 - Low Impact Development techniques, including site design, pervious paving, and retention of forests and mature trees.
- Engineers, Contractors, Developers, Review Staff, and Land Use Planners
 - Technical standards for stormwater site and erosion control plans.
 - Low Impact Development (LID) techniques, including site design, pervious paving, and retention of forests and mature trees.
 - Stormwater treatment and flow control BMPSs.

The apparent behavior changes by the targeted audiences will be used to measure the effectiveness of the outreach programs. The resulting measurements shall be used to direct education and outreach resources more effectively, as well as to evaluate the need to alter education practices to promote the desirable behavioral changes.

In general, pollution by the public is generated for no other reason than lack of knowledge as to how some of their everyday activities help to create stormwater pollution. Thus, even a little bit of information is a step closer to alleviating the problem. The City will address this issue by a variety of methods, including but not limited to:

- Development of a stormwater webpage on the City website;

- City Tent to supply stormwater information at local events; and
- Flyers for school usage.

These various methods should allow the City to reach a variety of targeted audiences with minimal effort.

The City will implement the following BMPs to perform public education and outreach activities on stormwater impacts. These BMPs are discussed at length.

- BMP 1(A): Create and Maintain Stormwater Website
- BMP 1(B): Maintain a Year Round Storm Drain Stenciling Program
- BMP 1(C): Provide Opportunities for Proper Disposal of Household Hazardous Waste
- BMP 1(D): Address Illegal Dumping and Littering
- BMP 1(E): Provide Information on Lawn and Garden Care Behavior
- BMP 1(F): Create Opportunities for the Use of Low Impact Development (LID)

Objective: Reduce pollutants from residential and industrial runoff through increased public awareness of the impacts of stormwater runoff and encourage changes in stormwater pollution causing behavior.

BMP 1(A): CREATE & MAINTAIN STORMWATER WEBSITE

Measurable Goals

1. Creation of a stormwater website.

Description

Websites continue to be a very useful tool for disseminating stormwater related information to a very broad audience. Since agency personnel, most citizens, environmental groups, and the business community use the internet regularly, the website is the most expedient tool for conveying stormwater related information. The City posts updates on meetings, policy discussions, and other stormwater issues. Specific targeted audiences continue to be:

1. Staff
2. General Public
3. Businesses
4. Homeowners Associations
5. Landscapers and Property Managers
6. Engineers and Developers

The website contains information pertaining to the City's stormwater program, including flyers or displays, phone numbers of contacts, information on community events, maps of the storm drainage system, wetlands, and open spaces, a glossary of standard stormwater terms, and recommended BMPs. The site will also have details pertaining to rate explanations, volunteer opportunities, fish and habitat related information, water quality data, and links to the City's SWMP and the adopted *2012 Stormwater Management Manual for Western Washington*

(Manual). The website also has links to State and National programs, such as the EPA and Ecology websites.

Timeline for Completion

- The website was completed in 2008.
- Updated reports are posted to the webpage yearly.
- Pertinent topics, information, and updates are posted as necessary.

Activities Completed

- The stormwater webpage was created and is updated throughout the year with stormwater information, new reports, ordinance updates, public meeting dates and times, etc. The website is located at: www.ci.camas.wa.us/index.php/engmain/stormwater
- The stormwater webpage was updated to include the link to the ‘Stormwater Partners of SW Washington’ website at www.stormwaterpartners.com. This website was created as part of an interlocal agreement between several municipalities; Clark County, Battle Ground, Camas, La Center, Ridgefield, Vancouver, and Washougal.

BMP 1(B): MAINTAIN A YEAR ROUND STORM DRAIN STENCILING PROGRAM

Measurable Goals

1. Availability of storm drain stencils and curb mounted medallions.
2. Contact information for Scouts and school volunteer groups.
3. Yearly refreshing of storm drain stencils and installation of missing medallions.
4. Requiring new developments to install curb medallions prior to final acceptance.

Description

A visual reminder that the drainage structure which is located against the curb, drains to creeks and other water ways, helps to cut down on water pollution. As the public continues to be informed they will begin to adjust their behavior to help protect water quality. Stencils and curb medallions located in front of storm drains are the visual reminders that encourage the public to think twice before sweeping grass clippings, or allowing car washing soap, to enter the roadway.

Timeline for Completion

- This is an on-going activity.

Activities Completed

- The City maintains a supply of storm drain stencils and paint for use by volunteer groups
- The curb mounted medallions have been incorporated as a detail and requirement for all new construction in the City’s Design Standards Manual.
- Missing curb-mounted storm drain medallions are replaced as reported.

BMP 1(C): PROVIDE OPPORTUNITIES FOR PROPER DISPOSAL OF HOUSEHOLD HAZARDOUS WASTE

Measurable Goals

1. Provide opportunities for the public to properly dispose of household hazardous waste.
2. Distribute flyers with dates, locations, and times for household hazardous disposal events.
3. Provide information on the effects of household hazardous waste on stormwater.

Description

Many citizens are not aware of the impacts to the environment that is caused by the improper disposal of typical household cleaning products. Or that many of these products can be replaced with less-toxic products that are readily available and safer to dispose of without waiting for the once yearly disposal event.

Activities Completed

- Information is provided to citizens about the yearly ‘Household Hazardous Waste’ dumping opportunity at the Operations Center. This information is included in the City newsletter, posted on the City website (www.ci.camamas.wa.us), and flyers are inserted in the appropriate billing cycle.
- Information has been provided about the new East County Transfer Station that takes household hazardous waste.

BMP 1(D): ADDRESS ILLEGAL DUMPING AND LITTERING

Measurable Goals

1. Created an informational sign for storm facilities prohibiting dumping.
2. Stormwater informational signs posted at all storm facilities.
3. The ordinance prohibiting litter was reviewed and is enforced.
4. Illegal dumping and littering education materials were created and distributed.

Description

Litter has continued to be an ongoing pollutant in our roadside ditches, ponds, rivers, streams, and lakes. Litter is an eyesore, hazardous to wildlife, and costly to remove.

When developing a litter management strategy, the City will adopt the following EPA recommendations:

- Regular cleaning and maintenance is necessary to prevent the trash accumulated at control structures from being hazardous itself.
- Control strategies that will not just transport trash to another waterbody, but will reduce the quantity of trash in our waterbodies as a whole.

The EPA indicates that there are two main methods of trash control: source control (through public education) and structural control.

Source control includes community education, waste reduction, and cleanup campaigns. Community education will be part of the stormwater brochures and utility inserts. The City installs signs at storm facilities, both public and private, indicating the consequences of illegal

dumping and littering; increasing the number of trash receptacles available for public use; and encourage the use of recycled products and products that contain limited amounts of packaging.

Structural control refers to the use of structures that physically filter wastes and conduct centrifugal separation of trash. Physical methods of filtering include trash racks, mesh nets, bar screens, and trash booms. Centrifugal separation is the means of separating floating trash from stormwater by increasing the settling rate of trash and particles. A number of commercial centrifugal products are available.

Timeline for Completion

- Illegal dumping and littering educational materials will be distributed throughout the life of the Permit.

Activities Completed

- Signs have been installed on all the stormwater facilities throughout the City that state 'dumping in the stormwater facility is not allowed'. Trash bins have not, and probably will not, be installed at storm facilities as these are private and the responsibility of property owner to maintain.
- The City continues to enforce the no littering laws.
- Information on disposal sites, garbage collection, and dates are posted on the city website: www.ci.camas.wa.us/index.php/pwgarbage, with additional information available in the 'Utility Customer Info' section.

BMP 1(E): PROVIDE INFORMATION ON LAWN AND GARDEN CARE BEHAVIOR

Measurable Goals

1. Develop public education material addressing lawn and garden care practices were developed.
2. Provide a list of native vegetation for use in 'natural' landscaping.

Description

Lawn and garden care activities can result in contamination of stormwater through pesticide, soil, and fertilizer runoff. Proper landscape management effectively reduces water use, which reduces contaminant runoff, and enhances the aesthetics of a property.

The following topics, which are appropriate for residential, business and industrial properties, will be included in future City brochures and materials mailed with utility bills:

Planning and Design

It is important to emphasize the desire for property owners and landscapers to develop a landscape plan that utilizes the natural conditions of the property. The regional and climatic conditions of the site, existing vegetation, topography, and the water needs of plants are important considerations in designing landscaping that promotes natural vegetation growth while minimizing water loss and contamination.

Appropriate Plant Selection

The City encourages property owners and landscapers to choose local native plants to develop an environmentally friendly landscape. Native plant species are generally more water efficient and disease resistant.

Fertilizers

Property owners, landscapers, as well as City staff, are discouraged from using fertilizers. When they are necessary, property owners are encouraged to not over-apply them. The City recommends less-toxic alternatives, such as composted organic material.

