City of Port Angeles

2024 Annual Report

NPDES Phase II Municipal Stormwater Permit

Permit #: WAR045028
Permit Cycle: 2024-2029

2024 Annual Report Questions

This worksheet is provided for your internal use only. Annual Report questions must be answered through the online submittal in WQWebPortal.
DO NOT attempt to submit this spreadsheet, electronically or otherwise, to meet your annual reporting requirement.

Phase II Stormwater Permit Reference: N:\PWKS\Stormwater\00 NPDES SW Permit Admin\Phase II SW Permit

Annual Report Working Documents: N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Working Documents

Manager	Category	#	Question	COPA Response / Status	Notes	Printed? (Yes or N/A)
Ryan	Reporting Requirements and SWMP	1	Attach a map 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.6.	N/A	No change to City geographic area or permit coverage during the reporting period.	N/A
Ryan	Reporting Requirements and SWMP	2	Attach updated annual Stormwater Management Program Plan (SWMP Plan). (S5.A.2; S9.D.1)	yes	**Section 1. SWMP**. The SWMP Plan is written to inform the public of planned activities for the upcoming planning year.	yes
Ryan	Reporting Requirements and SWMP	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	**Section 1. SWMP**. Use information to evaluate SWMP development, implementation, and permit compliance and to set priorities. Budget and timecard software, including Operations. **Part of SWMP**.	N/A
Ryan	Reporting Requirements and SWMP	4	Continued to coordinate among departments within the jurisdiction to eliminate barriers to permit compliance. (S5.A.5.b)	yes	**Section 1. SWMP** permitees shall include a written description of coordination mechanisms among departments within each jurisdiction to eliminate barriers to compliance with the terms of the permit. **SWMP Appendix A**	yes
Ryan	Reporting Requirements and SWMP	5	If applicable, identify other entities relied on to satisfy any of the obligations under the Permit. (S9.D.4)	yes	WSSOG, Streamkeepers, Streamkeepers biannaul report - copy in **Section 14. S4 Compliance**	yes
Ryan	Stormwater Planning	6	Continue to convene an interdisciplinary team to inform and assist in the development, progress, and influence of the stormwater planning program? (S5.C.1.a.)	yes	**Section 4. Stormwater Planning**. Compile StormWater Planning Coordination Group notes.	yes
Ryan	Stormwater Planning	12	Continue to design and implement local development-related codes, rules, standards, or other enforceable documents to minimize impervious surfaces, native vegetation loss, and stormwater runoff, where feasible? See S5.C.1.c.i. (Required annually)	Yes	**Section 4. Stormwater Planning**. New comprehensive plan, however no changes to stormwater code in 2024. Per PMAC, LID implementation is preferred alternative.	N/A
Ryan	Stormwater Planning	13	From the assessment described in S5.C.1.c.i(a), did you identify any administrative or regulatory barriers to implementation of LID Principles or LID BMPs? (Required annually)	No	**Section 4. Stormwater Planning**. No administrative or regulatory barriers. Physical site soils characteristics are the biggest barrier to implementation of LID principles and BMPs on projects in CoPA; local soils are predominantly not conducive to infiltration.	N/A
Ryan	Stormwater Planning	13a	If yes, describe the barrier(s) and the measures taken to address them. (S5.C.1.c.i(a))	N/A	**Section 4. Stormwater Planning**. Administrative and regulatory barriers are not preventing implementation of LID principles or BMPs within the City of PA.	N/A

	B	C	D	E	F	G	H
15	Ryan	Education and Outreach	19	Did you choose to adopt one or more elements of a regional program? (S5.C.2)	Yes	**Section 5. Education and Outreach**. Yes, Natural Yard Care campaign. WSSOG Report. And Puget Sound Starts Here (PSSH). Stormwater Outreach for Regional Municipalities (STORM) N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\5. Education & Outreach\2024 STORM Annual Report_Final.pdf	yes
16	Ryan	Education and Outreach	19a	If yes, list the elements, and the regional program.	West Sound Stormwater Outreach Group (WSSOG), Puget Sound Starts Here (PSSH), Stormwater Outreach for Regional Municipalities (STORM) are regional programs Port Angeles participates in. Some elements of the programs include, but are not limited to: cultivating a culture of environmental responsibility and action, public engagement campaigns, knowledge-sharing and coordination among its member cities, multimedia outreach efforts, including social media, workshops, and community events, the group amplifies its message and cultivates a broad coalition of support for sustainable stormwater solutions.	**Section 5. Education and Outreach**. Reports from the programs are included in Annual Report in this section.	N/A
17	Ryan	Education and Outreach	20	Attach a description of general awareness efforts conducted, including your target audiences and subject areas, per S5.C.2.a.i.	yes	**Section 5. Education and Outreach**. Locally met by the City newsletter fall 2024 to all community. Priority audience - general public. Subject area - LID principles and BMPs. Additional REGIONAL participation: WSSOG report planned to be completed by 3/5/25. N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\5. Education & Outreach\Fall 2024 CoPA Storm Newsletter.pdf	yes
18	Ryan	Education and Outreach	24	Provided, partnered, or promoted stewardship opportunities to encourage resident participation in activities such as those described in S5.C.2.a.iii.	yes	**Section 5. Education and Outreach**. City website annual report posted. Opportunities for Natural Yard Care programs. Streamkeepers.	yes

	B	C	D	E	F	G	H
19	Ryan	Education and Outreach	24a	Attach a list of stewardship opportunities provided.	yes	**Section 5. Education and Outreach**. also in Section 14. S4 Compliance. Natural Yard Care. Streamkeepers. City Hall presentation for Dry Creek Students. STEM Like Me. Etc.	yes
20	Ryan	Public Involvement	25	Describe in Comments field the opportunities created for the public to participate in the decision-making processes involving the development, implementation, and updates of the Permittee's SWMP and the SMAP.	Utility Advisory Committee presentation, City of PA website	**Section 6. Public Involvement & Participation**. City website annual report posted with feedback requested. Work with local groups - list. UAC presentation.	yes
21	Ryan	Public Involvement	25a	Describe specific public involvement and participation opportunities provided to overburdened communities and specifically, highly impacted communities. (S5.C.3.a.i)	The stormwater informational webpage on the City's website contains a direct link to the updated SWMP Plan along with a link to a digital form where public input on the SWMP is encouraged. In addition, City staff are available to the public for direct communication regarding stormwater, as described in the SWMP Plan.	**Section 6. Public Involvement & Participation**. City website pages and forms as it relates to stormwater are reported here.	yes
22	Matthew	Public Involvement	26	Posted the updated SWMP Plan and latest annual report on your website no later than May 31. (S5.C.3.b)	Link to SWMP Plan and Annual Report provided in notes column	**Section 6. Public Involvement & Participation**. https://www.cityofpa.us/1140/Stormwater-Management-Action-Plan https://www.cityofpa.us/255/Stormwater-Utility	N/A
23	Matthew	Public Involvement	26a	List the website address in Comments field.	https://cityofpa.us/1140/Stormwater-Management-Action-Plan https://cityofpa.us/255/Stormwater-Utility	**Section 6. Public Involvement & Participation**. Printed City website pages for report.	yes
24	Matthew	MS4 Mapping	27	Maintained an electronic map of the MS4 including the requirements listed in S5.C.4.?	Yes	**Section 7. MS4 Mapping & Documentation**. See attachment "COPA Stormwater Utility map.pdf"	yes
25	Matthew	IDDE	32	Informed public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste. (S5.C.5.b)	Yes	**Section 8. Illicit Discharge Detection & Elimination.** COPA Website Webpage https://www.cityofpa.us/262/Reporting-Spills	yes

	B	C	D	E	F	G	H
26	Matthew	IDDE	32a	Describe actions in Comments field. (S5.C.5.b)	Maintained IDDE page on website. Implemented the City's IDDE program. Provided IDDE program information (content, hotline, website, etc.) at education and outreach events, on distributed outreach materials, and posted up in City Hall. The Pollution Prevention Assistance (PPA) program provided source control and IDDE education to the local businesses.	**Section 8. Illicit Discharge Detection & Elimination**. Updated for 2024	N/A
27	Matthew	IDDE	33	Implemented an ordinance or other regulatory mechanism to effectively prohibit non-stormwater, illicit discharges as described in S5.C.5.c.	Yes	**Section 8. Illicit Discharge Detection & Elimination**. City has already adopted ordinance - see PAMC 13.63.130, PAMC 13.63.140, PAMC 13.63.150, PAMC 13.63.160	yes
28	Matthew	IDDE	35	Implemented procedures for conducting illicit discharge investigations in accordance with S5.C.5.d.i.	Yes	**Section 8. Illicit Discharge Detection & Elimination**. N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\3. SWMP Plan\Appendix C_IDDE Response Policy_PW-0610.pdf	yes
29	Matthew	IDDE	35a	Cite field screening methodology in Comments field.	The City's field screening methodology consists of: business inspections, stream and creek walks, and stormwater infrastructure inspections in basins selected for that year. Results of the field inspections are used to select monitoring nodes. Primary indicator testing is performed at monitoring locations. If thresholds are exceeded, the area upstream from the monitoring site is flagged for further investigation.	**Section 8. Illicit Discharge Detection & Elimination.**	N/A
30	Matthew	IDDE	36	Percentage of MS4 coverage area screened in the reporting year per S5.C.5.d.i. (Required to screen 12% on average each year.)	11.7	**Section 8. Illicit Discharge Detection & Elimination**. N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\8. IDDE\2024 Basin 2 Screening Summary.pdf	Yes

	B	C	D	E	F	G	H
31	Matthew	IDDE	36a	Cite field screening techniques used to determine percent of MS4 screened.	The City was divided up into eight (8) roughly equal screening basins by the number of catch basins within the right of way. Each year, one basin is selected and screened using the methodology described in 35a.	**Section 8. Illicit Discharge Detection & Elimination**.	yes
32	Matthew	IDDE	37	Describe how you publicized a hotline telephone number for public reporting of spills and other illicit discharges in the Comments field. (S5.C.5.d.ii)	Posted on the City website, advertised at public outreach events, listed on public outreach materials, and displayed in City Hall.	**Section 8. Illicit Discharge Detection & Elimination**. COPA Website Webpage https://www.cityofpa.us/262/Reporting-Spills	yes
33	Matthew	IDDE	38	Implemented an ongoing illicit discharge training program for all municipal field staff per S5.C.5.d.iii.	Yes	**Section 8. Illicit Discharge Detection & Elimination**. CESCL training included spill. Attach CESCL report. Also listed in Section 12. Training	yes
34	Matthew	IDDE	39	Implemented an ongoing program to characterize, trace, and eliminate illicit discharges into the MS4 per S5.C.5.e.	Yes	**Section 8. Illicit Discharge Detection & Elimination**. See "Appendix C_IDDE Response Policy_PW-0610.pdf" Copy in Section 1. SWMP Plan	yes
35	Matthew	IDDE	40	Implemented an ongoing illicit discharge training program for all staff responsible for implementing the procedures and program described in S5.C.5.f.	Yes	**Section 8. Illicit Discharge Detection & Elimination**. CESCL See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\3. SWMP Plan\Appendix C_IDDE Response Policy_PW-0610.pdf	yes
36	Matthew	IDDE	41	Attach a report with data describing the actions taken to characterize, trace, and eliminate each illicit discharge reported to, or investigated by, the Permittee as described in S5.C.5.g. The submittal must include all of the applicable information and must follow the instructions, timelines, and format described in Appendix 13.	Attach files from N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\IDDE	**Section 8. Illicit Discharge Detection & Elimination**. N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\8. IDDE\2024 IDDE Tracking.pdf	Yes
37	Matthew	Controlling Runoff	42	Continued to implement an ordinance or other enforceable mechanism to effectively address runoff from new development, redevelopment, and construction sites per the requirements of S5.C.6.b.i-iii.	Yes	**Section 9. Controlling Runoff from Development**. City has already adopted ordinance - see PAMC 13.63.190 N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\9. Controlling Runoff from Development\CoPA_muni code 13.63.190 - Stormwater design and construction requirements.pdf	yes
38	Matthew	Controlling Runoff	44	Does the ordinance or other enforceable mechanism follow a Phase I program approved by Ecology (S5.C.6.b.i)?	No	**Section 9. Controlling Runoff from Development**	N/A
39	Matthew	Controlling Runoff	44a	If yes, state the title of the Stormwater Management Manual and which Phase I Program.	N/A	**Section 9. Controlling Runoff from Development**	N/A

	B	C	D	E	F	G	H
40	Matthew	Controlling Runoff	45	Number of adjustments granted to the minimum requirements in Appendix 1. (S5.C.6.b.i. and Section 5 of Appendix 1)	0	**Section 9. Controlling Runoff from Development**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\Dev Rev\2024 Development Review S5.C.6.c.pdf	Yes
41	Matthew	Controlling Runoff	45a	Number of adjustments granted to the Minimum Requirements #5?	0	**Section 9. Controlling Runoff from Development**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\Dev Rev\2024 Development Review S5.C.6.c.pdf	Yes
42	Matthew	Controlling Runoff	46	Number of exceptions granted to the minimum requirements in Appendix 1. (S5.C.6.b.i., and Section 6 of Appendix 1)	0	**Section 9. Controlling Runoff from Development**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\Dev Rev\2024 Development Review S5.C.6.c.pdf	Yes
43	Matthew	Controlling Runoff	46a	Number of exceptions granted to the Minimum Requirements #5?	0	**Section 9. Controlling Runoff from Development**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\Dev Rev\2024 Development Review S5.C.6.c.pdf	Yes
44	Matthew	Controlling Runoff	47	Reviewed Stormwater Site Plans for all proposed development activities that meet the thresholds adopted pursuant to S5.C.6.b.i. (S5.C.6.c.i)	Yes	**Section 9. Controlling Runoff from Development**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\Dev Rev\2024 Development Review S5.C.6.c.pdf	Yes
45	Matthew	Controlling Runoff	47a	Number of site plans reviewed during the reporting period.	201	**Section 9. Controlling Runoff from Development**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\Dev Rev\2024 Development Review S5.C.6.c.pdf	Yes
46	Matthew	Controlling Runoff	48	Inspected, prior to clearing and construction, permitted development sites per S5.C.6.c.ii?	yes, 11	**Section 9. Controlling Runoff from Development**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\Dev Rev\2024 Development Review S5.C.6.c.pdf	Yes
47	Matthew	Controlling Runoff	49	Inspected permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls per S5.C.6.c.iii.	Yes	**Section 9. Controlling Runoff from Development**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\Dev Rev\2024 Development Review S5.C.6.c.pdf	Yes

	B	C	D	E	F	G	H
48	Matthew	Controlling Runoff	49a	Number of construction sites inspected per S5.C.6.c.iii.	30	**Section 9. Controlling Runoff from Development.** See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\Dev Rev\2024 Development Review S5.C.6.c.pdf	Yes
49	Matthew	Controlling Runoff	49b	Inspected stormwater treatment and flow control BMPs/facilities and catch basins in new residential developments at least twice per 12-month period with no less than 4 months between inspections, per S5.C.6.c.iv?	Yes	Discovery Loop, Lang, and Reserve at Valley Creek	N/A
50	Matthew	Controlling Runoff	50	Inspected all permitted development sites upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater facilities. (S5.C.6.c.v)	Yes	**Section 9. Controlling Runoff from Development**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\Dev Rev\2024 Development Review S5.C.6.c.pdf	Yes
51	Matthew	Controlling Runoff	51	Verified a maintenance plan is completed and responsibility for maintenance is assigned for projects prior to final approval and occupancy being granted. (S5.C.6.c.v)	Yes	**Section 9. Controlling Runoff from Development**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\Dev Rev\2024 Development Review S5.C.6.c.pdf	Yes
52	Matthew	Controlling Runoff	52	Number of enforcement actions taken during the reporting period (based on construction phase inspections at new development and redevelopment projects, per S5.C.6.c.ii-iv). (S5.C.6.c.viii)	5	**Section 9. Controlling Runoff from Development**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\Dev Rev\2024 Development Review S5.C.6.c.pdf	Yes
53	Matthew	Controlling Runoff	53	Achieved at least 80% of scheduled construction-related inspections. (S5.C.6.c.vi)	Yes, 85%	**Section 9. Controlling Runoff from Development**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\Dev Rev\2024 Development Review S5.C.6.c.pdf	Yes
54	Matthew	Controlling Runoff	54	Made online links to Ecology's Construction Stormwater General Permit Notice of Intent, the Industrial Stormwater General Permit Notice of Intent, and the registration requirements for Underground Injection Control (UIC) available to representatives of proposed new development and redevelopment? (S5.C.6.d)	Yes	**Section 9. Controlling Runoff from Development**. https://cityofpa.us/996/Stormwater-Permits, N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\Dev Rev\COPA Webpage Stormwater Permits.pdf	yes
55	Matthew	Controlling Runoff	55	All staff whose primary job duties are 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.6.e)	Yes	**Section 9. Controlling Runoff from Development**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\Dev Rev\2024 COPA CESCL Database.pdf	yes

	B	C	D	E	F	G	H
56	Ryan	Stormwater Management for Existing Development	56	Attach a list of projects that are fully funded, started, completed and/or scheduled for implementation during this permit term for the purpose of meeting S5.C.7.b, with the information and formatting specified in Appendix 12. Attach an updated list annually. (S5.C.7.b,)	yes	**Section 15. Other Supporting Docs. NEW requirement.** City Hall East Parking Lot and 16th Street LID Storm, (Stormwater Facility Retrofit Projects) Per Appendix 12, N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Working Documents\15. Other Supporting Docs\ Stormwater Management for Existing Development_App 12_Project List.xlsx	yes
57	Howard	Source Control	57	Updated inventory to identify institutional, commercial and industrial properties which have the potential to generate pollutants to the Permittee's MS4 per S5.C.8.b? (Required at least once every five years)	Yes	**Section 11. Source Control**. N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\SC\2024 SC Business Insp. List.pdf	yes
58	Howard	Source Control	57a	Number of total sites identified for the inventory.	191	**Section 11. Source Control**. N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\SC\2024 SC Business Insp. List.pdf	yes
59	Howard	Source Control	58	Attach a summary of actions taken to implement the source control program, per S5.C.8.a-d.	yes	**Section 11. Source Control**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\SC\SC Summary of Actions 2024.pdf	yes
60	Howard	Source Control	59	Attach a list of inspections, per S5.C.8.c.v, organized by the business category, noting the number of times each business was inspected and if enforcement actions were taken, per S5.C.8.d.	yes	**Section 11. Source Control**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\SC\2024 SC Inspections Performed.pdf	yes
61	Howard	Source Control	60	Implemented an ongoing source control training program per S5.C.8.e?	Yes	Print is included in **Section 12. Training**	yes
62	Matthew	O&M	61	Implemented maintenance standards that are as protective, or more protective, of facility function than those specified in the Stormwater Management Manual for Western Washington or a Phase I program approved by Ecology per S5.C.9.a?	Yes	**Section 10. Operations & Maintenance**. See PAMC 13.63.270 and USSG Chapter 5 (Not printed) (https://www.cityofpa.us/DocumentCenter/View/383/Chapter-5---Stormwater-PDF)	yes
63	Ryan	O&M	63	Applied a maintenance standard for a facility or facilities which do not have maintenance standards specified in the Stormwater Management Manual for Western Washington? (S5.C.9.a)	No		N/A
64	Ryan	O&M	63a	If so, note in the Comments field what kinds of facilities are covered by this alternative standard. (S5.C.9.a)	N/A		N/A
65	Matthew	O&M	64	Verified that maintenance was performed per the schedule in S5.C.9.a.ii when an inspection identified an exceedance of the maintenance standard.	Yes	**Section 10. Operations & Maintenance**. N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\10. Operations & Maintenance\Operation and Maintenance Public Facilities.pdf	Yes

	B	C	D	E	F	G	H
66	Matthew	O&M	64a	Attach documentation of maintenance time frame exceedances that were beyond the Permittee's control.	N/A	None to report.	N/A
67	Matthew	O&M	65	Implemented an ordinance or other enforceable mechanisms to verify long-term operation and maintenance of stormwater treatment and flow control BMPs/facilities regulated by the permittee per S.5.C.9.b.i(a)?	Yes	**Section 10. Operations & Maintenance**. City has already adopted ordinance - see PAMC 13.63.260 and PAMC 13.63.270	yes
68	Matthew	O&M	66	Inspected stormwater treatment and flow control BMPs/facilities regulated by the Permittee per S5.C.9.b.i(b)	Yes	**Section 10. Operations & Maintenance**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\10. Operations & Maintenance\Operation and Maintenance Private Facilities.pdf	Yes
69	Matthew	O&M	66a	Are you using a reduced stormwater treatment and flow control BMPs/facilities inspection frequency?	No	Not during this reporting period. Next year we may for some sites.	N/A
70	Matthew	O&M	66b	If using a reduced inspection frequency on stormwater facilities regulated by the Permittee for the first time during this permit cycle, attach documentation per S5.C.9.b.i.(b).	N/A		N/A
71	Matthew	O&M	67	Achieved at least 80% of required inspections to verify adequate long-term O&M. (S5.C.7.b.ii)	Yes	**Section 10. Operations & Maintenance**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\10. Operations & Maintenance\Operation and Maintenance Private Facilities.pdf	Yes
72	Matthew	O&M	68	Annually inspected municipally owned or operated permanent stormwater treatment and flow control BMPs/facilities. (S5.C.9.c.i)	Yes	**Section 10. Operations & Maintenance**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\10. Operations & Maintenance\Operation and Maintenance Public Facilities.pdf	Yes
73	Matthew	O&M	68a	Number of known municipally owned or operated stormwater treatment and flow control BMPs/facilities. (S5.C.9.c.i)	209	**Section 10. Operations & Maintenance**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\10. Operations & Maintenance\Operation and Maintenance Public Facilities.pdf	Yes
74	Matthew	O&M	68b	Number of facilities inspected during the reporting period.	206	**Section 10. Operations & Maintenance**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\10. Operations & Maintenance\Operation and Maintenance Public Facilities.pdf	Yes
75	Matthew	O&M	68c	Number of facilities for which maintenance was performed during the reporting period.	145	**Section 10. Operations & Maintenance**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\10. Operations & Maintenance\Operation and Maintenance Public Facilities.pdf	Yes

	B	C	D	E	F	G	H
76	Matthew	O&M	69	If using reduced inspection frequency for the first time during this permit cycle, attach documentation per S5.C.9.c.i.	N/A		N/A
77	Matthew	O&M	70	Conducted spot checks and inspections (if necessary) of potentially damaged stormwater facilities after major storms as per S5.C.7.c.ii. (S5.C.9.c.ii is the correct reference)	N/A	The 10-year storm event did not occur during this reporting period, therefore permittee owned and operated stormwater facilities did not need to be spot checked per this requirement.	N/A
78	Matthew	O&M	71	Inspected municipally owned or operated catch basins and inlets every two years or used an alternative approach? Cleaned as needed? (S.5.C.9.c.iii)	Yes	**Section 10. Operations & Maintenance.** See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\10. Operations & Maintenance\Operation and Maintenance Public Facilities.pdf	Yes
79	Matthew	O&M	71a	Number of known catch basins and inlets?	2682	**Section 10. Operations & Maintenance**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\10. Operations & Maintenance\Operation and Maintenance Public Facilities.pdf	Yes
80	Matthew	O&M	71b	Number of catch basins and inlets inspected during the reporting period?	1496	**Section 10. Operations & Maintenance**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\10. Operations & Maintenance\Operation and Maintenance Public Facilities.pdf	Yes
81	Matthew	O&M	71c	Number of catch basins and inlets cleaned during the reporting period?	1496	**Section 10. Operations & Maintenance**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\10. Operations & Maintenance\Operation and Maintenance Public Facilities.pdf	Yes
82	Matthew	O&M	72	Attach documentation of alternative catch basin inspection approach for those owned or operated by the Permittee, if used, per S5.C.9.c.iii.	N/A		N/A
83	Matthew	O&M	73	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.9.d)	Yes	**Section 10. Operations & Maintenance**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\O&M\COPA SW Policies and Procedures.pdf	yes
84	Ryan	O&M	79	Implemented a Stormwater Pollution Prevention Plan (SWPPP) 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.9.f)	Yes	**Section 10. Operations & Maintenance**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\O&M\COPA Corp Yard SWPPP.pdf	yes

	B	C	D	E	F	G	H
85	Ryan	O&M	80	Implemented an ongoing training program for Permittee employees whose primary construction, operations or maintenance job functions may impact stormwater quality. (S5.C.9.g)	Yes	**Section 10. Operations & Maintenance**. See N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\12. Training\CoPA CESCL training March 2024.pdf and APWA 2024 - Mmoore.pdf	yes
86	Ryan	TMDL	81	Complied with the Total Maximum Daily Load (TMDL)-specific requirements identified in Appendix 2. (S7.A)	N/A		N/A
87	Ryan	TMDL	81a	List any requirements that were not met.	N/A		N/A
88	Ryan	TMDL	82	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)	N/A		N/A
89	Ryan	Monitoring and Assessment	83	Submitted payment for cost-sharing for Stormwater Action Monitoring (SAM) status and trends monitoring no later than December 1, 2024 (S8.A.1); and no later than August 15 of each subsequent year? (S8.A.2.a.)	Yes	**Section 13. Monitoring and Assessment** N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\13. Monitoring & Assessment\SAM.2024_Approved Invoice.pdf	yes
90	Ryan	Monitoring and Assessment	84	Notified Ecology by December 1, 2024 which option you selected: S8.A.2.a, or S8.A.2.b.	Yes	**Section 13. Monitoring and Assessment** N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\13. Monitoring & Assessment**S8 Option Letter 2024.11.25.pdf**	yes
91	Ryan	Monitoring and Assessment	85	Submitted payment for cost-sharing for SAM effectiveness and source identification studies no later than December 1, 2024 (S8.B.1); and no later than August 15 of each subsequent year (S8.B.2.a or S8.B.2.c)?	Yes	**Section 13. Monitoring and Assessment** N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\13. Monitoring & Assessment**SAM.2024_Approved Invoice.pdf**	yes
92	Ryan	Monitoring and Assessment	86	Notified Ecology by December 1, 2024 which option you selected: S8.B.2.a, or S8.B.2.b.	Yes	**Section 13. Monitoring and Assessment** N:\PWKS\Stormwater\00 NPDES SW Permit Admin\NPDES Annual Reports\2024\Final\13. Monitoring & Assessment**S8 Option Letter 2024.11.25.pdf**	yes
93	Ryan	Monitoring and Assessment	87	If conducting stormwater discharge monitoring in accordance with S8.C.1, submitted a QAPP to Ecology no later than February 1, 2025? (S8.C.1.b and Appendix 9)	N/A		N/A
94	Ryan	General Conditions and Compliance with Standards	89	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)	N/A		N/A
95	Ryan	General Conditions and Compliance with Standards	90	Took appropriate action to correct or minimize the threat to human health, welfare, and/or the environment per G3.A.	N/A		N/A
96	Ryan	General Conditions and Compliance with Standards	91	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)	N/A		N/A
97	Ryan	General Conditions and Compliance with Standards	92	If requested, submitted an Adaptive Management Response report in accordance with S4.F.3.a.	N/A		N/A
98	Ryan	General Conditions and Compliance with Standards	93	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)	yes	See "2024 S4F Status_ongoing efforts_StreamKeepers.pdf"	yes

	B	C	D	E	F	G	H
99	Ryan	General Conditions and Compliance with Standards	94	Notified Ecology of the failure to comply with the permit terms and conditions within 30 days of becoming aware of the non-compliance. (G20)	N/A		N/A
100	Ryan	General Conditions and Compliance with Standards	95	Number of non-compliance notifications (G20) provided in reporting year. List permit conditions described in non-compliance notification(s) in Comments field.	0		N/A

This is a copy of the City's Stormwater Management Program (SWMP) Plan. It defines what the City plans to do to reduce adverse stormwater runoff impacts on downstream receiving waterbodies.

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

Please let us know if you have any comments, ideas, or concerns! You can provide feedback directly to City Hall 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.

City of Port Angeles

Stormwater Management Program Plan

Updated March 2025

As required by the

Western Washington Phase II Municipal Stormwater Permit
State of Washington – Department of Ecology

Permit Number: WAR045028
Permit Cycle: 2024-2029

Table of Contents

Background and Intent 5

Stormwater Planning 6

a) Stormwater Planning Team 6
b) Long-range Plan Coordination Report 6
c) LID Code-related Requirements 7
i) LID Barrier Assessment 8
d) Stormwater Management Action Planning (SMAP) 8
i) Phase I: Receiving Water Assessment 9
ii) Phase II: Receiving Water Prioritization 9
iii) Phase III: SMAP Development 9

Public Education and Outreach 10

a) General Awareness 11
b) Behavior Change 14
c) Stewardship 15
d) Recordkeeping 15

Public Involvement and Participation 16

a) Public Involvement in SWMP 16
b) Availability of Information to the Public 17

MS4 Mapping and Documentation 17

a) Municipal Separate Storm Sewer System (MS4) Map 17
i) Location of Known Outfalls, Receiving Waters and Structural BMPs 18
ii) New Connections to the MS4 18
iii) Areas Not Discharging to Surface Waters 18
b) Availability of Information 18

Illicit Discharge Detection and Elimination (IDDE) 19

e) IDDE Policy and Procedures 19
f) IDDE Education 19
g) Illicit Discharge Ordinance 20
h) Illicit Discharge Detection 20
i) Field Screening and Potential Sources 20
ii) Hotline for Public Reporting of Discharges and Spills 21
iii) IDDE Staff Training 22
i) Illicit Discharge Response 22
i) Nature of Discharge 22
ii) Fire Fighting Activities Cleanup 22
iii) Source Tracing 23
iv) Discharge Elimination 23
v) Permit Compliance Timeframes 23
j) Recordkeeping 24

Controlling Runoff from New Development, Redevelopment, and Construction Sites ... 24
a) Stormwater Ordinance Regulating Development ... 24
i) Minimum Requirements, Technical Thresholds, and Definitions ... 25
ii) Legal Authority to Inspect Private Facilities ... 25
iii) LID Required ... 25
iv) Erosivity Waiver ... 25
b) Permitting ... 25
i) Review of Stormwater Site Plans ... 26
ii) Erosivity Waiver ... 26
iii) Notice of Intent ... 26
c) Inspections ... 26
i) Pre-Construction Inspections ... 26
ii) During Construction Inspections ... 27
iii) Post-Construction Inspections ... 27
iv) Inspection Compliance ... 27
v) Enforcement Strategy ... 27
d) Staff Training ... 27
e) Recordkeeping ... 27
Stormwater Management for Existing Development ... 28
a) Stormwater Facility Retrofits ... 28
i) Strategic Stormwater Investments ... 28
ii) Opportunistic Stormwater Investments ... 28
b) Planned Projects ... 28
c) Projects Funded, Under Construction, or Fully Implemented ... 28
i) Projects Started On or After January 1, 2023 ... 28
ii) Contribution To Meet Regional Goal ... 29
iii) Projects Completely Implemented This Permit Term ... 29
iv) Projects That May Provide Tribal Benefits & Benefits to Overburdened Communities ... 29
d) Regional Goal Collaboration ... 29
i) In-Kind Services If There Is A Regional Strategy ... 29
ii) Contribution To Regional Goal ... 29
e) Projected Equivalent Acres Management For Next Term ... 29
Source Control Program for Existing Development ... 29
a) Program Goals ... 30
b) Program Components and Milestones ... 31
i) Ordinance to Apply Best Management Practices (BMPs) ... 31
ii) Inventory of Sites ... 31
iii) Inspection Program ... 31
iv) Progressive Enforcement Policy ... 32
c) Staff Training ... 33
Operations and Maintenance ... 33
a) Maintenance Standards ... 33

b) Permitted Stormwater Facilities 33
i) Operations and Maintenance Ordinance 34
ii) Maintenance Standards 34
iii) Annual Inspections 34
iv) Compliance & Recordkeeping 34
c) City Owned Stormwater Facilities 34
i) Treatment and Flow Control Inspections 35
ii) Spot Checks 35
iii) Catch Basin Inspections 35
iv) Compliance 35
d) Stormwater Impact Reduction from Public Lands 35
e) Training Program 36
f) Stormwater Pollution Prevention Plans 36
g) Recordkeeping 38

Stormwater NPDES and Capital Needs Assessment 38

Documents Referenced 39

SWMP Appendix A : Inter-Departmental Coordination Mechanism Policy 40

SWMP Appendix B : Public Outreach Plan Activity Matrix 41

SWMP Appendix C : Illicit Discharge Detection and Elimination (IDDE) Response Policy 42

List of Tables

Table 1: Status of Stormwater Pollution Prevention Plans for City Facilities 36
Table 2: Existing Individual Stormwater and Stormwater-Related Permits 38

Appendices

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

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 issued by the State of Washington's Department of Ecology (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 was renewed on August 1, 2013 for a five-year term (2013-2018), however, Ecology extended the permit an additional year into 2019. On August 1, 2019, Ecology updated and renewed the permit for another five-year term (2019-2024). The current 2024-2029 Permit was renewed by Ecology for another five-year term and became effective on August 1, 2024. The Permit authorizes the City to discharge from the municipal separate storm sewer system (MS4) to surface waters and ground waters of the state.

A Stormwater Management Program (SWMP) was developed by the City to meet the specific requirements of Special Condition S5 of the Permit: "Stormwater Management Program for Cities, Towns, and Counties." The SWMP Plan is a written set of planned actions and activities designed to reduce the discharge of pollutants to the maximum extent practicable and to protect water quality.

The organization of the City's SWMP reflects the nine core components required by Special Condition S5 under the active Permit; the corresponding permit sections are provided in parentheses:

1. Stormwater Planning (S5.C.1)
2. Public Education and Outreach (S5.C.2)
3. Public Involvement and Participation (S5.C.3)
4. MS4 Mapping and Documentation (S5.C.4)
5. Illicit Discharge Detection and Elimination (S5.C.5)
6. Controlling Runoff from New Development, Redevelopment, and Construction Sites (S5.C.6)
7. Stormwater Management for Existing Development (S5.C.7)
8. Source Control Program for Existing Development (S5.C.8)
9. Operations and Maintenance (S5.C.9)

The City's SWMP Plan is updated and submitted to the Department of Ecology annually, as required. A digital copy of the SWMP Plan is available on the City's stormwater web page. Updates to the Plan for each calendar year are posted by May 31st, as required by the Permit.

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. An annual report of actual activities performed is submitted annually to Ecology.

The public is encouraged to participate in the ongoing development and improvement of the SWMP. To provide input, contact the Department of Public Works and Utilities with questions, comments, or suggestions at:

Address:	321 East Fifth St., Port Angeles, WA 98362
Phone:	(360) 417-4830 (Stormwater Hotline) (360) 417-4745 (Illicit Discharge Hotline) *Report a Spill* (360) 417-4811 (City Stormwater Engineer)
Email:	stormwater@cityofpa.us illicitdischarge@cityofpa.us *Report a Spill*
Website:	https://www.cityofpa.us/376/Stormwater-Management-Program

STORMWATER PLANNING

The City has implemented a Stormwater Planning Program designed to inform and assist in the development of policies and strategies as water quality management tools to protect receiving waters. During the current permit cycle, this program will be further developed and executed within the allowable timeframes to meet the requirements of the 2024-2029 Permit.

a) STORMWATER PLANNING TEAM

Within the City, inter-departmental communication and coordination regarding stormwater management (i.e. code changes, permit compliance, low-impact development standards, illicit discharges, pollution prevention, education and outreach, permitting, tracking, etc.) has been well-established, as documented by the City's Inter-Departmental Coordination Mechanism Policy. The City's Stormwater Permit Coordination Group (SWPCG) was expanded upon previously to specifically include a "Planning" component that is dedicated to informing and assisting in the development, progress, and influence of the City's overall Stormwater Planning Program. The Group's written policy was updated in July 2020, included here-in in Appendix A, and was renamed the "Stormwater Permit Coordination and Planning Group" (SWPCPG). Semi-regular meetings are held to discuss ongoing and future stormwater management items across select departments and divisions within the City.

b) LONG-RANGE PLAN COORDINATION REPORT

During the previous permit cycle, the City reviewed and evaluated how stormwater management needs and protection/improvement of receiving water health are (or are not) informing the planning update processes and influencing policies and implementation strategies.

This effort was manifested in two reports to Ecology describing how the water quality and watershed protection policies, strategies, codes, and other measures intended to protect and improve local receiving water health through planning, or taking into account stormwater management needs or limitations; under the 2013-2019 permit cycle and, again, under the most-recent permit cycle.

Included in the City's 2020 annual report to Ecology, the City responded to the series of Stormwater Planning Annual Report questions describing how anticipated stormwater impacts on water quality were addressed, if at all, during the 2013-2019 permit term in updates to the Comprehensive Plan (or equivalent) and in other locally initiated or state-mandated, long-range land use plans that are used to accommodate growth or transportation.

These same questions were applied to the 2019-2024 permit cycle and used to generate a Long-range Plan Coordination Report Memorandum to Ecology, submitted January 1st, 2023. The purpose of the Report / Memo was to assist the City with responses to the Stormwater Planning Annual Report questions describing how anticipated stormwater impacts on water quality were addressed, if at all, during the 2019-2024 Permit term. Specifically, this memorandum provides responses to questions posed by Ecology.

The City is participating in watershed-scale green infrastructure and land use planning efforts with Greenlink Port Angeles. Additional land use planning efforts are described in the City's Comprehensive Plan and in the City's Capital Facilities Plan and Transportation Improvement Plan (updated on an annual basis). The Capital Facilities Plan (CFP) includes a schedule for preparation and adoption of all City Service and facilities plans, coordinated with the Comprehensive Plan.

In 2022, the City published its Climate Resiliency Plan as part of the Comprehensive Plan and is designed to build upon existing sustainability programs and efforts. This plan includes efforts related to land use, accommodating growth, stormwater management, and transportation. The following are highlights from the plan:

- Place a priority on sustainable land use and building practices, resilience of our natural systems, and a focus on reducing the City's carbon footprint to measure our independence, self-reliance, and quality of life.
- Directing measurable action to support system-wide waste and energy/water use reductions, sustainable land use, transportation and economic development, and social and environmental health and equity that celebrates our community's diversity.
- Recognizing the importance of contributing to sustainability through public projects that connect trails and transit, commercial development that provides jobs and services to neighborhoods, and innovative Low Impact Development (LID) stormwater and building practices.

The City has also implemented the Stormwater Management Action Plan which is further elaborated on later in this document.

c) LID CODE-RELATED REQUIREMENTS

The City will continue to require Low-impact Development (LID) Principles and LID BMPs when updating, revising, and developing new local development-related codes, rules, standards, or other enforceable documents, as needed. The intent being to make LID the preferred and commonly used approach to site development. The local development-related codes, rules, standards, or other enforceable documents will be

designed to minimize impervious surfaces, native vegetation loss, and stormwater runoff in all types of development situations, where feasible.

i) LID Barrier Assessment

Annually, the City will assess and document any newly identified administrative or regulatory barriers to implementation of LID Principles or LID BMPs since local codes were updated in accordance with Ecology's 2013 Permit, and the measures developed to address the barriers. If applicable, the assessment will describe mechanisms adopted to encourage or require implementation of LID principles or LID BMPs.

As required by the Phase II Permit, during this permit cycle, the City intends to review local LID and other development related codes and standards and, if necessary, make updates to encourage and require LID principle and BMPs.

Additionally, the City intends to adopt and implement tree canopy goals and policies to support stormwater management. The City will consider how existing or future tree canopy can support stormwater management and water quality improvements in receiving waters and will establish a long-term goal of canopy, existing or future projection, to be used for stormwater management that is appropriate for the City. Specific considerations for canopy for stormwater management on City-owned property or operated lands shall include:

a) Maintaining or increasing canopy in the City of Port Angeles, an overburdened community.
b) Maintaining existing mature canopy.

The City will document considerations, reasoning, and rationale for goals and policies.

d) Stormwater Management Action Planning (SMAP)

During the previous permit cycle, the City developed a comprehensive stormwater planning approach that is focused on addressing impacts from the cumulative development in a watershed rather than on single site or subdivision impact. The purpose of this effort was to determine:

- How the City can most strategically address existing stormwater problems, and
- How the City can meet future population and density targets while also protecting and improving conditions in receiving water.

The resulting Stormwater Management Action Plan (SMAP) strategically identified approaches to accommodate future growth and development while preventing water quality degradation and/or improving conditions in receiving waters harmed by past development. Here is a link to the current SMAP webpage for more information and to obtain copies of the progress reports: https://www.cityofpa.us/1140/Stormwater-Management-Action-Plan.
For this permit cycle, 2024-2029, the City will continue to develop an SMAP to support implementation in the Stormwater Management for Existing Development

(SMED) Program with the identification of strategic investments through the identification of projects and actions. Throughout this process, the City shall follow a transparent process that informs and seeks input from Tribes, community stakeholders, and residents. Because the City has an SMAP developed under the previous permit cycle, it may rely on the Receiving Water Assessment and Prioritization process conducted previously. As required by the permit, the City will develop an SMAP for at least one new high priority catchment area, or implement additional actions for the existing SMAP, under this current permit cycle. The City's current SMAP for Valley Creek was developed per the following:

i) Phase I: Receiving Water Assessment

In order to develop and implement a strategic plan of action, the City first identified receiving waters that are most likely to receive a benefit. To achieve this, the City documented and assessed existing information related to our local receiving waters.

A tabulated watershed inventory that includes a brief description of the relative conditions of the receiving waters and the contributing areas has been consolidated, per permit requirements, and was be submitted to Ecology by March 31st, 2022. The submittal included a map of the delineated basins that references back to the watershed inventory table and identifies which receiving waters have a relatively low stormwater management influence and will not be included in the next step; prioritization.

ii) Phase II: Receiving Water Prioritization

Informed by the assessment of receiving water conditions, and other local and regional information, the City developed and implemented a prioritization method and process to determine which receiving waters will receive the most benefit from implementation of stormwater facility retrofits, tailored implementation of SWMP actions, and other land/development management actions. The retrofits and actions were designed to:

- Conserve, protect, or restore receiving waters through stormwater and land management strategies that act as water quality management tools,
- reduce pollutant loading, and
- address hydrologic impacts from existing development as well as planned for and expected future buildout conditions.

This prioritized and ranked list of receiving waters was documented in a report and submitted to Ecology prior to June 30, 2022, along with the process used to identify high priority receiving waters. Additionally, the ranking process included the identification of a high priority catchment area (the Valley Creek Basin) for focus of the Stormwater Management Action Plan (SMAP Phase III).

iii) Phase III: SMAP Development

In this step, the City developed a SMAP for at least one high-priority catchment area (Valley Creek Basin) that:

- Identified specific stormwater management actions to protect water quality in the selected receiving water (Valley Creek Basin), and
- Determined an appropriate schedule and budget source(s) for implementing the activities and projects identified.

As required by the previous Permit, this SMAP was completed on March 31st, 2023 and included the following:

1. A description of the stormwater facility retrofits needed for the area, including the BMP types and preferred locations.
2. Land management/development strategies and/or actions identified for water quality management.
3. Targeted, enhanced, or customized implementation of stormwater management actions related to permit sections within section S5 of the Permit, including:
   a. IDDE field screening,
   b. Prioritization of Source Control inspections,
   c. O&M inspections or enhanced maintenance, or
   d. Public Education and Outreach behavior change programs.

   Identified actions will support other specifically identified stormwater management strategies and actions for the basin overall, or for the catchment area in particular.
4. If applicable, identification of changes needed to local long-range plans, to address SMAP priorities.
5. A proposed implementation schedule and budget sources for:
   a. Short-term actions (accomplished within 6 years)
   b. Long-term actions (accomplished within 7-20 years)
6. A process and schedule to provide future assessment and feedback to improve the planning process and implementation of procedures or projects.

PUBLIC EDUCATION AND OUTREACH

The City's public education and outreach program has been developed consistent with the original Permit goal: "to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts." The program's foundational goals are to:

- build general awareness within the community about methods to address and reduce impacts from stormwater runoff,
- effect behavior change to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts,
- create stewardship opportunities that encourages community engagement in addressing the impacts from stormwater runoff.

The City is a member of the West Sound Stormwater Outreach Group (WSSOG); a regional group facilitated by Kitsap County that consolidates resources, knowledge, and experience in an effort to achieve a robust, engaging, and consistent education and outreach program. Regionally developed strategies and materials are tailored to meet the City's needs and implemented locally.

a) General Awareness

At a minimum, the City will annually select one target audience from the list below and implement an education and outreach program designed to provide general awareness regarding stormwater issues and solutions. The content of the program will be relevant to the target audience selected and will be implemented on an ongoing or strategic schedule. The target audiences included in the permit and relevant subject areas to be covered are detailed below.

General Public or Businesses
Including overburdened communities, or school age children and including home-based or mobile businesses, respectively.

Subject areas:

- General impacts of stormwater on surface waters, including impacts from impervious surfaces.
- Low impact development (LID) principles and LID BMPs.

Land Development Professionals
Engineers, contractors, developers, or land use planners.

Subject areas:

- Technical standards for stormwater site and erosion control plans.
- LID principles and LID BMPs.
- Stormwater treatment and flow control BMPs/facilities

The following is a list of means and methods the City may employ in their annual targeted education and outreach program:

- **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 https://www.cityofpa.us/255/Stormwater-Utility. 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.
- **Presentations / Meetings**: Annually, the City may hold virtual and/or in-person public meetings to discuss the stormwater management program plan, stormwater management requirements, permitting, stormwater templates, ordinances, LID, etc. In these meetings we may discuss local water quality, the effects of impervious surfaces on stream health, and stormwater pollutants

generated by home and automobile owners. Meetings may be held with local interest groups such as Streamkeepers, EcoNet, and the North Peninsula Builders Association.

- **Informational handouts:** Take-home fliers and brochures and may be made available to the public 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 new brochures and other informational materials are developed, electronic copies will be made available through the City's stormwater webpage.
- **Media advertisements**: The City may periodically place stormwater-related information in the local newspaper (Peninsula Daily News), on paid cable and satellite, locally targeted internet advertising platforms, and at local movie theatres. 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 media advertisements may be made available through the City's stormwater webpage.
- **Utility bill mailers**: One month of the year, typically October, educational mailers are sent out with the monthly utility bills, thereby reaching 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 may also be made available on the City's stormwater website and as handouts. The utility bill mailer is likely to feature topics such as: LID techniques, stormwater code updates, stormwater programmatic changes, BMPs, pet waste management, vehicle washing, natural yard care, and the new source control inspection program.
- **Local event participation**: Educational materials (posters, brochures/handouts, maps, etc) are commonly distributed at existing local and regional events that attract members of the target audiences. At such events, City representatives are made available to answer questions and provide information. Typical events include: Clallam County Fair, Clallam County Home and Lifestyle Show, Earth Day at the Pier, and others. Event-specific materials are developed and distributed as appropriate. Announcements of upcoming events and copies of materials used at events are typically available on the City's stormwater website.

A matrix has been prepared to show planned activities for the current year and their relationship to the target audiences. This matrix is attached as Appendix B to this document. Updates of actual education and outreach activities performed will be provided with the Annual Report for the year.

In addition to the means and methods listed above (whose primary purpose is to provide stormwater education and meet permit requirements), throughout a typical year, the City also indirectly provides education outreach, such as:

- **Pollution prevention site visits**: The City receives grant funding through the Washington State Department of Ecology to support a Pollution Prevention Specialist position. This person schedules 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. Under the previous permit cycle, Source Control became a permit condition and starting in Jan. 2023, this program became an active component to the City's overall stormwater management program. See Section 8 for more details.
- **Illicit discharge information for the general public**: General information regarding illicit discharges to stormwater is provided to the public in an ongoing manner under the City's IDDE program. Information includes 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). See Section 5 for more details.
- **Direct mail:** Mailers designed to address specific stormwater education goals or stormwater ordinance updates may be sent directly to a specific target audience or City wide (i.e. car washes, golf courses, LID code changes, etc.). The audience will be selected based on classification in directories such as telephone books, web searches, or utility information.
- **BMP and LID incentives programs:** the City will continue to implement a stormwater rebate program that will offer financial incentives to small development projects who implement certain stormwater LID BMPs, on their properties. This program will be advertised on the City website and at local public events. The City has also implemented a rain garden rebate program for existing homes and businesses to further encourage LID. The rain garden rebate reimburses an approved applicant the cost of up to $1000 for the material required. Program details can be found on the City's Stormwater webpage: https://www.cityofpa.us/256/Rain-Gardens.
- **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.
- **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. New in 2021; via Microsoft Bookings and from the City's website, interested parties can now directly schedule a virtual meeting with Public Works Staff to discuss all aspects of development, including stormwater management or concerns.

b) BEHAVIOR CHANGE

At a minimum, the City will annually select one target audience and one Best Management Practice (BMP) from the list below and implement an education and outreach program designed to effect behavior change to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts.

Target Audiences
Residents, landscapers, property managers/owners, developers, school age children, or businesses (including home-based or mobile businesses).

Best Management Practices (BMPs):

- Use and storage of: pesticides, fertilizers, and/or other household
- chemicals.
- Use and storage of: automotive chemicals, hazardous cleaning supplies, carwash soaps, and/or other hazardous materials.
- Prevention of illicit discharges.
- Yard care techniques protective of water quality.
- Carpet cleaning.
- Repair and maintenance BMPs for: vehicles, equipment, and/or home/buildings.
- Pet waste management and disposal.
- LID Principles and LID BMPs.
- Stormwater facility maintenance, including LID facilities.
- Dumpster and trash compactor maintenance.
- Litter and debris prevention.
- Sediment and erosion control.
- (Audience specific) Source control BMPs (refer to S5.C.8).
- (Audience specific) Locally-important, municipal stormwater-related subject area.

As required by the permit, behavior change effectiveness studies will be performed at the time intervals specified. The City anticipates continuing to meet behavior change and program evaluation requirements in collaboration with the regional West Sound Stormwater Outreach Group (WSSOG), facilitated by Kitsap County. The City's inter-local Agreement with Kitsap County was re-signed at the beginning of the year through Dec. 2022. The focus over the last few years has been Natural Yard Care (NYC) and continued to be in 2023 and early 2024. Also, based on the October 2024 WSSOG meeting, a Dumpster Lid Behavior Change Program is expected to be implemented next year. This program would be similar to the program implemented by the City of Bellevue in

2022. The City has participated in the selection of the behavior change selection process with WSSOG and others in the group.

Tailoring of the program to meet the City's needs may be necessary to ensure the content is applicable to Port Angeles. Results from the effectiveness study will be used to optimize the strategy and schedule of our existing education and outreach program. Social marketing practices and methods will be incorporated, and a program evaluation plan will be developed and implemented to monitor ongoing performance. Progress reports regarding the program evaluation results and improvements will be submitted to Ecology at specified intervals.

c) STEWARDSHIP

Empowering and encouraging local citizens to take ownership in their community is known to have long-term positive impacts that can be felt for generations to come. The permit requires the City provide and advertise stewardship opportunities and/or partner with existing organizations (including non-permittees) to encourage residents to participate in activities or events planned and organized within the community, such as: stream teams, storm drain marking, volunteer monitoring, riparian plantings, and education activities. To meet this permit requirement, the City intends to continue its partnership with Streamkeepers of Clallam County; a citizen-based watershed monitoring program that provides volunteer opportunities and project assistance in the effort to protect and restore the local watersheds in Clallam County. However, new ideas for new partnerships and ways to support local stewardship opportunities are always welcome and can be submitted to the City's Stormwater Engineer.

d) 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, where applicable:

- 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.

PUBLIC INVOLVEMENT AND PARTICIPATION

The SWMP includes 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 by means of online public feedback space and other means noted below. Public comments are tracked and responded to as appropriate.

a) PUBLIC INVOLVEMENT IN SWMP

The City seeks public involvement and participation in developing and managing stormwater within the community. The permit describes ongoing opportunities for participation may be provided through advisory councils, public hearings, watershed committees, developing rate-structures, or other similar activities. Ways to engage and include overburdened communities, as defined in the permit, will be considered when providing a means for involvement. Annually, the City will document specific public involvement and participation opportunities provided to overburdened communities and specifically, highly impacted communities. Currently, common ways the public have opportunities for participation are:

- 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 page, https://www.cityofpa.us/255/Stormwater-Utility, includes an updated copy of the SWMP Plan, encourages public involvement, elicits and facilitates feedback, 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 are notified, as required, and will have a chance to comment during the hearings.
- Engineering counter handout: The SWMP Plan is available at City Hall in the Public Works and Utilities (PW&U) reception area.
- Stormwater workshops: The City stormwater engineer may hold public information sessions on the stormwater management program to local professionals, the public, and stakeholder groups such as Streamkeepers, EcoNet, and North Peninsula Builders Association.

All opportunities for public involvement and comments received will be tracked on a spreadsheet maintained by the Department of Public Works and Utilities. In 2026, the City intends to document methods used to identify overburdened communities.

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 Ecology, the SWMP Plan, and other submittals required by the Permit are made available to the public on the City's stormwater webpage. The documents are also 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.

MS4 Mapping and Documentation

Accountability of a municipality's existing and developing stormwater network is necessary to build upon the past, maintain what's existing, and plan for the future. In the late 90's and early 2000's, the City began collecting field stormwater infrastructure data and recording it electronically using data management and spatial mapping software. Today, the City's inventoried and mapped stormwater system consists of approximately:

- 65 miles of stormwater conveyance
- 2,600 catch basins
- 170 outfalls
- 190 treatment and flow control facilities

Maintaining accountability and updating the mapping system is an ongoing collaborative effort that relies heavily on communication and established information processing pathways.

a) Municipal Separate Storm Sewer System (MS4) 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. This information is available graphically to all interested parties via ArcGIS Online: https://pawa.maps.arcgis.com/home/index.html.

The stormwater GIS layers contain information on storm drain manholes, catch basins, outfalls, pipes, ditches, culverts, detention ponds, treatment facilities, 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 being performed in 2024 and is updated on a regular basis.

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 as part of the program's ongoing refinement process. During the course of normal business, Stormwater Operations staff are in the process of collecting and recording more detailed information specifically regarding outfalls such as material type, diameter, condition, etc.

ii) New Connections to the MS4

The City continuously updates the stormwater GIS with all new connections or infrastructure permitted or otherwise 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 four west side retention basins which provide an unmeasured level of infiltration: Lincoln Park Pond, Big Boy Pond, M & 10th St. Wetland, and the 10th and N St. Quarry). All of these areas have overflow structures that allow stormwater to discharge to surface waters. Also, the City has some surface water catch basins which drain to the City's wastewater plant. These basins have been mapped.

b) Availability of Information

The City's stormwater mapping with associated infrastructure information is available to anyone at any time on the City's website or via the following web address:

https://pawa.maps.arcgis.com/apps/webappviewer/index.html?id=201b67adeee447f89d720a9fbb9569f9

Additionally, City staff are available by appointment to provide assistance with navigating the GIS mapping database and in providing more-detailed project specific information, if available.

