

# Washington Department of Ecology Submission Cover Letter

**WQWebSubmittal - Submittal Submission Id: 1526375 - 3/29/2016  
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**Report Received Dated:**

3/29/2016 2:16:04 PM

Company Name	Signer Name	System Name
City of Port Angeles	Craig	WQWebPortal

## Attachments:

Document Name of Description	Document File Name
Submitted Copy of Record for City of Port Angeles	Copy of Record CityofPortAngeles Tuesday March 29 2016
WAR045028_5_03292016095315	05 Education and Outreach_5_03292016095315
WAR045028_7b_03282016102930	07bReport WSSOG Activities Rep_7b_03282016102930
WAR045028_20_03282016103234	20IDDE Inspection Listing Shor_20_03282016103234
WAR045028_65_03282016104930	65 Sample Plan_65_03282016104930
WAR045028_1_03292016095151	01 SMP for 2016 Update_1_03292016095151
06 Stewardship Opportunities	06 Stewardship Opportunities
20 IDDE Database Export	IDDE Inspection Listing Long
WAR045028_56_03282016105713	56 Monitoring_56_03282016105713
14 Field Screening	14 Screening Summary and Map 2015 Update

## 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:** PORT ANGELES CITY

**Permit Number:** WAR045028

**Site Address:** 321 E FIFTH ST  
Port Angeles, WA 98362

**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)	01 SMP for 2016 Update_1_0329201609 5151
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.	Not Applicable
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.	05 Education and Outreach_5_032920160 95315
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)	Yes
7b	S5.C.1.b	Attach description of how this requirement was met.	07bReport WSSOG Activities Rep_7b_032820161029 30

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)	The SWMP and contact information are available to the public on the City's website. A link to a comment form is also available on the SWMP page. Copies of the SWMP are available at the front counter of the City's Engineering Department, and provided at the annual Home Show.
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.	<a href="http://wa-portangeles.civicplus.com/376/Stormwater-Management-Program">http://wa-portangeles.civicplus.com/376/Stormwater-Management-Program</a>
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)	Not Applicable
12b		Cite the Prohibited Discharges code reference	
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	Illicit Discharge Detection and Elimination (IDDE) Response Policy, PW-0610. A copy is included in the SWMP.
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)	9
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)	360-417-4745
15b	S5.C.3.c.ii	Number of hotline calls received.	6
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)	The City trains its staff through IDDE Awareness Training, and businesses through personalized business inspections. A utility bill mailer was sent to all City residents which described what illicit discharges are and how to report them. A IDDE poster is also located in the entrance to City Hall.
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)	58
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	20IDDE Inspection Listing Shor_20_03282016103 234
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.	12
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.	9

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.	12
29	S5.C.4.b.ii, iii and v	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)	8
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.	Yes
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)	Not Applicable
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)	19
46c	S5.C.5.b	Number of facilities inspected during the reporting period. (S5.C.5.b)	19
46d	S5.C.5.b	Number of facilities for which maintenance was performed during the reporting period. (S5.C.5.b)	10
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.	Not Applicable
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)	Yes
49b	S5.C.5.d	Number of known catch basins.	2537
49c	S5.C.5.d	Number of catch basins inspected during the reporting period.	2264
49d	S5.C.5.d	Number of catch basins cleaned during the reporting period.	2264
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.	56 Monitoring_56_0328201 6105713
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.	23
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)	Not Applicable
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)	65 Sample Plan_65_03282016104930
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.*

Craig Fulton

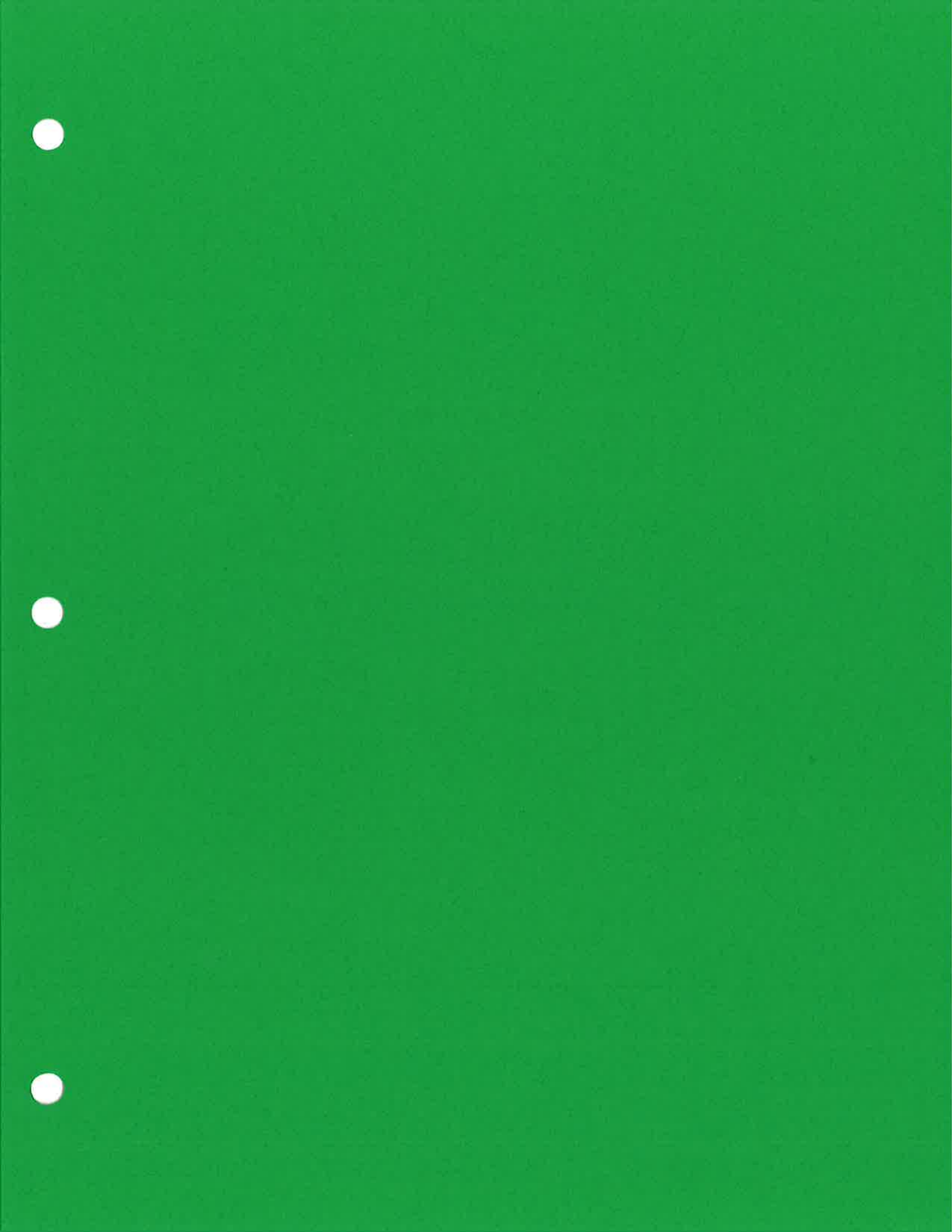
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**Signature**

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**Date**



**This is a copy of the City's stormwater management plan. It defines what the City plans to do to make stormwater cleaner.**

**We would like your input on methods to improve the quality of stormwater and the environment.**

**Please let us know if you have any comments, ideas or concerns! You can return this directly to the City offices at 321 East Fifth Street, attention Stormwater Engineer. You can also call the stormwater hotline at 360-417-4830, or send an email to [stormwater@cityofpa.us](mailto:stormwater@cityofpa.us)**

# **City of Port Angeles**

## **Stormwater Management Program**

Revised: February 25, 2016



As required by the

Western Washington Phase II Municipal Stormwater Permit

State of Washington – Department of Ecology

Municipal Stormwater Permit Coverage Number: WAR04-5028

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## Appendices

- Appendix A: Public Outreach Plan Activity Matrix
- Appendix B: Illicit Discharge Detection and Elimination (IDDE) Response Policy
- Appendix C: Inter-Departmental Coordinating Mechanisms

## Background and Intent

The City of Port Angeles (City) was issued a Western Washington Phase II Municipal Stormwater Permit (Permit) on January 17, 2007. The Permit was renewed on August 1, 2013. The Permit was issued by the State of Washington's Department of Ecology in compliance with the State of Washington Water Pollution Control Law (Chapter 90.48 Revised Code of Washington) and the Federal Water Pollution Control Act (Title 33 United States Code, Section 1251 et seq).

The Permit authorizes the City to discharge from the municipal separate storm sewer system (MS4) to surface waters and ground waters of the state.

The City is developing this Stormwater Management Program (SWMP) to address the specific requirements of Special Condition S5 of the Permit: "Stormwater Management Program for Cities, Towns, and Counties." The SWMP is a set of planned actions and activities designed to reduce the discharge of pollutants to the maximum extent practicable and to protect water quality. The City has teamed with Kitsap County to enhance the Public Education and Outreach components of the SWMP. The Permit includes broad ranging requirements which are implemented by various Departments within the City, inter-departmental coordination mechanisms are detailed in Appendix C.

The organization of the City's SWMP reflects the five core components required by Special Condition S5:

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. Pollution Prevention and Operation and Maintenance for Municipal Operations

The City's SWMP will be updated and submitted to the Department of Ecology annually as required. Electronic copies of updates will be available on the City's stormwater web page. Updates for each calendar year will be submitted by March 31 of the following year. Many of the activities described in the SWMP are planned activities, and their inclusion in this document does not guarantee that they will be implemented as described.

The public is encouraged to participate in the development of the SWMP. Please contact the Department of Public Works and Utilities with questions, comments or suggestions.

Mail: 321 East Fifth St – P.O. Box 1150, Port Angeles, WA 98362  
Phone: (360) 417-4745 (illicit discharge hotline)  
(360) 417-4811 (City stormwater engineer)  
Email: [illicit-discharge@cityofpa.us](mailto:illicit-discharge@cityofpa.us)  
Website: <http://www.cityofpa.us> .... CLICK >>  
LIVING IN... Your Home.... Stormwater  
Web Form: Click [Stormwater Management Plan](#) on the Stormwater webpage

## 1) Public Education and Outreach

The City's public education and outreach program is being developed consistent with the Permit goal: "to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts."

### a) Education and Outreach Program

The Permit has established education and outreach goals for four categories based on target audiences and subject areas. The City's program is structured to match these four categories, listed as i-iv below.

A matrix has been prepared to show planned activities for the year, and their relationship to the required target audiences. This matrix is attached as Appendix A to this document. Updates of actual education and outreach activities will be provided with the Annual Report for the year. The following sections provide details on anticipated and ongoing public education and outreach program activities.

#### i.) General public

*Education and outreach goals:*

- *General impacts of stormwater 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*

The program to meet these goals may include the following components:

- **Stormwater website:** the City's stormwater website contains information on general stormwater impacts, impervious surfaces, and opportunities for the public to help improve stormwater quality within the watershed. The webpage may be found at (<http://www.cityofpa.us> CLICK>> LIVING IN.... Your Home.... Stormwater). The website will be updated as more information becomes available. Specific updates are planned to include a list of frequently asked questions, a list of upcoming stormwater-related events, additional links to other websites, and copies of educational materials developed under this program.
- **Localized groups:** Annually, the City may hold a public meeting to discuss the stormwater management plan. In these meetings we discuss local water quality, the effects of impervious surfaces on stream health, and stormwater pollutants generated by home and automobile owners. Meetings will be held with groups such as Streamkeepers, EcoNet, and North Peninsula Builders Association.
- **Informational brochures:** will be made available at facilities such as Port Angeles City Hall (customer service and billing desk, Public Works and Utilities reception area), Clallam County Courthouse, Port Angeles Public Library, City Pier (Arthur D. Feiro Marine Life Center), Peninsula College, and others. The informational brochures are designed to address the education goals listed above. As brochures are developed, electronic copies will be made available through the City's stormwater webpage.

- **Newspaper advertisements:** the City plans to periodically place stormwater-related information in the local newspaper (Peninsula Daily News). This information will be designed to address the education goals listed above and will be timed to reflect the greater impact during the wet winter season. Electronic copies of all newspaper advertisement will be made available through the City's stormwater webpage.
- **Utility bill mailers:** Annually, educational mailers will be sent out with the monthly utility bills, thereby reaching all of the City's utility customers. The mailers will be developed to create a progressive flow of general stormwater related information with practical tips for home and business owners to help improve water quality. Copies of mailers will also be made available on the City's stormwater website and as handouts. The 2016 utility bill mailer may feature topics such as: code update, BMPs, yard care, dog waste, car washing, and yard debris.
- **Participation in existing events:** educational materials (posters, brochures/handouts, maps, etc) will be distributed at existing local and regional events that attract members of the target audiences. City representatives will be present to answer questions. Events include: Clallam County Fair, Clallam County Home and Lifestyle Show, and others. Event-specific materials will be developed and distributed as appropriate. Announcements of upcoming events and copies of materials used at events will be available on the City's stormwater website.

## ii.) **General public, home-based and mobile businesses**

### *Education and outreach goals:*

- *BMPs for use and storage of automotive chemicals, hazardous cleaning and yard care products, carwash soaps, and other hazardous materials*
- *Impacts of illicit discharges and how to report them*

The program to meet these goals may include the following components:

- **Site visits to business owners by City Pollution Prevention Specialist:** The City received grant funding through the State Department of Ecology to support a Pollution Prevention Specialist position. This person will schedule site visit appointments at businesses within the City. The purpose will be to educate them about stormwater pollution and their connection to the local water ways, to educate them about the impacts of illicit discharges and how to report them, to help them implement BMPs on use and storage of hazardous materials, to fill out the Department of Ecology's Source Control Checklist and to report that information to Ecology and the City.
- **Illicit discharge information for the general public:** general illicit discharge information will be distributed to the general public. The information will take the form of one or more of the general public program components described in the previous section. Information will include a description of illicit discharges, applicable laws, environmental effects, preventative measures, reporting

measures, and links to other sources of information. A “stormwater pollution hotline” is available for public reporting of illicit discharges (360-417-4745).

### iii.) **Homeowners, landscapers, and property managers**

*Education and outreach goals:*

- *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, retention of forests and mature trees*
- *Stormwater pond maintenance*

The program to meet these goals may include the following components:

- **Informational mailers to target audience:** mailers designed to address the specific education goals will be sent to the target audience. The audience will be selected based on classification in directories such as telephone books and web searches.
- **Informational brochures at City Hall, at local public events and at target commercial establishments:** informational brochures/handouts will be designed to address the specific education goals. The brochures will be placed or displayed at City Hall, at local public events and at businesses within the target group or that cater to the target audience. Examples may include: lawn and garden stores, hardware stores, general stores, landscaping businesses, florists, real estate offices, property management offices, and others. Permission to place the brochures will be obtained from business owners prior to placement. Brochures will be replaced periodically.
- **BMP and LID incentives programs:** the City will continue a stormwater incentives program that will offer financial incentive to home and business owners who implement certain stormwater BMPs, including LID technology, on their properties. This program is advertised on the City website and at local public events. The City has also implemented a rain garden rebate program to further encourage LID. The rain garden rebate reimburses an approved applicant the cost of up to \$750 for the material required. Program details can be found on the Stormwater webpage.

### iv.) **Engineers, contractors, developers, review staff, and land use planners**

*Education and outreach goals:*

- *Technical standards for flow control and pollution prevention*
- *Technical standards for stormwater site and erosion control plans*
- *Low Impact Development techniques, including site design, pervious paving, retention of forests and mature trees*

The program to meet these goals may include the following components:

- **Stormwater Management Manual for Western Washington:** a copy of the most recent version of the Department of Ecology's manual is available at the City's Public Works and Utilities Department's Engineering Services Office so that designers can access the manual without purchasing or printing it. Staff are available by appointment to assist with the use of the manual.
- **City staff will organize workshops or one on one meetings with developers:** The city stormwater engineer meets regularly with developers and engineers to help them interpret the City stormwater regulations, and to recommend low impact development techniques as generally lower cost stormwater solutions.
- **BMP and LID incentives programs:** see description in previous section
- **City staff training:** City engineering and review staff will attend training sessions as available to further knowledge of technical standards, LID techniques, regulatory requirements, and other stormwater-related topics.

***b) Measurement of Understanding and Adoption Among Targeted Audiences***

The City has entered into an interlocal agreement with Kitsap County for 2015. In conjunction with Kitsap County, the City will measure the understanding and adoption of a targeted behavior for at least one target audience in at least one subject area.

***c) Public Education and Outreach Recordkeeping***

The City will track and maintain records of all public education and outreach activities conducted. An electronic database of this information is maintained by the City's Public Works and Utilities Department. The database contains the following entries:

- Name of outreach activity/distribution/event
- Date(s)
- Location(s)
- City personnel involved
- Target audience(s)
- Contact information for other group(s)
- Subject area(s)
- Attendance/distribution (actual or approximate)
- Educational materials used (flyers, handouts, slide shows, posters, etc)
- Notes/other

The public education and outreach database is available from the City upon request. An updated version will be included with each annual report. Copies of all material used during public education and outreach activities will be maintained, as well as photos, descriptions of feedback, lessons learned, and other information.

## 2) Public Involvement and Participation

The SWMP will include opportunities for public involvement and participation to ensure that the program addresses the goals and expectations of the public as well as the requirements of the Permit. Public comments will be tracked and responded to as appropriate.

### a) *Public Involvement in SWMP*

The public will have the following opportunities for participation:

- Direct contact with City staff: An email address, phone number, and mailing address will be provided on all City stormwater information distributed. The public will be encouraged to contact City staff at any time with questions or concerns.
- Web page: The City's stormwater web site (<http://www.cityofpa.us> CLICK>> LIVING IN... Your Home... Stormwater) includes the SWMP, encourages public involvement and participation in the development of the SWMP, and gives contact information.
- Public hearings: All City policy decisions will follow standard City procedure and will be brought before City Council through the public hearing process. This includes rate changes, new or revised ordinances, and other official policy decisions. The public will be notified as required and will have a chance to comment during the hearings.
- Engineering counter handout: The SWMP is available in the Public Works and Utilities (PW&U) reception area.
- Stormwater workshops: The City stormwater engineer will hold public information sessions on the stormwater management program to stakeholder groups such as Streamkeepers, EcoNet, and North Peninsula Builders Association.

The current contact information for public involvement is:

Mail: P.O. Box 1150, Port Angeles, WA 98362  
Phone: (360) 417-4745 (illicit discharge hotline)  
(360) 417-4811 (City stormwater engineer's number)  
Email: [illicit-discharge@cityofpa.us](mailto:illicit-discharge@cityofpa.us)  
Website: <http://www.cityofpa.us> .... CLICK >>  
[LIVING IN... Your Home... Stormwater](#)  
Web Form: Click [Stormwater Management Plan](#) on the Stormwater webpage

All opportunities for public involvement and comments received will be tracked on a spreadsheet maintained by the Department of Public Works and Utilities. The City will consider comments as they are received and will follow up with the public as appropriate.

### **b) Availability of Information to the Public**

The most recent annual report to Department of Ecology, the SWMP, and other submittals required by the Permit will be made available to the public on the City's stormwater webpage. The documents will also be available to the public at the Department of Public Works and Utilities (321 East Fifth St, Port Angeles) upon request. Staff will be available by appointment to discuss the documents with any interested parties.

## **3) Illicit Discharge Detection and Elimination**

### **a) Municipal Storm Sewer System Map**

The City's stormwater system is mapped electronically in the City's Geographic Information System (GIS). The data contained in the map is updated and corrected continuously as information is gathered in the field or as new development occurs. Updates are made based on field sketches, design plans, as-built plans, aerial photography, and/or other sources of information that become available.

The stormwater GIS layers contain information on manholes, catchbasins, outfalls, pipes, ditches, culverts, detention ponds, and drainage basins. Other layers within the City's overall GIS dataset contain information relevant to stormwater as well, for example: land use, land cover, zoning, impervious surfaces, topography, natural hydrology, and combined sewers. Aerial photography is also available, with the most recent flyover performed in 2012. This information is available to City employees at any time, and can be made available to the public or other organizations upon request.

### **i) Location of Known Outfalls, Receiving Waters and Structural BMPs**

The locations of all known outfalls, receiving waters, and structural BMPs owned, operated and/or maintained by the City have been mapped in the GIS. Additional information regarding tributary conveyances (pipes, ditches, etc), associated drainage areas, and land use will be developed where required.

### **ii) Connections to MS4**

The City continuously updates the stormwater GIS with any new connections or infrastructure allowed or authorized by the City. New connections are mapped from development plans, project plans, field reports, and/or other sources as appropriate.

### **iii) Areas Not Discharging to Surface Waters**

Most of the areas served by the City-owned MS4 discharge into surface waters, however there are three west side basins which generally infiltrate (Lincoln Park Pond, Big Boy Pond and 10<sup>th</sup> and N open space). All of these areas have overflow structures that allow the water to discharge to surface waters. Also the City has many surface water catch basins which drain to the City's wastewater plant. These basins have been mapped.

#### **iv) Information Available to Ecology**

The City's stormwater GIS is available to Ecology upon request. The City can provide the required mapping information in electronic format and can meet the mapping standards described on Ecology's website, with the exception of metadata, which the City does not have available in electronic format at this time.

#### **v) Information Available to Secondary and Co-Permittees**

The City does not currently have any secondary or co-permittees.

#### **b) *Illicit Discharge Ordinance***

The City developed a comprehensive stormwater ordinance including an illicit discharge provision for the separate stormwater system. The ordinance was written to satisfy the criteria listed in the Permit, including: discharge categories that are NOT prohibited (3.b.i), discharge categories that ARE prohibited (3.b.ii), categories of discharge identified as significant sources of pollution to waters of the State (3.b.iv), escalating enforcement procedures (3.b.v), and enforcement strategies (3.b.vi). The ordinance was passed by the City Council on June 16<sup>th</sup>, 2009. No changes are anticipated in 2015.

#### **c) *Priority IDDE Screening Basins***

In order for the City to comply with its NPDES phase II permit, all permittees shall complete a field screening of at least 40% of the City MS4 system no later than December 31, 2017. The City of Port Angeles has elected to screen on average 12% of its MS4 system beginning in 2014. Each priority field screening basin contains approximately 12% of the cities stormwater catch basins; for a total of eight screening basins, each approximately 300 acres in size. Screening of these basins is accomplished through the use of existing City inspection programs. Every Stormwater catch basin within the priority screening basin is visually inspected during its years screening. Existing programs and tasks are also leveraged to fulfill this requirement including Business Inspections, Manhole Inspections, Outfall Inspections, and Stormwater BMP Inspections.

#### **d) *Detection Program***

The City has developed and implemented an "Illicit Discharge Detection and Elimination (IDDE) Response Policy". This Policy is included as Appendix B to this document. This policy contains all of the elements required by the Permit. The implementation of this Policy will continue in 2016. Each element is discussed in the following sections.

#### **i) *Priority Areas***

Prioritization was completed on February 12, 2010.

#### **Prioritization of Port Angeles Receiving Waterbodies**

Prioritization is based on the Department of Ecology's 303d list, as well as the significance of the waterbody for potential salmon recovery.

**303d list of most impacted to least impacted waterbodies in the Port Angeles area**

Peabody Creek  
Tumwater Creek  
Port Angeles Harbor  
Dry Creek  
Valley Creek  
Ennis / White Creek

**Creeks with high salmon recovery potential**

Ennis / White Creek system

**Proposed highest priority waterbodies for visual inspection:**

Peabody Creek  
Tumwater Creek  
Ennis / White Creek system

**ii) Field Assessment**

Field assessment has been completed on Peabody, Tumwater, Valley, Mills, Dry, White and the Ennis Creek systems. Inspections and re-inspections of priority water bodies will be made as part of the annual Field Screening of 12.5% of the City MS4. Field assessment activities include visual inspection during dry weather and field screening for illicit discharges in accordance with the City's "Illicit Discharge Detection and Elimination (IDDE) Response Policy". This Policy is included as Appendix B to this document.

**iii) Nature of Discharges**

Any illicit discharges discovered by or reported to the City will be characterized using the City's IDDE Response Policy in terms of potential public or environmental threat. The City will investigate any complaints, reports, or monitoring information that indicates a potential illicit discharge, spill, or illegal dumping within seven days. Problems and violations determined to be emergencies or otherwise judged to be urgent or severe will be investigated immediately.

Follow up training for maintenance staff in the use of the Policy for characterization will be conducted in 2016.

**iv) Tracing Source(s) of Discharges**

The City will trace the source of illicit discharges using one or more of the following means and methods:

- Visual observation

- Tracing upstream from manhole to manhole
- Dye testing
- Sewer inspection camera
- Water sampling and analysis
- Site inspections of potential sources

Additional tracing methods will be employed as available and applicable. The results of the tracing investigation will be entered onto the appropriate data base and used for follow-up activities. A drainage contaminate survey was performed on Peabody Creek with a goal of detecting and eliminating illicit connections contributing to high levels of fecal coliform. Sampling of priority areas identified in the contaminate survey continues. Sampling of priority areas identified in the contaminate survey continue.

#### **v) Removing Source(s) of Discharges**

Once identified, sources of illicit discharges will be removed, using the City's enforcement authority as needed.

#### **e) Public Information**

The City will utilize its Public Education and Outreach Program, as described in Section 1, to disseminate information about illicit discharges.

#### **i) Distribute Information to Target Audiences**

See Section 1.A – Public Education and Outreach Program.

#### **ii) Hotline for Public Reporting of Discharges and Spills**

The City's stormwater pollution hotline will be used for public reporting of discharges and spills. The hotline number will be published with all stormwater information and is available on the City's stormwater website. The hotline number is (360) 417-4745. The public will also be able to report discharges, spills, or other concerns via the City's storm water webpage, utilizing an online form, where information on the spill and photos can be submitted. An email address is also available: [illicit-discharge@cityofpa.us](mailto:illicit-discharge@cityofpa.us). Both the hotline and email are forwarded directly to City staff.

#### **f) Program Evaluation and Assessment**

The City will track the following information, as required by the Permit:

- Number and type of spills or illicit discharges identified
- Inspections made
- Feedback received from public education efforts (see Section 1 – Public Education and Outreach)

Public reporting of illicit discharges will be tracked using the form developed by the Center for Watershed Protection and incorporated into the City's IDDE Policy. Electronic and paper copies of all records, including follow up reports and actions, will be maintained at the Public Works and Utilities office. A summary of this information will be included in the City's Annual Report.

### ***g) Illicit Discharge Training***

The City will provide appropriate training for municipal field staff as described below.

#### **i) Field Staff Training**

The City will ensure that all municipal field staff who are responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges, including spills, improper disposal, and illicit connections are trained to conduct these activities. Follow-up training will be provided as needed to address changes in procedures, techniques, or requirements. The City will document and maintain records of training provided and staff trained. Refresher training for City field staff was held in 2014 and 2015.

#### **ii) Ongoing Training Program**

The City has developed and implemented an ongoing training program for all municipal field staff, which, as part of their normal job responsibilities, might come into contact with or otherwise observe an illicit discharge or illicit connection to the storm sewer system. Staff has been trained on the identification of an illicit discharge/connection and on the proper procedures for reporting and responding to the illicit discharge/connection. Follow-up training was provided in 2014 to address changes in procedures, techniques, or requirements. City staff will continue to attend select sessions held through the Statewide LID Training Program to assist staff in design, implementation, and maintenance of LID best management practices and facilities. The City will document and maintain records of future training provided and staff trained.

### ***h) Stormwater Ordinance***

The City developed and adopted an ordinance that addresses runoff from new development, redevelopment, and construction site activities at sites one acre and greater, and which retains all existing local policies and procedures for sites less than one acre. The ordinance adopts most of the Department of Ecology's 2005 Stormwater Management Manual for Western Washington and the Low Impact Development Technical Guidance Manual. Please see the Port Angeles Municipal Code, Section 13.63 for more detail.

In conjunction with the Stormwater Ordinance, the City has developed and implemented a program to reduce pollutants in stormwater runoff from new development, redevelopment, and construction site activities. The program is being applied to all sites one acre and greater, including projects less than one acre that are part of a larger common plan of development or sale. The program applies to both private and public development, including roads. The program is enforced through the City Ordinance described above as well as through the City's development standards (The City of Port Angeles Urban Services Standards and Guidelines).

#### **i) Minimum Requirements, Technical Thresholds, and Definitions**

The minimum requirements, technical thresholds, and definitions in Appendix 1 of the permit have been effective for the City since 2009.

## **ii) Site Planning Process, and BMP Selection and Design**

The site planning processes and Best Management Practice (BMP) selection and design criteria contained in the Department of Ecology manual have been effective for the City since 2009.

## **iii) Legal Authority to Inspect Private Facilities**

The ordinance includes provisions allowing City inspectors the legal authority to inspect private stormwater facilities that discharge into the City's MS4.

## **iv) Provisions to Allow LID**

The City has an existing Planned Low Impact Development (PLID) overlay zone ordinance that allows developers to apply non-structural preventative actions and source reduction approaches. The City also works with developers on a case by case basis to apply select LID BMPs, such as pervious pavements, to new development. The new stormwater ordinance encourages LID and the City provides a stormwater fee credit for property owners willing to implement BMPs on their sites to infiltrate stormwater. In 2015 and 2016 the City will review codes and standards for barriers to LID and propose and adopt changes to encourage the use of LID.

## **v) Erosivity Waiver**

The City does not allow developers to apply the Erosivity Waiver in Appendix 1, Minimum Requirement #2 of the permit. Therefore, the City does not plan to include enforcement sanctions for construction sites that provide notice of intent to apply the waiver but do not meet the requirements.

## ***i) Permitting Process***

The City has developed a permitting process with plan review, inspection, and enforcement capability as described below. The permitting process is applied to both private and public projects greater than one acre, and is administered by qualified personnel.

### **i) Review of Stormwater Site Plans**

The City reviews stormwater site plans as part of the permitting process. Plans are reviewed for compliance with the stormwater ordinance (PAMC 13.63) and the City's Urban Services Standards and Guidelines, which implement the ordinance. The review includes the minimum requirements, technical thresholds, and definitions in Appendix 1 of the Permit. The City works with developers to ensure that stormwater site plans meet the criteria established by both the Department of Ecology and the City.

### **ii) Pre-Construction Inspection of Development Sites**

During site plan review, City staff uses the definitions and requirements in Appendix 7 of the permit (Identifying Construction Site Sediment Transport Potential) to determine which sites have a high potential for sediment transport. These high priority sites will be inspected by qualified personnel prior to clearing and grading activities.

### **iii) Inspection of Development Sites During Construction**

Qualified City staff inspect all known permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls. Enforcement is used as required.

### **iv) Post-Construction Inspection of Development Sites**

Qualified City staff inspect all permitted development sites upon completion of construction and prior to final approval or occupancy. The purpose of the inspection is to ensure proper installation of permanent stormwater controls such as stormwater facilities and structural BMPs. City staff also verifies that a maintenance plan is completed and that responsibility for maintenance is clearly assigned. Enforcement is used as required.

### **v) Inspection Compliance**

The City maintains compliance with sections ii, iii, and iv above by the presence and records of an established inspection program designed to inspect all sites and achieving at least 80% of scheduled inspections.

### **vi) Enforcement Strategy**

The City has developed an enforcement strategy to respond to cases of non-compliance. This enforcement strategy is included in the City's Stormwater Ordinance PAMC 13.63.

### **vii) Erosivity Waiver**

At this time, the City does not allow developers to apply the Erosivity Waiver in Appendix 1, Minimum Requirement #2 of the Permit. Therefore, the City will perform review and inspection tasks for all construction sites as described above.

### **j) *Operation and Maintenance of Post-Construction Stormwater Facilities***

The City has developed and implemented a program to verify adequate long-term operation and maintenance of post-construction stormwater facilities and BMPs that are permitted pursuant to the City's permit process.

#### **i) Operations and Maintenance Ordinance**

The City has developed a comprehensive stormwater ordinance which requires private developers to clearly identify the party responsible for maintenance, requires inspection of facilities in accordance with Chapter 4, Volume V of the Department of Ecology's Stormwater Management Manual for Western Washington, and establishes enforcement procedures.

#### **ii) Maintenance Standards**

The City has adopted the 2005 Department of Ecology's Stormwater Management Manual for Western Washington. The City is currently implementing the maintenance standards included in Chapter 4 of Volume V.

### **iii) Annual Inspections**

The City will continue to annually inspect all private stormwater treatment and flow control facilities (other than catch basins) permitted. This inspection schedule may be adjusted for a different frequency if maintenance records justify the change.

### **iv) Inspections During Construction**

The City will inspect all new flow control and water quality treatment facilities, including catch basins, for new residential developments that are a part of a larger common plan of development every six months during the period of heaviest house construction. The purpose of the inspections will be to identify maintenance needs and enforce compliance with maintenance standards as necessary.

### **k) Recordkeeping**

The City will keep and maintain records of inspections and enforcement actions by staff. This will include inspection reports, warning letters, notices of violations, and other enforcement actions. Records of maintenance inspections and maintenance activities will also be maintained.

### **l) Notice of Intent Availability**

Copies of the “Notice of Intent for Construction Activity” and the “Notice of Intent for Industrial Activity” are available to representatives of proposed new development and redevelopment. Paper copies can be found at City Hall at the front desk of the Engineering Department. The City’s stormwater website also directs owners of construction sites and industrial facilities to the Ecology websites where they can find additional information and electronic copies of the notices of intent.

### **m) Training**

The City staff responsible for implementing the program to control runoff from new development, redevelopment, and construction sites have been trained to conduct these activities. Follow-up training will be provided as required. The City will document and maintain records of training.

## **4) Pollution Prevention and Operation and Maintenance for Municipal Operations**

The City has developed and implemented an operations and maintenance program that includes a training component and has the goal of preventing or reducing pollutant runoff from municipal operations. The program elements are described below.