The City obtains information from the following sources when preparing the lawn and garden brochures:

- Seattle Public Utilities, Seattle, WA
<http://www.seattle.gov/util/EnvironmentConservation/MyLawnGarden/LawnCare/index.htm>
- Washington State University, Pesticide Education Program, WSU Urban Imp Pesticide Safety Education Program, Pullman, WA
<http://pep.wsu.edu>

Activities Completed

- Brochures discussing lawn and garden activities and stormwater impacts are provided at city functions.
- A list of approved native plants and trees for use within the City right-of-way and suggested for private property is included in the City's new *Stormwater Design Standards Manual*. This is posted on the city's webpage: www.ci.cammas.wa.us/index.php/engmain, under the 'Other Resources' information list.

BMP 1(F): CREATE OPPORTUNITIES FOR THE USE OF LOW IMPACT DEVELOPMENT

Measurable Goals

1. Land use codes are reviewed to ensure consistency with LID principles
2. Construction related subjects for inclusion in construction and new development public education materials were indentified.
3. LID education materials are distributed at city functions.
4. LID Standards were posted on the website.
5. Site plans are reviewed for incorporation of LID principles and practices.

Description

The City revised the ordinance to encourage developers to use LID principles. The City will also evaluate the existing 'Development Standards' with an emphasis on revising these standards to comply with the Permit requirements. The revised standards will then be posted on the City website to allow access by the public.

Timeline for Completion

- The City continues to LID codes.
- Education materials, referring to LID practices, will be distributed at City Hall throughout the life of the Permit.
- The revised Development Standards are posted on the website.

Activities Completed

- The City adopted Ecology's approved LID manual.
- The new Stormwater Control Ordinance was adopted on February 1, 2010. City adopted a new *Stormwater Design Standards Manual*. This is posted on the city's webpage: www.ci.cammas.wa.us/index.php/engmain, under the 'Other Resources' information list.

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CHAPTER 2

PUBLIC INVOLVEMENT AND PARTICIPATION PROGRAM

Ecology has set out its requirements for the Public Involvement and Participation Program in Section S5.C.2 of the *Western Washington Phase II Municipal Stormwater Permit* (Permit). The following program is based on these requirements:

Public input is imperative to creating an effective stormwater management program. The SWMP is posted on the City's website. The SWMP is an ongoing opportunity for public involvement through advisory councils, watershed committees, participation in developing rate-structures, stewardship programs, environmental activities, or other similar activities. The City will:

- a. Provide opportunities for the public to participate in the decision-making processes involving implementation and updating of the SWMP.
- b. The SWMP, annual report, and all other submittals required by this Permit, available to the public by posting it on the City's website.

The City provides mechanisms whereby involvement and participation by the public are possible. This includes notifying the public of stormwater related opportunities and encouraging public comments. The following BMPs are the basis for accomplishing this requirement:

- BMP 2(A): Post Public Involvement Opportunities
- BMP 2(B): Conduct Stormwater Management Program Meetings
- BMP 2(C): Create a Year-Round Storm Drain Stenciling Program
- BMP 2(D): Explore Opportunity to Update Existing Stormwater Utility Fee
- BMP 2(E): Establish a Community Hotline

Objective: Provide opportunities for public involvement and participation.

BMP 2(A): POST PUBLIC INVOLVEMENT OPPORTUNITIES

Description

The City posts its public involvement opportunities on the website. Such opportunities will include workshops on the City's SWMP, storm drain stenciling program, and storm facility cleanups. Over the permitting cycle, the City will evaluate other opportunities that may be available to the public and post these as well. The City's annual report is posted on the website.

Timeline for Completion

- The City will continue to update the website for the duration of the Permit.

Activities Completed

- The City webpage is updated on a regular basis with agendas, and minutes, of all public meetings and workshops; including Council workshops & meetings, Planning, Parks Board, and Ward meetings.

BMP 2(B): CONDUCT STORMWATER MANAGEMENT PROGRAM MEETINGS

Measurable Goals

1. Meetings are held with a tally of attendees.
2. Actions were taken as a result of the public meetings.

Description

The City will conduct public meetings in order to promote public involvement and participation in the City's stormwater management program. The City will ensure that all meetings are well advertised, will follow applicable advertisement requirements for the City. Location, dates, and times for public meetings will be posted on the website and in public places, such as at City Hall and the Library. Public meetings will follow steps recommended by Ecology. The steps are as follows:

1. **Determine the Appropriate Type of Public Meeting Format.** The format chosen will be driven by the goals that the City wishes to achieve.
2. **Announce the Meetings.** The City will ensure that announcements for the public meetings will reach all stakeholders within the community by distributing the information to the local newspapers, posting in public places and on the website.
3. **Conduct Meeting and Solicit Public Input.** The City will ensure that the agenda includes plenty of time for people to ask questions and provide feedback to staff. Comments and responses will be recorded. In addition to the public meetings, the public will be provided with a means of commenting in writing.
4. **Perform Meeting Follow-up Activities.** A summary of the questions and answers discussed at the meeting will be prepared, along with a participant contact list. The information obtained from the meetings will help to determine if the meetings are an efficient method of reaching the public.

Activities Completed

- A public education program is under construction in a joint interagency format under a Ecology Municipal Stormwater Grant. Participants include Clark County, Battle Ground, Camas, La Center, Ridgefield, Vancouver, and Washougal.
- There have been public hearings on the Stormwater Control Ordinance, Illicit Discharge Detection & Elimination Ordinance, Erosion Control Ordinance, and the Stormwater Design Standards Manual.
- Workshops were held on the functions of stormwater facilities and who is responsible for the maintenance, and on the benefits in replacing high maintenance lawns with native species plantings.

BMP 2(C): CREATE A YEAR-ROUND STORM DRAIN STENCILING PROGRAM

Measurable Goals

1. Identify areas or streets to be included in the storm drain stenciling program were identified.
2. Develop a storm drain stencil.
3. Identify and contact groups interested in participating in the stenciling program.
4. The number of groups participating.
5. The number of storm drains stenciled.

Description

Identification of targeted areas and new streets to be included in the stenciling program will be an ongoing process. As interested groups are identified for participation in the program, the City will work with these groups, providing the stencils, paint, safety equipment, and traffic control.

Activities Completed

- The City identified target areas for storm drain stenciling, developed the stencils, and work with interested groups.
- In addition to the a stenciling program, the City began installing permanent curb markers as these were found to be a more cost effective and efficient means of labeling drainage structures.
- The City has installed approximately 2,500 permanent storm drain markers at catch basins.
- The installation of the permanent storm drain markers has been incorporated into the Design Standards Manual. The City will supply the markers and the Contractor and/or Developer will be required to install the markers with all new construction.

BMP 2(D): EXPLORE OPPORTUNITY TO UPDATE EXISTING STORMWATER UTILITY FEE

Measurable Goals

1. Periodic review of the current stormwater utility fee.

Description

The City has had a stormwater utility fee in-place for development in the Fisher Basin area since 1989. In 2004 a citywide stormwater fee was adopted with a rate structure that encompasses all developed properties within the city limits of Camas.

Timeline for Completion

- The City had a fee study completed in 2009 and implemented 2010.
- The City will continue to re-evaluate the existing stormwater utility fee and update the fee, as needed, throughout the life of the Permit.
- This is an ongoing project.

BMP 2(E): CREATE A COMMUNITY HOTLINE

Measurable Goals

1. A phone number and contact person was identified to receive reports on stormwater quality issues from the community.
2. The hotline number was distributed to the community.
3. The numbers of calls received are tracked, and inspections provided, in response to calls from the public.

Description

In most municipalities, there is not enough time or staff to monitor all the activities that may be doing harm to our waterbodies. This is where the community can provide a great deal of help. By providing a dedicated number and contact person, any number of incidents can be reported to the City. These types of incidents can include oil/gas leaks, washing out excess concrete into the streets, or illegal dumping in and around creeks and streams.

The phone number is posted on the Engineering and Street Department's webpage. Also included on the webpages are complaint forms in electronic format for submittal.

City staff responds to the complaints and make every attempt to determine the responsible party and inform them of the environmental impacts of their actions. The responsible party will be required to stop the action. In addition, the violator will be supplied with information on cleanup, alternative disposal sites, erosion control information, and any other approved BMPs that will alleviate the situation. When warranted, enforcement actions are taken against polluters.

Activities Completed

- A hotline number has been posted on the City website.
- The website has been upgraded to include a reporting form.

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CHAPTER 3

ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

Ecology has set out its requirements for an Illicit Discharge Detection and Elimination Program in Section S5.C.3 of the *Western Washington Phase II Municipal Stormwater Permit* (Permit). Discharges from cities often include wastes and wastewater from sources other than stormwater. Illicit discharges are those that enter the storm system in two ways, (1) by direct connection of wastewater piping to storm lines; or (2) through indirect connections, such as infiltration from cracked wastewater piping, dumping of illicit material into storm drains, or accidental spills that result in wastewater flowing into storm drains.