Upon request, and to the extent appropriate, the City is able to provide mapping information to federally recognized Indian Tribes, municipalities, and other Permittees, however, depending on the extent of the request, the City may recover reasonable costs associated with fulfilling these mapping information requests.

Upon request, the City can provide available stormwater maps to Ecology. The City can provide the required mapping information in electronic format that meets or exceeds Ecology's GIS mapping standards, with the exception of metadata, which the City does not have available in electronic format at this time.

Starting in 2026, or sooner, the City will begin to map tree canopy to support stormwater management on City-owned or operated property. The City will develop and follow a methodology to intentionally identify canopy for stormwater management purposes, which may be updated annually, or as needed.

No later than March 31, 2028, the City shall implement a methodology to map and assess acreage of MS4 tributary basins to outfalls with a 24-inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems that have stormwater treatment and flow control BMPs/facilities owned or operated by the Permittee. Submit with the March 31, 2028 Annual Report a map(s) (.pdf) and table (.xlsx) with a breakdown of the MS4 tributary basins quantifying estimated acres managed or unmanaged by stormwater treatment and flow control BMPs/facilities owned or operated by the City.

No later than December 31, 2028, using available, existing data map overburdened communities in relation to stormwater treatment and flow control BMPs/facilities, outfalls, discharge points, and tree canopy on City-owned property.

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

An illicit discharge is any direct or indirect discharge into the City's stormwater system that is not comprised entirely of stormwater, with some exceptions explicitly described in the Phase II permit and reiterated in municipal code. This section of the stormwater management program is designed to prevent, detect, characterize, trace, and eliminate illicit discharges to the City's municipal separate storm sewer system (MS4).

e) IDDE POLICY AND PROCEDURES

In 2010, the City developed a written IDDE Response Policy and Procedure Manual for the Department of Public Works and Utilities. This manual details the City's standard operating procedures for reporting, responding, and correcting or removing illicit connections, spills, or other illicit discharges, whether suspected or confirmed. The most recent comprehensive update to the City's IDDE policy occurred in Dec. 2014, however, a re-evaluation and update is currently underway and is expected to be finalized in 2025. The goal of the update is to ensure the City's policy is consistent with current techniques, methods, and standards and increase the document's overall usability. A copy of this policy is included as Appendix C to this document. In compliance with the Permit, implementation of this Policy will continue through the 2024-2029 permit cycle. Each element is discussed in the following sections.

f) IDDE EDUCATION

The City will primarily utilize its established Education and Outreach Program, as described in Section 2, to proactively disseminate information about illicit discharges, associated hazards, and improper disposal of waste. Additional education opportunities are taken under the City's Source Control Program (Section 8) and, reactively, during IDDE investigations.

g) ILLICIT DISCHARGE ORDINANCE

The City developed a comprehensive stormwater ordinance including an illicit discharge provision for the MS4 (PAMC 13.63). The ordinance was written to satisfy the criteria listed in the original Permit, including: illegal discharges, allowable discharges, categories of discharge identified as significant sources of pollution to waters of the State, escalating enforcement procedures, and enforcement strategies. The ordinance was passed by the City Council on June 16th, 2009. Additional permit driven updates to the stormwater code were enacted on December 20th, 2016 and July 5th, 2022. An additional stormwater code update will be required to address PFAS PCB containing material not discharging into the MS4 system.

h) ILLICIT DISCHARGE DETECTION

Within the City's IDDE program, mechanisms for the detection and identification of non-stormwater discharges and illicit connections have been established and are being implemented.

i) FIELD SCREENING AND POTENTIAL SOURCES

The City's established field screening methodology is described in full detail in the City's IDDE Response Policy, attached in Appendix C, and in the City's IDDE screening strategy that is updated annually and submitted to Ecology as part of the annual report.

Prioritization of receiving waterbodies was completed on February 12, 2010. Prioritization is based on the Department of Ecology's 303d list, as well as the significance of the waterbody for potential salmon recovery.

303(d) listed waterbodies

- 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

Starting in 2014, the City was broken up into 8 annual screening basins based on equal distribution of stormwater infrastructure. This enabled the City to begin annually screening, on average, 12.5% of its MS4 system for illicit connections and discharges. When a basin contains or borders a creek, a field assessment of

the creek from its outfall to the basin limit is performed as part of the screening program. Field assessments of the Peabody, Tumwater, Valley, Mill, Dry, White, and Ennis Creeks have been completed at least once within City limits. 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". IDDE Basin 2, the Tumwater/Valley Basin, was screened in 2024, achieving 100% of the City being screened since 2014. In 2025, IDDE Basin 8, the West/Airport Basin is scheduled to be screened.

Screening of these basins is accomplished through the use of existing City inspection programs. Primary stormwater catch basins 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, Stormwater BMP Inspections, and creek walks.

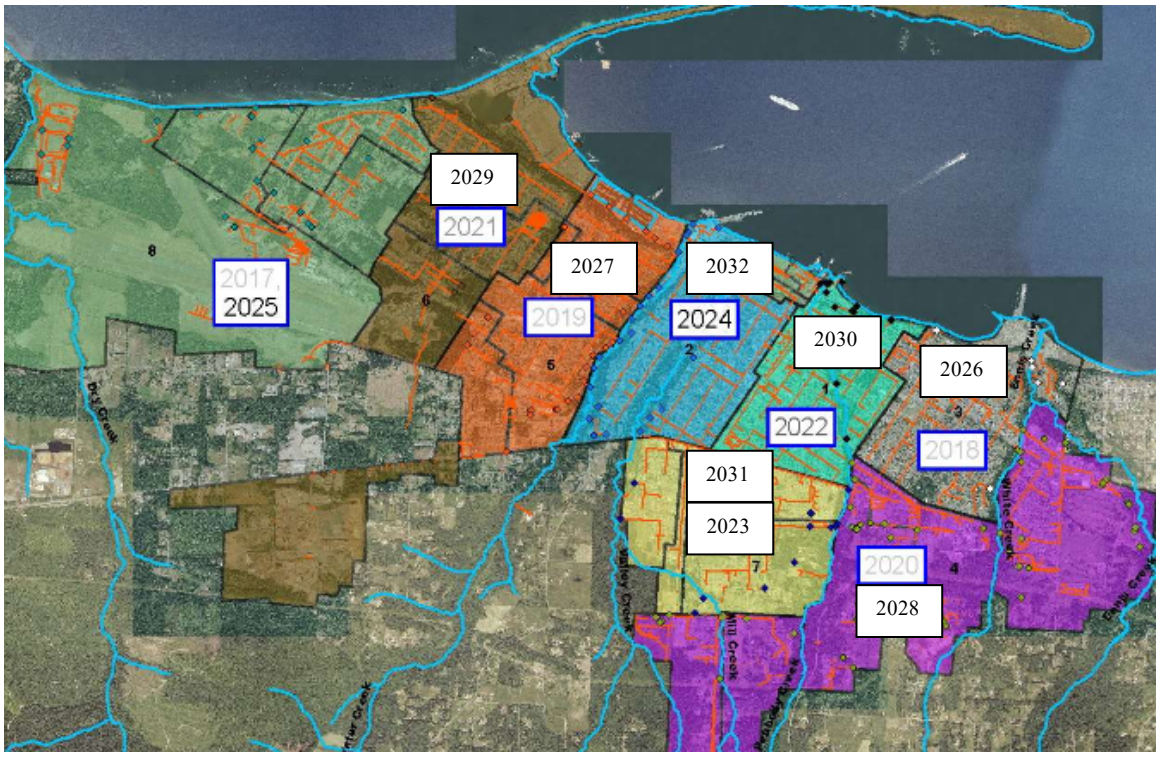


Figure 1. IDDE Screening Strategy: Screening basin boundary map and schedule.

ii) Hotline for Public Reporting of Discharges and Spills

The City's Illicit Discharge Hotline (360-417-4745) is available for public reporting of discharges and spills. Outside of traditional working hours, this number is forwarded to the Public Works On-Call number for after-hours response. The hotline number will be published with all stormwater information and is available on the City's stormwater website. 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. Direct reporting via email is also available: illicitdischarge@cityofpa.us. Both the hotline and email are forwarded directly to City staff to ensure a timely response.

iii) IDDE Staff Training

Municipal staff who are responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges, including spills, improper disposal, and illicit connections are specifically trained to conduct these activities. Follow-up training will be provided as needed to address changes in procedures, techniques, or requirements. The City documents and maintain records of training provided and staff trained.

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 are provided on-going annual or biennial IDDE trainings, depending on need and availability. This training is intended to educate staff members in the basics of the City's policy, IDDE identification, and the proper procedures for reporting to response teams. New employees receive this training during their probationary period to ensure all staff are trained to understand the basics and importance of IDDE notification and response.

i) Illicit Discharge Response

Following IDDE detection or notification, the City's response plan includes characterization, threat assessment, source tracing, discharge elimination or disconnection, spill clean-up, and reporting.

i) Nature of Discharge

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.

ii) Fire Fighting Activities Cleanup

The current permit requires the City to coordinate with the fire department regarding post-emergency cleanup and the use of PFAS-containing AFFFs potentially used during emergency firefighting activities for the purpose of minimizing the discharges to the MS4 system. Currently, the City fire department does not use PFAS-containing AFFFs within the City.
During this permit cycle, the City intends to formalize these existing policies designed to minimize discharges to the MS4 during post-emergency cleanup and disposal activities, including, prohibiting the use of PFAS.

iii) Source Tracing

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. An inter-local agreement with Streamkeepers of Clallam County facilitates ongoing sampling of priority areas identified in the contaminate survey alongside routine sampling of Peabody, Tumwater, and Valley Creeks.

iv) Discharge Elimination

Once identified, sources of illicit discharges and illicit connections will be eliminated using all allowable means made available by municipal code. If necessary, escalating enforcement and legal actions will be used if discharge elimination/disconnection cannot be achieved voluntarily and within allowable frames.

v) Permit Compliance Timeframes

Regarding IDDE response, Permit compliance is achieved by meeting the following timelines:

- Immediately respond to all illicit discharges, including spills, which are determined to constitute a threat to human health, welfare, or the environment, consistent with General Condition G3.
- Investigate (or refer to the appropriate agency with the authority to act) within 7 days, on average, any complaints, reports, or monitoring information that indicates a potential illicit discharge.
- Initiate an investigation within 21 days of any report or discovery of a suspected illicit connection to determine the source of the connection, the nature and volume of discharge through the connection, and the party responsible for the connection.
- Upon confirmation of an illicit connection, use the compliance strategy in a documented effort to eliminate the illicit connection within 6 months. All known illicit connections to the MS4 shall be eliminated.

j) RECORDKEEPING

The City will track the following information, as required by the 20124-2029 Permit:

1. Jurisdiction name and permit number
2. Date incident discovered or reported to you
3. Date of beginning your response
4. Date of end of your response
5. How was the incident discovered or reported to you?
6. Discharge to MS4?
7. Incident Location
8. Pollutants Identified
9. Source or Cause
10. Source tracing approach(es) used
11. Correction/elimination methods used
12. Field notes, explanations, and/or other comments

More details regarding the information tracked is described in Appendix 13 of the Permit.

In years past, reporting of illicit discharges were tracked using the form developed by the Center for Watershed Protection and incorporated into the City's IDDE Policy. To include all the recently required information listed above, the existing form may need to be updated or the City may begin using Ecology's WQWebIDDE form. 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 to Ecology.

CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT, AND CONSTRUCTION SITES

The City has developed and will continue to implement and enforce a program to reduce pollutants in stormwater runoff from new development and redevelopment construction projects, in accordance with Appendix 1 of the 2024-2029 Permit. The program applies to both private and public development, including transportation projects.

a) STORMWATER ORDINANCE REGULATING DEVELOPMENT

The City developed and adopted an ordinance that addresses runoff from new development, redevelopment, and construction site activities at sites 2,000 sq-ft and greater. The ordinance adopts most of the Department of Ecology's most-recent Stormwater Management Manual for Western Washington and the Low Impact Development Technical Guidance Manual. For more details, review Port Angeles Municipal Code, Section 13.63.

In conjunction with the Stormwater Ordinance, the City has developed and implemented a permitting program to reduce pollutants in stormwater runoff from new development, redevelopment, and construction site activities. The program is being applied to development or re-development projects with greater than or equal to

7,000 sq. feet of land disturbance or projects that install 2,000 sq. feet of new or replaced hard surface. The program applies to both private and public development, including transportation projects. 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, USSG).

i) Minimum Requirements, Technical Thresholds, and Definitions

The minimum requirements, technical thresholds, and definitions in Appendix 1 of the permit have been in-effect in Port Angeles since 2009. As required by the previous Permit, the lowered stormwater management thresholds were adopted and enforced January 1st, 2017.

To ensure the City's program satisfies the State's requirements under Chapter 90.48 RCW regarding water quality protection and reducing discharge of pollutants, the City utilizes Ecology's Stormwater Management Manual for Western Washington (SWMMWW) for:

- Site planning requirements
- BMP selection criteria
- BMP design criteria
- BMP infeasibility criteria
- LID competing needs criteria
- BMP limitations

The City has utilized the SWMMWW since 2009 to meet these permit requirements.

ii) Legal Authority to Inspect Private Facilities

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

iii) LID Required

As of December 31, 2016, the City updated its development codes to require LID where feasible, as determined by the SWMMWW criteria.

iv) 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.

b) Permitting

The City has developed a permitting process with plan review, inspection, and enforcement capability as described herein. The permitting process is applied to both private and public projects that consist of greater than or equal to 7,000 sq. feet of

land disturbance or projects that install 2,000 sq. feet of new or replaced hard surface. Permitting 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 (USSG), 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 Ecology and the City.

ii) 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.

iii) Notice of Intent

When applicable and during permitting, the City directs applicants also triggering Ecology's Construction Stormwater General Permit (CSWGP) and Industrial Stormwater General Permit (ISWGP) thresholds to submit a Notice of Intent (NOI) with Ecology. 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. In instances where a development project is covered by both local and State permits, the City continues to enforce local ordinances.

c) Inspections

Construction related inspections required by the City's Phase II Permit include pre-construction, during construction, and post construction site visits, where applicable. Follow-up inspections may be warranted if a project does not meet minimum standards or is in violation of their permit requirements. Additionally, the City may perform inspections of treatment or flow control facilities during installation and connection to the City's MS4.

i) Pre-Construction Inspections

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 are inspected by qualified personnel prior to permitting and before commencement of land disturbing activities.

ii) During Construction Inspections

Qualified City staff inspect all permitted development sites during construction that exceed the land disturbance and hard surface thresholds described above to verify proper installation and maintenance of required erosion and sediment controls. Escalation of enforcement is described in Ordinance and is implemented when necessary.

Typically, the City inspects new residential developments at least once every six-months for maintenance needs and compliance with development standards, until 90% of the lots are constructed or when construction has stopped and the site is fully stabilized.

iii) Post-Construction Inspections

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 agreement and plan is completed for all treatment and flow control facilities and that responsibility for maintenance is clearly assigned. Enforcement is used as necessary.

iv) Inspection Compliance

The City maintains permit compliance by the presence and records of an established inspection program designed to inspect all sites and achieving at least 80% of scheduled inspections.

v) 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.

d) Staff Training

Staff whose primary job duties are 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. Follow-up training is provided as needed to address changes in procedures, techniques or staffing. The City documents and maintains records of the training provided and the staff trained.

e) Recordkeeping

The City keeps and maintains permitting records as required by Ecology's permit and State laws. This includes inspection reports, warning letters, notices of violations, and other enforcement actions. Records of maintenance inspections and maintenance activities are also maintained.

STORMWATER MANAGEMENT FOR EXISTING DEVELOPMENT

The City has developed and implemented a program to control or reduce stormwater discharges to waters of the State from areas of existing development. The program focuses on strategic stormwater investments over longer planning timeframes.

a) STORMWATER FACILITY RETROFITS

The City has tailored SWMP actions that meet the criteria described in Appendix 12 of the NPDES permit using one or a combination of the following in an effort to implement stormwater facility retrofits.

i) STRATEGIC STORMWATER INVESTMENTS

The City has developed a Stormwater Management Action Plan (SMAP) for Valley Creek and identified strategic stormwater investments which meet the requirements for projects from areas of existing development; and / or.

ii) OPPORTUNISTIC STORMWATER INVESTMENTS

The City may identify and leverage projects outside of SMAP areas to improve stormwater management and infrastructure as an opportunistic stormwater investment.

b) PLANNED PROJECTS

The City, with each annual report, shall provide a list of planned, individual projects scheduled for funding or implementation during this Permit term for the purpose of meeting the assigned equivalent acreage in Appendix 12. The list shall include at a minimum the information and use the formatting specified in Appendix 12 (.xlsx file format). For the year 2024, the City has completed the East City Hall LID Storm project. The project meets the requirements of the program. For the next project meeting this program requirements, the City is constructing the 16th Street LID Storm project. Both of the projects have taken advantage of grants from the Department of Ecology. These project in conjunction meet the requirements of the permit for this permit cycle.

c) PROJECTS FUNDED, UNDER CONSTRUCTION, OR FULLY IMPLEMENTED

The City shall submit documentation with the annual reports demonstrating compliance with the requirements of Appendix 12; the City shall fully fund, start construction, or completely implement projects to meet the assigned equivalent acreage.

i) PROJECTS STARTED ON OR AFTER JANUARY 1, 2023

Projects that started construction on or after January 1, 2023, may be included towards achieving the acres required. The Capital Facilities Project TR0715 16th

Street LID Storm and project meets this requirement and is planned to be completed in 2025. The CFP TR1215 City Hall East Parking Lot LID project has been completed in 2024 and meets the requirements of the permit section.

ii) Contribution To Meet Regional Goal

The City does not intent to take part in a regional collaboration to satisfy this permit requirement.

iii) Projects Completely Implemented This Permit Term

The City has multiple stormwater facility retrofit projects that are to be completed prior to the expiration of this Permit during this cycle. The Capital Facilities Project TR0715 16th Street LID Storm project and CFP TR1215 City Hall East Parking Lot LID exceeds the requirements areas. Therefore, a portion of the area excess may apply to the next Permit term.

iv) Projects That May Provide Tribal Benefits & Benefits to Overburdened Communities

The City will report which projects may provide Tribal benefits and benefits to overburdened Communities including specifically Vulnerable Populations and Highly Impacted Communities. There are not any projects expected to be completed that qualify under this section during this permit cycle.

d) Regional Goal Collaboration

The City does not have any projects planned in the CFP and Transportation Improvement Plan during this permit cycle to meet this regional goal collaboration.

i) In-Kind Services If There Is A Regional Strategy

The City is not participating in a regional agreement for this Permit term.

ii) Contribution To Regional Goal

The City is not going to contribute to a regional goal for this Permit term.

e) Projected Equivalent Acres Management For Next Term

The City estimates 1.6 acres managed by stormwater facility retrofits can be applied for the next Permit term.

Source Control Program for Existing Development

The City has developed a Source Control (SC) Program that is designed to prevent and reduce pollutants in runoff from businesses that discharge to the City's MS4, as required by the 2024-2029 Permit. While this is a new permit requirement, the City has had an established pollution prevention presence in the community that was able to be built upon from the previous permit cycle.

Since 2012, the City of Port Angeles has been a member of the Pollution Prevention Assistance (PPA) Partnership, formerly called Local Source Control, which is a grant

funded program designed to help small businesses reduce and manage potential wastes to protect water, soil, and air quality. Under Washington State's Hazardous Waste and Toxics Reduction Program, Ecology is able to fund local jurisdictions on a biennium basis to provide free, one-on-one technical assistance to small businesses regarding waste management, pollution prevention, and stormwater-related issues.

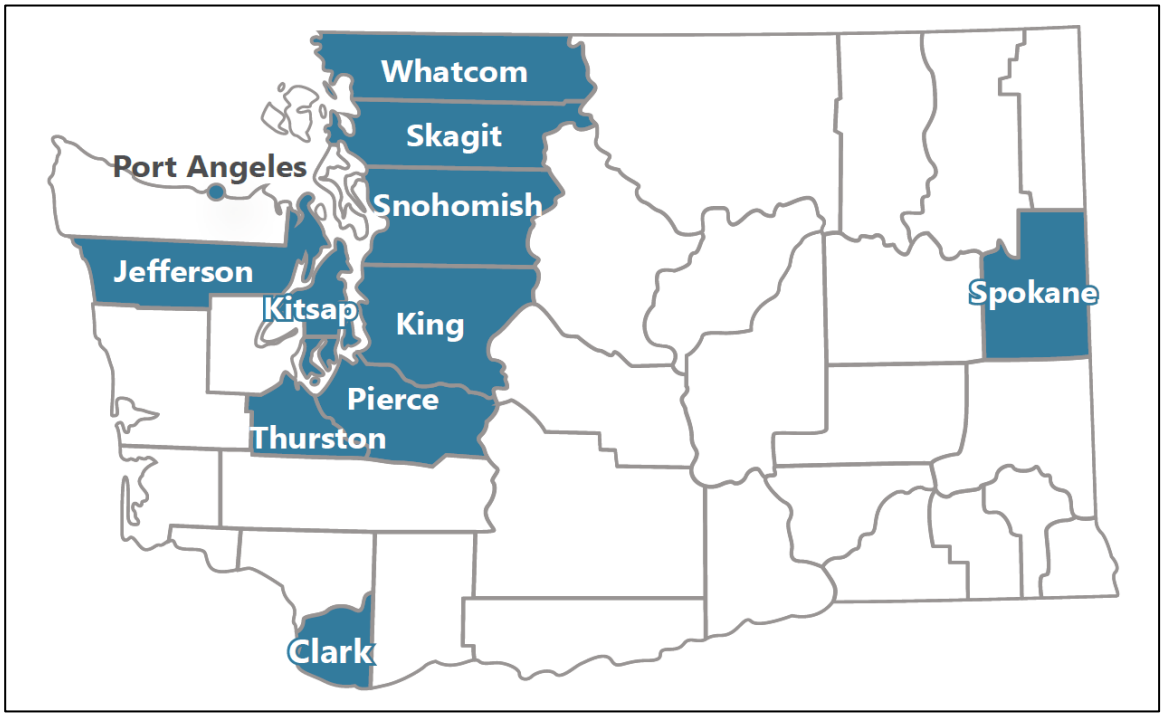


Figure 2. Pollution Prevention Assistance partners for 2017-2019 biennium.

The City intends to continue its partnership with Ecology's PPA program as a means to supplement the City's Source Control Program with valuable knowledge, expertise, and funding. Local businesses that qualify and participate in the PPA program that are also subject to Source Control inspections are able to have their SC inspection fees reimbursed by PPA through the City's grant agreement.

a) Program Goals

With the intent to prevent and reduce pollutants in runoff from areas that discharge into the City's MS4, the Source Control Program includes:

1. Application of operational source control BMPs, and if necessary, structural source control BMPs or treatment BMPs/facilities, or both, to pollution generating sources associated with existing land uses and activities.
2. Inspections of pollutant generating sources at publicly and privately owned institutional, commercial, and industrial sites to enforce implementation of required BMPs to control pollution discharging into the MS4.

3. Application and enforcement of local ordinances at sites, identified pursuant to the Permit, including sites with discharges authorized by a separate NPDES permit.
4. Practices to reduce polluted runoff from the application of pesticides, herbicides, and fertilizers from the sites identified in the inventory.

b) Program Components and Milestones

The program's minimum performance measures, as defined by the Permit, are:

i) Ordinance to Apply Best Management Practices (BMPs)

The City adopted ordinances requiring the application of source control BMPs for pollutant generating sources associated with existing land uses and activities. These ordinances were adopted July 5th, 2022.

The City applies the BMP standards described in the SWMMWW. In cases where the manual(s) lack guidance for a specific source of pollutants, the City will work with the owner/operator to implement or adapt BMPs based on the best professional judgement of the City.

Applicable operational source control BMPs are required for all pollutant generating sources. Structural source control BMPs, or treatment BMPs/facilities, or both, will be required for pollutant generating sources if operational source control BMPs do not prevent illicit discharges or violations of surface water, groundwater, or sediment management standards because of inadequate stormwater controls. Implementation of source control requirements may be done through education and technical assistance programs, provided that formal enforcement authority is available to the City and is used as determined necessary by the City, in accordance the Permit.

ii) Inventory of Sites

The City has established an inventory that identifies publicly and privately owned institutional, commercial, and industrial sites which have the potential to generate pollutants to the MS4. The Permit requires that this inventory is updated at least once every five (5) years, but currently the City updates this information annually. This inventory was originally compiled August 1, 2022 and includes:

1. Businesses and/or sites identified based on the presence of activities that are pollutant generating.
2. Other pollutant generating sources, based on complaint response, such as: home-based businesses and multi-family sites.

iii) Inspection Program

The City has developed an inspection program for sites identified in the inventory. The inspection program was initiated January 1st, 2023, and entails the following components:

1. All identified sites with a business address were provided information about activities that may generate pollutants and the source control requirements applicable to those activities. This information was provided to all sites on the business list by direct mail with posted links back to the program's webpage and to a webform to collect information about the business.
2. The City will annually complete the number of inspections equal to 20% of the businesses and/or sites listed in their source control inventory to assess BMP effectiveness and compliance with source control requirements. The City may count follow-up compliance inspections at the same site toward the 20% inspection rate. The Permittee may select which sites to inspect each year and is not required to inspect 100% of sites over a 5-year period. Sites may be prioritized for inspection based on their land use category, potential for pollution generation, proximity to receiving waters, or to address an identified pollution problem within a specific geographic area or sub-basin.
3. The City will inspect 100% of sites identified through credible complaints.
4. The City may count inspections conducted based on complaints, or when the property owner denies entry, to the 20% inspection rate.

iv) Progressive Enforcement Policy

Ordinance supporting the SC program and defining the program's progressive enforcement policy was codified on July 5th, 2022. Implementation of this policy coincided with the initiation of inspections on January 1st, 2023. This policy requires sites to comply with stormwater requirements within a reasonable time period, as specified below:

1. If the City determines, through inspections or otherwise, that a site has failed to adequately implement required BMPs, the City will take appropriate follow-up action(s), which may include phone calls, reminder letters, emails, or follow-up inspections.
2. When the City determines that a site has failed to adequately implement BMPs after a follow-up inspection(s), the City will take enforcement action as established through authority in its municipal codes or ordinances, or through the judicial system.
3. The City will maintain records, including documentation of each site visit, inspection reports, warning letters, notices of violations, and other enforcement records, demonstrating an effort to bring sites into compliance. The City will also maintain records of sites that are not inspected because the property owner denies entry.
4. The City may refer non-emergency violations of local ordinances to Ecology, provided, the City also makes a documented effort of progressive enforcement. At a minimum, the City's enforcement effort will include documentation of inspections and warning letters or notices of violation.

c) STAFF TRAINING

The City provides training to staff who are responsible for implementing the source control program to conduct these activities. The ongoing training program covers the legal authority for source control, source control BMPs and their proper application, inspection protocols, lessons learned, typical cases, and enforcement procedures. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements, or staff. The City documents and maintains records of the training provided and the staff trained.

OPERATIONS AND MAINTENANCE

The City has developed and implemented a program to regulate and conduct maintenance activities to prevent or reduce stormwater impacts. The program elements are described below.

a) MAINTENANCE STANDARDS

The City has adopted Ecology's Stormwater Management Manual for Western Washington (SWMMWW), including maintenance standards. The City uses Ecology's maintenance standards to determine if and when maintenance is required. It is important to note that the maintenance standard is always not a measure of the facility's required condition between inspections and an exceedance of the maintenance standard between inspections and/or maintenance is not a permit violation.

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

- Within 1 year for typical maintenance facilities, except catch basins.
- Within 6 months for catch basins
- 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) PERMITTED STORMWATER FACILITIES

The City has developed and implemented a program to verify adequate long-term operation and maintenance of privately-owned stormwater facilities and BMPs that are regulated pursuant to the City's permitting process.

i) Operations and Maintenance Ordinance

The City developed and enacted a comprehensive stormwater ordinance which requires projects installing treatment or detention facilities to record an O&M agreement and manual that clearly identifies the party responsible for ongoing inspection and maintenance, details maintenance standards per Ecology's SWMMWW, and acknowledges the City's annual inspection requirements and enforcement procedures.

ii) Maintenance Standards

The City has adopted Ecology's Stormwater Management Manual for Western Washington (SWMMWW).

iii) Annual Inspections

The City performs annual inspections of all stormwater treatment and flow control BMPs/facilities that discharge to the MS4 and were permitted by the Permittee, including those permitted in accordance with requirements adopted pursuant to the 2007-2024 Ecology municipal stormwater permits, unless there are maintenance records to justify a different frequency.

Reduction of the inspection frequency will be based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the City may substitute written statements to document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with Permit requirements.

iv) Compliance & Recordkeeping

Permit compliance is determined by the presence and records of an established inspection program designed to inspect all facilities, and achieving at least 80% of required inspections.

The City maintains records of inspections and enforcement actions by staff, including inspection reports, warning letters, notices of violations, and other enforcement records. Records of maintenance inspections and maintenance activities are also maintained.

c) City Owned Stormwater Facilities

The City has developed and implemented a program to inspect and maintain all municipally owned and operated stormwater facilities to ensure functionality and prevent or reduce stormwater impacts. This program is implemented by the City's Public Works Operations Department.

In addition to Ecology's permit requirements, 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.

i) Treatment and Flow Control Inspections

The City performs annual inspections of all municipally owned or operated permanent stormwater treatment and flow control facilities. The City will take appropriate maintenance actions in accordance with Ecology's maintenance standards described in the SWMMWW.

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

ii) Spot Checks

The City performs "spot checks" of potentially damaged permanent treatment and flow control facilities (other than catch basins) after major storm events (greater than 24-hour storm event with a 10-year or greater recurrence interval). 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.

iii) Catch Basin Inspections

On a two-year interval, the City inspects all catch basins and inlets owned and/or operated by the City. Catch basins and inlets are cleaned based on inspection results and in accordance with Ecology's SWMMWW maintenance standards. Decant water is disposed of in accordance with Appendix 6 of the Permit – *Street Waste Disposal*.

iv) Compliance

Compliance is determined by the presence of an established inspection program achieving at least 95% of permit required inspections.

d) Stormwater Impact Reduction from Public Lands

The City has implemented practices, policies, and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the City, and road maintenance activities under the City's functional control.

The City has an updated Operations and Maintenance Program which documents the ***Practices, Policies, and Procedures*** (Version 3, last updated 3.26.2023) aligning with Ecology's 2019 SWMMWW guidelines. This ***Practices, Policies, and Procedures*** program applies to all lands owned, managed, and maintained by the City of Port Angeles.

Lands owned or maintained by a municipality typically include, but are not limited to: streets, parking lots, roads, highways, buildings, parks, open space, road rights-of-way, maintenance yards, and stormwater treatment and flow control BMPs/facilities.

The following activities have been addressed:

- Pipe cleaning
- Cleaning of culverts that convey stormwater in ditch systems
- 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
- Application of fertilizers, pesticides, and herbicides according to the instructions for their use, including reducing nutrients and pesticides using alternatives that minimize environmental impacts
- Sediment and erosion control
- Landscape maintenance and vegetation disposal
- Trash and pet waste management
- Building exterior cleaning and maintenance

e) 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 and training records include dates, activities or course descriptions, and names and positions of staff in attendance.

f) 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 has SWPPPs for all facilities required.

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

Facility Name	**Facility Use**	**Document**	**Status**

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"	Updated December 2022
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 July 2018
Electric Utility Handling & Warehouse Building	Electric transformer storage and handling	"Spill Prevention Control and Countermeasure Plan"	Updated November 2022
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 Table 2 below for a listing of individual stormwater or other related permits.

Table 2: Existing Individual Stormwater and Stormwater-Related Permits

Facility Name	Type of Permit	Permit Number
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 discharge into the MS4.

g) RECORDKEEPING

The City maintains records of inspections, maintenance, and repair activities performed in accordance with this section of the SWMP.

STORMWATER NPDES AND CAPITAL NEEDS ASSESSMENT

The City retained Herrera Environmental Consultants some years ago 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 resources available at that time and the resources necessary to meet operating costs and capital costs under the previous (2013-2018) Phase II Permit regulatory requirements. Also, 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 2022. $17.01 per month for each ERU

This revenue is not sufficient to implement all projects in the 6-year Capital Facilities Plan, so grant funding is applied for to supplement revenue for projects.

DOCUMENTS REFERENCED

"City of Port Angeles Maintenance Facility SWPPP" City of Port Angeles, 2022

"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, July 2018

"Spill Prevention Control and Countermeasure Plan" (Electric Utility) City of Port Angeles, November 2003, Updated November 2022.

"Western Washington Phase II Municipal Stormwater Permit" State of Washington Department of Ecology, Effective August 1, 2019, and 2024.

"Stormwater Management Manual for Western Washington" Washington State Department of Ecology 2019, and 2024

"City of Port Angeles Municipal Code Title 13.63, Stormwater Ordinance" last modified in July 2022

"City of Port Angeles Urban Service Standards and Guidelines" last modified in 2017

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

SWMP Appendix A : Inter-Departmental Coordination Mechanism Policy

SWMP Appendix A : Inter-Departmental Coordination Mechanism Policy

City of Port Angeles
NPDES Phase II Municipal Stormwater Permit
Inter-Departmental Coordination Mechanisms and Stormwater Planning Team

Background

The Western Washington Phase II Municipal Stormwater Permit (NPDES permit or "Permit") is a federal permit, facilitated by the Washington State Department of Ecology (Ecology or ECY), issued to municipalities which allows municipal separate storm sewer systems (MS4) to discharge to waters of the state. The City of Port Angeles initially received coverage by the Permit in 2007. The NPDES (National Pollutant Discharge Elimination System) Permit includes broad ranging requirements which require collaboration and implementation by various departments within the City, including Public Works, Parks & Recreation, Community & Economic Development (CED), Fire, and Police.

It was a condition of the 2013 – 2018 NPDES permit (Section S5.A.5.b) and a condition of the 2019 – 2024 Permit (Section S5.A.b) that each jurisdiction develop a coordination mechanism to identify departmental responsibilities to eliminate barriers to compliance with the terms of the permit. Furthermore, it is a condition of the 2019-2024 Permit (Section S5.C.1.a) that the City develop a Stormwater Planning Program and convene an inter-disciplinary team to inform and assist in the development, progress, and influence of this program. These operating guidelines have been created to provide clarification of departmental roles and responsibilities for the purposes of complying with the Permit requirements and intent.

Section 1. Name

The name of this group shall be known as the "Stormwater Permit Coordination and Planning Group (SWPCPG)".

Section 2. Purpose

The effective management of existing stormwater infrastructure and strategic stormwater planning has an important role to play in reversing the ongoing degradation of local wetlands, streams, harbor, and Strait of Juan de Fuca. The purpose of this group is to ensure 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, coordinate, and plan in accordance with the City's Stormwater Management Program (SWMP). The SWPCPG 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 SWPCPG 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 SWPCPG shall continue indefinitely in order to preserve momentum and effectively manage the work required for Permit compliance.

Section 5. Membership
Management and implementation of the stormwater Permit is the responsibility of the jurisdiction as a whole, however, the core membership of the SWPCPG consists of representatives from the following departments: Public Works Operations and Engineering, Community and Economic Development, Parks & Recreation, Fire, and Police. The City's Stormwater Engineer is the City's Permit Coordinator and therefore has been designated coordinator of the SWPCPG. Representatives from other departments may be requested to attend meeting and provide input on occasion. Additionally, representatives from private consulting firm(s) retained by the City for Permit implementation support or long-term planning support may be invited to attend or facilitate coordination of the SWPCPG meetings.

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 to the core group 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 herein 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, S4.F, 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 SWPCPG member and to provide useful input into the process. Meeting attendance is expected of SWPCPG 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. All meetings will be advertised to core group members, however, depending on content, some meetings may be geared towards a particular department with other departments being listed as "optional" on the meeting invite.

Section 8. Departmental Responsibilities

It is the responsibility of each department head to assign duties and responsibilities to the pertinent members of their staff, as well as ensure they are being implemented correctly. In the event of personnel changes, it is each department head's responsibility to ensure SWPCPG membership, information, and responsibilities are passed on to the designated replacement.

A. Public Works

The Public Works Department is responsible for the majority of the Permit compliance efforts including Sections:

S5.C.1 Stormwater Planning
S5.C.2 Public Education and Outreach
S5.C.3 Public Involvement and Participation
S5.C.4 MS4 Mapping and Documentation
S5.C.5 Illicit Discharge Detection and Elimination
S5.C.6 Controlling Runoff from New Development, Redevelopment, and Construction Sites (for both public and private projects)
S5.C.7 Operations and Maintenance, and
S5.C.8 Source Control Program for Existing Development.

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 (SWMP) Plan.
5. Serving as point of contact for the Department of Ecology regarding issues of the Permit.
6. Submitting S4.F, 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. Updating stormwater system maps for both public and private facilities. Forwarding updates to GIS for incorporation and maintenance of the mapping

system.

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.C.1 Stormwater Planning and Section S5.C.6 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 required stormwater reports and plans.
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.5 Illicit Discharge Detection and Elimination and S5.C.7 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 have permit responsibilities under S5.C.5 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. Such events include but are not limited to discharge of water or foam to the MS4 during a firefighting event or report of vehicle fluid spill and clean-up operations during

response to a vehicular accident within City limits. They may also be called upon to assist in enforcement activities 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 S4.F, 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 SWPCPG. Determine meeting topics and agendas. Facilitate the meetings or arrange for an alternate to facilitate meetings. If necessary and appropriate, provide meeting materials to SWPCPG in advance and arrange for meeting notes to be taken.
9. Update this document, as needed.

SWMP APPENDIX B : PUBLIC OUTREACH PLAN ACTIVITY MATRIX

SWMP Appendix B : Public Outreach Plan Activity Matrix

2025 Planned Activities / Events	Location(s)	City Personnel	Target Audience	Contact Information (other groups)	Subject Area(s)
Clallam County Home & Lifestyle Show (March)	Port Angeles High School	Ryan Jeffries	Developers, contractors, home owners, landscapers, general public	Rjeffries@cityofpa.us	Pollution Prevention: landscaping, automotive care, pet waste, Natural Yard Care
Earth Day (April)	City Pier, Port Angeles	Matthew Moore, Ryan Jeffries, TBD	General public	Rjeffries@cityofpa.us	Focusing on updates to the SWMP, the SMAP, and other programatic updates.
Clallam County Fair (August)	Fairgrounds, Port Angeles	Matthew Moore, Ryan Jeffries, TBD	General public	Rjeffries@cityofpa.us	Focusing on pet waste awareness, natural yardcare, & programatic updates.
Utility Bill Mailer (October)	NA	Matthew Moore, Ryan Jeffries	General Public	Rjeffries@cityofpa.us	LID, Pollution Prevention Hotline, programatic updates.
Pollution Prevention Assistance Partnership (Ongoing)	Site visits within the City	Howard Carlseen, Ryan Jeffries	Local Businesses	Rjeffries@cityofpa.us	IDDE, Pollution Prevention, Source Control
Local Cinemas (Sept.)	Deer Park Theatre, Port Angeles	Ryan Jeffries	General public	Rjeffries@cityofpa.us	Pollution Prevention
Internet Adverts (Sept.)	Port Angeles	Ryan Jeffries	General Public	Rjeffries@cityofpa.us	Pollution Prevention: landscaping, automotive care, pet waste, Natural Yard Care
Natural Yard Care: Behavior Change Analysis via WSSOG (April)	Kitsap Co., Port Angeles	Ryan Jeffries	Landscapers, Home Gardeners	Rjeffries@cityofpa.us	Natural Yard Care - free webinars taught by WSU Master Gardeners w/ local coupons at Airport Garden Center
Storm Drain Art Project	Francis St. Park	Ryan Jeffries	General Public, Local artists	Rjeffries@cityofpa.us	Visual connection between stormwater inlets and the receiving waterbody.

SWMP Appendix C : Illicit Discharge Detection and Elimination (IDDE) Response Policy

SWMP Appendix C : Illicit Discharge Detection and Elimination (IDDE) Response Policy

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: 912-1960
3.	Assistant Stormwater Engineer	Office: 417-4820	
4.	Stormwater Engineer	Office: 417-4811	Cell: 912-5140
5.	Source Control Coordinator	Office: 417-4693	Cell: 477-3456
6.	Deputy Director of Public Works	Office: 417-4802	Cell: 912-0260

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

b. Illicit discharges can also be reported by email using the following address:

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.

<u>Small non-hazardous spills</u>

- Use a rag, damp cloth, or absorbent materials for general cleanup of liquids
- Use brooms of 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

<u>Large non-hazardous spills</u>

- 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. F<u>or 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.</u>

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 From 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. With in 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:

TOPIC	TARGET AUDIENCE
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
(Petroleum or Hazardous Materials)				
WS Emergency Management Division (24hrs)-**Immediate**	1-800-258-5990	_____		
National Response Center-**Immediate**	1-800-424-8802	_____		
Ecology Regional Office-SW-**24 Hrs**	360-407-6300	_____		
City of PA Stormwater Eng.-**24 Hrs**	360-460-3456	_____		

Bacterial-				
WWTP or Collections System Failure				
Ecology Regional Office-SW-**Immediate**	360-407-6300	_____		
WS DOH Shelfish Protection-**Immediate**	360-236-3330	_____		
(If no answer)	360-786-4183	_____		
Clallam County Enviro Health-**24 Hrs**	360-417-2415	_____		
City of PA Stormwater Eng.-**24 Hrs**	360-460-3456	_____		

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

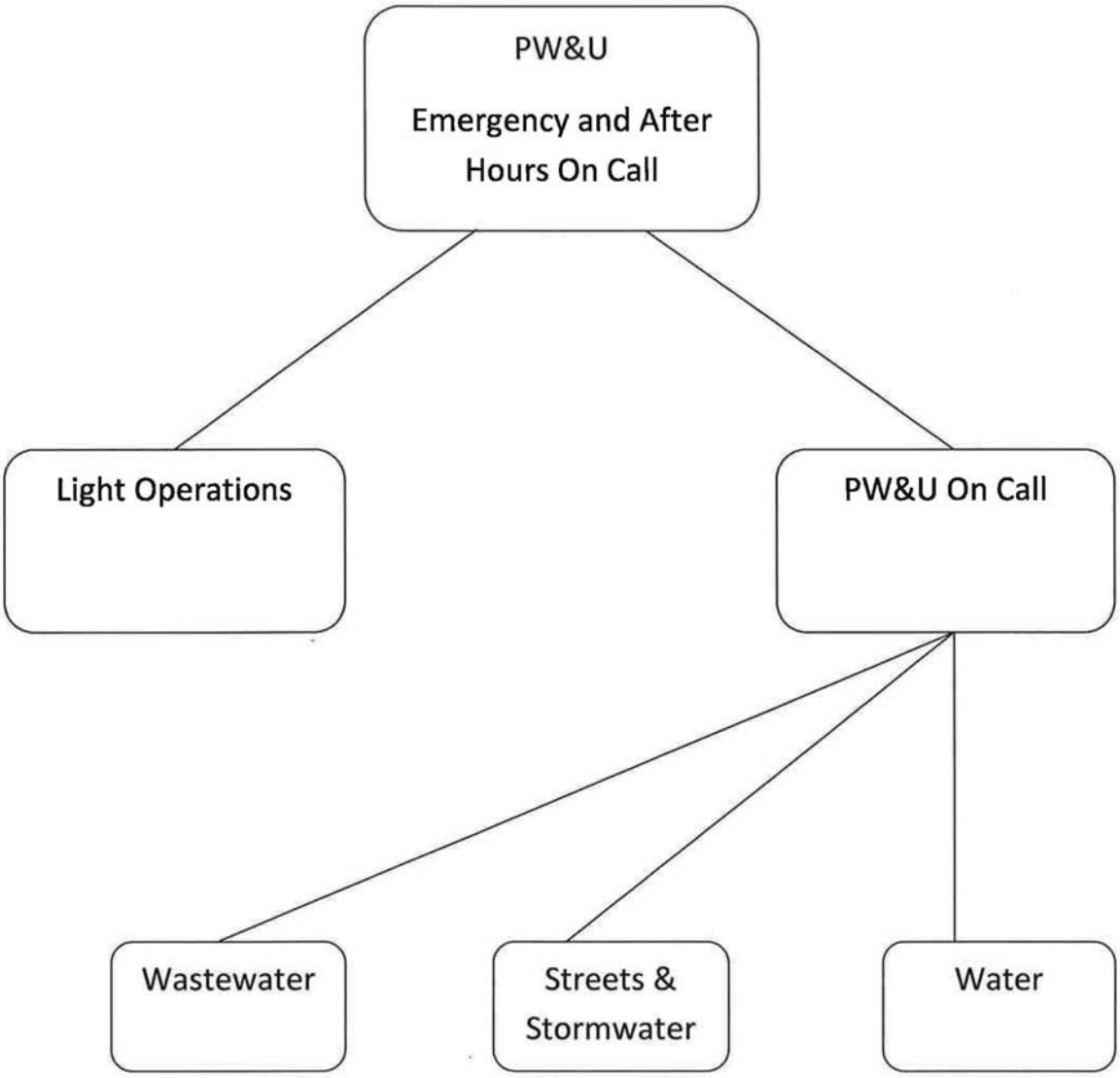
FOR POLLUTION INCIDENTS

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.

City of Port Angeles	Contact Person	Phone Nos.
Street/Stormwater Division	1) Cody Romero	Work: 360-417-4825 Cell: 360- 912-0260
	2) Greg Haskins	Work: 360-565-3854 Cell: 360-461-5174
	3) Jad Groves	Work: 360-417-4823
	4) Street/Stormwater On-Call	Cell: 360-461-9261
Stormwater Engineer	Ryan Jeffries	Work: 417-4811 Cell: 460-3456
Wastewater Collection	1) Jeff Groves	Work: 360-417-4855
	2) Rick Hartley	Work: 360-417-4891
Wastewater Treatment Plant	1) Tyler White	Work: 360-417-4690 Cell: 360-461-7022
	2) Nathan Gaul	Work: 360-417-4695
	3) WWTP on-call	Cell: 360-461-0111
Deputy Director of Operations	Eric Wheatly	Work: 360-417-4802 Cell: 360-912-0260
Fire Department	1) Joel McKeen	Work: 360-417-4652 Dispatch: 360-417-4797

Agency	Contact Person	Phone Nos.
WS Department of Ecology Water Quality, SW Regional Office. *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.*	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


PW&U
Emergency and After Hours On Call
Light Operations
PW&U On Call
Wastewater
Streets & Stormwater
Water

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):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- ☐ Other:_____
- ☐ 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
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	**In Water:** ☐ No ☐ Partially ☐ Fully **With Sediment:** ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☐ No	***If No, Skip to Section 5***			
Flow Description (If Present)	☐ Trickle ☐ Moderate ☐ 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**
☐ Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐ Flow #2	Flow depth		In	Tape Measure
	Flow width	_____' _____"	Ft, In	Tape Measure
	Measured length	_____' _____"	Ft, In	Tape Measure
	Time of travel		S	Stop Watch
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	☐	☐ Sewage ☐ Rancid/Sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See Severity	☐ 1 – Slight cloudiness	☐ 2 - Cloudy	☐ 3 - Opaque
Floatables – Does Not Include Trash!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 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	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ 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?	☐ Yes	☐ No		
2. Collected from:	☐ Flow	☐ Pool		
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM	☐ 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**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
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



Color: Brown; Severity: 2
Turbidity Severity: 2



Color: Blue-green; Severity: 3
Turbidity Severity: 2



Highly Turbid Discharge
Color: Brown; Severity: 3
Turbidity Severity: 3



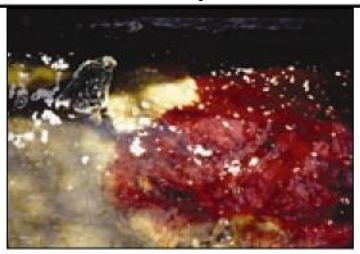
Sewage Discharge
Color: 3
Turbidity: 3



Paint
Color: White; Severity: 3
Turbidity: 3



Industrial Discharge
Color: Green; Severity: 3
Turbidity Severity: 3



Blood
Color: Red; Severity: 3
Turbidity Severity: None



Failing Septic System:
Turbidity Severity: 3



Turbidity in Downstream Plume
Turbidity Severity: 2
(also confirm with sample bottle)



High Turbidity in Pool
Turbidity Severity: 2
(Confirm with sample bottle)



Iron Floc
Color: Reddish Orange; Severity: 3
(Often associated with a natural source)



Slight Turbidity
Turbidity: 1
(Difficult to interpret this observation; May be natural or an illicit discharge)

Construction Site Discharge
Turbidity Severity: 3



Discharge of Rinse from Floor Sanding
(Found during wet weather)
Turbidity Severity: 3

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.

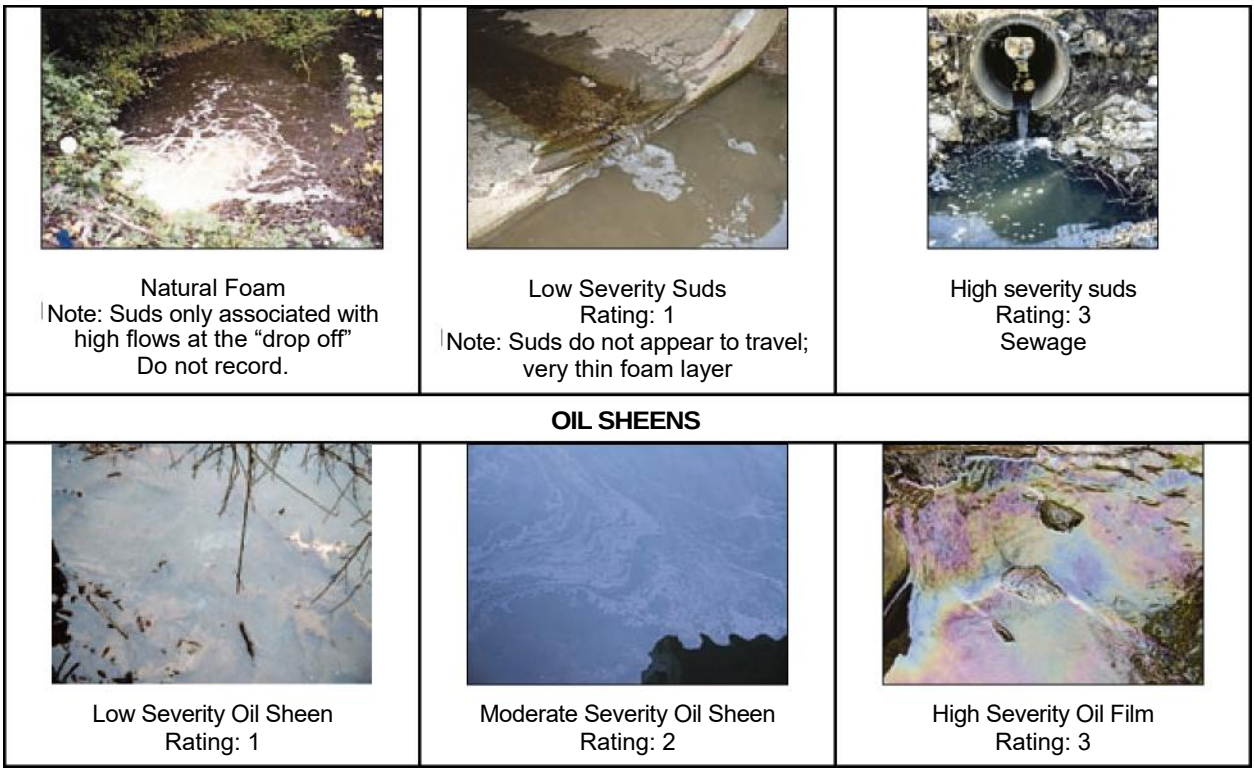


Figure 8.4.5: Determining the Severity of Floatables

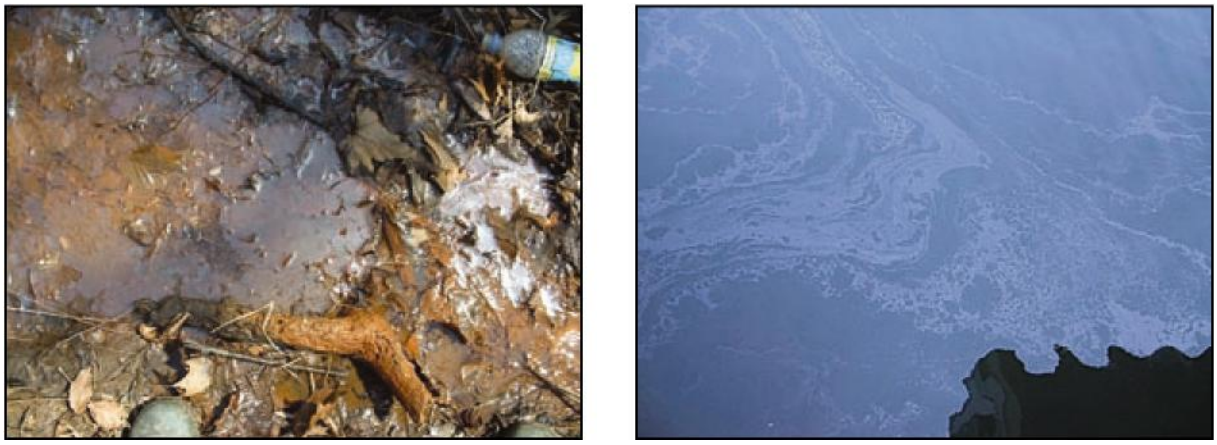


Figure 8.4.6: Synthetic versus Natural Sheen (a) Sheen from bacteria such as iron floc forms a sheet-like film that cracks if disturbed (b) Synthetic oil forms a swirling pattern

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.



Bacterial growth at this outfall indicates nutrient enrichment and a likely sewage source.



This bright red bacterial growth often indicates high manganese and iron concentrations. Surprisingly, it is not typically associated with illicit discharges.



Sporalitis filamentous bacteria, also known as “sewage fungus” can be used to track down sanitary sewer leaks.



Algal mats on lakes indicate eutrophication. Several sources can cause this problem. Investigate potential illicit sources.



Illicit discharges or excessive nutrient application can lead to extreme algal growth on stream beds.



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.



This brownish algae indicates an elevated nutrient level.

Figure 8.4.7: Interpreting Benthic and Other Biotic Indicators



Reddish staining on the rocks below this outfall indicate high iron concentrations.

Toilet paper directly below the storm drain outlet.

Watershed Protection??

Trash is not an indicator of illicit discharges, but should be noted.

Staining at the base of the outfall may indicate a persistent, intermittent discharge.

Excessive vegetation may indicate enriched flows associated with sewage.

Brownish stain of unclear origin. May be from degradation of the brick infrastructure.

Cracked rock below the outfall may indicate an intermittent discharge.