### **a) Maintenance Standards**

The City has adopted the 2005 Department of Ecology’s Stormwater Management Manual for Western Washington including the maintenance standards included in Chapter 4 of Volume V. The City is using the maintenance standards to determine if/when maintenance is required.

When an inspection identifies an exceedance of a maintenance standard, maintenance shall be performed within the following timeframes:

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

These timeframes may be exceeded if there are circumstances that are beyond the City's control. Such circumstances may include, but not be limited to, denial or delay of access by property owners, denial or delay of necessary permit approvals, and unexpected reallocations of maintenance staff to perform emergency work. For each such exceedance of the required timeframes, the City will document the extenuating circumstances.

### **b) Annual Inspections**

The City will perform annual inspections of all municipally owned or operated permanent stormwater treatment and flow control facilities, other than catch basins. The City will take appropriate maintenance actions in accordance with the maintenance standards in Chapter 4, Volume V of the Department of Ecology's Stormwater Management Manual for Western Washington (2005).

The City may reduce the inspection frequency based on inspection records. The reduction will be based on inspection records for double the length of time of the proposed inspection frequency, or upon written statements based on actual inspection and maintenance experience and certified as required.

### **c) Spot Checks**

The City will perform "spot checks" of potentially damaged permanent treatment and flow control facilities (other than catch basins) after major storm events (greater than 24-hour 10-yr). If the spot checks indicated widespread damage and/or maintenance needs, the City will inspect all stormwater treatment and flow control facilities that may be affected. Repairs and other maintenance actions will be taken based on inspection results and in accordance with the City's maintenance standards.

### **d) Catch Basin Inspections**

Over the past two years the City has inspected all catch basins and inlets owned and/or operated by the City as required by the last Permit. Catch basins and inlets will continue to be cleaned based on inspection results and in accordance with the maintenance standards established in the 2005 *Stormwater Management Manual for Western Washington*. Decant water will be disposed of in accordance with Appendix 6 of the Permit – *Street Waste Disposal*.

The City continues to inspect the City's stormwater CBs every two years for maintenance requirements.

### **e) *Inspection Program***

The City's inspection program will be constructed to comply with the requirements in sections a, b, c, and d above. The inspection program will be designed to inspect all sites and to achieve inspection at 95% of sites. The program will include full documentation of activities using City Works, a data base program which overlays the City's existing GIS program.

The City also has an existing large diameter culvert inspection program. The major culverts that conduct the City creeks under roads are visually inspected in the late summer every two to three years. Maintenance deficiencies are corrected before the wet winter season begins.

### **f) *Road Runoff Control and Maintenance***

The City has established and implemented practices to reduce stormwater impacts associated with runoff from streets, parking lots, roads or highways owned or maintained by the City, and road maintenance activities conducted by the City. The following activities have been addressed:

- Pipe cleaning
- Culvert cleaning
- Ditch maintenance
- Street cleaning
- Road repair and resurfacing, including pavement grinding
- Snow and ice control
- Utility installation
- Pavement striping maintenance
- Maintaining roadside areas, including vegetation management
- Dust control

### **g) *Public Land Runoff Control and Maintenance***

The City has established and implemented policies and procedures to reduce pollutants in discharges from all lands owned or maintained by the City, including, but not limited to, parks, open space, road right-of-way, maintenance yards, and stormwater treatment and flow control facilities. The following policies and procedures have been adopted:

- Application of fertilizer, pesticides, and herbicides including the development of nutrient management and integrated pest management plans
- Sediment and erosion control
- Landscape maintenance and vegetation disposal
- Building exterior cleaning and maintenance

### **h) *Training Program***

The City has implemented an on-going operations and maintenance training program for employees whose construction, operations or maintenance job functions may impact stormwater quality. The training addresses the importance of protecting water quality,

the requirements of the permit, operation and maintenance standards, inspection procedures, selecting appropriate BMPs, ways to perform job activities to prevent or minimize impacts to water quality, and procedures for reporting water quality concerns, including potential illicit discharges. Follow-up training will be provided as needed to address changes in procedures, techniques, or requirements. Training is documented.

**i) Stormwater Pollution Prevention Plans**

The City has developed and implemented a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards and material storage facilities that it owns and/or operates. The City’s applicable facilities and current status of SWPPPs or similar documents for each are summarized in the following table. While not all of the documents listed are specifically SWPPPs, they all have relevance to the prevention, containment, and handling of substances that could result in the pollution of municipal stormwater. The City SWPPPs for all facilities that are required to have them.

**Table 1: Status of Stormwater Pollution Prevention Plans for City Facilities**

<b>Facility Name</b>	<b>Facility Use</b>	<b>Document</b>	<b>Status</b>
Sanitary and Storm Sewer Collection System	Collection of sanitary and combined sewerage	“Illicit Discharge Detection and Elimination (IDDE) Response Policy”	Most Recent Revision: December 2014
Corp Yard	Maintenance, equipment & materials storage for water, wastewater, & streets utilities	“City of Port Angeles Maintenance Facility Stormwater Pollution Prevention Plan”	Most Recent Update: February 2013
Port Angeles Wastewater Treatment Plant	Wastewater treatment plant (secondary treatment)	“City of Port Angeles Wastewater Treatment Plant SWPPP”	December, 2001
Regional Transfer Station	Solid waste transfer station (previously a landfill)	“Port Angeles Transfer Station/ Landfill Stormwater Pollution Prevention Plan”	Updated November 2012
Electric Utility Handling & Warehouse Building	Electric transformer storage and handling	“Spill Prevention Control and Countermeasure Plan”	Completed November 2003
CSO Facilities	Combined sewer collection, storage, and conveyance, and discharge	“Amendment to the 2006 CSO Facilities Reduction Plan”	Updated August 2012

Several of these facilities are regulated by their own environmental permits. See the table below for a listing of individual stormwater or other related permits.

**Table 2: Existing Individual Stormwater and Stormwater-Related Permits**

<b>Facility Name</b>	<b>Type of Permit</b>	<b>Permit Number</b>
Regional Transfer Station	NPDES General Permit for Stormwater Discharges Associated with Industrial Activities	WAR005613
City of Port Angeles Municipal Solid Waste Facility	Solid Waste Handling Facility Permit	SLW98-0001
Port Angeles Wastewater Treatment Plant/CSO Facilities	NPDES Waste Discharge Permit	WA0023973

In addition, there are approximately twenty non-City-owned facilities in Port Angeles that are regulated by NPDES General Industrial Stormwater Discharge Permits. Because these facilities are regulated directly by the Department of Ecology, their individual stormwater collection infrastructure is not considered part of the municipal stormwater system, although in some cases they do discharge into it.

***j) Recordkeeping***

The City will maintain records of inspections and maintenance or repair activities conducted.

***k) Stormwater NPDES and Capital Needs Assessment***

The City retained Herrera Environmental Consultants to complete a comprehensive study of the Stormwater Utility. This project utilized Ecology grant funding to develop a functional resourcing and financial analysis of the staffing, equipment and funding mechanisms necessary to meet the requirements outlined in the NPDES Phase II Municipal Stormwater Permit. Additionally, the analysis included a capital facilities program (CFP) component defining a range of funding support options for CFP projects. The analysis assessed the gap between current resources and the resources necessary to meet operating costs and capital costs under the current and future (2013-2018) Phase II Permit regulatory requirements. In 2012, the City’s stormwater rate was \$6 per month for each equivalent residential unit (ERU). This analysis showed a funding gap and resulted in sequential stormwater rate increases to cover necessary expenses:

- Effective January 2016. \$14 per month for each ERU

-Effective January 2017. \$16 per month for each ERU

This revenue is not sufficient to implement all projects in the 6 year Capital Facilities Plan. The City plans to evaluate the Stormwater Utility revenues and obligations again in 2017 to seek public input.

## **Documents Referenced**

“City of Port Angeles Maintenance Facility SWPPP” City of Port Angeles, 2013

“Amendment to the 2006 CSO facilities Reduction Plan” City of Port Angeles, June 2007

“Illicit Discharge Detection and Elimination – A Guidance Manual for Program Development and Technical Assessments” Center for Watershed Protection, October 2004

“Port Angeles Transfer Station/ Landfill Stormwater Pollution Prevention Plan” City of Port Angeles, June 2010

“Spill Prevention Control and Countermeasure Plan” (Electric Utility) City of Port Angeles, November 2003

“Western Washington Phase II Municipal Stormwater Permit” State of Washington Department of Ecology, Issued August 1, 2013 and Modified on January 2015.

“Washington State Department of Ecology 2005 Stormwater Management Manual for Western Washington”

“City of Port Angeles Municipal Code Title 13.63, Stormwater Ordinance” last modified in August 2009

“City of Port Angeles Urban Service Standards and Guidelines” last modified in 2010

“Stormwater NPDES and Capital Needs Assessment” Prepared for City of Port Angeles December 2012

**SWMP Appendix A**  
**Public Outreach Plan Activity Matrix**

2016 Planned Activities / Events	Location(s)	City Personnel	Target Audience	Contact Information (other groups)	Subject Area(s)
Library "Science, Technology, Engineering & Math Career Day"	Port Angeles Library	Jonathan Boehme	5th grade Port Angeles students	<a href="mailto:jboehme@cityofpa.us">jboehme@cityofpa.us</a>	LID - Watersheds, Rain gardens, pervious pavement, pollution prevention
KONP Home Show	Port Angeles High School Gymnasium	Lucio Baack, Bob Kajfasz	General public	<a href="mailto:lbaack@cityofpa.us">lbaack@cityofpa.us</a>	IDDE Program, LID Rain Garden Rebate Program, Natural Yard Care
Flier	Port Angeles	Lucio Baack	Peabody Creek West Basin Residents	<a href="mailto:jboehme@cityofpa.us">jboehme@cityofpa.us</a>	Water quality project information
County Fair	Port Angeles	Jonathan Boehme, Lucio Baack Helen Freilich, Bob Kajfasz	General public	<a href="mailto:jboehme@cityofpa.us">jboehme@cityofpa.us</a>	Focusing on pet waste awareness, natural yardcare.
Library Skill Share Fair	Port Angeles	Jonathan Boehme	General public	<a href="mailto:jboehme@cityofpa.us">jboehme@cityofpa.us</a>	focusing on the benefits of installing a rain garden, City Rebate program.
Utility Bill Mailer	Port Angeles	Jonathan Boehme	General Public	<a href="mailto:jboehme@cityofpa.us">jboehme@cityofpa.us</a>	LID, Pollution Prevention Hotline
Business Stormwater Education	Site visits to businesses within the City	Jason Hart	Local businesses within the City	<a href="mailto:dfreed@cityofpa.us">dfreed@cityofpa.us</a>	IDDE, Pollution Prevention
B-Wet Grant support	Individual class rooms and Peabody Creek from NPS Visitor's Center to Creek outfall at the Harbor	Jonathan Boehme	4th and 5th grade students, teachers and parents in Port Angeles and Sequim School Districts	<a href="mailto:jboehme@cityofpa.us">jboehme@cityofpa.us</a>	Water quality and negative effects on water quality and biota from pet waste, fertilizers and pest control products and car washing
Local Cinemas	Deer Park	Jonathan Boehme	General public	<a href="mailto:jboehme@cityofpa.us">jboehme@cityofpa.us</a>	Pollution Prevention
Rain Garden Workshop	Port Angeles	Lucio Baack	Landscapers/ Contractors	<a href="mailto:jboehme@cityofpa.us">jboehme@cityofpa.us</a>	Rain Garden Rebate Program

**SWMP Appendix B**  
**Illicit Discharge Detection and Elimination (IDDE)**  
**Response Policy**



# PUBLIC WORKS & UTILITIES DEPARTMENT POLICY AND PROCEDURES

## ILLICIT DISCHARGE DETECTION and ELIMINATION (IDDE) RESPONSE PW- 0610

### 1.0 PURPOSE:

- 1.1 To establish a uniform procedure for IDDE response within the City of Port Angeles.

### 2.0 ORGANIZATIONS and SPECIFIC POSITIONS AFFECTED:

- 2.1 Public Works & Utilities Department staff
- 2.2 Key response personnel in order of response to pollution report:
  1. Stormwater Lead Worker Cell: 461-5174
  2. Streets Superintendent Office: 417-4825 Cell: 912-0260
  3. Assistant Stormwater Engineer Office: 417-4720
  4. Stormwater Engineer Office: 417-4811 Cell: 460-3456
  5. Source Control Coordinator Office: 417-4693 Cell: 808-6930
  6. Deputy Director of Public Works Office 417-4803 Cell: 808-3089

### 3.0 POLICY:

- 3.1 This policy will implement an ongoing program to detect and address non-stormwater discharges, including spills, and illicit connections into the City's municipal separate storm sewer system. It shall be followed throughout the Public Works and Utilities organization. The Stormwater Engineer is the authorized department representative for the implementation of this program and the maintenance of this policy.

### 4.0 SAFETY ASPECTS:

- 4.1 Follow all safety measures as promulgated in the Public Works and Utilities Department Accident Prevention Plan.
- 4.2 Do not enter private property without permission (If the property owner is unwilling to allow access, and access is necessary for the investigation, contact the legal department or stormwater engineer for assistance).

### 5.0 DEFINITIONS:

- 5.1 Illicit discharge: any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.
- 5.2 Small non-hazardous spills: Under 5 gallons of oil based products, paints or automotive fluids.
- 5.3 Large non-hazardous spills: Over 5 gallons of oil based products, paints or automotive fluids.
- 5.4 Hazardous or very large spills: Spills over 20 gallons of any chemical, flammable, or unknown substance. \* Gasoline is very flammable. Treat a gasoline spill of over five gallons as a hazardous spill.

- 5.5 A discharge which could constitute a threat to human health, welfare, or the environment:  
Large non-hazardous spills, hazardous or very large spills, or discharges exceeding thresholds in Section 7.3(3),
- 5.5 Dangerous system: A flooded stream system or a flooded large diameter culvert or manhole.

**6.0 EQUIPMENT FOR RESPONSE PERSONNEL:**

**Required Equipment:**

- Appropriate PPE (e.g., nitrile gloves, glasses, reflective vests, etc.)
- This SOP
- Hand Sanitizer

**Other Equipment As Needed:**

- System map
- Spill trailer or spill kit
- Sterile sample bottles

**7.0 PROCEDURES:**

**7.1 Illicit Discharge Contact Methods**

- a. The official number for the public or City staff to report suspected illicit discharges is:

Public Works Emergency and Afterhours Phone Number	360-417-4745
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- b. Illicit discharges can also be reported by email using the following address:

[illicit-discharge@cityofpa.us](mailto:illicit-discharge@cityofpa.us)

- c. Discharge reporting numbers and email addresses shall be posted on the City website.
- d. During normal working hours, the PWU clerical staff will receive calls and emails. For each call or email a CityWorks Service Request will be created and populated and forwarded to the key response personnel. . PWU clerical staff will be responsible for maintaining the official record of all such contacts. The report of an illicit discharge will also be directly made to one of the following staff personnel in the order listed:
  - Stormwater Leadworker
  - Streets Superintendent
  - Deputy Director of Operations
  - Stormwater Engineer
  - Source Control Coordinator

In addition, email reports shall be automatically distributed to all of the personnel

listed above.

- e. After normal working hours, the PWU on-call staff member will be responsible for handling the call, filling out the Illicit Discharge Contact Form (Appendix 8.1), doing the initial visual inspection of the incident, making initial containment if appropriate, and notifying management and requesting additional support when necessary. All recorded information shall be forwarded to the personnel listed in paragraph (d) no later than 08:00 A.M. the following workday.
- f. Illicit discharges or spills observed by City field personnel during the course of work should be immediately reported to their direct supervisor. In addition, City field personnel shall report the incident using one of the methods listed above to ensure that the key stormwater personnel are notified.

## 7.2 Priority Area Identification and Reconnaissance

- a. The Stormwater Engineer, shall be responsible for conducting a process for locating priority areas likely to have illicit discharges and/ or source control violations. This shall include at a minimum evaluating land uses and associated business/industrial activities present; areas where complaints have been registered in the past; and areas with storage of large quantities of materials that could result in spills.
- b. The lead organization for illicit discharge identification and field reconnaissance response shall be Operations Division, with the primary role for managing it being the Streets Section Superintendent. The Engineering Division shall provide technical support where appropriate. The responsibilities include:
  - (1) At a minimum, visually inspect all priority outfalls in the yearly Field Screening basin during dry weather conditions. Priority outfalls will be as designated by the Stormwater Engineer after consultation with the Streets Division Superintendent. Annually inspect and document the condition, sediment loading, blockages, and any other abnormal conditions for all priority culverts/outfalls.
  - (2) In addition, during dry weather, conduct stream reconnaissance for the purposes of verifying outfall locations, identifying previously unknown outfalls, and detecting illicit discharges. Stream reconnaissance will be conducted on one of the City's six stream systems or shoreline annually within the Port Angeles City limits.
  - (3) Flows suspected of containing illicit discharges due to the presence of odors, colors or sheens shall be tested. Testing will be done either in the field by trained personnel or by the COPA WW Lab. Test parameters include but are not limited to ammonia, surfactants, flouride, fecal coliform, pH, , turbidity, and temperature, . Testing will be performed by the lab within four hours of sample delivery, or by 10:00 am the next day, if the sample is delivered to the lab after 2:00 pm on any business day or on a weekend. Screening for illicit connections shall be conducted using: Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, Center for Watershed Protection, October 2004.

- (4) The results of the inspections and testing shall be documented and maintained on the Spill (Illicit Discharge Characterization) Field Sheet in Appendix 8.5 and input into the City's maintenance tracking software and GIS system to allow tracking of outfall locations, inspection dates, chemical tests conducted, and follow-up procedures implemented to correct any detected illicit discharge. The physical condition of the outfall shall also be noted during the inspections. Illicit discharge data will be used in the preparation of the annual report for the permit.
- c. Results from the program shall be compiled and analyzed by the Stormwater Engineer, who may request additional requirements be done to achieve the overall objectives of this element.

### 7.3 Illicit Discharge Response, Characterization, and Tracing

- a. The lead organization for illicit discharge response shall be Operations Division, with the primary role for managing being the Streets Division Superintendent. The Engineering Division shall provide technical support where appropriate.
- b. If the material is unknown, chemical or hazardous in nature contact the fire department.
- c. Containment. The qualified onsite responding personnel shall immediately assess a spill and determine if it is containable, recoverable, or neither. Attempt to contain and recover the material to the maximum extent practical using the procedure below, if feasible, safe to do so and the appropriate equipment is available. Block the nearby storm drains, so that the area impacted is minimized. If the appropriate equipment is not available, the material is unknown, chemical, or hazardous, wait for properly trained personnel to contain the materials.

#### Small non-hazardous spills

- Use a rag, damp cloth, or absorbent materials for general cleanup of liquids
- Use brooms or shovels for the general cleanup of dry materials
- If water is used, it must be collected and properly disposed of. The wash water cannot be allowed to enter the storm drain
- Dispose of any waste materials properly
- Clean or properly dispose of any equipment used to clean the spill

#### Large non-hazardous spills

- Use absorbent materials for general clean up of liquids
  - Use brooms, shovels or street sweepers for the general cleanup of dry materials
  - If water is used, it must be collected and properly disposed of. The wash water cannot be allowed to enter the storm drain
  - Clean or dispose of any equipment used to clean up the spill properly
- d. For hazardous or very large spills, chemical spills, or spills of unknown materials immediately contact the Fire Department, followed by the Streets Division Superintendent or Deputy Director of Operations.

e. Illicit discharges indicated by the presence of odors, colors or sheens shall be tested. Testing will be done either in the field by trained personnel or by the COPA WW Lab.. Test parameters include but are not limited to ammonia, surfactants, flouride, fecal coliform, pH, turbidity, and temperature. Screening for illicit connections shall be conducted consistent with the Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, Center for Watershed Protection, October 2004. The following additional guidance pertains:

- (1) The spill or illicit discharge will be characterized by the key response personnel, by the stormwater field crew or by on call staff if the discharge occurs after hours. The discharge will be characterized using Appendix 8.4 (Spill Characterization Field Sheet), visual observation and field testing as an unlikely, potential, suspect or obvious discharge. Characterization (or referral to the appropriate agency) shall occur within 7 days of any complaints, reports or monitoring information that indicates a potential illicit discharge, or shall occur immediately on the next business day for discharges deemed to be emergencies, urgent or severe.
- (2) Take a sample of the material in a sterile collection bottle and take the sample to the COPA WW lab for analysis.
- (3) The sample results should be compared to the following thresholds to determine if further IDDE investigation is necessary:

Indicator	Threshold	Comments
pH	<5 or > 10	Good indicator for industrial discharge
Ammonia	>5 mg/L	Good indicator of sanitary sewage, main ingredient in fertilizers
Detergents/ Surfactants	>1 mg/L	Excellent indicator of wash water
Fecal Coliform	>2000 CFU/100mL (Dry Weather) or >5000 CFU/100mL (Wet Weather)	Human sources include failing septics, wastewater leaks or cross-connections. Animal sources include pets, livestock, and wildlife.

f. Verifying and tracing the discharge shall be considered the initiation of the investigation and shall be performed within 21 days of a discharge characterization, unless tracing requires entry into a dangerous system, as defined in 5.5. If a dangerous system exists, verifying and tracing shall be performed when low flow conditions in the stormwater or stream system resume. The Stormwater Engineer shall determine when a dangerous system exists and shall document the delay and set the date to resume the investigation. In all cases, initial investigation shall be performed within 9 months of the discharge characterization. If the tracing

confirms an illicit connection, the connection shall be removed using the City's enforcement authority within 6 months.

Procedures for tracing the source of an illicit discharge include visual inspections, and when necessary, opening manholes, using mobile cameras, collecting and analyzing water samples, and/or other detailed inspection procedures. The equipment and methods described in "Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments", Chapter 13 shall be used to trace the spill or illicit discharge to its source. The following additional guidance pertains:

- (1) Review information collected when illicit discharge was initially identified (Spill Characterization Field Sheet).
  - (2) Consider storm drainage basin and land uses.
  - (3) Revisit outfall to verify reported discharge is still present.
  - (4) Contact COPA lab for determination of probable source.
  - (5) Survey the general area / surrounding properties to identify potential sources of the illicit discharge.
  - (6) Investigate illicit discharges using visual inspections of upstream points.
  - (7) Utilize M&O resources and equipment as required (traffic control, video truck, additional staff).
  - (8) Document investigation results for NPDES Permit compliance.
  - (9) If source cannot be found, add the location to a future inspection program.
- g. Results shall be documented and reported to the Deputy Director of Operations and the Stormwater Engineer.
- h. The Stormwater Engineer shall be responsible for administering the City's response to violations and ensuring consistency with City ordinances. All violation letters to property owners will be signed by the City Engineer level or higher. Technical assistance for eliminating the discharge; follow-up inspections; and escalating enforcement and legal actions if the discharge is not eliminated will be coordinated by the Stormwater Engineer.
- i. The IDDE Incident Closure Form will be completed by the personnel responsible for investigating the specific IDDE. This form is to be reviewed by the Stormwater Engineer. When the form is completed by operations personnel it shall be signed by the Deputy Director of Operations unless a violation letter has been issued, whereby the City Engineer shall sign. When the form is completed by engineering personnel it shall be signed by the City Engineer.

#### 7.4 Regulatory Reporting Requirements

- a. Within 24 hours all spills/ discharges which could constitute a threat to human health, welfare, or the environment shall be reported to Ecology regional office (Appendix 8.1).

- b. Immediately report spills or discharges which might cause bacterial contamination of marine waters such as discharges resulting from broken sewer line to Ecology regional office, and Department of Health, Shellfish Program. (Appendix 8.1).
- c.. Immediately report discharges of any size oil or other hazardous substance to Ecology and Washington Emergency Management Division (Appendix 8.1).
- d. Reportable spills/illicit discharges shall be reported to the appropriate regulatory agencies by the following personnel in the order listed:
  - Stormwater Leadworker
  - Streets Superintendent
  - Deputy Director of Operations
  - Stormwater Engineer
  - Source Control Coordinator

Reporting requirements are detailed in Appendix 8.1. If none of the personnel listed above can be reached, contact your supervisor for guidance. The Pollution Investigation Checklist shall be followed and returned to the Stormwater Engineer no later than 08:00 A.M. the following workday. If there is any doubt as to whether a spill is reportable, contact the appropriate regulatory agency for clarification.

#### 7.5 Field Screening

Each year field screening will be performed on average of 12% of the MS4. Percent of MS4 will be measured based on the combination of the number of catch basins and geographic area within City limits. Detection, response and elimination methods will be used as outlined in this policy.

#### 7.6 Public Education

The Stormwater Engineer shall conduct a program to inform City employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste. Acceptable methods to accomplish this provision include direct training, contract training, brochures, internet, mailers, etc.

The Source Control Coordinator will conduct site visits to target businesses to educate them on the proper requirements for stormwater discharges.

#### 7.7 IDDE Assessment

The Stormwater Engineer shall be responsible for program evaluation and assessment, including tracking the number and type of illicit discharges, including spills identified; inspections made; and any feedback received from public education efforts. A summary of this information shall be included in the City's annual report.

#### 7.8 Training for City Staff

The Streets Division Superintendent will be responsible for arranging for or conducting training requirements for the Streets and Stormwater workforce as well as on-call personnel.

The Stormwater Engineer will be responsible for arranging for or conducting

training for the Engineering Division staff and clerical staff for requirements needed to implement the policy contained herein. The following topics will be covered where appropriate:

<b>TOPIC</b>	<b>TARGET AUDIENCE</b>
Proper chain of contact for initial spill reporting	Clerical staff / on-call staff
Properly filling out the Spill Characterization Field Sheet and Pollution Investigation Checklist.	Field crews / on-call staff
Spill containment and response	Field crews / on-call staff
Simulated spill drill response, containment, and cleanup.	Stormwater Engineer, field crews, on-call staff, clerical staff
IDDE Characterization and Tracing	Stormwater Engineer, Streets Superintendent, Stormwater Leadworker, Deputy Director of Operations, Field Staff, On Call Staff
Requirements in this SOP	Stormwater Engineer, Streets Division, on-call staff, Clerical Staff

## **8.0 APPENDIX:**

- 8.1 Combined Contact & Pollution Investigation Checklist
- 8.2 Public Works & Utilities Emergency Call List for Spill/ Pollution Incidents
- 8.3 Spill Response (Discharge Type) Chart
- 8.4 Spill Characterization Field Sheet and Identification Figures
- 8.5 Stormwater Sampling Checklist
- 8.6 IDDE Incident Closure Form



# APPENDIX 8.1

## COMBINED CONTACT & POLLUTION INVESTIGATION CHECKLIST

This checklist is to be used as an aid in preparing your report and included with the report when forwarded to the Public Works and Utilities Department.

### SPILL INVESTIGATION

1. Date and time notification received or spill discovered \_\_\_\_\_

2. Name of City employee that discovered/reported the spill \_\_\_\_\_

3. If spill reported by public, name of staff reported to: \_\_\_\_\_

By: \_\_\_\_\_

(Reporting Citizen's Name) (Address) (Phone #)

4. Call to Key Response Personnel received by \_\_\_\_\_  
(This is the key response person who will report to the incident)

5. Notification of Authorities: (See PW 0808\_04 Emergency Call List)

Required when a discharge or spill could constitute a threat to human health, welfare, or the environment.

Oil Spill	Phone No.	Name	Date	Time
<b>(Petroleum or Hazardous Materials)</b>				
WS Emergency Management				
Division (24hrs)-Immediate	<u>1-800-258-5990</u>	_____		
National Response Center-Immediate	<u>1-800-424-8802</u>	_____		
Ecology Regional Office-SW-24 Hrs	<u>360-407-6300</u>	_____		
City of PA Stormwater Eng.-24 Hrs	<u>360-460-3456</u>	_____		
<b>Bacterial-</b>				
<b>WWTP or Collections System Failure</b>				
Ecology Regional Office-SW-Immediate	<u>360-407-6300</u>	_____		
WS DOH Shelfish Protection-Immediate	<u>360-236-3330</u>	_____		
(If no answer)	<u>360-786-4183</u>	_____		
Clallam County Enviro Health-24 Hrs	<u>360-417-2415</u>	_____		
City of PA Stormwater Eng.-24 Hrs	<u>360-460-3456</u>	_____		

ERTS # \_\_\_\_\_

6. Spill/ Discharge Scene:

a) Location/Address \_\_\_\_\_

b) Time of arrival \_\_\_\_\_

7. Type and Amount of pollutant and discharge \_\_\_\_\_

8. In the judgment of the qualified onsite personnel, is the spill Containable? Recoverable? Or Neither? (Circle)

Initial Containment Measures \_\_\_\_\_

9. Ultimate discharge:

a) Date/Time discharge terminated \_\_\_\_\_

b) Date/Time cleanup commenced \_\_\_\_\_

c) Final Cleanup measures \_\_\_\_\_

d) Date/Time cleanup completed \_\_\_\_\_

10. Additional remarks (as necessary) \_\_\_\_\_

Signature \_\_\_\_\_ Title \_\_\_\_\_

**APPENDIX 8.2  
PUBLIC WORKS & UTILITIES  
EMERGENCY CALL LIST**

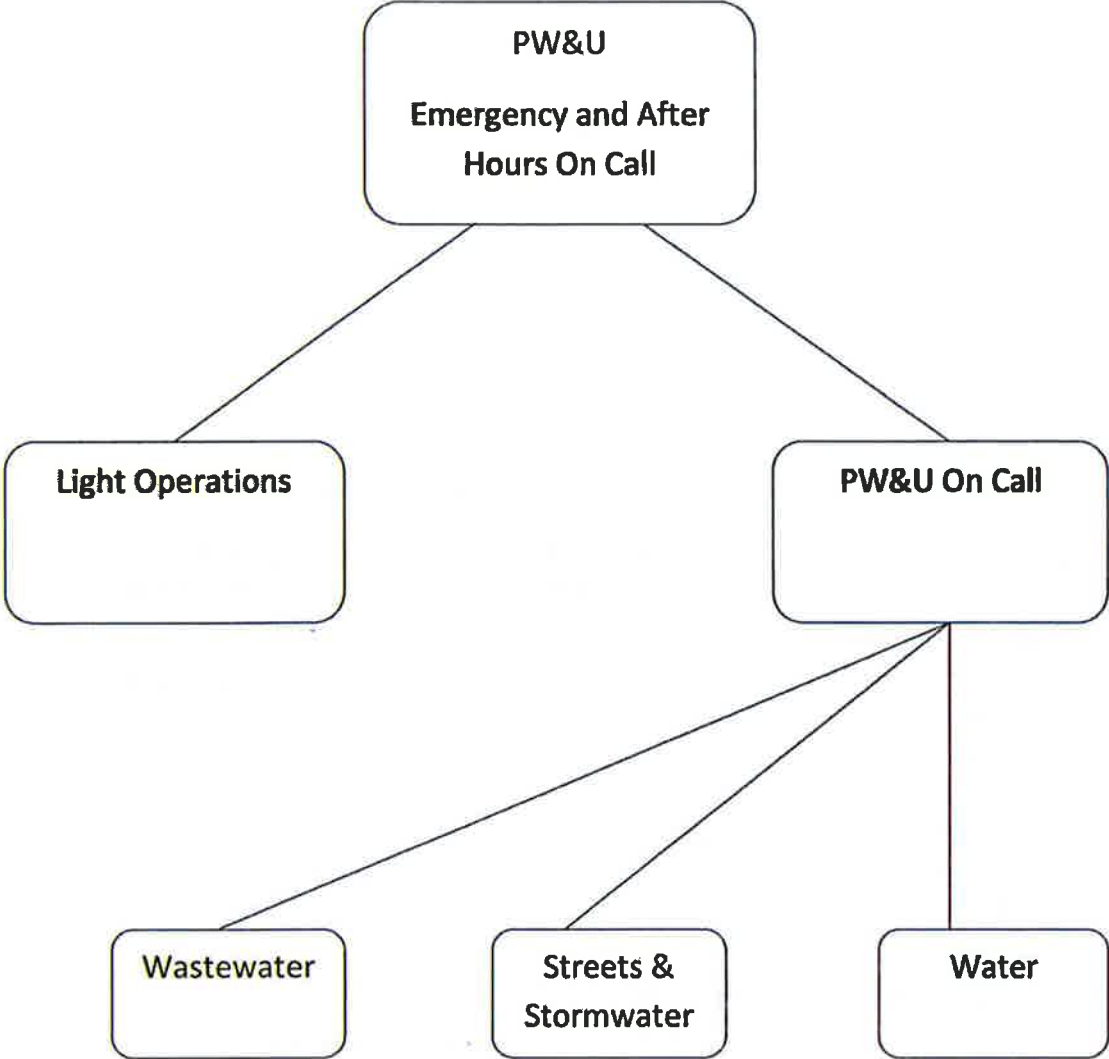
**FOR POLLUTION INCIDENTS**

The following phone/checklist is for the investigation and notification of the proper agencies of a pollution incident. By providing the applicable information, an accurate, orderly investigation and record will be assured. This checklist is to be used as an aid in preparing a final report and shall be included with the report when forwarded to the Public Works & Utilities Director.