As required by the Permit, the City implemented the following program:

- a. Develop and maintain a municipal storm sewer system map (MS4). This includes the following:
 - i. Location of outfalls, receiving waters, and structural BMPs owned, operated, or maintained by the City.
 - ii. Attributes shall be mapped for all storm sewer outfalls with a 24-inch diameter or larger, or an equivalent cross-sectional area for non-pipe systems as follows:
 - Tributary conveyances, Associated Drainage Areas, and Land Use
 - iii. A program shall be developed to map all authorized connections to the storm sewer system.

- b. Develop and implement an Illicit Discharge Ordinance that will effectively prohibit non-stormwater, illegal discharges, and/or dumping into the City's separate storm sewer system to the maximum extent allowable under State and Federal law.
 - i. The ordinance does **not** need to prohibit the following:
 - Diverted stream flows, rising ground waters, uncontaminated ground water infiltration or pumped ground water, foundation drains, irrigation water from agricultural sources, springs, water from crawl spaces, footing drains, flow from riparian habitats or wetlands, or discharges from emergency fire fighting.
 - ii. The ordinance **shall prohibit** the following:
 - Discharges from potable water sources, including waterline flushing, hyperchlorinated waterline flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges shall be dechlorinated to a concentration of 0.1 ppm or less.
 - Discharges from lawn watering and other irrigation runoff.
 - Dechlorinated swimming pool discharges and swimming pool cleaning wastewater and filter backwash.
 - Street and sidewalk wash water, dust control water, and external building washdown water.
 - iii. The SWMP will address each category in i and ii as required by the Permit.

- c. The City will develop and implement an ongoing program to detect and address non-stormwater discharges, illegal dumpings, spills, and illicit connections. This program consists of the following:
 - i. Evaluating land uses and associated business/industrial activities; areas where complaints have been registered; and areas with storage of large quantities of potential spill materials.
 - ii. Field assessment activities that include visual inspection of known outfalls, identifying previously unknown outfalls, and detecting illicit discharges.
 - Receiving waters were prioritized, with field assessments of the 3 highest priority water bodies. Thereafter, a yearly field assessment of at least one high priority water body is made.
 - iii. Procedures for characterizing the nature of, and potential public or environment threat posed by the illicit discharge, and steps for containment. Complaints shall be investigated, on average, within 7 days.
 - iv. Procedures for tracing the source of an illicit discharge.
 - v. Procedures for removing the source of the discharge.
- d. The City will inform public employees, businesses, and the general public of the hazards associated with illegal discharges and improper disposal of waste.
 - i. Appropriate information is distributed to targeted audiences.
 - ii. A hotline number is posted on the website for the public to report spills and other illicit discharges.
- e. The City adopted and implemented procedures for program evaluation and assessment of spills or illicit discharges, including tracking number of, inspections made, and feedback from educational materials.
- f. The City will provide appropriate training for field staff on identification and reporting.
 - i. Responsible field staff are trained and receive follow-up training as needed to address changes in procedures, techniques, or requirements.
 - ii. An ongoing training program was developed for **all** field staff.

The City will implement the following BMPs to detect and eliminate illicit connections, spills, and discharges during this Permit cycle.

- BMP 3(A): Review and Update Illicit Discharge Ordinance
- BMP 3(B): Review and Update Stormwater Ordinance
- BMP 3(C): Maintain Storm Sewer System Inventory Map
- BMP 3(D): Conduct Outfall Screening
- BMP 3(E): Provide Training on Illicit Discharges
- BMP 3(F): Establish Community Hotline

Objective

Establish and carry out procedures to identify and remove illicit discharges, and encourage public education and involvement in eliminating illicit discharges.

BMP 3(A): REVIEW AND UPDATE ILLICIT DISCHARGE ORDINANCE

Description

The City's Municipal Code (CMC) contains regulations that prohibit illicit discharges and dumping, and authorizes enforcement actions on public or private property.

As a permittee of the *Western Washington Phase II Municipal Stormwater Permit*, the City adopted Ecology's *2005 Stormwater Management Manual for Western Washington (Manual)*.

The City illicit discharge ordinance contains the following Ecology recommended key elements:

- Prohibitions on illegal dumping or discharges to the storm drainage system;
- Prohibitions on illicit connections from sanitary sewers to the storm drainage system;
- Authority to inspect all properties for illicit discharges; and
- Penalties and enforcement options.

Activities Completed

- The Illicit Detection and Discharge Elimination Ordinance (CMC 14.04) was adopted on August 17, 2009. Ordinance can be viewed at: www.ci.camamas.wa.us/index.php/businessdev
- A hotline number, and reporting form, for reporting violation is available on the City webpage: www.ci.camamas.wa.us/index.php/engmain/stormwater

BMP 3(B): REVIEW AND UPDATE STORMWATER ORDINANCE

Description

As a permittee of the *Western Washington Phase II Municipal Stormwater Permit*, the City adopted Ecology's *2005 Stormwater Management Manual for Western Washington (Manual)*.

The City ensured that the Stormwater ordinance contained the following Ecology recommended key elements:

- Prohibitions on illegal dumping or discharges to the storm drainage system;
- Prohibitions on illicit connections to the storm drainage system;
- Authority to inspect all properties for illicit discharges; and
- Penalties and enforcement options.

Activities Completed

- The Stormwater Control Ordinance (CMC 14.02) was adopted on February 1, 2010. Ordinance can be viewed at: www.ci.camamas.wa.us/index.php/businessdev

BMP 3(C): MAINTAIN STORM SEWER SYSTEM INVENTORY MAP

Measurable Goals

1. The storm sewer system map was updated with as-built information.

Description

A storm sewer system map, depicting the existing storm sewer system, was developed and is maintained by the City to aid in eliminating illicit discharges. Updates occur as new developments come on line and repairs to the existing storm system occur. The map includes the following features:

- The locations of all MS4 outfalls and receiving waters;
- The locations of all structural stormwater BMPs owned, operated, or maintained by the City;
- The tributary conveyances, associated drainage areas, and land use designations for all storm sewer outfalls with a 24-inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems;
- All connections to the municipal sewer authorized or allowed by the City after the effective date of the permit; and
- Geographic areas served by the City's MS4 that do not discharge stormwater to surface waters.

The map shows the required information shall be made available to Ecology upon their request.

The storm sewer system map is used to coordinate the removal of illicit connections and track storm sewer system maintenance.

Activities Completed

- The map is updated to include new facilities after final acceptance. The map is updated each summer with the help of interns from the CSD Magnet program. Stormwater maps can be viewed on the City webpage: www.ci.camas.wa.us/index.php/businessdev

BMP 3(D): CONDUCT OUTFALL SCREENING

Measurable Goals

1. An inventory of outfall sites for inspection was created and outfalls prioritized.
2. An inventory of local businesses, that have a high probability of discharging pollutants to outfalls, is ongoing.
3. A schedule was developed for inspecting outfalls each year.
4. Priority outfalls are inspected each Permit year.

Description

The information obtained from the Storm Sewer System map identifies the outfall locations and businesses that have a high potential of contributing to an illicit discharge to these outfalls. These outfalls are monitored to identify discharges that exceed water quality standards. Visual

inspections take place at outfalls located in areas that have a high potential of illicit discharges. Field notes are recorded on inspection forms and photos are taken of all inspected outfalls. If access to the outfall is a hazard, field staff will locate the nearest storm sewer manhole and attempt to identify signs of dry-weather flow, such as odor or residue. Field tests for possible contamination in dry-weather flows are as follows:

- **Odor** - Most strong odors, especially gasoline, oils, and solvents, are likely associated with high responses on the toxicity screening test.
- **Color** - the color of dry-weather discharges is an important indicator of inappropriate industrial sources. Industrial dry-weather discharges may be of any color, but dark colors, such as brown, gray, or black are most common.
- **Turbidity** - Turbidity is affected by the degree of gross contamination. Dry-weather industrial flows with moderate turbidity can be cloudy, while highly turbid flows can be opaque. High turbidity is often a characteristic of undiluted dry-weather industrial discharges.
- **Vegetation** - Vegetation surrounding an outfall may show the effects of industrial pollutants. Irregular growth of vegetation may be the result of dry-weather discharges.
- **Floatable Matter** - Contaminated flow may contain floating solids or liquids directly related to industrial or sanitary wastewater pollution. Floatables of industrial origin may include animal fats, spoiled food, oils, solvents, sawdust, foams, packing materials, or fuel.
- **Deposits and Stains** - Deposits and stains include any type of coating near the outfall, usually of a dark color.
- **Damage to Outfall Structures** - Damage to outfall structures is another visible indication of industrial contamination. Severely contaminated discharges, usually of industrial origin, can cause the peeling of surface paint and the cracking, deterioration, and spalling of concrete at an outfall.