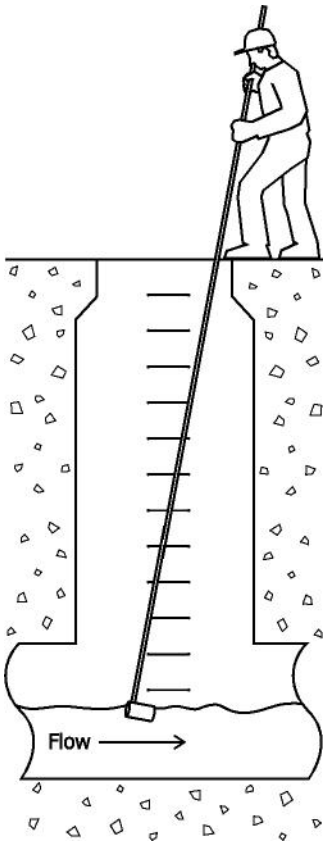
Poor pool quality. Consider sampling from the pool to determine origin.

Figure 8.4.8 **Typical Findings at Both Flowing and Non-Flowing Outfalls**

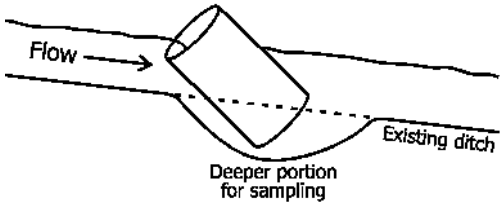
Appendix 8.5 – Stormwater Sampling Checklist

General Sampling Techniques

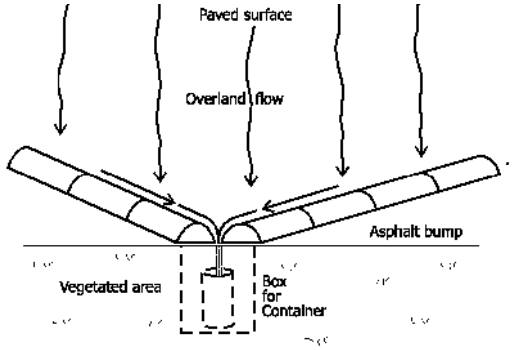
- If possible, notify the wastewater lab ahead of an illicit discharge investigation, a stream survey or a priority outfall survey so they will be aware that timely testing may be required.
- Collect two sample bottles for each sample site from the lab. Lab note: for fecal coliform samples: Bacteria 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.



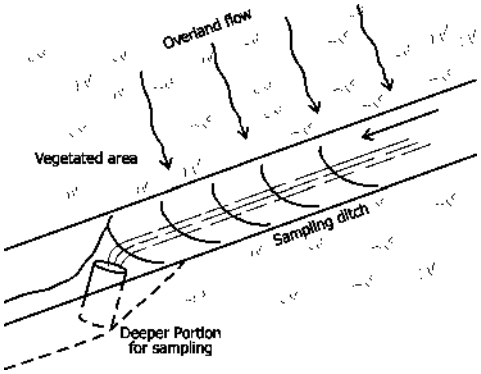
When sampling from a manhole, use a pole to safely sample from above ground. Avoid touching the sides of the manhole or pipes with the bottle to prevent contamination. Place the opening of the bottle upstream so that the flow enters the bottle directly.



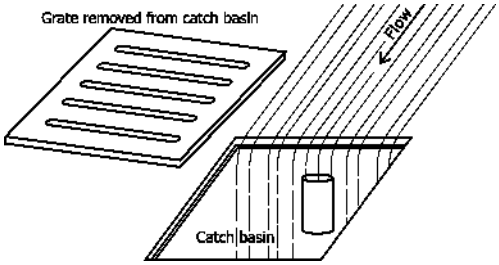
Deepening an existing ditch can allow samples to be collected directly into bottles in some cases. Be careful not to stir up solids from the sides or bottom of the ditch



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 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.



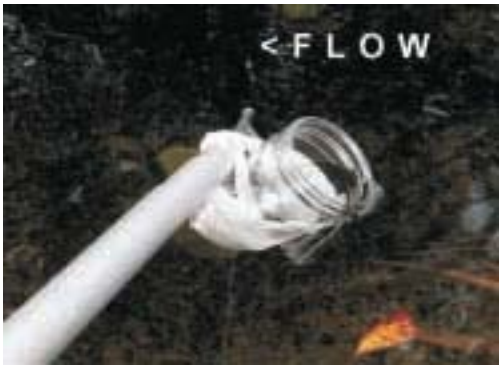
If the water is too shallow to sample with the bottle upright on the pole, try taping it on sideways, but tilted up slightly.



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 overfill 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.

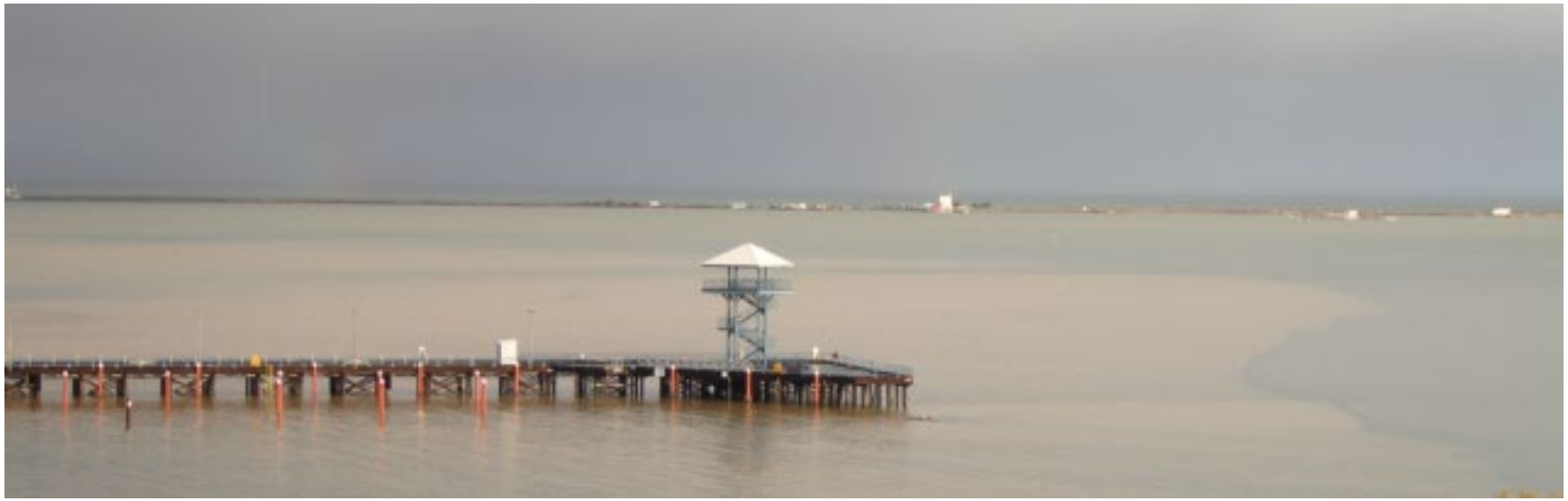


Do sample with the opening of the bottle facing upstream, into the flow so the water will enter directly into the bottle. This is true when sampling either by hand or with a pole. Do sample water that is rapidly flowing rather than stagnant.



Do collect samples without overfilling the bottle.

City of Port Angeles | Stormwater Permit Coordination and Planning Group (SWPCPG)



- PAPD
- Parks & Recreation
- PAFD
- Public Works
- Community & Economic Development

Ryan Jeffries, PWKS/Engineering

November 13, 2024



Meeting Agenda

1. Introductions
2. Main Meeting
   - New Items
   - Ongoing Items
   - Other Items
   - Open Discussion
3. Group Discussion – Inspections required for existing CoPA facilities

Next Meeting: February 13th, 2025

Introductions

- **Name**
- **Department**
- **Title**



Wrap-Up

Next Meeting: February 13th, 2025

V. McIntyre
Last Updated: 2.13.2024

Stormwater Permit Coordination & Planning Group (SWPCPG)

Meeting 2/13/2024

AGENDA

1. **Introductions**
    a. Brief self-introductions – name, department, title
    Attendees: Ryan, Vince, Joel,
    b. Additions or Subtractions?
        i. Anna Hood?
        ii. Leena invited?

2. **Quick Status Report (Vince)**
    a. SW Engineer Position – Ryan Jeffries! (Vacant Transpo Eng.)
    b. Capital Projects
        i. East City Hall LID Parking Lot Retrofit – REVIVED! Additional funding from ECY
            1. 75 total working days – Expect Const. through June.
                a. Parks & Rec - Vern Burton Calendar?
        ii. Park Ave. Outfall to Peabody Creek – DESIGN
            1. WDFW, ONP
        iii. Francis St. Outfall – DESIGN
        iv. Canyon Edge – DESIGN/Build
            1. WDFW
        v. Big Boy Pond / Lincoln Park Drainage Assessment – work initiated
    c. Grant Opportunities
        i. 2024-2026 Capacity Grant - ± $130k (Ryan secured?)
            1. Something specific we want to use it for?
        ii. 16th Street SW Facility Construction
            1. Agreement Reviewed – ready for signature; construct 2025
        ~~iii. SMAP projects – design grants? – Valley Creek Basin (OCTOBER)~~
        ~~iv. Permeable Pavement Cleaning Vehicle – Enhanced Program (OCTOBER)~~
        ~~v. Land Acquisition Grant (OCTOBER)~~
    d. Training
        i. SW Completeness Permit Acceptance Training
            1. HOLD – Fri. 3/8, 3/15, 3/22
        ii. CESCL – March 2024 (Thanks Leena for the Help!)
            1. Re-cert on March 26th
            2. New Cert on March 27th & 28th
                a. Field Day to occur at Triangular Lot next to WTP (Thank you Bruce!)
        iii. IDDE all staff annual training
            1. Ryan to work with Daniel
            2. Add in info about Updated Corp Yard SWPPP & Updated Policies & Procedures.

iv. IC/ID – refresher being discussed by Stormwater Center; Last taught in 2020
v. IDDE Survey 123 App – all-staff reporting
1. PAFD received training – any reports?
a. Joel – did it go through? Need follow-up.
b. Matthew – create user names and logins for all Staff
2. Give Detailed Training to SW OPS Crew & Cody, Bring Ryan & Howard

e. E&O – Spring 2024 Home Show
i. Bruce Dorcy initiating
ii. Plant Order from CCD
iii. Any further talk about new COPA marketing material order?
1. Jessica Straits
iv. Earth Day 2024?
1. Parks & Rec. ?

f. IDDE
i. Any items to discuss?
ii. Collaboration with Ops, Eng., PAFD, PAPD, & Code enforcement? Any reports?

g. Source Control – Requirements for all City owned properties
i. Howard Carlseen can be a good resource for you regarding management of runoff from City Properties.

h. Work with Osborn being extended into 2024.
i. Outfall inspection survey form – survey 123 NTP
ii. Private O&M Insp. form and Hub Site – being finalized
iii. SC Hub Sites are being tested – preparing for presentation to ECY and grant closeout

i. Ecology's proposed Phase II Permit Updates (2024-2029 Permit)

3. Scheduled Group Discussion Items (Open Discussion)

i. Any?
ii. Howard – asked Joel about Grease bins outside restaurants and PAFD's interest; Ask Mike Sanders who is retiring soon (March).

4. Other Items (Open Discussion)

a. Likely for 2023 / 2024
i. Corp Yard Inspection – Industrial Permit Program
1. Storage of materials; encourage disposal offsite
ii. ECY audit/inspection

5. Focused Discussion

a. None

6. Next Meeting: Ryan to Schedule - quarterly

R. Jeffries
Last Updated: 5.14.2024

Stormwater Permit Coordination & Planning Group (SWPCPG)

Meeting 5/14/2024

AGENDA

1. **Introductions**
    a. Brief self-introductions – name, department, title
    Attendees: Ryan Jeffries, Timothy Tucker, Cody Romero, Greg Haskins, Howard Carlseen, Matthew Moore, Jeff Groves, Daniel Harris, Derek Miller, Ben Braudrick, Joel McKeen
    Additions or Subtractions or Optional Attendee?
    Anna Hood, Brian Smith, Shannen Cartmel, Darrell Sharp, Bruce Dorcy, Jonathan Boehme, Benjie Flores, Tyler White, Todd Weeks, Ted Rife, Will Habel, Patrick Bartholick

2. **Quick Status Report (Ryan)**
    a. SW Engineer Position – Ryan Jeffries
    b. P street Outfall (further discussions necessary)
    c. Downtown Flowers (Greg)
    d. Ennis Creek Culvert Fish Passage Replacement (Matthew)
        i. Detour coordination – Include Clallam County
            1. Permanent Gates at 2 locations (Access Changes)
    e. Capital Projects
        i. East City Hall LID Parking Lot Retrofit – Under construction. (Vince)
            1. 75 total working days – Expect Const. through June.
                a. Parks & Rec - Vern Burton Calendar?
        ii. Park Ave. Outfall to Peabody Creek – DESIGN
            1. WDFW, ONP
        iii. Francis St. Outfall – DESIGN
        iv. Canyon Edge – DESIGN/Build
            1. WDFW
        v. Big Boy Pond / Lincoln Park Drainage Assessment – Consultant *Parametrix* work hydrologic modeling results; alternatives. Data collection ongoing. Collect and convey to another location options to be analyzed. (Matthew)
            1. Parks meeting with North Olympic Baseball group regarding pond / flooding.
    f. Grant Opportunities
        i. 2024-2026 Capacity Grant - ± $130k, ready for signature (City Manager)
            1. Suggested uses: pervious surface equipment, storm flow meters, hand camera (push camera - $10k+/-)
        ii. 16th Street SW Facility Construction (Ryan)
            1. Agreement Reviewed – signed; design 2024, construct 2025
    g. Training
        i. SW Completeness Permit Acceptance Training
            1. Any comments on the future training needs as we move forward?
        ii. CESCL – Completed March 2024

1. Valid certification through March 2027

iii. IDDE all staff annual training
1. Ryan to work with Daniel Harris (IT / Systems Coordinator)? Get on City Website

IC/ID – refresher being discussed by Stormwater Center; Last taught in 2020

iv. IDDE Survey 123 App – all-staff reporting
1. PAFD received training and is using successfully
a. Use ArcGIS username and password
2. Give Detailed Training to SW OPS Crew & Cody, including Ryan & Howard (youtube)

h. E&O – Spring 2024 Home Show
i. Plant Order from CCD; much feedback the lack of trees like previous year…
ii. Street Tree give away mid-October; get the word out.

i. IDDE
i. Any items to discuss? Paint issue continues, responses are ongoing as necessary, camping/shelters - hazards.
ii. Collaboration with Ops, Eng., PAFD, PAPD, & Code enforcement? Any reports?

j. Source Control – Requirements for all City owned properties
i. Howard Carlseen can be a good resource for you regarding management of runoff from City Properties.

k. Work with Osborn being extended into 2024.
i. Outfall inspection survey form – survey 123 underway
ii. Private O&M Insp. form and Hub Site – complete
iii. SC Hub Sites are being tested – preparing for presentation to ECY and grant closeout

l. Ecology's proposed Phase II Permit Updates (2024-2029 Permit) to be adopted 8/1/2024

3. Scheduled Group Discussion Items (Open Discussion)
a. None

4. Other Items (Open Discussion)
a. None

5. Focused Discussion
a. None

6. Next Meeting: Ryan to Schedule, new invite to come – quarterly – August 13, 2024

R. Jeffries
Last Updated: 8.13.2024

Stormwater Permit Coordination & Planning Group (SWPCPG)

Meeting 8/13/2024

AGENDA

1. **Introductions**
    a. Brief self-introductions – name, department, title
    Attendees: Ryan Jeffries, Matthew Moore, Woo Haskins, Daniel Harris, Anna Hood, Jemiah Jenkins, Howard Carlseen, Cody Romero, Benjie Flores, Joel McKeen, Shannen Cartmel
    Additions or Subtractions or Optional Attendee?

2. **Quick Status Report (Ryan)**
    a. County Fair – August 14th to 18th
        i. Signup sheet
    b. Capital Projects
        i. East City Hall LID Parking Lot Retrofit – Under construction. (Vince)
            1. Expect Const. through August
            2. GIS updates? Vince
        ii. Big Boy Pond / Lincoln Park Design Study – Consultant *Parametrix* working with City on alternative analysis. Data collection complete with memo to come summarizing the existing conditions. (Matthew)
        iii. Ennis Creek Culvert Fish Passage Replacement (Matthew)
            1. 30% Design review / coordination
                a. Width requirements in discussion with alternative sections being drafted to meet USSG/WSDOT/AASHTO requirements
                b. Get Fire feedback on alternatives
        iv. 16th Street SW Facility Construction (Ryan)
            1. Agreement Reviewed – signed; design 2024, construct in 2025. Need final design.
        v. Downtown Trees and SW project updates – trees to be planted yet
        vi. P street Outfall (no additional information currently – repair sketches / ideas)
        vii. Park Ave. Outfall to Peabody Creek – DESIGN
            1. WDFW, ONP
        viii. Francis St. Outfall – DESIGN
        ix. Canyon Edge – DESIGN/Build
            1. WDFW
    c. Grant opportunities
        i. 2024-2026 Capacity Grant - ± $130k, signed
            1. Suggested uses include pervious surface equipment, storm flow meters (quote from Whitney Equipment – potential install (A St.) in Sept or Oct), hand camera (push camera - $10k+/-)
    d. New Permit requirements – August 1 permit in effect, yet to be adopted by Council.
    e. IDDE all staff annual training needs to be scheduled.

1. Ryan to work with Daniel Harris (IT / Systems Coordinator)

f. Survey123 IDDE Reporting App – complete and implementation has begun.
   i. Howard Carlseen can be a good resource for you regarding management of runoff from Private or City Properties.
   ii. Matthew to follow up with Ops and Fire
g. Private O&M Insp. form and Hub Site – complete and being implemented
h. SC Hub Site – complete and being implemented
i. Outfall inspection survey form – survey 123 complete, but not used yet

3. Scheduled Group Discussion Items (Open Discussion)

a. Inspections required for existing City facilities
   i. How are we doing now? What considerations need to be made for future projects?
b. Basin 2 inspection (Valley Creek and Tumwater Creek) to occur for this yearly cycle for reporting.

4. Other Items (Open Discussion)

a. Cost of implementation of new Permit SWMP and TMDL?
b. Good of the order

5. Focused Discussion

a. IDDE response and follow-through; ie Safeway sewer issue.
   i. Good example of things working as they should
   ii. Develop a line of questions
   iii. Talk to the right person

6. Next Meeting: Ryan to Schedule, new invite to come – quarterly – November 13, 2024

R. Jeffries
Last Updated: 11.13.2024

Stormwater Permit Coordination & Planning Group (SWPCPG)

Meeting 11/13/2024

AGENDA

1. **Introductions**
    a. Brief self-introductions – name, department, title
    Attendees: Ryan Jeffries, Matthew Moore, Timothy Tucker, Woo Haskins, Daniel Harris (optional), Anna Hood, Jemiah Jenkins, Howard Carlseen, Cody Romero, Benjie Flores, Joel McKeen, Howard Carlseen, Jeff Groves
    Additions or Subtractions or Optional Attendee?

2. **Quick Status Report (Ryan)**
    a. County Fair – August 14th to 18th
        i. Signup sheet
    b. Capital Projects
        i. East City Hall LID Parking Lot Retrofit –Construction completed.
            1. Project closeout in process.
        ii. Big Boy Pond / Lincoln Park Design Study – Consultant *Parametrix* working with City. ongoing (Matthew)
        iii. Ennis Creek Culvert Fish Passage Replacement (Matthew)
            1. 30% Design review / coordination - ongoing
        iv. 16th Street SW Retrofit Construction (Ryan)
            1. PSA for Parametrix - 100% design in coming months, construction is planned for 2025.
        v. Downtown Trees and SW project updates – construction ongoing.
        vi. P street Outfall
        vii. Park Ave. Outfall to Peabody Creek – planning in-house design Summer 2025
            1. WDFW, ONP
        viii. Francis St. Outfall – DESIGN
        ix. Canyon Edge – DESIGN/Build
            1. WDFW
    c. Grant opportunities
        i. 2024-2026 Capacity Grant - ± $130k
            1. Suggested uses include pervious surface equipment (sweeping/vacuum equipment), storm flow meters (MEC-2024-38, SW's share being approximately $26.5k - $28k), hand camera (push camera - $10k+/-)
    d. New General Permit requirements – August 1 permit in effect, 2024 SWMMWW yet to be adopted by Council, needs to be adopted by June 30, 2027.
        i. Other items of note / changes / deadlines
    e. IDDE all staff annual training needs to be scheduled.
        1. Ryan to work with Vince and Daniel Harris (IT / Systems Coordinator) for new training. – update to come.

2. New NPDES requirement - by December 31, 2026, Non-stormwater discharge (emergency firefighting activities), CoPA shall coordinate with firefighting agencies / departments PFAS Management Plan.

f. Survey123 IDDE Reporting App – implemented. – Matthew elaborate.
g. Private O&M Insp. form and Hub Site – implemented. – Matthew elaborate.
h. Source Control Hub Site – implemented.

3. Scheduled Group Discussion Items (Open Discussion)

a. Inspections required for existing City facilities
    i. How are we doing now? What considerations need to be made for future projects?
b. Basin 2 inspection (Valley Creek and Tumwater Creek) to occur for this yearly cycle for reporting.

4. Other Items (Open Discussion)

a. Cost of implementation of new Permit SWMP and TMDL?
b. WSDOT New Prioritization Mapping Tool - WSDOT developed a GIS-based stormwater retrofit prioritization web map to address priority focus areas identified by the Washington State Legislature for funding WSDOT stormwater retrofits, including salmon recovery and ecosystem health, reducing pollution, addressing health disparities, and cost-effectiveness. The prioritization incorporates input from tribes, federal, state, and local governments, scientists, and others and includes consideration of tribal treaty rights and environmental justice, including the Healthy Environment for All (HEAL) Act.
c. Good of the order

5. Next Meeting: Ryan to Schedule, new invite to come – quarterly – February 13, 2024

City of Port Angeles | 2024 Education and Outreach Tracking

Table 1. Summary of Local Events

2024 Activities / Events	Date(s)	Location(s)	City Personnel	Target Audience	Contact Information (other groups)	Subject Area(s)	Attendance/Distribution	Educational Materials Used	Notes/Other
KONP Home Show	March, 2024	Port Angeles High School Gymnasium	Ryan Jeffries, Matthew Moore, Joey Currie and others	General Public, Developers, Landscapers, & Home Owners	Rjeffries@cityofpa.us	IDDE Program, LID Rebate Program, Rain Gardens, Natural Yard Care	Not tracked	Focus on Natural Yard Care: Bare Root Plantings from CCD, PSSH materials, SWMP Plan, LID Rebate, LID Guidance Documents, etc.	resumed in 2023 after COVID
Earth Day	April 22rd, 2024	City Pier	Ryan Jeffries, Sean Armstrong	General Public	Rjeffries@cityofpa.us	IDDE Program, LID Rebate Program, Rain Gardens, Pet waste management, SW Program updates	Not tracked	PSSH materials, SWMP Plan, LID Rebate, LID Guidance Documents, etc.	
Local Cinemas	Sept./Oct.	Deer Park and Lincoln Cinemas	Ryan Jeffries	General Public	Rjeffries@cityofpa.us	Pollution Prevention	Deer Park Cinemas	PSSH Stormwater Awareness paid advertisements	
Clallam County Fair	August 2024	Clallam County Fairgrounds	Ryan Jeffries, Matthew Moore, Sean Armstrong, Joey Currie, and others	General Public	Rjeffries@cityofpa.us	Focusing on pet waste awareness, the SWMP Plan, IDDE, and updates the the SW Program	Tracked over 1,000 interactions with people over the 4 day event	PSSH handout materials (grocery totes, pet wast bags and dispensers, bike lights, stickers, etc.). IDDE materials w/ hotline (pens, pencils, travel mugs, etc.), candy, informational materials (brocures, fliers, 1-sheets, etc.)	
PSSH Month - handouts to community	year-round	City Hall, welcome desk	Ryan Jeffries, Eric Walrath, Mike Spencer	General Public	Rjeffries@cityofpa.us	Stormwater Imapcts from: Pet Waste, Landscaping Runoff, & Car Washing	Pet Waste Bad Dispensers were distributed freely throughout the year from the City Hall welcome center and positioned next to the Spills Happen outreach banner advertising the City's IDDE Program contact information.	Materials included PSSH Campaign information directing to their website for more information.	
Stormwater Awareness Ad. Campaign - online	September	Virtual: YouTube, Facebook, Basis DSP, Instagram	Ryan Jeffries, Matthew Moore	General Public	Rjeffries@cityofpa.us	Stormwater Imapcts from: Pet Waste, Landscaping Runoff, Vehicle Fluids	Large regional social media campaign facilitated by Puget Sound Starts Here (PSSH) and in partnership with the City. Stats specific to Port Angeles unknown at this time: unknown Impressions, unknown Initiations,unknown Completions, & unknown Clicks.	PSSH Stormwater Awareness online videos and paid advertisements	
STEM like ME	May	Stevens Middle School	Ryan Jeffries, Matthew Moore	Public School	Rjeffries@cityofpa.us	Civil Engineer Stormwater	Small group in classroom, Raingarden Handbook and group exercise	Raingarden handbook, various sedimentary rock types in tupperware, small residential lot model with house for Group exercise	
Business Stormwater Education - PPA/SC Program	All-year	Site visits to businesses within the City	Howard Calseen	Local Businesses	Hcarlseen@cityofpa.us	Pollution Prevention, Source Control	80 Local Businesses Inspections took place throughout 2024, including initial and follow-up inspections.	Targeted Pollution Prevention and reporting information for local businesses to prevent adverse downstream stormwater impacts.	

2024 Education and Outreach Summary

S5.C.2 - The City Continues to partner with The West Sound Stormwater Outreach Group (WSSOG)
S5.C.2.i. - General Awareness:
Target Audience: General Public
Subject Area: General Impacts of on Surface Waters, See tracking sheet above for 2024
Additional information is included in the WSSOG 2024 Activities Report
S5.C.2.ii. - Behavior Change:
Target Audience: Residents, Homeowners, & Landscapers
Subject Area: Natural Yard Care
Additional information is included in the WSSOG 2024 Activities Report



YOUR CITY

AUTUMN 2024

WWW.CITYOFPA.US

THE CITY OF PORT ANGELES COMMUNITY NEWSLETTER

Newly installed bioretention cells as part of the East Parking Lot Low Impact Development Project.

UPCOMING LOCAL EVENTS

October 2024
Oct. 4-6 PNW Fiber Exposition
Oct. 11-13 Dungeness Crab Festival
Oct. 19 City Shade Street Tree Distribution
Oct. 19 PAFAC Celebration of Shadows
Oct. 23 Clallam County Job Fair
Oct. 29 Bloodworks NW Blood Drive
Oct. 31 City Hall-oween

November 2024
Nov. 2 Hurricane Ridge Gear Swap
Nov. 15-17 Christmas Cottage
Nov. 16 - Jan. 1 PA Winter Ice Village
Nov. 23 Hurricane Ridge Winterfest
Nov. 27 - Dec. 1 Olympic Medical Center Foundation Festival of Trees

December 2024
Dec. 7 PAFAC Wintertide Festival of Lights
Dec. 14 Evergreen Events Holiday Market

Every Saturday
PA Farmers Market

Learn More
cityofpa.us/calendar

YOUR VISION FOR 2045

The Comprehensive Plan Update is still ongoing—You can help to shape the future of Port Angeles! Visit our website to get involved and make your voice heard: **www.cityofpa.us/Vision2045**

BETTER STORMWATER FOR A HEALTHIER COMMUNITY

In September 2024, the City of Port Angeles completed the East Parking Lot Low Impact Development Project. This largely grant-funded effort improves stormwater management at City Hall, keeping our downstream waterways cleaner and setting a new standard for on-site stormwater management in future developments.

Stormwater runoff occurs when rain falls on impermeable surfaces like roads and parking lots, preventing it from soaking into the ground. As this runoff flows, it picks up pollutants which then enter local waterways and cause adverse environmental impacts.

Low Impact Development (LID) is a sustainable approach to stormwater management. Unlike traditional storm drains and pipes that quickly collect and transport runoff—often damaging streams and degrading water quality in the process—LID uses green infrastructure like permeable pavements, bioretention swales and rain gardens to slow, filter, and infiltrate stormwater where it falls. Benefits of this project include:

Better Stormwater Management: LID techniques detain and treat runoff on-site, reducing the load on the City's stormwater systems and lessening the downstream impact to Peabody Creek.

Cleaner Waterways: Two newly installed bioretention cells (one in the grassy area outside of City Hall and another on Peabody Street) will collectively treat over 500,000 gallons of runoff each year, removing pollutants like zinc, copper, petroleum and tire wear before they reach Peabody Creek and the Port Angeles Harbor.

Improved Parking Lot: The lot has been resurfaced, eliminating issues caused by wash boarding and providing a smoother, safer area for staff, visitors, and community events. *Story continued on back.*

Your City is published quarterly by the City of Port Angeles, 321 East 5th Street, Port Angeles, Washington 98362



WINTERIZE YOUR HOME
AND SAVE WITH REBATES

The days are shorter, the air is cooler, and the leaves are turning. Now is the time to prepare your home for the winter season ahead. Start by saving energy and reducing heating costs with simple upgrades. Insulate your home and seal drafty doors and windows with caulking and weather stripping to help keep warm air in and cold air out.

Test your smoke detectors, carbon monoxide detectors, and fire extinguishers. House fires are more common in winter as people turn to alternate heating sources.

For outdoor maintenance, clear your gutters to prevent clogs and ensure proper water flow during rain and snow events. Dispose of leaves and yard debris by placing them in your yard waste container–never in streets or storm drains, as this can cause blockages and flooding.

If you notice a clogged catch basin in your neighborhood, contact the Public Works Department at (360) 417-4800. Finally, don't forget to insulate your water pipes, drain outdoor faucets, and store hoses to prevent freezing.

The City of Port Angeles offers rebates on heat pump, insulation, and window replacements to help upgrade your home, save energy, and lower your utility bills. We also offer a Free Weatherization Program for low-income households (tenants included!), providing no-cost and low-cost home weatherization upgrades. To learn more about these programs, visit **www.cityofpa.us/Conservation.** A click today could save you tomorrow!

CONTINUED
BETTER STORMWATER

This project also serves as a model for our community and local developers, showcasing how LID techniques can be implemented to meet National Pollutant Discharge Elimination System (NPDES) permitting requirements associated with new and re-development projects.

"For years to come, the runoff from this rather large parking facility will be treated for contaminants prior to entering the receiving waters of Peabody Creek," says Public Works & Utilities Director Mike Healy. "A big 'thank you' to our dedicated staff and to our contractor Bruch and Bruch Construction, Inc. for their hard work throughout this project. We are also very grateful to the Department of Ecology for making this possible."

This work was funded by a $1.43 million grant from the Washington State Department of Ecology, covering 89% of the total project costs.

To learn more about low impact development, please contact the Public Works & Utilities Department at publicworks@cityofpa.us.

Scan QR Code to read more about the East Parking Lot LID Project at City Hall.

Scan QR Code to learn more about rebates and the Free Weatherization Program.

UPCOMING PUBLIC MEETINGS

City Council
1st & 3rd Tuesday of Each Month at 6pm

Lodging Tax Advisory Committee
Quarterly Meetings at 11am

Parks Commission
3rd Thursday of Each Month at 6pm

Planning Commission
4th Wednesday of Each Month at 6pm

Public Safety Advisory Board
3rd Wednesday of Each Month at 6pm

Utility Advisory Committee
2nd Tuesday of Each Month at 3pm

Learn More
www.cityofpa.us/calendar

STORM

STORMWATER OUTREACH FOR REGIONAL MUNICIPALITIES

2024 ANNUAL REPORT

About STORM

STORM is a coalition of city and county governments working together to improve the health of our communities and protect our lakes, rivers, streams, and Puget Sound. The coalition supports efforts to meet the Education and Outreach requirements in the Washington Municipal Stormwater Permits.

STORM's Vision: People living and working in our communities take actions that protect water quality within the Puget Sound Basin.

STORM's Mission: Work together with regional partners to address polluted runoff and stormwater impacts by advancing broad-scale education & outreach and behavior change initiatives.

If your municipality would like to join STORM, or receive our updates, send your request to Anne Melrose, Statewide Municipal Stormwater E&O Coordinator, *anne.melrose@wsu.edu*.

Check out the STORM Resource Reservoir at *pugetsoundstormgroup.org*.

2024 STORM by the Numbers



78 participating jurisdictions

210 members





300+ attendees at STORM events

3,700 downloads from the Resource Reservoir





2024 STORM Symposium

2024 STORM Symposium Highlights

It was wonderful to see so many new faces and long-time STORMers at the 2024 Annual Symposium! Over **68** colleagues met to share ideas, learn and inspire each other. The bomb cyclone put a new spin on the title “STORM” Symposium. Despite the weather bomb messing with our lunch order, we had a successful event with an amazing line up of guest speakers and topics. Thanks to Mary Rabourn with King County and Becca Bolettieri with Kitsap County for the generous array of delicious snacks that carried us through the day!



We kicked off the Symposium presentations with **Ann Grodnik-Nagle**, Senior Policy Advisor in Climate Adaptation and Built Environment at Seattle Public Utilities. Anne explained climate change as an impact amplifier. Meaning we will experience more flooding, extreme storms (like bomb cyclones), sea levels rise, stress on water supplies, wildfire risks and urban heat island effects. While recognizing these impacts will hit the most vulnerable communities the hardest. Seattle’s climate action strategy is a community centered, one water approach focused on climate justice, climate adaptation and climate mitigation. The approach includes collaborating with frontline communities bearing the brunt of climate impacts to develop equitable climate strategies. Also adapting systems and operations to climate impacts and reducing greenhouse gas emissions in their citywide operations. Seattle is using scenario planning and climate modeling to project a range of future outcomes with a goal of making better climate informed decisions while working within the uncertainty of climate change. Current work includes nature-based strategies such as floodplain restoration, creating resilience districts to address systemic vulnerabilities and inequities, and developing GSI RainCity partnerships and projects.

Next, **Simone Des Roches** and **Jessica Sandoval** researchers with the Washington Department of Fish and Wildlife (WDFW) discussed findings from the first year of a multi-year project. The project is studying the potential for stormwater ponds to provide suitable habitat for Washington’s native wildlife. In collaboration with city and county partners from the Cities of Olympia and Tumwater to the City of Bellingham, the hope is to learn how stormwater ponds can be created and managed to help address biodiversity loss, especially in urban centers.

The research team surveyed amphibians, birds, and beavers in over 200 stormwater ponds in the Salish sea watershed. Birds, from waterfowl to warblers, were identified visually or by their calls and songs. Frogs, salamanders, and fish were captured using dip-nets or small minnow traps, identified, counted, and released. Native amphibian species like the northwestern salamanders and the northern red-legged frogs were encountered frequently; however, so were invasive species including the American bullfrog and green frogs. Preliminary results of the study are encouraging, showing that conditions in many of our local stormwater ponds promote biodiversity. The research team will continue to collect data next year to help understand how essential urban infrastructure can promote pond biodiversity and access to wildlife for Puget Sound residents.

Late morning, we introduced our behavior change panelists **Laurie Deveraux** - City of Bellevue, **Cammy Mills** - Kitsap County , **Peggy Campbell** - Snohomish County and **Jess Huybregts** - City

2024 STORM Symposium Highlights *(continued)*

of Seattle. Each panelist shared their lessons learned and unique experiences with four different behavior change campaigns implemented during the prior Permit cycle.

Cammy started us off with a social marketing primer and followed up with reflections on Kitsap's Natural Lawn Care Program. Cammy walked us through the important exercise of choosing a campaign focus. Sharing a strategic methodology adopted from social marketing experts Nancy Lee and Doug McKenzie-Morh.

Peggy shared a comprehensive overview of Snohomish county's RainScaping Program focused on Low impact development principals and best management practices. She walked us through "Development" including strategy, timeline, GIS Analysis and audience research which revealed key insights. "Launch" including guide & materials, website, expo & workshops. "Evaluate" including expo & workshops, site visits, evaluation. "Report" including lessons learned.

Laurie shared highlights from the Dumpster Lid Campaign focusing on why dumpster lids were selected, audience research and interventions and the evaluation process. Lessons learned included the benefits of regional collaboration, using survey monkey for data collection and you don't always know who the "make me's" are. Campaign materials can be found on the Washington Stormwater Center's website.



Jess wrapped up the panel with Seattle's Adopt a Drain behavior change campaign, focusing on how the program was designed to meet each evaluation objective and question in the Permit. She covered participant recruitment, survey design, partnerships, metrics and lessons learned. Explaining how the program was modified to fit Seattle's program priorities and engage historically underserved communities.

In the afternoon, **Parker Lynas**, King County's NextGen Climate intern gave a *presentation on his "Clean Water Connects Us All"* campaign about community and health. In 2024, Parker explored communications and how using clean water as the foundation for actions might connect communities to health, the environment and climate resilience. He tested messaging at events using a splash pad for cooling off in White Center, touring of Renton's stormwater infrastructure with members of ethnic media, learning social marketing basics and through partners' artwork. Parker investigated how to connect to an audience's feelings about health, sense of place and water, and how actions might create community. People act when they feel connected to the message, and he tested how the presence of people and art in messaging made a difference. He will be continuing his work in climate resilience and communications in his final work at the Evans School.

Our final presentation featured **Nancy Hardwick** of Hardwick Research. She shared her insights on how to develop program evaluations from start to finish. She covered topics including survey design, focus group moderation and qualitative and quantitative research as well as innovative data collection techniques.

Want to learn more? You can find our panelists presentations on the ***STORM Resource Reservoir***.

Puget Sound Starts Here & Ethnic Media Tour Update

Thank you to all the campaign contributors! The 2024 clean water awareness campaign took a new approach this year. The start date was delayed (contracting and payment challenges) but continues into 2025. The approach included:

- digital marketing using the audience details called out in the NPDES Municipal Permit for Phase 1 and 2 Permitees,
- advertising to those contributor zip codes,
- hosting an ethnic media event Nov 18 touring Renton stormwater infrastructure and examples of community benefits,
- introducing media to the 6PPD issue gathering survey feedback,
- combining budgets with King County to test outreach tactics.



Media folks were very interested when Jenee Colton, speaking for King County's Science Section at the Cedar River stop, talked about tires, 6PPD and its impacts on salmon. There was an audible reaction when we highlighted the active storm drain flushing runoff from the highway into the river. The survey responses echoed feedback from previous media surveys about who communities trust and underscores the value of working with trusted partners.

From the survey: They trust those who speak their language, understand their culture, and provide useful information that meets their needs

There will be a project summary early February for our partners.

2024 Trainings and Professional Development

Quarterly meetings through the year focused on providing networking opportunities, skill shares, and trainings covering a variety of topics.

Thank you 2024 Quarterly Presenters!

- **The Radish Project** - Daniel Feinberg
- **Evaluation for Reporting** - Nancy Hardwick
- **Don't Wait to Inflate Campaign Report** - Karen Rich
- **Social Connections: Learning & Adapting as Social Media Evolves** - Warren Kagerise
- **Intro to Social Marketing** - Brooke Tully

We hosted a **Drips and Drops** (informal virtual learning session) on Oct. 8, 2024 with Abbey Stockwell, the Phase ll Municipal Stormwater Permit Writer from Ecology. She provided an hour webinar to about 35 STORM members to discuss changes that were made in the recently released Municipal Stormwater Permit. It was a wonderful opportunity to ask questions about behavior change requirements and gather clarity on other education and outreach pieces of the new permit.

Finally, we offered the following trainings:

Nancy Lee led two 2-day workshops that walked about 30 participants through the steps of creating a Social Marketing Campaign, with homework in between!

Culture2Culture Training & Consulting held two Government to Government workshops with Pam and Gordon James. They shared history and considerations on how to work together with Tribes, teaching about traditional and cultural perspectives, legal impacts, Tribal Sovereignty and Tribal Governments to over 80 participants.

2024 STORM Work Groups

STORM work groups are created on an ad hoc basis and facilitated by STORM members. They are member-driven and self-directed. The formation and focus of work groups often aligns with new permit requirements, initiatives of the STORM Steering Committee or from requests by STORM members.

Work group participation is voluntary and based on the interest of individual members. These groups tend to be task-oriented and may have end dates. Work group members determine their structure and function, meeting frequency, work plans and decision-making.

Pet Waste

In 2024, 25 members from 19 jurisdictions participated in the Pet Waste Work Group. The group met three times to share various approaches to Pet Waste Management and Outreach, discuss development of a 'toolkit', and gauge interest in shared grant applications for updating audience research in our region. The group will continue to meet in 2025 – contact Cammy Mills at ***cmills@kitsap.gov*** or Carston Curd at ***carston.curd@snoco.org*** to join.

Concrete

The Washington Stormwater Center has run a Concrete Workgroup in 2024 to work on developing outreach materials to address issues around truck washout into storm drains. Several STORM members have joined the effort and if anyone else finds concrete an issue in their jurisdiction and would like to join the group contact Anne Melrose at ***anne.melrose@wsu.edu***.



Adopt-a-Drain (AAD)

Washington's Adopt-a-Drain (AAD) coalition continued to grow in 2024. We are now 21-members strong, with several new partners in Central Washington (Yakima County) and SW Washington (Clark County and several cities) joining the Puget Sound pioneers. Since we launched in 2021, almost 1,900 individuals, families, and businesses in Washington have "adopted" more than 3,100 catch basins. Volunteers have reported that they prevented almost 35,000 pounds of sediment, leaves, twigs, garbage, pet waste, recyclables, and other materials from clogging or falling into the MS4 since 2021. In 2024, alone, volunteers removed more than 14,500 pounds of debris from around adopted drains.

In 2024, we boosted our Spanish language outreach, through community events, radio, TV, social media and printed materials. The social media toolkit and videos in both English and Spanish is on the Washington Stormwater Center website. Seattle and Duvall also successfully reported to Ecology how Adopt-a-Drain performed as a behavior change campaign.

It's not too late to join the AAD coalition! Help us reach 5,000 adoptions! For more information, please contact Halley Kimball at ***Halley.kimball@maplevalleywa.gov*** or Ann Zawistoski, Director of Adopt-a-Drain & Community Outreach, ***azawistoski01@hamline.edu***.

STORM Steering Committee



Marisa Allison
City of Kirkland

Marisa (she/her) is a new STORM Steering Committee member this year, joining the government stormwater sector after years of working for nonprofits. She's motivated by the opportunity to collaborate with the team and cultivate meaningful change in our communities.



Rebecca Bolettieri
Kitsap County

Rebecca (Becca, she/her) is the Stormwater Education and Outreach Coordinator for Kitsap County's Stormwater Division. A recent transplant from Georgia, she enjoys contributing her skills in creative writing and community involvement to STORM.



Laurie Devereaux
City of Bellevue

Laurie (she/her) has worked for Bellevue Utilities for 22 years. Her favorite thing about STORM is that it is a constant source of knowledge and inspiration.



Bryan Hatchell
City of Bellingham

Bryan (he/him) has run environmental outreach campaigns for the past 8 years. As a new STORM Committee member, he is excited to form new connections and break down barriers to information as we promote behaviors that make our stormwater cleaner.



Susan McCleary
City of Olympia

Susan (she/her) is hitting her ten-year mark with the City of Olympia. She is continuously astounded by the passion, excellence, drive and collaborative nature of the stormwater professional community. It has been the most inspirational, productive and beneficial part of her public career.



Mary Rabourn
King County

Mary (she/her) has spent over 30 years in public service, specializing in E&O around hazardous waste small quantity generator info, pesticides, stormwater, multicultural projects, PIO, and more.



Ry Yahn
City of Seattle

Ry (they/them) is a new STORM Steering Committee member. They are passionate about working with communities to prevent stormwater pollution and promote stewardship of local waters.



Anne Melrose
Washington Stormwater Center

Anne (she/her) spent a decade doing E&O in California. Now she has moved north into the rain of the NW to work on stormwater issues. She is inspired by the STORM Steering Committee and all that they do.

City of Port Angeles 2024 Home Show

	Saturday, March 9 Open 9a-4p	Sunday, March 10 Open 9a-3p
9:00am - 12:00pm	1 Howard Carlseen	1 Howard Carlseen
	2 Ryan Jeffries (Stormwater)	2 Matthew Moore (Stormwater)
	3. Nikki Adkins	3 Jade
	4 Jess Toth	4 Pen Com
	5 Pat Bartholick	5 Pen Com
	6 Pen Com	6 Jim Lierly /Gregg King Conservation
12:00pm - 2:00pm	1 Howard Carlseen	Joey Currie Conservation
	2 Sean Armstrong (Stormwater)	2 Matthew Moore (Stormwater)
	3 Will Habel	3 Pen Com
	4 Pen Com	4 Pen Com
	5 Pen Com	5
	6 Joey Currie Conservation	6
2:00pm - 4:00pm	1 Sean Armstrong	1 Ryan Jeffries (Stormwater)
	2	2 Pen Com
	3 Pen Com	3 Pen Com
	4 Pen Com	4 Joey Currie Conservation
	5 Heather Owens- SW	5 Ethan Walker
	6 Joey Currie Conservation	6
		Tear down 3p-4 Ryan @ 3 pm w/ Van for Tear Down

Port Angeles High School gymnasium

Natural Yard Care

5 *steps to make your piece of the planet a healthier place to live!*



Why Go Natural?

Our yards are our outdoor homes: fun, beautiful, and great spaces for relaxing. But in taking care of them, we often use water inefficiently, produce a lot of yard waste, and overuse chemicals that are bad for our families' health and the environment.

The good news is, by making some simple changes in how we care for our yards, we can:

Save money on water, waste disposal, and chemicals.

Save time because in the long run working with nature is easier.

Protect our families' health by reducing contact with chemicals.

Protect the environment by using these tips:

- Conserve our precious water supply
- Keep our streams and lakes clean by reducing the need for chemicals
- Recycle yard trimmings into free fertilizer



Put Nature to Work

Nature wastes nothing. In natural landscapes, soil life recycles dead plants into food for new plant growth. Plants are adapted to the water, sun, and soil available in their site.

Having a wide variety of plants, soil organisms, insects, and animals in your yard keeps most pests and diseases in check.

By working with nature in your yard, you can have a great looking landscape that's easier to care for and healthier for families, pets, wildlife, and our great Northwest environment.

Create a healthy, beautiful yard without working too hard!

How? It's Easy...

Start with these **5** steps:

1. **Build Healthy Soil**



2. **Plant Right for Your Site**



3. **Practice Smart Watering**



4. **Consider Eliminating Pesticides and Herbicides**



5. **Practice Natural Lawn Care**



Need Help? If you have questions or want more information, call Kitsap1: 360.337.5777 or check out the resources at the end of this guide.

1. Build Healthy Soil with Compost and Mulch

Soil is alive and soil life matters

A teaspoonful of healthy soil contains about four billion organisms! This community of beneficial soil creatures keeps landscapes healthy by:

- Creating a loose soil structure allowing air, water, and plant root growth into the soil
- Recycling nutrients and making them available to plants
- Storing water until plants need it
- Protecting plants from pests and diseases



Get to know your soil
Dig in and take a look

Use a trowel or shovel to dig 8-12 inches deep. You may find sand (which doesn't hold water well), clay (which won't let water in or out), compacted layers, or light color (which indicates low organic matter and soil life). Compost improves all types of soil.

Feed your soil with compost

Dig or rototill in 1–3 inches of compost (up to 20–25% compost in your soil mix) when you're making new beds or planting lawns. Compost works on any soil. It helps sandy soils hold nutrients and water and loosens clay soils. Compost feeds the beneficial soil life so it can feed and protect your plants.



Make compost at home or buy it in bags or bulk

Leaves, chopped stalks, flowers, and grass all make great compost in a pile or bin—just add water to keep it moist and wait 6 months. Vegetable kitchen scraps also make good compost, but should be composted in a worm bin or other rodent–resistant container to prevent pest problems.

Mulch it!

Mulch is a layer of organic material like leaves, wood chips, compost, or grass clippings you spread around your plants. Mulch conserves water, prevents weeds, and feeds the soil for healthier plants. Keep mulch at least an inch away from stems.



Mulch stops weeds, conserves water, and builds healthy soil for healthier plants. Spread mulch several inches deep and 1inch away from plant stems.

Mulch Improves:

- **Flower beds and vegetable gardens: Use 1–3 inches of leaves, compost, or grass clippings**
- **Trees, shrubs and woody perennials: Use 2–4 inches of woody mulches, like wood chips (get from a tree service) or bark. Fall leaves also work well**
- **Lawns: Mulch your lawn? Yes, you can grasscycle (leave the clippings) and spread compost on lawns—see Step 5**

Need fertilizer? Go organic!

Overusing chemical pesticides and fertilizers can damage beneficial soil life, leading to soil compaction and unhealthy plants. Chemicals can also wash off your lawn and garden into streams and lakes, where they can harm fish and other wildlife.

Most trees and shrubs can get all the nutrients they need from the soil and mulching once a year. But annual plants, vegetable gardens, and lawns sometimes need extra nutrients.

When shopping for fertilizers, look for the words "**natural organic**" or "**slow release**" and follow the instructions on the bag. Unlike "quick release" fertilizers, natural organic fertilizers won't wash off into streams so easily, and they'll feed your plants slowly to keep them looking good longer.



Remember, healthy plants grow in healthy soil.



2. Plant Right for Your Site

Get to know your yard

Where is it sunny or shady at different seasons? Dig in a few places to see where your soil is sand or clay, soggy year round or bone dry. Look around – are there plants with problems? Where do you want play areas, vegetables, color, views, or privacy? How much lawn do you need or want to maintain? What kind of plantings would fit your yard?

Choose the right plant for the right place

Select plants that grow well in the Northwest and fit the sun, soil, and water available in your yard. Native plants are best near waterways and also work well on many other sites. Think about how big a tree or shrub will be when mature (especially next to houses or under powerlines). Look around at your neighbors' yards, nurseries, books, and demonstration gardens for plants doing well in sites similar to yours.



Pick plants that resist pests and use less water

Many pest and disease resistant varieties are available now—ask at nurseries or Master Gardener clinics. Choose plants that are "low water use" or "drought tolerant." After they're established (2–5 years) many thrive on our limited summer rainfall, saving you time and money on watering.

Group plants by their needs

Put plants that need full sun, shade, rich soil, or regular irrigation together with those having similar needs. That way you don't have to water the whole yard to reach one thirsty plant!

Lawns and vegetables are picky

They need several hours of full sun, level well-drained soil, and irrigation. Limit lawn areas to where you need them. Other plants are better for shade, soggy sites, or slopes, and require less maintenance.

Give plants a good start

Prepare the soil by mixing 20–25% compost into soil in planting beds. For trees and shrubs, mix compost into the whole planting bed, or just plant in native soil and mulch well. Don't add compost just to their planting holes—that can limit root growth.

Spread out the roots, add water, and tamp soil back in for good root contact. Set plants so the soil level on the stem is at the same height as at the nursery to prevent problems. Mulch new plantings well and be sure to water even drought tolerant plants during their first few summers, until they build deep roots.



Dig a hole twice as wide and deep as the rootball. Spread the roots before planting.

Make Space for Wildlife

You can invite birds, butterflies, and other wildlife into your yard, protect shorelines and fish, and make a more attractive landscape.

- Plant trees and use native plants, especially ones with fruit and flowers
- Avoid exotic plants—check the list of invasive "noxious weeds"at *extension.wsu.edu/kitsap/nrs/noxious*
- Plant in layers (ground cover, shrubs, and trees) so your landscape is like the forest
- Avoid using pesticides and chemical fertilizers—they can poison birds, beneficial insects, and fish when rain washes them into streams
- Provide a bird bath or other small water source
- Leave wild "buffer" areas of native plants along ravines, streams, shoreline, and fencelines

3. Practice Smart Watering for Healthier Plants

Too much of a good thing

Did you know that watering too much or too little is the cause of many common plant problems in our area? You can have healthier plants, save money on water bills, and conserve precious water by learning to give your lawn and garden just what they need, and no more.

Water deeply, but infrequently

Most plants do best if the soil is allowed to partially dry out between waterings. For lawns, a loss of shine or footprints showing indicate it's time to water. Vegetables and other annuals should be watered at the first sign of wilting, but tougher perennials (plants that live several years) only need water if they stay droopy after it cools off in the evening. Trees and shrubs usually don't need any watering once their roots are fully established (2 to 5 years) except in very dry years.

Moisten the whole root zone

Watering deeply builds deeper, healthier root systems. To see if you are watering deep enough to moisten the whole root zone, dig in with a trowel an hour after watering to check the depth.



Soaker hoses save water! Cover them with mulch to save even more.

Make every drop count

Some easy ways to lower water bills and get more water to plants include:

- Build your soil with compost and mulch to hold water and prevent evaporation
- Choose low water use plants—once established they can often thrive just on rainfall
- Use soaker hoses or drip irrigation on beds—they save 50% or more compared with sprinklers
- Use a timer that screws onto the faucet (available at garden stores) to water just the right amount
- Water lawns separately from other plantings—make sure sprinklers aren't watering the pavement too
- Catch roof runoff in a rain barrel for use on gardens.

- When soil is dry or compacted it won't absorb water quickly. If water puddles, stop watering for a while and then restart, so the water has time to soak in
- Water in the early morning or evening —if you water at mid-day, some of the water just evaporates



Water in the early morning or evening to reduce evaporation.

Use automatic irrigation systems efficiently

Automatic systems can actually either waste water or be fairly efficient, depending on how you set and maintain them.

- Have a professional test, repair, and adjust your system annually
- Inspect your system while operating once a month—look for leaks or sprinkler heads plugged or misdirected
- Install a rain shutoff device (ask your irrigation expert where to find them)
- Adjust your watering schedule at least once a month through the season—plants need a lot less water in May and September than they do in July and August



Let the rain soak in

Winter rain rushes off roofs, pavement, and compacted soil. This causes flooding downstream, erodes stream banks, and muddies the water, which harms fish and other wildlife. You can help slow this winter runoff and help the soil hold the moisture plants need in summer.

- Direct downspouts onto lawns and beds or "dry wells"
- Use compost and mulch to reduce erosion and help rain soak in
- Use open pavers, gravel or other pavement options that let rain through and into the soil
- Plant dense strips of native trees, shrubs, and groundcovers next to streams, lakes, and ditches to stabilize the soil and to slow and filter runoff
- Build a rain garden to collect, absorb, and filter stormwater runoff. Get more information at *cleanwaterkitsap.org/Pages/Rain-Gardens.aspx*.

Need Help? For tips on conserving water in your garden, lawn and home, visit Kitsap Public Utility District *kpud.org* | 360.779.7656.

4. Consider Eliminating Pesticides and Herbicides

Did you know...

Pesticides and herbicides may be washed into streams after heavy rains or over watering at levels harmful to fish and wildlife. Overuse of these products can also damage soil and plant health.