<b>City of Port Angeles</b>	<b>Contact Person</b>	<b>Phone Nos.</b>
Street/Stormwater Division	1) Eric Wheatley  2) Mike Brockopp  3) Guy Wehr  4) Street/Stormwater On-Call	Work: 360-417-4825 Cell: 360- 912-0260  Work: 360-565-3854 Cell: 360-461-5174 Work: 360-417-4827 Cell: 360-460-9676  Cell: 360-477-1260
Stormwater Engineer	Jonathan Boehme	Work: 417-4811 Cell: 460-3456
Wastewater Collection	1) Jeff D. Young  2) Jay Divelbiss	Work: 360-417-4845 Cell: 360-461-1044 Work: 360-417-4845 Cell: 360-460-3976
Wastewater Treatment Plant	1) Jeff D. Young  2) Gary Richmond  3) WWTP on-call	Work: 360-417-4845 Cell: 360-461-1044  Work: 360-417-4845 Cell: 360-808-4757 Cell: 360461-0111
Deputy Director of Operations	Mike Puntenney	Work: 360-417-4803 Cell: 360-808-3089
Fire Department	1) Coral Wheeler	Work: 360-417-4650 Dispatch: 360-417-4797

<b>Agency</b>	<b>Contact Person</b>	<b>Phone Nos.</b>
WS Department of Ecology Water Quality, SW Regional Office.  <i>Notification shall be provided not later than 24 hours from the time the Permittee becomes aware of the circumstances. If this information is provided orally, a written submission covering these points shall be provided within five (5) days of the time the Permittee becomes aware of the circumstances, unless the Department waives or extends this requirement on a case-by-case basis.</i>	24 Hour Spill Reporting	360-407-6300
WS Department of Health Shellfish/Marine Division	Dept. of Health Shellfish Program – Appropriate Person: Mark Toy	360-236-3306  Page: 360-786-4183 (After hours only)
Clallam County Department of Health	Andy Brastad	360-417-2415 Fax: 417-2313
Feiro Marine Lab (Water intake at mouth of Peabody Creek)		360-417-6254
Lower Elwha Klallam Tribe	Matt Beirne	360-457-4012 ext 12
Port of Port Angeles	Randy Brackett 24 Hours	360-417-3446 360-457-1909

**APPENDIX 8.3**



## APPENDIX 8.4 - SPILL (ILLICIT DISCHARGE) CHARACTERIZATION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID:	
Incident Date / Today's Date:		Time (Military):	
Investigators:		Form Completed by:	
Temperature (°F):	Rainfall (in.):	Last 24 hours:	Last 48 hours:
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		<input type="checkbox"/> Other: _____	
<input type="checkbox"/> Commercial		<input type="checkbox"/> Known Industries: _____	
Notes (e.g., origin of outfall, suspected violator information, if known):			

### Section 2: Outfall Description – Skip this section if spill occurs in the public right of way or on private property

LOCATION	MATERIAL	SHAPE	DIMENSION (IN.)	SUBMERGED	
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____  Depth: _____ Top Width: _____ Bottom Width: _____	<b>In Water:</b> <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully <b>With Sediment:</b> <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____			
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>				
Flow Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If Present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization - Skip this section if spill occurs in the public right of way or on private property

FIELD DATA FOR FLOWING OUTFALLS			
PARAMETER	RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Bottle
	Time to fill		Sec
<input type="checkbox"/> Flow #2	Flow depth		Tape Measure
	Flow width	_____ ' _____ "	Ft, In
	Measured length	_____ ' _____ "	Ft, In
	Time of travel		S
Temperature – field measure		°F	Thermometer
pH		pH Units	Test strip/Probe
Ammonia		Mg/L	Test strip – or lab

**Section 4: Physical Indicators for Flowing Spills or Illicit Discharges Only**

Are physical indicators present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Faint	<input type="checkbox"/> 2 – Easily detected	<input type="checkbox"/> 3 – Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Faint colors in sample bottle	<input type="checkbox"/> 2 – Clearly visible in sample bottle	<input type="checkbox"/> 3 – Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See Severity	<input type="checkbox"/> 1 – Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables – Does Not Include Trash!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Few/slight; origin not obvious	<input type="checkbox"/> 2 – Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Spills or Illicit Discharges**

Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Spill or Illicit Discharge Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one of more indicators with a severity of 3)  Obvious

**Section 7: Data Collection –Two samples must be taken for lab analysis. Test parameters are in 7.2 b 3 and 7.3 e**

1. Sample for the lab?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**



**Figure 8.4.1: Characterizing Submersion and Flow**

## Spill Characterization Field Sheet Section 2

If discharge is discovered in a pipe or open drainage ditch, fill in this section using Figure 8.4.1 above to determine the level of flow and submergence. If the discharge is discovered on the pavement or in a curb and gutter, skip to the bottom of Section 2 and determine if flow is present or not.

### Spill Characterization Field Sheet Section 3

Use this section if the discharge is coming from a pipe or ditch. If you have the Horiba water quality meter, test for temperature and pH and record the results. Ammonia is one of the parameters that will be tested by the City lab.

#### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS			
PARAMETER	RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter
	Time to fill		Sec
<input type="checkbox"/> Flow #2	Flow depth		In
	Flow width	____' ____"	Ft, In
	Measured length	____' ____"	Ft, In
	Time of travel		S
Temperature		°F	Thermometer
pH		pH Units	Test strip/Probe
Ammonia		mg/L	Test strip

Figure 8.4.2: Section 3 of the ORI Field Sheet

### Spill Characterization Field Sheet Section 4

#### Odor

Section 4 asks for a description of any odors that emanate from the outfall and an associated severity score. Since noses have different sensitivities, the entire field crew should reach consensus about whether an odor is present and how severe it is. A severity score of one means that the odor is faint or the crew cannot agree on its presence or origin. A score of two indicates a moderate odor within the pipe. A score of three is assigned if the odor is so strong that the crew smells it a considerable distance away from the outfall.

#### Tip

Make sure the origin of the odor is the outfall. Sometimes shrubs, trash or carrion, or even the spray paint used to mark the outfall can confuse the noses of field crews.

## **Color**

The color of the discharge, which can be clear, slightly tinted, or intense is recorded next. Color can be quantitatively analyzed in the lab, but the spill characterization field sheet only asks for a visual assessment of the discharge color and its intensity. The best way to measure color is to collect the discharge in a clear sample bottle and hold it up to the light (Figure 8.4.3).

Field crews should also look for downstream plumes of color that appear to be associated with the outfall. Figure 8.4.4 illustrates the spectrum of colors that may be encountered during a spill investigation, and offers insight on how to rank the relative intensity or strength of discharge color. Color often helps identify industrial discharges.

## **Turbidity**

The spill characterization field sheet asks for a visual estimate of the turbidity of the discharge, which is a measure of the cloudiness of the water. Like color, turbidity is best observed in a clear sample bottle, and can be quantitatively measured using field probes. Crews should also look for turbidity in the plunge pool below the outfall, and note any downstream turbidity plumes that appear to be related to the outfall. Field crews can sometimes confuse turbidity with color, which are related but are not the same. Remember, turbidity is a measure of how easily light can penetrate through the sample bottle, whereas color is defined by the tint or intensity of the color observed. Figure 8.4.4 provides some examples of how to distinguish turbidity from color, and how to rank its relative severity. Also, under high intensity or long duration rainfall, Port Angeles streams will be turbid from natural processes upstream. If turbid water is encountered in the stream, investigate waters upstream to determine the source.



**Figure 8.4.3: Using a sample bottle to estimate color and turbidity**







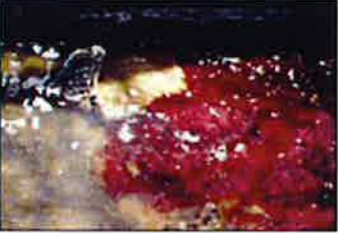





 <p>Color: Brown; Severity: 2 Turbidity Severity: 2</p>	 <p>Color: Blue-green; Severity: 3 Turbidity Severity: 2</p>	 <p>Highly Turbid Discharge Color: Brown; Severity: 3 Turbidity Severity: 3</p>
 <p>Sewage Discharge Color: 3 Turbidity: 3</p>	 <p>Paint Color: White; Severity: 3 Turbidity: 3</p>	 <p>Industrial Discharge Color: Green; Severity: 3 Turbidity Severity: 3</p>
 <p>Blood Color: Red; Severity: 3 Turbidity Severity: None</p>	 <p>Failing Septic System: Turbidity Severity: 3</p>	 <p>Turbidity in Downstream Plume Turbidity Severity: 2 (also confirm with sample bottle)</p>
 <p>High Turbidity in Pool Turbidity Severity: 2 (Confirm with sample bottle)</p>	 <p>Iron Floc Color: Reddish Orange; Severity: 3 (Often associated with a natural source)</p>	 <p>Slight Turbidity Turbidity: 1 (Difficult to interpret this observation; May be natural or an illicit discharge)</p>
<p>Construction Site Discharge Turbidity Severity: 3</p>	 <p>Discharge of Rinse from Floor Sanding (Found during wet weather) Turbidity Severity: 3</p>	

Figure 8.4.4: Interpreting Color and Turbidity

## Floatables

The last sensory indicator is the presence of any floatable materials in the discharge or the plunge pool below. Sewage, oil sheen, and suds are all examples of floatable indicators; trash and debris are generally not in the context of the Outfall Reconnaissance Inventory (ORI). The presence of floatable materials is determined visually, and some guidelines for ranking their severity are provided in Figure 8.4.5, and described below.

If you think the floatable is sewage, you should automatically assign it a severity score of three since no other source looks quite like it. Surface oil sheens are ranked based on their thickness and coverage. In some cases, surface sheens may not be related to oil discharges, but instead are created by in-stream processes, such as shown in Figure 8.4.6. A thick or swirling sheen associated with a petroleum-like odor may be diagnostic of an oil discharge.

Suds are rated based on their foaminess and staying power. A severity score of three is designated for thick foam that travels many feet before breaking up. Suds that break up quickly may simply reflect water turbulence, and do not necessarily have an illicit origin. Indeed, some streams have naturally occurring foams due to the decay of organic matter. On the other hand, suds that are accompanied by a strong organic or sewage-like odor may indicate a sanitary sewer leak or connection. If the suds have a fragrant odor, they may indicate a sanitary sewer leak or connection. If the suds have a fragrant odor, they may indicate the presence of laundry water or similar wash waters.

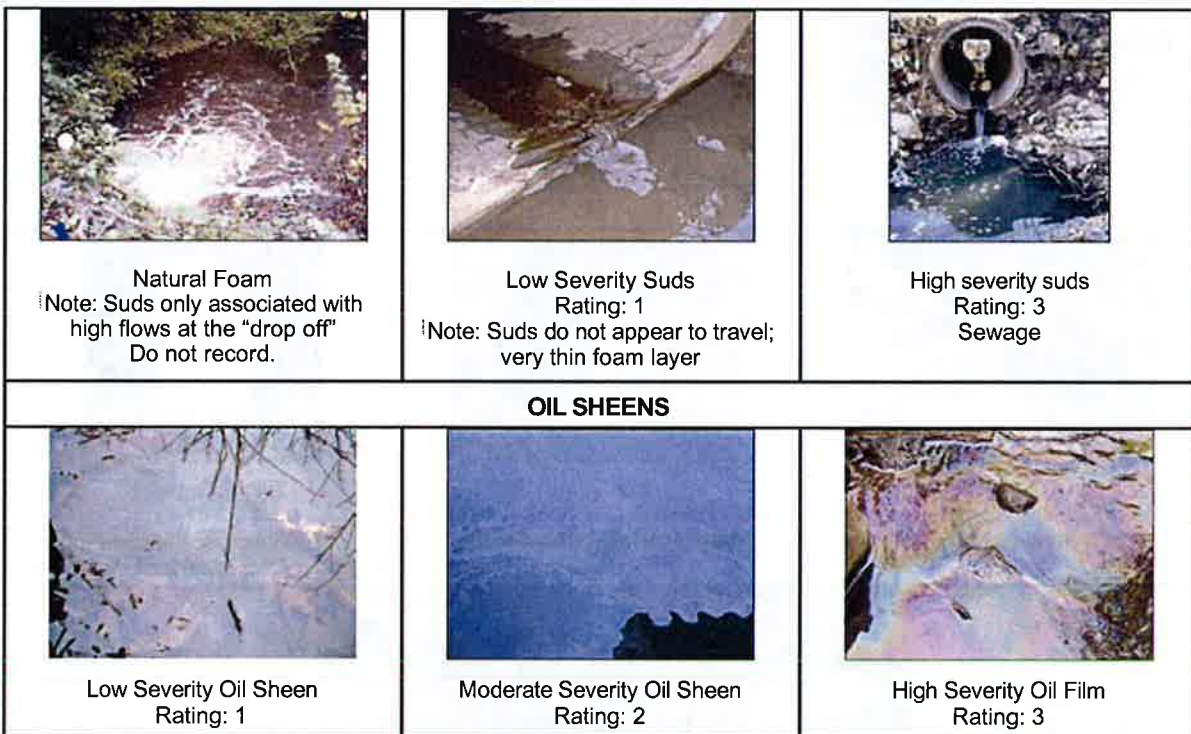


Figure 8.4.5: Determining the Severity of Floatables

SUDS



**Figure 8.4.6: Synthetic versus Natural Sheen (a) Sheen from bacteria such as iron floc forms a sheet-like film that cracks if disturbed (b) Synthetic oil forms a swirling pattern**

### **Sample Collection Field Sheet Section 5**

Section 5 of the ORI field sheet examines physical indicators found at both flowing and non-flowing outfalls that can reveal the impact of past discharges. Physical indicators include outfall damage, outfall deposits or stains, abnormal vegetation growth, poor pool quality and benthic growth on pipe surfaces. Common examples of physical indicators are shown in Figures 8.4.7 and 8.4.8. Many of these physical conditions can indicate that an intermittent or transitory discharge has occurred in the past, even if the pipe is not currently flowing. Physical indicators are not ranked according to their severity, because they are often subtle, difficult to interpret and could be caused by other sources. Still physical indicators can provide strong clues about the discharge history of a storm water outfall, particularly if other discharge indicators accompany them.

 <p>Bacterial growth at this outfall indicates nutrient enrichment and a likely sewage source.</p>	 <p>This bright red bacterial growth often indicates high manganese and iron concentrations. Surprisingly, it is not typically associated with illicit discharges.</p>	 <p>Sporalitis filamentous bacteria, also known as "sewage fungus" can be used to track down sanitary sewer leaks.</p>
 <p>Algal mats on lakes indicate eutrophication. Several sources can cause this problem. Investigate potential illicit sources.</p>	 <p>Illicit discharges or excessive nutrient application can lead to extreme algal growth on stream beds.</p>	 <p>The drainage to this outfall most likely has a high nutrient concentration. The cause may be an illicit discharge, but may be excessive use of lawn chemicals.</p>
 <p>This brownish algae indicates an elevated nutrient level.</p>		

**Figure 8.4.7: Interpreting Benthic and Other Biotic Indicators**

 <p>Reddish staining on the rocks below this outfall indicate high iron concentrations.</p>	 <p>Toilet paper directly below the storm drain outlet.</p>	 <p>Watershed Protection??</p>
 <p>Trash is not an indicator of illicit discharges, but should be noted.</p>	 <p>Staining at the base of the outfall may indicate a persistent, intermittent discharge.</p>	 <p>Excessive vegetation may indicate enriched flows associated with sewage.</p>
 <p>Brownish stain of unclear origin. May be from degradation of the brick infrastructure.</p>	 <p>Cracked rock below the outfall may indicate an Intermittent discharge.</p>	 <p>Poor pool quality. Consider sampling from the pool to determine origin.</p>

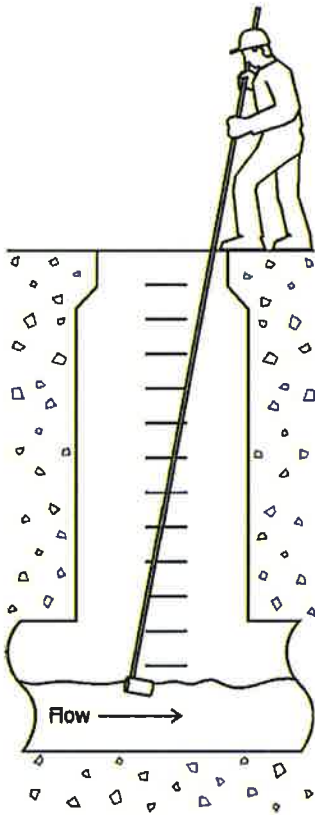
Figure 8.4.8

**Typical Findings at Both Flowing and Non-Flowing Outfalls**

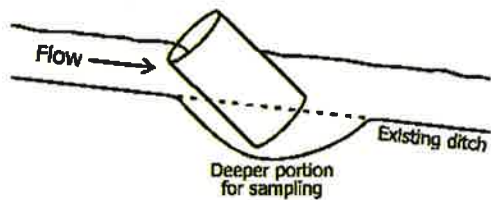
## Appendix 8.5 – Stormwater Sampling Checklist

### General Sampling Techniques

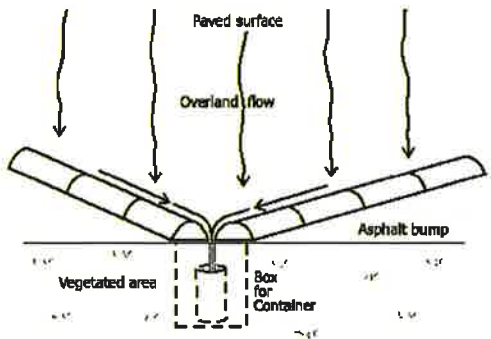
- If possible, notify the wastewater lab ahead of an illicit discharge investigation, a stream survey or a priority outfall survey so they will be aware that timely testing may be required.
- Collect two sample bottles for each sample site from the lab. Lab note: for fecal coliform samples: Bacteria sample containers should be 250-mL or 500mL pre-autoclaved (sterilized) polypropylene bottles with aluminum foil wrapped caps used to preserve sterility near the bottle opening. No preservative should be added. However, if sampling near a major road or highway, EDTA should be added to neutralize the high metals
- Prepare and carry a small sample cooler with ice.
- When collecting the sample:
  - Safety is most important. If a trip hazard is present or if there is deep, or swift water, samples should be taken with a partner. Do not enter any manhole or long culvert, unless you have been trained to enter confined spaces.
  - Wear disposable powder free gloves.
  - The sample should be collected by hand (grab sample) or with sample bottle attached to an extension pole. Samples cannot be pumped or transferred from container to container (dipper).
  - Care should be used at all times to avoid contamination of the inside of the sample bottle cap. (Do not touch the inside of the bottle cap with your hands, or place the open side on the ground.)
  - Do not rinse the bottle.
  - Do not disturb sediment from the stream bed, pipe or manhole. If the flow is too shallow to take a sample without sediment, the flow can be dammed to create a deep spot, or the ditch can be deepened with a shovel to create a small sampling pocket. See examples below.
  - Always collect samples from the active part of the stream or pipe flow.
  - Face the opening of the bottle upstream (or into the tidal flow in marine water).
  - Plunge the sample bottle to mid flow depth and sweep up.
  - Leave ½ inch headspace in the bottle for mixing.
  - As soon as the sample is collected, cap the bottle and label it.
  - Immediately store in a cooler with ice.
  - Deliver to the lab within 6 hours.



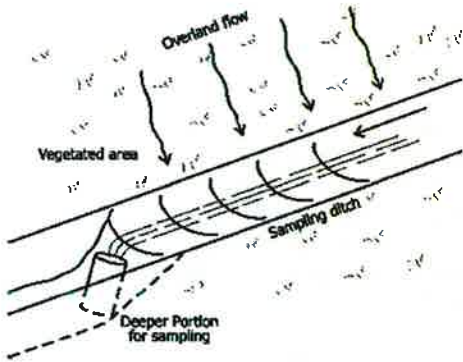
When sampling from a manhole, use a pole to safely sample from above ground. Avoid touching the sides of the manhole or pipes with the bottle to prevent contamination. Place the opening of the bottle upstream so that the flow enters the bottle directly.



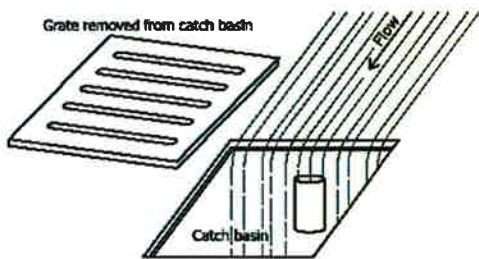
Deepening an existing ditch can allow samples to be collected directly into bottles in some cases. Be careful not to stir up solids from the sides or bottom of the ditch



Overland flow on paved areas can be sampled by constructing asphalt or concrete bumps to collect and concentrate the flow. A box positioned below ground surface in the paved area or the edge of an unpaved area can provide a place to collect samples directly into bottles.



Overland flow from vegetated areas can be sampled by constructing a shallow ditch to intercept the runoff and a deepened area to place bottles to catch the runoff.



Runoff entering a catch basin can sometimes be collected directly into bottles by removing the grate and allowing the runoff to fall into the bottles.



Do not touch openings of bottles. Keep bottles clean to prevent contamination.



Do not allow bottle lids to touch ground. Keep lids clean to prevent contamination.



Do not attach a bottle to a pole for sampling in manholes or when a hand sample would be in stagnant water. A boathook is used in this example and the bottle is attached to it with filament strapping tape.



Do not sample in stagnant areas with little flow. Do not stir up bottom sediments or allow foreign materials to enter the sample bottle. (Do be careful to grab a clean sample in cases where stormwater runoff is shallow.) If the runoff is so shallow that it is not possible to sample without the sample being contaminated in the process, then find an alternative way to sample.



If the water is too shallow to sample with the bottle upright on the pole, try taping it on sideways, but tilted up slightly.



Do not sample with the bottle opening facing downstream, when using a pole or when sampling by hand. Water flowing past your container, pole, or hand and into the container can be contaminated by such contact.



Do not allow water to overflow the bottle, particularly not for sample bottles with preservative. Oil and grease samples should be collected from water falling into the bottle when possible, or otherwise in a single swoop.




Do sample with the opening of the bottle facing upstream, into the flow so the water will enter directly into the bottle. This is true when sampling either by hand or with a pole. Do sample water that is rapidly flowing rather than stagnant.



Do collect samples without overfilling the bottle.

Appendix 8.6 – IDDE Incident Closure Form

 <b>IDDE INCIDENT CLOSURE FORM</b>		
Initial investigation date:	Title:	Investigators:
Cityworks WO#:		
<input type="checkbox"/> No investigation made:	Reason:	
<input type="checkbox"/> Referred to different department/agency:	Department/Agency:	
<input type="checkbox"/> Investigated: No action necessary		
<input type="checkbox"/> Investigated: Requires action	<input type="checkbox"/> Report to Ecology ERTS #	
<input type="checkbox"/> Enforcement Required?	<input type="checkbox"/> Referred to Stormwater Engineering for Enforcement	
<b>Description of Event:</b>		
<b>Description or Actions Taken:</b>		
<b>Conclusion/Findings:</b>		
<b>Date of Case Closed:</b>		

X  
Deputy Director of Public Works & Utilities

**SWMP Appendix C**  
**NPDES Phase II Municipal Stormwater Permit**  
**Inter-Departmental Coordination Mechanisms**

# City of Port Angeles

## NPDES Phase II Municipal Stormwater Permit

### Inter-Departmental Coordination Mechanisms

#### Background

The Western Washington Phase II Municipal Stormwater Permit (NPDES permit or “Permit”) is a federal permit issued to municipalities which allows municipal stormwater systems to discharge to waters of the state. The NPDES (National Pollutant Discharge Elimination System) Permit includes broad ranging requirements which are implemented by various departments within the City, including Public Works, Parks & Recreation, Community & Economic Development (CED), Fire and Police.

Furthermore, it is a condition of the 2013 – 2018 NPDES permit (Section S5.A.5.b) that each jurisdiction develops a coordination mechanism to identify departmental responsibilities to eliminate barriers to compliance with the terms of the permit. These operating guidelines have been created to provide clarification of departmental roles and responsibilities for the purposes of complying with the NPDES permit.

#### Section 1. Name

The name of this group shall be known as the “Stormwater Permit Coordination Group (SWPCG)”.

#### Section 2. Purpose

The effective management of stormwater has an important role to play in reversing the ongoing degradation of wetlands, streams, harbors, and Strait of Juan de Fuca. The purpose of this group is to insure the fulfillment of the conditions of the City’s NPDES Permit by removing internal barriers to permit implementation and by requiring and empowering City departments to cooperate and coordinate with the City’s Stormwater Management Program. The SWPCG serves as the coordinating body.

#### Section 3. Mission

The NPDES permit is a broad ranging federal stormwater permit which requires citywide compliance, and as such, shall be viewed as a citywide permit. The mission of the SWPCG is to provide a coordinated, efficient and effective response to all Permit conditions. Each city department is subject to implementing compliance activities when applicable to that department. Each department has an important contribution to make in improving the quantity or quality of stormwater discharged under the Permit.

#### Section 4. Duration

The SWPCG shall continue indefinitely in order to preserve momentum and effectively manage the work required for Permit compliance.

## **Section 5. Membership**

The core membership of the SWPCG consists of members from the following departments: Public Works including Engineering and Operations Divisions, Parks & Recreation, CED, Fire, and Police, as well as the NPDES Permit Coordinator.

On behalf of the Public Works Department, the Permit Coordinator shall lead the group, in coordinating compliance with the NPDES permit. All departments responsible for complying with any portion of the NPDES permit shall work cooperatively with the lead department, responding and providing information in a timely manner, including accurate tracking and reporting data.

Each department, division, section, or workgroup engaging in any activities or programs that the Permit Coordinator determines may be subject to or could support compliance with the municipal permit is expected to comply with municipal permit requirements. Other City workgroups or departments may be added should current needs or future requirements call for expanded responsibility.

### **A. Coordination framework and expectations:**

1. The Permit Coordinator shall be responsible for coordinating the City's municipal permit compliance activities
2. Each departmental representative shall be familiar with all municipal permit requirements, particularly those applicable to their department or workgroup.
3. Each departmental representative may propose options for funding and staffing to meet municipal permit requirements.
4. Each departmental representative shall communicate regularly with department management on the status of applicable compliance activities.
5. The Permit Coordinator, in collaboration with departmental representatives, shall prepare and provide submittals to Ecology to comply with municipal permit requirements. Submittals include, but are not limited to, annual reports, stormwater management program (SWMP) plans, compliance reports and other submittals as required by Ecology.
6. Upon request from the Permit Coordinator, departmental representatives or other staff shall provide information regarding department-specific compliance activities in a timely manner. The Permit Coordinator shall indicate the timeline for any request and may extend the timeline at the request of the department representative if there is flexibility to do so.
7. The Permit Coordinator shall communicate as necessary with departmental representatives and other management about municipal permit requirements, the SWMP, and the status of the City's compliance.

Any Permit Coordinator responsibilities listed above may be delegated to appropriate staff, but the Permit Coordinator shall retain accountability to the City Engineer.

Signature authority for all documents related to the municipal permit that require an official signature shall reside with the Public Works Director, as delegated in a letter from the City Manager to Ecology on September 10, 2013.

**B. Non-compliance:**

All city departments are responsible for working with the NPDES Permit Coordinator to resolve instances of permit noncompliance, including:

1. Notifying the NPDES Permit Coordinator as soon as they become aware of any instance of non-compliance; and
2. Identifying steps and a timeline for resolving issues of non-compliance that will be identified in G3 or G20 notifications to Ecology.

**Section 6. Meetings**

Meetings shall be facilitated by the City Engineer or the Permit Coordinator. Meetings shall be open to any/all staff that need permit information or to share challenges to permit implementation. Meeting frequency, time, and location shall be set by the City Engineer or Permit Coordinator based on the need to meet in order to respond to policy, procedures or barriers to implementation.

**Section 7. Attendance Policy**

Attendance at the meetings is important to continue being an informed SWPCG member and to provide useful input into the process. Meeting attendance is expected of SWPCG members or a designee. If unable to attend a meeting, it is the member's responsibility to inform themselves on issues discussed in those meetings.

**Section 8. Departmental Responsibilities**

It is the responsibility of each department head to assign the duties and responsibilities to the pertinent members of their staff, as well as ensure they are being implemented correctly.

**A. Public Works**

The Public Works Department is responsible for the majority of the NPDES compliance efforts including Sections: S5.C.1 Public Education and Outreach, S5.C.2 Public Involvement, S5.C.3 Illicit Discharge Detection and Elimination, Section S5.C.4. Controlling Runoff from New Development, Redevelopment, and Construction Sites (for both public and private projects), and S5.C.5 Municipal Operations and Maintenance. These responsibilities include, but are not limited to:

*Engineering Division*

1. NPDES Permit coordination.
2. Program development appropriate/applicable to the department.
3. Annual reporting.
4. Development and submittal of the Stormwater Management Program Plan.
5. Serving as point of contact for the Department of Ecology regarding issues of the Permit.
6. Submitting G3 and G20 noncompliance notifications.

7. Updating codes, policies, plans and standards applicable to the Public Works Department for permit compliance.
8. Private stormwater facility maintenance verification.
9. Enforcement of maintenance or water quality violations.
10. Conducting, tracking, and reporting development review in compliance with adopted standards and policies.
11. Tracking, reporting and justifying any deviations (e.g. variances, exceptions etc.) from adopted stormwater development review standards.
12. Inspection of development sites.
13. Collection of final stormwater system record drawings for new development/redevelopment and distribution of them to designated GIS and Public Works staff.
14. Maintaining and updating stormwater system maps for both public and private facilities.
15. Collection and processing of maintenance covenants and operations and maintenance manuals for new development/redevelopment.

*Operations Division*

16. Inspection and maintenance of municipal stormwater components and facilities.
17. Illicit discharge/illicit connection detection and elimination.
18. Operations and maintenance procedures are in place and followed to reduce stormwater impacts to all lands owned and maintained by the City in accordance with the Ecology Stormwater Management Manual for Western Washington.

**C. Community & Economic Development**

CED is responsible for implementation of and compliance with portions of Section S5.C4 of the NPDES Permit entitled "Controlling Runoff from New Development, Redevelopment and Construction Sites". These responsibilities include, but are not limited to:

1. Updating codes, policies, plans, programs, procedures, and standards appropriate/applicable to CED for permit compliance.
2. Processing permit applications and collecting required documents for all building permits, including stormwater plans and erosion and sediment controls
3. Inspection of building sites for erosion and sediment controls as required by Ecology Stormwater Management Manual for Western Washington

**C. Parks & Recreation**

Parks is responsible for implementation of and compliance with portions of S5.C.3 Illicit Discharge Detection and Elimination and S5.C.5 Municipal Operations and Maintenance. These responsibilities include, but are not limited to:

1. Updating codes, policies, plans, programs, procedures, and standards appropriate/applicable to Parks for permit compliance.
2. Operations and maintenance procedures are in place and followed to reduce stormwater impacts to all lands owned and maintained by the City in accordance with the Ecology Stormwater Management Manual for Western Washington.

3. Report observations of illicit discharges to the Permit Coordinator or other designee

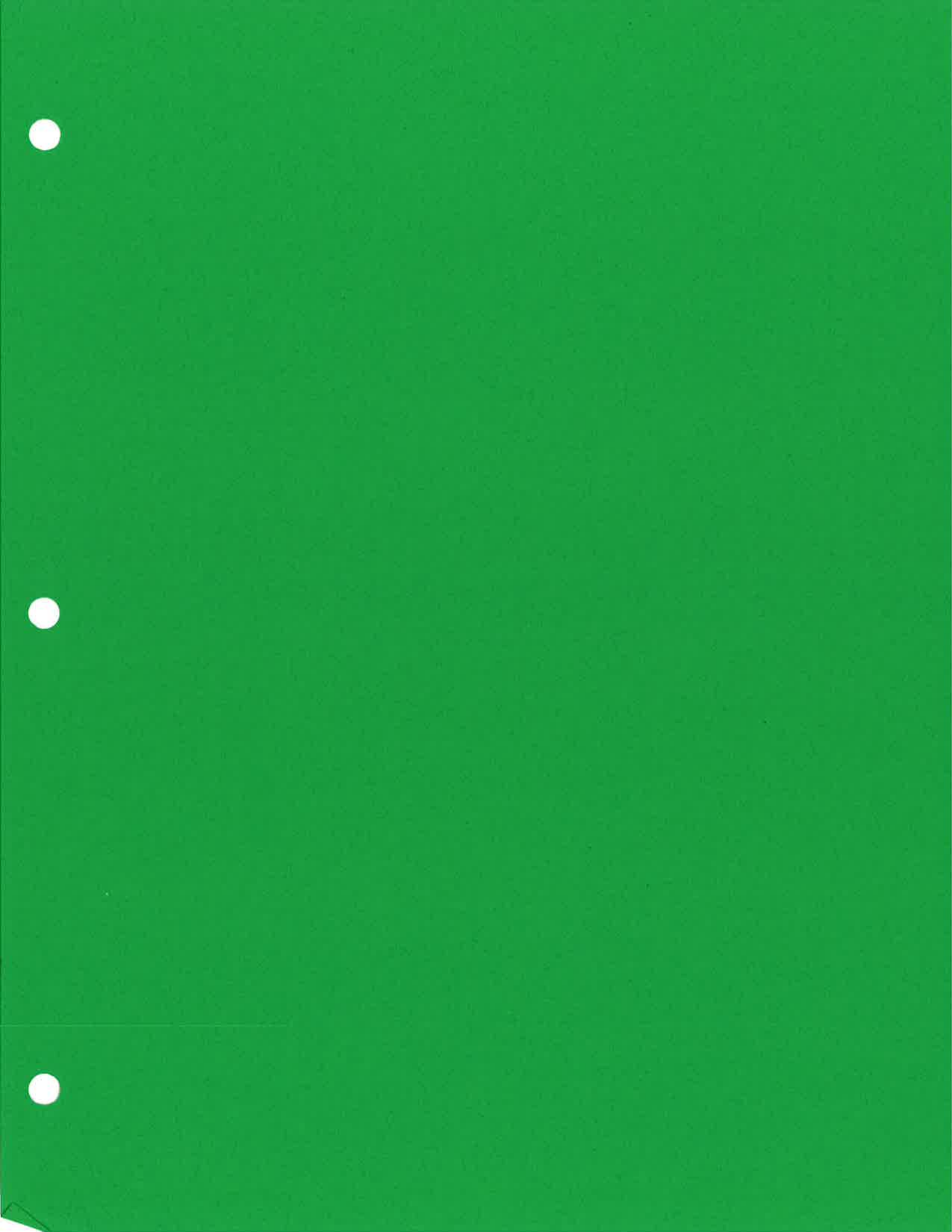
**D. Police and Fire**

The Police and Fire Departments has permit responsibilities under S5.C.3 Illicit Discharge Detection and Elimination. As field personnel, it is their responsibility to report observations of illicit discharges to the Permit Coordinator or other designee. They may also be called upon to assist in enforcement activities or during an illicit discharge event.