The City inspects priority outfalls yearly. If there are signs of an illicit discharge, the Public Works Director will be alerted and steps will be followed to identify and eliminate the source of the discharge. A list of potential non-stormwater discharges that could originate from sites located within each basin will be cataloged for use in identifying the type of discharge and the potential violator.

The City will follow the EPA recommendations for detecting illicit connections including:

- Instituting building and plumbing codes to prevent connections of sources of potentially hazardous pollutants to storm drains.
- Prioritizing structures to be inspected by building age and use.

- Mapping each area to be surveyed and indicating the route of the storm sewer system and the locations of storm drains on the map.
- Surveying individual buildings to identify connections to storm drains.
- Inspecting storm sewer lines with television equipment to identify physical connections.
- Inspecting new developments or renovation projects to identify illicit connections to the storm sewer system.
- Testing sediment from the catch basins or equivalent structures.
- Using methods of identifying illicit connections such as dye testing, visual inspection, smoke testing, flow monitoring, or infrared, aerial and thermal photograph to determine whether they should be connected to the storm drain system or to the sanitary sewer.

Activities Completed

- The inventory of outfalls, 24-inches and greater, was completed in 2011.
- Outfalls were prioritized and priority outfalls are inspected yearly.
- There is a means of tracking and reporting illicit discharges.
- Stormwater maps can be viewed on the City webpage:
www.ci.camas.wa.us/index.php/businessdev

BMP 3(E): PROVIDE TRAINING ON ILLICIT DISCHARGES

Measurable Goals

1. A list of personnel to be trained was developed.
2. Training materials were developed.
3. Training and the number of staff trained is tracked.

Description

Targeted staff for training include: Code Enforcement Officer, Construction Inspectors from Engineering, Building Inspectors from Community Development, and Operations personnel from the Ops Center. The training includes detection and elimination of illicit discharges, and the proper BMPs to use for mitigation. This includes various means to identify illicit connections and methods used to disconnect them from the stormwater system.

Activities Completed

- Training materials have been created and staff is trained on an annual basis. The staff required to attend training are all field personnel, e.g. Engineering, Building, Streets, Water/Sewer, Mechanics, and Parks Maintenance.

BMP 3(F): CREATE A COMMUNITY HOTLINE

Measurable Goals

1. The hotline phone number is posted on the Engineering and Operations webpages. When a report is received on illicit discharge issues, the report is routed to the appropriate department.
2. The hotline number was distributed to the community.

3. Inspections are provided in response to calls from the public.

Description

In most municipalities, there is not enough time or staff to monitor all the activities that may be doing harm to our waterbodies. This is where the community can provide a great deal of help. By providing a dedicated number and contact person, any number of incidents can be reported to the City. These types of incidents can include oil/gas leaks, washing out excess concrete into the streets, or illegal dumping in and around creeks and streams.

A name and/or department including phone number are provided to the public through the City newsletter and website. Also included on the website is the complaint form in an electronic format for submittal.

City staff will respond to the complaints and make every attempt to determine the responsible party and inform them of the environmental impacts of their actions. The responsible party will be required to stop the action. In addition, the violator will be supplied with information on cleanup, alternative disposal sites, erosion control information, and any other approved BMPs that will alleviate the situation. When warranted, disciplinary action will be taken against polluters.

Activities Completed

- The City tracks the number of inspections performed in response to the calls throughout the life of the Permit. The hotline number and electronic complaint form is posted on the website: www.ci.camass.wa.us/index.php/engmain/stormwater.

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CHAPTER 4

CONTROL STORMWATER RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT AND CONSTRUCTION SITES

The City will develop, implement, and enforce a program to reduce pollutants in stormwater runoff from new development, redevelopment, and construction site activities. This program will be applied to all sites that disturb an acre or greater of land, including projects less than one acre that are part of a larger common plan of the development. The program shall apply to private and public development, including roads.

The minimum performance measures are:

- a. An ordinance or other enforceable mechanism that addresses runoff from new development, redevelopment, and construction site projects. The ordinance includes, at a minimum:
 - i. The Minimum Requirements, technical thresholds, and definitions in Appendix 1, or an equivalent, as approved by Ecology under the NPDES Phase 1 Permit. More stringent requirements may be used or tailored to local circumstances. Such local requirements shall provide equal protection of receiving waters and equal levels of pollutant control.
 - ii. A site planning process and BMP selection and design criteria that will protect water quality, reduce the discharge of pollutants to the maximum extent practicable, and satisfy the State requirement under Chapter 90.48 RCW to apply all known, available and reasonable methods of prevention, control, and treatment prior to discharge. The will document how the criteria and requirements will protect water quality, reduce discharge of pollutants, and satisfy State AKART requirements. The site planning process and BMP selection and design criteria shall conform to the 2005 *Stormwater Management Manual for Western Washington*, or an equivalent manual approved by DOE.
 - iii. The legal authority, through the approval process for new development, to inspect private stormwater facilities that discharge to the MS4.
 - iv. Provisions to allow non-structural preventive actions and source reduction approaches, such as Low Impact Development Techniques (LID), measures to minimize the creation of impervious surfaces and measures to minimize the disturbances of native soils and vegetation.
 - v. Provisions to allow construction sites to apply the 'Erosivity Waiver, as described in Appendix 1, Minimum Requirement #2, of the Permit.
- b. The program shall include a permitting process with plan review, inspection, and enforcement capability to meet the standards listed in (i) through (iv) below, for both private and public projects, using qualified personnel. At a minimum, the program shall be applied to all sites that disturb a land area of 1 acre or greater, including projects less than one acre that are part of a larger common plan.

- i. Review all stormwater site plans for proposed development activities.
 - ii. Inspect, prior to clearing and construction, all known development sites that have a high potential for sediment transport.
 - iii. Inspect all known, permitted development sites, during construction to verify proper installation and maintenance of required erosion and sediment controls and enforce as necessary based on the inspection.
 - iv. Inspect all permitted development sites upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater controls. Verify that a maintenance plan is completed and responsibility for maintenance is assigned. Enforce as necessary based on the inspection.
 - v. Compliance with the inspection requirements, as outlined in (ii) thru (iv), shall be determined by the presence and records of an established inspection program designed to inspect all sites and achieve at least 95% of scheduled inspections.
 - vi. An enforcement strategy shall be developed and implemented to respond to issues of non-compliance.
 - vii. Where construction sites are allowed to apply the 'Erosivity Waiver, as described in Appendix 1, Minimum Requirement #2 of the Permit, the requirements under (i), (ii), and (iii) would not apply.
- c. The program shall include provisions to verify adequate long-term operation and maintenance (O&M) of post-construction stormwater facilities and BMPs that are permitted and constructed pursuant to (b) above. These provisions shall include the following:
- i. Adoption of an ordinance or other enforceable mechanism that clearly identifies the party responsible for maintenance, requires inspection of facilities, and establishes enforcement procedures.
 - ii. Establish maintenance standards that are as protective or more protective of facility function than those outlined in Chapter 4 of Volume V of the 2005 Stormwater management Manual for Western Washington.
 1. The purpose of the maintenance standard is to determine if maintenance is required.
 2. When an inspection identifies that the maintenance standard has been exceeded, maintenance shall be performed as follows:
 - With 6 months for typical maintenance.
 - Within 9 months for maintenance requiring re-vegetation, and
 - Within 1 year for wet pool facilities and retention/detention ponds.
 - Within 2 years for maintenance that requires capital construction of less than \$25,000.00
 - For exceedence of the required timeframe, documentation of the circumstances and how they were beyond their control must be kept.
 - iii. Annual inspections of all stormwater treatment and flow control facilities (other than catchbasins), unless maintenance records justify a different frequency.
 - iv. Inspections of all new flow control and water quality treatment facilities, including catchbasins, for new residential developments that are a part of a larger common plan of development, every 6 months during the period of heaviest house construction to identify maintenance needs and enforce compliance with maintenance standards as

needed. Maintenance may be reduced to annually 1 to 2 years following subdivision approval.

- d. The program shall include a procedure for keeping records of inspections and enforcement actions by staff, including reports, warning letters, notices of violations, and other enforcement records.
- e. The program shall make available copies of the "Notice of Intent for Construction Activity" and copies of the "Notice of Intent for Industrial Activity."
- f. All staff responsible for implementing the program to control stormwater runoff from new development, redevelopment, and construction sites, including permitting, plan review, construction site inspections, and enforcement, are to be trained to conduct these activities. Follow-up training will be as needed.