Studies find increased health risks among families using lawn and garden pesticides, especially among pets and children. The good news is, you really don't need most of those chemicals.

Start with prevention

- Build healthy soil with compost and mulch—soil protects plants from many disease and pest problems
- Select pest-resistant plants and put them in the conditions they like—sun, shade and soil
- Dispose of diseased plants and compost dead plants in the fall to reduce hiding places for insect pests
- Pull weeds before they go to seed
- Use a variety of plants so if pests attack one plant, others can fill its place

Identify the problem before you spray, squash, or stomp

The problem could really be incorrect mowing or pruning, improper watering, or other easily corrected practice. That scary bug could actually be a beneficial "good bug" that eats problem pests. Whether it's a bug, disease, or weed, you need to identify it to know how to effectively manage it.

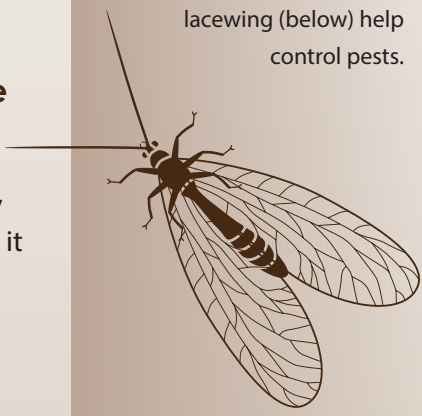
Accept a little damage — give nature time to work

Natural predators often bring pests under control, but they need time to work. Don't spray at the first sign of damage—nature may control it for you or plants often just outgrow the damage.



Most Bugs Are Good Bugs.

Only about 5% of the bugs in your yard are pests. "Good bugs" like the ground beetle (above) and the green lacewing (below) help control pests.



If a pest or weed problem develops, use the least toxic solution

- Physical controls like traps, barriers, fabric row covers, or repellants may work against pests
- Long handled weed pullers pop dandelions out easily
- Mulching once a year reduces weeds in beds
- Less toxic products like soaps, horticultural oils, and plant-based insecticides are available
- Beneficial insects that prey on problem bugs are available for sale, or you can attract these "good bugs" by planting a variety of plants that provide pollen and nectar all year



Long handled weed pullers pop dandelions out easily.



Use chemical pesticides and herbicides as the last resort

If you must use a chemical, use the least toxic product and spot apply it—don't spread it all over the yard to kill a few weeds or bugs.

It may be best to have a professional with all the protective gear do the application, but don't use a service that spreads chemicals over the whole yard or sprays on a calendar schedule. Apply pesticides or herbicides only when and where you really have a problem. Follow label instructions exactly—more is not better. And be sure to keep children and pets out of application areas.

Replace problem plants with pest-resistant ones for a healthier, easier to care for yard

If a plant, even a tree, has pest or disease problems every year, it's time to replace it with a more tolerant variety or another type of plant that doesn't have these problems.



Roses are one example of plants we often use fungicides on to control disease. Ask your nursery for modern, pest and disease resistant varieties, to replace disease-prone plants.

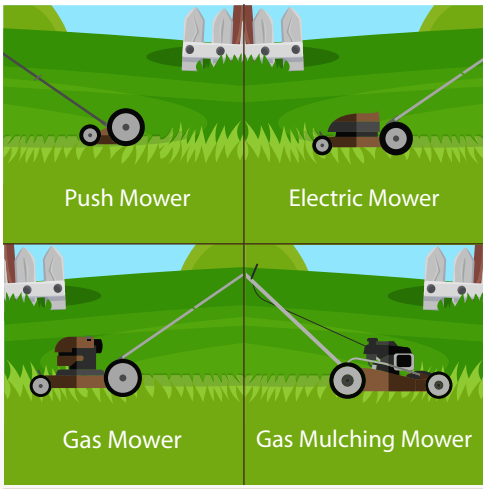
Got a tough pest or weed problem?
WSU Master Gardeners can identify pests, weeds and plant diseases if you bring samples. 360.228.7300

5. Practice Natural Lawn Care

It's easy to put all these steps to work on your lawn, where you often use the most pesticides, fertilizer, and water, produce the most waste, and work too hard!

Mow higher (1-2 inches), mow regularly, and leave the clippings

"Grasscycling," or leaving the clippings on the lawn, doesn't cause thatch build up. It make lawns healthier! Soil organisms recycle the clippings into free fertilizer, and you save all the work of bagging. Mulching lawn mowers make grasscycling even easier.



You can grasscycle with any mower. Push mowers and conventional power mowers leave clippings on the surface to break down. Electric and gas mulching mowers blow chopped clippings down to the soil, leaving a clean lawn.

Use "natural organic" or "slow release" fertilizers

Don't try for a deep blue-green color – healthy lawns in our region are a lighter meadow green.

- The best time to fertilize is September when grass plants are building root reserves for the next year
- If you want to fertilize in the spring, wait until May when grass growth slows
- Follow manufacturer instructions

How Much is 1" of Water a Week?

Scatter tuna cans or other straight-sided containers on your lawn, turn on the sprinkler, and check the time. When most cans have 1 inch of water in them, turn off the sprinkler and check how long it ran. Now you know how long to run your sprinkler each week during the summer.

Water deeply, to moisten the whole root zone, but infrequently

Let the soil dry between waterings to prevent lawn disease and save water. Lawns only need about one inch of water a week during the summer, including rain, to stay green. You can let areas of lawn that don't get heavy wear go brown and dormant—just water once a month and they'll bounce back in the fall.



Improve poor lawns with aeration, over-seeding, and top-dressing with compost

- Aerate in spring or fall to improve root development and water penetration
- Overseed thin areas with Northwest–adapted grass seed blends
- "Top-dress" by raking in 1/4" to 1/2" of compost to cover the seed and improve the soil
- Repeat these steps annually as needed to improve poor lawns



You can rent an aerator or get a yard service to aerate for you.

Consider not using "weed and feed" or other pesticide or herbicide

Accept a few weeds. Crowd out problem weeds by growing a dense, healthy lawn. Use a long-handled weed puller to easily remove dandelions without bending over. Weeding is easiest when the soil is moist. If you want to use weed killer, don't spread "weed and feed" all over, it gets into our streams. Just spot spray the problem weeds.

Honey, I Shrunk the Lawn!

Consider alternatives to lawns on steep slopes, shady areas, or near streams and lakes. Grass grows best on level, well-drained soil in full sun or part shade. It takes a lot of work (and sometimes chemicals) to maintain. Look for other plants better suited to soggy soil, slopes, or heavy shade. Try to leave or plant a buffer of dense, native vegetation along streams and lakes. It will filter and slow runoff, shade and cool the water, provide homes for wildlife, and prevent bank erosion too.

Need Help? For more information visit *KitsapGov.com/pw* | Kitsap1: 360.337.5777.



Natural Yard Care throu

Spring
March – May

Summer
June – August

Flowers and Vegetable Gardens

- Prepare new planting beds and gardens by mixing in 1–3 inches of compost
- Pull weeds when they first start growing, while soil is moist, roots are short, and before they go to seed
- Buy plants that resist disease, and use less water
- Identify problem pests

- Mulch flower and vegetable beds with compost or grass clippings to conserve water and control weeds
- Use fabric row covers to keep pests off sensitive vegetables
- Identify bugs before you spray, squash, or stomp – they may be "good bugs" that eat pests

Trees and Shrub Beds

- Prepare new tree and shrub beds by mixing compost into the entire bed, not just planting holes
- Plant trees in native soil and mulch well

- Mulch shrub and tree beds with wood chips, leaves, or bark once a year to conserve water, reduce weeds, and feed the soil

Lawns

- Mow about 2 inches high for most lawns, or 1 inch for bentgrass lawns. Grasscycle — leave the clippings for free fertilizer
- Aerate, overseed, and top-dress with ½ inch of compost lawns in poor condition
- Fertilize lawns in May, if needed, with "natural organic" or "slow release" fertilizer

- Mow regularly and leave the clippings on the lawn
- Keep mower blades sharp to reduce lawn damage and brown tips
- Consider saving water by letting some lawn areas (ones that don't get heavy traffic) go brown and dormant until fall

Watering

- Prepare sprinkler systems by testing, adjusting sprinkler heads, and repairing leaks
- Lay out soaker hoses in beds and cover with mulch
- Check soil moisture at plant roots before watering – don't water until they need it

- Start and re-check watering systems and adjust for weather. Don't water when it rains
- Water lawns 1 inch per week or let it go brown and dormant—water enough to moisten root zone once a month
- Water at dawn or in the evening to reduce evaporation

Composting

- Harvest compost from your bin
- Throw any uncomposted sticks or stalks back in for another cycle

- Add yard debris to compost pile
- Water compost pile to keep it moist
- Place compost pile in shade or cover it to hold moisture



gh the Seasons!



Fall
September – November

- Pull emerging weeds in beds when ground is moist and before they develop deep roots
- Mulch garden beds with leaves or compost to reduce winter weeds and feed the soil. Plant winter cover crops in open beds
- Prepare new planting areas by digging in compost

- Mulch tree and shrub beds with leaves, wood chips, or bark
- Plant trees, shrubs, and many perennials in early fall to give them a good start

- Improve thin areas of lawns September – October by aerating, overseeding, and top-dressing with compost
- Fertilize lawns with "natural organic" or "slow release" fertilizer in September to develop healthy roots and crowd out weeds
- Plant new lawns September 1 – October 15 to give them the best start before next summer

- Reduce watering for cooler weather
- Shut off and drain watering systems when rains come
- Put away exposed soaker hoses or re-cover with mulch if left out

- Clear out annual garden growth and compost it for spring
- Keep your compost pile as moist as a wrung-out sponge

Winter
December – February

- Rake winter leaf mulch back onto beds if winds blow it off
- Weed beds once during winter to prevent weeds going to seed

- Prune fruit trees and other woody trees and shrubs while they're dormant

Winter is the time to plan for Spring!

- Tune up yard equipment; sharpen mower blades
- Plan drip irrigation or soaker hoses for beds and containers to conserve water
- Check storage areas for any unwanted chemicals and dispose of them safely. Kitsap1: 360.337.5777 or visit *Recycle.KitsapGov.com* for information on proper disposal and transport.
- Plan to replace plants that have disease or pest problems
- Start planning for spring. Request free brochures Kitsap1: 360.337.5777



Want to Know More?

Resources

Check these resources for more information on natural yard care:

- Native plant sale — Kitsap Conservation District *kitsapcd.org* | 360.337.7171
- Master Gardeners Program, WSU Extension *extension.wsu.edu/kitsap/gardening* 360.228.7300
- Water conservation *(indoors and outdoors)* — Kitsap Public Utility District *kpud.org* | 360.779.7656
- Water quality programs — Kitsap County Public Works: Stormwater Program *KitsapGov.com/pw* Kitsap1: 360.337.5777

Publications

Find these publications at *KitsapGov.com/pw* or Kitsap1: 360.337.5777.

- *Curbside compost guide*
- *Rain garden handbook*
- *Enhance your yard booklet*
- *Rain garden care guide*

When it comes to your yard, act naturally!

Thanks to City of Seattle Public Utilities and King County Solid Waste Division for providing content information. Partially funded by the Department of Ecology through the Coordinated Prevention Grant Program

Printed on 100% post-consumer recycled paper

7401 (03/20)



WEST SOUND STORMWATER OUTREACH GROUP

2024 SUMMARY OF ACTIVITIES

TABLE OF CONTENTS

Who We Are 3

2024 Highlights 4

Maximizing Our Reach Through Partnerships 5

General Awareness – Section S5.C.2.a.i 6

Behavior Change - Section S5.C.2.a.ii 7

Stewardship – Section S5.C.2.a.iii 11

Illicit Discharge Detection and Elimination – Section S5.C.5.d.ii 12

Planned Activities For 2025 14

Appendix A: STORM 2024 Annual Report 15

Appendix B: Natural Yard Care Summary 22

2024 Appendix C: WSSOG 2024 Work Plan 49

WHO WE ARE

The West Sound Stormwater Outreach Group (WSSOG) is a regional partnership dedicated to improving water quality through education and outreach. Since 2008, Kitsap County and the cities of Bremerton, Gig Harbor, Port Orchard, and Poulsbo have collaborated to fund, develop, and implement public outreach efforts required by the Western Washington Phase II Municipal Stormwater Permit. In 2012, Bainbridge Island and Port Angeles joined the group, strengthening our collective impact. The U.S. Navy also participates as an informal member.

WSSOG's mission is to collaboratively fulfill the public education and outreach requirements of the Permit while maximizing cost savings and efficiency. By aligning efforts, the organization ensures consistent messaging and meaningful community engagement, ultimately safeguarding local waterways for future generations.



2024 HIGHLIGHTS

WSSOG remains committed to advancing stormwater education and outreach while adapting to evolving permit requirements and regional priorities. Below are key highlights of WSSOG's efforts and accomplishments over the past year.

On July 1, 2024, Ecology issued the latest iteration of the Western Washington Phase II Municipal Stormwater Permit, which remains in effect until July 31, 2029. As part of the ongoing five-year permit cycle, this version continues to evolve to address regional water quality goals and incorporate feedback from prior implementations. While WSSOG successfully met all requirements of the 2019–2024 Permit, the new Permit introduces updates to the requirements impacting education and outreach, particularly in relation to behavior change, public involvement and participation and environmental justice.

One significant change is the updated definition of "overburdened communities" to align with the Washington HEAL Act. This change brings new obligations, including:

- Reporting on how overburdened communities were engaged in public involvement opportunities and the methods used to identify these populations.
- Designing outreach and behavior change campaigns that prioritize overburdened communities.
- Mapping overburdened communities in relation to stormwater infrastructure to ensure their needs are considered in stormwater planning and the development of the Stormwater Management Action Plan (SMAP).

WSSOG will utilize its Overburdened Communities Assessment and Kitsap County Equity Atlas to effectively implement these new Permit requirements and ensure meaningful community engagement.

In the fall of 2024, WSSOG launched an evaluation of its Natural Yard Care campaign to determine whether nutrient reduction should remain a top priority for member jurisdictions. Each jurisdiction assessed the effectiveness of the existing campaign while also identifying their own priority pollutants. Using a structured evaluation process, the group generated a list of potential pollutants and associated behaviors for targeted outreach. Each behavior was rated based on several criteria, including relevance, impact on water quality, influence on overburdened communities, and measurability.

Based on this analysis, WSSOG chose to focus its 2025 campaign on encouraging businesses to close their dumpster lids—an effort aimed at reducing stormwater contamination.

As WSSOG moves forward, its collaborative efforts will ensure that public education, outreach, and stormwater management continue to evolve in ways that protect water quality, engage communities, and align with regional and state environmental priorities.

MAXIMIZING OUR REACH THROUGH PARTNERSHIPS

STORMWATER OUTREACH FOR REGIONAL MUNICIPALITIES (STORM)

WSSOG actively connects to broader regional stormwater education and outreach efforts through participation in the Puget Sound Stormwater Outreach for Regional Municipalities (STORM) partnership. STORM is a collaborative of over 80 Puget Sound Area cities, counties, state agencies and nonprofits working together to understand and reach our shared audiences for clean water actions. STORM uses social marketing strategies using marketing practices for social benefit. This shared approach creates a disciplined and science-based approach to public outreach and understanding of influences on stormwater issues. Through sharing time, resources and projects, we can be more effective, consistent, cost efficient and learn together. STORM's vision is “People living and working in our communities will take actions that protect water quality within the Puget Sound basin.” STORM's mission is “To work together with regional partners to address polluted runoff by advancing broad-scale behavior change.”

Kitsap County represents the WSSOG on the STORM Steering Committee which meets twice a month to work on tasks that guide the regional STORM partnership. The STORM Steering Committee plans and facilitates quarterly STORM partnership meetings and the annual Symposium. WSSOG partners also participate in the STORM Pet Waste Workgroup. Significant accomplishments of the STORM partnership are summarized in Appendix A: STORM 2024 Annual Report.

PUGET SOUND STARTS HERE COMMITTEE

Puget Sound Starts Here is a Puget Sound-wide stormwater pollution prevention awareness campaign that provides recognizable branding and consistent messaging to raise awareness about the impacts of stormwater pollution. Kitsap County represents the WSSOG on the Puget Sound Starts Here (PSSH) Steering Committee. Notable projects accomplished by the PSSH Committee include coordinating a regional PSSH Month digital advertising campaign and bulk purchasing of PSSH branded promotional items.

WORK GROUPS

WSSOG partners also participate in several Washington Stormwater Center work groups. These include the Business Inspection Group (BIG) and the Environmental Justice Work Group.

GENERAL AWARENESS – SECTION S5.C.2.a.i

PUGET SOUND STARTS HERE

Puget Sound Starts Here is a regional effort to raise awareness about actions residents can take to reduce their impact and keep Puget Sound. Local implementation of PSSH included a variety of outreach approaches, including the promotion of Puget Sound Starts Here Month in September. Bainbridge Island issued a proclamation recognizing Puget Sound Starts Here Month.



Many jurisdictions distribute branded promotional items with the Puget Sound Starts Here logo through outreach events, at front desk counters and other mechanisms.

Collectively, these efforts placed over 10,379 Puget Sound Starts Here branded items in the hands of West Sound residents and visitors.

Jurisdiction	Coasters	Pens/ Pencils	Leash Bag Holders	Leash Bag Holder Refills	Bike Safety Lights	Other (Tote Bags, Stickers, etc.)	Total Impressions
Bainbridge Island	1,000	0	200	0	0	100	1,300
Bremerton	1,250	25	20	20	0	0	1,315
Gig Harbor	0	0	100	0	0	0	100
Kitsap County	3,500	0	0	0	0	1,750	5,250
Port Angeles	15	0	32	375	5	398	825
Port Orchard	0	0	0	189	0	1,300	1,489
Poulsbo	0	0	100	0	0	0	100
						Total	**10,379**

PUGET SOUND STARTS HERE MONTH DIGITAL CAMPAIGN

The regional Puget Sound Starts Here Committee coordinated PSSH Month in September. The committee coordinated a digital marketing campaign and jurisdictions were invited to financially participate in the campaign. Bainbridge Island, Bremerton, Kitsap County, Port Angeles, Port Orchard, and Poulsbo invested in the campaign.

This year's campaign focused on vehicle maintenance behaviors, "Don't Wait to Inflate," for Puget Sound Starts Here Month The digital campaign's goals were to drive people to the PSSH website and encourage them to learn more about how to check their tire pressure and the importance of maintaining proper tire pressure.



The campaign combined a digital video and digital display ads and were shared on Facebook, Instagram and YouTube.

The campaign's audience were adults aged 18-64 in the Puget Sound region. The ads were run in English, Spanish, Korean and Vietnamese. A portion of the ad budget was allocated towards targeting overburdened communities using factors such as income, education, people of color and/or those who speak limited English.

PUGET SOUND STARTS HERE TRADITIONAL ADVERTISING

The WSSOG actively participated in the Puget Sound Starts Here campaign through diverse outreach efforts. Member jurisdictions displayed the PSSH banner on their websites, engaged with the public at community events, and promoted key stormwater messages, including proper tire inflation to reduce pollution.

BEHAVIOR CHANGE - SECTION S5.C.2.a.ii

WSSOG coordinates two behavior change campaigns: the long-standing Mutt Mitt Program and the Natural Yard Care Campaign.

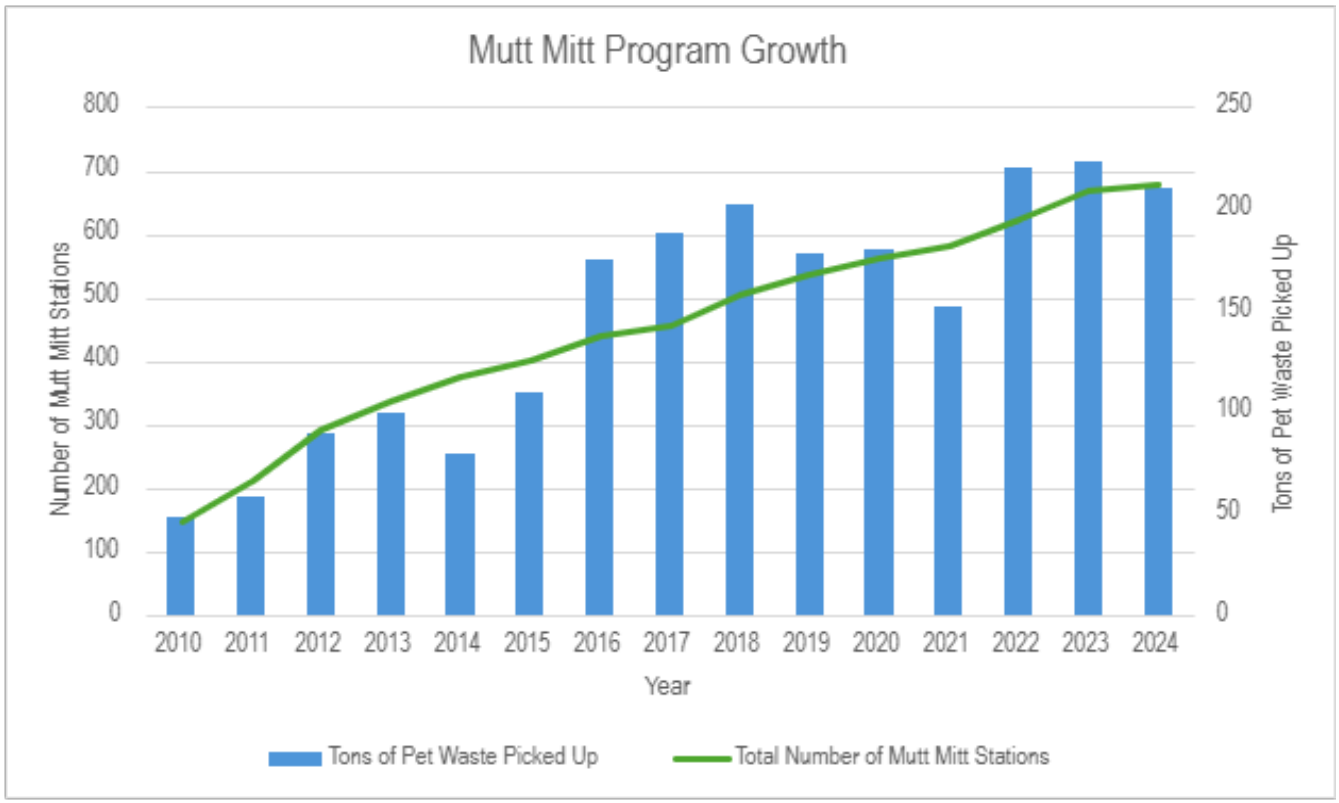
PET WASTE IN PUBLIC AREAS – MUTT MITT PROGRAM

In 2009, the WSSOG identified pet waste pick-up and proper disposal as a key behavior for reducing bacteria pollution in stormwater and surface water and adopted a successful and collaborative regional Mutt Mitt Program. Efforts related to this key behavior have continued annually and the program continues to be a primary behavior change campaign for the WSSOG. In 2014, the WSSOG conducted a survey that focused on two target audiences: Mutt Mitt station sponsors and Mutt Mitt station users. The report identified strategies to improve the Mutt Mitt Program, which were implemented in 2016. The Mutt Mitt Program continues to grow steadily and currently comprises 680 stations that have been distributed throughout the county and WSSOG partner cities. On average between 20-40 stations are added annually.

In 2024, the cities, County and residents that participate in the program distributed a total of 1,269,999 pet waste disposal bags. This effort represents 210 tons of dog waste diverted from the natural surface waters of Kitsap County.



Dog walkers depend upon stations that are reliably stocked with bags to help them adopt this behavior. It is essential that Mutt Mitt branded stations are continuously stocked and in good working order. Kitsap County typically conducts inspections of all Mutt Mitt stations located within Bainbridge Island, Bremerton, Port Orchard and Poulsbo on an annual basis and all other stations located within the County on a biennial basis



TALKING (AND TOSSING) POOP FOR WATER QUALITY

In 2024, the popular Poop Toss game continued to draw crowds at public events, using humor to spark conversations about responsible pet waste disposal, an often-avoided topic.

Featured at community events like PetsWalk (Poulsbo and Kitsap County), the Bainbridge Island Boaters' Fair, and the Clallam County Fair, the game engaged participants of all ages while reinforcing key environmental messages. At the Clallam County Fair alone, Port Angeles connected with approximately 885 attendees, while Kitsap County and Poulsbo reached 432 people at PetsWalk.

Participants not only learned proper pet waste disposal practices through play but also received a Puget Sound Starts Here branded clip-on bag dispenser, a practical tool that serves as a lasting reminder of their commitment to keeping waterways clean. In total, the game helped jurisdictions engage over 1,300 residents, making pet waste education both fun and impactful.

NATURAL YARD CARE CAMPAIGN

Per the requirements of the 2019-2024 Permit, the WSSOG looked at their current behavior change campaign and based on trends and the Backyard Pet Waste campaign evaluation, elected to develop a behavior change campaign focused on a new target audience and BMP. The group selected nutrient reduction as the goal, and improper/ combination fertilizer use as the new BMP, targeting homeowners who perform DIY-yard care. The group hired a consultant in 2019 and developed a new social marketing campaign to target this BMP.

The new Natural Yard Care campaign was set to pilot in 2020, however due to COVID-19 the pilot was postponed. As a pivot, the group elected to conduct additional research on the priority audience, barriers and potential ways to address these barriers. The consultant recruited respondents to participate in a paid research study to learn what barriers are discouraging people from choosing natural yard care over conventional methods. The barriers identified were cost and lack of information (about how natural lawn care products work and where to purchase the products). The study also found that Kitsap residents are interested and receptive to online Master Gardener events. Lastly, the study found that the target audience is concerned about the safety of chemical fertilizers on their kids and pets. The campaign and marketing strategy was designed based on the study's findings.

The Natural Yard Care behavior change campaign was piloted in Poulsbo in 2021 and expanded to the rest of the County in 2022. In 2023, the campaign ran during peak fertilizer season (spring/summer) and included three natural lawn care webinars hosted by WSU Kitsap Extension Master Gardeners; a tabling event at Bremerton City Nursery; an organic fertilizer discount offered through a partnership with six retailers; and campaign communications including a Facebook ad campaign, a postcard, e-

newsletters, social media, and utility bill messaging. In accordance with the Permit, Kitsap worked with a consultant to evaluate the effectiveness of the campaign and identify successes or develop recommended changes to the program to be more effective. The evaluation report summarizing the changes in understanding and adoption of targeted behaviors resulting from the implementation of the strategy and any planned or recommended changes to the campaign was completed in February 2024. Based on the results of the evaluation report, Kitsap decided that 2024 would be the last year it would implement the NYC Campaign, and elected to select a new pollutant, behavior and target audience. In spring/summer 2024, the campaign ran with modifications per the evaluation. It included three webinars, one in person event. The full results are available in Appendix B: Natural Yard Care Summary 2024.

At the end of the 2024 NYC Campaign, the WSSOG began the process of selecting a new social marketing behavior change campaign. They selected bacterial pollution reduction as the goal, and encouraging businesses to keep dumpster lids closed as the best management practice (BMP). The group plans to hire a consultant in 2025 to help develop and implement the strategy and schedule for the new social marketing campaign to target this BMP.



STEWARDSHIP – SECTION S5.C.2.a.iii

Each partner jurisdiction offers stewardship opportunities that empower residents to take part in activities and events aimed at protecting and restoring surface waters, streams, and riparian corridors while fostering a strong sense of community connection.

CREATIVE WAYS TO ENGAGE

- Port Angeles participated in community events, including the Clallam County Fair and Dry Creek Elementary's *STEM Like Me* event.
- Poulsbo hosted over 300 attendees at the inaugural Earth Day celebration and 450 visitors at Poulsbo Fish Park for Salmon Tours.
- Port Orchard assisted with the Sinclair Clean-up event in both spring and fall.
- Bremerton engaged with 30 fourth and fifth graders in the *Highly Capable* program at Kitsap Lake Elementary.
- Bainbridge took part in the annual Beach Clean-up event in September.
- Gig Harbor partnered with Harbor WildWatch for stewardship opportunities and supported the salmon counting logbook at Donkey Creek Park.
- Kitsap County sponsors Stream Stewards and Salmon Docent Training programs which provide residents with opportunities to participate in activities and events that protect and restore surface waters, stream and riparian corridors and cultivate community connection. The training culminates with the opportunity to become a docent at the annual Kitsap Salmon Tours event, giving trainees the chance to share what they've learned with the public. Kitsap Salmon Tours is an annual event, held in November at seven steam sites across the county where the public can explore all things salmon with biologists, local organizations and trained docents. Salmon Tours provides the public with an opportunity to experience salmon in their habitat while learning about the sources and impacts of stormwater pollution.





ILLICIT DISCHARGE DETECTION AND ELIMINATION – SECTION S5.C.5.d.ii

All Permittees are required to implement an ongoing program designed to detect and identify non-stormwater discharges and illicit connections to the Permittee's Municipal Separate Storm Sewer System, or MS4, including a publicly listed and publicized hotline for reporting spills and other illicit discharges.

SPILLS HAPPEN

All WSSOG jurisdictions have a publicly listed hotline, telephone number and/or app for reporting spills and other illicit discharges. Kitsap County, Bainbridge Island, Bremerton, Poulsbo, and Port Orchard share the Kitsap1 phone number and SeeClickFix app. Gig Harbor also utilizes SeeClickFix.

WSSOG shares common branding and publicity through a tagline and graphics called *Spills Happen*. This catchy phrase and graphics are intended to bring awareness and encourage residents to report spills. The partners post their spill reporting phone numbers and apps on their websites as well on print materials.



WSSOG utilizes outreach methods, including:

- Bainbridge Island publicizes their spills hotline and promotes the *Spills Happen* messaging on their City webpage, in their Stormwater Management Program Plan, and at their City Hall lobby display and front counter. They also shared spill reporting information at the Bainbridge Island Boater's Fair.
- Bremerton features the *Spills Happen* branding on one sweeper truck and two signs downtown near the large parking garages. They also distributed Spills Happen branded paint sticks to remind community members to properly dispose of paint waste.
- Gig Harbor publicizes their spills hotline and promotes the *Spills Happen* messaging on their City webpage and provide branded magnets at the Civic Center and to businesses Source Control inspections.
- Kitsap County displays the *Spills Happen* graphics on three spill response trailers. The spill reporting hotline phone number is also on their spill response truck.
- Port Angeles promoted the program in their Stormwater Rains Utility Mailer which is sent to 11,278 utilities customers.
- Port Orchard publicized Spills Happen branding and promoted SeeClickFix and Kitsap 1 on their website, a public facing message board (in City Hall), on Facebook, handed out educational flyers, including spill, pressure washing, painting and IDDE pamphlets and 100 fridge magnets to interested parties.
- Poulsbo distributes *Spills Happen* magnets at City Hall and stocks field staff's vehicles with BMP pamphlets to hand out to residents as needed.

SPILLS REPORTING CALLS

A total of 92 spill complaints were received in 2024. Of those, 45 came in via Kitsap1 phone number, 15 via Kitsap1 email, and 32 spill complaints were reported through the SeeClickFix app or web-based reporting form. (Kitsap County – 64, Bremerton – 14, Bainbridge Island – 2, Port Orchard – 8, Poulsbo – 4).





TRAINING PROGRAM

Jurisdictions coordinate an ongoing training program and follow up trainings to their field staff on how to recognize, respond to and report spills (S5.C.5.d.iii). WSSOG reported the following trainings held in 2024:

- Bainbridge Island – Provided on the job spills training for operations and maintenance staff.
- Bremerton – As part of the City's staff training program, 15 employees completed Municipal StormWatch training in 2024. Two City team members completed IDDE: A Grate Concern.
- Gig Harbor – Conducted spills training for 20 Public Works employees.
- Kitsap County – A total of 261 staff were trained in 2024, both online and in-person, which includes 30 Kitsap County Sheriff's officers who took the online training.
- Port Angeles – The city held a CESCL recertification training for 42 field staff.
- Poulsbo – Held a refresher training for 18 Public Works employees.

PLANNED ACTIVITIES FOR 2025

WSSOG has implemented all required actions under the Education and Outreach sections of the Permit. In 2025, the WSSOG will continue to collaborate and work on improving water quality through education and outreach. The WSSOG 2024 Work Plan is included in Appendix C.

Activities planned for the upcoming year will include maintaining and improving the programs outlined in the WSSOG 2025 Work Plan adapting it as necessary to meet Permit and program objectives. WSSOG plans to conduct the following new activities in 2025:

- Design and implement a new dumpster behavior change campaign.

- Implement a new Mutt Mitt station mini trash can pilot and design new MM station signs that promote proper pet waste disposal.

APPENDIX A: STORM 2024 ANNUAL REPORT

STORM

STORMWATER OUTREACH FOR REGIONAL MUNICIPALITIES

2024 ANNUAL REPORT

About STORM

STORM is a coalition of city and county governments working together to improve the health of our communities and protect our lakes, rivers, streams, and Puget Sound. The coalition supports efforts to meet the Education and Outreach requirements in the Washington Municipal Stormwater Permits.

STORM's Vision: People living and working in our communities take actions that protect water quality within the Puget Sound Basin.

STORM's Mission: Work together with regional partners to address polluted runoff and stormwater impacts by advancing broad-scale education & outreach and behavior change initiatives.

If your municipality would like to join STORM, or receive our updates, send your request to Anne Melrose, Statewide Municipal Stormwater E&O Coordinator, *anne.melrose@wsu.edu*.

Check out the STORM Resource Reservoir at *pugetsoundstormgroup.org*.

2024 STORM by the Numbers



78 participating jurisdictions

210 members





300+ attendees at STORM events

3,700 downloads from the Resource Reservoir





2024 STORM Symposium

2024 STORM Symposium Highlights

It was wonderful to see so many new faces and long-time STORMers at the 2024 Annual Symposium! Over **68** colleagues met to share ideas, learn and inspire each other. The bomb cyclone put a new spin on the title "STORM" Symposium. Despite the weather bomb messing with our lunch order, we had a successful event with an amazing line up of guest speakers and topics. Thanks to Mary Rabourn with King County and Becca Bolettieri with Kitsap County for the generous array of delicious snacks that carried us through the day!



We kicked off the Symposium presentations with **Ann Grodnik-Nagle**, Senior Policy Advisor in Climate Adaptation and Built Environment at Seattle Public Utilities. Anne explained climate change as an impact amplifier. Meaning we will experience more flooding, extreme storms (like bomb cyclones), sea levels rise, stress on water supplies, wildfire risks and urban heat island effects. While recognizing these impacts will hit the most vulnerable communities the hardest. Seattle's climate action strategy is a community centered, one water approach focused on climate justice, climate adaptation and climate mitigation. The approach includes collaborating with frontline communities bearing the brunt of climate impacts to develop equitable climate strategies. Also adapting systems and operations to climate impacts and reducing greenhouse gas emissions in their citywide operations. Seattle is using scenario planning and climate modeling to project a range of future outcomes with a goal of making better climate informed decisions while working within the uncertainty of climate change. Current work includes nature-based strategies such as floodplain restoration, creating resilience districts to address systemic vulnerabilities and inequities, and developing GSI RainCity partnerships and projects.

Next, **Simone Des Roches** and **Jessica Sandoval** researchers with the Washington Department of Fish and Wildlife (WDFW) discussed findings from the first year of a multi-year project. The project is studying the potential for stormwater ponds to provide suitable habitat for Washington's native wildlife. In collaboration with city and county partners from the Cities of Olympia and Tumwater to the City of Bellingham, the hope is to learn how stormwater ponds can be created and managed to help address biodiversity loss, especially in urban centers.

The research team surveyed amphibians, birds, and beavers in over 200 stormwater ponds in the Salish sea watershed. Birds, from waterfowl to warblers, were identified visually or by their calls and songs. Frogs, salamanders, and fish were captured using dip-nets or small minnow traps, identified, counted, and released. Native amphibian species like the northwestern salamanders and the northern red-legged frogs were encountered frequently; however, so were invasive species including the American bullfrog and green frogs. Preliminary results of the study are encouraging, showing that conditions in many of our local stormwater ponds promote biodiversity. The research team will continue to collect data next year to help understand how essential urban infrastructure can promote pond biodiversity and access to wildlife for Puget Sound residents.

Late morning, we introduced our behavior change panelists **Laurie Deveraux** - City of Bellevue, **Cammy Mills** - Kitsap County , **Peggy Campbell** - Snohomish County and **Jess Huybregts** - City

2024 STORM Symposium Highlights *(continued)*

of Seattle. Each panelist shared their lessons learned and unique experiences with four different behavior change campaigns implemented during the prior Permit cycle.

Cammy started us off with a social marketing primer and followed up with reflections on Kitsap's Natural Lawn Care Program. Cammy walked us through the important exercise of choosing a campaign focus. Sharing a strategic methodology adopted from social marketing experts Nancy Lee and Doug McKenzie-Morh.

Peggy shared a comprehensive overview of Snohomish county's RainScaping Program focused on Low impact development principals and best management practices. She walked us through "Development" including strategy, timeline, GIS Analysis and audience research which revealed key insights. "Launch" including guide & materials, website, expo & workshops. "Evaluate" including expo & workshops, site visits, evaluation. "Report" including lessons learned.

Laurie shared highlights from the Dumpster Lid Campaign focusing on why dumpster lids were selected, audience research and interventions and the evaluation process. Lessons learned included the benefits of regional collaboration, using survey monkey for data collection and you don't always know who the "make me's" are. Campaign materials can be found on the Washington Stormwater Center's website.



Jess wrapped up the panel with Seattle's Adopt a Drain behavior change campaign, focusing on how the program was designed to meet each evaluation objective and question in the Permit. She covered participant recruitment, survey design, partnerships, metrics and lessons learned. Explaining how the program was modified to fit Seattle's program priorities and engage historically underserved communities.

In the afternoon, **Parker Lynas**, King County's NextGen Climate intern gave a *presentation on his "Clean Water Connects Us All"* campaign about community and health. In 2024, Parker explored communications and how using clean water as the foundation for actions might connect communities to health, the environment and climate resilience. He tested messaging at events using a splash pad for cooling off in White Center, touring of Renton's stormwater infrastructure with members of ethnic media, learning social marketing basics and through partners' artwork. Parker investigated how to connect to an audience's feelings about health, sense of place and water, and how actions might create community. People act when they feel connected to the message, and he tested how the presence of people and art in messaging made a difference. He will be continuing his work in climate resilience and communications in his final work at the Evans School.

Our final presentation featured **Nancy Hardwick** of Hardwick Research. She shared her insights on how to develop program evaluations from start to finish. She covered topics including survey design, focus group moderation and qualitative and quantitative research as well as innovative data collection techniques.

Want to learn more? You can find our panelists presentations on the ***STORM Resource Reservoir***.

Puget Sound Starts Here & Ethnic Media Tour Update

Thank you to all the campaign contributors! The 2024 clean water awareness campaign took a new approach this year. The start date was delayed (contracting and payment challenges) but continues into 2025. The approach included:

- digital marketing using the audience details called out in the NPDES Municipal Permit for Phase 1 and 2 Permitees,
- advertising to those contributor zip codes,
- hosting an ethnic media event Nov 18 touring Renton stormwater infrastructure and examples of community benefits,
- introducing media to the 6PPD issue gathering survey feedback,
- combining budgets with King County to test outreach tactics.



Media folks were very interested when Jenee Colton, speaking for King County's Science Section at the Cedar River stop, talked about tires, 6PPD and its impacts on salmon. There was an audible reaction when we highlighted the active storm drain flushing runoff from the highway into the river. The survey responses echoed feedback from previous media surveys about who communities trust and underscores the value of working with trusted partners.

From the survey: They trust those who speak their language, understand their culture, and provide useful information that meets their needs

There will be a project summary early February for our partners.

2024 Trainings and Professional Development

Quarterly meetings through the year focused on providing networking opportunities, skill shares, and trainings covering a variety of topics.

Thank you 2024 Quarterly Presenters!

- **The Radish Project** - Daniel Feinberg
- **Evaluation for Reporting** - Nancy Hardwick
- **Don't Wait to Inflate Campaign Report** - Karen Rich
- **Social Connections: Learning & Adapting as Social Media Evolves** - Warren Kagerise
- **Intro to Social Marketing** - Brooke Tully

We hosted a **Drips and Drops** (informal virtual learning session) on Oct. 8, 2024 with Abbey Stockwell, the Phase ll Municipal Stormwater Permit Writer from Ecology. She provided an hour webinar to about 35 STORM members to discuss changes that were made in the recently released Municipal Stormwater Permit. It was a wonderful opportunity to ask questions about behavior change requirements and gather clarity on other education and outreach pieces of the new permit.

Finally, we offered the following trainings:

Nancy Lee led two 2-day workshops that walked about 30 participants through the steps of creating a Social Marketing Campaign, with homework in between!

Culture2Culture Training & Consulting held two Government to Government workshops with Pam and Gordon James. They shared history and considerations on how to work together with Tribes, teaching about traditional and cultural perspectives, legal impacts, Tribal Sovereignty and Tribal Governments to over 80 participants.

2024 STORM Work Groups

STORM work groups are created on an ad hoc basis and facilitated by STORM members. They are member-driven and self-directed. The formation and focus of work groups often aligns with new permit requirements, initiatives of the STORM Steering Committee or from requests by STORM members.

Work group participation is voluntary and based on the interest of individual members. These groups tend to be task-oriented and may have end dates. Work group members determine their structure and function, meeting frequency, work plans and decision-making.

Pet Waste

In 2024, 25 members from 19 jurisdictions participated in the Pet Waste Work Group. The group met three times to share various approaches to Pet Waste Management and Outreach, discuss development of a 'toolkit', and gauge interest in shared grant applications for updating audience research in our region. The group will continue to meet in 2025 – contact Cammy Mills at ***cmills@kitsap.gov*** or Carston Curd at ***carston.curd@snoco.org*** to join.

Concrete

The Washington Stormwater Center has run a Concrete Workgroup in 2024 to work on developing outreach materials to address issues around truck washout into storm drains. Several STORM members have joined the effort and if anyone else finds concrete an issue in their jurisdiction and would like to join the group contact Anne Melrose at ***anne.melrose@wsu.edu***.



Adopt-a-Drain (AAD)

Washington's Adopt-a-Drain (AAD) coalition continued to grow in 2024. We are now 21-members strong, with several new partners in Central Washington (Yakima County) and SW Washington (Clark County and several cities) joining the Puget Sound pioneers. Since we launched in 2021, almost 1,900 individuals, families, and businesses in Washington have "adopted" more than 3,100 catch basins. Volunteers have reported that they prevented almost 35,000 pounds of sediment, leaves, twigs, garbage, pet waste, recyclables, and other materials from clogging or falling into the MS4 since 2021. In 2024, alone, volunteers removed more than 14,500 pounds of debris from around adopted drains.

In 2024, we boosted our Spanish language outreach, through community events, radio, TV, social media and printed materials. The social media toolkit and videos in both English and Spanish is on the Washington Stormwater Center website. Seattle and Duvall also successfully reported to Ecology how Adopt-a-Drain performed as a behavior change campaign.

It's not too late to join the AAD coalition! Help us reach 5,000 adoptions! For more information, please contact Halley Kimball at ***Halley.kimball@maplevalleywa.gov*** or Ann Zawistoski, Director of Adopt-a-Drain & Community Outreach, ***azawistoski01@hamline.edu***.

STORM Steering Committee



Marisa Allison
City of Kirkland

Marisa (she/her) is a new STORM Steering Committee member this year, joining the government stormwater sector after years of working for nonprofits. She's motivated by the opportunity to collaborate with the team and cultivate meaningful change in our communities.



Rebecca Bolettieri
Kitsap County

Rebecca (Becca, she/her) is the Stormwater Education and Outreach Coordinator for Kitsap County's Stormwater Division. A recent transplant from Georgia, she enjoys contributing her skills in creative writing and community involvement to STORM.



Laurie Devereaux
City of Bellevue

Laurie (she/her) has worked for Bellevue Utilities for 22 years. Her favorite thing about STORM is that it is a constant source of knowledge and inspiration.



Bryan Hatchell
City of Bellingham

Bryan (he/him) has run environmental outreach campaigns for the past 8 years. As a new STORM Committee member, he is excited to form new connections and break down barriers to information as we promote behaviors that make our stormwater cleaner.



Susan McCleary
City of Olympia

Susan (she/her) is hitting her ten-year mark with the City of Olympia. She is continuously astounded by the passion, excellence, drive and collaborative nature of the stormwater professional community. It has been the most inspirational, productive and beneficial part of her public career.



Mary Rabourn
King County

Mary (she/her) has spent over 30 years in public service, specializing in E&O around hazardous waste small quantity generator info, pesticides, stormwater, multicultural projects, PIO, and more.



Ry Yahn
City of Seattle

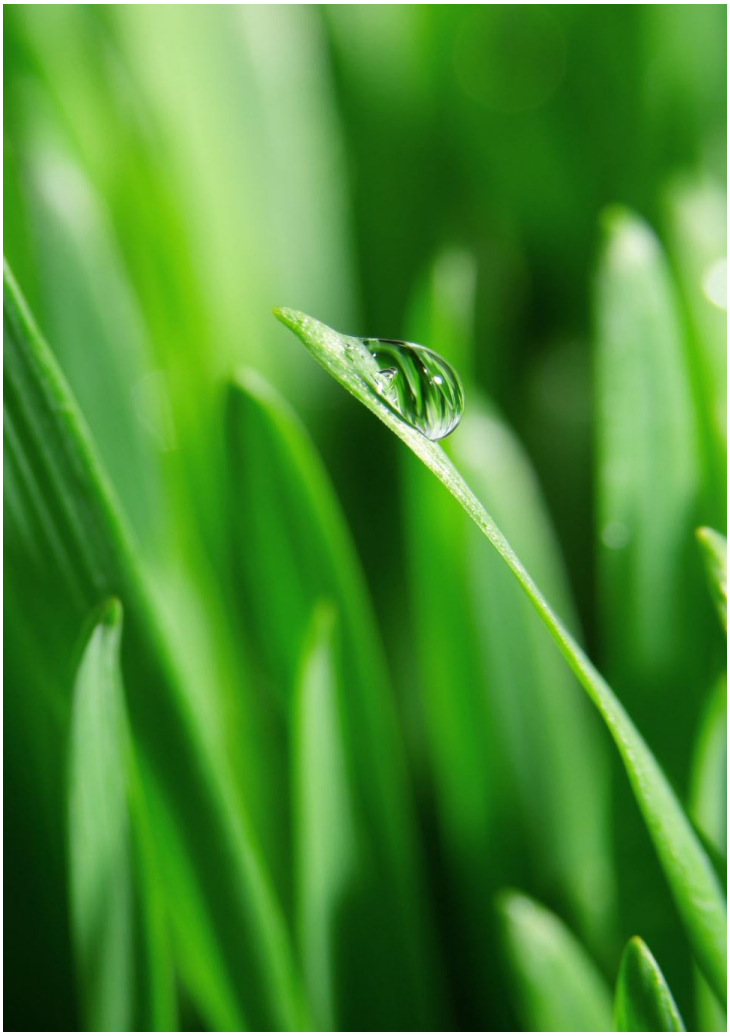
Ry (they/them) is a new STORM Steering Committee member. They are passionate about working with communities to prevent stormwater pollution and promote stewardship of local waters.



Anne Melrose
Washington Stormwater Center

Anne (she/her) spent a decade doing E&O in California. Now she has moved north into the rain of the NW to work on stormwater issues. She is inspired by the STORM Steering Committee and all that they do.

APPENDIX B: NATURAL YARD CARE SUMMARY 2024



NATURAL YARD CARE SUMMARY 2024

Prepared by:

Cammy Mills
Kitsap County Public Works

Contents

Executive Summary....2
Background/Strategy....2
Campaign Summary....3
Evaluation....3
Campaign Evaluation....3
2024 Evaluation....4
Advertising....4
Social Media....4
Postcard....5
In Store....6
Webinars....6
Webinar evaluation....6
Coupon Use....12
Hands-On Event....12
Post-Campaign Decision Making....13
Appendix A....15
Appendix B....19
Appendix C....24

Executive Summary

The **Natural Yard Care campaign**, implemented by the West Sound Stormwater Outreach Group (WSSOG), successfully engaged residents across its jurisdictions through webinars, advertising, and partnerships with local retailers. Key highlights include:

- **High webinar satisfaction:** 84% of respondents rated the webinars a 7 or higher in meeting their expectations.
- **Behavior change progress:** 33% of post-webinar respondents reported planning to use natural/organic lawn care products, compared to 22% of attendees.
- **Advertising success:** The campaign reached over 367,000 people through social media, with a 63% increase in link clicks compared to 2023.

Despite these successes, challenges remain:

- **Low survey response rates** (36%) limited the ability to generalize findings.
- **Geographic gaps:** Port Angeles was underrepresented among registrants.
- **Barriers to adoption:** Concerns about weed control and slower results hindered confidence in using natural products.

Background/Strategy

The West Sound Stormwater Outreach Group, or WSSOG, is a multijurisdictional partnership between Kitsap County and the Cities of Bainbridge Island, Bremerton, Gig Harbor, Poulsbo, Port Angeles, and Port Orchard. The group works together to improve water quality by reducing pollutants in stormwater runoff, which are a major source of pollution to local waterways and the Puget Sound. The following report details results and findings from the second-year implementation of the Natural Yard Care campaign.

This program satisfies the current Western Washington Phase II Municipal Stormwater NPDES permit to affect behavior change (S5.C.2). Planning for the program began in 2018, and the pilot occurred in 2021. In 2022, the campaign was expanded to all the WSSOG-member jurisdictions and full implementation continued through 2024. The following activities were conducted through the multi-year effort:

- **Social Marketing Sessions/Campaign Planning** - The WSSOG conducted five social marketing planning sessions to define key project elements, including the campaign's focus on getting residents to reduce the use of chemical fertilizers on their lawns.
- **Initial Audience Research -** Research was conducted to better understand the priority audience's perceived barriers, benefits, and motivators in relation to the desired behavior.
- **Creative Development and Testing -** Based on research findings, creative concepts were developed then tested among the priority audience.

- **COVID-19 Pivot to Research** - Due to COVID-19, the 2020 pilot was delayed to 2021. While the pilot was delayed, additional research was conducted to further refine planned campaign tactics and messaging.
- **Pilot Campaign in Poulsbo** – A pilot was conducted in Poulsbo during peak fertilizer season in spring 2021, and included webinars hosted by WSU Kitsap County Extension Master Gardeners; an organic fertilizer discount offered through a partnership with a local retailer; and campaign communications including a Facebook ad campaign, a postcard, and government delivery channels such as e-newsletters, organic social media, and utility bill messaging.
- **Campaign Expansion** – 2022 - 2024, the campaign was expanded to include all WSSOG jurisdictions. Natural lawn and yard care webinars were hosted by WSU Kitsap County Extension Master Gardeners; an organic fertilizer discount was offered at local nurseries locations; and campaign communications included a postcard mailer, Facebook ad campaign and local government delivery channels. In 2024, a hands-on event was added. In-store advertising for coupons was also added in 2024.
- **Completion of High Level Evaluation** – In 2023 and 2024, Kathryn Owen Consulting was contracted to develop, implement and interpret a thorough evaluation of the effectiveness of the campaign and offer recommendations for improvement.

The current campaign strategy focuses on encouraging the adoption of natural lawn care techniques by offering coupons to residents in WSSOG jurisdictions to by natural/organic fertilizer at participating retailers. This is supported by natural lawn care webinars offered by Kitsap Master Gardeners, a hands-on natural lawn care demonstration event, and follow up email support from Master Gardeners for those interested.

Campaign Summary

Evaluation

Campaign Evaluation

Kathryn Owen consulting conducted a thorough evaluation of the effectiveness of this campaign during 2023 and 2024. (The evaluation was completed by March 2024. This left the WSSOG with limited ability to incorporate recommendations into the 2024 campaign.) Key findings are below.

Nearly half of respondents are interested in the target behavior: stopping weed and feed

Roughly 40% of survey respondents indicated an interest in adopting the target behavior of stopping use of weed and feed-type fertilizer and switching to natural/organic. Very few (5%) were uninterested in using organic fertilizer, though a third said they didn't want to use *any* fertilizer products.

Respondents found the ads compelling and a third said they would influence their lawn care behavior

Respondents (both with and without children or pets at home) found the ad campaign very compelling, citing the images of things they care about – in particular, protecting marine life and Puget Sound, and protecting their children and pets. A third said the campaign ads were "likely" or "very likely" to influence their own lawn care practices. Just under 30 people attended a webinar on natural yard care. While response rates were too low to make confident predictions about the impact on attendees as a whole, most of those who did respond had, six months later, taken steps towards natural yard care including stopping the use of weed and feed.

Participating nurseries and garden centers are interested in future events, and raised a few suggestions

All of the retailers interviewed after the campaign were interested in participating in future events and campaigns related to natural yard care. Some raised suggestions for future promotions, including changing the discount to a flat fee rather than a percentage, having discount coupons available on days when there is a workshop or demo on natural lawn care, and collecting additional info to find out whether the coupon is generating new customers for the retailers or new users of organic fertilizers.

Overall, responses showed significant interest in natural yard care & the topic of alternatives to lawns

Many respondents are taking additional natural yard care steps at home, such as setting the lawnmower higher, weeding by hand, overseeding with clover, etc. There was substantial interest in learning how to control weeds/invasive plants without toxic chemicals, which was a barrier for many in terms of consistently use of organic products. There was also substantial interest in alternatives to grass lawns.

A three-page summary of this evaluation, prepared by Kathryn Owen Consulting, is in Appendix A.

2024 Evaluation

Evaluation of the 2024 campaign was conducted through pre and post webinar surveys, engagement metrics from advertising efforts, and coupon use.

Advertising

Social Media

The webinar, coupon, and in-person event ad sets each featured two ads with different copy to A/B test, with one set of copy from the 2023 campaign. The ads encouraged residents to reduce pollutants in stormwater by signing up for a $15 coupon discount on organic or natural fertilizer, and to attend webinars and an in-person event to learn about spring lawncare tips from Master Gardeners.

The campaign reached a total of 367,138 people and received 10,948 link clicks, a 63% increase in link clicks from the 2023 campaign (6,691). This increase can be attributed to a variety of factors including incorporating interest targeting, expanding the ads set to 3 (6 ads overall) to test and therefore reach a broader audience using different messaging, and adding Instagram, exposing the

ads to a larger audience. Additionally, adjusting CTA copy from “Get 25% off” to “Get $15 Off” and incorporating more direct, actionable messaging (e.g., “Make the healthier, safer choice”) may have also made the offers more compelling, contributing to higher link clicks.

For full results of the digital ad campaign, please see the report prepared by C+C in Appendix B.