**Section 9. Permit Coordinator's Role**

The Permit Coordinator's role is to assure the integrity and fulfillment of the Permit. The Coordinator's role includes, but is not limited to:

1. Coordinate NPDES Permit compliance efforts for the City, including collecting tracking and reporting data from the different departments, as well as preparing and submitting annual reports and updates to the Stormwater Management Program Plan to the Department of Ecology.
2. Assist the different City departments in identifying and understanding their individual responsibilities for complying with the pertinent sections of the Permit.
3. Provide permit compliance guidance to individual departments who are developing or updating their departmental programs or procedures which are necessary to comply with Permit requirements.
4. Develop and implement programs and activities associated with the Public Works Department.
5. Work with individual departments to assist in resolving issues of non-compliance, as well as drafting and submitting G3 or G20 Non-Compliance Notification letters to Ecology.
6. Coordinate required illicit discharge detection and reporting training for all municipal field staff. Assist in other training activities where applicable.
7. Ensure policies are followed.
8. Manage communication and information exchange among the SWPCG. Determine meeting topics and agendas. Assist the City Engineer with meeting facilitation. Provide meeting materials to SWPCG before meetings and take meeting notes.



### **IDDE Screening Strategy**

In order for the City to comply with its NPDES phase II permit, which dictates that all permittees shall complete field screening for at least 40% of the MS4 system no later than December 31, 2017. The City of Port Angeles has elected to screen on average 12% of its MS4 system beginning in 2014. Screening basins were divided up by number of catch basins within the right of way; the summation of catch basins in the first three screening areas resulted in 36% of the cities total catch basins, with one more year to meet the 40% minimum screening goal set for phase II NPDES permittee. In order to use the cities resources as efficiently as possible a mix of residential and commercial zoning in each year's screening area was preferred; to take advantage of an existing business inspection program. The City's Pollution Prevention Specialist inspects businesses within the screening basin boundary for potential illicit connections or discharges, and provides education to the business owners and staff on pollution prevention. Streams and creeks within the yearly screening area are inspected for the purpose of verifying outfall locations, identifying previously unknown outfalls, and detecting illicit discharges. All catch basins within the screening area are inspected for odor, color, and floatables that are indicative of illicit discharges. Results of the catch basin inspection and in office basin investigation are used to select monitoring nodes, typically manholes. Primary indicator testing is performed at these manhole locations, and at the basins primary outfalls. If Primary indicator thresholds are exceeded, the area upstream from the monitoring site is flagged for further investigation; if no indicators are found then areas of the screening basin can quickly be eliminated from further screening. When a discharge has been detected and traced back to a specific branch of the MS4 network, methods such as die testing, smoke testing, or video inspections will be employed to trace the discharge to its source.

### **2015 – Field Screening Lauridsen, Basin 7:**

An office basin investigation of basin 7 was held in order to determine the most effective way to screen the basin. The basin is serviced by one primary outfall and three smaller outfalls. Because the majority of the basin flows out of a single outfall, the city elected to select strategic monitoring manholes, and to perform primary indicator testing at these locations. All Stormwater catch basins within basin 7 were also inspected for visual and olfactory indicators, and suspected illicit discharges were then flagged for further investigation. A portion of Peabody Creek was screened to verify outfall locations, identifying previously unknown outfalls, and to detect illicit discharges. Although the basin is primarily residential, the City's pollution prevention specialist focused his business inspection activity in the Lauridsen basin. Businesses with previous illicit discharges were revisited to ensure their continued compliance with the City's Stormwater ordinance. A CCTV inspection contractor was hired to clean and video Stormwater line within the basin, the videos were reviewed for suspected illicit discharges and unmarked laterals. City Stormwater operations staff was then tasked with smoke testing unmarked laterals found during the video inspections, to determine the presence of cross connections.

<b>Year Inspected:</b>	<b>Basin #:</b>	<b>Description:</b>	<b>Catch Basins (%):</b>
2014	1	Urbanized Peabody Basin	15
2015	7	Lauridsen Blvd. Basin	9
Planned 2016	2	Tumwater/Valley Basin	12

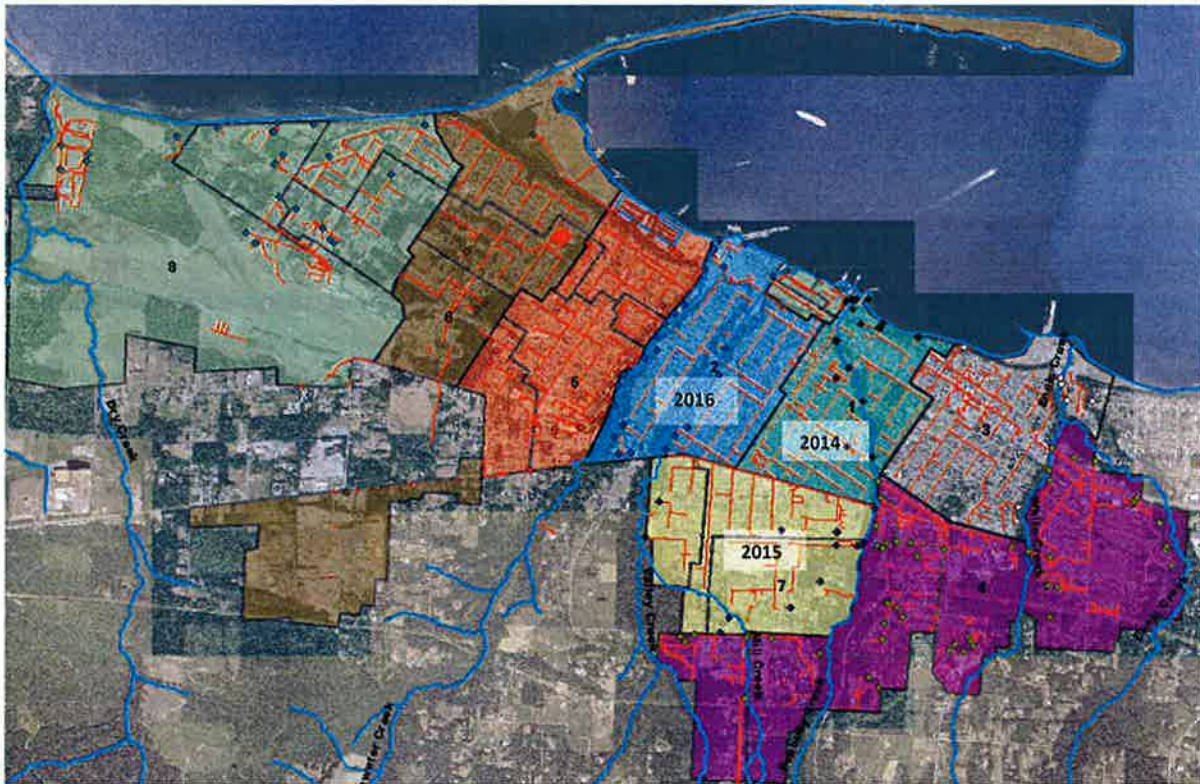


Figure 1 Basin Boundaries

Outfall Inspections	
Outfall	Location Description
# 52 Outfall to Valley Creek	West end of Fogarty St.
# 18585 Outfall to Valley Creek	West end of Forest Ave.
# 51 Outfall to Valley Creek	West end of Park Ave.
# 3418 Outfall 1.2c to Peabody Creek	North of Lauridsen Bridge, New Outfall with energy dissipator

Lauridsen Basin #7 Priority Manhole Locations	
Manhole	Location Description
482	At the intersection of Chase St. and Lauridsen Blvd.
557	At the intersection of Oak St. and Motor Ave.
558	At the intersection of Laurel St. and Motor Ave.
564	At the intersection of Lincoln St. and Lauridsen Blvd.
583	At the intersection of Vine St. and Orcas Ave.
586	At the intersection of Peabody St. and Lauridsen Blvd.
610	At the intersection of Eunice St. and Lauridsen Blvd.
25900	At the intersection of Race St. and Lauridsen Blvd.

**IDDE Event Inspection Listing**

Unique Identifier:	Actual Start:	Actual Finish:	How did you learn about the problem?	Threat Determination:	G3:	On Average Investigated Within 7 Days	Pollutant(s) Identified:	Correction/Elimination Method:	Location:	Address:	Comments:
2167	19-Mar-14	1-Nov-15	Business Inspection	Yes	Yes	Yes	Detergents & Surfactants	Behavior/Operations Modification	Clallam County Road Maintenance Shop Facility, Washdown pad.	1033 W. Lauridsen Blvd.	Business inspection on 3/19/14 raised questions if County Maintenance Wash Pad was connected to City MS4, instructed County to stop using facility. 4/15/2014 inspector confirmed the presence of a cross connection. 4/23/14 The County plugged the line connecting the wash facility to the MS4 and temporarily directed it to a vegetated area while a permanent fix was designed. 11/15 Permanent fix complete.
2552	24-Oct-14	15-Oct-15	Business Inspection	Yes	Yes	Yes	Trash	Behavior/Operations Modification	Safeway (Lincoln St.)	110 E 3rd St	10/24/2015 Safeway trash compactor leaking into private stormwater system draining to MS4. Initial cleaning activity was performed in November, however the trash compactor leaked again. Repairs to the trash compactor were made, parking lot Stormwater system line cleaning performed 3/12 to 3/13/15, temporary measures in place to prevent future discharge, new trash compactor scheduled for delivered April 2015. 10/12/15 Followup sampling event resulted in fecal counts below City thresholds. The City will continue to periodically monitor the site for illicit discharges.
2723	25-Sep-14	In Process	Outfall Inspection	Yes	Yes	No	Bacteria	NA	Outfall Under Lauridsen Blvd Bridge	Peabody 1.2 Outfall	Streamkeepers sampling results from 8/19/14 (3288 CFU/100ml, dry weather), and 9/16/14 (7680 CFU/100ml, wet weather), at Peabody outfall 1.2c triggered the Cities threshold for Fecal Coliform. Values above 2000 CFU/100ml in dry weather and 5000 CFU/100ml in wet weather indicate a need for further investigation. Upon receiving August and September test results from Streamkeeper on 9/25/14 JB reported the test results to Ecology. 10/9/14 indicator tracing performed, results inconclusive. 12/11/14 further indicator tracing performed, results indicated higher fecal counts from Laurel, Lincoln, Chase St. Stormwater mains. 7/20/15 Video inspection performed on Laurel, Lincoln, Chase St, unmarked laterals marked for further tracing. 10/5/15 City operations staff smoke tested to determine source of unmarked lateral lines, no cross connections found. 2016 send sample for PCR DNA test to determine if fecal counts are the result of human fecal contamination. Schedule further indicator tracing, to attempted to narrow down source of fecal contamination.
2818	12-Jan-15	21-Apr-15	Business Inspection	Yes	Yes	Yes	Trash	Behavior/Operations Modification	Albertson/Hagens Trash Compactor	114 E Lauridsen Blvd	01/12/2015 Inspection resulted in the finding of trash debris surrounding Albertson's trash Compactor, inspectors were unable to ascertain the cause of the spill, whether it was the compactor leaking again or possibly human error. Stormwater education was provided to Albertson's management. As this was a repeat violation, extra time was spent with the store manager to stress the importance of routine maintenance and inspection of their trash compactor.
2825	23-Feb-15	24-Feb-15	Business Inspection	No	Yes	Yes	Detergents & Surfactants	Behavior/Operations Modification	Parking lot of Olympic Electric	4230 Turnwater Truck Rte	2/23/15 during a routine inspection it was discovered that Olympic Electric has been intermittently washing their company vehicles on their sloped parking lot for quite some time with the washwater entering the MS4. J Hart provided stormwater education and the owner, Chuck Burkhardt, said he would discontinue the practice.
2895	11-Mar-15	11-Mar-15	Other Field Screening	No	No	Yes	pH from Saw Cutting	Behavior/Operations Modification	5th Street City Hall Parking Lot	321 East 5th Street	3/11/15 At approximately 10am <1/4 gallon of saw cut spoils were witnessed entering a City Hall parking lot CB. All spoils were contained in the CB and removed, no discharge to water body. Jonathan Boehme provided stormwater education to the contractor, the contractor committed to proactively managing saw cut spoils generated by his work activity.
2897	30-Jan-15	6-Mar-15	Business Inspection	No	Yes	No	Detergents & Surfactants	Behavior/Operations Modification	Sure Clean	1315 W 16th St	1/30/15 City was notified that Sure Clean Carpet Cleaners was dumping their wastewater into a Drywell. Further investigation was performed 2/11/15 confirming that Sure Clean was responsible, no connection to City MS4. This event was referred to another department, Ecology's groundwater program, and the business owner pledged to discontinue the practice.
2898	10-Mar-15	18-Mar-15	Pollution Hotline	No	No	Yes	NA	Education/Technical Assistance	William Shore Memorial Pool	225 E 5th St	3/10/15 The School District reported a stockpile of sand and a ripped bag of diatomaceous earth left at the back of the William Shore Memorial Pool. 3/17/15 Investigated, determined that this was not an illicit discharge, education regarding the Cities Stormwater policy was provided to William Shore Memorial Pool staff and the potential polluting materials were removed and stored in more appropriate locations.
2904	7-Apr-15	26-Jun-15	CB/MH Inspection	Yes	Yes	Yes	Sewage	Enforcement	Olympic Medical Center	939 Caroline St	4/7/15 Sewage waste discovered in storm manhole originating from the OMC. 4/8/15 City Stormwater Engineer notified OMC of this discovery, and offered to provide any necessary technical assistance as OMC staff attempt to trace and eliminate the connection. 5/5/15 OMC staff isolated the toilet and three sinks that were dumping to the stormwater system. 5/20/15 finished rerouting connections from the toilet and three sinks to the appropriate sanitary sewer drain. 6/26/15 All line previously affected by the cross connection were jetted and cleaned.
3048	16-Apr-15	17-Apr-15	Pollution Hotline	Yes	Yes	Yes	Food Waste Oil	Education/Technical Assistance	Red Lion Hotel Parking Lot	221 N Lincoln St	4/16/15 Caller reported grease bubbled up out of interceptor at the Red Lion Hotel and discharged to the parking lot catch basin for approximately 3 hours, intermittently (7:30am -10:30am 4-16-15). The Catch basin flows to the stormwater pond and eventually to Port Angeles harbor. The blockage was removed later that same day, the hotel hired a septic company to do cleanup. Hotel staff understand the reasoning behind the city's stormwater policies and will take action to prevent future events.
3090	17-Jun-15	17-Jun-15	Other Agency Referral	Yes	Yes	Yes	Diesel Fuel	Add/Improve Treatment BMP	Port Angeles Landfill	3501 W 18th St	6/17/15 A water truck used by Magnus Pacific (landfill cell stabilization contractor) had a broken diesel fuel line, less than 15 gallons of fuel was spilled. Stormwater education was provided by City staff at the time of the spill, the contractor understood the City's Stormwater ordinance and policies, and promptly implemented their spill prevention plan to avoid discharge of pollutants to water bodies of the State
3133	21-Jul-15	21-Jul-15	Staff Referral	Yes	Yes	Yes	pH from Saw Cutting	Behavior/Operations Modification	Marine Drive Main Replacement Project by Jordan Excavating, 900 Block Marine Drive	916 Marine Dr	7/21/15 Saw Cutting sub-contractor to Jordan Excavation on the Marine Drive Main Replacement Project failed to promptly vacuum up saw cut spoils, the slurry as a result was allowed to enter three stormwater catch basins along the edge of the Port Angeles Boat Haven. The city stormwater engineer provided stormwater education to the contractor, the contractor committed to proactively managing saw cut spoils generated by his work activity.
3228	6-Jul-15	7-Jul-15	Pollution Hotline	Yes	Yes	Yes	Sewage	Education/Technical Assistance	In the Alley between 5th Street and the bluff above Marine Drive	1321 W 5th St	7/6/2015 Barbara Ashley-Carlson a resident of 1326 W 5th St. contacted the Cities Pollution Hotline to report dirty water with a sewage odor discharging from a crack in alley behind 1321 W 5th St. Eric Walrath visited the site at 1:30pm, and witnessed no active discharge but noted a stain on the pavement and traced the discharge to a stormwater catch basin down the alley from the sewer leak. Eric determined that the leak was due to a plugged side sewer, a plumber cleared the blockage the following day.
3240	1-Oct-15	1-Oct-15	Pollution Hotline	Yes	Yes	Yes	Sediment	No Action Needed	Intersection of Race St. & Georgiana St. on Georgiana St. Sewer and Stormwater Project.	Intersection of Race St. & Georgiana St.	10/1/15 City construction inspector receives call notifying him of water main break on the intersection of Georgiana St. and Race St. The water main break was a result of asphalt construction debris being left in trench during the original water main installation in 1949. The contractor's compaction activity in a parallel trench caused a chunk of asphalt to puncture the side of an old brittle Asbestos concrete pipe. This was a single event illicit discharge of highly turbid water of an unknown quantity greater than 1000 gallons to the City MS4. City operations staff acted quickly to isolate the main break and prevent any further discharge.
3270	12-Oct-15	12-Oct-15	Staff Referral	Yes	Yes	Yes	pH from Saw Cutting	Education/Technical Assistance	Clallam County Courthouse Parking Lot - LID Retrofit Project	223 E 4th St.	10/12/15 City Staff noticed saw cutting equipment and saw cut slurry in the parking lot of the Clallam County Court House. It was raining the day of the event, an unknown quantity of slurry discharged to the MS4. City staff provided stormwater education to Bob the Superintendent with Interwest Construction. Bob understood and instructed his saw cutters to step up their cleaning procedure.
3320	2-Nov-15	28-Jan-16	Staff Referral	Yes	Yes	Yes	Sediment	Add/Improve Treatment BMP	Construction Stormwater Pond for Olympic Medical Center Office Project	939 Caroline St - OMC	11/2/15 Turbid water discharging to the MS4, contractor accessed discharge point and plugged until he could improve sediment pond, stormwater conveyance ditches. Contractor performed work to stabilize exposed soils, and lined conveyance channels and settlement pond with plastic. As work on the site progressed the contractor applied adaptive management practices to improve the quality of Stormwater discharged from their site.
3342	13-Nov-15	13-Nov-15	Pollution Hotline	No	No	Yes	Sediment	Education/Technical Assistance	South Side 300 Block of 1st Street	314 West 1st St.	11/13/15 Small Discharge of turbid water to MS4, due to lack of erosion control on a city light replacement project. Stormwater education was provided to the contractor and the contractor took action to correct the issue.
3358	8-Dec-15	17-Dec-15	Ditch Inspection	Yes	Yes	Yes	Sediment	Education/Technical Assistance	Lakeside Industries facility, stormwater pond discharges over the hill and down into a roadside swale along HW101. Property owned by Jonathan Shotwell, first property on Fields Drive, South side of the road.	142 Eclipse IND PKWY	12/8/15 Turbidity measurement taken where the discharge enters the City MS4 had an NTU reading of 302. Lakeside took prompt action to install temporary BMPs to reduce turbidity. Karen Deal informed the City that a local engineer will be looking at what permeant BMPs should be installed on this site to prevent future discharges.
3360	8-Dec-15	In Process	Business Inspection	Yes	Yes	Yes	Sediment	Education/Technical Assistance	Property owned by Jonathan Shotwell, first property on Fields Drive, South side of the road.	Fields Dr. Site owned by Plantinum C LP	12/8/2015 Stormwater inspectors noted exposed soils on site and evidence of significant erosion on site, a water quality sample was collected at the point of compliance. Sample resulted in a turbidity reading of 378 NTU which exceeds the city threshold, the discharge was reported to Ecology. The city worked with the site's CESCL, and Jonathan Shotwell the sites owner, to rework the outlet structure to more accurately reflect the design on the original plans as well as suggest BMPs to stabilize additional areas of the site. Due to the ongoing nature of this illicit discharge, the City will continue to monitor progress on the site.
3365	10-Dec-15	11-Dec-15	ERTS	Yes	Yes	Yes	Diesel Fuel	Enforcement	American Gold Seafood at 670 Ediz Hook Rd	670 Ediz Hook Rd.	12/10/15 Caller reported to Ecology Regional Office that an air compressor had fuel hose disconnect due to the storm and discharge approximately 5 gallons of diesel fuel into the water. A follow up phone call was made to Kevin Bright the Permit Coordinator with American Gold Seafood, American Gold Seafood had already taken action to prevent further spills of this nature. No significant rainbow observed and very little pink coloration (dyed diesel) indicating a small amount of diesel was actually released from the fuel return line, perhaps less than a gallon. The air compressor and fuel supply tank were removed from the farm by a contracted marine vessel later in 12/14/15 City resident reported boat flushing activity draining to City MS4. City Staff did not witness spill, provided stormwater education. Recommended alternative locations to flush out engine.
3373	14-Dec-15	15-Dec-15	Pollution Hotline	No	No	Yes	Vehicle Fluids	Behavior/Operations Modification	Boat parked out front of 1204 O St.	1204 O St.	12/17/15 Less than 10 gallons of mineral oil was discharged during a transformer fire. Light Ops reported spill to Ecology. City crews responded immediately to deploy absorbent pads to contain as much oil as possible.
3385	17-Dec-15	22-Dec-15	Staff Referral	Yes	Yes	Yes	Transformer "Mineral Oil"	No Action Needed	Power Pole North of Fitness west Building	Lincoln and First	6/24/2015 City Staff were informed of a turbid red-orange colored discharge from Peabody Creek outfall 0.2a, initial inspections of upstream infrastructure were inconclusive. Previous testing in 2015 showed no pollutants of concern. The City investigated and determined line was the responsibility of Clallam County to maintain, the issue was referred to them, they cleaned the outfall pipe and upstream structure. City hired contractor to video the line on 7/21/15, but could not discover source water. City operations staff smoke tested the line on 8/17/15, results were inconclusive. The source of the orange discharge is a pipe with an unknown upstream connection, the pipe is rusting out and is the most likely source of the orange discharge.
3559	24-Jun-15	18-Aug-15	Outfall Inspection	No	No	No	Sediment	NA	Outfall dumping into Peabody Creek just South of the managers office for the Peabody Creek Trailer Park near the intersection for Lincoln and 2nd Street.	Peabody 0.2a Outfall	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
2755	6-Jan-15	6-Jan-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	35' east of the valve at the SW corner of 6th and H St. in the rain garden.	1504 W 6th St	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
2776	14-Jan-15	14-Jan-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	75' east of the valve at M street	1834 West 5th Street	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.

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Unique Identifier:	Actual Start:	Actual Finish:	How did you learn about the problem?	Threat Determination:	G3:	On Average Investigated Within 7 Days	Pollutant(s) Identified:	Correction/Elimination Method:	Location:	Address:	Comments:
2793	23-Jan-15	23-Jan-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	NW corner of the 10/11 alley intersection.	734 E 10th Street	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
2821	10-Feb-15	10-Feb-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	32' west of the valve at Lincoln St.	130 West 6th Street Street	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3075	10-Jun-15	11-Jun-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	230 feet west of the hydrant nearest 1301 Marine Dr.	1301 Marine Drive	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3079	12-Jun-15	12-Jun-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	5' feet east of valve at the SW corner of 5th and Blue Water View.	506 Blue Water View	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3096	19-Jun-15	20-Jun-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	55' west of main valve.	125 E 3rd street	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3098	24-Jun-15	24-Jun-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	55' west of valve.	125 E 3rd street	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3102	25-Jun-15	26-Jun-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	50, west of 2" valve.	125 W 3rd street	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3103	25-Jun-15	26-Jun-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	40' south of meter in driveway.	217 S Laurel street	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3118	10-Jul-15	10-Jul-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	Near water service to J building.	1703 S B street	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3124	15-Jul-15	15-Jul-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	120' east of the hydrant at Lauridsen and Race St.	912 E Lauridsen Blvd.	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3142	27-Jul-15	28-Jul-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	722' east of Hill Street.	1301 Marine Drive	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3143	28-Jul-15	28-Jul-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	20' west of valve.	220 S Lincoln St	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3217	16-Sep-15	16-Sep-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	North side of channel near hydrant.	1902 Marine Drive	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3224	22-Sep-15	22-Sep-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	54' west of 2' valve at Francis St. on 6th street.	521 S Francis Street	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3250	6-Oct-15	6-Oct-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	North side of channel near hydrant.	1902 Marine Drive	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3251	7-Oct-15	7-Oct-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	North side of Front Street, approximately 100' west of valve in center of driveway to parking lot.	120 N Oak Street	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3341	22-Nov-15	22-Nov-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	South side of street	607 S C St	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3344	23-Nov-15	23-Nov-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	SW corner of Eunice and Thistle between 2 valve boxes.	527 Thistle St	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3346	24-Nov-15	24-Nov-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	85' east of the hydrant at 2312 W 12th.	2306 W 12th St	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3348	30-Nov-15	30-Nov-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	SE corner of 6th and C St. under curb.	607 S C St	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3349	30-Nov-15	30-Nov-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	228' east of the valve at Peabody St.	419 E 12th St	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3352	1-Dec-15	1-Dec-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	128' from valve at Lincoln St.	211 E 10th St	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3354	1-Dec-15	1-Dec-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	12' west of 2" valve at Lincoln St.	920 S Lincoln St	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3356	4-Dec-15	4-Dec-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	195' west of the valve at N Jones St.	1115 E Front St	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3376	14-Dec-15	14-Dec-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	Approximately 100' west of the valve at Jones St.	1125 E 4th St	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3379	14-Dec-15	15-Dec-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	Intersection of Marine Drive and Cedar Street.	538 Marine Drive	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3392	24-Dec-15	24-Dec-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	45' west of the valve at G St.	1334 W 4th St	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3393	26-Dec-15	26-Dec-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	25' east of 2' valve on 11th street.	1023 S Peabody	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3403	29-Dec-15	29-Dec-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	68' west of the valve at H St.	1503 W 7th St	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3407	29-Dec-15	29-Dec-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	30' west of the valve at Vine St.	436 E 6th St	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
3411	29-Dec-15	29-Dec-15	Staff Referral	No	No	NA	Sediment	Water Main Repair	70' west of the valve at Chase St. in the center of the driveway.	229 E Lopez Ave	Water main break resulting in discharge of municipal water and sediment to MS4. Once notified, City water operations staff quickly responded to the issue, isolated the damaged water main to prevent further discharge, and made repairs.
653933	5-Jan-15	9-Jan-15	Staff Referral	Yes	Yes	NA	Combined Sewage	Sanitary Sewer Spill	2101 W. 4th St./ Tumwater Drive/ Marine Drive	2101 W. 4th St.	Sewer spill occurred on 1/5/15 at three general locations, overflows due to intense rainfall and insufficient capacity in sewer system to deal with combined load.
655480	15-Mar-15	18-Mar-15	Staff Referral	Yes	Yes	NA	Combined Sewage	Sanitary Sewer Spill	123 E. Front St./1520 E. Front St./ Marine Drive	123 E. Front St.	Sewer spill occurred on 3/15/15 at three general locations, overflows due to intense rainfall and insufficient capacity in sewer system to deal with combined load.
660132	10-Oct-15	20-Oct-15	Staff Referral	Yes	Yes	NA	Combined Sewage	Sanitary Sewer Spill	Northwest corner of N. Lincoln St. and E. Front Street.	135 E. Front St.	Sewer spill occurred on 10/10/15 located at the Manhole on the Northwest corner of N. Lincoln St. and E. Front St. intersection.
660648	10-Nov-15	12-Nov-15	Staff Referral	Yes	Yes	NA	Combined Sewage	Sanitary Sewer Spill	South East Corner of S. Lincoln St. and E. 12th St.	218 E. 12th St.	Sewer spill occurred on 11/11/15 located at the Manhole on the Southeast corner of S. Lincoln and E. 12th St. intersection
661366	9-Dec-15	14-Dec-15	Staff Referral	Yes	Yes	NA	Combined Sewage	Sanitary Sewer Spill	Northwest corner of Marine Drive and Hill St.	Pump Station 3	Sewer spill occurred on 12/9/15 located at the base of Hill Street at Pump Station #3. Wastewater staff arrived at PS3 for routine inspection and discovered that the station's pumps were unable to keep up with the incoming combined sewer flows.

<b>Total # of Events: 61</b> 58 Eliminated during reporting period	<b># Reported on Pollution hotline: 6</b>	<b>Total # of G3: 23</b>
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2015 Activities / Events	Date(s)	Location(s)	City Personnel	Target Audience	Contact Information (other groups)	Subject Area(s)	Attendance/Distribution	Educational Materials Used	Notes/Other
Library "Science, Technology, Engineering & Math Career Day"	22-Jan-15	Port Angeles Library	Jonathan Boehme	5th grade Port Angeles students	<a href="mailto:jboehme@cityofpa.us">jboehme@cityofpa.us</a>	LID - Watersheds, Rain gardens, pervious pavement, pollution prevention	Over 300	Rain garden model, soil infiltration samples, pervious pavement sample, IDDE pollution prevention banner	
KONP Home Show	March 14th and 15th, 2015	Port Angeles High School Gymnasium	Lucio Baack, Helen Freilich, Bob Kajfasz	General public	<a href="mailto:lbaack@cityofpa.us">lbaack@cityofpa.us</a>	IDDE Program, LID Rain Garden Rebate Program, Natural Yard Care	7,000, Directly spoke to over 100 specifically about stormwater.	Promoted the pollution prevention hotline, and rain garden rebate program. Handed out 40 yard sticks with information on how to apply for City rain garden rebates. Focus on the water quality benefits of a rain garden using a rain garden model with circulating water, Natural Yard care, handed out 100 pairs of gloves and highlighted ways to care for yard in a natural way not harmful to environment.	
Flier	Jun-15	Port Angeles	Lucio Baack	Peabody Creek West Basin Residents	<a href="mailto:jboehme@cityofpa.us">jboehme@cityofpa.us</a>	Water quality project information	400	Flier focused preventing pollutants in Peabody Creek	
County Fair	August 20 - 23 2015	Port Angeles	Jonathan Boehme, Lucio Baack Helen Freilich, Bob Kajfasz	General public	<a href="mailto:jboehme@cityofpa.us">jboehme@cityofpa.us</a>	Focusing on pet waste awareness, natural yardcare.	Uncertain . 10,000	Handed out 255 Puget Sound Starts Hear Pet waste dispensers, 46 refill roles and 30 doggy bandanas, and discussed the importance of picking up after our pets with each person. Over 350 people participated in the "Poop Toss" game. Also provided information on how to apply for City rain garden rebates and perform natural yard care.	
Library Skill Share Fair	19-Sep-15	Port Angeles	Jonathan Boehme	General public	<a href="mailto:jboehme@cityofpa.us">jboehme@cityofpa.us</a>	focusing on the benefits of installing a rain garden, City Rebate program.	50	Focus on the water quality benefits of a rain garden using a rain garden model with circulating water.	
Utility Bill Mailer	October	Port Angeles	Jonathan Boehme	General Public	<a href="mailto:jboehme@cityofpa.us">jboehme@cityofpa.us</a>	LID, Pollution Prevention Hotline	7,000-10,000	Flier focused on LID and the pollution reporting hotline.	
Business Stormwater Education	January through December 2015	Site visits to businesses within the City	Jason Hart	Local businesses within the City	<a href="mailto:jfhart@cityofpa.us">jfhart@cityofpa.us</a>	IDDE, Pollution Prevention	Over 50 Businesses	Pollution Prevention and reporting information	Mostly positive response from business owners
B-Wet Grant support	June through December 2015	Individual class rooms and Peabody Creek from NPS Visitor's Center to Creek outfall at the Harbor	Jonathan Boehme	4th and 5th grade students, teachers and parents in Port Angeles and Sequim School Districts	<a href="mailto:jboehme@cityofpa.us">jboehme@cityofpa.us</a>	Water quality and negative effects on water quality and biota from pet waste, fertilizers and pest control products and car washing	?	Water quality tests for temperature, pH, surfactants turbidity, watershed notebooks	City supported program with funding,
Local Cinemas	Months of June, July, and August	Deer Park	Jonathan Boehme	General public	<a href="mailto:jboehme@cityofpa.us">jboehme@cityofpa.us</a>	Pollution Prevention	NA	30 second Pollution Prevention Ad on Vehicle Leaks shown before feature films	
PSA	12-Nov-15	News Services	Jonathan Boehme	General public	<a href="mailto:jboehme@cityofpa.us">jboehme@cityofpa.us</a>	BMP, clearing leaves from Catch Basins	Uncertain	Education on clearing catch basins with leaves and disposing of the leaves in the yard waste container. Do not rake or blow leaves from yard into street or right of way.	
Rain Garden Workshop	Nov 18, 19 2015	Port Angeles	Lucio Baack	Landscapers/ Contractors	<a href="mailto:jboehme@cityofpa.us">jboehme@cityofpa.us</a>	Rain Garden Rebate Program	30	PowerPoint describing the City of Port Angeles Rain Garden and LID incentivizes and the value of LID.	