The City will implement the following BMPs to address construction site run-off control:

- BMP 4(A): Update Ordinance and Legal Authority
- BMP 4(B): Adopt 2005 Stormwater Maintenance Manual for Western Washington
- BMP 4(C): Create Tracking Mechanism for Inspections and Enforcement
- BMP 4(D): Provide Training for Staff
- BMP 4(E): Review Site Plan Standards
- BMP 4(F): Conduct Post-Developed Inspections

Objective: Upgrade requirements for erosion and sediment control for new development, re-development, and construction sites per the City's adopted ordinance. This includes planning, installation, inspection, maintenance, and enforcement of development practices.

BMP 4(A): UPDATE ORDINANCE AND LEGAL AUTHORITY

Measurable Goals

1. The stormwater ordinance was revised.

Description

The revised and adopted ordinance fully addresses the requirements as laid out by the Permit's erosion and sedimentation control BMPs.

The City will revised the ordinance to require that BMPs from Ecology's 2012 *Stormwater Management Manual for Western Washington* (Manual), and/or BMPs of the City's that are equal to or greater in protection than Ecology's, be used to reduce contaminated runoff during construction.

The ordinance incorporates an enforcement plan that protects against inadequate construction erosion and sediment control practices.

The ordinance applies to all construction activity disturbing at least one acre. As part of this review, the City looks at the grading permit process and ensure that prior to a grading permit being issued, developers submit erosion and sediment control plans to implement approved BMPs.

Activities Completed

- The ‘Stormwater Control’ Ordinance (CMC 14.02) was adopted on February 1, 2010. The ordinance can be viewed at: www.ci.camamas.wa.us/index.php/businessdev.
- The ordinance also adopted the 2012 *Stormwater Management Manual for Western Washington, Volume IV* for erosion and sediment control measures.

BMP 4(B): ADOPT 2005 STORMWATER MAINTENANCE MANUAL FOR WESTERN WASHINGTON

Measurable Goals

1. The ordinance adopted Ecology's *2005 Stormwater Management Manual for Western Washington* (Manual), in its entirety.
2. The *2012 Stormwater Management Manual for Western Washington, Volume IV* as adopted for erosion prevention and sediment control.

Description

The City adopted the Manual, in its entirety and ensures that BMPs that are not in the Manual meet or exceed the expectations of the Manual. BMPs are used to reduce contaminated runoff during construction and post-construction. In addition, the City describes erosion and sediment control techniques in its stormwater brochures and posts them on the website for the use of construction site managers, home builders, homeowners, and landscape companies.

Activities Completed

- The ‘Stormwater Control’ Ordinance (CMC 14.02) was adopted on February 1, 2010. The ordinance can be viewed at: www.ci.camamas.wa.us/index.php/businessdev.
- The ordinance adopted the 2005 *Stormwater Management Manual for Western Washington*. In its entirety.
- The City has its own *Stormwater Design Standards Manual*.
- These manuals are available online to the public at: www.ci.camamas.wa.us/index.php/engmain/stormwater

BMP 4(C): CREATE TRACKING MECHANISM FOR INSPECTIONS AND ENFORCEMENT

Measurable Goals

1. Inspection forms were developed.
2. Frequencies of inspections are in compliance with construction site temporary erosion and sediment controls (TESC) and maintenance of installed BMPs.
3. An inventory inspection activities is maintained.

4. The ordinance for site inspection requirements is revised.
5. The numbers of non-compliance letters or actions issued are tracked.

Description

Lack of construction site erosion prevention and sediment control is one of the largest single contributors to runoff contamination and regular inspections. Site inspections will ensure that erosion and sediment controls are properly installed and maintained and that the SWPPP reflects any changes made (e.g. changes in control types or locations). Erosion prevention and sediment control inspectors will include Building Inspectors and other staff (e.g. Engineering) under the direction of the Public Works or Community Development Directors. Frequent and consistent inspections are the key to ensuring proper installation and maintenance of BMPs.

Besides staff, the Contractor is one of the most important people on a job site to ensure that the BMPs are relevant to the situation and are installed properly. Appendix 1 of the Western Washington Phase II Municipal Stormwater Permit, Minimum Requirement #2, "Construction Stormwater Pollution Prevention Plan (SWPPP), that requires that a person with a Certified Erosion and Sediment Control Lead (CESCL) certification be on-site or on-call at all times during a construction project. The City will include this requirement in the updated ordinance.

Construction inspectors are vital to ensuring that erosion and sediment control measures are in-place, thus inspection will be prioritized based on the following:

- Construction sites on steep slopes or highly erodible areas;
- Construction sites operated by contractors with past violations;
- Construction sites disturbing more than one acre; and
- Construction sites in operation during rain events.

Activities Completed

- Inspection and correction notice forms were created.
- Site inspections continue on both small and large parcel projects.
- An SOP for Erosion Prevention and Sediment Control has been created for staff guidance.

BMP 4(D): PROVIDE TRAINING FOR STAFF

Measurable Goals

1. All field staff are trained in ESC inspection, with the required re-certifications tracked.

Description

Engineering and building inspectors, as well as operation's staff are trained in the required erosion and sediment control BMPs for stormwater runoff from construction sites that meet the requirements for CESCL certification. The required classes cover the various means to identify where and what type of erosion and sediment control BMPs are needed for each site condition.

Activities Completed

- All staff was initially trained at the required two full days of erosion and sediment control in order to receive CESCL certification, with follow-ups for recertification, for the life of the Permit.

BMP 4(E): REVIEW SITE PLAN STANDARDS

Measurable Goals

1. A checklist for reviewers was developed.
2. The number of plans reviewed is tracked.

Description

City staff reviews all pre-construction site plans, for development property greater than 1 acre, to ensure that they include the required stormwater controls, erosion and sediment controls, and post-construction controls as required by City ordinance.

Plans for sites disturbing at least one acre will be reviewed to verify the following:

- Erosion and sediment controls are consistent with City ordinances.
- Construction operators are aware of their responsibility for implementing and maintaining erosion and sediment controls and are aware of the penalties for failing to do so.
- Post-construction controls consistent with the City ordinances are clearly described in the site plan.
- The construction operator and landowner are aware of the responsibility for implementing and maintaining the post-construction controls and of the penalties for failing to do so.

Pre-construction meetings are held with all parties involved, i.e. general contractor and field staff, to ensure that all parties are aware of the site plan and its requirements.

Activities Completed

- Several plan review checklists have been created.
- Training was conducted in 2011 for all staff responsible for plan review.
- The number of plans reviewed will be tracked throughout the life of the Permit.

BMP 4(F): CONDUCT POST-DEVELOPED INSPECTIONS

Measurable Goals

1. Inspection forms were developed.
2. The frequency of inspections is in compliance of installed BMPs.
3. An inventory of inspection activities was created and is maintained.
4. The ordinance for site inspection requirements was updated.
5. The number of compliance letters written are tracked.

Description

Typically, maintenance for water quality controls (e.g. detention ponds, wet ponds, swales) are the responsibility of each of the Homeowners Association's (HOA). These HOA's are made up of citizens that, without guidance, would not know how to properly maintain the facility. Post-development inspections are important to ensure that the facilities are still working as designed. Currently, inspections are made on an as needed/emergency basis on facilities other than those maintained by the City. Whereas post-development construction site inspections, on all facilities, should occur no later than one-year following the completion of the project.

Activities Completed

- Post-construction inspections are ongoing.
- Inspection forms have been created.
- CMC 14.02 'Stormwater Control' Ordinance addresses post-construction inspections.
- The Ordinance can be viewed at: www.ci.camass.wa.us/index.php/businessdev

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CHAPTER 5

POLLUTION PREVENTION AND OPERATIONS AND MAINTENANCE (O&M) FOR MUNICIPAL OPERATIONS PROGRAM

The City developed and implemented an O&M program, with a training component that prevents pollutant runoff from municipal. Areas of municipal operations targeted include:

- Streets, parking lots, rights-of-way, and vehicle maintenance and storage areas;
- City maintained stormwater treatment and flow control facilities; and
- Parks and open space.