Postcard

Jurisdiction	Relative Population	# Allocated	# Actual submitted with duplicates removed
Unincorporated Kitsap County	59.20%	8880	9142
Bremerton	14.00%	2100	2088
Bainbridge Island	8.20%	1230	1249
Port Angeles	6.50%	975	1030
Port Orchard	4.80%	720	558
Poulsbo	3.70%	555	553
Gig Harbor	3.60%	540	521
Extra for distribution at events		500	500
TOTAL	**100%**	**15000**	**15141**

Table 1 - Postcard Mailing by Jurisdiction

Postcards were sent out to advertise the webinars and which also served as a coupon. Each jurisdiction selected its mailing area based on locally relevant criteria. Some factors considered were proximity to water, lot size, and whether the area had received a mailing in the past. Return rate of postcard coupons is discussed in the coupon section.



Image 1 - Front of Postcard

In Store

Based on requests received from retailers for in store advertising a flyer was developed including a QR code link to the coupon, see Image 2. This may have helped contribute to a higher number of coupon redemptions in 2024. However, the challenge with offering in-store coupons is that, like other coupon promotions, it is not possible to discern whether coupon users are changing their behavior or simply using the coupon to purchase a product they already use.



Image 2 - In-Store Coupon Ad

Webinars

A total of three natural lawn care webinars were held on 4/20/2024, 4/27/2024 and 5/1/2024. One hundred two (102) unique individuals registered for these events. (Some people registered for multiple events but were only counted once.) A total of 51 unique individuals attended the sessions.

Webinar evaluation

Evaluation of the webinars was comprised of a set of questions that registrants answered as well as a post-webinar evaluation. The evaluation provided valuable information about the characteristics of those who registered for the webinar (referred to as "registrants") and those who attended (referred to as "attendees"). However, because the post-webinar was administered through a different tool, before and after results could not be obtained for individual attendees. Those who took the post-webinar survey are referred to as "respondents."

Eighteen (18) webinar attendees completed post-webinar evaluations, a 36% response rate. Their responses to the survey are below. Because of the low response rate, results should be considered qualitative rather than quantitative.

Satisfaction

Overall, the webinar was well-received. A significant majority of respondents (84%) rated the webinar a 7 or higher in terms of meeting their expectations. Similarly, a large portion of

respondents (72%) indicated they were likely to recommend the webinar, rating it an 8 or higher. This suggests that attendees found the content valuable and engaging. However, it is important to acknowledge that a small percentage of respondents (6% for each question) gave low ratings (1 or 2), indicating that the webinar did not meet their needs.

To what extent did this webinar meet your expectations?	# respondents	% respondents
1 - Did not meet my expectations	1	6%
Two	0	0%
Three	0	0%
Four	1	6%
Five	2	11%
Six	1	6%
Seven	3	17%
Eight	3	17%
Nine	4	22%
10 – Exceeded my expectations	3	17%

Table 2 - Satisfaction with Webinar

How likely are you to recommend webinar	# of respondents	% of respondents
One	1	6%
Two	1	6%
Three	0	0%
Four	1	6%
Five	1	6%
Six	2	11%
Seven	1	6%
Eight	2	11%
Nine	2	11%
Ten	6	33%

Table 3 - Likeliness to Recommend Webinar

Audience

The target audience for the webinar was households with kids and/or pets, as these households are often more concerned about the potential impacts of conventional lawn care products. While a substantial proportion of both registrants (71%) and attendees (67%) fell into this category, the post-webinar evaluation responses skewed towards individuals without kids or pets (72%).

	# of Registrants	% of Registrants	# of Attendees	% of Attendees	# of Respondents	% of Respondents
Have kids and/or pets at home	72	71%	34	67%	5	28%
No kids or pets at home	30	29%	17	33%	13	72%

Table 4 - Webinar Audience Demographics

Webinar registrants came from throughout the Puget Sound region, but primarily from the Kitsap Peninsula. All WSSOG jurisdictions were represented in the registrants with the exception of Port Angeles. This suggests an opportunity to increase outreach efforts in that specific area for future webinars.

Zip	City or area	Total from zip
98006	Bellevue	1
98092	Auburn	1
98110	Bainbridge Island	9
98310	Bremerton/East Bremerton	5
98311	Bremerton/Silverdale	7
98312	Bremerton/West of 16	10
98322	Burley	1
98332	Gig Harbor/Purdy	5
98335	Gig Harbor/Artondale	7
98337	Bremerton/Gorst	3
98340	Hansville	1
98346	Kingston	4
98353	Manchester	1
98359	Olalla	2
98366	Port Orchard east of Hwy 16	10
98367	Port Orchard west of Hwy 16	14
98370	Poulsbo	11
98380	Seabeck	3
98382	Sequim	1
98368	Port Townsend	1
98383	Silverdale	7

98391	Bonney Lake	1
98392	Suquamish	1
98436	Tacoma	1

Table 5 - Zip Code of Webinar Registrants

Behavior Change

The purpose of this campaign is to encourage people who currently use weed and feed to switch to organic lawncare products. The survey reveals a mixed bag of current lawn care practices among respondents. Among respondents to the webinar survey, 33% were using some type of conventional lawn care products, but only 11% had used weed and feed, meaning there was limited opportunity to reach people using weed and feed.

The "other" category, which includes individuals who don't use any products, highlights a segment of the population that may require different messaging. An early concern among WSSOG members in developing this campaign was the possibility that we could inadvertently increase fertilizer use (and therefore nutrient pollution) by encouraging those who currently do not apply any fertilizer to start using natural or organic fertilizer.

Which of these products, if any, have you used on your lawn in the past few years? Check all that apply.	**# of respondents**	**% of respondents**
Natural or organic fertilizer	9	50%
Non-organic fertilizer	4	22%
Fertilizer & herbicide combination (weed & feed)	2	11%
Weed killer	4	22%
Moss killer	5	28%
Other (please describe)*	7	39%
*Four of the "other" responses were people that indicated that they did not use anything on their lawn.		

Table 6 – Previous Behavior of Webinar Survey Respondents

When people change their behavior, there are often stages that they go through prior to adopting the behavior consistently. They may start at a point where they are not interested in the behavior, then move to thinking about the behavior, then planning the behavior, engaging in the behavior occasionally, and then adopting the behavior all of the time. To gauge the success of the webinars, respondents were asked if they planned to change their behavior, but also, if they had moved along this continuum of behavior change.

A positive shift was observed in the respondents' stage of behavior change. There's a notable increase in the percentage of people who are *planning* to use natural/organic products (33%) compared to attendees (22%). This suggests the webinar effectively motivated individuals to move closer to adopting natural lawn care practices. The absence of respondents in the "not interested" category and the emergence of an "N/A" category further indicate a shift in mindset towards considering or using natural/organic options.

	# of Registrants	% of Registrants	# of Attendees	% of Attendees	# of Respondents	% of Respondents
I am not interested in using any products on our lawn	9	9%	5	10%	0	0%
I've never thought about using natural/organic products on my lawn instead of non-organic	9	9%	4	8%	*	*
I am thinking about using natural/organic products on my lawn instead of non-organic	24	24%	13	25%	4	22%
I am planning on using natural/organic products on my lawn in the near future instead of non-organic	22	22%	11	22%	6	33%
I sometimes use natural/organic lawn products	23	23%	9	18%	2	11%
I only use natural/organic lawn products	20	20%	9	18%	3	17%
N/A (I don't use anything on my lawn)	**	**	**	**	2	11%
*This question was not asked in the post-webinar evaluation because by virtue of attending the webinar, respondents would have had to think about natural/organic lawn products.						
**This was not an option in the registration question.						

Table 7 - Stages of Change for Webinar Registrants, Attendees and Survey Respondents

People's confidence in their ability to make a change can be a barrier. Another goal was to find out if webinar attendees felt confident in their ability achieve a healthy lawn using natural/organic products.

The varied confidence levels suggest that while some attendees felt empowered by the webinar, others still had reservations. The comments from those with lower confidence provide valuable insights into the specific barriers that need to be addressed through targeted messaging and resources.

How confident are you that you'll be able to create a healthy lawn using natural/organic products?	# of Respondents	% of Respondents	Percent in the top, middle and bottom thirds
1 - Not at all confident	0	0%	17%
Two	2	11%	
Three	0	0%	
Four	1	6%	
Five	5	28%	45%
Six	1	6%	
Seven	2	11%	
Eight	3	17%	34%
Nine	1	6%	
10 - Extremely confident	2	11%	

Table 8 - Confidence in Using Natural Lawn Care Techniques Post-Webinar

Among those who rated their confidence a five or lower, four respondents left comments that help indicate why they do not feel confident and may indicate topics that should be addressed in future webinars. Their reasons included:

- Uncertainty about whether their spouse would agree to using organic products
- Understanding that results will take longer than they anticipated to realize and that they may have to tolerate a less than perfect lawn
- Belief that the products would not get rid of dandelions or clover
- Concern about a problem area of the lawn

Initial audience researchshowed that changing from conventional lawn care methods to natural lawn care can take some time until people are happy with the look of their lawn. A key strategy in this campaign was offering follow ups with Master Gardeners for webinar attendees. Of the survey respondents, 6 (33%) were interested in receiving a follow up contact from Master Gardeners.

Coupon Use

A key part of the strategy for this campaign is offering a coupon to help offset the perceived higher cost of using organic/natural fertilizer. In 2024, more coupons were redeemed than in previous years. Tables 9 and 10 show coupon redemption rates. For a full report on retail partnerships and coupon redemptions, please see the report prepared by C+C in APPENDIX C.

Store	Digital (Phone/Printed)	Postcard	Printed In-store	Total
Airport Garden Center (Port Angeles)	-	-	12	**12**
Bay Hay & Feed (Bainbridge Island)	1	38	-	**39**
Bremerton City Nursery (Bremerton)	15	16	-	**31**
Gig Harbor Ace Hardware (Gig Harbor)	11	5	-	**16**
Vern's Organic Topsoil (Poulsbo)	1	6	-	**7**
TOTAL	**28**	**65**	**12**	**105**
Percent of Total	27%	62%	11%	

Table 9 - Coupon Use by Retailer

	Total # of Coupons Redeemed	# of Retailers	Average Coupons Redeemed per Retailer	Coupon Start	Coupon End	# of Days for Coupon	Average Coupons Redeemed per Store Each Day
2021	18	1	18	30-Mar-21	22-May-21	53	0.34
2022	70	5	14	1-Apr-22	30-May-22	59	0.24
2023	68	6	11	1-Apr-23	18-Jun-23	78	0.15
2024	105	5	21	1-Apr-24	30-Jun-24	90	0.23

Table 10 - Coupon Use by Year

Hands-On Event

One of the recommendations from the evaluation report, completed by Kathryn Owen Consulting in 2024 was to help people overcome doubts about their ability to effectively manage their lawns using natural yard care techniques by focusing on skill building.

The event was advertised via social media (see Appendix B) and Master Gardener email lists. A short presentation about natural lawn care was given by a Master Gardener twice during the event so that attendees did not have to attend the entire event to get the full content.

A variety of lawn care tools were purchased for the event so that attendees could try them, three different types of weeding tools, a dethatching tool, and an aerating tool.. The event was held at Frank Raab Park in Poulsbo and the Poulsbo Parks Department gave permission for attendees to use the tools on the lawn at the park. Once attendees had had a chance to try all the tools, they could enter a raffle to win the tool of their choice. It was helpful to have multiple styles of hand-weeding tools since some attendees preferred one over the other, but there was not a clear consensus on which one people liked best. This also helped avoid the perception that any of the organizing entities (the county, cities, WSU Extension or Master Gardeners) were endorsing one particular brand.

A total of nine people attended the event. Several were Master Gardeners, so it is possible that they were already using some natural lawn care techniques. However, there was enough enthusiasm for the event among those present that we recommend continuing this event.

Post-Campaign Decision Making

In the fall of 2024, the WSSOG embarked on a process to evaluate the Natural Yard Care and determine if focusing on nutrient reduction was still a priority for the WSSOG jurisdictions. Each jurisdiction reviewed the evaluation of the existing campaign. They also gathered information about priority pollutants within their jurisdiction. Based on these priorities, the group came up with a list of potential pollutants and related behaviors on which to focus the upcoming campaign.

Potential Behaviors and Pollutant	Nutrients	Bacteria	Herbicide
Installing pet waste stations on shorelines		x	
Discouraging wildlife feeding		x	
Managing compost bins to discourage wildlife		x	
Close dumpster lids to discourage vermin and minimize leaks	x	x	
Pick up pet waste at home		x	
Use organic fertilizer - current program	x		
Hand pull weeds	x		x
Grass cycling	x		
Preventing fertilizer overspray	x		

Table 11 - Potential Areas of Focus for Future WSSOG Social Marketing Campaigns

Each WSSOG jurisdiction then rated each of these behaviors based on the following criteria: relevance in their jurisdiction, impact on water quality, impact on overburdened communities, ability to perform size of market not doing the behavior, measurability of the behavior (or behavior change and their confidence in their answers. Each behavior was assessed across all criteria for each relevant audience including, residents, businesses, property owners/managers, and the general public. An average score was calculated for each potential behavior. Based on these results, the group decided to move forward in 2025 with a campaign that focuses on encouraging businesses to close their dumpster lids.

After several years of implementing the natural yard care campaign with the WSSOG, Kitsap County will continue to support an education-only natural yard care campaign through its interlocal agreement with Washington State University Extension. This campaign will retain the educational elements of the existing campaign (webinars and hands-on events) but will not include a coupon, will not be advertised with a postcard, and will have a much smaller capacity for advertising.

Appendix A

WSSOG
Natural Yard Care Social Marketing Campaign

Summative Evaluation

Overview

Project purpose & evaluation goals

Kitsap County contracted with Kathryn Owen Consulting LLC to conduct a summative evaluation of the Natural Yard Care Social Marketing Campaign carried out by the West Sound Stormwater Outreach Group (WSSOG), a multi-jurisdictional partnership between Kitsap County, the Cities of Bainbridge Island, Bremerton, Gig Harbor, Poulsbo, Port Angeles, and Port Orchard. The aim of this campaign was to help reduce nutrient runoff - a major source of pollution to local waterways and to Puget Sound as a whole.

The target behavior for the Natural Yard Care (NYC) campaign was to encourage homeowners to switch from weed-and-feed type products to natural or organic fertilizer.[1] The target audience was initially identified as households who a) have a lawn, b) maintain the lawn themselves, and c) have children or pets with access to the yard as part of the household.

This evaluation summarizes findings from the most recent year of this multiyear campaign, which began in 2018. The evaluation centered on exploring the campaign's impact on audience receptivity to the messages, intent to engage in the target behavior, and actual engagement in the target behavior. Towards this end, we surveyed 2481 households within WSSOG jurisdictions. We also conducted in-person and phone interviews with partners (i.e., nurseries and garden centers involved in distribution of a discount coupon for organic fertilizer).

Evaluation findings

In spite of significant challenges posed by the COVID 19 pandemic, this campaign was able to produce a compelling ad campaign that spoke to the target audiences' interests and concerns and that many said would influence their behavior; to hold a series of webinars on natural lawn care that participants found valuable and that encouraged the target behavior; and to begin developing successful partnerships with local nurseries and other retailers. Key findings include:

[1] The campaign used the phrase "natural/organic" in most of its marketing literature, which has been shortened to "organic" for readability, unless quoting campaign materials.

- Roughly 20% of survey respondents have used weed and feed, moss killer, weed killer, or a nonorganic, slow-release fertilizer. Only 5%, however, identified themselves as "*not interested*" in using organic fertilizer.

- In all, 40% of the audience falls into the "willingness to change" category. They have already thought about doing the target behavior, have planned to start doing it, or have started doing it at least some of the time. Among those who are willing to engage in the target behavior, the challenge of controlling weeds and/or invasive plants was the most frequently mentioned barrier. Among the audience as a whole, the most prominent barriers were the perceptions that a) organics don't work as well as chemical fertilizer, and b) are too expensive.

- One-third of survey respondents said they were not interested in using *any type* of fertilizer on their lawns, and there was significant interest in alternatives to grass lawns.

- Over a third of the audience said the NYC campaign ads were "*likely*" or "*very likely*" to influence their lawn care practices. Not counting those who were already using organic exclusively, 19% of the audience showed intent to adopt this new behavior. This translates to a potential 3,457 pounds or 1.72 tons of nutrient runoff diverted from local waterways; if extrapolated to the entire audience reached (not just survey respondents) the figure comes to 23,673 pounds or 11.8 tons.

- The aspect of the ad campaign the audience found particularly compelling was the focus on things they cared about: protecting marine life and Puget Sound; protecting their children, pets, and families; and protecting nature in general. People also liked the use of direct and compelling words like "*healthy*" and "*safe*," and some appreciated the offers for fertilizer discounts and webinars. In addition, we found that households with and without children or pets were equally likely to find the ad campaign compelling.

- When given the opportunity to make general comments about their own lawn care practices or about natural yard care in general, the most frequent topics that emerged were:
    - Comments on NYC steps the respondent was taking aside from not using weed and feed-type products
    - Comments about wanting to reduce or remove their lawn
    - Comments about topics the respondent would like help with, including learning and/or resources
    - Comments about the perceived benefits of not using weed and feed-type products or other lawn chemicals
    - Comments of appreciation and/or agreement with WSSOG's NYC campaign

- While comments did not vary greatly by jurisdiction, there were a few differences:
    - Respondents from Bainbridge Island were the most likely to share additional NYC steps they have taken, and to make comments of agreement or appreciation for the campaign.
    - Respondents from Gig Harbor and Port Orchard were the most likely to make comments reflecting lack of agency. I.e., referencing their HOA's rules – or a housemate's control – as barriers to taking action.

- The three webinars on natural yard care offered by a Master Gardener were attended by 29 individuals, out of 103 registering. While they reached a fairly small audience, the webinars had a high satisfaction rate, and the majority of attendees said they were likely to recommend the webinars to others. Of the attendees surveyed six months later, the majority reported having taken one or more steps towards natural lawn care.

- All of the nurseries and garden centers were interested in participating in future campaigns. Retailers' suggestions included changing the discount to a flat fee rather than a percentage, having discount coupons available on days when there is a workshop or demo on natural lawn care, and collecting additional info to find out whether the coupon is generating a) new customers for the retailers, and b) new users of organic fertilizers.

Recommendations

- While there were people who *were not* interested in the target behavior because they don't agree that nonorganic fertilizers pose a hazard – to their households or to Puget Sound – this group was quite small. For this reason, we recommend focusing future efforts on moving beyond awareness to skill building. To address the needs of the audience most likely to engage in the target behavior, the campaign could offer follow-up activities that can help people learn how to treat areas of concern (weeds, invasive plants, moss) without using toxic chemicals. These are most likely to be successful if they feature one-on-one conversations, which are able to respond to individualized conditions (e.g., lawn size, slope, proximity to water) and can contextualize the behavior.

- If WSSOG wants to continue using a social marketing approach, we recommend revisiting the target behavior and identifying a behavior that is non-divisible (doesn't contain multiple steps) and end-state. That is, the behavior will produce the desired outcome for the audience without requiring additional action. If the desired outcome is caring for the lawn without chemicals, the current target works; we suspect, however, that the desired outcome among these households is for a lawn that looks good (weeds are under control, for instance).

- Continue and expand the use of social marketing tools, including social diffusion and norms, public commitment, and making the behavior convenient. If the campaign were to adopt a non-divisible and end-state behavior, some of these additional tools could be employed more effectively. For instance, if the campaign were to encourage the behavior of adjusting lawnmower height to crowd out weeds, households could make a public commitment and help establish norms by putting up a small yard sign. Or the behavior could be prompted through reminders placed in nurseries and garden centers and take-home stickers.

  Clarify the intent of the fertilizer discount. The discount coupon for 25% off organic fertilizer was provided as a way to reduce the barrier of cost for people interested in switching to organic. But because the coupon is for one-time use, it may not maintain the behavior beyond one application. If unfamiliarity with the products and where to find them were the main barrier, simply introducing people to the organic options through a coupon would be helpful. But with a product consumers buy repeatedly, the discount may be seen as having limited value. If WSSOG feels it would be helpful in convincing people of the benefits of organics, a cost comparison for customers showing organic and nonorganic costs over time could also be helpful.

In addition, because the participating nurseries focus on organic products already, it was unclear whether the discount coupons were encouraging first-time customers or first-time organic users – rather than people who already use organics and appreciate the discount. Our suggestion is to collect data during coupon redemption to find out the percentage of a) first time customers to that retailer, and b) first-time organic users, to find out whether the coupon is having the desired effect.

Appendix B

Kitsap Natural Yard Care 2024 Advertising

Following the success of the Kitsap Natural Yard Care campaign in 2023, C+C leveraged a paid Meta campaign in 2024 to reach priority audiences across Kitsap County, Port Angeles and Gig Harbor on Facebook and Instagram. The 2024 campaign introduced a new ad set for the in-person event, alongside the webinar and coupon ads. The campaign consisted of six static ads, using images from the spring 2023 campaign.

The webinar, coupon, and in-person event ad sets each featured two ads with different copy to A/B test, with one set of copy from the 2023 campaign. The ads encouraged residents to reduce pollutants in stormwater by signing up for a $15 coupon discount on organic or natural fertilizer, and to attend webinars and an in-person event to learn about spring lawncare tips from Master Gardeners.

Results

The campaign reached a total of 367,138 people and received 10,948 link clicks, a 63% increase in link clicks from the 2023 campaign (6,691). This increase can be attributed to a variety of factors including incorporating interest targeting, expanding the ads set to 3 (6 ads overall) to test and therefore reach a broader audience using different messaging, and adding Instagram, exposing the ads to a larger audience. Additionally, adjusting CTA copy from "Get 25% off" to "Get $15 Off" and incorporating more direct, actionable messaging (e.g., "Make the healthier, safer choice") may have also made the offers more compelling, contributing to higher link clicks.

The average cost per link click (CPC) was $0.50, outperforming last year's average CPC of $0.75 and the Meta CPC benchmark of $1.72. This means that the ads were very cost-efficient and there was strong audience interest in the content.

The A/B testing for the webinar, coupon, and in-person event ads all resulted in approximately the same amount of link clicks and people reached. Since both versions of the ads performed well, we decided to keep both ads running through campaign duration within each ad set to maximize reach and engagement. This approach helped to maintain fresh creative content for the audience by having multiple versions running.

<u>Webinar Ad Set (April 1, 2024 to April 30, 2024)</u>

- Link clicks: 2,505
- Media Budget: $1,497.91
- Impressions: 396,615
- Reach*: 181,553
- Cost Per Link Click: $0.60
- Engagements: 165
    - 4 comments
    - 139 reactions

    - 8 shares
    - 14 saves
- Frequency: ~2

Coupon Ad Set (April 1, 2024 to June 30, 2024)

- Link clicks: 7,142
- Media Budget: $3,249.25
- Impressions: 489,338
- Reach*: 220,381
- Cost Per Link Click: $0.45
- Engagement: 142
    - 13 comments
    - 110 reactions
    - 17 shares
    - 2 saves
- Frequency: ~2

In-person Event Ad Set (May 13, 2024 to June 7, 2024)

- Link Clicks: 1,301
- Media Budget: $748.52
- Impressions: 170,252
- Reach*: 81,654
- Cost Per Link Click: $0.58
- Engagement:
    - 4 comments
    - 67 reactions
    - 7 shares
    - 3 saves
- Frequency: ~2

**116,450 people saw multiple ads resulting in 367,138 total people reached*

Webinar Ad 1 *(2023 copy)*

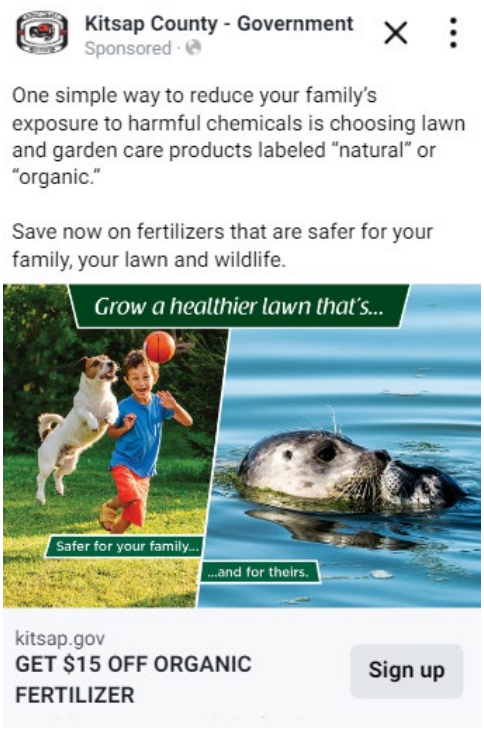


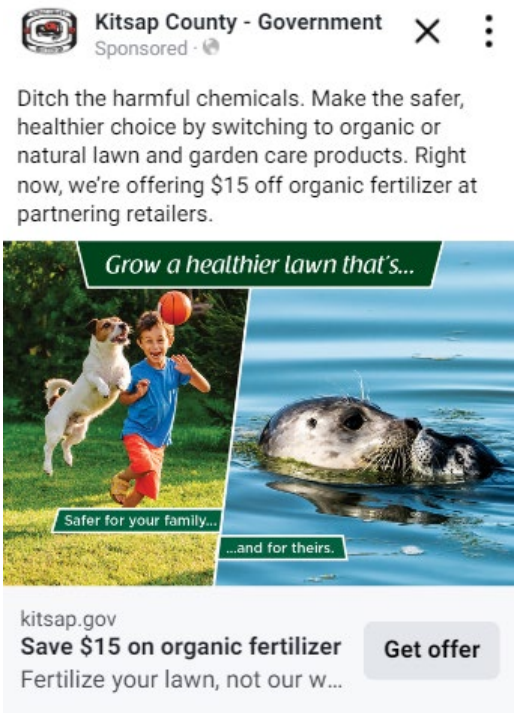
Webinar Ad 2 *(Top Performer)*



Coupon Ad 1 *(2023 copy)*

Coupon Ad 2 *(Top Performer)*





In-person Event Ad 1

In-person Event Ad 2 *(Top Performer)*





2023 – 2024 Campaign Comparison

This year's ad campaign budget was $5,500—a 10% increase over the 2023 budget of $5,000. Interest targeting was introduced this year and the campaign runtime was extended for an additional week. The 2024 campaign generated over 4,200 more link clicks than the 2023 campaign, and reached over 272,000 more people.

Recommendations for Further Evaluation and Next Steps

- Refresh the visuals for the ads, since the images have now been used for both the 2023 and 2024 campaigns and the target audience remains the same each year.
- Continue to leverage interest targeting to introduce the ads to qualified audiences.
- Continue to use A/B testing with multiple sets of ad creative to maximize and optimize performance.
    - The 2024 ad copy performed slightly better than the 2023 ad copy, so for the next campaign we recommend using the high performing 2024 ad copy and A/B test with a new set of ad copy.

Appendix C

Kitsap Natural Yard Care 2024 Retail & Coupon Redemption

Retail Store Outreach and Coupon Redemption Results

In 2024, C+C and WSSOG conducted another year of robust outreach to solicit retailer participation in Kitsap's Natural Yard Care campaign. This year, five stores across the West Sound participated in Kitsap's Natural Yard Care coupon promotion, providing coverage across the county and into Port Angeles.

Through these retailers, customers (West Sound residents) could receive $15 off select natural or organic lawn fertilizer.

To support the retailer promotions in-store, the team provided an 8.5"x11" flyer for every retail partner to put in their stores as another touchpoint for customers to see messaging related to the campaign.



In-store Flyer

During the 13-week period the coupon was active (between April 1 and June 30), 105 total coupons were redeemed at participating stores—a significant increase from both the 2022 campaign (drove 70 coupon redemptions) and the 2023 campaign (68 redemptions).

C+C and the WSSOG tracked which kinds of coupons were turned in to get a sense where customers received coupons; of the 105 coupons redeemed, 28 customers received it through digital ads and the website (presenting the coupon on their phone or printed out) and 65 customers received it as a mailed postcard or in person at Master Gardening events hosted by WSSOG at Gig Harbor Ace Hardware and Airport Garden Center in Port Angeles. 17 received a printed coupon in-store from Airport Garden Center staff.

Store	Digital (Phone/Printed)	Postcard	Printed In-store	Total
Airport Garden Center (Port Angeles)	-	-	12	**12**
Bay Hay & Feed (Bainbridge Island)	1	38	-	**39**
Bremerton City Nursery (Bremerton)	15	16	-	**31**
Gig Harbor Ace Hardware (Gig Harbor)	11	5	-	**16**
Vern's Organic Topsoil (Poulsbo)	1	6	-	**7**
TOTAL	**28**	**65**	**12**	**105**

Percent of Total	27%	62%	11%	

Two new features were added to the 2024 campaign:

- **Increased Redemption Timeline:** This year, the team increased the time customers had to redeem the coupon from 11 weeks in the spring 2023 campaign (April 1, 2023 to June 18, 2023) to 13 weeks for the spring 2024 campaign (April 1, 2024 to June 30, 2024).
- **'$15 off' Offer:** To help move past any cost barriers associated with natural or organic fertilizer, the project team adjusted the incentive offer to provide a flat '$15 off' on all eligible products. This "$15 off" offer was new in 2024, replacing the "25% off (up to $15)" offer used in previous years of the Natural Yard Care campaign.



Coupon Offer

WSSOG and C+C also received other valuable insights from retailers about spring sales overall for 2024. Airport Garden Center and Vern's Organic Topsoil both reported that excessive rain and cloudy days in April and May may have contributed to a slower spring gardening season this year. To help boost awareness, Airport Garden Center designed a front-of-store display just for the WSSOG promotion.



Airport Garden Center Display

APPENDIX C: WSSOG 2024 WORK PLAN

West Sound Stormwater Outreach Group (WSSOG) 2025 Work Plan

Objectives from Exhibit "A"

West Sound Stormwater Outreach Group Scope of Work & Budget for 2023-2025

Sustain Successful Efforts with Pet Waste Outreach (Objective 2)

- Review data and other programs (2.1)

  - Develop an updated Mutt Mitt program plan.

  - Consider adopting updated Mutt Mitt program plan.

- Continue Pet Waste Outreach (2.2)

  - Continue to implement Mutt Mitt program plan.

  - Participate in the regional STORM Pet Waste workgroup as appropriate.

Continue Social Marketing Campaign Development (Objectives 3 and 6)

- Launch Dumpsters Campaign (3.1)

  - Review and adapt original Dumpsters campaign.

  - Coordinate adaptation of any printed materials.

  - Develop RFP (consultant for evaluation).

  - Review submissions with WSSOG.

  - Manage consultant contract.

  - Prior to full implementation, have consultant collect baseline data.

  - Develop strategy and schedule for new campaign and program evaluation plan by **July 1, 2025**.

  - Implement campaign by **September 1, 2025**.

  - Follow-up evaluation by **March 31, 2029**.

Collaborate on Joint Outreach for the Business Inspection Program (Objective 4)

- Look for new opportunities to develop materials to support the business inspection program (4.1).

Collaborate on Mutually Beneficial Outreach Opportunities (Objectives 5 and 6)

- Continue Spills Hotline Outreach (5.2)

- Distribute paint sticks, when feasible.

- Promote the SeeClickFix application and spills reporting phone number via social media, print, or digital communications.

- Continue Participation in Puget Sound Starts Here (PSSH) Outreach (6.3)

- Promote PSSH Month.

- Distribute PSSH-branded merchandise (e.g., coasters, pet waste bag holders) when feasible.

- Participate in STORM-sponsored regional ad buys and/or place local ads.

Strengthen Coalition and Represent WSSOG on Regional Efforts (Objective 6)

- Participate in the STORM Steering Committee and PSSH committee (6.1).

- Participate in STORM's regional workgroups as appropriate (6.4).

- Provide STORM and PSSH support and attend quarterly meetings (6.1).

Track and Maintain Records of Education and Outreach Activities (Objective 7)

- Provide an **annual summary of activities**, track and maintain records, and report on programs as appropriate.

- Ensure compliance with the **Washington State Phase II Municipal Stormwater Permit**, as required by the **National Pollutant Discharge Elimination System (NPDES)** under the **Clean Water Act (40 CFR Part 122)**.

- Kitsap County will provide a draft summary of activities to WSSOG jurisdictions by **March 2025**, with the final report submitted no later than **mid-March** to align with **annual NPDES permit reporting requirements**.

Stormwater Management Program | Annual Report to ECY

S5.C.2.a.iii. - List of Stewardship Opportunities provided in 2024

1. **Streamkeepers of Clallam County**
   The City has long-partnered with Streamkeepers of Clallam County in support of their water Quality monitoring program that utilizes trained volunteers to collect water quality data. The City and the County executed a new 5-year Inter-local Agreement with Streamkeepers in 2022. See attached 2022-2026 ILA. A few notable additions to the agreement are:
   - Benthic macroinvertebrate sampling on Tumwater, Peabody, Valley, and Ennis Creeks
   - Production of a comprehensive 20-year report
   - Sampling for E.Coli (freshwater) and E. Cocci (marine waters).



Stormwater Management Program
Stormwater Management Action Plan
Stormwater Resources
Reporting Spills
Stormwater Incentives
Rain Gardens
Combined Sewer Overflows
Natural Yard Care
Storm Drain Art

Stormwater Management Program

The Stormwater Management Plan (SWMP) is a comprehensive plan designed to reduce the discharge of pollutants from the City of Port Angeles separate stormwater system in order to protect local waters.

View the Stormwater Management Program planning document (PDF).

The plan addresses six minimum control measures, as identified by the EPA and required by the City NPDES Phase II Municipal Stormwater Permit. The minimum control measures are as follows:

1. Public Education and Outreach

Provides informative information to the general public, environmental groups and nonprofits including:

- Information booths at the KONP Home Show and Clallam County Fair
- Distribution of the *Stormwater Rains* newsletter via utility bill mailers
- Providing grade school stormwater education in partnership with Feiro Marine Life Center
- Presentations to local community groups - schedule your group today!

2. Public Participation / Involvement

We want to hear from you! Take a moment to complete our stormwater plan survey.

3. Illicit (illegal) Discharge Detection and Elimination

Identify and reduce spills to protect the environment. Learn more about illicit discharges and how to report a spill, or view Appendix B of the SWMP (PDF) to learn about how the City responds to illicit discharges.

4. Construction Site Runoff Control

Utilizing a permitting process to address runoff from new development and redevelopment.

5. Post-Construction Runoff Control

Maintain and clean new stormwater controls.

6. Pollution Prevention / Good Housekeeping

Yearly inspection of all City stormwater controls such as filter units and detention facilities. The City cleans over 1500 catch basins and sweeps about 10,000 miles of streets each year.

Current Stormwater Regulations

In 1987, Congress amended the Clean Water Act to include stormwater discharges in the National Pollutant Discharge Elimination System (NPDES) permit program. The Environmental Protection Agency (EPA) developed rules to implement the new stormwater requirements in two phases. The Washington Department of Ecology implements the stormwater rules through municipal stormwater permits. The City of Port Angeles was issued a NPDES Phase II permit on January 17, 2007, authorizing the City to discharge stormwater into receiving water bodies.

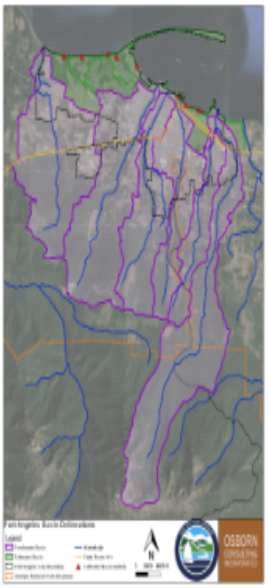
CONTACT US
Port Angeles, WA
321 E 5th Street
Port Angeles, WA 98362

Stormwater Management Program
Stormwater Management Action Plan
Stormwater Resources
Reporting Spills
Stormwater Incentives
Rain Gardens
Combined Sewer Overflows
Natural Yard Care
Storm Drain Art

Stormwater Management Action Plan

What is stormwater?

Stormwater, or urban runoff, is rainwater or snowmelt that runs over surfaces such as lawns, roofs, streets, and parking lots. With no action, stormwater can become polluted by litter, dirt, bacteria, chemicals, and oils that it picks up along its journey. When polluted stormwater reaches a water body, it can have a harmful impact on the plants and animals in and around the water. It can also affect people who swim or fish in the water.



Why is the City implementing a Stormwater Management Action Plan (SMAP)?

The Washington State Department of Ecology has added the development of a Stormwater Management Action Plan (SMAP) to their 2019-2024 Phase II Municipal Stormwater Permit requirements. Stormwater Planning, including development of a SMAP, is one of several components of the City of Port Angeles' Stormwater Management Program (SWMP), being implemented daily to protect our valuable fresh and marine receiving waters. More about the City's SWMP can be found here. More information about the Phase II Stormwater Permit is available on the Department of Ecology website.

How will the SMAP benefit our community?

We all know that time and money are finite resources. We also know that actions must be taken now to preserve our pristine areas and improve those already impacted. This effort is intended to get the ball rolling in the most efficient and effective direction.

Developing a SMAP helps the City to critically asses our watersheds, identify priority basins that would receive the most benefit from intervention, and develop a basin-specific action plan for improvement. The resulting action plan will include best management practices (BMPs) that are applicable and tailored to the specific priority basin selected for consideration. Different basins have different challenges and will require different solutions. A fully developed basin may benefit most from a retrofit project-type BMP, such as the design of a regional stormwater facility where treatment and/or flow control is installed into an existing stormwater conveyance main. A more undeveloped basin may benefit more from a less-tangible BMP, such as improved ordinances geared towards minimizing impacts from future development and protecting receiving waters.

Once completed, this plan will be used to inform staff on how and where we can take action to receive the most benefit in our community. It may also be used to partner with basin-protection stakeholders and secure funding to bring the action plan to life.

View Port Angeles Basins Delineations (PDF)

Project Phases | Project Documents | Interactive GIS Map

SMAP Phase	Action	Timeline
Phase 1: Receiving Water Conditions Assessment	Assess the conditions of our natural bodies of water to identify which are most likely to benefit from stormwater management planning and delineate the drainage basins	Completed March 2022
Phase 2: Prioritization	Categorize and rank drainage basins to identify one (1) priority basin that would benefit from implementation of Stormwater Best Management Practices (BMPs)	Completed June 2022
Phase 3: SMAP	Select stormwater projects, policy and code changes, and management actions for priority catchment	Completed March 2023

How can I get involved?

The review period closed on January 16, 2023. Comments received were considered and used to guide the final draft Phase 3 report for the Valley Creek Basin. The City of Port Angeles thanks you for your feedback!

Project Contact

If you have any questions regarding the development of a Stormwater Management Action Plan (SMAP), please contact the City's Stormwater Engineer at stormwater@cityofpa.us.

Stormwater Resources

City Stormwater Code

In January, 2007, Port Angeles was designated as a National Pollutant Discharge Elimination System (NPDES) II city. In order to comply with the permit, the City revised development codes. To view information about the City Stormwater Code, please visit this page.

Helpful Stormwater Information

Visit our Helpful Stormwater Information page for information on stormwater fees, how you can play a part in keeping our water clean and safe, and more.



Video time stamps for important information and specific worksheets:

Intro:	00:00
Pre-Design:	13:54
BP^{SW}:	30:10
Worksheet A1:	38:32
Worksheet A2:	1:09:21
Worksheet B1:	1:19:46
Worksheet B2:	1:50:08
Worksheet C:	1:16:39
Worksheet D:	54:38
Worksheet E1:	59:16
Conclusion:	1:53:28

Stormwater Management Presentation Slides (PDF)

Contact Us

Stormwater Utility
Email Stormwater Utility Division

Physical Address
321 East 5th Street
Port Angeles, WA 98362

Phone: 360-417-4830

Directory

Reporting Spills

Have you witnessed spills or any suspicious discharges to the stormwater system, streets, ditches, streams, and wetlands? Report spills here, or call 360-417-4745.

Spills could include things such as:

- Algae blooms
- Chemicals
- Foam
- Gasoline
- Muddy water from construction sites
- Oily sheens
- Paint
- Sewage



Water pollution comes from a variety of sources. It is economically infeasible to have pollution inspectors everywhere, 24/7; however, a citizen reporting of pollution problems can help protect water quality.

Common Sources of Pollution

Paint
Car Fluids
Suds
Debris
Sewage
Litter & Trash
Swimming Pools & Hot Tubs

Paint



Prevention:
Avoid painting outside when it is raining. Never clean brushes or other painting equipment outside, and never pour the rinse water into the storm system.

Typical Source:
Pollution from paint usually comes from improper cleanup, but can also occur from spills and dumping.

Proper Disposal and Cleanup:
Never pour any type of paint directly down the drain. Small amounts of latex paint can be set out to dry and be disposed of in the garbage. Recycle large amounts of unused paint at the Regional Transfer Station - Moderate Risk Waste Facility, or at Around Again in Port Angeles or Sequim. Also consider advertising on the local news and radio, or the 2good2toss website.

Impact:
All paint types, especially oil based, are toxic. When those toxins make it into our waterways, they can harm fish and other aquatic life.



Contact Us

Reporting a Spill
Email to Report a Spill

Physical Address
321 E 5th Street
Port Angeles, WA 98362

Phone: 360-417-4745

Hours
Monday - Friday
8:00 a.m. - 5:00 p.m.

Stormwater Incentives

Stormwater Green Infrastructure Rebates

Low impact development (LID) techniques are encouraged to improve water quality and aesthetics. The City provides rebates for new development or redevelopment projects that result in less than 5000 square feet of new or replaced hard surfaces, and implements two or more of the following:

- Permeable pavement
- Compost amended soils in all disturbed areas not covered by new improvements
- Rain gardens

Rebates available as funding allows include:

- Permeable pavement - $1 per square foot, up to a maximum of $1000
- Composted amended soils - voucher for up to 10 yards of compost
- Rain garden - up to $1000 for materials to install rain garden

To be eligible, the LID technique must be designed and maintained in accordance with the Department of Ecology's 2014 SWMMWW. Allowing rain water from your roof and yard to soak into the ground helps clean our streams. Pollutants like fertilizers, pesticides, and dissolved metals from cars are removed in the rain garden soil before entering the creeks near our homes.

Rain Garden Retrofit Rebates

The City provides rebates of up to $1000 to build a rain garden at your home or place of business. Allowing rain water from your roof and yard to soak into the ground helps clean our streams. Pollutants like fertilizers, pesticides, and dissolved metals from cars are removed in the rain garden soil before entering the creeks near our homes. Learn More.

Infiltration Strategies

- Amend Site Soils After Construction (PDF)
- Concentrated Flow Dispersion for Steep Driveways (PDF)
- Downspout Dispersion Trench (PDF)
- Downspout Infiltration Dry Well (PDF)
- Downspout Infiltration Trench (PDF)
- Downspout Infiltration Trench for Coarse Gravel (PDF)
- Perforated Stub Out Connections (PDF)
- Permeable Patios or Driveways (PDF)
- Preserve Natural Vegetation (PDF)
- Rain Gardens (PDF)
- Sheet Flow Dispersion for Flat to Moderate Driveways (PDF)

Rain Garden Rebates



When it rains, runoff flows from our roofs, yards, and driveways, carrying oil, fertilizers, pesticides, and other pollutants into our environment. Low Impact Development (LID) techniques such as rain gardens help protect water quality.

Rain Garden Retrofit Rebates

The City of Port Angeles is providing financial assistance to residents and businesses building rain gardens at their existing home or place of business. Approved applicants may receive a rebate of up to $1000 for the purchase of materials such as plants, compost, sand, mulch, and rock. Rain gardens manage stormwater on your property where it originates. You can contribute to reducing the amount of stormwater and pollutants coming from your property by incorporating rain gardens into your yard.

Green Infrastructure Rebate

The City provides rebates for new development or redevelopment projects that result in less than 5000 square feet of new or replaced hard surfaces, and implements two or more of the following:

- Permeable pavement
- Compost amended soils in all disturbed areas not covered by new improvements
- Rain gardens

Rebates available as funding allows include:

- Permeable pavement - $1 per square foot, up to a maximum of $1000
- Composted amended soils - voucher for up to 10 yards of compost
- Rain garden - up to $1000 for materials to install rain garden

General Program Guidelines

Rain gardens must be located inside city limits. Applicants must be approved prior to commencement of construction. Green Infrastructure 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 for Rain Garden Retrofit Rebate will be accepted February 1 through November 30th every year, or until available funding is depleted, whichever comes sooner. Once approved for rebate and following construction, applicants must submit the Rain Garden Retrofit Rebate Form with original receipts no later than December 10 of the Current Year to receive funds.

Applications for Green Infrastructure Rebate will be accepted until further notice with a Building Permit or Clearing and Grading Permit application. If available funding is depleted, notice will be given on this web page, and no further applications will be approved. Once approved for rebate and following construction, applicants must submit the Green Infrastructure Rebate Form with original receipts no later than December 10 of the Current Year to receive funds.

Applicants will be notified regarding the status of approval or denial of their applications within three weeks of the application submittal. Applicants denied rebates may revise and resubmit their applications for reconsideration if they adequately address all prior comments.

Rain Garden Handbooks

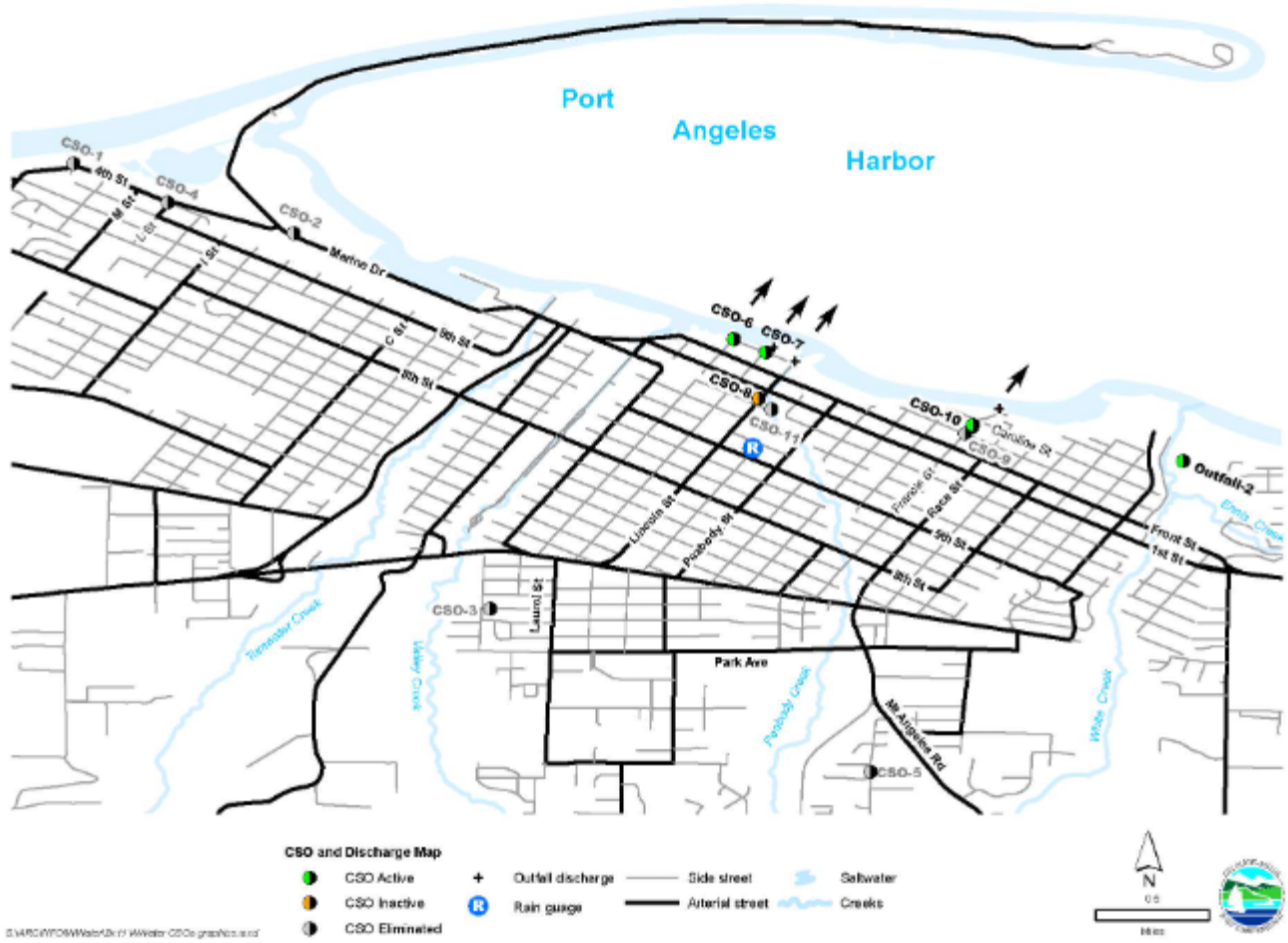
- Western Washington Rain Gardens Handbook

Combined Sewer Overflows Reports

What are Combined Sewer Overflows?

Combined sewer overflows (CSOs) are emergency relief points in sewer systems that carry sewage and stormwater in the same pipe. When heavy rains fill the pipes, CSOs release sewage and stormwater into the Port Angeles Harbor. They prevent sewage backups into homes and businesses as well as infrastructure failure due to capacity exceedance. But, they can harm people and animals living in the water because they carry chemicals and germs.

CSO locations in the City of Port Angeles are located along the waterfront. This map details the City's permitted CSO locations (only the outfalls depicted in green are active).



Most of the time, this water is conveyed to the Wastewater Treatment Plant, however during large rain events, the wastewater system's capacity is exceeded, resulting in a CSO. CSOs release roughly 10 percent sewage and 90 percent stormwater.

City of Port Angeles CSO Reduction Efforts

The City of Port Angeles continues to work on controlling and reducing CSO events by improving and replacing infrastructure that is decades old. The Washington State Standard for controlled CSO overflows is no more than one time each year on a long-term average. Since 2016 the City of Port Angeles has greatly reduced its CSO events and volumes - from an average 70 events per year to an average of 1 event per year, discharging less than one million gallons on average.

Future CSO reduction projects are also included in the City's six-year Capital Facilities Plan, with the goal of reducing the size and frequency of CSO events further.

What should Port Angeles residents do during CSO Events?
Residents should stay out of the water for 48 hours after a combined sewer overflow; contact with polluted water can make you sick.

If you observe an overflow from a sanitary structure to the roadway, or have concerns about a potential CSO event please call 360-417-4745.

CSO Events:
11/15/2021 Rain Event: 2.08" of total rainfall, 24 hr. storm duration.

CSO 7: (North East of Blackball Ferry Terminal)
Total Volume: 18,029 gallons
Overflow Event Duration: 27 minutes

Outfall 2: (Wastewater Treatment Plant Influent Diversion Structure)
Total Volume: 12,543 gallons
Overflow Event Duration: 41 minutes

01/02/2021 Rain Event: 2.05" of total rainfall, 40 hr. storm duration.

Outfall 2: (Wastewater Treatment Plant Influent Diversion Structure and CSO Tank)
Total Volume: 6,807 gallons* (*preliminary value)
Overflow Event Duration: 1.13 hours

12/21/2020 Rain Event: 2.95" of total rainfall, 20 hr. storm duration.

CSO 7: (North East of Blackball Ferry Terminal)
Total Volume: 206,598 gallons
Overflow Event Duration: 4 hours

CSO 10: (Francis Street)
Total Volume: 413,389 gallons
Overflow Event Duration: 2.5 hours

Outfall 2: (Wastewater Treatment Plant Influent Diversion Structure and CSO Tank)
Total Volume: 286,543 + 310,372 = 596,917 gallons
Overflow Event Duration: 14 hours

CSO Annual Reports

- 2019 CSO Annual Report
- 2018 CSO Annual Report
- 2017 CSO Annual Report
- 2016 CSO Annual Report
- 2015 CSO Annual Report



Natural Yard Care



Do you want a healthier yard, family, Puget Sound and Strait of Juan de Fuca?

Go natural! By choosing lawn care products that are labeled Natural or Organic, you'll reduce harmful chemical exposure to your family, our streams and seas, otters and orcas, salmon and seals...you get the idea!

You can still grow a healthy, beautiful lawn using natural yard care techniques. Attend free webinars this spring to learn more about natural yard care, receive personalized advice from Master Gardeners, and get tips on how to take your yard to the next level.

Pull the Weeds, Not Your Hair Webinar Events
Dealing with dandelions? Miserable about moss? Clover taking over? Discover eco-friendly ideas to keep your lawn healthy. Get personalized advice from WSU Kitsap Extension Master Gardeners at these free webinars

- Saturday, April 20 at 10 AM
- Saturday, April 27 at 10 AM
- Wednesday, May 1 at 6 PM

Join us for an in-person, hands-on weeding and natural lawn care demonstration.
Swing by Frank Raab Park in Poulsbo on June 8, 2024, from 10 am to 2 pm (18349 Caldart Ave NE) to get expert advice from a Master Gardener! Eventgoers will receive complimentary, seasoned advice on nurturing a thriving yard with ease.

For a limited time, receive $15 off at select retailers when you present a coupon (click here for coupon details).

About the Campaign
The West Sound Stormwater Outreach Group (WSSOG) is a multijurisdictional partnership between Kitsap County, the cities of Bainbridge Island, Bremerton, Gig Harbor, Port Angeles, Port Orchard and Poulsbo. These agencies work together on improving water quality by reducing pollutants in stormwater runoff, which are a major source of pollution to local waterways and Puget Sound. These webinars and discount program are being jointly coordinated by WSSOG.

Storm Drain Art Project 2021



Coming to a City Park near you in 2021!!!

Stay tuned for more information!

Statement of Purpose:

The City of Port Angeles (City) is seeking artists to transform storm drains into public works of art at selected sites located in Port Angeles.

Who is eligible?

- Artists must be 18 years or older
- Artists should demonstrate in their application the ability to complete work through experience or training
- Outdoor art and painting experience are preferred but not required

Background Information:

This Public Art and stormwater education project is designed to connect residents, businesses, and visitors to the valuable resources of our local waters. Each Artist will be assigned one storm drain within the project area to work around and will be provided with paint. These storm drains are located within areas of high pedestrian use in downtown Port Angeles, WA.

Related Articles:

http://www.ifiberonenewsradio.com/news/local_news/art-for-clean-water-connecting-storm-drains-to-puget-sound/article_8616633e-c403-11e9-b90d-8fcad2260855.html

https://www.kitsapsun.com/story/news/2019/08/30/artists-adorn-keyport-storm-drains-clean-water-murals/2152947001/



Helpful Stormwater Information

Fees

A monthly stormwater fee is charged to all property owners in Port Angeles. This fee supports the city's public stormwater utility. The current fee for all residential properties is $16.87 per month. The fee for commercial properties is based on the amount of impervious area at the facility.

One equivalent residential unit (ERU) equals 4,000 square feet of impervious. Surface cost per ERU equals $16.87 per month. Maximum number of ERUs assessed per property (cap) is 10.

Stormwater fees provide funding for activities required to construct new stormwater infrastructure, improve the quality of stormwater, maintain existing facilities, and comply with permit requirements. The stormwater utility is operated by the City's Department of Public Works and Utilities.