# Stormwater Rains

## NEWSLETTER

### RAIN GARDENS

#### *Rain Garden Rebate*

Fall has arrived, which for many, signals a time to get outside and plant fall bulbs after a long dry summer. The City of Port Angeles is excited to provide rain garden rebates of up to \$750. Residents and businesses building rain gardens at their home or place of business are eligible.

Rain gardens reduce the amount of stormwater and pollutants coming off your property and entering the environment.

**For more information visit:** [www.cityofpa.us/stormwater.htm](http://www.cityofpa.us/stormwater.htm)

#### *Rain Garden Workshop*

A Two Day Rain Garden Workshop is being held in Port Angeles! Save the date for November 4th and 5th.

**For more information please contact:** WSU Extension's Master Gardener Coordinator: [lhamilton@co.clallam.wa.us](mailto:lhamilton@co.clallam.wa.us)



#### Contact Information

Website:  
[cityofpa.us/stormwater.htm](http://cityofpa.us/stormwater.htm)  
Stormwater Hotline:  
**417-4830**  
Email:  
[Stormwater@cityofpa.us](mailto:Stormwater@cityofpa.us)

### Current and Future Stormwater Projects to Improve Water Quality

#### COMPLETED

#### 4th Street Stormwater Improvement Project



Retrofit an existing neighborhood with rain gardens. This project will improve water quality and increase pipe conveyance size to reduce localized flooding. The compost-amended media in the rain gardens filter pollutants from the street and adjacent yards and reduce peak flows to help prevent flooding.

Construction Completed Spring 2015.  
Funded in part through a \$1 Million grant from WA Dept. of Ecology

#### COMPLETED

#### Peabody Water Quality Retrofit Project



Install stormwater treatment devices (Filterra Units) to reduce fecal coliform bacteria discharging into Peabody Creek. A Filterra unit is similar in concept to bioretention (rain gardens), but has been optimized for a small footprint with high pollutant removal.

Construction Completed Summer 2015.  
Funded in part through a \$155,000 grant from WA Dept. of Ecology

#### PLANNED

#### Green Low Impact Development Alley Project



Install permeable pavement in two alleys in the Francis Street basin. The permeable pavement will allow street runoff to soak into the ground and reduce pollutants entering surface waters.

Construction Scheduled Spring 2016.  
Funded in part through a \$461,000 grant from WA Dept. of Ecology

### Coming Soon to a Neighborhood Near You: Low Impact Development

The City is required by its National Pollutant Discharge Elimination System (NPDES) permit to make Low Impact Development (LID) the preferred and commonly-used approach to site development by December 2016.

The City has begun embarking on this project which will look for ways to promote LID where feasible, minimize hard surfaces, reduce native vegetation loss, and minimize stormwater runoff impacts in all types of development situations. The City, in partnership with Herrera Environmental and stakeholders in the local development community, will develop draft municipal code and design standard language, which will be presented at public hearings in the first half of 2016.

For more information or to get involved in the process please contact the City (contact information at left).

# NATURAL YARD CARE

Natural yard care choices for landscape design and maintenance will transform your yard into a beautiful, healthy refuge, while reducing potentially harmful stormwater run-off, and the amount of garden chemicals and water you use.



## 1 Build healthy soil.

- Add compost and organic mulch for lush, vibrant plants with deeper roots, fewer pests and weed problems, and lower water needs.
- If needed, fertilize moderately with organic or slow release fertilizers.



## 2 Plant right.

- Choose pest/disease resistant and drought-tolerant plants.



## 3 Practice smart watering.

- Water infrequently, but deeply, being sure to moisten the entire root area.
- Mulch planting beds to reduce water evaporation.

# STORMWATER MANAGEMENT PLAN

The City has a stormwater management plan designed to protect our local water bodies.

## LEARN MORE:

To learn more about the Stormwater Management Plan visit:

[www.cityofpa.us/stormwater.htm](http://www.cityofpa.us/stormwater.htm)

Copies are also available at City Hall.

## ONLINE SURVEY:

An online survey is available at

[www.cityofpa.us/stormwater.htm](http://www.cityofpa.us/stormwater.htm)

to provide input on the plan. Topics include:

What stormwater pollution topics would you like to see discussed in future newsletters or presentations?

Do you have cost effective ideas that can improve the quality of stormwater?

What would you like to see incorporated into the plan?

**Spills happen. Help us find them.**

**CALL or CLICK if you see oil, paint, suds, or sewage in ditches, drains or waterways.**

Call the **Port Angeles Water Pollution Hotline** at **(360) 417-4745**  
 Click: [www.cityofpa.us/stormwater.htm](http://www.cityofpa.us/stormwater.htm)  
 If it looks hazardous call 911

**ONLY rain down the drain.**

# 2015 Stormwater Outreach Booths



(LEFT) KONP Home Show - March 14, 15 2015. Directly spoke to over 100 people on stormwater subjects ranging from the IDDE program, Stormwater Management Program the City Rain Garden Rebate Program and the benefits of Low Impact Development.

(RIGHT/ BELOW) Clallam County Fair - August 20 - 23 2015. Over 350 people participated in the "Poop Toss" game promoting the importance of picking up after our pets. Prizes for playing the game included Pet Waste Dispensers, and PSSH doggy bandannas.



# Try “going natural” in your yard



- **Build healthy soil by adding compost, mulch, and other all-natural amendments.** Healthy soils lead to robust plants that are more resistant to disease and insects. This will reduce your need for herbicides and pesticides. If you must, use slow-release organic fertilizer in spring.
- **Minimize spray:** Try traps, barriers, fabric row covers and natural repellants before turning to pesticides.
- **Review your practices:** Your problem could be due to overwatering, incorrect mowing, improper pruning, or other easily correctable practices.
- **Accept a little damage:** Natural predators will often bring pests under control but they need time to work. Only about 5% of the bugs in your yard are pests. Good bugs help control small pests that will attack your plants and soil. Don't spray at the first sign of damage

#### IT ALL ADDS UP:

**Go natural!** There are many non-chemical choices for preventing weeds and bugs. Learn more about healthy and low maintenance natural yard care.

Learn more:

Natural Yard Care resources – <http://www.naturalyardcare.info>

**Puget Sound  
Starts Here**



## Public Education and Outreach Agreement

The City of Port Angeles has partnered with Kitsap County to work cooperatively to help meet the requirements of S5.C.1 to implement an education and outreach program to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts and encourage the public to participate in stewardship activities. The following pages include the group outreach report, and well as the inter-local agreement.

# West Sound Stormwater Outreach Group

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## Members:

**City of Bainbridge Island** -  
Melva Hill and Cami Apfelbeck

**City of Bremerton** - Teresa  
Smith

**City of Gig Harbor** - Wayne  
Matthews

**Kitsap County** - Michelle  
Perdue and Cammy Mills

**City of Port Angeles** -  
Jonathan Boehme

**City of Port Orchard** -  
Andrea Archer-Parsons, Janet  
Kearsley and Zack Holt

**City of Poulsbo** - Anja Hart

**U.S. Navy** - Bryan Haelsig,  
Peter Haun and Nikki Bennett

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## 2015 Summary of Activities

### HIGHLIGHTS

2015 was a year of maintenance and growth, with the group focusing on maintaining and improving existing programs, as well as monitoring regional efforts on potential future project targets.

The year saw a few staff transitions within the jurisdictions, with several new members welcomed into the group and a few cherished members saying goodbye.

- Bryan Haelsig of the U.S. Navy turned over the reins for their program to Peter Haun, who managed the transition for Nikki Bennett, the Navy's new representative for our group.

- Melva Hill of Bainbridge Island achieved a well-deserved retirement, and passed the torch to Cami Apfelbeck, who will be managing their transition until they hire a permanent replacement in 2016.

- The City of Port Orchard has seen two new staff members over the course of the year, including Janet Kearsley and Zack Holt, who is their new representative for our group.

## Pet Waste in Public Areas

### *The Mutt Mitt Program*

Members of the WSSOG meet the requirements of S5.C.1.c through the Mutt Mitt program. The Mutt Mitt program is focused on encouraging dog walkers to pick up after their pet when they are in public places such as parks, apartment complexes, or neighborhoods.

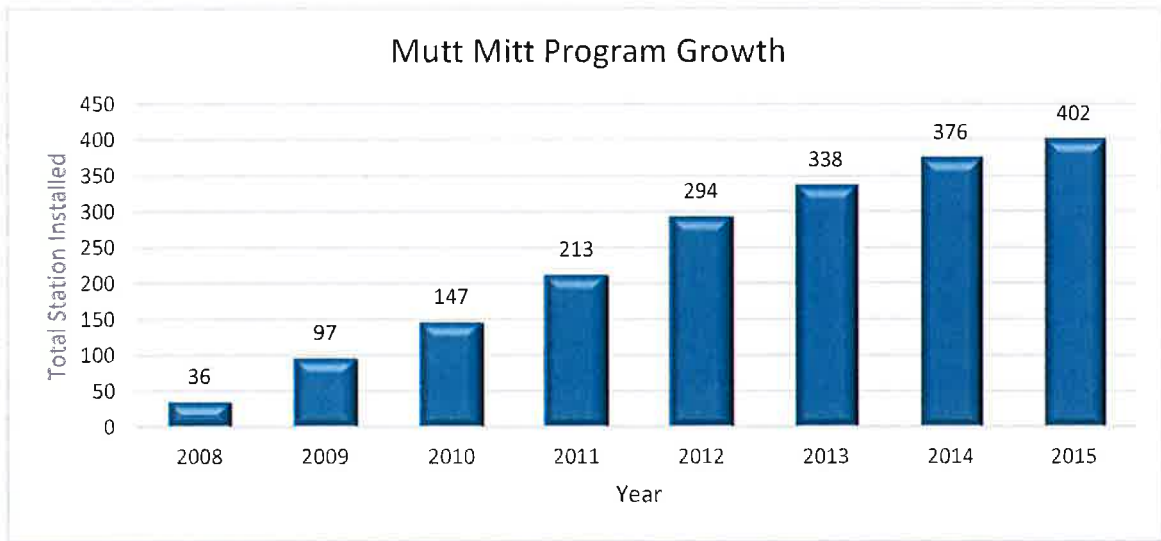
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*Each Permittee shall measure the understanding and adoption of the targeted behaviors for at least one target audience in at least one subject area. No later than February 2, 2016, Permittees shall use the resulting measurements to direct education and outreach resources most effectively, as well as to evaluate changes in adoption of the targeted behaviors. Permittees may meet this requirement individually or as a member of a regional group.*

**NPDES Municipal Stormwater Permit - S5.C.1.c**

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Adoption of the target behavior is measured in part through growth of the Mutt Mitt program. As of the end of 2015, there are a total of 402 pet waste stations distributed throughout the Kitsap Peninsula; ninety-seven stations (24%) are privately sponsored and 305 are sponsored by NPDES municipal permittees. This means that dog walkers throughout the region see similar desirable behavior messaging for adoption as the norm. In 2015, Twenty-six new Mutt Mitt stations were installed throughout the county and one new station was installed in Port Angeles.



**Bag total by location**

Bainbridge Island	5,400
Bremerton	136,000
Gig Harbor	0
Port Angeles	60,000
Port Orchard	3,600
Poulsbo	63,800
Kitsap County	249,000
Private Mutt Mitt Sponsors	139,756
<b>Total</b>	<b>657,556</b>

When asked to report the bag usage, 43% of private station sponsors reported using 139,756 bags, which are purchased with their own funding. Actual bag use is likely much higher since nearly 60% of sponsors did not report bag usage. NPDES municipal permittee sponsored stations distributed a total of 517,800 bags. Therefore the total bags distributed translated to 109.5 tons of dog poop picked up.

Dog walkers rely upon stations that are reliably stocked with bags to help them adopt this behavior. It's essential that Mutt Mitt branded stations are continuously stocked and in good working order. Kitsap County conducts inspections of all the Mutt Mitt stations on an annual basis. In 2015, 87% of all Mutt Mitt stations passed their inspection, meaning that they were stocked with bags. Those whose stations did not pass their first inspection were inspected a second time. If the station failed both inspections, the Mutt Mitt sponsors were contacted and offered 500 bags per station to help them get stocked again.

The WSSOG implemented the regional program in 2008. After 6 years it was time to refresh the program. In 2014, an evaluation was conducted measure the understanding and adoption of the

targeted behavior (see NPDES Permit S5.C.1.c). Both Mutt Mitt sponsors and users were asked about their experience with the program (see Appendix D for complete results).

To measure their understanding of the desired behavior, Mutt Mitt users were asked, “How important do you think it is for dog owners to pick up their pet waste *and* put it in a garbage can?” Eighty three percent of respondents said it was “extremely important” and the remaining 17% said it was “very important”.



The Mutt Mitt program has been promoted in a way that is intended to align with the values of our target audience and not necessarily its value as a way to prevent pollution. Interestingly however, when Mutt Mitt sponsors were asked why they choose to sponsor a station, “protecting water quality” was the top reason. This indicates that sponsors understand the value of desired behavior to their neighborhood and the environment.

As a result of the survey, a number of improvements to the Mutt Mitt program have been made including:

- Stickers stating “scoop it, bag it, trash it” were placed on dispensers during 2015 inspections to cover the phrase “degradable pick-up mitt”. Sponsors felt this phrase was confusing so that people would leave the bagged waste on the ground.
- WSSOG members distributed clip-on leash bag dispensers to make pet waste disposal more convenient (evaluation identified not having a bag as a primary reason people don’t pick up). This has the dual effect of helping build the norm around pet waste pickup by making the desired behavior more visible.
- Following conversations with Mutt Mitt sponsors, Kitsap County conducted a small trial to see whether brightly colored bags are disposed of properly more often than dark colored bags. As a result, Kitsap County now provides a starter supply of brightly colored pet waste bags to accompany all new stations.
- Mutt Mitt sponsors indicated that the cost of buying replacement bags was a significant challenge for them. In response, we now offer Mutt Mitt sponsors an annual allotment of 500 free bags per station.

After administering this survey, we received complaints from sponsors that there was a significant amount of pet waste being disposed of improperly at some parks (the waste was either unscooped or bagged and left on the trail). Volunteers were asked to count the number times they saw waste that was disposed of improperly for a week. We then compared this number to the number of bags distributed to that park on an annual basis, and found that the noncompliance rate was extremely low, less than 3%. While this was a somewhat rough calculation, we felt confident in using it to direct the program due to the fact that the count took place during high use summer months, and therefore was likely an overestimate of the amount of waste being disposed of improperly.

In addition to continued growth of the Mutt Mitt program through providing new stations and bags, the group purchased a Poop Toss game, which is shared amongst the jurisdictions. The game is used at outreach events and teaches players the appropriate way to dispose of pet waste. The WSSOG borrowed the game in 2014 and it was so well received that the group decided to obtain their own game. In 2015, it was used by the Cities of Port Angeles and Poulsbo where they reached over 350 and 200 people, respectively. The humorous nature of the game attracts participants of all ages and makes it easy to start a conversation about a topic people might otherwise have preferred to avoid. Not only do game participants learn about the correct behavior when they play, they also receive a Puget Sound Starts Here-branded clip-on bag dispenser for playing which gives them the tool they need to implement the behavior.



In 2015, a survey was developed to help direct a backyard pet waste program. This survey will be administered to residents in partnership with Kitsap Public Health. In 2016, we will administer the survey and use the results to develop a backyard pet waste campaign.

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## Illicit Discharge Detection and Elimination Program

*Keeping Small Spills From Becoming Big Problems*

### Regional Spills Hotline

The Spills Happen effort, meant to encourage people to report spills, continued in 2015. Several jurisdictions are currently posting the hotline on their websites, and other outreach methods included distribution of paint sticks featuring the hotline number; display of the “Spills Happen” banner at events, in billing offices and public spaces; and an ad in the Spring 2015 WasteWise Living newsletter, a publication that is direct mailed to all Kitsap County residents including those that reside in the cities. (Gig Harbor and Port Angeles are outside of the hotline area.)

Port Angeles promoted its own city hotline number by sending out a utility bill mailer to all of its utility customers advertising the Spills Happen theme and their own unique hotline number.



In addition, 4200 paint sticks featuring the spills hotline phone number and a BMP message were distributed to locations throughout Kitsap County, Bainbridge Island, Bremerton, Gig Harbor, Port Orchard and Poulsbo. To evaluate the effectiveness of the paint sticks, stores that distribute them in Kitsap County were asked to respond to a brief survey.

While survey respondents (employees and store managers) were unable to gauge their customers' reactions to the paint sticks, 100% (10) of respondents indicated that one of the main reasons they participated in the effort was that it showed their customers that they care about their community and the environment. In addition, 60% indicated that they intend to continue participating in the campaign and the remaining 40% were neutral. Given the positive response from businesses, there may be an opportunity to expand this partnership.

A total of 65 calls were received in 2015 by Kitsap1 to the hotline number. In addition, cities also received several reports directly to their jurisdictions. (Poulsbo – 17, Bremerton – 12, Port Orchard – 11) Port Angeles has its own hotline number – 360.417.4745 - and web reporting form, and reported 7 hotline calls in 2015. (See NPDES Permit S5.C.3.c.ii).

### Internal Staff IDDE Training



Kitsap County revised their internal staff IDDE Training in 2015. Elements from the Washington Stormwater Center training were incorporated as well as key giveaways for those completing the training as developed by Pierce County. A new graphic with simple messages was developed for staff reference when reporting a spill. Elements of Kitsap County's training program were created to be sharable with WSSOG members in order for them to conduct their own trainings. Shareable items included training videos, activities and post-training

quiz and evaluation. Over the course of 2015, several jurisdictions implemented innovative training solutions, including using reciprocal trainers to provide the sessions for each other's employees to improve retention. Port Angeles used a version of these graphics on coffee mugs with their own spill reporting number to encourage participation and engagement during staff IDDE training.



## Puget Sound Starts Here

### *Around the West Sound*



In May we once again celebrated “Puget Sound Starts Here Month”, a regional effort to raise awareness about the harm to Puget Sound from polluted stormwater runoff and simple actions residents can take to reduce their impact. Local implementation of Puget Sound Starts Here (PSSH) Month included a variety of outreach approaches.

Two cities purchased on-screen cinema ads for the months of May and June, featuring the PSSH Public Service Announcement (PSA) about car leaks and yard care. These ads appeared on 10 screens in Gig Harbor at the Uptown Galaxy Theater (car leaks) and on 8 screens in Port Angeles at Deer Park Cinemas (yard care), at least two times prior to each feature film on every screen throughout the month, with between 2800 and 6000 impressions each month depending on how many ads were in the cycle. Theatergoers could expect to see the ad within six minutes or less before the start of each movie, and if they were there earlier, could view those ads every six minutes in rotation. These professionally produced 30-second PSAs were produced by the City of Seattle for PSSH, and featured the municipality’s logo (either Gig Harbor or Port Angeles) at the close.

Outreach efforts included the popular distribution of beverage coasters and coffee sleeves to local restaurants and coffee shops. (Appendix C) We had 100% group participation in the PSSH campaign in 2015, expanding distribution with several new products, including carabiners and pet waste leash dispensers, which built on the existing pet waste program.

Collectively, these efforts placed over 40,950 “Puget Sound Starts Here”-branded items in the hands of countless Peninsula residents and visitors. This total is 25.52% more than the distribution from the previous year, and expanded previous efforts to strategically place this messaging into the hands of residents.

Additionally, feedback from participating coffee shops informed us that hot drink sleeves would be more widely received in the winter months. Based on that information, Kitsap County and Port Orchard both piloted a secondary distribution of coffee sleeves in the winter months and performed a short evaluation of that process which will influence future distribution efforts.

Kitsap County and City of Bremerton gathered a group of 100 attendees for the STORM-sponsored “Puget Sound Starts Here” night at the Mariners, an annual event with Scoopy Doo and a PSSH booth for the public.



## Regional Partnerships for a Comprehensive Approach

### *STORM Continues Coordinating Regional Outreach*

Kitsap staff continues to represent the County and cities within STORM as part the WSSOG's partnership in larger regional efforts. In 2015 Kitsap staff provided input on STORM's BMP prioritization process, the STORM Work Plan, and participated in the 2015 STORM Symposium as panelists. Significant accomplishments are summarized in the annual STORM report (included as Appendix A).

Among the highlights of the year were:

- Kitsap staff worked with several small workgroups under STORM's umbrella in 2015 on issues of regional significance. Kitsap County applied for a GROSS grant addressing mobile business outreach, and additionally participated in the workgroup addressing commercial and multifamily dumpster maintenance outreach. This effort resulted in piloting a dumpster/grease illicit discharge complaint system where Kitsap Public Health District will assist Kitsap municipalities with problem sites (see [Kitsap Public Health District Dumpster Inspections](#)).
- The annual STORM Symposium in November, where Kitsap staff took part in two sessions – Transferring a Successful Outreach Program to Your Jurisdiction, and the Mobile Business Outreach Program.
- STORM has continued to shape the PSSH campaign and has advocated for BMPs to remain a visible and accessible part of the campaign.

### *Kitsap Public Health District Dumpster Inspections*

Kitsap County Storm Inspectors work in partnership with the Health District on problematic dumpster and food waste issues – those sites that are continuing problems. Kitsap Health Food Inspectors are looking for dumpster/grease problems when they do their food permit inspections. They report the issue back to the Health District's Pollution Identification and Correction program (PIC), who follows up with the businesses. These follow ups are documented in the Kitsap 1 complaint response system so they are able to be coordinated with the jurisdictions, as well as count them as a spill report.

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## Looking Ahead at 2016

### *Evaluating, Responding and Improving*

Working within the scope of the interlocal agreements implemented in 2014, WSSOG members evaluated the Work Plan to guide 2016's activities. (Attached as Appendix B) The focus for the year will be to review and revise existing programs and to build on new opportunities raised by regional group efforts.



The first half of the year will be spent examining efficient and effective ways to continue the Mutt Mitt Program and IDDE program, as well as update the Backyard Pet Waste Program Plan based upon the residential intercept surveys. Additionally, an Education & Outreach Plan for Hotline Promotion will be developed to determine how ongoing promotion of the hotline should occur.

In the second half of the year, we will create and implement a Dumpster Outreach Plan based on the research completed in 2015 and the efforts of the regional Dumpster Maintenance Outreach Workgroup.

On a regional scale, the WSSOG will take advantage of the work underway by the STORM Vehicle Leaks Committee to see what opportunities arise to encourage our residents to find and fix leaks. This will primarily entail recruiting local automotive shops to participate in offering discounts and other incentives as part of the Don't Drip and Drive campaign during the summer months.



The WSSOG will also monitor STORM's evolution of the Puget Sound Starts Here campaign, and will present the suggestion to extend the distribution of materials to other times of the year. In May, we will participate in Puget Sound Starts Here Month through outreach to local restaurants and coffee shops. Expanded distribution may again be planned for November and December in selected jurisdictions, as well as some evaluation of both the coffee sleeve and paint stick distributions.

The group will continue to participate in the Mobile Business Outreach workgroup and take part as appropriate.

Finally, members will continue to monitor and provide input on the regional BMP prioritization process as it occurs, and use the outcomes of this process in WSSOG efforts as applicable.

**APPENDIX A**  
**STORM ANNUAL REPORT**

# APPENDIX B

## WSSOG 2016 WORK PLAN

### Sustain successful efforts (Objective 2, Task 2.2)

- Continue Pet Waste Outreach
  - Update Backyard Pet Waste E&O Plan
  - Continue to implement updated Mutt Mitt E&O Plan
  - Sustain Mutt Mitt Program through the addition of 40 more stations
- Plan for sustained Hotline Outreach
  - Track IDDE campaign research and development from STORM, participate if appropriate and update our plan as applicable
  - Consider:
    - Paint Sticks (Consider evaluation)

### BMP Prioritization (Objective 3, Tasks 3.1, 3.2)

- Continue to monitor STORM's BMP prioritization process
- Use outcomes of STORM process as applicable in SOG work (year round)

### New behavior campaign development (Objective 3 & 4)

- Monitor STORM's dumpster outreach campaign research and development and participate as appropriate
- Create and implement a Dumpster Outreach Plan
- Monitor the progress of STORM's mobile business campaign and participate as appropriate

### Other opportunities (Objective 7)

- PSSH Month (May. Consider additional fall campaign and evaluation)
- Don't Drip and Drive campaign (summer – if offered through STORM)
- Cinema ads (summer – Port Angeles & Gig Harbor)
- School lessons (year round – Poulsbo & Port Orchard)
- STORM PSSH advertising opportunity (spring)

### Strengthen coalition and represent WSSOG on regional efforts (Objective 8)

- Capacity building/training as needed (year round)
- STORM & PSSH support (year round)

# APPENDIX C

## WSSOG 2015 COASTER AND SLEEVE DISTRIBUTION

Coasters		Coffee Sleeves	
<b>BAINBRIDGE ISLAND</b>			<b>1400</b>
Distribution list not available at time of printing			
<b>POULSBO</b>	<b>2500</b>		<b>1350</b>
Valholl Brewing Co	277	Caffe Cocina	150
Sheila's Port Side Pub	277	Cups Espresso	150
The Loft Restaurant	277	Hot Shots Java	150
Sogno Di Vino	277	Liberty Bay Books	150
Slippery Pig Brewery	277	Fat Apple Bakery	150
Tizley's Euro Pub	277	Poulsbohemian	150
Hare & Hounds	277	Jak's Café	150
Sound Brewery	277	Poulsbo Perk	150
Chocmo	277	Latte On Your Way	150
Staff	7		
<b>BREMERTON</b>	<b>2500</b>		<b>2000</b>
Bremerton Bar and Grill	375	Manette Coffee Company	140
Toro Lounge	375	Christale's Java Hut & Juanito's	140
McClouds	375	Espresso Lane	100
Fritz Fry House	125	Cowgirl Coffee	140
Manette	500	The Coffee Spigot	100
Arena	375	Simply Sublime	140
Horse and Cow	375	Cornerstone	140
		Coffee Oasis	140
		2nd Shot Espresso	120
		Bay Vista	140
		2 Blocks Up Café	140
		Fraiche Cup	140
		Harbor Market	140
		Caffe Perfetto	140
		The Bridge	140
<b>PORT ORCHARD</b>			
<b>May Distribution</b>	<b>3500</b>		<b>1000</b>
Family Pancake House	250	Express Espresso	100
Lighthouse Restaurant	250	Chug-A-Tug	100
Kai Pan Asian	250	Bay Buoy Espresso	100

Blue Goose Bar	250	Jump Start Java	100
Hi-Joy Bowl	250	Stormy Espresso	100
Moon Dogs II	375	Grinderfest	100
Wiskey Gulch	250	Second Wind Coffee	100
Amy's on the Bay	375	The Frothie Bean	100
Hi-Tide Tavern	250	Coffee Oasis	100
Slaughter Co. Brewery	375	Brewed Awakening	100
Red Dog Saloon	250		
McCormick Woods	375		
<b>December Distribution</b>	<b>2125</b>		<b>1200</b>
Blue Goose Bar	250	Express Espresso	100
Hi-Joy Bowl	250	Chug-A-Tug	100
Moon Dogs II	375	Bay Buoy Espresso	100
Amy's on the Bay	375	Jump Start Java	100
Hi-Tide Tavern	250	Stormy Espresso	100
Slaughter Co. Brewery	375	Grinderfest	150
Red Dog Saloon	250	Second Wind Coffee	100
		The Frothie Bean	150
		Coffee Oasis	100
		Brewed Awakening	150
		Crème Café	100
<b>KITSAP COUNTY</b>			
<b>May Distribution</b>	<b>6500</b>		<b>6400</b>
Round Table Pizza	250	Express Espresso	200
Hop Jacks	500	Java Joint	200
Our Place Pub	250	Brewberry Hill	200
Old Town Pub	250	Café Noir	200
Whiskey Creek Steakhouse	500	All Star Espresso	200
Los Corales	250	Simply Sublime (Silverdale)	200
Main Street Ale House	500	Simply Sublime (Chico)	200
Pizza Factory	250	Keyport Mercantile	200
Puerto Vallarta	500	The Cup & Muffin	500
Drifters	250	Mystic Mountain	200
Bella Luna Pizzeria	250	J'aime les crepes	200
Sully's	500	Jumpin' Java	1100
Der Blokken Brewery	250	Coyote Coffee	200
Clover Leaf	250	DRINKWORx Coffee Co.	200
AC Sports Bar	250	East Side Java	200
Manchester Pub	375	Cutter's Point Coffee	200
Manchester Grill	500	Supreme Bean	200

Port Gamble Bar/ Resturant	250	Express Espresso	200
Silver City	375	Light House Espresso	200
		Gamble Bay Coffee	200
		Borwnsville Junction Java	200
		Reality Coffee Company	200
		Gamble Bay Coffee	200
		Port Gamble General Store	200
		Latte your way	200
		Kelly's Latte and Espresso	200
<b>December Distribution</b>			<b>4800</b>
		Express Espresso	200
		Java Joint	200
		Brewberry Hill	200
		Café Noir	200
		All Star Espresso	200
		Simply Sublime (Silverdale)	200
		Simply Sublime (Chico)	200
		Keyport Mercantile	200
		The Cup & Muffin	400
		Smither's Jitter Espresso	200
		Mystic Mountain	200
		J'aime les crepes	200
		Jumpin' Java	400
		Coyote Coffee	200
		DRINKWORx Coffee Co.	200
		East Side Java	200
		Cutter's Point Coffee	200
		Supreme Bean	200
		Express Espresso	200
		Light House Espresso	400
		Gamble Bay Coffee	200
<b>PORT ANGELES</b>			<b>750</b>
		Blackbird Coffeeshouse	150
		Bella Rosa Coffee House	150
		A Cup Above	150
		Easy Street Coffee House	150
		Grandview Coffee Shop	150
<b>GIG HARBOR</b>		<b>500</b>	<b>500</b>
Gourmet Burger Shop	100	Kelly's Restaurant	200
Spiro's Restaurant	200		

Kelly's Restaurant	100	
<b>TOTAL</b>	<b>17625</b>	<b>18750</b>

# APPENDIX D

## MUTT MITT SURVEY SUMMARY

# Mutt Mitt Survey Summary

Results of surveys of Mutt Mitt station sponsors and users

January, 2015

Kitsap Public Works – Stormwater Division

Prepared by: Cammy Mills, cmills@co.kitsap.wa.us



## **Executive Summary**

Sponsor and users of Mutt Mitt stations were surveyed to assess the program's success. Survey results indicate that sponsors and users are different audiences with different motivators. Based on survey results, convenience appears to be a primary barrier for proper disposal of pet waste. While adding additional waste bins in problem areas would help make proper disposal more convenient for users, the difficulty of waste removal is a barrier for sponsors. Making both pet waste disposal and garbage removal more convenient should have a positive impact on the number of people participating in the environmentally responsible behavior. Additional recommendations include making pet waste pick-up more convenient by offering clip-on bag dispensers and encouraging sponsors by acknowledging their hard work and accomplishments in news or magazine articles. These articles will also serve the purpose of promoting the program and desired behavior, and further normalizing proper pet waste disposal.

## **Background**

The Pet Waste in Public Areas Program (aka Mutt Mitt program) began in 2006 as a pilot project by the Kitsap Public Health District in response to bacterial pollution beach closures at the Indianola Public Dock. Excess dog waste on the beaches was suspected to be the cause of the beach closures. Subsequently, in 2008, proper pet waste management was selected by the West Sound Stormwater Outreach Group (WSSOG) as the NPDES permit required targeted behavior change program for meeting permit compliance. This group is a consortium of Kitsap Peninsula Cities, Kitsap County, and the Navy. The program has grown significantly from 4 stations in Indianola to over 350 stations region wide. The program continues to grow each year with 20 – 40 new stations adopted. The stations sponsors are enthusiastic about sponsoring the solution to the problem of dog waste in their public areas.

## **Purpose**

Performance measure data is collected annually and tracked for the number of stations adopted, number and percentage of stations maintained by community sponsors, number of bags used and then calculating the tons of dog waste diverted from surface waters. In 2013 the program assisted dog owners in picking up over 100 tons of poop. As the program has matured, anecdotal feedback from local station sponsors was received about frustration that not all dog owners were picking up or that periodically bags of poop were left on the ground rather than in trash cans. The purpose of this project was to learn from the two target audiences about their attitudes and awareness, to solicit comments about adoption of the habit to pick up and put pet waste in the trash, and gather information to assist with further improvements of the program.

For Mutt Mitt Station sponsors the study questions included (See Appendix A for complete survey):

- Why do you sponsor a station?
- Are you likely to continue sponsorship?
- Have the Mutt Mitt stations had an impact on the amount of pet waste left in your area?

For Mutt Mitt Station users the study questions included (See Appendix B for complete survey):

- How frequently do you pick up after your dog?

- On an occasion when you may not have picked up after your dog, what was the main reason?
- What impact has the Mutt Mitt program had on pick-up rates in areas you frequent?

## **Methods**

Two separate surveys were designed, one for Mutt Mitt station sponsors and one for Mutt Mitt station users. Both surveys were designed with the assistance of Ellen Cunningham Environmental to ensure that questions were well-designed and that surveys yielded information that could be used to help guide the program.

## ***Sponsors***

A link to the Sponsor Survey was sent via email to 101 Mutt Mitt sponsors on 9/9/2014 and a reminder e-mail was sent on 9/16/2014. Sponsors could opt-in at the end of the survey to be eligible to win either a green cleaning kit or 200 Mutt Mitt bags (each an approximately \$15.00 value) for participating in the survey. A total of 48 unique responses were received, a 47.5% response rate.

## ***Users***

Surveys conducted at three public dog walking sites: Clear Creek Trail including the Silverdale Dog Park (8/11/2014, 9/27/2014), Howe Farm (8/11/2014, 8/16/2014), and South Kitsap Regional Park (8/11/2014). Surveys were conducted in the morning from 8:00 am to 11:00am. A total of 82 surveys were completed. Those administering the written survey tried to give respondents as much anonymity as possible to encourage honest answers; however, frequently, respondents asked for help in filling out the survey. Users were offered a clip-on bag dispenser, dog bandana, or flashlight as an incentive. While the percentage of people that were willing to take the survey was not tracked, it is noteworthy that the vast majority of those asked to take the survey, agreed to take it.