Minimum performance measures shall include:

- a. Maintenance standards that are as protective, or more, as those specified in Chapter 4 of Volume V of the *2005 Stormwater Management Manual for western Washington*.
 - i. The purpose of the maintenance standard is to determine if maintenance is required.
 - ii. When an inspection identifies an exceedence of the standards, maintenance shall be performed as follows:
 - Within 6 months for typical maintenance.
 - Within 9 months for maintenance requiring re-vegetation.
 - Within 1 year for wet pool facilities and detention/retention ponds.
 - Within 2 years for maintenance that requires capital construction of less than \$25,000.
- b. Annual inspection of all municipally owned or operated permanent stormwater treatment and flow control facilities, except catch basins.
- c. Spot checks of potentially damaged permanent treatment and flow control facilities after major storm events.
- d. Inspections of all catch basins and inlets at once before the end of the Permit term. Cleaning of catch basins to comply with established maintenance standards.
- e. Inspection program shall achieve inspections of 95% of all sites.
- f. Maintenance practices associated with runoff from streets, parking lots, or roads shall address the following activities:
 - Pipe and culvert cleaning,
 - Ditch maintenance,
 - Street cleaning,
 - Road repair, pavement grinding and resurfacing,
 - Snow and ice control,

- Utility installation,
 - Pavement striping maintenance,
 - Roadside areas maintenance and vegetation management, and
 - Dust control
- g. Establishment and implementation of policies and procedures to reduce pollutants in discharges from all lands owned or maintained by the City, including: parks, open space, road rights-of-way, maintenance yards, and storm facilities. These polices shall address:
- Application of fertilizer, pesticides, and herbicides.
 - Sediment and erosion control.
 - Landscape maintenance and vegetation disposal.
 - Trash management.
 - Building exterior cleaning and maintenance.
- h. Develop and implement an on-going training program for staff whose construction, operations, or maintenance job functions may impact stormwater quality.
- i. Development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards and material storage facilities.
- j. Records of inspections and maintenance or repair activities conducted shall be maintained for five years.

As a means of addressing stormwater pollution that may be attributed to the City's operations, the following BMPs will be implemented:

- BMP 5(A): Create an O&M Program and Standards
- BMP 5(B): Develop a Stormwater Pollution Prevention Plan (SWPPP)
- BMP 5(C): Participation in the Grounds Equipment Maintenance (GEM) Program
- BMP 5(D): Create a Street Sweeping Program
- BMP 5(E): Create a Catch Basin Cleaning Program
- BMP 5(F): Proper Pesticide and Herbicide Application
- BMP 5(G): Landscaping and Lawn Care
- BMP 5(H): Provide Employee Training

Objective: Promote pollution prevention and good housekeeping measures.

BMP 5(A): CREATE AN O&M PROGRAM AND STANDARDS

Measurable Goals

1. An O&M Program and Standards was created and adopted.

Description

The City's O&M procedures are essential to setting a good example for the community. Having an O&M program that outlines the City's good housekeeping procedures is essential to ensuring that all City activities and programs that may impact stormwater quality will work efficiently and effectively. The program includes:

- a. Training of maintenance staff on how to minimize stormwater pollution and the proper methods for disposal of solid and liquid wastes from maintenance activities;
- b. The development and implementation of a maintenance schedule; and
- c. The development of a means for measuring the program's effectiveness.

An effective means of developing components (b) and (c) will be achieved by reviewing the standards that City maintenance staff currently follows and how these activities may contribute to stormwater pollution. Specific attention will be paid to the following:

- a. Frequency of activities, including inspections;
- b. Types of substances used;
- c. Methods of material storage, handling, and disposal;
- d. Recordkeeping practices; and
- e. Type and frequency of employee training.

The City adopted a set of O&M Standards that provides for stormwater pollution protection and can be used as a means to determine when/if maintenance is needed. When these standards are exceeded, maintenance will be performed within the following timeframes:

- Within 6 months for typical maintenance.
- Within 9 months for maintenance requiring re-vegetation.
- Within 1 year for wet pool facilities and detention/retention ponds.
- Within 2 years for maintenance that requires capital construction of less than \$25,000.

Activities Completed

- A City O&M Manual has been created and is posted on the City website:
www.ci.camas.wa.us/index.php/engmain/stormwater

BMP 5(B): DEVELOP A STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

Measurable Goals

1. A SWPPP was developed.

Description

The City developed, implemented, and monitors the SWPPP for all City facilities. The SWPPP is intended to reduce the amount of pollutants carried by stormwater runoff in the storm drainage system. The SWPPP provides the guidelines for procedures and schedules for municipal activities. It consists of the following:

1. A site or project description;
2. A description of stormwater BMPs that may be appropriate for municipal operations;
3. A description of site specific BMPs and an implementation schedule;
4. A description of site inspection and monitoring activities;
5. A log book to track all construction activities or reports; and
6. Training for inspectors responsible for implementing the BMPs.

Proper and consistent use of BMPs will help to eliminate the amount of stormwater pollution that could be attributed to by the day-to-day municipal operations. Some of the potential pollutants that are a result of operations are as follows:

- Oil, Grease, Fuel, Metals, Antifreeze, Battery Acids, and Hydraulic Fluids;
- Herbicides and Pesticides;
- Paint and Solvents.

These pollutants are a constant issue for spills and require cleanup. The following BMPs should be used as a general guide for safe and effective cleanup:

- Spill containment and cleanup kits should be in numerous locations and readily available;
- Dispose of dry cleanup materials promptly after use;
- Post a facility drainage map to show areas with potential for spills, the direction of stormwater flow, and location of kits for large spill responses;
- Ensure that the phone number for the spill response team is posted in the most convenient locations;
- Distribute procedures for spill response and cleanup to applicable facilities; and
- Train employees on spill control procedures.

The SWPPP serves as a reference manual for all City employees that are in any way involved in stormwater management.

Activities Completed

- The SWPPP Manual was created and is posted on the City website:
www.ci.camasa.wa.us/index.php/engmain/stormwater

BMP 5(C): PARTICIPATION IN THE GROUNDS EQUIPMENT MAINTENANCE (GEM) PROGRAM

Measurable Goals

1. The City is an active member of GEM.

Description

GEM is the acronym for Northwest Interagency Cooperative. The acronym actually stands for “grounds, equipment, and maintenance”. The cooperative is comprised of government agencies including cities, counties, WSDOT, school districts, port districts, fire departments, etc. that share common goals to share equipment, innovations, manpower, and other resources to

accomplish the missions of their individual agencies. The cooperative efforts are made possible through a cooperative wide inter-agency agreement. The City typically has more than one representative attending these meetings and from time to time has employees that serve as officers on the GEM executive board. The City of Camas is one of the agencies that participates in the funding and use of the shared Clark County Whatley Pit Decant Facility for street sweepings and catch basin debris.

Timeline for Completion

- The City has been a member of GEM since its formation in 1994 and will continue in the GEM consortium to promote efficiency in government throughout the life of the Permit.

Activities Completed

- The City continues to meet with the GEM consortium on a quarterly basis, throughout the life of the Permit, to share ideas, update resources, and share successes.

BMP 5(D): CREATE A STREET SWEEPING PROGRAM

Measurable Goals

1. There is a schedule for street sweeping.
2. A citywide map outlines the daily areas of sweeping.
3. The quantity of material removed per day is tracked.

Description

Street sweeping is a fairly efficient method of getting to a large number of areas, quickly and consistently. By sweeping the streets on a regular basis, the 'not so obvious' pollutants are removed from the road surface prior to pollutants entering the stormwater system and ultimately the downstream receiving waters. Records of the distances swept and the quantity of materials removed will be maintained and referenced in the annual SWMP report.

Activities Completed

- Citywide the streets are swept on a quarterly basis.
- Downtown core streets are swept weekly.
- Operations Center has a tracking mechanism in place to monitor areas that may need more frequent sweeping.

BMP 5(E): CREATE A CATCH BASIN CLEANING PROGRAM

Measurable Goals

1. A schedule for cleaning catch basins, inlet structures, and manholes has been developed.
2. The number of catch basins, inlet structures, and manholes that have been cleaned yearly is tracked.
3. The amount of trash, sediment, and other pollutants removed during cleaning is tracked.

Description

Pollutants that are missed by street sweeping naturally make their way to catch basins, inlet structures, and manholes. The pollutants that cause the biggest problems, in relation to the functionality of the structure, are litter and sediment. Thus, storm drain maintenance is important for reducing flooding and water quality impacts. A preventative maintenance program helps ensure that the storm sewer functions effectively. This BMP requires regular inspections, record keeping, cleaning, and proper disposal system waste. The City will conduct year-round cleaning during the spring and summer, with additional inspections as needed during the rainy season. The following catch basin maintenance activities will be implemented:

- Inspect catch basins and inlet structures to ensure structural stability, sumps are not more than 40% full, and catch basins and inlets are marked to prohibit dumping of waste.
- Clean catch basins, storm drain inlets, and other conveyance structures before the rainy season in order to remove accumulated sediment and debris.
- Inspect catch basins more frequently during the rainy season and clean or repair as needed.
- Keep records of maintenance activity.
- Dispose of waste material in the appropriate manner.

Activities Completed

- Catch basins are cleaned out on a yearly basis. Number of catch basin maintained is based on staffing and other unforeseen circumstances, with the goal to maintain all catch basins yearly.

BMP 5(F): PROPER PESTICIDE AND HERBICIDE APPLICATION

Measurable Goals

1. An inventory of areas designated for herbicide and pesticide application was developed.
2. Local, state, and federal regulations, associated with pesticide applications, are followed.
3. Areas of treatment are assessed and prioritized for the potential use of alternative practices.