Watershed

A watershed is the area of land where all of the water that drains off of it goes into the same place. Watersheds come in all shapes and sizes. They cross county, state, and national boundaries. No matter where you are, you're in a watershed. View the Port Angeles watershed map for more information.

The Port Angeles watershed is just under 27,000 acres in size and includes the city of Port Angeles, part of Clallam county, and a small part of Olympic National Park.

Stormwater Concerns

Stormwater in urban areas can become polluted by litter, dirt, bacteria, chemicals, and oils that it picks up along the way to receiving waters. When polluted stormwater reaches a water body, it can have a harmful impact on the plants and animals in and around the water. It can also affect humans who swim or fish in the water, or whose drinking water comes from the water body.

Stormwater can also be a safety hazard to vehicles, pedestrians, and private property if it is not collected properly and forms pools in roadways.



Common Stormwater Pollutants Impact

Trash & Litter

Litter that reaches creeks and harbors can choke or suffocate birds and fish. Litter may also clog the stormwater drainage system, leading to street flooding.

Bacteria & Disease-Causing Organisms

These organisms can cause health hazards for animals and people.

Chemicals & Oil

Aquatic animals can be poisoned by chemicals and oils. People can be at risk if they eat contaminated fish or drink polluted water.

Nutrients

Nutrients from fertilizers or detergents can cause algae to grow in water. This algae uses up oxygen that native organisms need to survive.

Stormwater Utility

NEW! The City of Port Angeles is building a regulatory source control program that will require businesses to take measures to stop water pollution before it enters the stormwater system. The development of this program is a requirement of the Department of Ecology's Western Washington Phase II Stormwater Permit. To learn more, please visit the dedicated project page.

The Stormwater Management Plan (SWMP) is a comprehensive plan designed to reduce the discharge of pollutants from the City of Port Angeles separate stormwater system in order to protect local waters. The SWMP is designed to improve water quality. To learn more, view the Plan here. After reading, you may provide your comments on the Plan.

The Stormwater Utility collects and conveys stormwater received from residential, commercial, and industrial sites. Much of the stormwater in Port Angeles flows through a separate stormwater system that discharges directly into local creeks and the harbor. Stormwater Utility responsibilities include:

- Managing the City's NPDES Municipal Stormwater Permit, with a primary focus on improving water quality
- Implementing capital projects which relieve flooding, protect the environment, health and safety, and foster economic growth
- Maintaining existing stormwater facilities such as pipes, catch basins, ponds, and treatment devices

The stormwater system consists of 65 miles of separate stormwater mains and ditches, as well as over 2500 catch basins. View the stormwater system map (PDF) to see details of the system. This Separate Stormwater System is not connected to the Combined Sewer Overflows (CSO). The Stormwater system drains to both freshwater streams and saltwater locations. View the stormwater discharge map (PDF) to see receiving water bodies.

What is Stormwater?

Stormwater is rainwater or snowmelt that runs over surfaces such as lawns, roofs, streets, and parking lots. With no action, stormwater can become polluted by litter, dirt, bacteria, chemicals, and oils that it picks up along its journey.

What Citizens Can Do About Stormwater

Protecting our water resources starts with each person, home, building, and work site. For the most part the City's Separate Stormwater System does not treat the stormwater, it simply conveys stormwater through pipes and ditches directly to our creeks and harbor. It's important to prevent stormwater from becoming polluted in the first place.

Citizens play an important role in improving stormwater in Port Angeles:

- Avoid using fertilizers or chemicals on your lawn, and blowing yard clippings into the street
- Check your car for leaks that may be running onto pavement
- Check your home plumbing and/or septic tank to make sure there are no leaks or discharges into the storm drain system
- Don't litter or dump trash illegally
- Educate yourself, your family, and your neighbors to be good stewards of the unique environment of Port Angeles and surrounding areas
- Never dump oils or chemicals into catch basins
- Pick up all pet waste, even in your backyard
- Plant bare and graded areas to reduce erosion
- Report any illegal discharges or other harmful activities to the City hotline at 360-417-4745
- Wash cars and boats on lawn areas, where the water percolates in, or at a local car wash
- Build a rain garden to help clean stormwater before it leaves your property

Annual Reports

The Stormwater Utility is required to submit an annual report as a condition of its NPDES Municipal Stormwater Permit.
View All Annual Reports

Useful Stormwater Information

- FAQ Residential Car Washing and Stormwater (PDF)
- Stormwater Information Sheet (PDF)
- Stormwater Management Program (PDF)



Contact Us

Stormwater Utility
Email Stormwater Utility Division

Physical Address
321 East 5th Street
Port Angeles, WA 98362

Phone: 360-417-4830

Streets and Stormwater Superintendent
Email Streets & Stormwater Superintendent
Phone: 360-417-4825

Form Center

Search Forms by:

Word or Phrase

Select a Category

By signing in or creating an account, some fields will auto-populate with your information.

Comment on the Stormwater Management Program

Sign in to Save Progress

The Stormwater Management Plan outlines how the City plans to make stormwater cleaner. Your input on how to improve this plan is valued.

For more information about the:
Stormwater Management Program

What would you like to see incorporated in the Stormwater plan?

What Stormwater pollution topics would you like to see discussed during outreach events?

Other Stormwater Comments

If you would like to receive a response please provide your contact information.
Email address:

Phone Number:

Name:

protected by reCAPTCHA
Privacy - Terms

Receive an email copy of this form.

Email address

This field is not part of the form submission.

Submit

COPA | Utility Advisory Committee

Western Washington Phase II Municipal Stormwater Permit Revisions

Ryan Jeffries, PE| Civil / Utility Engineer

Matthew Moore, EIT| Civil / Utility Engineer

November 12th, 2024

Outline

- National Pollutant Discharge Elimination System (NPDES)
- Upcoming Municipal Stormwater Permit Deadlines
- Washington State Phase II Permit Changes 2024-2029
  - What has changed
  - New requirements
- 2024 SWMMWW Adoption and Changes
  - What hasn’t changed
  - What has changed
- Conclusion
  - Questions?

The Issue with Stormwater

"Stormwater runoff is the Number 1 water pollution problem in the urban areas of our State." - WA Dept. of ECY

Stormwater Management Goals:

Clean Water Act: "… to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."

Water Quality Parameters:

Runoff Volume, Rate, and Quality





"Fishable & Swimmable"

PA's Stormwater Management Program



EPA
1970



CWA
1972



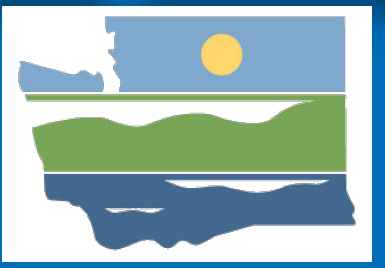
NPDES
1970s – 80's



WQ Act
1987



EPA – I & II
1990 & 1999



ECY – I & II
1995 & 2007

ECY's 2024-2029 Phase II Municipal Stormwater Permit (S5.C) Program Components

1) *Stormwater Planning*
2) *Public Education and Outreach*
3) *Public Involvement and Participation*
4) *MS4 Mapping and Documentation*
5) *Illicit Discharge Detection and Elimination*
6) *Controlling Runoff from New Development, Redevelopment, and Construction Sites*
7) *Stormwater Management for Existing Development*
8) *Source Control Program for Existing Development*
9) *Operations and Maintenance*

CITY OF PORT ANGELES
PUBLIC WORKS & UTILITIES

Washington State Phase 1 and Phase II Permittees

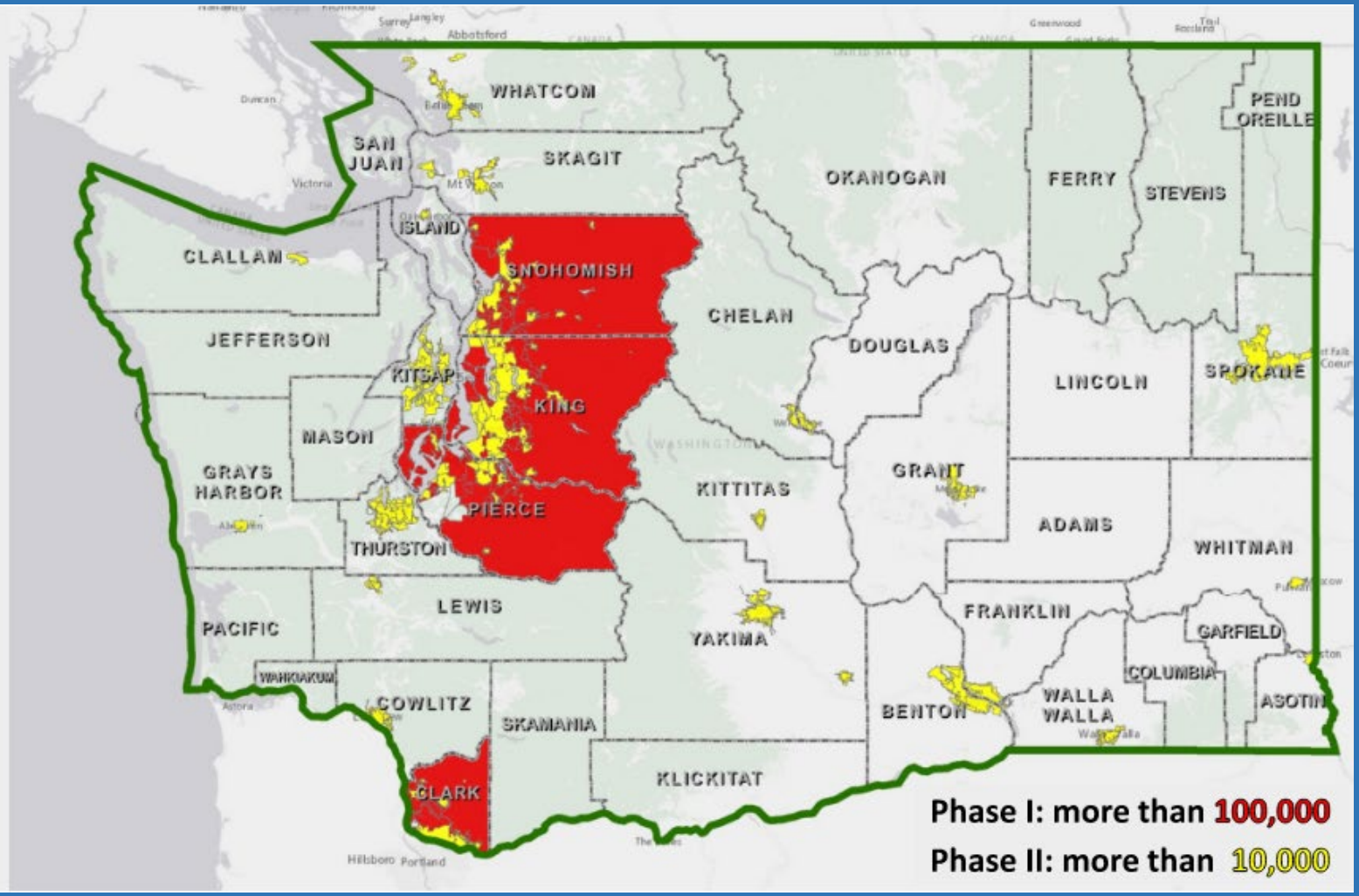
Washington State Phase I and Phase II Permittees

Source: WA Dept. of Ecology

Description: Municipal Stormwater Permit Areas (MSWPA) of Washington State, incorporating 2013 updates to combined incorporated City boundaries and unincorporated Urban Growth Areas (UGA) as defined by the Growth Management Act.

Phase 1

Phase 2



Some Upcoming Municipal Stormwater Permit Phase II Deadlines

- Ecology reissued the Municipal Stormwater General Permits for Phase 1 & 2 permittees on July 1, 2024.
- By December 1, 2024, Permit Section S8 Stormwater Action Monitoring (SAM) notice of intent to pay contribution is due on or before; CoPA participates in the ECY monitoring program and contributes accordingly.
- By July 1, 2025, each Permittee shall follow social marketing practices and methods and develop a campaign that is tailored to the community, including development of a program evaluation plan.
- By March 31, 2026, Permittees shall include a written description of internal coordination mechanisms among departments to eliminate barriers to compliance with the terms of this Permit in the Annual Report.
- By December 31, 2026, per S2.B.3 Non-Stormwater Discharge (emergency firefighting activities) CoPA shall coordinate with firefighting agencies/departments that serve areas that drain to the MS4 to develop a PFAS Management Plan which will implement measures to minimize discharges of PFAS via the MS4 during emergency fighting activities.

Some Upcoming Municipal Stormwater Permit Phase II Deadlines

- By March 31, 2027, Permittee shall describe how stormwater management needs and protection/improvement of receiving water health are (or are not) informing the long-range or comprehensive planning update processes and influencing policies and implementation strategies in their jurisdiction in the Annual Report.
- By March 31, 2027, provide an Annual estimated cost to implement each component of the SWMP and the sources of funding. This information shall be provided with each Annual Report.
- By March 31, 2027, Permittees shall complete and submit a SMAP for at least one new high priority catchment area, or additional actions for an existing SMAP.
- By June 30, 2027, adopt 2024 Stormwater Management Manual for Western Washington (Phase 2 Permitees).
- By December 31, 2028, adopt and implement tree canopy goals and policies to support stormwater management.
- Expiration date of permit is July 31, 2029.

Washington State Phase II Permit Changes



Issuance Date: July 1, 2024
Effective Date: August 1, 2024
Expiration Date: July 31, 2029

WESTERN WASHINGTON PHASE II MUNICIPAL STORMWATER PERMIT

National Pollutant Discharge Elimination System and
State Waste Discharge General Permit for discharges from
Small Municipal Separate Storm Sewer Systems
In Western Washington

State of Washington
Department of Ecology
Olympia, WA 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 *et seq.*

Until this Permit expires, is modified, or revoked, Permittees that have properly obtained coverage under this Permit are authorized to discharge to waters of the State in accordance with the special and general conditions which follow.

Vincent McGowan, P.E.
Water Quality Program Manager
Washington State Department of Ecology

High-Level summary of changes for reissued 2024-2029 Municipal Stormwater Permits

- SMED. (Stormwater Management for Existing Development) the 2024-2029 Phase II Permit now includes a stormwater retrofit requirement for already developed areas.
- Doing more to address stormwater pollution from transportation-related runoff was a consideration as the Permits were written, particularly given what we know about 6PPDQ.

Washington State Phase II Permit Changes

High-Level summary of changes for reissued 2024-2029 Municipal Stormwater Permits (continued)

- SMAP. (Stormwater Management Action Planning) requirement in the 2019-2024 Permits has been carried over to the 2024-2029 Permits, for Western Washington.
- Street sweeping (O&M). 2024 Permits now include a street sweeping requirement, which is expected to reduce sources of multiple pollutants in stormwater, including 6PPDQ and tire wear particles. For Phase II permittees the required sweeping frequency for priority areas is 3 times per year. Priority areas for sweeping are defined in the Permits.
- Appendix 1 of the Permits includes updated thresholds for redevelopment projects, which are expected to increase the number of redevelopment projects, including road redevelopment, that require Runoff Treatment and Flow Control BMPs.

Washington State Phase II Permit Changes

TABLE OF CONTENTSTABLE OF CONTENTS

S1. PERMIT COVERAGE AREA AND PERMITTEES 1
- A. Geographic Area of Permit Coverage 1
- B. Regulated Small Municipal Separate Storm Sewer Systems (MS4s) 1
- C. Permit Waivers 3
- D. Obtaining Coverage Under this Permit 4

S2. AUTHORIZED DISCHARGES 8
- A. Stormwater Discharges 8
- B. Non-Stormwater Discharges 8
- C. Responsibilities and Liabilities 8
- D. Compliance with State and Local Authorizations 8
- E. Indian Country 9

S3. RESPONSIBILITIES OF PERMITTEES 10
- A. Compliance with Conditions 10
- B. Reliance on Another Entity 10

S4. COMPLIANCE WITH STANDARDS 11
- A. Prohibition of Discharge of Toxicants 11
- B. Compliance with Standards 11
- C. MEP Standard 11
- D. AKART Standard 11
- E. Responsibilities of Permittees 11
- F. Violations of Water Quality Standards and Adaptive Management 11
- G. Revoke and Reissue Permit 14

S5. STORMWATER MANAGEMENT PROGRAM FOR CITIES, TOWNS, AND COUNTIES 15
- A. Stormwater Management Program General Requirements 15
- B. Stormwater Management Program Standards 17
- C. Stormwater Management Program Components 17
  1. Stormwater Planning 17
  2. Public Education and Outreach 20
  3. Public Involvement and Participation 23
  4. MS4 Mapping and Documentation 24
  5. Illicit Discharge Detection and Elimination 26
  6. Controlling Runoff from New Development, Redevelopment, and Construction Sites 32
  7. Stormwater Management for Existing Development 35
  8. Source Control Program for Existing Development 37
  9. Operations and Maintenance 40

S6. STORMWATER MANAGEMENT PROGRAM FOR SECONDARY PERMITTEES 48
- A. Secondary Permittees and New Secondary Permittees Coverage 48
- B. Coordination 49
- C. Legal Authority 49
- D. Stormwater Management Program for Secondary Permittees 49
  1. Public Education and Outreach 49
  2. Public Involvement and Participation 50
  3. Illicit Discharge Detection and Elimination 50
  4. Construction Site Stormwater Runoff Control 54
  5. Post-Construction Stormwater Management for New Development and Redevelopment 55
  6. Pollution Prevention and Good Housekeeping for Municipal Operations 55

S7. COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS 58
- A. TMDL Specific Requirements 58

S8. MONITORING AND ASSESSMENT 58
- A. Regional Status and Trends Monitoring 58
- B. Stormwater Management Program (SWMP) Effectiveness and Source Identification Studies 59
- C. Stormwater Discharge Monitoring 60
- D. Payments into the Stormwater Action Monitoring Collective Fund. 61

S9. REPORTING & RECORDKEEPING REQUIREMENTS 62
- A. Annual Report Submittal 62
- B. Records Retention 62
- C. Records Available to the Public 62
- D. Annual Report for Cities, Towns, and Counties 62
- E. Annual Report for Secondary Permittees 63

GENERAL CONDITIONS 64

DEFINITIONS AND ACRONYMS 73

Washington State Phase II Permit Changes

- The Permits and Stormwater Manuals include measures and BMPs intended to help reduce sources of PCBs and PFAS going into stormwater. For example, per the Permit's IDDE section, buildings confirmed or suspected to have PCB-containing materials shall not discharge washdown to the MS4.
- Finally, the 2024-2029 Permits include new requirements that address stormwater benefits to overburdened communities, in addition to what was included in the 2019-2024 Permits. Permittees are asked to continue involving the public, including overburdened communities, in their decision-making process for stormwater management. The 2024 Permits require that Permittees identify these communities and document their outreach measures for overburdened communities. Moreover, the SMAP guidance recommends Permittees reach out to Tribes for input when prioritizing areas for stormwater retrofits.
- The program must, at a minimum, meet the requirements and development thresholds described in the SWMMWW 2024, once adopted.

Stormwater Management Manual for Western Washington (SWMMWW), 2024

9 Minimum Requirements (no changes)

1. Preparation of stormwater site plans
2. Construction Stormwater Pollution Prevention Plan (SWPPP)
3. Source Control of pollution
4. Preservation of Natural Drainage Systems and Outfalls
5. Onsite Stormwater Management
6. Runoff Treatment
7. Flow Control
8. Wetlands Protection
9. Operation and Maintenance



Stormwater Management Manual for Western Washington (SWMMWW), Status

Status of SWMMWW

- Release for use July 2024
- UIC Guidance for Projects started after October 1, 2019
- Adopt Manual by June 30, 2027 (Phase 2)

What hasn't changed

- Minimum Requirements: still nine with the same names, descriptions, and requirements.
- Project Thresholds for new development
- Design Criteria for treatment and flow control BMPs
- WWHM 4.2.16 and MGS Flood 4.56 as approved models (or later versions)

What has changed

- Revised text throughout document
  1. correct typos and errors
  2. Eliminate redundancies
- Ten Significant Changes
  1. Redevelopment Project Thresholds: project level updates- added "and replaced"
  2. Project Exemptions: pavement maintenance & underground utility
  3. Wetland Hydroperiod Protection Method 2: protection requirements updated
  4. Light Rail Guideways as PGIS
  5. Light Rail BMPs
  6. Climate Change: impacts on stormwater
  7. Nutrients and Toxic Organics: new guidance for 6PPD, PCBs, and PAHs
  8. Source Control BMPs – PCB Edits
  9. Bioretention: included HPBSM as approved media for use
  10. UIC Program Guidelines

Stormwater Management Manual for Western Washington (SWMMWW), Status

Figure I-3.1: Flow Chart for Determining Requirements for New Development

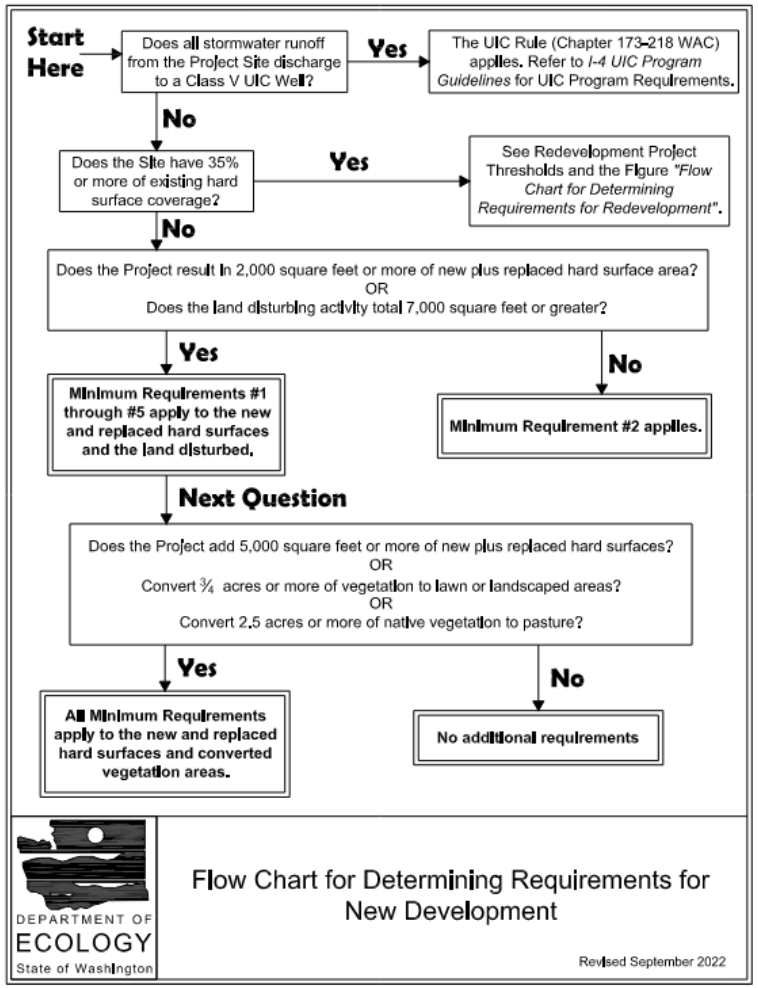
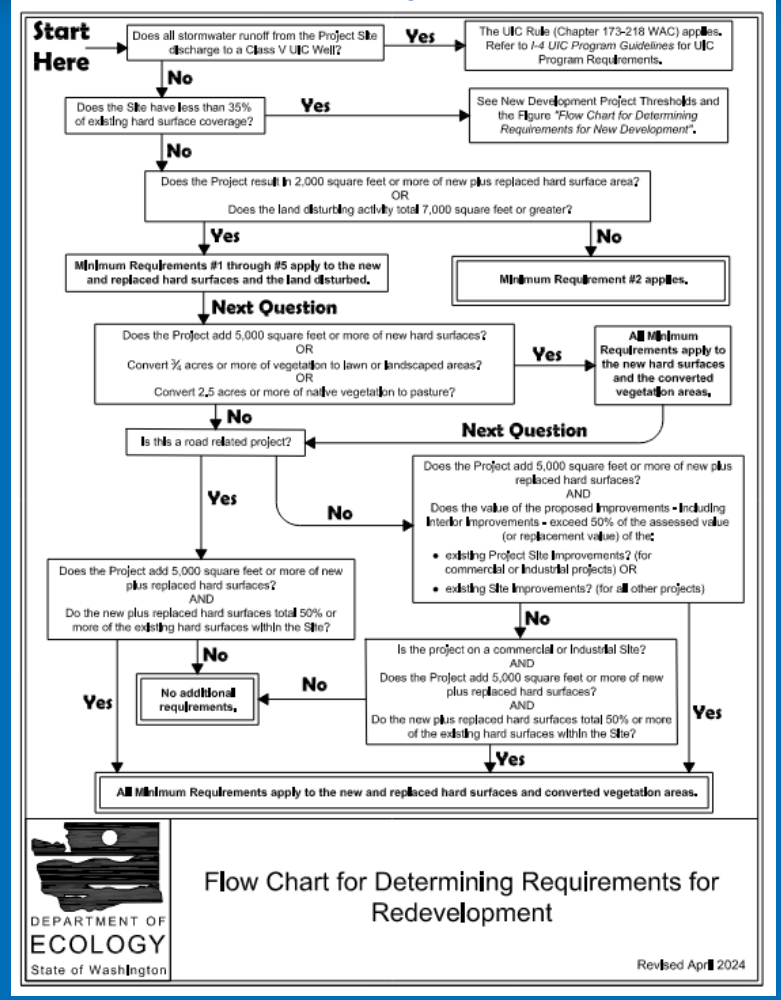


Figure I-3.2: Flow Chart for Determining Requirements for Redevelopment



Stormwater Management Manual for Western Washington (SWMMWW), cont.

Maintenance

- Repair and maintenance includes activities conducted on currently serviceable structures, facilities, and equipment that involves no expansion or use beyond that previously existing and results in no significant adverse hydrologic impact. It includes those usual activities taken to prevent a decline, lapse, or cessation in the use of structures and systems.

Pavement Maintenance

- Fully Exempt Activities
  1. Pothole and Square cut patching.
  2. Overlaying asphalt or concrete with BST, asphalt, or concrete without expanding the area of coverage.
  3. Shoulder grading.
  4. Reshaping / regrading drainage systems.
  5. Crack sealing.
  6. Vegetation maintenance.

Typical Project Thresholds (same)

SMALL PROJECT (MR #1-5)

Land Disturbance:	≥ 7,000 ft^2
HARD Surface:	≥ 2,000 ft^2 < 5,000 ft^2

LARGE PROJECT (MR #1-9)

Land Conversion:	≥ ¾ acre veg.-lawn/l.s.
	≥ 2.5 acres native-pasture
HARD Surface:	≥ 5,000 ft^2

Stormwater Management Manual for Western Washington (SWMMWW), cont.

Subject to Thresholds

1. Removing and replacing an asphalt or concrete pavement to base course or lower, or repairing the pavement base (except for a project consisting only of pothole or square cut patching): These are considered replaced hard surfaces.
2. Extending the pavement edge, or paving graveled shoulders: These are considered new hard surfaces.
3. Resurfacing by upgrading from dirt to gravel, a bituminous surface treatment ("chip seal"), asphalt, or concrete; or upgrading from chip seal to asphalt or concrete: These are considered new impervious surface.

Definitions

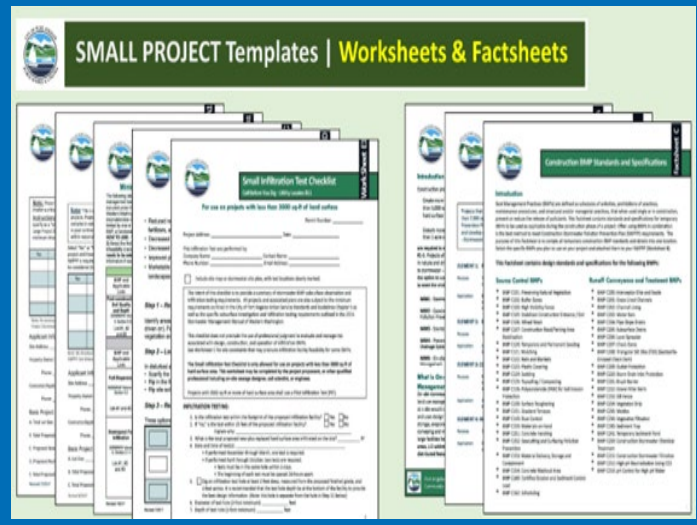
- **Project Site**: that portion of a property, properties, and right of way subject to land disturbing activities, new hard surfaces, or replaced hard surfaces.
- **Site**: the area defined by the legal boundaries of a parcel or parcels of land that is (are) subject to new development or redevelopment. For road projects, the length of the project site and the right of way boundaries define the site.

Stormwater Management Manual for Western Washington (SWMMWW), cont.

Definitions (continued)

- **Site**: a site may include multiple parcels and/or sections of right of way, if multiple parcels and/or sections of right of way are subject to the new development or redevelopment project.
- **Impervious surface**: A surface area which either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. A surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam or other surfaces which similarly impede the natural infiltration of stormwater.
- **Pervious surface**: any surface material that allows stormwater to infiltrate into the ground. Examples include lawn, landscape, pasture, native vegetation areas, and permeable pavements.
- **Hard surface:** an impervious surface, a permeable pavement, or a vegetated roof.
- **Replaced Hard surface:** for structures, the removal down to (i.e. exposing the top of) the foundation and replacement. For other hard surfaces, the removal down to (i.e. exposing the top of) bare soil or base course and replacement.

Templates, Worksheets & Factsheets

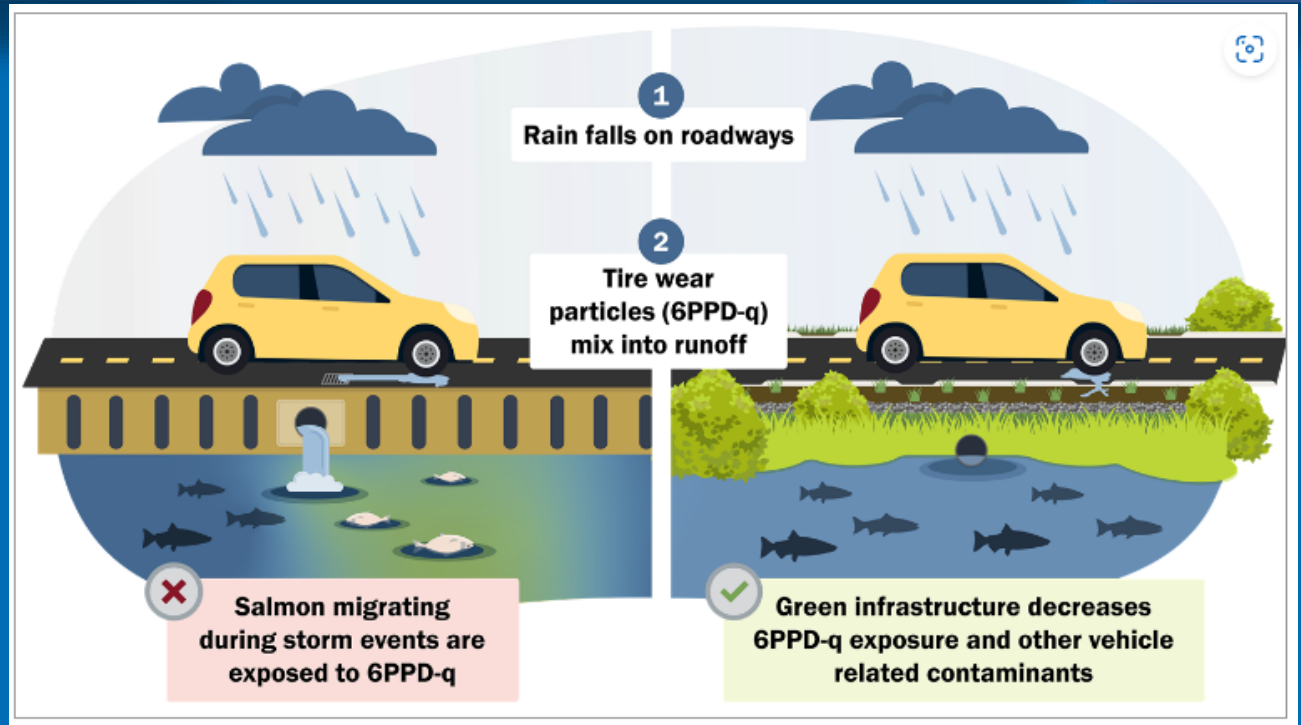


Addressing Priority Toxic Chemicals, 6PPD and 6PPD-quinone

ECY Taking action to protect salmon:

6PPDQ stands for the chemical N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine. It's a chemical that prevents automotive tires from degrading (i.e., breaking down) and helps them last longer. When 6PPD is exposed to air, it reacts with ozone to create **6PPD-quinone** (also known as **6PPDQ**). 6PPDQ is lethal to coho salmon and can contaminate water systems.

- Three key efforts to effectively reduce the threat of 6PPDQ to salmon: Understand the problem: Develop scientific methods to measure 6PPDQ in the environment and identify affected areas.
- Reduce stormwater pollution: Identify stormwater management practices to treat 6PPDQ and tire debris before it reaches streams; update guidance for local governments to use; and increase funding for stormwater infrastructure.
- Reduce sources of 6PPDQ: Research alternative chemical preservatives that could replace 6PPDQ in tires, and evaluate if those chemicals are actually safer.



6PPDQ can end up in freshwater or marine environments harming wildlife. Green infrastructure can help remove toxic chemicals like 6PPDQ from stormwater.

Conclusion

Final Thoughts
Does the UAC have any questions?
Resources:

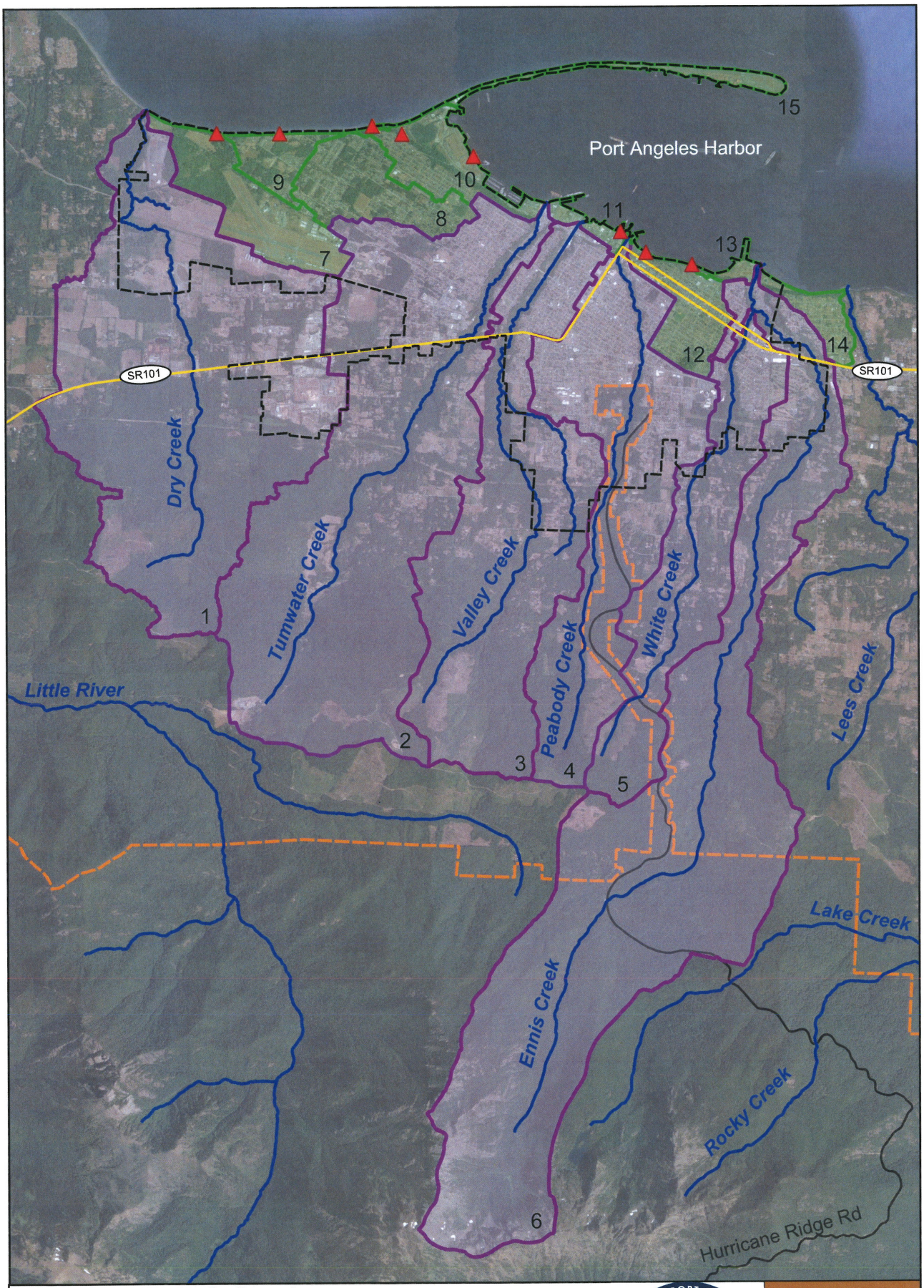
City of Port Angeles (COPA)
Utility Map
https://pawa.maps.arcgis.com/home/index.html

Washington Dept. of Fish and Wildlife (WDFW)
National Wetlands Inventory Mapper
https://www.fws.gov/wetlands/data/mapper.html

USDA National Resource Conservation Service (NRCS)
Web Soil Survey
https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

WA Department of Ecology (ECY)
What's In My Neighborhood?
https://fortress.wa.gov/ecy/neighborhood/

City of Port Angeles (COPA)
Stormwater Discharge Map
https://www.cityofpa.us/DocumentCenter/View/6393/Stormwater-Discharge-Map



Port Angeles Basin Delineations

Legend

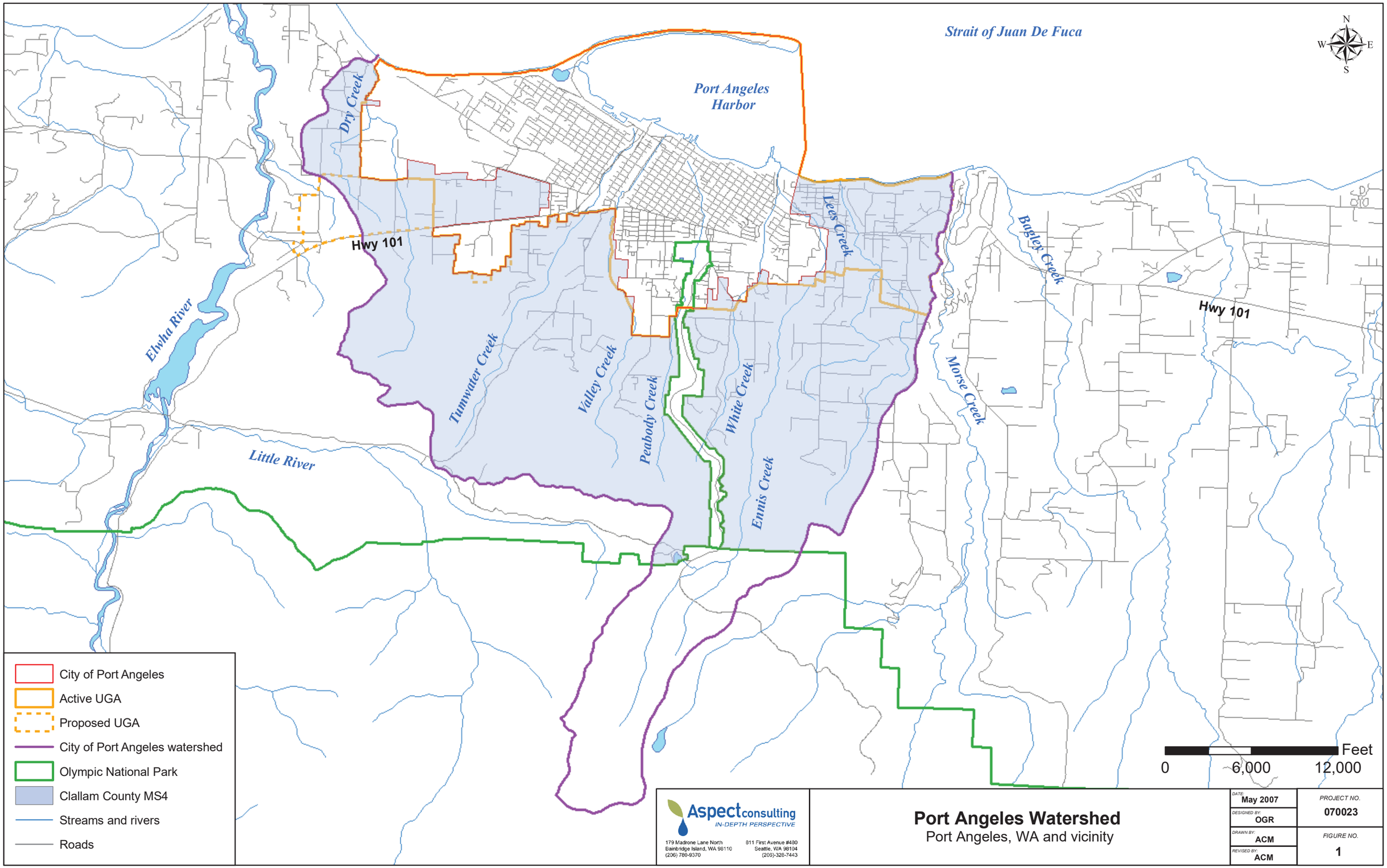
- Freshwater Basin
- Saltwater Basin
- Port Angeles City Boundary
- Olympic National Park Boundary
- Waterbody
- State Route 101
- Saltwater Basin Outfalls
- X Basin ID

N

0 2000 4000 ft

CITY OF PORT ANGELES

OSBORN CONSULTING INCORPORATED



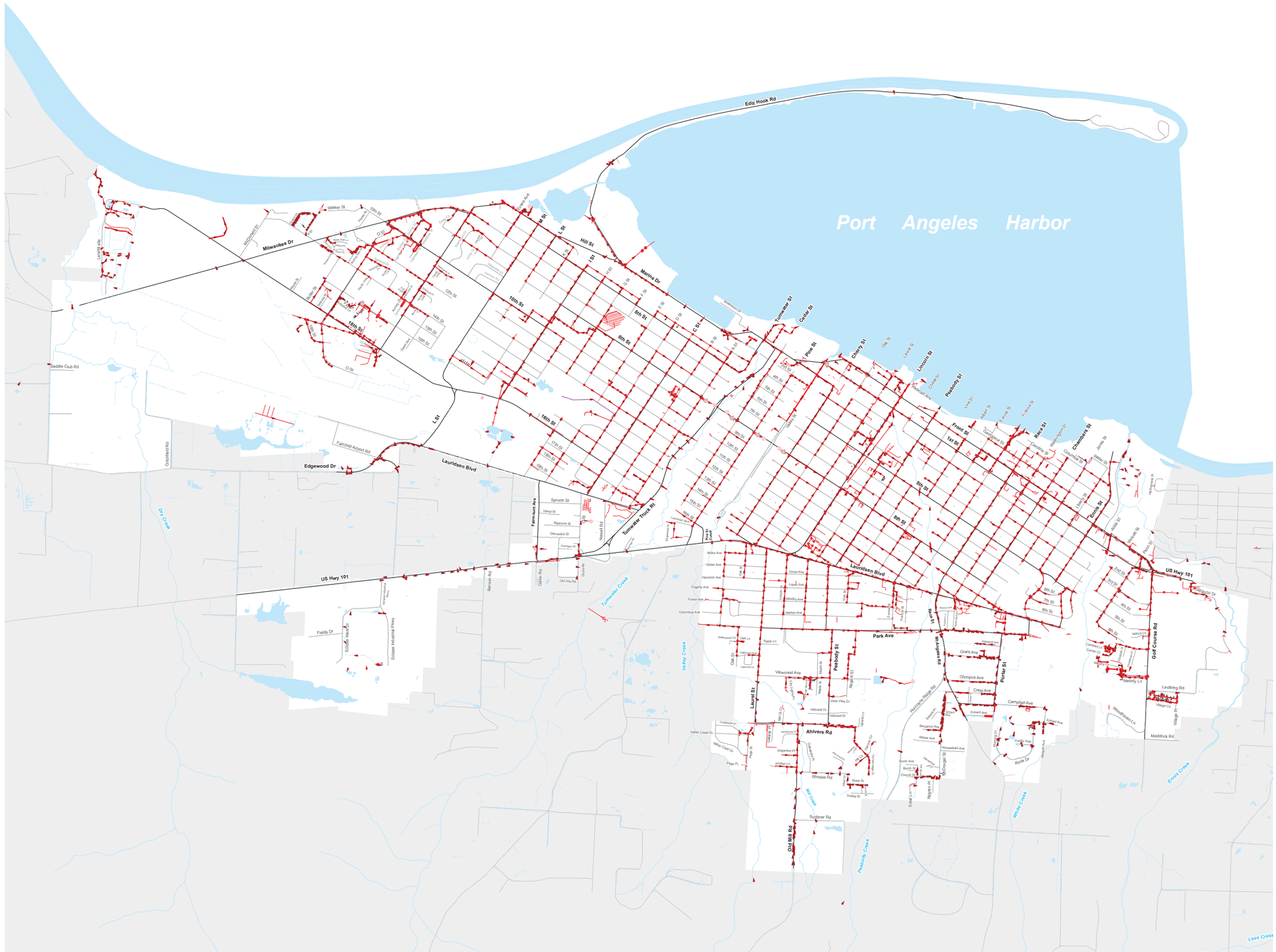
Aspect consulting
IN-DEPTH PERSPECTIVE
179 Madrone Lane North
Bainbridge Island, WA 98110
(206) 780-9370
811 First Avenue #480
Seattle, WA 98104
(206)-326-7443

Port Angeles Watershed

Port Angeles, WA and vicinity

DATE: May 2007	PROJECT NO. 070023
DESIGNED BY: OGR	
DRAWN BY: ACM	FIGURE NO. 1
REVISED BY: ACM	

T:\projects_8\port_angeles\sitemap



This map is not intended for use as a legal description. Locations of features are approximate only. Topographic/Map features are +-5 feet of actual locations. This map/drawing is produced by the city of Port Angeles for its own use and purposes. Any other use of this map/drawing shall not be the responsibility of the City.

S:\ARC\NFO\GIS\Water\36x48 Stormwater map.mxd

CITY OF PORT ANGELES
PUBLIC WORKS & UTILITIES

N

825
Feet

Vertical Datum = NAVD 88
Horizontal Datum = NAD 83/91

Storm Water Map

Map legend

- Ditches and drainage
- River and creek
- Ponds and marshes
- Saltwater
- City arterial
- City side street
- County road
- County jurisdiction

Storm utility legend

Chamber
- <all other values>
- DAquaswirl
- DDiversionChamber
- DDryWell
- DEnergyDissipator
- DFilterChamber
- DVortech
- DWetWell
- SystemValve
- ControlValve
- Manhole
- Ponds
- LateralLine
- DOther active mains
- DDitches
- DOverflow
- DInterceptor
- DMain
- DCulvert
- DInlineStorage
- DCollector
- DOutfall
- PressurizedMain

PUBLIC WORKS & UTILITIES DEPARTMENT

N

Outfall Discharge Map

1,600
Feet

Vertical Datum = NAVD 88
Horizontal Datum = NAD 83/91

Printed: 3/12/2020

Legend

- COPA Outfall
- POPA Outfall
- City boundary
- Creek
- River

This map is not intended for use as a legal description. Locations of features are approximate only. Topographic/Map features are +-5 feet of actual locations. This map/drawing is produced by the city of Port Angeles for its own use and purposes. Any other use of this map/drawing shall not be the responsibility of the City.