## **Key Findings**

### ***Mutt Mitt Station Community Sponsors***

#### **Main Reason for Sponsoring Mutt Mitt Station**

- **Protecting water quality** was the top reason (38%)
- **Making an area friendlier to both dog and non-dog owners** was the second most common reason (29%).

#### **Sponsors View their Contribution has a Positive Effect and Desire to Continue Sponsorship**

All sponsors felt that the Mutt Mitt stations had a positive effect on the amount of pet waste left on the ground and most (93%) felt the program had a major or moderate effect. This is echoed in the fact that most sponsors felt they were likely to continue sponsoring the Mutt Mitt station(s). Seventy-seven percent of respondents said they were “extremely likely” to continue sponsoring a station(s) and 19% said they were “very likely”.

“[I] wanted to give the tools to our residents to encourage them to clean up and respect their neighbors. It is unsanitary and [I] want to help keep our community clean and sanitary.” – Mutt Mitt Sponsor

Nineteen percent of sponsors were interested in joining a Mutt Mitt sponsors Facebook page to share successes and challenges.

**Sponsor Suggestions to Improve the Program** - At the end of the survey, respondents were asked if they had any suggestions for how we could make the Mutt Mitt program more successful and if there was anything else they wanted to share about their experience sponsoring a Mutt Mitt station. Responses to both questions seemed to be very similar, so all answers were combined and categorized, with each unique response from an individual being counted.

“Help with the cost of bags. I’m a volunteer, and I can’t afford those very expensive bags!” – Mutt Mitt Sponsor

- **Consider Ways to Reduce the Program Expense.** Sponsors were concerned about the expense of maintaining a station (purchasing the bags) and some wanted to see the program advertised more so that more sponsors would join.
- The most common response from sponsors, aside from general praise, was that we should **promote and share successes of program more.**
- **Clarify the Potential Confusing Message about Disposal.** While none wrote this, some sponsors expressed concern verbally that “degradable pick-up mitt” phrasing on Mutt Mitt stations might be confusing for users and lead to improper disposal of pet waste.

**Mutt Mitt Station Users**

Survey responses tended to be from women, with the 36-50 year old age range being under-represented (though it is possible that this matches the pattern for park use.)

- **All respondents reported picking up after their dog;** 93% said they “always” pick up after their dog and 6% said the “often” pick up after their dog (a lone respondent said their dog had never pooped at the park). However, use of the Mutt Mitt stations was variable. This may indicate a large percentage of people who bring their own bags.

Table 1 - Reasons for not picking up after pet	
%	Response
23%	Unprepared/no bag
17%	Dog pooped in an area where people wouldn’t walk
5%	Dog was sick
54%	N/A - always pick it up

**Even the Most Dedicated Scoopers May Not Always Pick Up** - Despite the fact that most reported that they “always” pick up, in a follow up question where we asked why they might not have picked up after their pet in the past, respondents offered some reasons why they might not pick up on occasion (see Table 1). This question is particularly interesting. There have been complaints (sometimes vehement in nature) about the pickup rates at some parks. This question reveals that even the most dedicated scoopers may not always be able to follow through and thus may contribute to at least some of the waste being left at parks. This is also interesting in light of research conducted in Snohomish County in 2005 that indicates that most people thought negatively of those that don’t pick up after their pets, assuming that the primary reasons for not doing so was that others were “lazy”. This assumption was even more prevalent among those who reported “always” picking up after their pet.

**People Want to See Pet Waste Disposed of Properly and Think That the Mutt Mitt Program Helps** - All respondents felt that it was important for pet owners to pick up after their pet *and* put it in the trash (83% said it was “extremely important” and 17% said it was “very important”). In addition, most respondents said that they thought that the Mutt Mitt program has a major effect on reducing the amount of pet waste left on the ground.

**Users Have Positive Feelings About Mutt Mitt Program, Even if They’re Unsure If Pet Waste Pickup Rates Have Improved** - When people were asked if rates of pet waste pickup have improved at their park over the last two or three years, there was no clear consensus. Thirty five percent of respondents thought people were picking up more, 12% thought people were picking up less, 17% felt it was about the same, and 26% didn’t know. There are a number of conclusions that could be drawn from the disparity between this question and the previous one about the effect of the Mutt Mitt program. People’s positive response about the effect of the program may indicate that they like the program, even if they’re not sure that they’ve seen pickup rates improve at their local park. **Increase Park Use May Lead to Perception that Pickup Rates Have Not Improved.** In any population, there is a fairly steady

percentage of people who will not follow best management practices, thus increased park use would lead to more pet waste left on the ground. The number of bags provided to Clear Creek has increased precipitously since the program began in 2007, providing some support to the idea that park use may have increased (see Table 3).

**Table 2 - Number of bags provided by year to Clear Creek Trail**

Year	Bags used
2007	1,600
2009	2,000
2010	10,000
2011	20,000
2012	36,100
2013	62,000
2014	60,000

“We use the Mitt stations, but feel they should be accompanied by trash cans.” - Mutt Mitt User

**Users Would Like More Waste Receptacles** - The final question on the survey was an open-ended question asking for any other comments or

suggestions for improving the program. Responses were then categorized (see Table 3). The most common suggestion for improving the program was to have more trash cans available. Of those that asked for more trash cans, most responses (73%) came from Clear Creek. It is interesting that while many Mutt Mitt users wanted more places to dispose of their pet waste, this was not a common request among sponsors.

**Table 3 - Open-ended comments and suggestions**

#	Response
15	More trash cans
11	General praise
5	More stations in more locations
5	Other ideas for improving compliance
5	Comments about the park or its upkeep

**Discussion/Conclusion**

**Sponsors and Users Represent Different Audiences** - In comparing responses from users and sponsors, it appears that these are two different audiences. While we did not ask a specific question about why people pick up after their pets, the common theme in interacting with interviewees was that they picked up after their dogs as a courtesy to others, so no one would step in it, not as a means to achieve improvement in local water quality. By contrast, the most popular reason for sponsoring a station was to help reduce impact on local water quality. Messaging and outreach to these two groups should be done

separately with an eye to their different motivations. More exploration into the motivations of users may prove helpful.

**Waste Disposal a Barrier for Both Sponsors and Users** - The disparity between the number of requests for more waste bins between sponsors and users is also insightful, and perhaps indicative of barriers for both groups. For users, it would appear they are unwilling to carry bags filled with their pet's waste very far. The large body of research devoted to littering indicates that convenience is a huge factor in whether people choose to litter. It stands to reason that picking up pet waste follows similar behavior patterns. However, the fact that sponsors did not make a similar request (despite frustration among some that pickup rates aren't better) may indicate that the cost and effort of removing garbage from the waste bins is a barrier. This is supported by a number of personal communications from sponsors regarding the cost and effort of maintaining a waste bin.

Based on the results of this survey, the following recommendations are made.

- To improve pick up rates:
  - **Make pet waste disposal more convenient** by providing more waste bins and providing clip-on bag dispensers. Partner with volunteers at high-use parks to distribute dispensers.
  - **Eliminate confusing wording** ("degradable pick-up mitt") with stickers identifying the correct action ("scoop it, bag it, trash it") to help users understand how to dispose of pet waste.
  - Explore ways to **incentivize pet waste disposal**, such as giving dog treats when people throw away dog waste.
- To make sponsorship easier and aid current sponsors:
  - Work with sponsors to find ways to **make emptying waste bins more convenient**.
  - Work with Waste Management to **assess feasibility of discounted or pro bono garbage pick-up** at Clear Creek.
  - Explore ways to **reduce price of Mutt Mitt sponsorship**, including finding less expensive bags, providing more bags to more sponsors, and sharing cost-saving techniques with sponsors when they are contacted for annual reporting.
  - Work directly with sponsors as needed to **set reasonable expectations for the program's success** and help them understand the importance of their work in creating social norms.
- To increase sponsorship:
  - **Increase visibility of program** through ads and articles, emphasizing the program's success, the hard work of volunteers, and ways to become involved.
  - **Continue to promote program to recruit new station sponsors.**

These recommendations are meant to help improve pick-up rates, encourage and aid existing sponsors, and recruit new sponsors to the program.

"Good program. Keep it going!" – Mutt Mitt User

## **Appendix A**

**Introduction:** We are contacting you because our records indicate that you signed up to sponsor a Mutt Mitt station. First of all, thank you for participating in this program! We have a few short questions to help us improve our program and determine its impact. Please take a few minutes to fill out the survey. Respondents will be eligible to receive a free green cleaning kit, valued at \$15 or a batch of Mutt Mitt bags of similar value (200 bags). Please submit responses by Sept. 22nd. If you are no longer the person responsible for maintaining the Mutt Mitt station, please notify Cammy Mills (cmills@co.kitsap.wa.us ).

1. How long have you been a Mutt Mitt sponsor?
  - a. Less than a year
  - b. 1-3 years
  - c. 4-5 years
  - d. More than 5 years
  
2. How many stations do you sponsor?
  - a. 1
  - b. 2
  - c. 3
  - d. 4 or more
  
3. What was the main reason you decided to become a Mutt Mitt sponsor? (Choose one.)
  - a. Help make the area more child friendly
  - b. Help reduce impacts on local water quality
  - c. Help make the area friendly to both dog and non-dog owners
  - d. Help support educating dog owners about what to do with pet waste
  - e. Sponsored station in response to resident/neighbor complaints about pet waste
  - f. Other – please specify
  
4. About how often do you frequent the area(s) where you sponsor a station(s)? If you sponsor more than 1 station, your response should reflect a visit to any one of the stations.
  - a. 3 or more times a week
  - b. 1 to 2 times a week
  - c. 1 to 3 times a month
  - d. Less than once a month
  - e. Once every 2-4 months
  - f. A few times a year
  
5. What effect do you think the Mutt Mitt stations has had on reducing the amount pet waste left on the ground in the areas you are familiar with?
  - a. Major effect
  - b. Moderate effect

- c. Minor effect
- d. No effect
- e. Don't know

6. How likely are you to continue sponsoring the Mutt Mitt station(s)?

- a. Extremely likely (skip to 8)
- b. Very likely (skip to 8)
- c. Neither likely nor unlikely (skip to 8)
- d. Not very likely (proceed to 7)
- e. Not at all likely (proceed to 7)

7. What is the main reason you are not likely to continue sponsoring the Mutt Mitt station?  
(Choose one)

- a. Too much work stocking the bags
- b. Too much work dealing with the garbage
- c. Moving away
- d. Too much expense

8. Would you be interested in joining an online group for Mutt Mitt station sponsors on Facebook or other social media? This could be a venue to share successes and challenges and to let us and others know of safety concerns (such as wasp nests in Mutt Mitt stations).

- a. Yes (If yes, proceed to 8a)
- b. No (If no, skip to 9)

8a. Please leave us your email address so we can let about an online Mutt Mitt sponsor group.

9. Do you have any suggestions for how we could make the Mutt Mitt program more successful?

10. Is there anything else you'd like to share about your experience sponsoring a Mutt Mitt station?

11. In order to be eligible to receive your green cleaning kit or supply of Mutt Mitt bags, we need a way to contact you. This is completely optional.

Email:

Phone:

Name:

**Appendix B**



# Dog Walker Survey

We value your feedback and are constantly striving to make our programs better. Please take a few minutes to fill out this brief survey. Choose the answer that best applies for each. When you're done, you'll receive a special gift.



**About how often do you walk your dog at this park?**

- Almost daily
- 1 to 4 times a week
- 1 to 3 times a month
- Less than once a month

**Of all the times you come here with your dog, about how frequently do you pick up the poop?**

- Always
- Often
- Sometimes
- Rarely
- Never
- NA - Dog has never pooped here

**When you visit parks or other areas with your dog that have Mutt Mitt stations, about how frequently do you use the bags provided?**

- Always
- Often
- Sometimes
- Rarely
- Never

**On an occasion where you may not have picked up after your dog on a walk, what was the main reason?**

- Unprepared/No Bag
- Dog pooped in an area where people wouldn't walk
- Dog was sick
- N/A – always pick it up

**How important do you think it is for dog owners to pick up their pet waste *and* put it in a garbage can?**

- Extremely important

- Very important
- Moderately important
- Slightly important
- Not at all important

**Compared to 2 or 3 years ago, would you say that dog owners are now picking up their pet waste more, less, or about the same *at this park*?**

- Picking it up more
- Picking it up less
- About the same
- Don't know

**If you witnessed somebody fail to pick up their dog's waste, would you feel comfortable asking them to do so?**

- Yes, I've done it before
- Yes, I think so
- No
- Not sure

**In the last 12 months, have you ever asked a *friend or acquaintance* to pick up after their dog waste?**

- Yes
- No

**In the last 12 months, have you ever asked *someone you don't know* to pick up after their dog waste?**

- Yes
- No

**What effect do you think the Mutt Mitt program and information about scooping the poop and putting it in the trash has had on reducing the amount of pet waste left on the ground in areas where you take your dog?**

- Major effect
- Moderate effect
- Minor effect
- No effect
- Don't know

**What is your gender?**

- Male
- Female

**What is your age?**

- 18-35
- 36-50
- 51-64
- 65+

**How long have you been a dog-owner?**

- Less than 1 year

- 2 to 5 years
- More than 5 years

**Do you have any comments or suggestions about the Mutt Mitt stations or pet waste?**

**INTERLOCAL AGREEMENT  
BETWEEN KITSAP COUNTY AND  
THE CITY OF PORT ANGELES  
FOR THE WEST SOUND STORMWATER OUTREACH GROUP**

**I. PREAMBLE**

This Interlocal Agreement (hereafter "AGREEMENT") is by and between Kitsap County (hereafter "COUNTY") whose principal offices are located at 614 Division Street, Port Orchard, WA, 98366 and the City of Port Angeles (hereafter "CITY") whose principal offices are located at 321 East 5<sup>th</sup> Street, Port Angeles, WA 98362.

**II. RECITALS**

*Whereas*, the Washington State Department of Ecology requires owners or operators of a municipal separate storm sewer system to obtain coverage under a Western Washington NPDES Phase II Municipal Stormwater Permit; and

*Whereas*, mutual benefits will accrue to the parties hereto and the people which each serves in the cooperative implementation of the West Sound Stormwater Outreach Group. The Interlocal Cooperation Act, chapter 39.34 RCW, further authorizes the parties hereto to enter into this AGREEMENT; and

*Whereas*, Permittees are required by Permit Section S5.C.1 to provide stormwater education and outreach programs designed to achieve measurable reductions in behaviors that cause or contribute to adverse stormwater impacts; and

*Whereas*, coordination among Permittees with adjoining or shared geographic areas is encouraged by Washington State Department of Ecology and enhances access to federal, state, and other financial and technical support; and

*Whereas*, West Sound residents share media sources and would benefit from consistent messaging across city and county boundaries; and

*Whereas*, municipal resource efficiency is increased and cost savings are realized through sharing expertise, expenses, and staff time to gain economies of scale and avoid duplication; and

*Whereas*, Kitsap County, United States Naval bases therein, and the cities of Poulsbo, Bremerton, Port Orchard, Gig Harbor, Bainbridge Island and Port Angeles desire to continue working together as the West Sound Stormwater Outreach Group to coordinate joint development and implementation of stormwater education and outreach programs.

NOW THEREFORE, the parties mutually agree as follows:

### III. AGREEMENT

A. The Recitals set forth above are expressly incorporated into the Agreement by this reference.

B. This AGREEMENT consists of the following documents:

1. Interlocal Agreement
2. Exhibit A: West Sound Stormwater Outreach Group Scope of Work and Budget

C. **Purpose:** The purpose of the AGREEMENT is to provide a mechanism through which COUNTY and CITY voluntarily collaborate in the development, implementation, and funding of stormwater education and outreach messages, materials, activities, and program assessment tools for the general public, businesses, and other target audiences as required by the NPDES Phase II Permit.

D. **Payment and Funding:** CITY will provide COUNTY funds in an amount not to exceed a total of \$8,290 per year, \$24,870 total for the years 2014 to 2016 inclusive. In accordance with Section I below, COUNTY agrees to send invoices to CITY representative for reimbursement of allowable expenses incurred as defined in Exhibit A.

E. **Scope of Work:** COUNTY and CITY shall perform duties and services as are listed in Exhibit A, attached hereto and incorporated herein by this reference. Said services shall be performed in accordance with the approved Scope of Work and budget specified in Exhibit A, and as provided for in Section I of this AGREEMENT.

F. **COUNTY and CITY Administrators:**

The "West Sound Stormwater Outreach Group" is a collective of local jurisdictions and is not a separate legal entity. Accordingly, Jayna Ericson, SSWM Outreach and Education Coordinator, 614 Division Street MS 26-A, Port Orchard WA 98366 shall represent COUNTY in all matters pertaining to the services rendered under this AGREEMENT. All requirements of the CITY pertaining to the services and materials to be rendered under this AGREEMENT shall be coordinated through the COUNTY representative.

Jonathan Boehme, Port Angeles' Stormwater Engineer, 321 East 5<sup>th</sup> Street, Port Angeles, WA 98362 shall represent the CITY in all matters pertaining to the services and materials to be rendered under this AGREEMENT. All requirements of the COUNTY pertaining to the services or materials to be rendered under this AGREEMENT shall be coordinated through the CITY representative.

Following a change of representative, COUNTY and CITY will inform the other party in writing within ten (10) working days.

**G Reporting:** By January 31<sup>st</sup> of each year this AGREEMENT is in effect, COUNTY and CITY will jointly report the results of work conducted under this AGREEMENT in a manner that is mutually useful in the fulfillment of NPDES Permit reporting requirements for public education activities, as specified in Permit Section S9.E.2.c.

**H. Responsibilities of the Parties:** It is mutually understood that CITY will provide COUNTY with the following:

Up to \$24,870 over the duration of this AGREEMENT for development of educational materials, professional service fees, partial reimbursement of COUNTY administrative costs, and other expenses related to tasks as described in Exhibit A. CITY will also contribute staff time to attend meetings, provide input, conduct pertinent research, and participate in program development.

It is mutually understood that COUNTY will provide CITY with the following:

COUNTY will provide administrative services and act as financial manager for this AGREEMENT and associated professional service contracts. COUNTY will also contribute staff time to facilitate meetings, provide input, conduct pertinent research, and participate in program development.

**I. Reimbursement:** CITY shall reimburse COUNTY for actual incurred costs upon presentation of a properly executed invoice. Costs shall be charged and funding reimbursed based upon appropriate program elements as defined in Exhibit A. COUNTY may exceed line item amounts within individual program element budgets, but shall not exceed the total budget for each individual program element without written approval of CITY. Reimbursement requests shall not be made to CITY more frequently than once a month. CITY shall reimburse COUNTY within thirty (30) days of receipt of a properly executed COUNTY invoice.

**J. Property:** Title to property purchased by COUNTY, the cost of which COUNTY has been reimbursed as a direct item of cost under this AGREEMENT, shall pass to and vest to COUNTY. Property purchased with funds delivered pursuant to this AGREEMENT may be used only for the performance of this AGREEMENT and shall be purchased in accordance with applicable state law and COUNTY purchasing policies.

**K. Assignment:** COUNTY may assign or subcontract any portion of the services provided within the terms of this AGREEMENT. All terms and conditions of the AGREEMENT shall apply to any approved subcontract or assignment related to this AGREEMENT.

**L. Indemnity:** Both COUNTY and CITY shall accept responsibility for any and all liability arising from acts of its own officers, employees, agents and contractors to the extent provided by law. Additionally, each party agrees to indemnify, defend, and hold

harmless the other party, and its officers, agents, and employees for all claims (including demands, suits, penalties, losses, damages or costs of any kind whatsoever) including costs, expenses and reasonable attorney's fees, to the extent such a claim arises or is caused by the indemnifying party's own negligence or that of its officers, agents, or employees in performance of this Agreement.

Nothing contained in this section of this Agreement shall be construed to create a liability or a right of indemnification in any third party.

This section shall survive the expiration of this Agreement.

**M. Amendments:** The parties hereby further agree that this AGREEMENT cannot be amended or modified without the written concurrence of both parties.

**N. Termination:** Either party to this AGREEMENT may elect to terminate this AGREEMENT for any reason by delivering a sixty (60) day written notice of intent to terminate to the other party. In the event of such termination, COUNTY shall be compensated for the actual costs incurred prior to the time of written notification of contract termination.

**O. Duration:** This AGREEMENT shall commence on the date of execution, and shall remain in effect through December 31, 2016.

**P. RECORDING.** Pursuant to RCW 39.34.040, this Agreement shall be filed with the Kitsap County Auditor.

**Q. WAIVER.** A failure by either party to exercise its rights under this agreement shall not preclude that party from subsequent exercise of such rights and shall not constitute a waiver of any other rights under this Agreement unless stated to be such in a writing signed by an authorized representative of the party and attached to the original Agreement.

**R. GOVERNING LAW.** This Agreement shall be governed by and construed in accordance with the laws of the State of Washington.

**S. VENUE.** The venue for any action to enforce or interpret this Agreement shall lie in the Superior Court of Washington for Kitsap County, Washington.

**T. MULTIPLE ORIGINALS.** This Agreement may be executed in multiple copies, each of which shall be deemed an original.

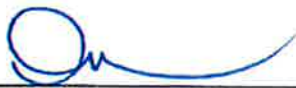
**U. SEVERABILITY.** If any provision of this Agreement or any provision of any document incorporated by reference shall be held invalid, such invalidity shall not affect the other provisions of this Agreement which can be given effect without the invalid provision, if such remainder conforms to the requirements of applicable law and the

fundamental purpose of this agreement, and to this end the provisions of this Agreement are declared to be severable.

IN WITNESS WHEREOF, this Agreement was executed by the parties on the dates hereinafter indicated.

DATED this 17<sup>th</sup> day of December, 2013.

**CITY OF PORT ANGELES**



Dan McKeen, City Manager

ATTEST



Janessa Hurd, City Clerk

Approved as to Form:



William E. Bloor, City Attorney

DATED this 27<sup>th</sup> day of January, 2014.

**KITSAP COUNTY  
BOARD OF COMMISSIONERS**



Charlotte Garrido, Chair



Robert Gelder, Commissioner



Linda Streissguth, Commissioner

ATTEST



Dana Daniels, Clerk of the Board



**EXHIBIT A:**

**WEST SOUND STORMWATER OUTREACH GROUP  
Scope of Work & Budget for 2014–2016**

Kitsap County and the Cities of Poulsbo, Bremerton, Port Orchard, and Gig Harbor have been working to jointly develop, implement, and fund NPDES Municipal Stormwater Permit-required outreach via interlocal agreements since 2008. With the additions of Bainbridge Island and Port Angeles in 2012, the group assumed the name of West Sound Stormwater Outreach Group (WSSOG), to represent the regional scope and to align with other similar groups across Puget Sound under the Stormwater Outreach for Regional Municipalities (STORM) umbrella.

**A. GOALS, OBJECTIVES, AND TASKS**

*Goals:*

1. **Work cooperatively to help meet the requirements for compliance with NPDES Phase II Municipal Stormwater Permit Section S5.C.1, Public Education and Outreach, through the implementation of "education and outreach program[s] designed to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts and encourage the public to participate in stewardship activities."**<sup>1</sup>
2. **Realize cost savings and increase municipal resource efficiency by sharing expertise, expenses, and staff time to gain economies of scale and avoid duplication.**
3. **Jointly work to help fulfill education and outreach requirements of local Total Maximum Daily Loads (TMDLs), also known as Water Pollution Cleanup Plans.**
4. **Benefit citizens of the West Sound region by providing consistent outreach and messaging.**
5. **Gain enhanced access to federal, state, and other financial and technical support through coordination among Permittees with adjoining or shared geographic areas.**

*Objectives & Tasks:*

**Objective 1** Develop and adhere to an annual work plan for each year of this interlocal agreement.

**Task 1.1** Jointly develop a work plan for each year by January 31 of 2014, 2015, and 2016.

**Objective 2** Build on existing successful efforts by maintaining elevated awareness levels and environmentally positive behavior trends for one audience and behavior selected during the previous Permit term.

**Task 2.1** Review available survey results to determine impact of existing outreach efforts.

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<sup>1</sup> Washington State Department of Ecology, *Western Washington Phase II Municipal Stormwater Permit (2013)* p.16.

- Task 2.2** Continue to achieve sustained awareness and practice of proper pet waste management.
- Update the Education & Outreach Plan for Pet Waste in Backyards, including a strategy for sustained awareness for the current Permit term.
  - Update the Education & Outreach Plan for Pet Waste in Public Places, including a strategy for continued awareness and behavior adoption for the current Permit term, leading to sustainable growth and maintenance of the Mutt Mitt Program.

**Objective 3** Select one new behavior and target audience. Review and prioritize the list of NPDES Permit audiences and practices to be addressed by a behavior change campaign. Revise as necessary based on emerging issues, opportunities, and evaluation results.

**Task 3.1** Assess practices that are most likely contributing to adverse stormwater impacts based on regional reports, studies, and knowledge of local pollution problems. Consider the scope of the problems as identified by reports, water quality data, and inspection/investigation results.

**Task 3.2** Evaluate behaviors targeted for social marketing campaigns using factors such as:

- Attitude and behavior survey data, such as the Puget Sound Partnership's General Opinion Survey and Sound Behavior Index results;
- Applicability of the issue across the West Sound region;
- Availability of existing, effective programs that can be modeled;
- Opportunities to collaborate with others involved in stormwater outreach programs;
- Degree to which behaviors are single, simple, doable, and measurable; and
- Findings from Task 3.1.

**Objective 4** Design or adopt a social marketing campaign with built-in evaluation protocols for the highest priority behavior from Objective 3.

**Task 4.1** Conduct formative research, which may include:

- Reviewing other program designs, management approaches, and evaluation strategies;
- Adopting a campaign approach that has been thoroughly evaluated and proven successful in a similar community; and/or
- Utilize focus groups or other survey tools to garner in-depth information on attitudes and practices relative to the behavior, and identify barriers and benefits of the target audience adopting the behavior.

**Task 4.2** Develop a campaign strategy based on research from Task 4.1 that includes an evaluation plan with specific, measurable, and achievable outcomes.

- Objective 5** Implement a social marketing campaign for the highest priority behavior.
- Task 5.1 Test the campaign strategy on a small segment of the population, using focus groups and/or pilot studies to refine and reevaluate the strategy.
  - Task 5.2 Implement the campaign across the community, assessing effectiveness at proper intervals, documenting progress, and changing the campaign strategy as necessary to achieve defined outcomes.
  - Task 5.3 Continue the program at an appropriate level once measurements indicate increased adoption of the behavior in the target audience.

**Objective 6** As resources and consensus of the group are available, implement additional campaigns using a phased approach for each prioritized behavior and associated target audience.

- Task 6.1 Pursue grants and other funding opportunities as available and appropriate.

**Objective 7** Use adaptive management to refine programs and direct education and outreach resources most effectively.

- Task 7.1 Take advantage of mutually beneficial outreach opportunities that fall within the NPDES Permit-required scope of audiences and behaviors, regardless of prioritization ranking.
- Task 7.2 Seek opportunities to share among member jurisdictions the existing outreach efforts to audiences not prioritized within the WSSOG activities, such that these efforts are beneficial to all members.

**Objective 8** Represent the WSSOG on larger regional stormwater outreach efforts through participation as a Core member of STORM and the Puget Sound Starts Here (PSSH) campaign development team.

- Task 8.1 Help implement the STORM Strategic Plan and annual Work Plan to achieve results of use and benefit to the WSSOG.
- Task 8.2 Promote capacity building among STORM and WSSOG members to raise the caliber of collective outreach in the region.
- Task 8.3 Support development and implementation of the PSSH awareness campaign in conjunction with on the ground local behavior change programs.

**Objective 9** Track and maintain records of education and outreach activities. Publish an annual summary of activities that is suitable for use in NPDES reporting.

## **B. BUDGET**

Table 1 shows the annual budget for years 2014 through 2016. The annual Staff Time budget of \$43,720 is for 0.5 FTE of a Kitsap County Education & Outreach Coordinator's time to administer the Interlocal Agreement and manage outreach programs identified in the annual work plan on behalf of the WSSOG. This funding also includes coordination with STORM, the Puget Sound Starts Here campaign development team, ECO Nets, and all associated travel expenses; as well as administrative duties such as financial tracking and management. The annual staff time budget will be shared by all WSSOG jurisdictions in proportion to their relative population size, as shown in Table 1.

The annual Outreach Base Programs budget of \$65,020 will be used to implement joint programs prioritized by the group and agreed upon for inclusion in the WSSOG annual work plan. This may include activities such as the Mutt Mitt Program, backyard pet waste outreach, reporting hotline promotion, advertising, business outreach, local implementation of the Puget Sound Starts Here campaign, newsletters and literature development, priority behavior change programs, member capacity building, and evaluation/surveys. The WSSOG will make every effort to minimize actual costs by selecting competitive bids for professional services, and by pursuing grants and other funding sources as available and appropriate.

The annual Supplemental Programs Budget was added to accommodate several jurisdictions that expressed a desire for additional outreach support. This allows flexibility for jurisdictions to customize a suite of outreach options to meet the needs of their communities. Rates for elementary classroom lessons were based on County staff time for lesson preparation, teaching time, and travel. Cinema ad rates were based on real charges incurred for similar advertising in 2012.

**Table 1. Annual budget for all program elements.**

Jurisdiction	Population (2013)	Relative Population	Staff Time	Base Programs Budget	Supplemental Programs Budget	Annual Cost per Jurisdiction
Unincorporated KC	170,505	60.7%	\$26,540	\$39,460	N/A	\$66,000
Bremerton	37,850	13.5%	\$5,900	\$8,780	\$0	\$14,680
Bainbridge Island	23,190	8.3%	\$3,630	\$5,400	\$0	\$9,030
Port Angeles	19,120	6.8%	\$2,970	\$4,420	\$900 <sup>2</sup>	\$8,290
Port Orchard	12,870	4.6%	\$2,010	\$2,990	\$860 <sup>3</sup>	\$5,860
Poulsbo	9,585	3.4%	\$1,490	\$2,210	\$1,650 <sup>4</sup>	\$5,350
Gig Harbor	7,670	2.7%	\$1,180	\$1,760	\$2,700 <sup>5</sup>	\$5,640
<b>TOTAL</b>	<b>280,790</b>	<b>100.0%</b>	<b>\$43,720</b>	<b>\$65,020</b>	<b>\$4,660</b>	<b>\$114,850</b>

<sup>2</sup> Includes funding for 2 months of cinema ads in Port Angeles.

<sup>3</sup> Includes 4 elementary school classroom lessons at \$215 each.

<sup>4</sup> Includes 6 elementary school classroom lessons at \$275 each.

<sup>5</sup> Includes funding for 2 months of cinema ads at the Galaxy Uptown Theatre in Gig Harbor.



## 2015 Interim Report

**Name of Project:** *Public Education and Outreach Services*

**Main contact/role:** *Melissa Williams, Executive Director, Feiro Marine Life Center*

**Contact Information:** 360-417-6254

**Project Overview:** Conduct education programs for 4<sup>th</sup> and 5<sup>th</sup> grade students in Port Angeles related to stormwater and human impact. Aligned with NPDES permit requirements, assess behavior change of students. Rebuild rain garden model and provide education services on stormwater to Feiro visitors.

### **Summary of Progress to Date:**

Students in the fourth grade at area schools visited the Feiro Marine Life Center, on the Port Angeles City Pier, and NOAA's Olympic Coast National Marine Sanctuary to participate in *North Olympic Watershed Science*. This program provides a hands-on opportunity for students to learn about the marine food web and the human impact on that food web, primarily through the impact of marine debris, and especially plastics. The debris often begins as land-based litter, and can be washed into the ocean through the movement of water runoff in local watersheds.

**Port Angeles students reached – Aug 2015 – Dec 2015:** 226

### **Hours of education provided:**

Students – 15 hours x 226 students

General public -- 25 hours x 5,000 people

### **Evidence of change in knowledge, skills or attitudes specific to targeted NPDES permit behaviors:**

In an attempt to measure behavior change of students participating in the 4<sup>th</sup>, and later 5<sup>th</sup> grade programs, students were given a three question verbal survey.

Each question was a yes/no question answered by a show of hands. First, we asked how many students had pets, specifically cats or dogs. Second, we asked how many of the students, with pets, were responsible to pick up their waste. Third, we asked how many students disposed of the pet waste in the garbage can.

We visited ten 4<sup>th</sup> grade classrooms in Port Angeles. About 60% of students have pets. Of the students that have pets, about 50% of them are responsible for picking up their waste. Of the students that are responsible for picking up after their pets, about 80%\* of the students say that they always throw the pet waste in the garbage.

The intention is to again measure the same students as they progress to the 5<sup>th</sup> grade.

### **Student Pre- and Post-test Survey 4<sup>th</sup> Grade of Marine Debris**

\* might have some peer bias

All 10 classes were also assessed on their understanding of marine debris issues and actions they could take. Three questions were asked prior to the field investigation and immediately afterwards. Each class showed an improvement on marine debris topics, including: Which items are most commonly found, how marine debris can harm marine life and ways they can take action to prevent marine debris.

The average pre-response for all students was 22.4 points. Two of the questions were open-ended, so there was no maximum point total. The average post-response for the same students was 56.8 points, demonstrating a knowledge gain of 34.4 in understanding of marine debris impacts on marine life and ways students can act to prevent marine debris from entering our watersheds and waterways.

**Rain Garden Model** Feiro refreshed the education model demonstrating the effectiveness of a rain garden. The model has been used at the Clallam County Fair and is on display daily in front of the center.