Description

The use of insecticides, pesticides, and herbicides can be harmful to the environment. They have the potential of ending up in drinking water and other aquatic systems when not properly managed. The manufacturer's recommendations should always be reviewed and followed prior to applications. Records of the amount, date, and concentration will be required for all pesticide and herbicide application. An annual review of the types of pesticides and herbicides used, as well as the purpose of their application will be used in determining ways to reduce the amount, concentration, and frequency of use.

When appropriate, the City will implement the following BMPs:

- **Inclement Weather:** Weather conditions can adversely affect the efficacy of chemical treatments. If wind or rain is imminent, the City will reschedule pesticide application in order to avoid unnecessary contamination of stormwater runoff.
- **Runoff Control:** Storm drains potentially impacted by stormwater runoff after pesticide usage will be located, prior, and covered during treatment.
- **Drift Control:** The City will reduce the use of power sprays to reach the upper canopy of trees in order to prevent pesticide drift into buildings and water bodies. Alternative control measures, such as the injection of systemic insecticides will be promoted where feasible.
- **Preventative Applications:** Dormant oils and herbicides will only be used on shrubs and trees if justified by the existence of potential pest outbreaks. Notification and posting during application of lawn pesticides will be conducted.
- **Application of Rodenticides:** Anticoagulants, tracking powders, and other mammalian toxicants will be placed in locations that will not result in their translocation to aquatic habitats.
- **Application Termiticides into the Ground:** The application Termiticides will not be permitted near wells, streams, or other water sources.
- **Transportation of Pesticides:** Pest control vendors will be required to comply with the following provisions during transportation:
 - Containers will be kept securely sealed and fastened to the vehicle;
 - Pesticides will not be left in an unattended vehicle unless the vehicle has an enclosed storage area and is kept locked in that storage area;
 - Pesticides spray tanks that are transported will: (1) be securely sealed; (2) form part of or be permanently fixed to the vehicle using the pesticide; and (3) be prominently marked either "WARNING" or "POISON", and the name of the pesticide product.
 - Vehicles used for pest control will: (1) be designed so pesticide is separated from the driver or operator by a barrier impervious to the pesticide; (2) not be left on public land when not in use; (3) be securely housed to restrict public access when not in use; and (4) be washed down on a grassed area in such a way that no runoff is allowed into the stormwater or sewage system.
- **Pesticide Storage:** Pesticide containers will always be kept in covered storage areas that are covered or have some form of secondary containment to protect it from stormwater contamination.
- **Pesticide Spills:** A pest control operator who observes any accident or spillage of pesticide will report it to the City as soon as possible.
- **Pesticide Disposal:** Once application of the pesticide is finished, the containers will be rinsed thoroughly and the rinsate used on the intended target, so that no amount of the pesticide is unaccounted for. Empty containers will be disposed of as hazardous waste, in accordance with the manufacturer's label.

Activities Completed

- There is an inventory of pesticide and herbicide use.
- Applications are monitored on an annual basis throughout the life of the Permit.

BMP 5(G): LANDSCAPING AND LAWN CARE

Measurable Goals

1. An inventory of landscaping and lawn areas that require maintenance was developed.
2. Practices for open space maintenance at all parks were implemented.
3. A method for containing or composting grass clippings was evaluated.

Description

The City implemented BMPs for landscaping and lawn care practices that will reduce the impacts of nutrient loading from stormwater. Nutrient loading generated by lawn care has the potential to cause water quality problems in streams, lakes, and estuaries and should be reduced whenever possible.

The City limits the use of fertilizers and pesticides whenever possible. The use of alternative landscape options will be implemented where practicable. These alternatives could be as simple as planting native species in all new park designs, as native species require much less fertilizer and water.

Currently, the City uses grass clippings and leaf debris for composting and use on City property.

Activities Completed

- The City developed an inventory of areas where lawn care and landscaping BMPs are needed.
- The City developed alternative maintenance practices for open space and parks.

BMP 5(H): PROVIDE EMPLOYEE TRAINING

Measurable Goals

1. A training program was implemented.
2. The number of staff trained, hours trained, and retraining needs are tracked.

Description

The City ensures that employees in Streets, Water/Sewer, Parks Maintenance and other related positions are trained on the requirements of the stormwater pollution prevention and good housekeeping program. The training program incorporates the following:

- Training on proper maintenance activities, including record keeping and disposal;
- Allow only properly trained individuals to handle hazardous materials and waste;
- Train employees from all departments to recognize and report illegal dumping;
- A training mechanism to educate businesses, contractors, and the general public in the proper and consistent methods for waste disposal, and
- Training staff to recognize and report non-stormwater discharges via illicit connections.

The City will ensure that its employees have access to public education materials produced as part of this Permit so that they may implement feasible BMPs into their day-to-day work.

Activities Completed

- The City tracks staff trained and the training hours.

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CHAPTER 6

MONITORING AND ASSESSMENT

Section S8.A of the 2013 Western Washington Phase II Municipal Stormwater Permit states that all Permittees shall provide a description of any stormwater monitoring or stormwater-related studies conducted by the Permittee during the reporting period. If other stormwater monitoring or stormwater-related studies were conducted on behalf of the Permittee during the reporting period, or if stormwater-related investigations conducted by other entities were reported to the Permittee during the reporting period, a brief description of the type of information gathered or received shall be included in the annual report.

Permittees are not required to provide descriptions of any monitoring, studies, or analyses conducted as part of the Regional Stormwater Monitoring Program (RSMP) in annual reports. If a Permittee conducts independent monitoring in accordance with requirements in S8.B or S8.C below, annual reporting of such monitoring must follow the requirements specified in those sections.

S8.C Stormwater management program effectiveness studies. By December 1, 2013, each city and county Permittee listed in S1.D2.a(i) and S1.D2.a(ii) shall notify Ecology in writing which of the following two options for effectiveness studies the Permittee chooses to carry out during this permit cycle. Either option will fully satisfy the Permittee's obligations under this section (S8.C). Each Permittee shall select a single option for the duration of this permit term.

The City selected Effectiveness Studies Option #1. Permittees that choose option #1 shall pay into a collective fund to implement RSMP effectiveness studies. The payments into the collective fund are due to Ecology annually beginning August 15, 2014. The payment amount for Camas is \$7,002.00 to be paid annually.

CHAPTER 7

REPORTING REQUIREMENTS

An annual report is required to be submitted no later than March 31st of each year of the Permit, beginning March 31, 2015. The report covers the reporting period from January 1, 2014 through December 31, 2014. Each subsequent report will cover the previous calendar year.

Ecology requires the report to be submitted electronically using the Water Quality Permitting Portal (WQWebPortal) available on Ecology's website at:

<http://www.ecy.wa.gov/programs/wq/permits/paris/portal.html>, unless otherwise directed by Ecology.

The City is required to keep all records related to the Permit and the SWMP for at least five (5) years.

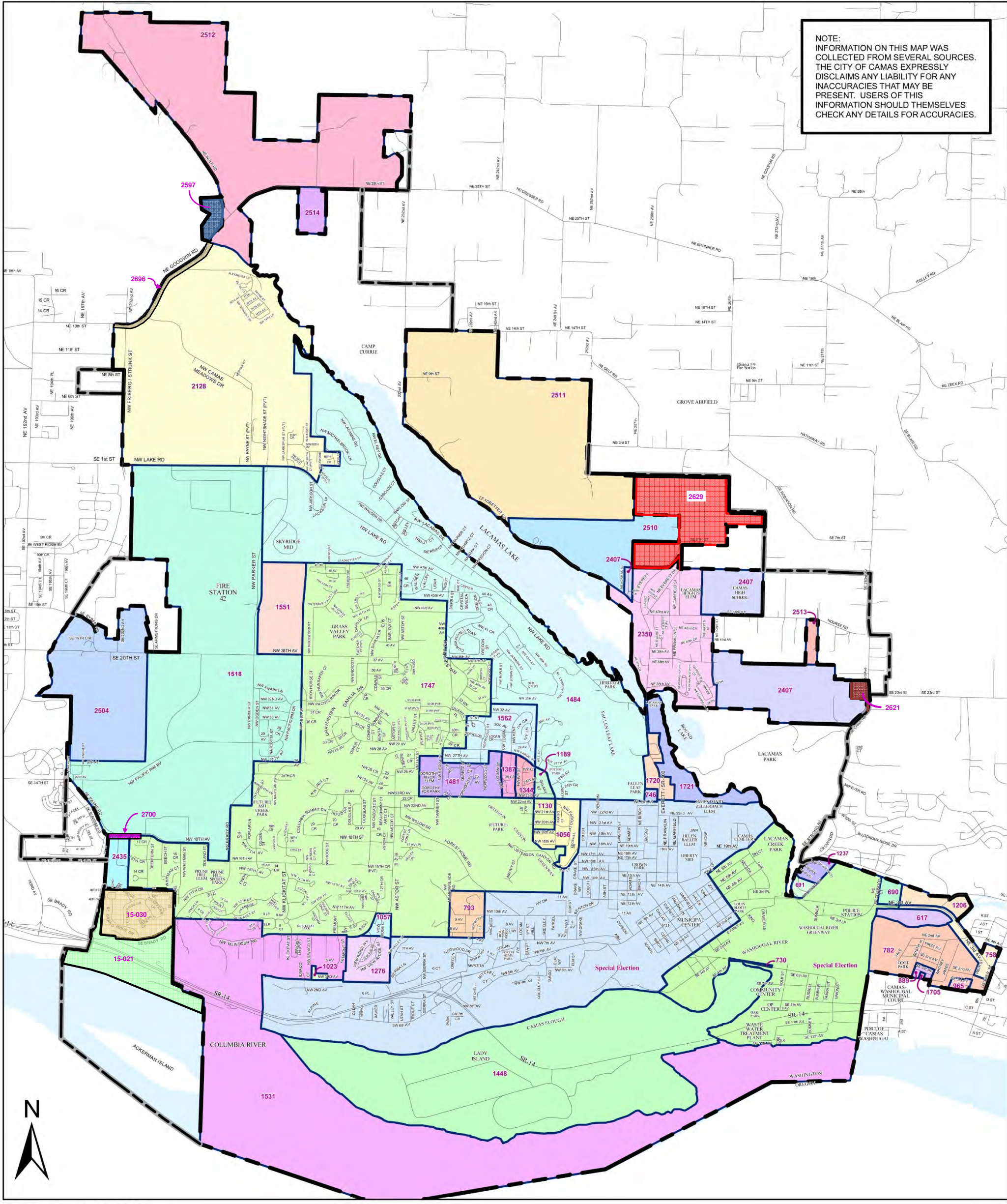
The annual report shall include the following:

1. The current Stormwater Management Plan (SWMP);
2. Submittal of the annual report form as provided by Ecology pursuant to S9.A, describing the status of implementation of the requirements of this permit during the reporting period.
3. Attachments to the annual report form including summaries, descriptions, reports, and other information as required, or as applicable, to the requirements of this permit during the reporting period. Refer to appendix 3 for annual report questions.
4. If applicable, notice that MS4 is relying on another governmental entity to satisfy any of the obligation under this permit.
5. Certification and signature pursuant to G19.D, and notification of any changes to authorization pursuant to G19.C.
6. A notification of any annexations, incorporations or jurisdictional boundary changes resulting in an increase or decrease in the Permittee's geographic area of permit coverage during the reporting period.

As required, the City will make all records relating to the Permit and the SWMP available to the Public upon request. The annual report and the SWMP will also be available to the public via the City's webpage.

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NOTE:
 INFORMATION ON THIS MAP WAS
 COLLECTED FROM SEVERAL SOURCES.
 THE CITY OF CAMAS EXPRESSLY
 DISCLAIMS ANY LIABILITY FOR ANY
 INACCURACIES THAT MAY BE
 PRESENT. USERS OF THIS
 INFORMATION SHOULD THEMSELVES
 CHECK ANY DETAILS FOR ACCURACIES.



City Limits
 ————
Urban Growth Boundary
 - - - - -
Annexations
 Ord. Name, Ord. Date

- 746, , 4/28/1953
- 758, , 7/28/1953
- 782, Westco, 4/27/1954
- 793, NW 10th, 2/8/1955
- 889, SE 3rd Av, 3/23/1959
- 965, Weir Park, 4/9/1962
- 1023, NW 9th, 10/26/1964
- 1056, Prune Hill, 2/28/1966
- 1057, NW 10th, 2/28/1966
- 1130, Prune Hill, 6/23/1969
- 1189, Prune Hill Village, 7/26/1971
- 1206, NE 3rd Av, 3/14/1972
- 1237, Province Dr, 10/9/1973

- 1276, McEnry/Rodgers, 8/11/1975
- 1344, Annex Reinhart Area, 1/23/1978
- 1387, Reinhart Autoview, 9/24/1979
- 1448, Lady Island, 2/11/1982
- 1481, Reinhart Dorothy Fox, 6/13/1983
- 1484, Shipler, 7/11/1983
- 1518, MacKay MacDonald, 10/22/1984
- 1531, Bachelder, 4/8/1955
- 1551, DKW Property, 10/14/1985
- 1562, Crown View Heritage Heights, 3/10/1986
- 1705, 2 Lots One Stop, 12/12/1988
- 1720, North Everett, 7/10/1989
- 1721, Round Lake, 7/10/1989

- 1747, Vancouver View, 2/12/1990
- 2128, North Dwyer Creek, 9/8/1997
- 2350, Lacamas Heights, 12/8/2003
- 2407, Gregg Reservoir, 6/13/2005
- 2435, Hinton, 1/3/2006
- 2504, Bybee Curves, 1/7/2008
- 2510, CJ Dens Land Co, 4/21/2008
- 2511, Lacamas Northshore, 4/21/2008
- 2512, Green Mountain, 4/21/2008
- 2513, Loyal Land, 4/21/2008
- 2514, Green Mountain South, 4/21/2008
- 2597, Green Mountain (2), 8/16/2010
- 2621, Whittler, 5/2/2011
- 2629, Grace Foursquare, 11/7/2011
- 2696, NE Goodwin Rd., 3/17/2014
- 2700, NW 18th Ave., 5/5/2014
- 15-021, Grand Ridge, 11/29/2015
- 15-030, Grand Ridge Island, 2/5/2016

City of Camas Annexation Map



Public Education & Outreach Efforts

1. July 24-25, 2015 – Camas Days

A City tent is set up outside of City Hall, every year, during Camas Days. Information is provided to the public on Low Impact Development measures, such as rain gardens and native plantings; water quality & pet waste pickup; car washing information, and ways to reducing water usage.

During Camas Days, staff conducts before & after quizzes about the impact of pet waste on water quality.

2. October 2015 – Lacamas Lake Cleanup

The Georgia Pacific Mill starts a drawn down of the Lacamas and Round Lakes every year after Labor Day, in order to inspect and make repairs on the fish wheel and the dams. This year's draw down was delayed until the end of September due to the extended warm weather. Once the lake elevation is lowered there is a community wide shoreline cleanup. The City provides dumpsters and garbage bags for the citizens and then picks up all the debris at the conclusion of the event.

Typically, the City also sets up an informational table at Heritage Park to distribute pet waste information, as this park and the surrounding trails are very popular with dog walkers.

3. December 4, 2015 – Hometown Holidays

A City booth was set up downtown alongside the City's new Vactor truck. Information was provided to the public about the vactor truck and the street sweeper, the functions of both pieces of equipment to help the City meet water quality requirements that are dictated by our NPDES Stormwater Permit.



2015 Illicit Discharge Summary

1. March 23, 2015 – NE Franklin St. & NW 15th Ave. – Hydraulic Fluid Spill
 - a. Reported to Ecology: ERTS #655675
 - b. City sanitation vehicle blew a hydraulic line resulting in approximately 5 gallons of hydraulic fluid spilling on to the road and impacting a catch basin.
 - c. Cleanup was conducted by City Street Department staff and consisted of absorbent and booms, with debris swept up and disposed in plastic bags.
 - d. Additional measures were street sweeping and the catch basin was cleaned out with the vector truck.

2. March 30, 2015 – NE 2nd Ave. & NE Lechner St. – Rendered Cooking Oil Spill
 - a. Reported to Ecology: ERTS #655844
 - b. City sanitation vehicle's pincher arms knocked over a grease trap container, behind the Jett Burger restaurant, spilling approximately 200 gallons of rendered cooking oil.
 - c. Initial response was conducted by City Street Department staff and consisted of absorbent and booms to protect catch basin.
 - d. Additionally, 3 Kings Environment was called in to complete the cleanup and properly dispose of contaminated materials.
 - e. Operations staff is working with Clark County Health to verify location and placement of rendered oils and with Sanitation drivers on the placement and proximity of dumpster locations.

3. August 28, 2015 – 800 NE 3rd Ave. Safeway Fueling Station – Gasoline Spill
 - a. Reported to Ecology: ERTS #659140
 - b. Fire Dept. was called out on a 911 call for public safety, not for the spill, however, FD cleaned up the surface area with absorbent material and contacted both contacted Ecology and the Ops Center.
 - c. There was approximately 3 gallons of fuel spilled. It was contained within the fuel island, which drains to an oil/water separator prior to discharge. The remainder of the cleanup was completed by Safeway.
 - d. The City contacted the Regional Facility Manager, for Safeway, who scheduled cleaning for all catch basins located within Safeway's parking lots.
 - e. Staff will continue to work with Safeway to ensure they are aware of the IDDE requirements and are prepared for spills.