AssetID *	FacilityID	LegacyID	Administration	Jurisdiction	InstallDate	Status	SubType	Diameter	Elevation	WaterType	DataSource	Notes	Name	Project	Location	Street	Intersection	StreetX_NE	StreetX_SW	Material
SWDI1	1	1	City of PA	City of PA	1/1/1968	Active	OutfallCreek	<Null>	117	<Null>	<Null>	Outfall to Tumwater creek	<Null>	<Null>	<Null>	Tumwater Truck Rt	<Null>	<Null>	14th St	<Null>
SWDI2	2	2	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	90	<Null>	<Null>	Outfall to Tumwater creek	<Null>	<Null>	<Null>	Tumwater Truck Rt	<Null>	<Null>	13th St	<Null>
SWDI3	3	3	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	24	StormRunOff	Inspection	Outfall to Dry creek. Pipe outlet with rip rap.	Dry Creek Outfall	16-May	Dry Creek	Landfill site	<Null>	<Null>	<Null>	<Null>
SWDI4	4	3135	City of PA	County	<Null>	Active	OutfallCreek	<Null>	246	<Null>	<Null>	Outfall to Tumwater creek	<Null>	<Null>	<Null>	Reservoir Rd	<Null>	Davis St	<Null>	<Null>
SWDI5	5	3146	City of PA	City of PA	1/1/1996	Active	Outfall	<Null>	358	<Null>	<Null>	Outlet to ditch	<Null>	<Null>	<Null>	Melody Ln	<Null>	Melody Cir	<Null>	<Null>
SWDI6	6	3147	Private	City of PA	1/1/1988	Active	OutfallCreek	<Null>	465	<Null>	<Null>	Outfall to Valley creek	<Null>	<Null>	<Null>	Mill Ck Ct	<Null>	Ahlvers Rd	<Null>	<Null>
SWDI7	7	3155	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	104	<Null>	<Null>	Outfall to Tumwater creek	<Null>	<Null>	<Null>	Tumwater Truck Rt	<Null>	<Null>	15th St	<Null>
SWDI9	9	3158	City of PA	City of PA	1/1/1995	Active	Outfall	<Null>	129	<Null>	<Null>	Top of bluff outfall	<Null>	<Null>	<Null>	McDonald St	<Null>	<Null>	<Null>	<Null>
SWDI10	10	3074	City of PA	City of PA	1/1/1929	Active	OutfallHarbor	30	10	StormRunOff	<Null>	<Null>	Culvert discharge	<Null>	South east corner of boat harbor.	Marine Dr	<Null>	<Null>	B St	<Null>
SWDI11	11	3075	City of PA	City of PA	1/1/1971	Active	Outfall	<Null>	230	<Null>	<Null>	OUTFALL	<Null>	<Null>	<Null>	6th St	<Null>	E St	<Null>	<Null>
SWDI12	12	3076	City of PA	City of PA	1/1/1978	Active	Outfall	<Null>	250	<Null>	<Null>	OUTFALL	<Null>	<Null>	<Null>	Reyes St	<Null>	19th St	<Null>	<Null>
SWDI13	13	3077	City of PA	City of PA	1/1/1955	Active	OutfallHarbor	36	8	StormRunOff	<Null>	<Null>	Culvert discharge	<Null>	Boat harbor.	Marine Dr	<Null>	<Null>	D St	<Null>
SWDI14	14	3079	City of PA	City of PA	1/1/1955	Active	OutfallHarbor	15	6	StormRunOff	<Null>	<Null>	Culvert discharge	<Null>	Boat harbor.	Marine Dr	<Null>	<Null>	E St	<Null>
SWDI15	15	3082	City of PA	City of PA	1/1/1956	Active	OutfallCreek	<Null>	131	<Null>	<Null>	Outfall to Valley creek	<Null>	<Null>	<Null>	9th St	<Null>	Cherry St	Valley St	<Null>
SWDI17	17	3084	City of PA	City of PA	1/1/1961	Active	OutfallCreek	24	14	<Null>	Inspection	Outfall to Ennis creek	<Null>	<Null>	Rayonier parking lot.	Ennis St	<Null>	<Null>	Water St	<Null>
SWDI18	18	3087	City of PA	City of PA	1/1/1954	Active	OutfallHarbor	18	0	StormRunOff	<Null>	Outlet for old County sanitary sewer.	<Null>	<Null>	Northwest of Francis St park.	Francis St	<Null>	<Null>	Georgiana St	Concrete
SWDI19	19	3088	Private	City of PA	1/1/1993	Active	Outfall	6	16	StormRunOff	Plan Set	OUTFALL	Pipe discharge	<Null>	Runs over the bluff from Albert St. Discharges to ditch parallel to harbor.	Albert St	<Null>	<Null>	Georgiana St	PolyE
SWDI20	20	3089	Private	City of PA	1/1/1993	Active	Outfall	4	16	StormRunOff	Plan Set	OUTFALL	Pipe discharge	<Null>	Runs over the bluff from Albert St. Discharges to ditch parallel to harbor.	Albert St	<Null>	<Null>	Georgiana St	PVC
SWDI21	21	07A	City of PA	City of PA	1/1/1927	Active	OutfallHarbor	84	12	CombinedWW	Plan Set	See main for inspections and photos. Field note locates N end of storm culvert	CSO discharge site 8	<Null>	Peabody creek outfall west of the City peir parking lot.	Lincoln St	<Null>	<Null>	Railroad Ave	Concrete
SWDI22	22	3096	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	21	<Null>	<Null>	Outfall to Tumwater creek	<Null>	<Null>	<Null>	Tumwater St	<Null>	3rd St	<Null>	<Null>
SWDI23	23	3100	City of PA	City of PA	1/1/1995	Active	Outfall	<Null>	218	<Null>	<Null>	Outfall	<Null>	<Null>	<Null>	Butler St	<Null>	16th St	<Null>	<Null>
SWDI24	24	3101	City of PA	City of PA	<Null>	Active	Outfall	<Null>	222	<Null>	<Null>	<Null>	Lincoln park Big Boys pond outfall.	<Null>	South west edge of Big Boys pond.	14th St	<Null>	<Null>	I St	<Null>
SWDI25	25	3104	City of PA	City of PA	1/1/1995	Active	Outfall	<Null>	248	<Null>	<Null>	STORM OUTFALL.	<Null>	<Null>	<Null>	16th St	<Null>	O St	16th St	<Null>
SWDI26	26	09A	City of PA	City of PA	1/1/1961	Active	Outfall	<Null>	8	<Null>	<Null>	See main for inspections and photos.	<Null>	<Null>	<Null>	Tumwater St	<Null>	<Null>	Marine Dr	<Null>
SWDI27	27	05A	City of PA	City of PA	1/1/1952	Active	OutfallCreek	<Null>	45	<Null>	<Null>	See main for inspections and photos. Outfall to Peabody creek	<Null>	<Null>	<Null>	Peabody St	<Null>	3rd St	4th St	<Null>
SWDI28	28	08A	City of PA	City of PA	1/1/1957	Active	OutfallHarbor	54	16	StormRunOff	<Null>	See main for inspections and photos. Valley creek culvert outfall to harbor	Culvert discharge	<Null>	Valley creek esturary.	Valley St	<Null>	<Null>	Marine Dr	<Null>
SWDI29	29	3640	City of PA	City of PA	5/1/2006	Active	Outfall	<Null>	162	<Null>	<Null>	4ft x 4ft quarry spall	<Null>	Rolling Hills plan-set	<Null>	O St	<Null>	<Null>	<Null>	<Null>
SWDI30	30	3387	City of PA	City of PA	9/15/2016	Active	OutfallHarbor	12	12	StormRunOff	AsBuilt	Outfall to Harbor. This outfall is first shown on the 1970 City storm map. However I think it is much older than that. Exact install date unknown.	See sheet SD-1 (pg 17)	Project WW10-08 (06-01 Phase 2)	Valley creek esturary	Marine Dr	<Null>	<Null>	Front St	<Null>
SWDI31	31	3394	City of PA	City of PA	4/1/2001	Active	Outfall	<Null>	24	<Null>	<Null>	<Null>	<Null>	Francis St Park Impvts	<Null>	Francis St	<Null>	<Null>	<Null>	<Null>
SWDI32	32	3395	City of PA	City of PA	4/1/2001	Active	Outfall	<Null>	24	<Null>	<Null>	<Null>	<Null>	Francis St Park Impvts	<Null>	Francis St	<Null>	<Null>	<Null>	<Null>
SWDI33	33	3396	City of PA	City of PA	1/1/1915	Active	OutfallHarbor	24	0	CombinedWW	<Null>	CSO outfall.	CSO discharge site 10 east.	<Null>	Northeast of Francis St park.	Francis St	<Null>	<Null>	Georgiana St	Concrete
SWDI34	34	01A	City of PA	City of PA	<Null>	Active	Outfall	<Null>	260	<Null>	<Null>	See main for inspections and photos. Culvert outfall	<Null>	<Null>	<Null>	Park Ave	<Null>	Race St	Eunice St	<Null>
SWDI35	35	02A	City of PA	City of PA	<Null>	Active	Outfall	<Null>	120	<Null>	<Null>	See main for inspections and photos. Culvert outfall	<Null>	<Null>	<Null>	8th St	<Null>	Francis St	Eunice St	<Null>
SWDI36	36	03A	City of PA	City of PA	<Null>	Active	Outfall	<Null>	120	<Null>	<Null>	See main for inspections and photos. Culvert outfall	<Null>	<Null>	<Null>	8th St	<Null>	Francis St	Eunice St	<Null>
SWDI37	37	04A	City of PA	City of PA	<Null>	Active	Outfall	<Null>	83	<Null>	<Null>	See main for inspections and photos. Culvert outfall	<Null>	<Null>	<Null>	5th St	<Null>	Albert St	Vine St	<Null>
SWDI38	38	06A	City of PA	City of PA	1/1/1914	Active	Outfall	<Null>	32	Creek	<Null>	See main for inspections and photos. 2nd St St culvert outfall	<Null>	<Null>	North side of 2nd St culvert in trailer park.	2nd St	<Null>	<Null>	Lincoln St	<Null>
SWDI39	39	10A	City of PA	City of PA	<Null>	Active	Outfall	<Null>	120	<Null>	<Null>	See main for inspections and photos. Culvert outfall	<Null>	<Null>	<Null>	Front St	<Null>	Penn St	Alder St	<Null>
SWDI40	40	3561	City of PA	City of PA	<Null>	Active	Outfall	<Null>	244	<Null>	<Null>	Also see fieldbooks T47-2 and T47A	<Null>	<Null>	<Null>	Tumwater Truck Rt	<Null>	<Null>	Lauridsen Blvd	<Null>
SWDI41	41	3562	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	104	<Null>	<Null>	Outfall to Tumwater creek	<Null>	<Null>	<Null>	Tumwater Truck Rt	<Null>	<Null>	A St	<Null>
SWDI42	42	3563	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	92	<Null>	<Null>	Outfall to Tumwater creek	<Null>	<Null>	<Null>	Tumwater Truck Rt	<Null>	<Null>	A St	<Null>
SWDI43	43	3564	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	150	<Null>	<Null>	Outfall to Tumwater creek	<Null>	<Null>	<Null>	10th St	<Null>	<Null>	Tumwater Truck Rt	<Null>
SWDI44	44	3619	City of PA	City of PA	10/1/2005	Active	Outfall	<Null>	313.82	<Null>	<Null>	<Null>	Park Ave Impvts	4-Apr	<Null>	Park Ave	<Null>	<Null>	Washington St	<Null>
SWDI45	45	3620	City of PA	City of PA	10/1/2005	Active	Outfall	<Null>	308.36	<Null>	<Null>	<Null>	Park Ave Impvts	4-Apr	<Null>	Park Ave	<Null>	<Null>	Washington St	<Null>
SWDI46	46	2329	City of PA	City of PA	1/1/1985	Active	OutfallCreek	<Null>	200	<Null>	<Null>	Outfall to Ennis creek	<Null>	<Null>	<Null>	US Hwy 101	<Null>	<Null>	Delguzzi Dr	<Null>
SWDI47	47	2330	City of PA	County	1/1/1970	Active	OutfallCreek	<Null>	76	<Null>	<Null>	Outfall to Ennis creek	<Null>	<Null>	<Null>	Ennis Creek Rd	<Null>	<Null>	<Null>	<Null>
SWDI48	48	2319	City of PA	City of PA	1/1/1964	Active	OutfallCreek	<Null>	158	<Null>	<Null>	Outfall to Peabody creek	<Null>	<Null>	South side of Lauridsen Blvd bridge.	Lauridsen Blvd	<Null>	Race St	<Null>	<Null>
SWDI49	49	2322	City of PA	City of PA	1/1/1952	Active	OutfallCreek	<Null>	156	<Null>	<Null>	Outfall to Peabody creek	<Null>	<Null>	<Null>	9th St	<Null>	Race St	Francis St	<Null>
SWDI50	50	2323	City of PA	City of PA	1/1/1970	Active	OutfallCreek	<Null>	226.61	<Null>	<Null>	Outfall to Whites creek. 18inx12in tee in ditch.	<Null>	<Null>	<Null>	Alder St	<Null>	<Null>	5th St	<Null>
SWDI51	51	2213	City of PA	County	1/1/1976	Active	OutfallCreek	<Null>	262	<Null>	<Null>	Outfall to Valley creek	<Null>	<Null>	<Null>	Park Ave	<Null>	Cherry St	<Null>	<Null>
SWDI52	52	2214	City of PA	City of PA	1/1/1962	Active	OutfallCreek	<Null>	290	<Null>	<Null>	Outfall to Valley creek	<Null>	<Null>	<Null>	Fogarty Ave	<Null>	Cherry St	<Null>	<Null>
SWDI53	53	2217	City of PA	City of PA	1/1/1956	Active	OutfallCreek	<Null>	219	<Null>	<Null>	Outfall to Valley creek	<Null>	<Null>	<Null>	14th/15th Alley	<Null>	Cherry St	<Null>	<Null>
SWDI54	54	2218	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	148	<Null>	<Null>	Outfall to Tumwater creek	<Null>	<Null>	<Null>	Edgewood Pl	<Null>	Lauridsen Blvd	<Null>	<Null>
SWDI55	55	2219	City of PA	City of PA	1/1/1956	Active	Outfall	<Null>	208	<Null>	<Null>	PIPE OUTLET AT TOP OF BANK.	<Null>	<Null>	<Null>	13th/14th Alley	<Null>	Cherry St	<Null>	<Null>
SWDI56	56	2221	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	200	<Null>	<Null>	Outfall to Tumwater creek	<Null>	<Null>	<Null>	Tumwater Truck Rt	<Null>	<Null>	Lauridsen Blvd	<Null>
SWDI57	57	2224	City of PA	City of PA	1/1/1968	Active	Outfall	<Null>	204	<Null>	<Null>	OUTFALL	Tumwater creek outfall	<Null>	<Null>	15th St	<Null>	A St	<Null>	<Null>
SWDI58	58	2225	City of PA	City of PA	1/1/1989	Active	OutfallCreek	<Null>	235	<Null>	<Null>	Outfall to Ennis creek	<Null>	<Null>	<Null>	Delguzzi Dr	<Null>	US Hwy 101	<Null>	<Null>
SWDI59	59	2238	City of PA	City of PA	1/1/1977	Active	Outfall	<Null>	504	<Null>	<Null>	OUTLET	<Null>	77-2	<Null>	Glenbrook Cir	<Null>	McDougal St	McGill Ave	<Null>
SWDI60	60	2239	City of PA	City of PA	1/1/1974	Active	OutfallCreek	<Null>	470	<Null>	<Null>	Outfall to Peabody creek	<Null>	<Null>	<Null>	Canyon Cir	<Null>	<Null>	Canyonedge Dr	<Null>
SWDI61	61	2248	City of PA	City of PA	1/1/1974	Active	Outfall	<Null>	476	<Null>	<Null>	PIPE OUTLET FROM MH APO12.	<Null>	<Null>	<Null>	Ahlvers Rd	<Null>	Peabody St	<Null>	<Null>
SWDI62	62	2249	City of PA	City of PA	1/1/1971	Active	OutfallCreek	<Null>	476	<Null>	<Null>	Outfall to Valley creek	<Null>	<Null>	<Null>	Ahlvers Rd	<Null>	Peabody St	Old Mill Rd	<Null>
SWDI63	63	2251	City of PA	City of PA	1/1/1980	Active	OutfallCreek	<Null>	468	<Null>	<Null>	Outfall to Valley creek	<Null>	<Null>	<Null>	Ahlvers Rd	<Null>	Peabody St	Old Mill Rd	<Null>
SWDI64	64	2252	City of PA	City of PA	1/1/1991	Active	OutfallCreek	<Null>	482	<Null>	<Null>	Outfall to Valley creek	<Null>	<Null>	<Null>	Ahlvers Rd	<Null>	<Null>	Galaxy Pl	<Null>

AssetID *	FacilityID	LegacyID	Administration	Jurisdiction	InstallDate	Status	SubType	Diameter	Elevation	WaterType	DataSource	Notes	Name	Project	Location	Street	Intersection	StreetX_NE	StreetX_SW	Material
SWDI65	65	2254	City of PA	City of PA	1/1/1978	Active	Outfall	<Null>	476	<Null>	<Null>	OUTFALL	<Null>	<Null>	<Null>	McDougal St	<Null>	<Null>	Benjamin Ave	<Null>
SWDI66	66	2257	City of PA	City of PA	1/1/1976	Active	Outfall	<Null>	448	<Null>	<Null>	OUTLET OF PIPE FROM CB UP038.	<Null>	<Null>	<Null>	Regent St	<Null>	Viewcrest Ave	Vista View Dr	<Null>
SWDI67	67	2268	City of PA	City of PA	1/1/1986	Active	OutfallCreek	<Null>	404	<Null>	<Null>	OUTFALL	<Null>	<Null>	<Null>	McDougal St	<Null>	Mt Angeles Rd	<Null>	<Null>
SWDI68	68	2273	City of PA	City of PA	1/1/1986	Active	Outfall	<Null>	412	<Null>	<Null>	OUTFALL	<Null>	<Null>	<Null>	Mt Angeles Rd	<Null>	Craig Ave	<Null>	<Null>
SWDI69	69	2278	City of PA	City of PA	1/1/1996	Active	Outfall	<Null>	362	<Null>	<Null>	Outlet to ditch	<Null>	<Null>	<Null>	Melody Ln	<Null>	Melody Cir	<Null>	<Null>
SWDI70	70	2279	Private	City of PA	1/1/1993	Active	Outfall	<Null>	346	<Null>	<Null>	<Null>	<Null>	93-13	<Null>	Lauridsen Blvd	<Null>	Currier Ct	Lambert Ln	<Null>
SWDI71	71	2283	City of PA	City of PA	1/1/1989	Active	OutfallCreek	<Null>	242	<Null>	<Null>	Outfall to Ennis creek	<Null>	<Null>	<Null>	Delguzzi Dr	<Null>	US Hwy 101	<Null>	<Null>
SWDI72	72	2287	City of PA	City of PA	1/1/1965	Active	Outfall	<Null>	336	<Null>	<Null>	PIPE OUTLET	<Null>	<Null>	<Null>	Porter St	<Null>	Park Ave	Highland Ave	<Null>
SWDI73	73	2288	City of PA	City of PA	1/1/1954	Active	OutfallCreek	<Null>	260	<Null>	<Null>	Outfall to Peabody creek	<Null>	<Null>	<Null>	Park Ave	<Null>	Race St	Eunice St	<Null>
SWDI74	74	2289	City of PA	City of PA	1/1/1973	Active	Outfall	<Null>	266	<Null>	<Null>	OUTLET	<Null>	<Null>	<Null>	Eunice St	<Null>	<Null>	Vashon Ave	<Null>
SWDI75	75	2290	City of PA	City of PA	1/1/1973	Active	Outfall	<Null>	266	<Null>	<Null>	OUTLET	<Null>	<Null>	<Null>	Eunice St	<Null>	<Null>	Vashon Ave	<Null>
SWDI76	76	2301	City of PA	City of PA	1/1/1983	Active	OutfallCreek	<Null>	231	<Null>	<Null>	Outfall to Peabody creek	<Null>	<Null>	<Null>	Race St	<Null>	Bryson Ave	<Null>	<Null>
SWDI77	77	2304	City of PA	City of PA	1/1/1989	Active	OutfallCreek	<Null>	226	<Null>	<Null>	Outfall to Ennis creek	<Null>	<Null>	<Null>	Delguzzi Dr	<Null>	US Hwy 101	<Null>	<Null>
SWDI78	78	2309	City of PA	City of PA	1/1/1989	Active	OutfallCreek	<Null>	184	<Null>	<Null>	Outfall to Ennis creek	<Null>	<Null>	<Null>	Delguzzi Dr	<Null>	US Hwy 101	<Null>	<Null>
SWDI79	79	2310	City of PA	City of PA	1/1/1989	Active	OutfallCreek	<Null>	170	<Null>	<Null>	Outfall to Ennis creek	<Null>	<Null>	<Null>	Delguzzi Dr	<Null>	US Hwy 101	<Null>	<Null>
SWDI80	80	2317	City of PA	City of PA	1/1/1952	Active	OutfallCreek	<Null>	190	<Null>	<Null>	Outfall to Peabody creek	<Null>	<Null>	<Null>	10th St	<Null>	Race St	<Null>	<Null>
SWDI81	81	2334	City of PA	City of PA	1/1/1972	Active	OutfallCreek	<Null>	112	<Null>	<Null>	Outfall to Ennis creek	<Null>	<Null>	<Null>	Harborcrest Pl	<Null>	<Null>	<Null>	<Null>
SWDI82	82	2336	City of PA	City of PA	1/1/1976	Active	OutfallCreek	<Null>	148	<Null>	<Null>	Outfall to Valley creek	<Null>	<Null>	<Null>	US Hwy 101	<Null>	15th St	<Null>	<Null>
SWDI83	83	2337	City of PA	City of PA	1/1/1955	Active	OutfallHarbor	42	6	StormRunOff	<Null>	Outfall	Culvert discharge	<Null>	Boat harbor.	Marine Dr	<Null>	<Null>	C St	<Null>
SWDI84	84	2339	City of PA	City of PA	1/1/1968	Active	Outfall	<Null>	168	<Null>	<Null>	OUTFALL	<Null>	<Null>	<Null>	13th St	<Null>	Tumwater Truck Rt	A St	<Null>
SWDI85	85	2341	City of PA	City of PA	1/1/1968	Active	Outfall	<Null>	210	<Null>	<Null>	OUTFALL	<Null>	<Null>	<Null>	14th St	<Null>	Tumwater Truck Rt	A St	<Null>
SWDI86	86	2342	City of PA	City of PA	1/1/1978	Active	Outfall	<Null>	294	<Null>	<Null>	OUTFALL	<Null>	<Null>	<Null>	F St	<Null>	17th St	18th St	<Null>
SWDI87	87	2343	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	80	<Null>	<Null>	Outfall from 11th St to Tumwater creek	<Null>	<Null>	East of Tumwater Truck Rt.	11th St	<Null>	Tumwater Truck Rt	<Null>	<Null>
SWDI88	88	2345	City of PA	City of PA	1/1/1978	Active	Outfall	<Null>	290	<Null>	<Null>	OUTFALL	<Null>	<Null>	<Null>	F St	<Null>	16th St	17th St	<Null>
SWDI89	89	3466	City of PA	City of PA	1/1/1953	Active	OutfallHarbor	6	7.3	CombinedWW	Plan Set	I.E. determined with hand level. The install date is probably older than 1953.	CSO discharge site 6	<Null>	Discharges at the end of Oak St.	Railroad Ave	<Null>	Oak St	Cherry St	Concrete
SWDI90	90	3117	City of PA	City of PA	1/1/1967	Active	Outfall	<Null>	310	<Null>	<Null>	OUTFALL	<Null>	<Null>	<Null>	Vashon Ave	<Null>	<Null>	Peabody St	<Null>
SWDI91	91	3119	City of PA	City of PA	1/1/1979	Active	Outfall	<Null>	238	<Null>	<Null>	OUTLET OF PIPE	<Null>	<Null>	<Null>	11th/12th Alley	<Null>	K St	<Null>	<Null>
SWDI92	92	3121	City of PA	City of PA	1/1/1996	Active	Outfall	<Null>	362	<Null>	<Null>	Outlet to ditch	<Null>	<Null>	<Null>	Melody Ln	<Null>	Melody Cir	<Null>	<Null>
SWDI93	93	3122	City of PA	City of PA	1/1/1994	Active	Outfall	<Null>	282	<Null>	Plan Set	Outfall	Clallam County Transit	Clallam Transit site improvements	Clallam Transit site	Lauridsen Blvd	<Null>	Tumwater Truck Rt	Newell Rd	<Null>
SWDI94	94	3123	City of PA	City of PA	1/1/1994	Active	Outfall	<Null>	280	<Null>	<Null>	Outfall	<Null>	<Null>	<Null>	Newell Rd	<Null>	<Null>	<Null>	<Null>
SWDI95	95	3124	City of PA	City of PA	1/1/1994	Active	Outfall	<Null>	260	<Null>	Plan Set	Outfall	Clallam County Transit	Clallam Transit site improvements	Clallam Transit site	Lauridsen Blvd	<Null>	Tumwater Truck Rt	Newell Rd	<Null>
SWDI96	96	3126	City of PA	City of PA	1/1/1994	Active	Outfall	<Null>	262	<Null>	Plan Set	Outfall	Clallam County Transit	Clallam Transit site improvements	Clallam Transit site	Lauridsen Blvd	<Null>	Tumwater Truck Rt	Newell Rd	<Null>
SWDI97	97	3127	City of PA	City of PA	1/1/1978	Active	Outfall	<Null>	258	<Null>	<Null>	outlet to detention	<Null>	<Null>	<Null>	19th St	<Null>	<Null>	<Null>	<Null>
SWDI98	98	3332	City of PA	City of PA	1/1/2002	Active	Outfall	<Null>	294	<Null>	<Null>	Outfall	<Null>	<Null>	<Null>	15th St	F St and 15th St	<Null>	F St	<Null>
SWDI99	99	3334	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	200	<Null>	<Null>	Outfall to Tumwater creek	<Null>	<Null>	<Null>	16th St	<Null>	Cedar St	<Null>	<Null>
SWDI100	100	3477	City of PA	City of PA	<Null>	Active	Outfall	<Null>	50	<Null>	<Null>	Located by Mike Szatlocky. Baffled outlet.	<Null>	<Null>	<Null>	McDonald St	<Null>	McDonald St	18th St	<Null>
SWDI101	101	3511	City of PA	City of PA	<Null>	Active	Outfall	<Null>	450	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	Rook Dr	<Null>	Rook Dr	Forest Trail	<Null>
SWDI102	102	3565	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	62	<Null>	<Null>	Outfall to Tumwater creek	<Null>	<Null>	<Null>	Tumwater Truck Rt	<Null>	9th St	<Null>	<Null>
SWDI103	103	3566	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	49	<Null>	<Null>	Outfall to Tumwater creek	<Null>	<Null>	<Null>	Tumwater Truck Rt	<Null>	8th St	<Null>	<Null>
SWDI104	104	3567	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	41	<Null>	<Null>	Outfall to Tumwater creek	<Null>	<Null>	<Null>	Tumwater Truck Rt	<Null>	<Null>	8th St	<Null>
SWDI105	105	3568	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	38	<Null>	<Null>	Outfall to Tumwater creek	<Null>	<Null>	<Null>	Tumwater Truck Rt	<Null>	<Null>	8th St	<Null>
SWDI106	106	3569	City of PA	City of PA	<Null>	Active	Outfall	<Null>	126	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	7th St	<Null>	<Null>	A St	<Null>
SWDI107	107	3570	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	36	<Null>	<Null>	Outfall to Valley creek	<Null>	<Null>	<Null>	Valley St	<Null>	<Null>	8th St	<Null>
SWDI108	108	3571	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	250	<Null>	<Null>	Outfall to Peabody creek	<Null>	<Null>	<Null>	Park Ave	<Null>	Race St	Eunice St	<Null>
SWDI109	109	3572	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	260	<Null>	<Null>	Outfall to Peabody creek	<Null>	<Null>	<Null>	Park Ave	<Null>	Race St	Eunice St	<Null>
SWDI110	110	3573	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	284	<Null>	<Null>	Outfall to Peabody creek	<Null>	<Null>	<Null>	Park Ave	<Null>	Race St	Eunice St	<Null>
SWDI111	111	3574	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	292	<Null>	<Null>	Outfall to Peabody creek	<Null>	<Null>	<Null>	Mt Angeles Rd	<Null>	Park Ave	<Null>	<Null>
SWDI112	112	3575	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	294	<Null>	<Null>	Outfall to Peabody creek	<Null>	<Null>	<Null>	Mt Angeles Rd	<Null>	Park Ave	<Null>	<Null>
SWDI113	113	3576	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	16	<Null>	<Null>	Outfall to Ennis creek	<Null>	<Null>	<Null>	Rayonier	<Null>	<Null>	Rayonier	<Null>
SWDI114	114	3617	City of PA	City of PA	10/1/2005	Active	Outfall	<Null>	295.32	<Null>	<Null>	<Null>	Park Ave Impvts	4-Apr	<Null>	Park Ave	<Null>	<Null>	Mt Angeles Rd	<Null>
SWDI115	115	3646	City of PA	City of PA	6/1/2006	Active	Outfall	12	170	StormRunOff	Inspection	<Null>	<Null>	The Orchards Subdivision	<Null>	14th St	Milwaukee Dr and 14th St	Milwaukee Dr	<Null>	<Null>
SWDI117	117	3653	City of PA	City of PA	6/1/2006	Active	Outfall	<Null>	160	<Null>	<Null>	Outfall to detention pond	<Null>	The Orchards Subdivision	<Null>	Orchard Ave	<Null>	<Null>	Apple Tree Ln	<Null>
SWDI118	118	3658	City of PA	City of PA	6/1/2006	Active	Outfall	<Null>	464	<Null>	<Null>	Quarry spall discharge	<Null>	Green Crow-Reidel phase2	<Null>	Forest Trail	<Null>	Rook Dr	Forest Trail	<Null>
SWDI119	119	3679	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	28	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	2nd St	<Null>	<Null>	Lincoln St	<Null>
SWDI120	120	3587	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	410	<Null>	<Null>	Outfall to Whites creek	<Null>	<Null>	<Null>	Woodhaven Dr	<Null>	<Null>	<Null>	<Null>
SWDI121	121	3588	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	352	<Null>	<Null>	Outfall to Whites creek	<Null>	<Null>	<Null>	Currier Ct	<Null>	Lambert Ln	<Null>	<Null>
SWDI122	122	3589	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	150	<Null>	<Null>	Outfall to Whites creek	<Null>	<Null>	<Null>	2nd St	<Null>	<Null>	Wolcott St	<Null>
SWDI123	123	3590	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	162	<Null>	<Null>	Outfall to Whites creek	<Null>	<Null>	<Null>	1st/2nd Alley	<Null>	Wolcott St	Alder St	<Null>
SWDI124	124	3591	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	162	<Null>	<Null>	Outfall to Whites creek	<Null>	<Null>	<Null>	1st/2nd Alley	<Null>	Wolcott St	Alder St	<Null>
SWDI125	125	3592	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	115	<Null>	<Null>	Outfall to Whites creek	<Null>	<Null>	<Null>	Front St	<Null>	Wolcott St	Alder St	<Null>
SWDI126	126	3839	City of PA	City of PA	12/1/2006	Active	Outfall	<Null>	238	<Null>	<Null>	extend pipe to daylight.	<Null>	15th street and I	<Null>	15th St	<Null>	H St	I St	<Null>
SWDI127	127	3848	City of PA	City of PA	<Null>	Active	Outfall	<Null>	315	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	US Hwy 101	<Null>	Tumwater Truck Rt	Doyle Rd	<Null>
SWDI129	129	3997	City of PA	City of PA	<Null>	Active	Outfall	<Null>	8	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	Tumwater St	<Null>	<Null>	Marine Dr	<Null>
SWDI130	130	3833	City of PA	City of PA	12/1/2006	Active	Outfall	<Null>	452.96	<Null>	<Null>	Outfall to pond	<Null>	Green Crow phase 3	<Null>	Morning Ct	<Null>	Rook Dr	Forest Trail	<Null>
SWDI131	131	2281	City of PA	City of PA	1/1/1993	Active	OutfallCreek	<Null>	218	<Null>	<Null>	Diffuser. Outfall to Whites creek	<Null>	93-13	<Null>	Penn St	<Null>	6th St	Lambert Ln	<Null>
SWDI132	132	4230	City of PA	City of PA	<Null>	Active	Outfall	<Null>	244	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	Tumwater Truck Rt	<Null>	<Null>	Lauridsen Blvd	<Null>
SWDI133	133	4226	City of PA	City of PA	<Null>	Active	Outfall	<Null>	476.2	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	Ahlvers Rd	<Null>	Laurel St	Creekside Dr.	<Null>
SWDI134	134	4104	City of PA	City of PA	1/29/2009	Active	Outfall	<Null>	472	<Null>	<Null>	Flow dispersion structure.	<Null>	Reserve at Valley Creek plan set 2009	<Null>	Crestside Dr.	<Null>	Ahlvers Rd	Valley Creek Dr.	<Null>
SWDI135	135	4121	City of PA	City of PA	1/29/2009	Active	Outfall	<Null>	474	<Null>	<Null>	Flow dispersion structure.	<Null>	Reserve at Valley Creek plan set 2009	<Null>	Creekside Dr.	<Null>	Ahlvers Rd	Valley Creek Dr.	<Null>
SWDI136	136	4166	City of PA	City of PA	2/26/2019	Removed	Outfall	<Null>	441	StormRunOff	AsBuilt	<Null>	<Null>	Campbell Ave PRD Phase 2	Near lot 32 and 33	Rook Dr	<Null>	Eckard Ave	<Null>	<Null>
SWDI137	137	3659	City of PA	City of PA	6/1/2006	Active	Outfall	<Null>	452	<Null>	<Null>	<Null>	<Null>	Green Crow-Reidel phase2	<Null>	Rook Dr	<Null>	Rook Dr	Forest Trail	<Null>
SWDI138	138	4206	Private	City of PA	<Null>	Active	OutfallCreek	<Null>	340	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	Lauridsen Blvd	<Null>	<Null>	Ennis St	<Null>
SWDI139	139	3140	City of PA	City of PA	1/1/1996	Active	Outfall	<Null>	270	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	16th St	<Null>	N St	Maloney Ct	<Null>
SWDI140	140	3141	City of PA	City of PA	1/1/1996	Active	Outfall	<Null>	270	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	16th St	<Null>	N St	Maloney Ct	<Null>
SWDI142	142	3150	City of PA	City of PA	1/1/1985	Active	Outfall	<Null>	208	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	Delguzzi Dr	<Null>	US Hwy 101	<Null>	<Null>
SWDI143	143	3151	City of PA	City of PA	1/1/1985	Active	Outfall	<Null>	202	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	Delguzzi Dr	<Null>	US Hwy 101	<Null>	<Null>
SWDI144	144	3153	City of PA	City of PA	1/1/1925	Active	Outfall	<Null>	376	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	Viewcrest Ave	<Null>	<Null>	<Null>	<Null>

AssetID *	FacilityID	LegacyID	Administration	Jurisdiction	InstallDate	Status	SubType	Diameter	Elevation	WaterType	DataSource	Notes	Name	Project	Location	Street	Intersection	StreetX_NE	StreetX_SW	Material
SWDI145	145	2215	City of PA	City of PA	1/1/1987	Active	Outfall	<Null>	246	<Null>	<Null>	LOCATED FROM AERIALS AND AS-BUILT "PINE ROAD VILL	<Null>	<Null>	<Null>	Edgewood Dr	<Null>	Pine St	US Hwy 101	<Null>
SWDI146	146	2216	City of PA	City of PA	1/1/1987	Active	Outfall	<Null>	246	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	Edgewood Dr	<Null>	Pine St	US Hwy 101	<Null>
SWDI147	147	2256	City of PA	City of PA	1/1/1977	Active	Outfall	<Null>	445	<Null>	<Null>	<Null>	<Null>	Pinebrook Sub Eckard Pl water wwater	<Null>	McDougal St	<Null>	Craig Ave	Eckard Ave	<Null>
SWDI148	148	2291	City of PA	City of PA	1/1/1954	Active	Outfall	<Null>	308	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	Park Ave	<Null>	Race St	Eunice St	<Null>
SWDI150	150	2347	City of PA	City of PA	1/1/1968	Active	Outfall	<Null>	150	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	9th St	<Null>	Tumwater Truck Rt	A St	<Null>
SWDI152	152	3113	City of PA	City of PA	1/1/1955	Inactive	OutfallHarbor	8	14	WWEffluent	Inspection	Valve that activates this outflow is in the off condition.	CSO inactive	<Null>	Daishowa lagoon	Marine Dr	<Null>	Hill St	Ediz Hook Rd	Concrete
SWDI153	153	3726	City of PA	City of PA	<Null>	Proposed	Outfall	<Null>	322	<Null>	<Null>	Outfall to ditch. 6 in quarry spall.	<Null>	<Null>	<Null>	Highland Ave	<Null>	Park Ave	Grant Ave	<Null>
SWDI154	154	3931	City of PA	City of PA	<Null>	Active	Outfall	<Null>	38	<Null>	<Null>	Energy dissipater. See plans for detail.	<Null>	Juan De Fuca Bluffs plan set	<Null>	P St	<Null>	Walker St	Dutch Dr	<Null>
SWDI155	155	4093	City of PA	City of PA	1/29/2009	Active	Outfall	<Null>	474	<Null>	<Null>	<Null>	<Null>	Reserve at Valley Creek plan set 2009	<Null>	Creekside Dr.	<Null>	Ahlvers Rd	Valley Creek Dr.	<Null>
SWDI156	156	<Null>	City of PA	City of PA	1/1/2006	Active	Outfall	<Null>	130	StormRunOff	<Null>	Overflow storm water discharge from Walker Subd to ditch that flows to Strait outfall.	<Null>	<Null>	<Null>	P St	<Null>	Walker St	Dutch Dr	<Null>
SWDI157	157	<Null>	City of PA	City of PA	1/1/2006	Active	Outfall	<Null>	130	StormRunOff	<Null>	Storm water discharge from Walker Subd to ditch that flows to Strait outfall.	<Null>	<Null>	<Null>	P St	<Null>	Walker St	Dutch Dr	<Null>
SWDI159	159	<Null>	City of PA	City of PA	<Null>	Active	OutfallCreek	12	546	StormRunOff	<Null>	Creek outfall to Mill Creek.	<Null>	<Null>	<Null>	Old Mill Rd	<Null>	Rhodes Rd	<Null>	<Null>
SWDI160	160	<Null>	City of PA	City of PA	<Null>	Active	OutfallCreek	<Null>	30	StormRunOff	Inspection	Overflow	Dry Creek Diversion Outfall	16-May	Landfill site along Dry Creek.	Landfill site	<Null>	<Null>	<Null>	<Null>
SWDI161	161	<Null>	City of PA	City of PA	<Null>	Active	Outfall	<Null>	184	StormRunOff	<Null>	Outfall to parking lot ditch.	Wal mart superstore	<Null>	Wal mart superstore parking lot	US Hwy 101	<Null>	Masters Rd	<Null>	<Null>
SWDI166	166	<Null>	City of PA	City of PA	1/1/1953	Active	Outfall	15	12	StormRunOff	Plan Set	Originally installed before 1953 and upgraded since. The pond is tidal influenced.	Culvert discharge	<Null>	East of Red Lion motel. Over the bluff from Front St then discharges to pond.	Peabody St	<Null>	<Null>	Front St	Concrete
SWDI167	167	<Null>	City of PA	City of PA	1/1/1915	Active	OutfallHarbor	12	6	StormRunOff	<Null>	Installation date is approximate and coincides with the building of the Railroad. Many improvements have been made over the years.	Culvert discharge	<Null>	East of Red Lion motel from pond culvert complex.	Peabody St	<Null>	<Null>	Front St	PVC
SWDI168	168	<Null>	City of PA	City of PA	<Null>	Active	Outfall	<Null>	174	StormRunOff	<Null>	<Null>	<Null>	<Null>	North of MRWF pond and east of gun range.	Landfill site	<Null>	<Null>	<Null>	<Null>
SWDI171	171	<Null>	City of PA	City of PA	<Null>	Active	Outfall	<Null>	184	StormRunOff	<Null>	<Null>	<Null>	<Null>	<Null>	Landfill site	<Null>	<Null>	<Null>	<Null>
SWDI173	173	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	14	<Null>	Inspection	<Null>	<Null>	<Null>	<Null>	Marine Dr	<Null>	<Null>	<Null>	<Null>
SWDI174	174	174	City of PA	City of PA	1/1/1979	Active	OutfallHarbor	12	9.54	StormRunOff	Plan Set	<Null>	Culvert discharge	78-2 PA Municipal Pier	Rip rap north of the City pier parking lot and near the Peabody Creek outfall	Railroad Ave	<Null>	<Null>	Lincoln St	Concrete
SWDI175	175	175	City of PA	City of PA	<Null>	Active	IDDE	<Null>	16	<Null>	Inspection	<Null>	<Null>	<Null>	Dairy Queen	Railroad Ave	<Null>	Lincoln St	Laurel St	<Null>
SWDI176	176	<Null>	City of PA	City of PA	1/1/1967	Active	OutfallHarbor	24	10	CombinedWW	Plan Set	This discharge site is inderectly referenced in 67-4 and is not shown on the 1953 storm map. Install date is approximate.	CSO discharge site 7	<Null>	Discharges on the east side of the Blackball ferry dock.	Railroad Ave	<Null>	Lincoln St	Laurel St	Concrete
SWDI177	177	<Null>	City of PA	City of PA	<Null>	Active	OutfallHarbor	<Null>	14	StormRunOff	Inspection	<Null>	Pipe discharge	<Null>	Discharges at the end of Lincoln St. to the west of Peabody Ck culvert.	Lincoln St	<Null>	<Null>	Railroad Ave	<Null>
SWDI178	178	<Null>	City of PA	City of PA	1/1/1937	Abandoned	OutfallHarbor	15	0	StormRunOff	<Null>	Destroyed during graving yard construction (2002) and inactive prior to that.	Old CSO discharge site	<Null>	Near graving yard area.	Marine Dr	<Null>	<Null>	Hill St	Steel
SWDI179	179	<Null>	City of PA	City of PA	<Null>	Active	Outfall	<Null>	30	StormRunOff	<Null>	<Null>	<Null>	<Null>	On beach north of old pump station one location.	4th St	<Null>	Evans Ave	<Null>	<Null>
SWDI180	180	<Null>	City of PA	City of PA	<Null>	Active	Outfall	<Null>	122	StormRunOff	<Null>	<Null>	<Null>	<Null>	Discharges near top of bluff and flows to beach	4th St	<Null>	<Null>	<Null>	<Null>
SWDI181	181	<Null>	City of PA	City of PA	<Null>	Abandoned	OutfallCreek	<Null>	512	StormRunOff	<Null>	Old CSO outfall to seasonal creek	Old CSO	<Null>	<Null>	Church St	<Null>	McDougal St	<Null>	<Null>
SWDI182	182	<Null>	City of PA	City of PA	1/1/1950	Abandoned	OutfallHarbor	<Null>	0	StormRunOff	<Null>	Historical outfall per study 95-09 Marine environment near Rayonier. Shown on a 1963 aerial photo but the install date was probably much earlier due to the maturity of the structures in the photograph. Unknown pipe data.	Historical site E	<Null>	Rayonier site south west side of pier	Ennis St	<Null>	<Null>	<Null>	<Null>
SWDI183	183	<Null>	City of PA	City of PA	1/1/1950	Abandoned	OutfallHarbor	<Null>	0	StormRunOff	<Null>	Historical outfall per study 95-09 Marine environment near Rayonier. Shown on a 1963 aerial photo but the install date was probably much earlier due to the maturity of the structures in the photograph. Unknown pipe data.	Historical site A	<Null>	Rayonier site west side of pier	Ennis St	<Null>	<Null>	<Null>	<Null>
SWDI184	184	<Null>	City of PA	City of PA	1/1/1950	Abandoned	OutfallHarbor	<Null>	0	StormRunOff	<Null>	Historical outfall per study 95-09 Marine environment near Rayonier. Shown on a 1963 aerial photo but the install date was probably much earlier due to the maturity of the structures in the photograph. Unknown pipe data.	Historical site B	<Null>	Rayonier site south end of pier	Ennis St	<Null>	<Null>	<Null>	<Null>
SWDI185	185	<Null>	City of PA	City of PA	1/1/1950	Abandoned	OutfallHarbor	<Null>	0	StormRunOff	<Null>	Historical outfall per study 95-09 Marine environment near Rayonier. Shown on a 1963 aerial photo but the install date was probably much earlier due to the maturity of the structures in the photograph. Unknown pipe data.	Historical site C	<Null>	Rayonier site east side of pier	Ennis St	<Null>	<Null>	<Null>	<Null>
SWDI186	186	<Null>	City of PA	City of PA	1/1/1950	Abandoned	OutfallHarbor	<Null>	0	StormRunOff	<Null>	Historical outfall per study 95-09 Marine environment near Rayonier. Shown on a 1963 aerial photo but the install date was probably much earlier due to the maturity of the structures in the photograph. Unknown pipe data.	Historical site D	<Null>	Rayonier site east side of pier at Ennis creek outfall	Ennis St	<Null>	<Null>	<Null>	<Null>
SWDI166	166	<Null>	City of PA	City of PA	1/1/1970	Active	Outfall	4	28	StormRunOff	Cards	The pond is tidal influenced. This pipe shows up on the 1970 storm map but I think it is much older.	Culvert discharge	<Null>	Over the bluff from Front St then to Red Lion motel parking lot then discharges to pond.	Peabody St	<Null>	<Null>	Front St	PVC
SWDI188	188	<Null>	Port of PA	City of PA	4/1/1996	Active	OutfallHarbor	12	7.94	StormRunOff	Plan Set	See pdf page 11 of the primary image plan set. End of pipe is fitted with tide flex valve.	Culvert discharge	<Null>	Westport Marine area.	Cedar St	<Null>	<Null>	Marine Dr	Ductile Iron
SWDI189	189	<Null>	City of PA	City of PA	1/1/1979	Active	OutfallHarbor	12	0	StormRunOff	<Null>	<Null>	Pipe discharge	<Null>	City pier east of the stage area in rip rap.	Railroad Ave	<Null>	<Null>	Lincoln St	Concrete
SWDI190	190	<Null>	City of PA	City of PA	<Null>	Active	OutfallHarbor	<Null>	12	StormRunOff	<Null>	<Null>	Pipe discharge	<Null>	Near entrance to the City Pier parking lot.	Railroad Ave	<Null>	<Null>	Lincoln St	<Null>
SWDI191	191	<Null>	City of PA	City of PA	1/1/1979	Abandoned	OutfallHarbor	12	0	StormRunOff	<Null>	See pdf page 12 of the plan set. This culvert has been removed.	Historical site	<Null>	Rayonier mill site near the old clarifier tank.	Ennis St	<Null>	<Null>	<Null>	Concrete
SWDI192	192	<Null>	Port of PA	City of PA	<Null>	Abandoned	OutfallHarbor	<Null>	14	StormRunOff	OrthoPhoto	Outfall of Tumwater creek	Tumwater Creek	<Null>	Near the POPA pier	Tumwater St	<Null>	<Null>	Marine Dr	<Null>

AssetID *	FacilityID	LegacyID	Administration	Jurisdiction	InstallDate	Status	SubType	Diameter	Elevation	WaterType	DataSource	Notes	Name	Project	Location	Street	Intersection	StreetX_NE	StreetX_SW	Material
SWDI193	193	<Null>	City of PA	City of PA	<Null>	Active	OutfallHarbor	<Null>	0	StormRunOff	OrthoPhoto	<Null>	Ennis Creek	<Null>	Ennis creek outfall east of the Rayonier pier	Elwha St	<Null>	<Null>	<Null>	<Null>
SWDI194	194	<Null>	Private	City of PA	<Null>	Active	Outfall	4	447.6	StormRunOff	Inspection	Outfall with drain rock.	<Null>	<Null>	West side of house.	Rook Dr	<Null>	<Null>	<Null>	<Null>
SWDI195	195	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	94	<Null>	Inspection	<Null>	<Null>	<Null>	South portion of Fiesta Jalisco's parking lot near 1st Front alley.	Front St	<Null>	Eunice St	1st/Front Alley	<Null>
SWDI196	196	<Null>	City of PA	City of PA	<Null>	Active	Outfall	<Null>	15	StormRunOff	Inspection	Outfall to ditch that runs toward Marine dr.	<Null>	<Null>	South side of 3rd street to ditch	3rd St	<Null>	Tumwater St	Marine Dr	<Null>
SWDI197	197	<Null>	City of PA	City of PA	10/1/2012	Active	IDDE	<Null>	16	ParkingLot	Inspection	IDDE location inside catch basin	<Null>	<Null>	Red loin parking lot	Lincoln St	<Null>	Railroad Ave	Front St	<Null>
SWDI198	198	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	100	<Null>	WorkSketch	<Null>	<Null>	<Null>	VBCC main entrance	5th St	<Null>	Peabody St	Chase St	<Null>
SWDI199	199	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	94	StormRunOff	<Null>	<Null>	See WO 1630	<Null>	SE corner of Eunice Front/First Alley.	Eunice St	<Null>	Front St	1st St	<Null>
SWDI200	200	<Null>	City of PA	City of PA	12/31/2018	Active	Outfall	48	185	StormRunOff	AsBuilt	See sheet 56/59 for details and 16/59 for plan. Beehive outfall structure.	<Null>	TR-11-00	NW corner	N St	N St and 10th St	Seamount Dr	10th St	CONC
SWDI201	201	<Null>	City of PA	City of PA	<Null>	Active	Outfall	<Null>	120	StormRunOff	<Null>	<Null>	<Null>	<Null>	<Null>	Walker St	<Null>	10th St	<Null>	<Null>
SWDI202	202	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	120	<Null>	Inspection	<Null>	<Null>	<Null>	South side of 1st Street and east of the restaurant.	1st St	<Null>	Penn St	Alder St	<Null>
SWDI203	203	<Null>	City of PA	City of PA	4/1/2012	Active	IDDE	<Null>	144	<Null>	Inspection	<Null>	<Null>	<Null>	<Null>	Albert St	Albert St and 8th St	8th St	9th St	<Null>
SWDI204	204	<Null>	City of PA	City of PA	2/18/2012	Active	IDDE	<Null>	300	<Null>	<Null>	<Null>	<Null>	<Null>	South of Lauridsen near 1362 W Lauridsen Blvd	Lauridsen Blvd	<Null>	F St	L St	<Null>
SWDI205	205	<Null>	City of PA	City of PA	3/18/2013	Active	IDDE	<Null>	16	<Null>	Inspection	Source of discharge 219 Hwy 117	<Null>	<Null>	Just east of the intersection.	Marine Dr	Tumwater Truck Rt and Marine Dr	Cedar St	Tumwater Truck Rt	<Null>
SWDI206	206		City of PA	City of PA	1/5/2012	Active	Outfall	<Null>	420				<Null>	<Null>		US HWY 101	Airport Rd and US Hwy 101	Airport Rd	Eclipse Industrial Pkwy	<Null>
SWDI207	207		City of PA	City of PA	<Null>	Active	Outfall	<Null>	28				<Null>	<Null>	Near the culvert inlet	2nd St		Peabody st	Lincoln st	<Null>
SWDI208	<Null>	<Null>	City of PA	City of PA	<Null>	Active	Outfall	<Null>	33	StormRunOff	<Null>	Sample point for CSO SWPPP permit.	DC-3	<Null>	CSO site	Ennis St	<Null>	Water St	Columbia St	<Null>
SWDI209	209	<Null>	City of PA	City of PA	6/18/2013	Active	IDDE	<Null>	126	ComercialSite	Inspection	<Null>	<Null>	<Null>	East of Bruce's Specialty Auto near the 1st / Front alley.	Ennis St	<Null>	Front St	1st St	<Null>
SWDI210	210	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	130	ComercialSite	<Null>	<Null>	<Null>	<Null>	Mid point of west property line	Front St	<Null>	Penn St	Ennis St	<Null>
SWDI211	<Null>	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	50	StormRunOff	<Null>	<Null>	<Null>	<Null>	North side of Front street	Front St	<Null>	<Null>	<Null>	<Null>
SWDI212	212	212	City of PA	City of PA	<Null>	Active	IDDE	<Null>	548	<Null>	Inspection	<Null>	<Null>	<Null>	Northeast corner of intersection on private lot.	Scrivner Rd	<Null>	<Null>	Mt Angeles Rd	<Null>
SWDI213	213	213	City of PA	City of PA	<Null>	Active	IDDE	<Null>	430	<Null>	<Null>	<Null>	<Null>	<Null>	SW corner of intersection.	Campbell Ave	<Null>	<Null>	Mt Angeles Rd	<Null>
SWDI214	214	<Null>	Penn Coll	City of PA	<Null>	Active	OutfallCreek	12	355	StormRunOff	AsBuilt	<Null>	<Null>	<Null>	College campus	Alder St	<Null>	Melody Cir	<Null>	<Null>
SWDI215	215	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	93	<Null>	Inspection	<Null>	<Null>	<Null>	<Null>	Jones St	Jones St and Front St	Front St	<Null>	<Null>
SWDI216	216	<Null>	City of PA	City of PA	1/1/2012	Active	OutfallHarbor	<Null>	10	StormRunOff	Plan Set	<Null>	<Null>	Waterfront Phase 2	<Null>	Railroad Ave	<Null>	Laurel St	Oak St	<Null>
SWDI217	217	<Null>	City of PA	City of PA	1/1/2013	Active	OutfallHarbor	<Null>	8	StormRunOff	Plan Set	<Null>	<Null>	Waterfront Phase 2	Harbor side through rip rap.	Oak St	<Null>	<Null>	Railroad Ave	<Null>
SWDI218	218	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	118	<Null>	Inspection	See related work order	<Null>	<Null>	North side of Fairchild floors.	Front St	1st St and US Hwy 101	<Null>	Ennis St	<Null>
SWDI618	618	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	236	ParkingLot	Inspection	<Null>	<Null>	<Null>	Albertsons Grocery Store parking lot	Lauridsen Blvd	Laurel St and Lauridsen Blvd	Lincoln St	Laurel St	<Null>
SWDI619	619	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	22	<Null>	Inspection	<Null>	<Null>	<Null>	NE corner of intersection	1st St	Cherry St and 1st St	Oak St	Cherry St	<Null>
SWDI620	620	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	18	<Null>	Inspection	<Null>	<Null>	<Null>	Near the SW corner of the intersection.	Lincoln St	Lincoln St and Railroad Ave	Railroad Ave	Front St	<Null>
SWDI621	621	<Null>	Private	City of PA	<Null>	Active	IDDE	<Null>	86	<Null>	Inspection	<Null>	<Null>	<Null>	Safeway parking lot	3rd St	Laurel St and 4th/5th Alley	Lincoln St	Laurel St	<Null>
SWDI622	622	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	276	<Null>	Inspection	<Null>	<Null>	<Null>	East Lincoln Park Pond 1	Lauridsen Blvd	L St and Lauridsen Blvd	16th St	Lauridsen Blvd	<Null>
SWDI623	623	<Null>	Private	City of PA	<Null>	Active	IDDE	<Null>	100	<Null>	Inspection	<Null>	<Null>	<Null>	The SW corner of the intersection	Laurel St	Laurel St and 5th St	5th St	5th/6th Alley	<Null>
SWDI624	624	<Null>	Private	City of PA	<Null>	Active	IDDE	<Null>	48	<Null>	Inspection	<Null>	<Null>	<Null>	<Null>	1st St	Lincoln St and 1st St	Chase St	Lincoln St	<Null>
SWDI625	625	<Null>	Private	City of PA	<Null>	Active	IDDE	<Null>	218	<Null>	Inspection	<Null>	<Null>	<Null>	SE corner of intersection	4th/5th Alley	<Null>	G St	H St	<Null>
SWDI626	626	<Null>	Private	City of PA	<Null>	Active	IDDE	<Null>	252	<Null>	<Null>	<Null>	<Null>	<Null>	SW corner of the intersection.	8th St	I St and 8th St	I St	K St	<Null>
SWDI1018	<Null>	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	316	<Null>	Inspection	<Null>	<Null>	<Null>	County maintenance yard	Lauridsen Blvd	<Null>	C St	<Null>	<Null>
SWDI1418	<Null>	<Null>	Private	City of PA	<Null>	Active	IDDE	<Null>	128	<Null>	Inspection	Discharge point was to the storm main in Ennis St.	<Null>	<Null>	Car wash	1st St	Ennis St and 1st St	Ennis St	<Null>	<Null>
SWDI1818	1818	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	298	ComercialSite	Inspection	Vehicle wash water	<Null>	<Null>	Olympic Electric in ditch along Tumwater Truck Rte.	Tumwater Truck Rt	Tumwater Truck Rt and Lauridsen Blvd	Lauridsen Blvd	<Null>	<Null>
SWDI1819	1819	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	96	ParkingLot	Inspection	<Null>	<Null>	<Null>	In front of city hall (south parking lot) along 5th St.	5th St	Peabody St and 5th St	<Null>	<Null>	<Null>
SWDI2218	<Null>	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	196	<Null>	WorkSketch	See work order 2095	<Null>	<Null>	<Null>	O St	<Null>	12th St	Samara Dr	<Null>
SWDI2618	<Null>	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	110	<Null>	WorkSketch	See workorder 2820	<Null>	<Null>	105 N Liberty	Liberty St	<Null>	<Null>	<Null>	<Null>
SWDI3018	<Null>	<Null>	Port of PA	City of PA	4/9/2009	Active	OutfallHarbor	<Null>	8.27	StormRunOff	Plan Set	<Null>	<Null>	<Null>	West boat harbor parking lot.	Marine Dr	<Null>	<Null>	<Null>	<Null>
SWDI3418	<Null>	<Null>	City of PA	City of PA	1/1/2014	Active	OutfallCreek	24	158	StormRunOff	<Null>	<Null>	<Null>	Lauridsen bridge replacement project BRM-7568-001	Peabody creek along the north side of Lauridsen Blvd bridge	Lauridsen Blvd	<Null>	Race St	Lauridsen Ct	<Null>
SWDI3818	<Null>	<Null>	County	City of PA	<Null>	Active	IDDE	<Null>	90	<Null>	Inspection	Discharge location	<Null>	<Null>	Clallam Co Courthouse parking lot	4th St	<Null>	Peabody St	Lincoln St	<Null>
SWDI3819	<Null>	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	84	<Null>	Inspection	Discharge point	<Null>	<Null>	Ne corner of intersection	Race St	Race St and Georgiana St	Carolina/Georgiana Alley	Georgiana St	<Null>
SWDI3820	<Null>	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	94	<Null>	Inspection	<Null>	<Null>	<Null>	OMC parking lot	Caroline St	Washington St and Caroline St	<Null>	Washington St	<Null>
SWDI3821	<Null>	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	14	<Null>	Inspection	Discharge point	<Null>	<Null>	Near the boat harbor across the street from 930 Marine Dr.	Marine Dr	<Null>	<Null>	D St	<Null>
SWDI3822	<Null>	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	212	<Null>	Inspection	Discharge point	<Null>	<Null>	South side of 4th st	4th St	<Null>	F St	G St	<Null>
SWDI4218	<Null>	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	20	<Null>	Inspection	<Null>	<Null>	<Null>	Mid block on the south side of the street	1st St	<Null>	Cherry St	Valley St	<Null>
SWDI4219	<Null>	<Null>	Private	City of PA	<Null>	Active	IDDE	<Null>	412	<Null>	Inspection	<Null>	<Null>	<Null>	<Null>	US Hwy 101	<Null>	<Null>	Eclipse Industrial Pkwy	<Null>
SWDI4220	<Null>	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	175	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	O St	O St and 12th St	<Null>	12th St	<Null>
SWDI4221	<Null>	<Null>	City of PA	City of PA	<Null>	Active	IDDE	<Null>	30	<Null>	Inspection	<Null>	<Null>	<Null>	<Null>	1st St	Laurel St and 1st St	<Null>	<Null>	<Null>
SWDI4618	<Null>	<Null>	City of PA	City of PA	9/14/2016	Active	Outfall	12	30	StormRunOff	Plan Set	Outfall to the Strait of Juan De Fuca	SW02-12 Landfill cell stabilization	SW02-12	North cell of the City landfill.	18th St	<Null>	Milwaukee Dr	<Null>	Ductile Iron
SWDI5018	<Null>	<Null>	City of PA	City of PA	4/16/2015	Active	IDDE	<Null>	16	ComercialSite	Inspection	<Null>	<Null>	<Null>	Red Lion west parking area	Lincoln St	<Null>	Railroad Ave	<Null>	<Null>
SWDI5020	<Null>	<Null>	City of PA	City of PA	3/3/2016	Active	IDDE	<Null>	196	Street	Inspection	See WO3640	<Null>	<Null>	<Null>	Clipper Cove	<Null>	Seabreeze Pl	<Null>	<Null>
SWDI5021	<Null>	<Null>	City of PA	City of PA	2/2/2016	Active	IDDE	<Null>	14	ComercialSite	Inspection	Discharged CSO water	<Null>	<Null>	<Null>	Marine Dr	<Null>	Cherry St	<Null>	<Null>
SWDI5022	<Null>	<Null>	City of PA	City of PA	<Null>	Active	OutfallCreek	24	311	StormRunOff	Inspection	<Null>	<Null>	<Null>	West end of Forest Ave.	Forest Ave	Cherry St and Forest Ave	Cherry St	<Null>	<Null>
SWDI5418	<Null>	<Null>	Port of PA	City of PA	7/1/2019	Proposed	OutfallHarbor	<Null>	12	StormRunOff	Plan Set	Marina outfall	Outfall 4	POPA Storm treatment	West of the Marine Boathaven intersection.	Boathaven Dr	<Null>	Marine Dr	<Null>	<Null>
SWDI5419	<Null>	<Null>	Port of PA	City of PA	7/1/2019	Proposed	OutfallHarbor	<Null>	12	StormRunOff	Plan Set	<Null>	Outfall 3	POPA Storm treatment	West of the Marine Boathaven intersection.	Boathaven Dr	<Null>	Marine Dr	<Null>	<Null>
SWDI5818	<Null>	<Null>	Port of PA	City of PA	<Null>	Active	OutfallHarbor	<Null>	14	StormRunOff	Plan Set	Existing structure prior to this project. Link for refrence only.	<Null>	<Null>	West of Tumwater bridge.	Tumwater St	<Null>	<Null>	Marine Dr	<Null>
SWDI6218	<Null>	<Null>	Port of PA	City of PA	<Null>	Abandoned	OutfallHarbor	<Null>	14	StormRunOff	Plan Set	<Null>	<Null>	<Null>	POPA site west of tumwater bridge.	Tumwater St	<Null>	<Null>	Marine Dr	<Null>
SWDI6219	<Null>	<Null>	Port of PA	City of PA	<Null>	Abandoned	OutfallHarbor	<Null>	14	StormRunOff	Plan Set	<Null>	<Null>	<Null>	POPA site west of tumwater bridge.	Tumwater St	<Null>	<Null>	Marine Dr	<Null>
SWDI6618	<Null>	<Null>	Private	City of PA	8/1/2019	Proposed	Outfall	<Null>	412	StormRunOff	Plan Set	Outfall to ditch	<Null>	<Null>	<Null>	Campbell Ave	Porter St and Campbell Ave	<Null>	Porter St	<Null>
SWDI7018	<Null>	<Null>	Private	City of PA	2/26/2019	Active	Outfall	<Null>	430	StormRunOff	AsBuilt	Quarry spall outfall	<Null>	Campbell Ave PRD Phase 2	Just south of Campbell Ave	Campbell Ave	Wabash Ave and Campbell Ave	Rook Dr	<Null>	<Null>

AssetID *	FacilityID	LegacyID	Administration	Jurisdiction	InstallDate	Status	SubType	Diameter	Elevation	WaterType	DataSource	Notes	Name	Project	Location	Street	Intersection	StreetX_NE	StreetX_SW	Material
SWDI7019	<Null>	<Null>	Private	City of PA	2/26/2019	Active	Outfall	<Null>	422	StormRunOff	AsBuilt	<Null>	<Null>	Campbell Ave PRD Phase 2	<Null>	Campbell Ave	<Null>	<Null>	<Null>	<Null>
SWDI7418	<Null>	<Null>	Private	City of PA	2/26/2019	Active	Outfall	<Null>	440	StormRunOff	AsBuilt	Quarry spall outfall	<Null>	Campbell Ave PRD Phase 2	The pond near lots 19 and 20	Rook Dr	Wabash Ave and Campbell Ave	Rook Dr	Morning Ct	<Null>
SWDI7818	<Null>	<Null>	Port of PA	City of PA	<Null>	Active	Outfall	<Null>	202	StormRunOff	Plan Set	Discharge to MS4	Outfall B	<Null>	<Null>	Milwaukee Dr	<Null>	18th St	<Null>	<Null>
SWDI7819	<Null>	<Null>	Port of PA	City of PA	<Null>	Active	Outfall	<Null>	168	StormRunOff	Plan Set	Sample location	Outfall A	<Null>	<Null>	Kaycee Wy	<Null>	<Null>	Lower Elwha Rd	<Null>

City of Port Angeles GIS
Consultant data requirements, specificaltions, and standarization

The City of PA is currently running vs 10.7 ESRI

When creating and updating data for the City of Port Angeles, it is impertative to use the following standarization, naming convention, specifications and data requirements. A blank file geodatabase may be requested from the City of Port Angeles when creating a new dataset.