**Any anticipated changes to project:**

Student programming remains as planned for 2016. We will see an increased focus on public education services, including increased awareness and behavior to improve the health of Peabody Creek is planned and being implemented in partnership with several community organizations, including Friends of Peabody Creek, North Olympic Salmon Coalition, Port Angeles Noon Rotary, PA Citizen Action Network, Hope after Heroin youth group and others.



## Stewardship Opportunities

The City has implemented a grant program to encourage resident participation in activities such as learning about and building rain gardens, creek restoration, habitat enhancement, and storm drain marking. The City partners with WSU Extension, Master Gardeners of Clallam County to provide site assessments and education for property owners interested in rain gardens. In 2015 two rain garden grants were awarded, and installed by home owners.

The photos below were taken building one of the rain gardens in partnership with WSU Extension. This site served as a learning laboratory for a hands-on rain garden training class held in Port Angeles in November 2015.







# Stormwater Green Infrastructure Rebate Program 2015

## Rain Garden and Residential Downspout Disconnection

### Rebate Application

Name: \_\_\_\_\_

When it rains, runoff flows from our roofs, yards and driveways, carrying oil, fertilizers, pesticides, and other pollutants into our environment. The City of Port Angeles wants to assure that does not happen. The Stormwater Green Infrastructure Rebate Program's aim is to reduce the amount of pollutants that enter the environment.

#### Rain Gardens

The City of Port Angeles is providing financial assistance to residents and businesses building rain gardens at their home or place of business. Approved applicants may receive a rebate of up to \$750 for the purchase of materials, such as plants, compost, sand, mulch and rock.

#### Residential Downspout Disconnections

The City of Port Angeles is providing financial assistance to residents disconnecting downspouts from the Combined Sewer or Stormwater System. Approved applicants may receive a rebate of \$25 per downspout draining to the Combined Sewer, \$150 maximum, or \$12.50 per downspout draining to the Stormwater System, \$75 maximum.

The stormwater from disconnected downspouts must be directed to onsite controls such as a drywell, rain garden, rain barrels, dispersion, or other approved method.

#### Program Guidelines:

- Rain gardens and downspout disconnections must be located inside City limits.
- **Applicants must be approved prior to commencement of construction.**
- Rain Garden Rebate and Residential Downspout Disconnection Rebates may be combined, but limit one rebate of each type per household or business.
- A minimum of 400 square feet of impervious surface area, such as roofs, driveways, or patios must drain to proposed rain garden to be eligible.

Applications will be accepted from **February 1, 2015**, through **November 30, 2015**, or until available funding is depleted, whichever comes sooner. All work must be completed and Rebate Form submitted by December 10, 2015. Applicants will be notified regarding the status of approval or denial of their applications within three weeks of their application submittal. Applicants denied rebates may revise and resubmit their applications for reconsideration if they adequately address all prior comments. Suggested rain garden design details may be found on the City website: <http://www.cityofpa.us/Stormwater.htm>

For more information contact the City of Port Angeles at 360-417-4830  
Or to schedule a free site assessment contact Master Gardeners at 360-565-2679

## Stormwater Green Infrastructure Rebate Applicant Information (required information)

Name: \_\_\_\_\_

Site Location Address: \_\_\_\_\_

Contact (Please check the best method to contact you)

- Mailing Address: \_\_\_\_\_
- Phone Number and best time to call: \_\_\_\_\_
- Email: \_\_\_\_\_

Applying for:

- Rain Garden Rebate
- Downspout Disconnection Rebate

Project Details:

What are your project goals? \_\_\_\_\_

Please attach the following items to your application for **Rain Garden Rebate**:

- Photos of the area BEFORE installation
- Green Rebate Worksheet (for free site assessment contact: Master Gardeners at 360-565-2679)
- Infiltration Test Checklist
- Sketch of the design and planting layout

Please attach the following items to your application for **Downspout Disconnection Rebate**:

- Photos of the area BEFORE installation
- Green Rebate Worksheet
- Sketch of where the downspouts currently drain
- Sketch of the design for onsite stormwater controls
- Number of downspouts to disconnect: \_\_\_\_\_

- **Following construction, submit rebate form with original receipts no later than December 10, 2015 in order for the rebate to be processed.**
- **Call (360) 417-4830 to schedule a FINAL inspection. Rebates will not be disbursed without a final inspection.**

**Certification**

By submitting this application I certify that I am the legal property owner as shown in the deed or I have obtained permission from the property owner to change the landscaping. I agree to perform routine maintenance on the rain garden or other stormwater controls, and keep the installed system in good working order for a minimum of two years. I grant the City permission to conduct site inspections of my stormwater system at times that are mutually acceptable to me and the City.

I acknowledge that the City of Port Angeles provides examples of rain gardens and stormwater control designs. I understand that the City did not design, install, or oversee the installation or design of my rain garden or stormwater control installed on my property. I am solely responsible for the design, installation, and functioning of the rain garden or stormwater control installed on my property. The City is not responsible for any loss, injury, flooding, or other damage that may occur or result from the rain garden or storm water control installed on my property or the downspout(s) disconnected on my property. By accepting the rebate, I hereby waive and release the City from any claim, cause of action, or liability from any loss, injury, flooding, or other damage whatsoever arising or resulting from the design, installation, and function of the rain garden or stormwater control installed on my property.

As a condition of this application and receiving City funds, I give the City permission to release the location of my rain garden, and I agree that my rain garden may be photographed by the City for documentation and promotion purposes.

X \_\_\_\_\_

Signature

Date

Send complete applications by one of the following methods:

Mail to: City of Port Angeles  
c/o Stormwater Rebate Program  
321 E Fifth Street – P.O. Box 1150  
Port Angeles, WA 98362

Email: [stormwater@cityofpa.us](mailto:stormwater@cityofpa.us)

For City Use: Date Received: \_\_\_\_\_ Approval: \_\_\_\_\_

# Green Rebate Worksheet - Feasibility

Date \_\_\_\_\_

Referred by \_\_\_\_\_

Property Owner: \_\_\_\_\_

Address: \_\_\_\_\_

Public Sewer: \_\_\_\_\_ Private drainfield: \_\_\_\_\_ Type of onsite sewage system: \_\_\_\_\_

Tax Parcel Number \_\_\_\_\_ Watershed (if known) \_\_\_\_\_

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## DESIGN CONSIDERATIONS - LOCATION

*Ideal rain garden or infiltration sites are fairly flat, downhill from runoff source, and well drained. See pages 6-7 of the Rain Garden Handbook.*

- Green infrastructure site > 10 ft downslope or > 50 ft upslope of drainfield \_\_\_\_\_
- Check for buried utilities at site (call 811 to have utilities located) \_\_\_\_\_
- Slope <15 % (rise of slope / length of slope) \_\_\_\_\_
- Site >10 ft from buildings \_\_\_\_\_
- Site downhill of runoff source \_\_\_\_\_
- Groundwater > 1ft below bottom of green infrastructure \_\_\_\_\_
- Soil drainage >0.25 in/hr (see Infiltration Test Checklist) \_\_\_\_\_  
Percolation Tests:           Hole One       Trial 1 \_\_\_\_\_ Trial 2 \_\_\_\_\_ Trial 3 \_\_\_\_\_  
  Hole Two       Trial 1 \_\_\_\_\_ Trial 2 \_\_\_\_\_ Trial 3 \_\_\_\_\_
- Safe overflow path (where will water drain to if it overflows rain garden?) \_\_\_\_\_

## DESIGN CONSIDERATIONS – DRAINAGE, SIZE AND OUTFLOW

- Measure how much area is draining to the Rain Garden or other stormwater control (pg 10 of the Handbook)  
\_\_\_\_\_ square feet of roof area and \_\_\_\_\_ square feet of yard or driveway will drain to the rain garden for  
a total are of \_\_\_\_\_ square feet
- Measure how much area is available for the rain garden (pg 11 of the Handbook): \_\_\_\_\_ square feet
- Options for inflow to garden (e.g. buried pipe, swale, overland flow) \_\_\_\_\_
- Options for outflow from garden (e.g. storm drain, disperse to open landscape) \_\_\_\_\_

**CONCLUSION – Is site suitable for green stormwater infrastructure?** \_\_\_\_\_

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## Green Rebate Worksheet – Design

### Budget

Design Costs: Who will design the rain garden?  Self  Consultant \$ \_\_\_\_\_

Labor Costs: Who will install the rain garden?  Self  Contractor \$ \_\_\_\_\_

Material Costs:

Materials (Plants, soil)	Quantity	Source (ie Nursery)	Area Required (sq-ft)	Cost

**Total Estimated Green Infrastructure Cost:** \$ \_\_\_\_\_

### Number of disconnected downspouts:

Disconnected from Sanitary Sewer at \$25 each Number : \_\_\_\_\_ \$ \_\_\_\_\_

Disconnected from Stormwater System at \$12.50 each Number : \_\_\_\_\_ \$ \_\_\_\_\_

**What is the estimated rebate amount requested?** \$ \_\_\_\_\_

(Maximum rain garden materials rebate is \$750.)

(Maximum disconnection rebate is \$150.)

## Perform an Infiltration Test Checklist

As part of your *Green Rebate Worksheet – Feasibility*

How water flows through soil plays a significant role in how large to build a rain garden. A glacial till or clay subsoil can act as a seal underneath the topsoil. If there is enough rain, the topsoil will become saturated and there will be no place for the water to go regardless of the characteristics of the topsoil.

To properly size your rain garden or other stormwater control, perform the following infiltration test:

### Test:

1) Dig a hole 24 inches deep and at least 10 inches across. Add a stake with a ruler attached to it.



2) Fill with a hose to a depth of **12 inches**, and let drain completely.

3) Repeat fill to 12-inch depth and drain a second time. This may take overnight.

4) On the third fill to 12-inch depth:

– Measure the water height every hour. *Note your results in the table included in this form.*

– Continue until the rate of fall stabilizes. (Same amount of fall for 2-3 hours)

– Use that as the infiltration rate. (inches/hour)

***If you find any of the following conditions during your test***

***You hit hard pan***

***Your test hole does not drain at least .25" per hour; OR***

***Your test hole fills with water***

***Do not attempt to install a rain garden or other infiltration system!***

**Results Table (Fill this out during your third fill)**

Percolation Test Hole # (Multiple test holes are recommended)	Elapsed Time (hours)	Water depth measurement (in inches)	Infiltration Rate (depth of fall in inches /time in hours)	Notes/Comments
1	Zero	12 inches		Initial fill

**You must sign the statement below and return this document with your application.**

I certify that I have followed the procedures outlined in this document to determine my rain garden or stormwater control sizing. I have chosen to size my rain garden or stormwater control in accordance with these results. I understand that rain gardens are sized for moderate rain events and that regardless of infiltration ability of my soil that my rain garden must have a clear and safe overflow.

Test performed by:

Homeowner      Print Name \_\_\_\_\_  
Signature \_\_\_\_\_ Date \_\_\_\_\_

Contractor      Print Name \_\_\_\_\_  
Signature \_\_\_\_\_ Date \_\_\_\_\_



# Stormwater Green Infrastructure Rebate Program 2015

## Creek Enhancement

### Grant Application

Project Name: \_\_\_\_\_

Five urban creeks are located in Port Angeles that carry water from the foothills of the Olympics to the Strait of Juan de Fuca. The City of Port Angeles wants to promote community awareness, and protect and enhance these natural amenities.

#### Creek Enhancement

The City of Port Angeles is providing financial assistance of between \$100 and \$1,000 to environmental organizations for stewardship opportunities. Eligible projects include:

- Creek restoration
- Riparian native vegetation and habitat enhancement
- Storm drain marking
- Other creek enhancement projects

#### Program Guidelines:

- Creek Enhancement Projects must be located inside City limits.
- Applicants must submit a project description not to exceed one page.
- Applications must be approved prior to commencement of project.
- Applicant is responsible for obtaining all required permits, such as property rights, Hydraulic Project Approval (HPA) permit, ect.

Applications will be accepted from **January 1, 2015**, through **November 30, 2015**, or until available funding is depleted, whichever comes sooner. Payments will be made on a cost-reimbursable basis. All work must be completed and Payment Request submitted by December 10, 2015. Applicants will be notified regarding the status of approval or denial of applications within three weeks of the application.

## Stormwater Creek Enhancement Application (required information)

Name: \_\_\_\_\_

Site Location / Address: \_\_\_\_\_

Contact (Please check the best method to contact you)

- Mailing Address: \_\_\_\_\_
- Phone Number and best time to call: \_\_\_\_\_
- Email: \_\_\_\_\_

What are your project goals? \_\_\_\_\_

Please attach the following items to your application:

- Brief project description, including any necessary environment / engineering permits
- Budget worksheet
- **Following project completion, submit payment request with itemized expenses no later than December 10, 2015 in order for the rebate to be processed.**

### Certification

I understand that the City did not design, install, or oversee the creek enhancement work. I am solely responsible for obtaining required permits to perform this work. The City is not responsible for any loss, injury, flooding, or other damage that may occur or result of this project. By accepting the grant, I hereby waive and release the City from any claim, cause of action, or liability from any loss, injury, property damage, or other damage whatsoever arising or resulting from the creek enhancement project. I understand that this application does not grant me any license to enter any property and that I am responsible for obtaining permission for the work from any property owners, including the City. In performing the work I understand I must follow all applicable laws.

X \_\_\_\_\_

Signature

Date

Send complete applications by one of the following methods:

Mail to: City of Port Angeles  
c/o Stormwater Rebate Program  
321 E Fifth Street – P.O. Box 1150  
Port Angeles, WA 98362

Email: [stormwater@cityofpa.us](mailto:stormwater@cityofpa.us)

For City Use: Date Received: \_\_\_\_\_ Approval: \_\_\_\_\_



An S4F1 notification was made to Department of Ecology on January 4, 2011. Sampling activities for bacteria continue through an Inter Local Agreement with Streamkeepers of Clallam County. Sampling for fecal coliform is conducted monthly in Peabody and Tumwater Creeks. A larger sampling of sites in Port Angeles is conducted quarterly for both dry and wet weather conditions. Sample results are analyzed monthly and compared against the City IDDE Response Policy. Attached is the 2015 sampling plan.

# City of Port Angeles project: Streamkeepers Grab-Sample Plan for 2015

<b>Semi Annual Samples - Aim for 1 dry weather and 1 wet weather sample in each semi annual window (preferably on consecutive days), for a total of 8 samples at each location</b>	Samples per event	Lab cost per event	Lab cost per year
Tumwater 0.0			
Tumwater 0.0 rep			
Tumwater 0.1			
Tumwater 0.1b (storm pipe)			
Tumwater 0.1a (u/s of storm pipe)			
Tumwater 0.8			
Tumwater 0.8D			
Tumwater 0.8E			
Tumwater 1.5			
Tumwater 4.4			
Valley 0.0 (when possible)			
Valley 0.4			
Valley 0.4 rep			
Valley 1.4			
Peabody 0.0 (when possible)			
Peabody 0.2			
Peabody 0.2 rep			
Peabody 0.2A			
Peabody 0.2B			
Peabody 0.4b (u/s of trailers)			
Peabody 0.4			
Peabody 0.4A			
Peabody 0.9			
Peabody 1.2			
Peabody 1.2A			
Peabody 1.4			
Peabody 2.9			
	27	702	
<b>Semi- Annual Marine Samples - same as above, fecal + entero</b>			
PA Harbor @Hollywood west			
PA Harbor @Hollywood central			
PA Harbor @Hollywood east			
PA Harbor @Peabody mouth			
PA Harbor @Peabody mouth rep			
	5	305	
<b>SUBTOTAL:</b>		1007	4028

**Non-Semi Annual Samples - Aim for 5 dry weather and 5 wet weather samples in non-semi-annual months, for a total of 10 samples at each location**

Peabody 0.0 (when possible)			
Peabody 0.2			
Peabody 0.2 rep			
Peabody 0.2A			
Peabody 0.2B			
Peabody 0.4b (u/s of trailers)			
Peabody 0.4			
Peabody 0.4A			
Peabody 0.9			
Peabody 1.2			
Peabody 1.2A			
Peabody 1.4			
Tumwater 0.0			
Tumwater 0.0 rep			
Tumwater 0.8			
Tumwater 0.8D			
Tumwater 0.8E			
Tumwater 1.5			
<b>SUBTOTAL:</b>	18	468	4680
<b>TOTAL:</b>			<b>8708</b>

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**Selected Water-Quality Parameters From: 1/1/15 To: 12/31/15**

**Project: City of Port Angeles**

**Watershed: All**

SITE			Air	Water	DO		Specific (25°C)		Fecal		Enterococci		Flow	Stage
Visit_ID	Date	Start Time	Temp (°C)	Temp (°C)	pH	Concentration (mg/L)	Conductivity (uS)	Salinity (pss)	Turbidity (NTU)	Precip24 (in)	Coliform (Colonies/100ml)	Flow (cfs)		
PA Harbor @ Peabody				PA Harbor @ Peabody mouth										
27070	5/11/2015	14:38		12						0	11	10	U	
27070	5/11/2015	14:40		12						0	11	10	U	
27513	9/22/2015	10:08		12							44			
27904	11/16/2015	12:17		9						0	U	57	124	
27904	11/16/2015	12:19		9						0	U	57	124	
28012	11/17/2015	12:53		10							132	3086		
28012	11/17/2015	12:54		10							132	3086		
PA Harbor @Hollywood central				PA Harbor @Hollywood Beach central										
27072	5/11/2015	14:50		13						0		6	U	
27906	11/16/2015	12:26		9						0	U	10	63	
27906	11/16/2015	12:24		9						0	U	10	63	
28010	11/17/2015	12:45		11							24	30		
PA Harbor @Hollywood east				PA Harbor @Hollywood Beach east end by Red Lion rooms										
27071	5/11/2015	14:43		13						0		2	U	10
27905	11/16/2015	12:19		9						0	U	28	G	1222
27905	11/16/2015	12:24		9						0	U	28	G	1222
28011	11/17/2015	12:47		11							60	84		
PA Harbor @Hollywood west				PA Harbor @Hollywood Beach west end by City Pier										
27073	5/11/2015	14:53		13						0		2	U	10
27907	11/16/2015	12:27		9						0	U	4	31	
28009	11/17/2015	12:42		11							20	63		

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SITE			Air	Water		DO	Specific (25°C)				Fecal	Entero-		
Visit_ID	Date	Start Time	Temp	Temp	pH	Concentration	Conductivity	Salinity	Turbidity	Precip24	Coliform	cocci	Flow	Stage
			(°C)	(°C)		(mg/L)	(uS)	(pss)	(NTU) type	(in)	(Colonies/100ml)		(cfs)	
Peabody 0.0				Peabody @ mouth										
23902	2/24/2015	13:55		7						0	10			
26779	3/31/2015	10:37		10						0	12			
26820	4/27/2015	9:30		9						0	2	U		
27069	5/11/2015	14:27		12						0	4			
27040	6/2/2015	11:30		13						0	178			
27274	7/7/2015	11:40		15							146			
27435	8/31/2015	10:35		15							70			
27824	10/27/2015	9:25		11							26			
27824	10/27/2015	9:40		11							26			
27976	11/16/2015	12:17												
28115	12/14/2015	9:05												

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SITE			Air	Water		DO	Specific (25°C)				Fecal	Entero-		
Visit_ID	Date	Start Time	Temp	Temp	pH	Concentration	Conductivity	Salinity	Turbidity	Precip24	Coliform	cocci	Flow	Stage
			(°C)	(°C)		(mg/L)	(uS)	(pss)	(NTU)	type	(Colonies/100ml)		(cfs)	
Peabody 0.2														
														Peabody @ 2nd St, above final culvert
23903	2/24/2015	14:09		7						0	13			0.55
23903	2/24/2015	14:10		7						0	13			0.55
26780	3/31/2015	12:04		10						0	4			0.6
26780	3/31/2015	12:01		10						0	4			0.6
26826	4/27/2015	11:00		9						0	4			0.48
26826	4/27/2015	10:59		9						0	4			0.48
27064	5/11/2015	13:27		12						0	2			0.43
27064	5/11/2015	13:30		12						0	2			0.43
27032	6/1/2015	10:30												0.4
27033	6/1/2015	14:30												0.45
27041	6/2/2015	10:38		12						0	309			0.42
27041	6/2/2015	10:40		12						0	309			0.42
27275	7/7/2015	11:50		16							81			0.38
27275	7/7/2015	11:51		16							81			0.38
27446	8/27/2015	18:00												0.32
27436	8/31/2015	12:24		15							43			0.36
27436	8/31/2015	12:25		15							43			0.36
27514	9/22/2015	11:59		13							15			0.34
27514	9/22/2015	11:58		13							15			0.34
27825	10/27/2015	9:40		11							42			0.46
27825	10/27/2015	9:41		11							42			0.46
27982	11/16/2015	15:25		8						0	U	59		0.82
27982	11/16/2015	15:26		8						0	U	59		0.82

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SITE Visit_ID	Date	Start Time	Air Temp (°C)	Water Temp (°C)	pH	DO Concentration (mg/L)	Specific (25°C) Conductivity (uS)	Salinity (pss)	Turbidity (NTU) type	Precip24 (in)	Fecal Coliform (Colonies/100ml)	Entero-cocci	Flow (cfs)	Stage
27988	11/16/2015	15:55												0.82
27989	11/17/2015	8:04												1.15
28005	11/17/2015	12:58		10										1.48
28013	11/17/2015	11:25		9							230 G			1.32
28013	11/17/2015	11:26		9							230 G			1.32
28019	11/17/2015	16:30												1.58
28121	12/14/2015	9:15		6							24			1 EST
28251	12/14/2015	12:00												0.9
Peabody 0.2a				Peabody input - storm pipe d/s of RV park office										
23904	2/24/2015	14:16		12						0	2 U			
26781	3/31/2015	12:09		8						0	4			
26827	4/27/2015	11:07		13						0	2 U			
27065	5/11/2015	13:24		13						0	2 U			
27043	6/2/2015	10:43		14						0	52			
27276	7/7/2015	11:57		14							2 U			
27437	8/31/2015	12:31		15							28			
27515	9/22/2015	12:10		15							2 U			
27826	10/27/2015	9:50		13							2 U			
27983	11/16/2015	15:30		13						0 U	20			
28014	11/17/2015	11:30		11							132 G			
28122	12/14/2015	9:20		8							14 G			

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SITE	Date	Start Time	Air Temp (°C)	Water Temp (°C)	pH	DO Concentration (mg/L)	Specific (25°C) Conductivity (uS)	Salinity (pss)	Turbidity (NTU)	Precip24 (in)	Fecal Coliform (Colonies/100ml)	Enterococci	Flow (cfs)	Stage
Peabody 0.2b														
				Peabody u/s of storm pipe		d/s of RV Park office								
23905	2/24/2015	14:18		7						0	16			
26782	3/31/2015	12:15		9						0	4			
26828	4/27/2015	11:10		10						0	2			
27063	5/11/2015	13:15		11						0	2			
27044	6/2/2015	10:45		12						0	200			
27277	7/7/2015	11:59		16							52			
27438	8/31/2015	12:32		16							40			
27516	9/22/2015	12:08		14							14			
27827	10/27/2015	9:47		11							36			
27984	11/16/2015	15:35		8						0	U	48		
28015	11/17/2015	11:32		9							206	J		
28123	12/14/2015	9:22		6							24			

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Peabody 0.4a				Peabody input - storm pipe inside culvert @ Peabody St.										
23908	2/24/2015	11:15		10						0	24			
26785	3/31/2015	12:47		10						0	28			
26831	4/27/2015	11:33		10						0	32			
27061	5/11/2015	13:10		12						0	10			
27047	6/2/2015	10:58		14						0	246			
27280	7/7/2015	12:10		16							6			
27441	8/31/2015	12:40		16							50			
27519	9/22/2015	12:23		13							76			
27830	10/27/2015	10:03		12							28			
27987	11/16/2015	15:44		11						0 U	86			
28126	12/14/2015	9:50		6							94			

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SITE			Air	Water		DO	Specific (25°C)				Fecal	Entero-		
Visit_ID	Date	Start Time	Temp	Temp	pH	Concentration	Conductivity	Salinity	Turbidity	Precip24	Coliform	cocci	Flow	Stage
			(°C)	(°C)		(mg/L)	(uS)	(pss)	(NTU) type	(in)	(Colonies/100ml)		(cfs)	
Peabody 0.9				Peabody u/s of 8 St.										
23909	2/24/2015	11:30		7						0	2 U			
26786	3/31/2015	13:08		9						0	2			
26832	4/27/2015	11:43		9						0	2 U			
27066	5/11/2015	14:02		10						0	2 U			
27048	6/2/2015	12:44		12						0	64			
27281	7/7/2015	12:26		15							102			
27442	8/31/2015	12:15		15							28			
27520	9/22/2015	12:50		12							12			
27831	10/27/2015	10:24		10							2046 G			
27925	11/16/2015	15:02		8						0 U	38			
27925	11/16/2015			8						0 U	38			
28006	11/17/2015	12:07		9							260 G			
28127	12/14/2015	10:05		6							46			

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SITE			Air	Water		DO	Specific (25°C)				Fecal	Entero-		
Visit_ID	Date	Start Time	Temp	Temp	pH	Concentration	Conductivity	Salinity	Turbidity	Precip24	Coliform	cocci	Flow	Stage
			(°C)	(°C)		(mg/L)	(uS)	(pss)	(NTU)	(in)	(Colonies/100ml)		(cfs)	
Tumwater 0.0				Tumwater d/s of Marine Dr										
23897	2/24/2015	13:17		7						0	7			
23897	2/24/2015	13:15		7						0	7			
26773	3/31/2015	10:49		8						0	24			
26773	3/31/2015	10:52		8						0	24			
26821	4/27/2015	9:44		9						0	3			
26821	4/27/2015	9:45		9						0	3			
26941	5/11/2015	12:10		10						0	2			
26941	5/11/2015	12:12		10						0	2			
27034	6/2/2015	11:45		12						0	17			
27034	6/2/2015	11:40		12						0	17			
27269	7/7/2015	13:19		15							29			
27269	7/7/2015	13:20		15							29			
27430	8/31/2015	10:42		14							390			
27430	8/31/2015	10:40		14							390			
27508	9/22/2015	10:25		11							13			
27508	9/22/2015	10:24		11							13			
27819	10/27/2015	11:47		10							195			
27819	10/27/2015	11:46		10							195			
27908	11/16/2015	12:36		7						0 U	134			
27908	11/16/2015	12:37		7						0 U	134			
27975	11/17/2015	10:43		9							401 G			
27975	11/17/2015	10:42		9							401 G			
28116	12/14/2015	11:46		6							25			

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SITE	Date	Start Time	Air Temp (°C)	Water Temp (°C)	pH	DO Concentration (mg/L)	Specific (25°C) Conductivity (uS)	Salinity (pss)	Turbidity (NTU)	Precip24 (in)	Fecal Coliform (Colonies/100ml)	Enterococci	Flow (cfs)	Stage
28116	12/14/2015	11:45		6							25			
Tumwater 0.1				Tumwater u/s of Marine Dr, d/s of LB stormwater drain input										
26936	5/11/2015	11:34		10						0	4			
27909	11/16/2015	12:43		7						0 U	90			
28000	11/17/2015	10:20		9							160 J			
Tumwater 0.1a				Tumwater @ 3rd St. u/s of LB storm drain input										
26938	5/11/2015	11:40		11						0	4			
27910	11/16/2015	12:44		7						0 U	140			
28002	11/17/2015	10:25		9							330 G			
Tumwater 0.1b				Tumwater LB storm drain input @ 3rd St.										
26937	5/11/2015	11:36		12						0	2			
27911	11/16/2015	12:46		12						0 U	74			
28001	11/17/2015	10:23		10							872			

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SITE			Air	Water		DO	Specific (25°C)				Fecal	Entero-		
Visit_ID	Date	Start Time	Temp	Temp	pH	Concentration	Conductivity	Salinity	Turbidity	Precip24	Coliform	cocci	Flow	Stage
			(°C)	(°C)		(mg/L)	(uS)	(pss)	(NTU)	(in)	(Colonies/100ml)		(cfs)	
Turnwater 0.8d				Turnwater input - storm outfall pipe into Turnwater @ 11 St.										
23899	2/24/2015	12:50		9						0	2			
26775	3/31/2015	11:08		10						0	136			
26822	4/27/2015	10:06		10						0	2	U		
26933	5/11/2015	11:15		10						0	2	U		
27037	6/2/2015	11:58		12						0	52			
27271	7/7/2015	13:38		13							2	U		
27432	8/31/2015	11:04		16							44			
27510	9/22/2015	10:03	11	12							2	U		
27510	9/22/2015	11:03	11	12							2	U		
27821	10/27/2015	12:14		11							118			
27913	11/16/2015	12:58		12						0	U	46		
27998	11/17/2015	10:05		10							1582			
28118	12/14/2015	11:22		6							36			

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SITE			Air	Water		DO	Specific (25°C)				Fecal	Entero-		
Visit_ID	Date	Start Time	Temp	Temp	pH	Concentration	Conductivity	Salinity	Turbidity	Precip24	Coliform	cocci	Flow	Stage
			(°C)	(°C)		(mg/L)	(uS)	(pss)	(NTU) type	(in)	(Colonies/100ml)		(cfs)	
Tumwater 0.8e				Tumwater u/s of 11 St. storm outfall										
23900	2/24/2015	12:52		6						0	2	U		
26777	3/31/2015	11:17		8						0	8			
26824	4/27/2015	10:15		9						0	2	U		
26934	5/11/2015	11:20		10						0	2			
27038	6/2/2015	12:00		11						0	10			
27272	7/7/2015	13:50		15							2			
27433	8/31/2015	11:08		14							26			
27511	9/22/2015	10:52		10							2			
27822	10/27/2015	12:10		10							264			
27915	11/16/2015	13:05		8						0	U	110		
27999	11/17/2015	10:10		9							224	G		
28119	12/14/2015	11:25		6							28			

Multiple readings for a given Visit are averaged; if multiple methods were used, results are reported only for the most reliable method & QA compliance.

3/1/2016

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SITE			Air	Water		DO	Specific (25°C)				Fecal	Entero-		
Visit_ID	Date	Start Time	Temp	Temp	pH	Concentration	Conductivity	Salinity	Turbidity	Precip24	Coliform	cocci	Flow	Stage
			(°C)	(°C)		(mg/L)	(uS)	(pss)	(NTU)	(in)	(Colonies/100ml)		(cfs)	
Tumwater 1.5				Tumwater d/s of runoff ditch from SW side of Hwy 101										
23901	2/24/2015	12:20		7						0	2	U		
26778	3/31/2015	11:43		8						0	2	U		
26825	4/27/2015	10:38		8						0	2	U		
26929	5/11/2015	10:58		10						0	2			
27039	6/2/2015	12:27		11						0	6			
27273	7/7/2015	14:05		15							10			
27434	8/31/2015	11:25		14							8			
27512	9/22/2015	11:33		10							4			
27823	10/27/2015	12:39		9							6			
27920	11/16/2015	13:55		8						0	U	168		
27994	11/17/2015	9:40		9							140			
28120	12/14/2015	10:47		6							28			
Tumwater 1.5a				Tumwater u/s of runoff ditch from SW side of Hwy 101										
26930	5/11/2015	10:55		10						0	4			
27919	11/16/2015	14:00		8						0	U	132		
27995	11/17/2015	9:35		8							174	G		
Tumwater 1.5b				Runoff ditch to Tumwater Cr. from SW side of Hwy 101										
26931	5/11/2015	10:57		11						0	6			
27918	11/16/2015	13:50		8						0	U	22		
27996	11/17/2015	9:30		9							120	J		
Tumwater 4.4				Tumwater u/s of 3142 Black Diamond Rd										
26925	5/11/2015	10:22		9						0	2	U		
27917	11/16/2015	13:32		8						0	U	18		
27993	11/17/2015	9:00		8							18			

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3/1/2016

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SITE	Date	Start Time	Air Temp (°C)	Water Temp (°C)	pH	DO Concentration (mg/L)	Specific (25°C) Conductivity (uS)	Salinity (pss)	Turbidity (NTU)	Precip24 (in)	Fecal Coliform (Colonies/100ml)	Enterococci	Flow (cfs)	Stage
Valley 0.0														
	Valley @ estuary pedestrian bridge													
26940	5/11/2015	11:57		11						0	2			
28004	11/17/2015	11:10		9							426 G			
Valley 0.4														
	Valley @ 6th St, u/s of final culvert 220ft													
26939	5/11/2015	11:50		11						0	4			
26939	5/11/2015	11:49		11						0	4			
28003	11/17/2015	10:53		9							315			
28003	11/17/2015	10:52		9							315			
Valley 1.4														
	Valley ~600' u/s of Hwy 101 where trail nears stream													
26935	5/11/2015	10:37		10						0	2 U			
27916	11/16/2015	13:18		7						0 U	28			
27992	11/17/2015	9:20		8							190			
WS-KWAPORTA22														
	Weather Station - PA - Lincoln HS													
27448	8/30/2015	10:00								0				
27447	8/31/2015	10:00								0				
27977	11/15/2015	4:09	through	11/16/2015	17:14									
27979	11/16/2015	17:14	through	11/17/2015	8:01									
27980	11/17/2015	8:01	through	11/17/2015	13:01									
27981	11/17/2015	13:01	through	11/17/2015	16:30									

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3/1/2016

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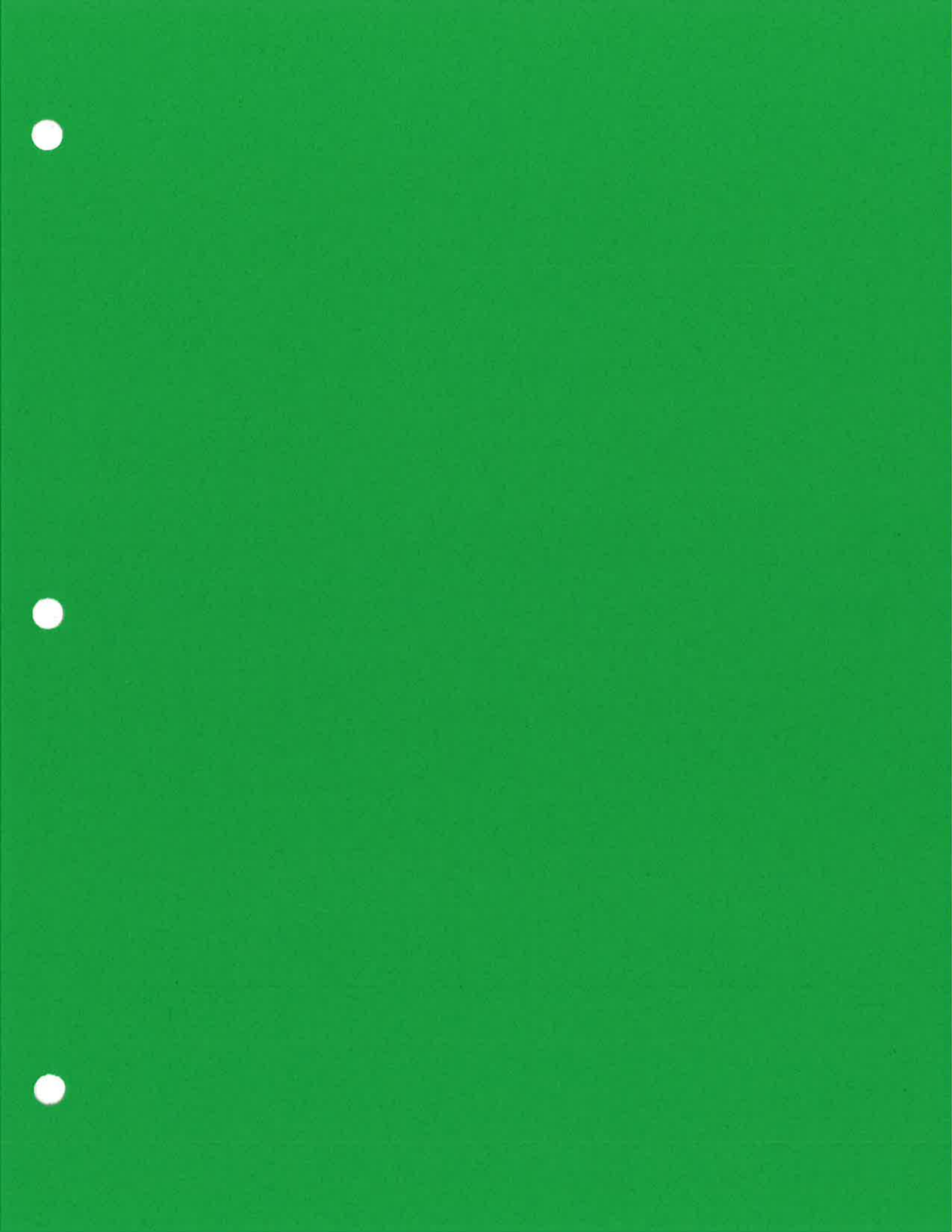
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An S4F1 notification was made to Department of Ecology on January 4, 2011. Sampling activities for bacteria continue through an Inter Local Agreement with Streamkeepers of Clallam County. Sampling for fecal coliform is conducted monthly in Peabody and Tumwater Creeks. A larger sampling of sites in Port Angeles is conducted quarterly for both dry and wet weather conditions. Sample results are analyzed monthly and compared against the City IDDE Response Policy. Attached is the 2015 sampling plan.

**Non-Semi Annual Samples - Aim for 5 dry weather and 5 wet weather samples in non-semi-annual months, for a total of 10 samples at each location**

Peabody 0.0 (when possible)			
Peabody 0.2			
Peabody 0.2 rep			
Peabody 0.2A			
Peabody 0.2B			
Peabody 0.4b (u/s of trailers)			
Peabody 0.4			
Peabody 0.4A			
Peabody 0.9			
Peabody 1.2			
Peabody 1.2A			
Peabody 1.4			
Tumwater 0.0			
Tumwater 0.0 rep			
Tumwater 0.8			
Tumwater 0.8D			
Tumwater 0.8E			
Tumwater 1.5			
<b>SUBTOTAL:</b>	18	468	4680
<b>TOTAL:</b>			<b>8708</b>



# City of Port Angeles

## NPDES Phase II Municipal Stormwater Permit Inter-Departmental Coordination Mechanisms

### **Background**

The Western Washington Phase II Municipal Stormwater Permit (NPDES permit or “Permit”) is a federal permit issued to municipalities which allows municipal stormwater systems to discharge to waters of the state. The NPDES (National Pollutant Discharge Elimination System) Permit includes broad ranging requirements which are implemented by various departments within the City, including Public Works, Parks & Recreation, Community & Economic Development (CED), Fire and Police.

Furthermore, it is a condition of the 2013 – 2018 NPDES permit (Section S5.A.5.b) that each jurisdiction develops a coordination mechanism to identify departmental responsibilities to eliminate barriers to compliance with the terms of the permit. These operating guidelines have been created to provide clarification of departmental roles and responsibilities for the purposes of complying with the NPDES permit.

### **Section 1. Name**

The name of this group shall be known as the “Stormwater Permit Coordination Group (SWPCG)”.

### **Section 2. Purpose**

The effective management of stormwater has an important role to play in reversing the ongoing degradation of wetlands, streams, harbors, and Strait of Juan de Fuca. The purpose of this group is to insure the fulfillment of the conditions of the City’s NPDES Permit by removing internal barriers to permit implementation and by requiring and empowering City departments to cooperate and coordinate with the City’s Stormwater Management Program. The SWPCG serves as the coordinating body.

### **Section 3. Mission**

The NPDES permit is a broad ranging federal stormwater permit which requires citywide compliance, and as such, shall be viewed as a citywide permit. The mission of the SWPCG is to provide a coordinated, efficient and effective response to all Permit conditions. Each city department is subject to implementing compliance activities when applicable to that department. Each department has an important contribution to make in improving the quantity or quality of stormwater discharged under the Permit.

### **Section 4. Duration**

The SWPCG shall continue indefinitely in order to preserve momentum and effectively manage the work required for Permit compliance.

## **Section 5. Membership**

The core membership of the SWPCG consists of members from the following departments: Public Works including Engineering and Operations Divisions, Parks & Recreation ,CED, Fire, and Police, as well as the NPDES Permit Coordinator.

On behalf of the Public Works Department, the Permit Coordinator shall lead the group, in coordinating compliance with the NPDES permit. All departments responsible for complying with any portion of the NPDES permit shall work cooperatively with the lead department, responding and providing information in a timely manner, including accurate tracking and reporting data.

Each department, division, section, or workgroup engaging in any activities or programs that the Permit Coordinator determines may be subject to or could support compliance with the municipal permit is expected to comply with municipal permit requirements. Other City workgroups or departments may be added should current needs or future requirements call for expanded responsibility.

### **A. Coordination framework and expectations:**

1. The Permit Coordinator shall be responsible for coordinating the City's municipal permit compliance activities
2. Each departmental representative shall be familiar with all municipal permit requirements, particularly those applicable to their department or workgroup.
3. Each departmental representative may propose options for funding and staffing to meet municipal permit requirements.
4. Each departmental representative shall communicate regularly with department management on the status of applicable compliance activities.
5. The Permit Coordinator, in collaboration with departmental representatives, shall prepare and provide submittals to Ecology to comply with municipal permit requirements. Submittals include, but are not limited to, annual reports, stormwater management program (SWMP) plans, compliance reports and other submittals as required by Ecology.
6. Upon request from the Permit Coordinator, departmental representatives or other staff shall provide information regarding department-specific compliance activities in a timely manner. The Permit Coordinator shall indicate the timeline for any request and may extend the timeline at the request of the department representative if there is flexibility to do so.
7. The Permit Coordinator shall communicate as necessary with departmental representatives and other management about municipal permit requirements, the SWMP, and the status of the City's compliance.

Any Permit Coordinator responsibilities listed above may be delegated to appropriate staff, but the Permit Coordinator shall retain accountability to the City Engineer.

Signature authority for all documents related to the municipal permit that require an official signature shall reside with the Public Works Director, as delegated in a letter from the City Manager to Ecology on September 10, 2013.

**B. Non-compliance:**

All city departments are responsible for working with the NPDES Permit Coordinator to resolve instances of permit noncompliance, including:

1. Notifying the NPDES Permit Coordinator as soon as they become aware of any instance of non-compliance; and
2. Identifying steps and a timeline for resolving issues of non-compliance that will be identified in G3 or G20 notifications to Ecology.

**Section 6. Meetings**

Meetings shall be facilitated by the City Engineer or the Permit Coordinator. Meetings shall be open to any/all staff that need permit information or to share challenges to permit implementation. Meeting frequency, time, and location shall be set by the City Engineer or Permit Coordinator based on the need to meet in order to respond to policy, procedures or barriers to implementation.

**Section 7. Attendance Policy**

Attendance at the meetings is important to continue being an informed SWPCG member and to provide useful input into the process. Meeting attendance is expected of SWPCG members or a designee. If unable to attend a meeting, it is the member's responsibility to inform themselves on issues discussed in those meetings.

**Section 8. Departmental Responsibilities**

It is the responsibility of each department head to assign the duties and responsibilities to the pertinent members of their staff, as well as ensure they are being implemented correctly.

**A. Public Works**

The Public Works Department is responsible for the majority of the NPDES compliance efforts including Sections: S5.C.1 Public Education and Outreach, S5.C.2 Public Involvement, S5.C.3 Illicit Discharge Detection and Elimination, Section S5.C.4. Controlling Runoff from New Development, Redevelopment, and Construction Sites (for both public and private projects), and S5.C.5 Municipal Operations and Maintenance. These responsibilities include, but are not limited to:

*Engineering Division*

1. NPDES Permit coordination.
2. Program development appropriate/applicable to the department.
3. Annual reporting.
4. Development and submittal of the Stormwater Management Program Plan.
5. Serving as point of contact for the Department of Ecology regarding issues of the Permit.
6. Submitting G3 and G20 noncompliance notifications.

7. Updating codes, policies, plans and standards applicable to the Public Works Department for permit compliance.
8. Private stormwater facility maintenance verification.
9. Enforcement of maintenance or water quality violations.
10. Conducting, tracking, and reporting development review in compliance with adopted standards and policies.
11. Tracking, reporting and justifying any deviations (e.g. variances, exceptions etc.) from adopted stormwater development review standards.
12. Inspection of development sites.
13. Collection of final stormwater system record drawings for new development/redevelopment and distribution of them to designated GIS and Public Works staff.
14. Maintaining and updating stormwater system maps for both public and private facilities.
15. Collection and processing of maintenance covenants and operations and maintenance manuals for new development/redevelopment.

*Operations Division*

16. Inspection and maintenance of municipal stormwater components and facilities.
17. Illicit discharge/illicit connection detection and elimination.
18. Operations and maintenance procedures are in place and followed to reduce stormwater impacts to all lands owned and maintained by the City in accordance with the Ecology Stormwater Management Manual for Western Washington.

**C. Community & Economic Development**

CED is responsible for implementation of and compliance with portions of Section S5.C4 of the NPDES Permit entitled "Controlling Runoff from New Development, Redevelopment and Construction Sites". These responsibilities include, but are not limited to:

1. Updating codes, policies, plans, programs, procedures, and standards appropriate/applicable to CED for permit compliance.
2. Processing permit applications and collecting required documents for all building permits, including stormwater plans and erosion and sediment controls
3. Inspection of building sites for erosion and sediment controls as required by Ecology Stormwater Management Manual for Western Washington

**C. Parks & Recreation**

Parks is responsible for implementation of and compliance with portions of S5.C.3 Illicit Discharge Detection and Elimination and S5.C.5 Municipal Operations and Maintenance. These responsibilities include, but are not limited to:

1. Updating codes, policies, plans, programs, procedures, and standards appropriate/applicable to Parks for permit compliance.
2. Operations and maintenance procedures are in place and followed to reduce stormwater impacts to all lands owned and maintained by the City in accordance with the Ecology Stormwater Management Manual for Western Washington.

3. Report observations of illicit discharges to the Permit Coordinator or other designee

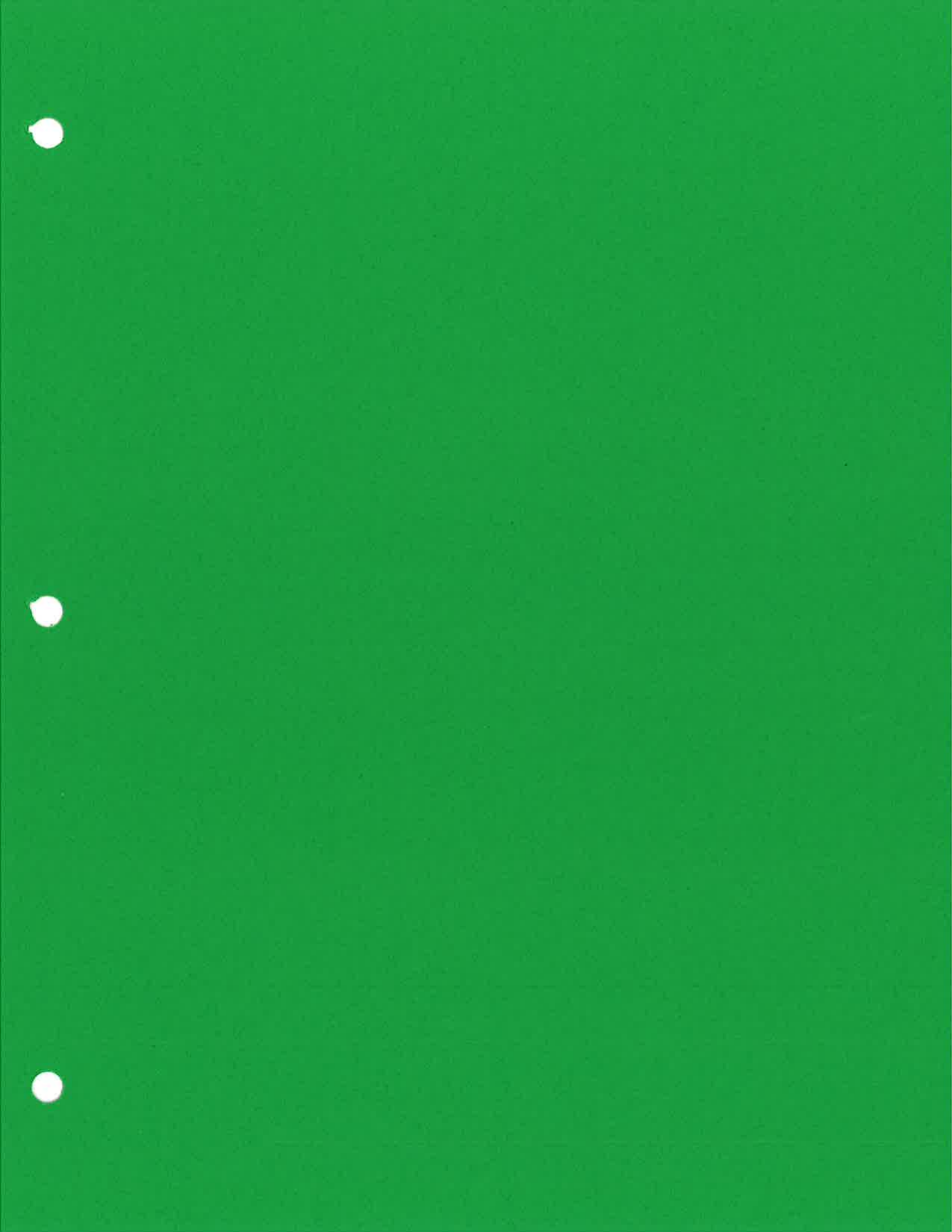
**D. Police and Fire**

The Police and Fire Departments has permit responsibilities under S5.C.3 Illicit Discharge Detection and Elimination. As field personnel, it is their responsibility to report observations of illicit discharges to the Permit Coordinator or other designee. They may also be called upon to assist in enforcement activities or during an illicit discharge event.

**Section 9. Permit Coordinator's Role**

The Permit Coordinator's role is to assure the integrity and fulfillment of the Permit. The Coordinator's role includes, but is not limited to:

1. Coordinate NPDES Permit compliance efforts for the City, including collecting tracking and reporting data from the different departments, as well as preparing and submitting annual reports and updates to the Stormwater Management Program Plan to the Department of Ecology.
2. Assist the different City departments in identifying and understanding their individual responsibilities for complying with the pertinent sections of the Permit.
3. Provide permit compliance guidance to individual departments who are developing or updating their departmental programs or procedures which are necessary to comply with Permit requirements.
4. Develop and implement programs and activities associated with the Public Works Department.
5. Work with individual departments to assist in resolving issues of non-compliance, as well as drafting and submitting G3 or G20 Non-Compliance Notification letters to Ecology.
6. Coordinate required illicit discharge detection and reporting training for all municipal field staff. Assist in other training activities where applicable.
7. Ensure policies are followed.
8. Manage communication and information exchange among the SWPCG. Determine meeting topics and agendas. Assist the City Engineer with meeting facilitation. Provide meeting materials to SWPCG before meetings and take meeting notes.



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*Backup Documentation Not Submitted With Annual Report*

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Stormwater Development Review Tracking

Development Title	1 Acre Threshold	First Plan Review Date	Initials	If Necessary, Second Plan Review Date	Initials	Inspection Prior To Construction (includes Appendix 7 Review) Date	Initials	Construction Started?	Inspection During Construction Dates	Initials	Erosion and Sediment Violations	Final Completion Inspection Date	Initials	Number of Structural BMPs Inspected?	Maintenance Agreement?	Public or Private Facility with stormwater treatment or flow control facilities / Violation Notes
Pendley Estates	Yes	1/20/2011	TP	4/20/2011	TP	8/16/2011	RV	Yes	6/6/11, 10/11/11, 11/18/11, 5/8/12, 6/20/12, 10/18/12	RV	No	10/20/2012	RV	15	YES	Private- inspect
Pendley Estates construction of homes 2014	Yes							Yes	9/8/2014, 9/23/2014, 11/10/2014	RV/EW	Yes	2/18/2015	RV		N/A	
Pendley Estates construction of homes 2015	Yes							Yes	4/17/15, 6/16/15, 10/16/2015, 10/27/2015	RV/JB	Yes				N/A	Notice of deficiency issued 10/27/2015
Olympic Medial Center Parking Columbia St	Yes	6/18/2012	JB			5/7/2012	RV	Yes	9/6/12, 9/12/2012, 10/30/12, 11/27/12	RV	No	11/30/2012	RV	10	YES	Private- inspect
Mt. Angeles View re-development	Yes	6/25/2012	JB	2/13/2014, 12/24/15	JB	5/1/2014	RV	No								Needed
Blackball Ferry Terminal West Pier Replacement	No	10/2/2012	JB	10/18/2012	JB	11/20/2012	RV	Yes	12/18/12, 12/21/12	RV	No	6/25/2013	RV	6	No	Private- inspect
Waterfront Development Phase 1	Yes	10/1/2011	TP			10/5/2012	RV	Yes	10/15/12, 1/18/13, 4/5/13, 6/4/13, 6/14/13	JP, JM, RV	No	10/21/2013	RV	15	COPA	Public- O&M inspection
Waterfront Development Phase 2	Yes	4/10/2013	JB	1/7/2014	JB	10/5/2012	RV	Yes	1/9/2015, 2/13/15, 2/27/15, 5/25/2015, 7/1/2015, 9/1/2015	JM, TA, LB	No	11/17/2015	Jeff B.		COPA	
Around Again	No	5/28/2013	JB			4/12/2013	RV	Yes	7/9/2013	RV	No	7/30/2013	EW	4	YES	Private- inspect
North Olympic Library System	No	6/5/2013	JB			5/22/2013	RV	Yes	7/23/2013	RV	No	10/18/2013	RV	3	YES	Private- inspect
Green Crow- Forest Harvest (M St to Evans)	Yes	1/30/2014	JB	2/20/2014	JB	12/20/2013	RV	Yes	4/3/14, 4/25/14	EW, RV	No	10/31/2014	EW, RV	4	No	N/A
320 E Fifth Street Parking Lot	No	2/25/2013	JB	2/27/2013	JB	4/2/2014	RV	Yes	4/7/2014	RV	No				No	N/A
OMC Emergency Expansion	No	4/29/2014	JB			8/22/2014	RV	Yes	2014, 9/3/14, 9/22/14, 10/3/14, 12/11/14, 12/24/14, 8/27/14, 9/11/2014, 10/21/2014, 11/7/2014, 12/9/2014,							
Landfill Bluff Stabilization	Yes	5/13/2014	JB			5/13/2014	JP	Yes	1/8/16, 2/22/16	JP	No				COPA	N/A
1001 E Front Street- Parking Lot	No	5/6/2014	JB	5/22/2014	JB	8/27/2014	RV	Yes	9/2/2014	RV	No	10/4/2014	RV	2	No	N/A
1217 Airport Rd- Log Yard	Yes	7/2/2014	JB			6/30/2014	JB	Yes	7/11/2014, 9/22/14	JB, EW, RV	No	12/2/2014	RV	6	NO	No MR#6,7 BMPs
4th Street Stormwater Improvements	No	3/1/2014	JB	5/1/2014	JB	7/21/2014	LB	Yes	10/11/2014	LB	Yes	3/26/2015	LB	8	COPA	Public- O&M inspection
1021/1027 Dunker Dr- Rain Garden	No	8/26/2014	JB		JB	N/A		Yes	9/15/2014	RV	No	9/15/2014	RV	1	no	Private- inspect
Shotwell Inert Landfill	Yes	11/7/2014	JB					No								
McDonalds	Yes	12/11/2014	JB			12/22/2015	RV	Yes	1/11/16, 1/22/2016, 2/9/2016	RV/ JB	Yes					Non compliance email issued 1/22/2016
Mt. Angeles View Phase 1A	Yes	2/13/2014	JB	2/17/2015		5/1/2014	RV	No								
CSO Project	Yes	1/15/2015	JB	3/19/2015	JB	2/23/2015, 5/29/2015	Jeff B.	Yes	3/31/2015, 4/15/2015, 5/15/2015, 7/1/2015	DM, Jeff B.	Yes				COPA	Non Compliance Letter Issued 7/2/15
Shotwell Soil Disposal Site Fields Dr	Yes	3/11/2015	JB	3/20/20015	JB	4/6/2015, 4/16/15, 4/22/2015	RV/JB/EW	Yes	4/30/2015, 5/18/2015, 7/9/15, 8/31/15, 10/27/2015, 11/12/15, 12/17/2015	RV/EW/JB	Yes					Verbal Notification to Jonathan Shotwell 4/22/2015, Verbal Notification to Jonathan Shotwell to correct track out from site on 5/26/2015. Written notice of erosion deficiencies sent 11/2015, ERTS 12/2015
Marine Drive Water Main Replacement	No	4/1/2015	JB			N/A		Yes	7/21/2015, 9/1/2015, 10/13/15	DM/EW	Yes	2/11/2016	EW	-	COPA	ERTS #658322, stormwater education provided
1815 Marine Dr, Nippon Truck Scales	Yes	2/27/2015	JB	3/5/2015	JB	4/6/2015	RV	Yes	4/17/15, 4/20/15, 5/27/15, 6/19/15, 7/13/15	RV	No	12/14/2015	RV	2	NO	No MR#6,7 BMPs
Olympic Medical Center Medical Office Building	Yes	4/9/2015	JB	8/4/2015		8/13/2015	RV	Yes	11/13/2015, 11/19/15, 1/27/16, 2/2/16	RV/JB	Yes					ERTS# 660467, non compliance email issued
Peninsula College Allied Health	Yes	4/22/2015	JB	7/14/2015	JB	8/12/2015	RV	Yes	8/26/2015, 10/30/2015, 11/12/15, 2/9/2016	RV/JB	Yes					Non compliance email issued 2/10/2016
Peabody Creek WQ Project	No	5/26/2015	LB			6/22/2015	LB	Yes	7/15/2015	LB	No	9/14/2015	LB	8	COPA	
Georgina St Sewer and Storm Project	No	4/21/2015	JB			9/1/2015	DM	Yes	10/19/2015	DM	Yes	2/11/2016	EW	-	COPA	ERTS# 659806, main break, high turbidity
Peninsula Behavioral Health Parking Lot	No	5/27/2015	JB			1/7/2016	RV	Yes	1/16/16, 1/29/16, 2/9/16	RV/EW	No			7		
Clallam County Courthouse Raingarden Retrofit	Yes	7/16/2015	JB	10/23/2015	JB	10/21/2015	RV	Yes	10/22/15, 10/26/15, 12/29/15	RV	Yes	12/29/2015	RV	ardens, 1-pervious	Yes	ERTS # 660025, verbal stormwater education
<b>2015 Totals</b>		<b>12</b>				<b>9</b>			<b>12</b>		<b>8</b>	<b>7</b>				



**Jonathan Boehme**

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**From:** Eric Wheatley  
**Sent:** Monday, January 25, 2016 7:41 AM  
**To:** Jonathan Boehme  
**Cc:** Mike Brockopp  
**Subject:** Annual Report Info - Street Sweeping

JB-

Totals for street sweeping for 2015 are:  
642 cubic yards of debris  
10,733 miles (includes miles to and from decant facility as in years past)

Brockopp is compiling the catch basin and facility info.

Thanks,  
Eric

	<p><b>Eric Wheatley</b> City of Port Angeles <i>Street &amp; Stormwater Superintendent</i></p> <p>Phone: (360) 417-4825 Fax: (360) 452-4972 <a href="mailto:Ewheatle@cityofpa.us">Ewheatle@cityofpa.us</a></p> <p>321 East Fifth Street, PO Box 1150 Port Angeles, WA 98362-0217</p>
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**Jonathan Boehme**

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**From:** Eric Wheatley  
**Sent:** Wednesday, March 09, 2016 10:53 AM  
**To:** Jonathan Boehme  
**Cc:** Mike Brockopp  
**Subject:** RE: Number of CBs

JB-

See Mike's email below. I know this was a slightly different number than Bill came up with but if I remember right there was only a difference of 6 or 7? If Bill included the landfill c/b's that could be the difference?

Thanks,  
Eric

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**From:** Mike Brockopp  
**Sent:** Wednesday, February 24, 2016 10:25 AM  
**To:** Eric Wheatley <Ewheatle@cityofpa.us>  
**Subject:** RE: Number of CBs

Eric,

There are 2,537 catch basins in the city. Minus the landfill catch basins....(industrial permit) I searched EACH grid and added the numbers together.

Mike

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**From:** Eric Wheatley  
**Sent:** Wednesday, February 24, 2016 8:58 AM  
**To:** Jonathan Boehme <[Jboehme@cityofpa.us](mailto:Jboehme@cityofpa.us)>; Mike Brockopp <[Mbrockop@cityofpa.us](mailto:Mbrockop@cityofpa.us)>  
**Subject:** RE: Number of CBs

I will have Brockopp run one using City works to compare numbers.

Sent from my Verizon Wireless 4G LTE smartphone

----- Original message -----

**From:** Jonathan Boehme <[Jboehme@cityofpa.us](mailto:Jboehme@cityofpa.us)>  
**Date:** 02/24/2016 8:47 AM (GMT-08:00)  
**To:** Bill Hale <[Bhale@cityofpa.us](mailto:Bhale@cityofpa.us)>  
**Cc:** Eric Wheatley <[Ewheatle@cityofpa.us](mailto:Ewheatle@cityofpa.us)>  
**Subject:** FW: Number of CBs

Bill,  
Could you please run a report with our total number of City owned Catch Basins?

Thanks,

**Jonathan Boehme**

Stormwater Facilities	Asset ID #	Date of Inspection	Cityworks WO#	Was Maint. Required?	Date(s) of Maintenance	Cityworks WO#(s)
<b>Ponds and bioswales</b>						
Airport Corners - East of Access Rd	51	3/2/2015	3062	Yes	3/9/2015	2875
Airport Corners - West of Access Rd - South Pond	50	3/2/2015	3062	Yes	3/9/2015	2875
Airport Corners - West of Access Rd - North Pond	481	3/2/2015	3062	Yes	3/9/2015	2875
Red Lion Motel - East of Parking Area	18					
101 Bioswale - West of Eclipse Parkway, North Side	881					
<b>CAVFS</b>						
C St. Ext.	6759	4/7/2015	3599	Yes	4/10/2015	3600
	6760	4/7/2015	3599	Yes	4/10/2015	3600
	6761	4/7/2015	3599	Yes	4/10/2015	3600
	6762	4/7/2015	3599	Yes	4/10/2015	3600
	6763	4/7/2015	3599	Yes	4/10/2015	3600
	6764	4/7/2015	3599	Yes	4/10/2015	3600
	6751	4/7/2015	3599	Yes	4/10/2015	3600
<b>Swirl Concentrator</b>						
Crown Park Aquaswirl	9	1/12/15, 10/1/15	2763, 3242	No		
1100 Walker St. Vortech	22	1/12/15, 10/1/2015	2769, 3257	No		
Blackball Ferry Vortech	12	1/12/15, 10/1/2015	2770, 3254	Yes (floatables), No	3/3/2015	2835
<b>ConTech Filters</b>						
8th and A St.	20	1/12/15, 10/1/2015	2765, 3259	No		
8th and Cedar	17	1/12/15, 10/1/2015	2766, 3258	No		
8th and Pine	15	1/12/15, 10/1/2015	2767, 3261	No		
8th and Cherry	13	1/12/15, 10/1/2015	2768, 3260	No		
16th and Maloney	26	1/13/15, 10/1/2015	2772, 3262	No		
<b>Block Media Filter</b>						
Eco Storm Plus	25	1/21/15, 7/13/15, 10/13/15	2801, 3186, 3557	Yes	1/21/15, 7/13/15, 10/13/15	2801, 3186, 3557
<b>Filtterra Units</b>						
Lauridsen Blvd Bridge - 817 E Blvd	1234	7/7/2015	3268	No		
10th and Race St.	1235	7/7/2015	3267	No		
10th and Race St.	1236	7/7/2015	3362	No		
SW Corner of 6th and Francis	840					
SW Corner of 4th and Francis	838					
NE Corner of 4th and Francis	837					
NW Corner of 4th and Francis	839					
SW corner of 2nd and Francis	836					
NE Corner of 4th and Albert	835					
SW Corner of 3rd and Albert	833					
SE Corner of 2nd and Albert	834					
<b>Pump Stations</b>						

Stevens School Pumpstation 2 10/2/2015 3545 No

**Raingardens (Biofiltration)**

Oak St. Park  
Each corner of 5th and H Project - List by corner

**Example:** 5th and K, NW Corner

6th and M, NE Corner	883, 884, 1707		9/16/2015	3615 No		
6th and M, SW Corner		887	9/16/2015	3618 No		
6th and M, SE Corner	885, 886, 1708		9/16/2015	3616 No		
6th and M, NW Corner			9/16/2015	3619 No		
5th and L, NW Corner		889	9/16/2015	3613 No		
5th and L, NE Corner	896, 895, 1703		9/16/2015	3608 No		
5th and L, SE Corner	892, 893, 894, 1704		9/16/2015	3614 No		
5th and L, SW Corner	890, 891, 1705		9/16/2015	3609 No		
6th and K, NW Corner	910, 911, 1699		9/14/2015	3602 No		
6th and K, NE Corner	905, 906, 1697		9/16/2015	3603 No		
6th and K, SE Corner	907, 908, 1698		9/14/2015	3597 Yes	9/15/2015	3598
6th and K, SW Corner		909	9/14/2015	3601 No		
5th and K, NW Corner	897, 898, 1700		9/16/2015	3606 No		
5th and K, NE Corner		904	9/16/2015	3607 No		
5th and K, SE Corner	901, 902, 903, 1701		9/16/2015	3604 No		
5th and K, SW Corner	899, 900, 1702		9/16/2015	3605 No		
7th and H, NW Corner	943, 944, 1316		9/7/2015	3580 No		
7th and H, NE Corner	939, 940, 1317		9/7/2015	3581 No		
7th and H, SE Corner		941	9/7/2015	3577 No		
7th and H, SW Corner		942	9/7/2015	3579 No		
6th and H, NW Corner	936, 937, 938, 1313		9/8/2015	3585 No		
6th and H, NE Corner	931, 932, 1314		9/8/2015	3586 No	9/9/2015	3587
6th and H, SE Corner		933	9/7/2015	3582 Yes	9/9/2015	3583
6th and H, SW Corner	934, 935, 1315		9/7/2015	3584 No		
5th and H, NW Corner	928, 929, 930, 1309		9/10/2015	3590 No		
5th and H, NE Corner	921, 922, 1310		9/10/2015	3591 No		
5th and H, SE Corner	923, 924, 1311		9/10/2015	3588 No		
5th and H, SW Corner	925, 926, 927, 1312		9/10/2015	3589 No		
7th and K, NW Corner		912	9/11/2015	3595 No		
7th and K, NE Corner	919, 920, 1318		9/11/2015	3596 No		
7th and K, SE Corner	915, 917, 918, 1320		9/10/2015	3592 Yes	9/11/2015	3593
7th and K, SW Corner	913, 914, 1319		9/11/2015	3594 No		

**Permeable Surfaces**

Pervious Concrete at 5th St. Raingardens

Solar Lane			6/8/2015	3620 Yes	8/12/2015 (swept with air sweeper)	3160
18th St., west of N ST.						
Dunker Dr.						