Data Types:

Other data types must be approved by the GIS department before it will be accepted

- File geodatabases (gdb)
- Arcpro project files (aprx)
- Map files (Mapx)

Geographic coordinate system:

All data is mandatory to represent the following geographic coordinate system. Other systems must be approved by the GIS department before it will be accepted.

- NAD 1983 StatePlane Washington North FIPS 4601 Feet

Metadata:

Thumbnails

- Clip art type of thumbnail that is an icon or image representing the item is acceptable. PNG image is preferred.

Tags

- At minimum, 3 key works should represent the data
- At least one should represent the data name
- Add acronyms and spell out acronyms (COPA, City of Port Angeles)

Summary

- A summary is required for all content that is received, created, or updated. Include a project summary, if necessary.

Description

- A description is required for all content that is received, created, or updated. This must include the data type, why it is created, what it contains, and what is its purpose.

Credits

- Include your company and the City of Port Angeles

Use limitations

- Include the following disclaimer for all content:
  The data and related materials may contain some nonconformities, defects, or errors. The City of Port Angeles does not warrant that the data will meet user's needs or expectations; that the use of the data will be uninterrupted; or that all nonconformities, defects, or errors can or will be corrected. The City of Port Angeles is not inviting reliance on this data, and the user should always verify actual data. These maps are not intended for use as a legal description. Locations of features are approximate only (+-10 feet). These maps are produced for the City of Port Angeles for its own use and purposes. Any other use of these maps shall not be the responsibility of the City. The boundaries and locations of features shown on these maps are approximate. These maps have not been prepared for, and are not suitable for legal, engineering, surveying purposes, or for creating legal descriptions. These maps are produced for the City of Port Angeles for its own use and purposes. Any other use of these maps is not authorized, and the City disclaims any and all responsibility for any injury or liability that results from the use of these maps for any purpose not authorized by the City.

Naming Standardization:

- Fields

Each attribute field needs to have an alias that describes the data

- AssetID

Each item needs a prefix with a concatenated object ID number calculated to create a unique asset ID.

Example: Street Centerline:
AssetID value: STCL12345

Mandatory Data fields:

A geodatabase template can be provided.
(City Staff) Templates are available on the S:/ArcInfo/GISData/ConsultantDBTemplate.gdb

- Line

LineTemplate

Field Name	Data Type
OBJECTID	AutoNumber
SHAPE	OLE Object
AssetID	Short Text
LegacyID	Short Text
Jurisdiction	Short Text
Administration	Short Text
Name	Short Text
Status	Short Text
InstallDate	Date/Time
AbandonDate	Date/Time
Address	Short Text
Location	Short Text
StreetX_NE	Short Text
StreetX_SW	Short Text
DataSource	Short Text
Notes	Short Text
Project	Short Text
ImagePrimary	Short Text
ImageMinor	Short Text
Video	Short Text
SHAPE_Length	Number

- Point

PointTemplate

Field Name	Data Type
OBJECTID	AutoNumber
SHAPE	OLE Object
AssetID	Short Text
LegacyID	Short Text
Jurisdiction	Short Text
Administration	Short Text
Status	Short Text
Address	Short Text
LocationID	Short Text
Intersection	Short Text
StreetX_NS	Short Text
StreetX_EW	Short Text
Notes	Short Text
AssetPhoto	Short Text
Project	Short Text
ImagePrimary	Short Text
ImageMinor	Short Text
Video	Short Text
TxtRot0	Number
TxtRot33	Number
SymRot0	Number
SymRot33	Number

- Polygon

PolygonTemplate

Field Name	Data Type
OBJECTID	AutoNumber
SHAPE	OLE Object
AssetID	Short Text
LegacyID	Short Text
Jurisdiction	Short Text
Administration	Short Text
Status	Short Text
InstallDate	Date/Time
Address	Short Text
Location	Short Text
Street	Short Text
StreetX_NE	Short Text
StreetX_SW	Short Text
DataSource	Short Text
Notes	Short Text
AssetPhoto	Short Text
Project	Short Text
ImagePrimary	Short Text
ImageMinor	Short Text
Video	Short Text
Edited	Short Text
TxtRot0	Number
TxtRot33	Number
SHAPE_Length	Number
SHAPE_Area	Number

Reporting Spills

Have you witnessed spills or any suspicious discharges to the stormwater system, streets, ditches, streams, and wetlands? Report spills here, or call 360-417-4745.

Spills could include things such as:

- Algae blooms
- Chemicals
- Foam
- Gasoline
- Muddy water from construction sites
- Oily sheens
- Paint
- Sewage



Water pollution comes from a variety of sources. It is economically infeasible to have pollution inspectors everywhere, 24/7; however, a citizen reporting of pollution problems can help protect water quality.

Common Sources of Pollution

Paint

Car Fluids

Suds

Debris

Sewage

Litter & Trash

Swimming Pools & Hot Tubs

Paint



Prevention:
Avoid painting outside when it is raining. Never clean brushes or other painting equipment outside, and never pour the rinse water into the storm system.

Typical Source:
Pollution from paint usually comes from improper cleanup, but can also occur from spills and dumping.

Proper Disposal and Cleanup:
Never pour any type of paint directly down the drain. Small amounts of latex paint can be set out to dry and be disposed of in the garbage. Recycle large amounts of unused paint at the Regional Transfer Station - Moderate Risk Waste Facility, or at Around Again in Port Angeles or Sequim. Also consider advertising on the local news and radio, or the 2good2toss website.

Impact:
All paint types, especially oil based, are toxic. When those toxins make it into our waterways, they can harm fish and other aquatic life.

2024 Illicit Discharge Detection and Elimination (IDDE) Tracking Spreadsheet

2019-2024 NPDES Stormwater Phase II Permit, per S5.C.5 and Appendix 12

0	1	2	3	4	5	6	7a	7b	8	9	10	11	12
Count	**Jurisdiction name and permit number**	**Date incident discovered or reported to you**	**Date of beginning your response**	**Date of end of your response**	**How was the incident discovered or reported to you? (select all that apply)**	**Discharge to MS4? (select one)**	**Incident Location (address or Lat.Long)**		**Pollutants Identified (select all that apply)**	**Source or Cause (select all that apply)**	**Source tracing approach(es) used (select all that apply)**	**Correction/elimination methods used (select all that apply)**	**Field notes, explanations, and/or other comments**
EXAMPLE	City of Port Angeles, WAR045028	MM/DD/YYYY	MM/DD/YYYY	MM/DD/YYYY	Pollution hotline (phone, web, app)	Yes – allowable or conditionally allowable	123 Fake St. Port Angeles, WA 98362	48.114397, -123.432281	Unconfirmed, unspecified, or not identified	Unconfirmed, unspecified, or not identified	Observation (color/sheen/turbidity/floatables/odor)	Clean-up	Pollution hotline referred staff to unknown discharge. Operations responeded and observed an unknown substance which was cleaned using the sweeper truck.
1	City of Port Angeles, WAR045028	1/2/2024	1/2/2024	1/2/2024	Direct report to your staff	No – cleaned up before reached MS4	Ediz Hook	48.140294, -123.448336	Sewage/septage/pet waste/human waste	Unconfirmed, unspecified, or not identified	Observation (color/sheen/turbidity/floatables/odor)	Clean-up	Recieved a call from POPA forwarding information about a concered person reporting an RV dumping greywater on Ediz Hook. Operations responded immediately to assess, and ended up sprinkling lime where discharge was present. Code enforcement insp nearby RVs
2	City of Port Angeles, WAR045028	1/30/2024	1/30/2024	1/30/2024	Direct report to your staff	Yes – did not notify	1827 Melody Ln	48.09921, -123.40429	Sediment/soil	Construction activity	Observation (color/sheen/turbidity/floatables/odor)	Education/technical assistance, Add or modify operational source control BMP	Neighbor reported a concern about contractor draining project water towards her property, more importantly this turbid water was able to convey donwstream in the grass lined ditch and other conveyance towards White's Creek. Contractor was open to education and has quickly made corrections. Dewatering bag is now being utilized.
3	City of Port Angeles, WAR045028	2/1/2024	2/1/2024	2/22/2024	Direct report to your staff	Unknown	1902 Marine Drive	48.132547, -123.46568	Sediment/soil	Other commercial/industrial activity	Observation (color/sheen/turbidity/floatables/odor)	Education/technical assistance, Add or modify operational source control BMP	Prepared Combined Contact & Pollution Investigation Checklist for the file. Received email from concerned citizen regards the trackout on Marine Drive. Email correspondence response was prepared and sent to person initiating the complaint.
4	City of Port Angeles, WAR045028	2/14/2024	2/15/2024	2/15/2024	Staff Referral	No – cleaned up before reached MS4	3rd and Laurel	48.11519, -123.436375	Fuel and/or vehicle related fluids	Vehicle collision	Observation (color/sheen/turbidity/floatables/odor)	Clean-up	Vehicle coolant spill from vehicle collision. Controlled with absorbent before reaching MS4. Incident occurred at entrance to Safeway, northwest corner. Approximately 3 gallons of absorbent on street. Sweeper responded to request 2/15.
5	City of Port Angeles, WAR045028	4/3/2024	4/3/2024	4/3/2024	Direct report to your staff	No – cleaned up before reached MS4	L and 18th	48.118375, -123.480645	Unconfirmed, unspecified, or not identified	Unconfirmed, unspecified, or not identified	Observation (color/sheen/turbidity/floatables/odor)	Clean-up	Observed what looks to be a fuel spill collected by absorbent and left without further cleanup. Referred to streets/sw superintendent for cleanup.
6	City of Port Angeles, WAR045028	4/22/2024	4/23/2024	4/23/2024	Staff Referral	Yes – did not notify	ENNIS St and Front St	48.110136, -123.40899	Fuel and/or vehicle related fluids	Other (Explanation required)	Observation (color/sheen/turbidity/floatables/odor)	Clean-up	Followed up with cleaning the adjacent catchbasin next day and street sweeping for a second time. - PWKS
7	City of Port Angeles, WAR045028	5/13/2024	5/14/2024	5/16/2024	Staff Referral	No – cleaned up before reached MS4	1520 E Front St	48.108784, -123.405763	Fuel and/or vehicle related fluids	Vehicle collision	Observation (color/sheen/turbidity/floatables/odor)	Clean-up	Single motorcycle collision. Gasoline spilled from fuel tank but didn't enter storm drain. Adsorbent material laid over spill. - PAFD Area to be swept on 5/16 - PWKS
8	City of Port Angeles, WAR045028	5/21/2024	5/21/2024	5/21/2024	Staff Referral	Yes – did not notify	5th & Oak (northwest corner)	48.1164, -123.438623	Paint	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Education/technical assistance	Apparent paint dumping. Tracked paint drops to the nearby "Peace House". Owner Cody admitted paint was sourced from his home but claims it was in the back of a truck that was stolen. HC SW found dry paint - no cleanup. MM
9	City of Port Angeles, WAR045028	5/27/2024	5/28/2024	5/28/2024	Staff Referral	No – cleaned up before reached MS4		48.115716, -123.429173	Fuel and/or vehicle related fluids	Vehicle collision	Observation (color/sheen/turbidity/floatables/odor)	Clean-up	Collision occurred 5/27/24, Memorial Day. Operations swept area subsequent morning, 5/28/24 according to Greg Haskins.
10	City of Port Angeles, WAR045028	6/10/2024	6/10/2024	6/10/2024	Staff Referral	Yes – did not notify	Railroad and Lincoln	48.120607, -123.429765	Sediment/soil	Landscape-related business	Observation (color/sheen/turbidity/floatables/odor)	Education/technical assistance	Warf landscaper was tossing yard debris from weeding into channel where Peabody Creek meets the Strait. Education was provided as to why this is not an acceptable practice and was instructed to instead use proper disposal methods.
11	City of Port Angeles, WAR045028	7/12/2024	7/12/2024	7/15/2024	Staff Referral	Yes – did not notify	1938 West 4th Street	48.131842, -123.473749	Fuel and/or vehicle related fluids	Construction activity	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Education/technical assistance	Hydraulic line busted on sweeper. Most hyd. fluid stayed on the street. Dirt was placed on it to be absorbed. What fluid reached the CB stayed in the sump of the structure as the fluid in the structure was below any pipe penetrations into the structure.
12	City of Port Angeles, WAR045028	7/22/2024	7/23/2024	7/26/2024	ERTS referral	No – none found	1937 E 1st	48.10691, -123.40026	Other (Explanation required)	Vehicle-related business	Not applicable	Other (Explanation required)	See ERTS #730742. Citizen reported concern regarding practices associated with car washing. Source Control Inspector, Howard Carlseen determined that washwater was infiltrating into soil and occuring infrequently.
13	City of Port Angeles, WAR045028	7/26/2024	7/26/2024	9/5/2024	Staff referral	Unknown		48.1278, -123.46051	Sediment/soil	Other commercial/industrial activity	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Education/technical assistance, Add or modify operational source control BMP	Trackout observed along Marine Drive emanating from the Port's log yard. Contacted Port Environmental Manager, Jesse Waknitz who coordinated a response to the track out worked to update the inspection and sweeping plan. Port has been informed that future trackout will likely require the installation of a structural BMP.
14	City of Port Angeles, WAR045028	7/31/2024	7/31/2024	7/31/2024	Pollution hotline (phone, web, app)	Yes – did not notify	108 S Del Guzzi Dr	48.105962, -123.398151	Other (Explanation required)	Food-related business	Observation (color/sheen/turbidity/floatables/odor)	Education/technical assistance	Citizen complaint via phone call of Jimmy John's employees dumping pickle juice into their catch basin. Evident with photos and observation of a pickle on the catch basin lid. Educated JJ manager that this is not an acceptable practice.
15	City of Port Angeles, WAR045028	8/1/2024	8/1/2024	8/1/2024	Direct report to your staff	Yes – did not notify	14th and B	48.114782, -123.460987	Fuel and/or vehicle related fluids	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Education/technical assistance	Received a report of someone spilling fluids while working on their vehicle. Was able to talk to the person, Dave and educate. Will coordinate with Ops to clean nearby catch basin which Dave washed pollilutants to.
16	City of Port Angeles, WAR045028	8/9/2024	8/9/2024	8/9/2024	Staff Referral	Yes – notified Ecology	Lincoln & 3rd	48.116526, -123.433518	Sewage/septage/pet waste/human waste	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Education/technical assistance, Add or modify operational source control BMP, Add or modify structural source control BMP	See ERTS #732901. Had a sewage overflow in fuel station area. Sewage ran into their catch basin network before reaching MS4. Wastewater field crew was able to clean via vactor four inline cb sumps and large manhole sump vault, collecting practically the entire spill.
17	City of Port Angeles, WAR045028	8/15/2024	8/15/2024	8/16/2024	Pollution hotline (phone, web, app)	No – none found	110 S Golf Course Rd	48.105417, -123.403458	Fuel and/or vehicle related fluids	Vehicle-related business	Not applicable	Education/technical assistance	Anonomous complaint made claiming employees are regularly draining anti-freeze into their oil/water separator. No photos. The maintenance manager stated clearly that Ruddell does not dispose of coolant in O/W separator. He will review BMPs with employees.
18	City of Port Angeles, WAR045028	8/18/2024	8/18/2024	8/18/2024	Staff Referral	No – cleaned up before reached MS4	2001 East 1st St	48.106414, -123.399692	Fuel and/or vehicle related fluids	Vehicle collision	Observation (color/sheen/turbidity/floatables/odor)	Clean-up	Two car collision. Port Angeles Fire Incident #3642. PAFD cleaned up about 5 gallons of spill with adsorbent material.
19	City of Port Angeles, WAR045028	10/22/2024	10/22/2024	10/22/2024	Direct report to your staff	Yes – did not notify	828 E 4th St	48.11085, -123.422208	Soap or cleaning chemicals	Mobile business	Observation (color/sheen/turbidity/floatables/odor)	Education/technical assistance	Spoke to operator. He was young and unaware of "no rain down the drain". Educated him so he knows discharging to MS4 is not allowed. He will use containment system from now on. Water quantity to MS4 can only be roughly estimated.
20	City of Port Angeles, WAR045028	10/29/2024	10/30/2024	10/30/2024	Staff Referral	No – cleaned up before reached MS4	238 W. 8th St	48.11446, -123.442819	Fuel and/or vehicle related fluids	Vehicle collision	Observation (color/sheen/turbidity/floatables/odor)	Clean-up	Confirmed with Greg Haskins that a sweeper captured the oil dry the next morning where based on observation, none reached the MS4.
21	City of Port Angeles, WAR045028	11/9/2024	11/12/2024	11/13/2024	Staff Referral	No – cleaned up before reached MS4	MVA First Baptist Church	48.114812, -123.437562	Fuel and/or vehicle related fluids	Vehicle collision	Observation (color/sheen/turbidity/floatables/odor)	Clean-up	Antifreeze from a motor vehicle collision. Adsorbent used for spill control. - PAFD Confirmed with Travis from PAFD that spill was entirely contained and cleaned. - MM

22	City of Port Angeles, WAR045028	12/4/2024	12/4/2024	12/6/2024	Staff Referral	No – cleaned up before reached MS4	Lauridsen W of S L St	48.114393, -123.484634	Fuel and/or vehicle related fluids	Vehicle collision	Observation (color/sheen/turbidity/floatables/odor)	Clean-up	Antifreeze spill from vehicle collision. Adsorbent used for spill control. - PAFD Spoke with Cody Romero, Operations was able to sweep the remainder of spill. - MM
23	City of Port Angeles, WAR045028	12/17/2024	12/18/2024	12/18/2024	Direct report to your staff	No – none found	S N St & 10th St	48.128244, -123.482668	Unconfirmed, unspecified, or not identified	Unconfirmed, unspecified, or not identified	Not applicable	Other (Explanation required)	Citizen notified Public Works of a trail of gas or oil on the corner. Investigated and found no pollutants present. Followed up with an email with an ask to notify of any additional instances.
24	City of Port Angeles, WAR045028	12/26/2024	12/26/2024	12/26/2024	Staff referral	Yes – notified Ecology	Ediz Hook	48.142, -123.429	Sewage/septage/pet waste/human waste	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up	See ERTS #735978. WWTP Opertator found wet well overflowing during morning check of wastewater lift station for restroom facility. Vactor truck removed water from wet well to discern failed check valve.

2024 Water Main Break / Repair

0	1	2	3	4	5	6	7a	7b	8	9	10	11	12
Count	**Jurisdiction name and permit number**	**Date incident discovered or reported to you**	**Date of beginning your response**	**Date of end of your response**	**How was the incident discovered or reported to you? (select all that apply)**	**Discharge to MS4? (select one)**	**Incident Location (address or Lat.Long)**		**Pollutants Identified (select all that apply)**	**Source or Cause (select all that apply)**	**Source tracing approach(es) used (select all that apply)**	**Correction/elimination methods used (select all that apply)**	**Field notes, explanations, and/or other comments**
25	City of Port Angeles, WAR045028	1/2/2024	1/2/2024	1/2/2024	Staff referral	Yes – allowable or conditionally allowable	733 E 2nd, 28" west of main valve at Francis		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
26	City of Port Angeles, WAR045028	1/2/2024	1/2/2024	1/2/2024	Staff referral	Yes – allowable or conditionally allowable	113 S. Eunice, NE corner of 2nd/Eunice		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
27	City of Port Angeles, WAR045028	1/4/2024	1/4/2024	1/4/2024	Staff referral	Yes – allowable or conditionally allowable	319 E. 12th, 230' west if vakve at 12th/Peabody		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
28	City of Port Angeles, WAR045028	1/10/2024	1/10/2024	1/10/2024	Staff referral	Yes – allowable or conditionally allowable	131 W 7th, 120' east of main valve at Oak		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
29	City of Port Angeles, WAR045028	1/16/2024	1/16/2024	1/16/2024	Staff referral	Yes – allowable or conditionally allowable	2204 S. Laured, SW corner of intersection of Laurel and Dolan		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
30	City of Port Angeles, WAR045028	1/16/2024	1/16/2024	1/16/2024	Staff referral	Yes – allowable or conditionally allowable	1836 W 4th, 100' east of main valve at M street		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
31	City of Port Angeles, WAR045028	1/17/2024	1/17/2024	1/17/2024	Staff referral	Yes – allowable or conditionally allowable	923 E. 10th, 280' east of main valve at Race St		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
32	City of Port Angeles, WAR045028	1/19/2024	1/19/2024	1/19/2024	Staff referral	Yes – allowable or conditionally allowable	224 E 10th, 270' east of valve main valve at Lincoln Street		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
33	City of Port Angeles, WAR045028	1/20/2024	1/20/2024	1/20/2024	Staff referral	Yes – allowable or conditionally allowable	502 E 10th, 30' east of main valve at Vine Street		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
34	City of Port Angeles, WAR045028	1/21/2024	1/21/2024	1/21/2024	Staff referral	Yes – allowable or conditionally allowable	402 E. 6th, 45' east of the main valve at Peabody Street		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
35	City of Port Angeles, WAR045028	1/23/2024	1/23/2024	1/23/2024	Staff referral	Yes – allowable or conditionally allowable	1115 E front, Near driveway		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
36	City of Port Angeles, WAR045028	1/24/2024	1/24/2024	1/24/2024	Staff referral	Yes – allowable or conditionally allowable	225 E 5th, 60' east of main valve at the NW corner of 5th and Lincoln		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
37	City of Port Angeles, WAR045028	1/25/2024	1/25/2024	1/25/2024	Staff referral	Yes – allowable or conditionally allowable	202 W. 3rd, SW corner of intersection		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
38	City of Port Angeles, WAR045028	1/26/2024	1/26/2024	1/26/2024	Staff referral	Yes – allowable or conditionally allowable	316 E 12th St,		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
39	City of Port Angeles, WAR045028	1/27/2024	1/27/2024	1/27/2024	Staff referral	Yes – allowable or conditionally allowable	140 W. 11th, 32' south of hydrant		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
40	City of Port Angeles, WAR045028	1/29/2024	1/29/2024	1/29/2024	Staff referral	Yes – allowable or conditionally allowable	632 W 3rd, End of main		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
41	City of Port Angeles, WAR045028	1/30/2024	1/30/2024	1/30/2024	Staff referral	Yes – allowable or conditionally allowable	315 W 6th, 212' west of main valve		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
42	City of Port Angeles, WAR045028	3/5/2024	3/5/2024	3/5/2024	Staff referral	Yes – allowable or conditionally allowable	516 Blue Water View, Top end of cul-de-sac		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
43	City of Port Angeles, WAR045028	3/8/2024	3/8/2024	3/8/2024	Staff referral	Yes – allowable or conditionally allowable	2603 S. Lincoln, 46' east of 2' main valve at Lincoln Street		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
44	City of Port Angeles, WAR045028	3/11/2024	3/11/2024	3/11/2024	Staff referral	Yes – allowable or conditionally allowable	1930 W 5th, 136' east of the 2" main valve at Evans Street		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.

45	City of Port Angeles, WAR045028	4/4/2024	4/4/2024	4/4/2024	Staff referral	Yes – allowable or conditionally allowable	202 Dolan, SW Corner Oak/Dolan		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
46	City of Port Angeles, WAR045028	5/15/2024	5/15/2024	5/15/2024	Staff referral	Yes – allowable or conditionally allowable	702 E. 8th,		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
47	City of Port Angeles, WAR045028	5/17/2024	5/17/2024	5/17/2024	Staff referral	Yes – allowable or conditionally allowable	1038 W 7th,		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
48	City of Port Angeles, WAR045028	5/25/2024	5/25/2024	5/25/2024	Staff referral	Yes – allowable or conditionally allowable	10th/Chase, NE corner of intersection		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
49	City of Port Angeles, WAR045028	6/3/2024	6/3/2024	6/3/2024	Staff referral	Yes – allowable or conditionally allowable	9th/Oak, NW corner of intersection		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
50	City of Port Angeles, WAR045028	6/5/2024	6/5/2024	6/5/2024	Staff referral	Yes – allowable or conditionally allowable	1013 Flores, 140' south of valve at 10th		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
51	City of Port Angeles, WAR045028	6/7/2024	6/7/2024	6/7/2024	Staff referral	Yes – allowable or conditionally allowable	712 E 5th,		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
52	City of Port Angeles, WAR045028	6/13/2024	6/13/2024	6/13/2024	Staff referral	Yes – allowable or conditionally allowable	1629 W. 6th,		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
53	City of Port Angeles, WAR045028	7/3/2024	7/3/2024	7/3/2024	Staff referral	Yes – allowable or conditionally allowable	7th Liberty, SW corner of intersection		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
54	City of Port Angeles, WAR045028	7/17/2024	7/17/2024	7/17/2024	Staff referral	Yes – allowable or conditionally allowable	519 H Street, 203' South of valve at 5th/H		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
55	City of Port Angeles, WAR045028	8/28/2024	8/28/2024	8/28/2024	Staff referral	Yes – allowable or conditionally allowable	2406 W. 14th, 550' east of valve at 14th/O		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
56	City of Port Angeles, WAR045028	9/3/2024	9/3/2024	9/3/2024	Staff referral	Yes – allowable or conditionally allowable	6th/N, SE corner of interesction		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
57	City of Port Angeles, WAR045028	9/24/2024	9/24/2024	9/24/2024	Staff referral	Yes – allowable or conditionally allowable	Chambers/Georgiana, NE corner of intersection		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
58	City of Port Angeles, WAR045028	10/2/2024	10/2/2024	10/2/2024	Staff referral	Yes – allowable or conditionally allowable	2615 W. 18th, 450" West of valve at 18th/Butler		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
59	City of Port Angeles, WAR045028	10/11/2024	10/11/2024	10/11/2024	Staff referral	Yes – allowable or conditionally allowable	309 W. 6th,		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
60	City of Port Angeles, WAR045028	10/14/2024	10/14/2024	10/14/2024	Staff referral	Yes – allowable or conditionally allowable	327 E. 11th,		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
61	City of Port Angeles, WAR045028	10/25/2024	10/25/2024	10/25/2024	Staff referral	Yes – allowable or conditionally allowable	602 W. 3rd,		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
62	City of Port Angeles, WAR045028	11/4/2024	11/4/2024	11/4/2024	Staff referral	Yes – allowable or conditionally allowable	4th/C Street, SW corner of intersection		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
63	City of Port Angeles, WAR045028	11/6/2024	11/6/2024	11/6/2024	Staff referral	Yes – allowable or conditionally allowable	3rd/Truck RT, 25' East of valve at 3rd east side of truck rt		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
64	City of Port Angeles, WAR045028	11/18/2024	11/18/2024	11/28/2024	Staff referral	Yes – allowable or conditionally allowable	726 E. 6th,		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
65	City of Port Angeles, WAR045028	11/23/2024	11/23/2024	11/23/2024	Staff referral	Yes – allowable or conditionally allowable	5th/Liberty, west side if lot for 1311 E. 5th		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
66	City of Port Angeles, WAR045028	11/27/2024	11/27/2024	11/27/2024	Staff referral	Yes – allowable or conditionally allowable	2623 Franklin Ln,		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
67	City of Port Angeles, WAR045028	12/2/2024	12/2/2024	12/2/2024	Staff referral	Yes – allowable or conditionally allowable	1503 W. 10th,		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
68	City of Port Angeles, WAR045028	12/17/2024	12/17/2024	12/17/2024	Staff referral	Yes – allowable or conditionally allowable	1604 E. 4th, In driveway to 1604 W. 4th		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.

69	City of Port Angeles, WAR045028	12/18/2024	12/18/2024	12/18/2024	Staff referral	Yes – allowable or conditionally allowable	130 Dolan,		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
70	City of Port Angeles, WAR045028	12/18/2024	12/18/2024	12/18/2024	Staff referral	Yes – allowable or conditionally allowable	1738 E. 3rd, 10' west of main valve		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
71	City of Port Angeles, WAR045028	12/19/2024	12/19/2024	12/19/2024	Staff referral	Yes – allowable or conditionally allowable	828 W. 10th,		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
72	City of Port Angeles, WAR045028	12/19/2024	12/19/2024	12/19/2024	Staff referral	Yes – allowable or conditionally allowable	4th/Francis,		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.
73	City of Port Angeles, WAR045028	12/20/2024	12/20/2024	12/20/2024	Staff referral	Yes – allowable or conditionally allowable	630 E. 9th,		Sediment/soil	Other accident/spill	Observation (color/sheen/turbidity/floatables/odor)	Clean-up, Referred to other agency or department	Water Main Break. Operations staff responded, isolated the damaged main or service lateral, made repairs, restored service, cleaned up deposits from gutterline and roadway, and stabilized disturbed areas.

IDDE Screening Strategy:

For the City to comply with the 2013-2018 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 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 five screening areas resulted in 83% of the cities total catch basins, meeting the 40% minimum screening goal set for 2013-2018 Phase II NPDES permittee. This requirement is also reflected in the current 2024-2029 Permit:

All Permittees shall complete field screening for an average of 12% of the MS4 each year.

The City's existing methodology for IDDE screening strategy requires no change to meet these requirements.

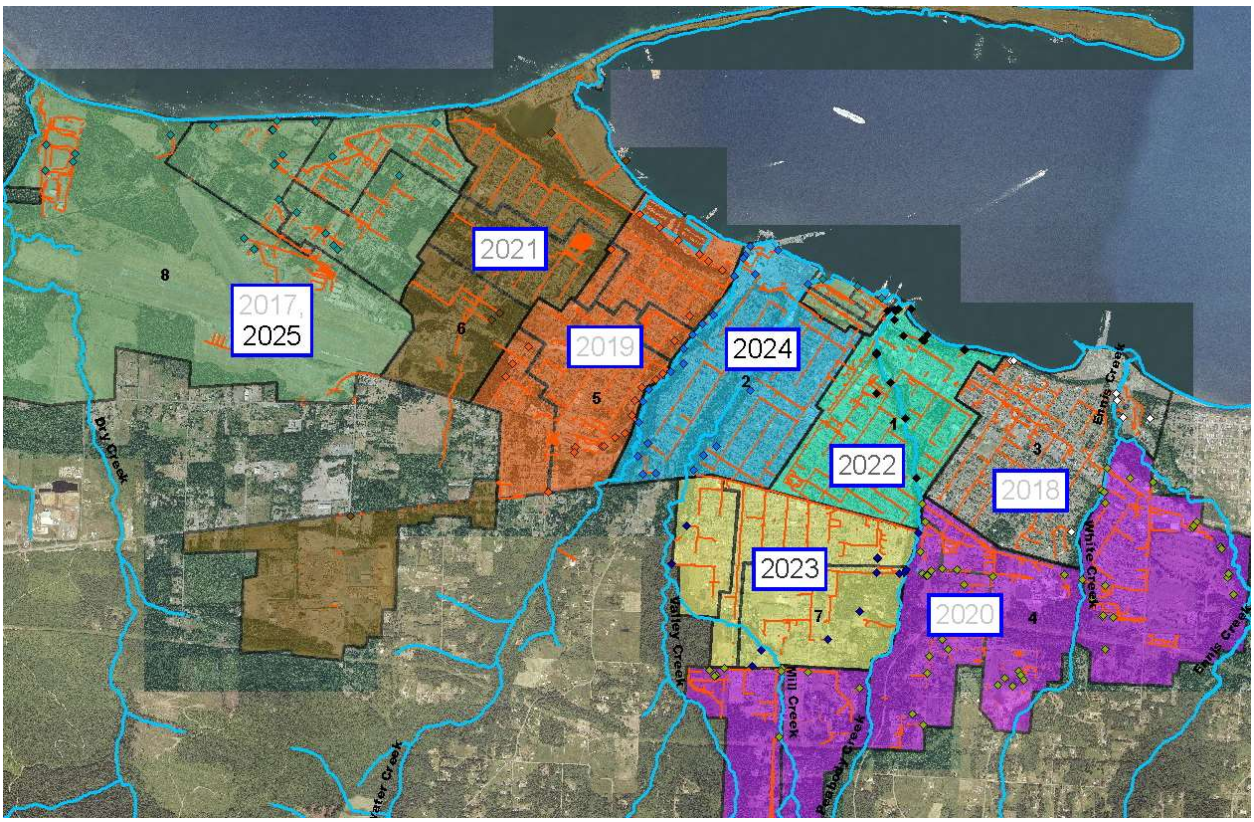


Figure 1. Basin Boundaries and Years Inspected

Streams and creeks within the yearly screening area are inspected for the purpose of verifying outfall locations, identifying previously unknown outfalls, detecting illicit discharges, and determining maintenance needs. Primary 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. During dry weather primary indicator testing is performed at these manhole locations, and at the basin's 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 are employed to trace the discharge to its source.

Table 1. Basins Inspected by Year

Year Inspected:	Basin #:	Description:	Catch Basins (%):	24-29 Permit (S5.C.5.d.i) Total (%):	Running Total (%):
2019	5	A St.	12.01	-	78.5
2020	4	Southwest	13.43	-	91.9
2021	6	I St./Eclipse	8.10	-	100
2022	1	Urbanized Peabody	14.83	-	100
2023	7	Lauridsen	9.42	-	100
2024	2	Tumwater/Valley	11.68	11.68	100
2025	9	Western/Airport	15.46	27.14	100

2024 – Field Screening Tumwater/Valley Basin, Basin 2:

Review of the 2016 basin screening investigation for basin 2 was used as guidance for implementation of the 2024 screening. The basin is serviced by two primary stormwater basins with outfall draining to Valley and Tumwater Creek outfall, there are also 16 smaller stormwater basins which service small areas of the overall Tumwater/Valley basin. Because most of the basin flows out of two primary outfalls, the City elected to select strategic monitoring manholes and outfalls, and to perform indictor testing at each of these locations (figure 2). Of the 31 one strategic monitoring locations, six samples were collected and tested for pH, ammonia, and nitrate (table 2). Only one sample crossed the threshold for investigation, due to high ammonia and nitrate concentrations, which emanated from Port of Port Angeles property; After speaking with the Port, we determined the high concentrations is best explained by the seagull population that gathers on a roof which is associated with the outfall. The two primary outfalls sampled within threshold parameters and concluded the lack of need for further investigation. During the basin screening process, additional information such as outfall descriptions and materials were confirmed or recorded, and maintenance needs were identified and assigned to Operations.

Table 2. Strategic Manhole and Outfall Inspection Results

Inspector:	Matthew Moore, Greg Haskins	**Temperature: (F)**	63
Date:	9/2/2024	**Rainfall (in) 24hrs**	0
Basin Number:	2	**Rainfall (in) 48hrs**	0

Structure Type: Manhole **Landuse in Basin:** Residential Suburban

Structure ID:	Location, Notes:	Flow Present:	Flow Description:	Samples Collected?	pH	Ammonia (mg/L)	Nitrate (mg/L)	Fecal Coliform (CFU/100mL)
411	Intersection of 9th & Laurel St. Sample from Laurel St. Main	No	N/A	No				
581	Intersection of 9th & Oak St. Sample from Oak St Main	No	N/A	No				
221	Intersection of 9th & Cherry St. Sample from Cherry St Main	No	N/A	No				
537	Intersection of 8th & Laurel St. Sample from 8th St Main	No	Utilized manhole 464 due to traffic	No				
459	Intersection of 3rd & Laurel St. Sample from South & North Laurel St Mair	Yes	Low flow, poor sample	Yes	7	< 1	0	72
457	Intersection of 3rd & Oak St. Sample from South & North Oak St Main	Yes	Low flow	Yes	7	0	0	3
735	Intersection of 3rd & Cherry St. Sample from South Cherry & West 3rd Mair	No	N/A	No				
519	Intersection of 9th & Pine St. Sample from Pine St Main	No	N/A	No				
711	Intersection of 9th and Cedar St. Sample from Cedar St Main	No	N/A	No				
720	Intersection of 3rd and Pine St. Sample from flow in Manhole	No	N/A	No				
740	Manhole Mid way up Cedar St Hill, Sample from flow in Manhole	No	N/A	No				
557	Motor and Oak	No	N/A	No				

Structure Type: Outfall **Landuse in Basin:** Residential Suburban

Structure ID:	Location, Notes:	Flow Present	Flow Description:	Samples Collected?	pH	Ammonia (mg/L)	Nitrate (mg/L)	Fecal Coliform (CFU/100mL)
53	14th/15th alley, Discharging to Valley	No	N/A	No				
55	13th/14th alley, Discharging to Valley	No	Could not locate, inspected manhole before outfall	No				
82	Off US Hwy 101, Discharging to Valley	Did Not Inspect	Could not locate, inspected upstream manhole 557	No				
54	Outfall to Tumwater Creek, Off Lauridsen Blvd Between Bridges	No	Could not locate, inspected manhole before outfall	No				
99	16th Street, Outfall to Tumwater	No	N/A	No				
43	10th St, Outfall to Tumwater	No	N/A	No				
15	9th Street, outfall to Valley	No	N/A	No				
21	Valley Creek Culvert Inlet	Yes	Clean groundwater	No				
28	Valley Creek Culvert Outlet, at Estuary	Yes	Low flow	Yes	8	< 1	0	32
24	Outfall to Tumwater Creek, Culvert inlet under Tumwater Street	Yes	Drip	Yes	7	> 1	> 3.4	39
26	Outfall to Tumwater Creek, Culvert outlet	No	N/A	No				
107	Outfall to Valley, ~ 350' from culvert inlet	Yes	Clean groundwater	No				
14	East Side of bridge, Energy Dissipator Discharging to Valley Creek	No	N/A	No				
16	West Side of bridge, Energy Dissipator Discharging to Valley Creek	No	N/A	No				
18	East Side of bridge, Energy Dissipator Discharging to Tumwater Creek	No	N/A	No				
129	Outfall on Port property, near tumwater culvert exit	No	N/A	No				
192	Tumwater Box Culvert Near Harbor	Yes	Low flow	Yes	8	0	0	27
188	Outfall on Port property, at the base of Cedar St.	Yes	Drip	Yes	8	0	0	1

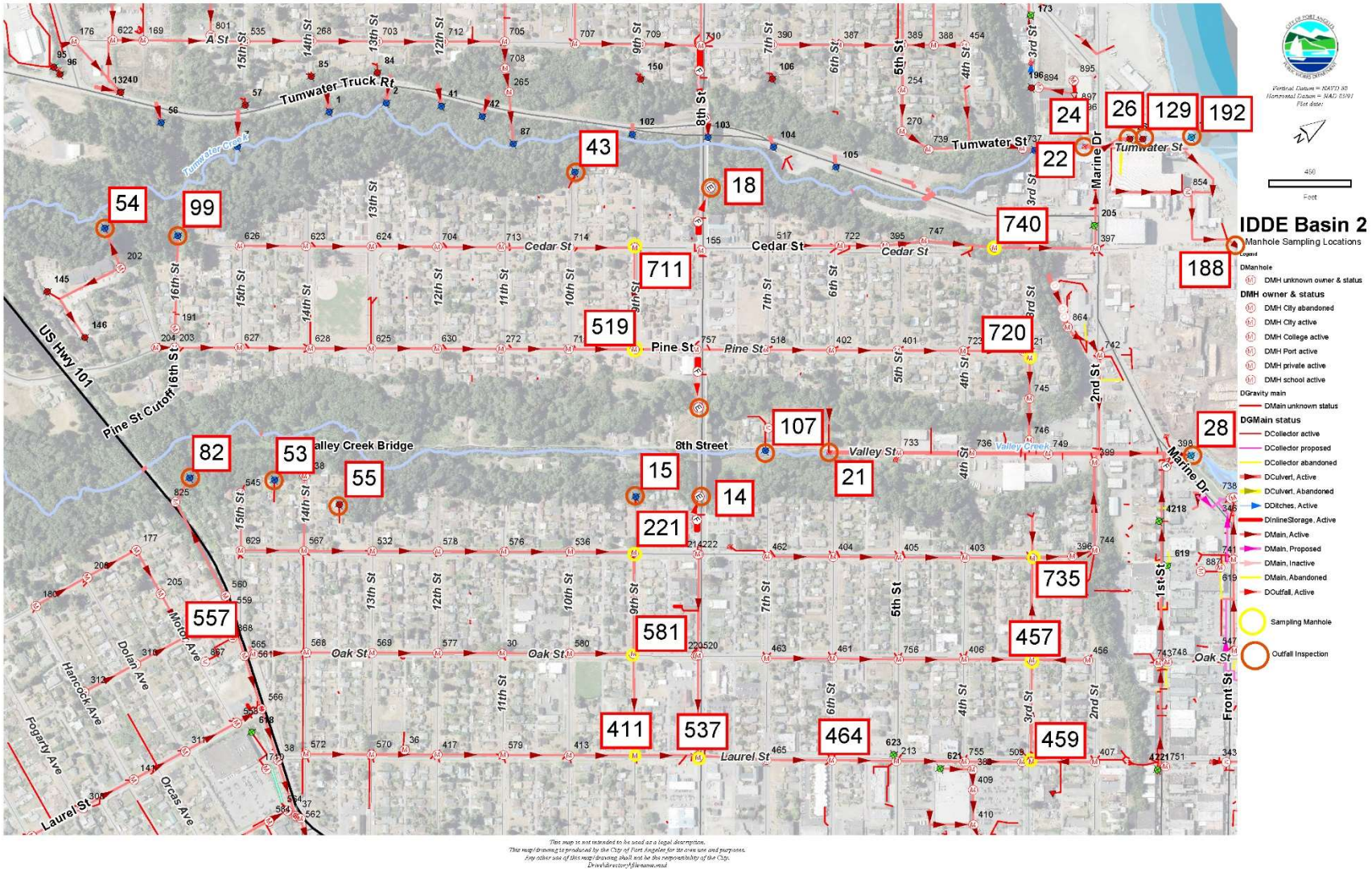


Figure 2. Basin 2 Strategic Sampling Locations

13.63.130 - Non-stormwater, illegal discharges and dumping prohibited.

A. Except as provided in subsections B. and C. below, no person shall throw, drain or otherwise discharge, cause or allow others under its control to throw, drain or otherwise discharge into the stormwater system any materials other than stormwater.

B. The following discharges into the stormwater system are prohibited, unless the stated conditions are met:

1. Discharges from potable water sources, including waterline flushing, hyperchlorinated waterline flushing, fire hydrant system flushing and pipeline hydrostatic test water. Planned discharges shall be dechlorinated to a concentration of 0.1 ppm or less, pH adjusted, if necessary (to meet water quality standards), and volumetrically and velocity controlled to prevent resuspension of sediments in the MS4.
2. Discharges from lawn watering and other irrigation runoff shall be minimized.
3. Dechlorinated swimming pool, spa and hot tub discharges. The discharges shall be dechlorinated to a concentration of 0.1 ppm or less, pH adjusted and re-oxygenized, if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments in the MS4 and the property owner has obtained a stormwater discharge permit from the City. Discharges shall be thermally controlled to prevent an increase in temperature of the receiving water. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.
4. Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents. To avoid washing pollutants into the MS4, permittee must minimize the amount of street wash and dust control water used. At active construction sites, street sweeping must be performed prior to washing the street.
5. Other non-stormwater discharges. The discharges shall be in compliance with the requirements of the stormwater pollution prevention plan reviewed by the City, which addresses such discharges.
6. Any discharges from a construction site. Discharges must be in conformance with the stormwater pollution prevention plan (SWPPP) reviewed by the permittee.
7. Combined sewer overflow (CSO) discharges. This discharge must be in conformance with a current National Pollution Discharge Elimination System Permit, approved by the Washington State Department of Ecology.

C. The following categories of non-stormwater discharges are specifically allowed:

1. Diverted stream flows.
2. Rising groundwaters.
3. Uncontaminated groundwater infiltration (as defined at 40 CFR 35 2005(20)).
4. Uncontaminated pumped groundwater.
5. Foundation drains.
6. Air conditioning condensation.
7. Irrigation water from agricultural sources that is commingled with urban stormwater.
8. Springs.
9. Uncontaminated water from crawl space pumps.
10. Footing drains.
11. Flows from riparian habitats and wetlands.
12. Non-stormwater discharges covered by another NPDES or state waste discharge permit.
13. Discharges from emergency firefighting activities in accordance with the City of Port Angeles' Stormwater NPDES Permit Section S2 Authorized Discharges. The City's stormwater NPDES permit is available to view in the office of the City Engineer.

(Ord. 3694 § 2, 7/5/2022; Ord. 3568 § 1, 12/20/2016; Ord. 3367 § 2, 8/15/2009)

13.63.140 - Illicit connections and uses.

A. The stormwater system of the City of Port Angeles, natural and artificial, may only be used to convey stormwater runoff, and any discharge meeting the permit conditions within a current National Pollutant Discharge Elimination System Permit, approved by the Washington State Department of Ecology.

B. Except as provided in the preceding paragraph, no person shall use this system, directly or indirectly, to dispose of any solid or liquid matter other than stormwater. No person shall make or allow any connection to the stormwater system which could result in the discharge of polluting matter. Connections to the stormwater system from the interiors of structures are prohibited. Connections to the stormwater system for any purpose other than to convey stormwater or groundwater are prohibited and shall be eliminated.

(Ord. 3367 § 2, 8/15/2009)

13.63.150 - Stormwater discharge into sanitary sewer system prohibited.

A. No person shall discharge or cause to be discharged any stormwater, surface water, groundwater, roof runoff, subsurface drainage, uncontaminated cooling water, or unpolluted industrial process waters into any sanitary sewer, unless otherwise approved by the Director based on lack of feasible alternatives or unless the discharge meets the condition outlined in subsection 13.63.140.A.

B. No person shall make connection of roof downspouts, exterior foundation drains, area drains, or other sources of stormwater surface runoff or groundwater to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer, unless such connection is otherwise approved in writing by the Director based on lack of feasible alternatives or other appropriate factors.

(Ord. 3367 § 2, 8/15/2009)

13.63.160 - Unpolluted stormwater discharge shall have approved outlet.

A. Stormwater shall be discharged to such sewers as are specifically designated as storm sewers, or to a natural outlet approved by the Director.

B. Storm drainage from hard-surfaced or graded areas, such as parking lots, service station yards, and storage yards, shall enter the public storm sewer system or other outlet approved by the Director and as required by this chapter and as such facilities are available. Such storm drainage shall not be connected to or allowed to enter a sanitary sewer.

(Ord. 3694 § 2, 7/5/2022; Ord. 3568 § 1, 12/20/2016; Ord. 3367 § 2, 8/15/2009)

Relevance to WWA PHII SW Permit	First Name	Last Name	Company	City	CESCL #	Expires	Status	Display?	Training Provider
	Caleb	Adams	City of Port Angeles	Port Angeles	CWTA-2480	2027/03/28	Current	Yes	CWT Training Academy
	David	Wegener	City of Port Angeles	Port Angeles	CWTA-2518	2027/03/28	Current	Yes	CWT Training Academy
	Eric	Walrath	City of Port Angeles	Port Angeles	CWTA-2517	2027/03/28	Current	Yes	CWT Training Academy
	Gavin	Medley	City of Port Angeles	Port Angeles	CWTA-2503	2027/03/28	Current	Yes	CWT Training Academy
Stormwater Leadworker	Greg	Haskins	City of Port Angeles	Port Angeles	CWTA-2497	2027/03/28	Current	Yes	CWT Training Academy
	Howard	Carlseen	City of Port Angeles	Port Angeles	CWTA-2488	2027/03/28	Current	Yes	CWT Training Academy
	Hunter	Heckenlaible	City of Port Angeles	Port Angeles	CWTA-2498	2027/03/28	Current	Yes	CWT Training Academy
	Jad	Groves	City of Port Angeles	Port Angeles	CWTA-2494	2027/03/28	Current	Yes	CWT Training Academy
	Jared	Bridges	City of Port Angeles	Port Angeles	CWTA-2486	2027/03/28	Current	Yes	CWT Training Academy
	Jason	Paynter	City of Port Angeles	Port Angeles	CWTA-2506	2027/03/28	Current	Yes	CWT Training Academy
	Jeff	Gagnon	City of Port Angeles	Port Angeles	CWTA-2493	2027/03/28	Current	Yes	CWT Training Academy
	Jeff	Groves	City of Port Angeles	Port Angeles	CWTA-2495	2027/03/28	Current	Yes	CWT Training Academy
	Jeremy	Pozernick	City of Port Angeles	Port Angeles	CWTA-2509	2027/03/28	Current	Yes	CWT Training Academy
City Engineer	Jonathan	Boehme	City of Port Angeles	Port Angeles	CWTA-2484	2027/03/28	Current	Yes	CWT Training Academy
	Jordan	Sage	City of Port Angeles	Port Angeles	CWTA-2513	2027/03/28	Current	Yes	CWT Training Academy
	Joshua	Borte	City of Port Angeles	Port Angeles	CWTA-2485	2027/03/28	Current	Yes	CWT Training Academy
	Joshua	Roening	City of Port Angeles	Port Angeles	CWTA-2511	2027/03/28	Current	Yes	CWT Training Academy
	Leyton	Evans	City of Port Angeles	Port Angeles	CWTA-2491	2027/03/28	Current	Yes	CWT Training Academy
	Lucio	Baack	City of Port Angeles	Port Angeles	CWTA-2482	2027/03/28	Current	Yes	CWT Training Academy
	Luke	Leonard	City of Port Angeles	Port Angeles	CWTA-2500	2027/03/28	Current	Yes	CWT Training Academy
Civil/Utility Engineer I	Matthew	Moore	City of Port Angeles	Port Angeles	CWTA-2504	2027/03/28	Current	Yes	CWT Training Academy
Stormwater Utility Worker	Michael	Poats	City of Port Angeles	Port Angeles	CWTA-2508	2027/03/28	Current	Yes	CWT Training Academy
	Patrick	Bartholick	City of Port Angeles	Port Angeles	CWTA-2483	2027/03/28	Current	Yes	CWT Training Academy
	Rick	Hartley	City of Port Angeles	Port Angeles	CWTA-2496	2027/03/28	Current	Yes	CWT Training Academy
Civil/Utility Engineer III	Ryan	Jeffries	City of Port Angeles	Port Angeles	CWTA-2499	2027/03/28	Current	Yes	CWT Training Academy
	Steve	Rutz	City of Port Angeles	Port Angeles	CWTA-2512	2027/03/28	Current	Yes	CWT Training Academy
	Tim	Tucker	City of Port Angeles	Port Angeles	CWTA-2515	2027/03/28	Current	Yes	CWT Training Academy
	Travis	Truckenmiller	City of Port Angeles	Port Angeles	CWTA-2514	2027/03/28	Current	Yes	CWT Training Academy
Capital Project Engineer	Vince	McIntyre	City of Port Angeles	Port Angeles	CWTA-2502	2027/03/28	Current	Yes	CWT Training Academy
	Zachary	Alderson	City of Port Angeles	Port Angeles	CWTA-2481	2027/03/28	Current	Yes	CWT Training Academy
	Brad	Landes	City of Port Angeles	Port Angeles	CWTA-2464	2027/03/27	Current	Yes	CWT Training Academy
	Brent	Robinson	City of Port Angeles	Port Angeles	CWTA-2471	2027/03/27	Current	Yes	CWT Training Academy
	Brody	Merritt	City of Port Angeles	Port Angeles	CWTA-2467	2027/03/27	Current	Yes	CWT Training Academy
	Casey	McFarlan	City of Port Angeles	Port Angeles	CWTA-2466	2027/03/27	Current	Yes	CWT Training Academy
	Dave	Cameron	City of Port Angeles	Port Angeles	CWTA-2458	2027/03/27	Current	Yes	CWT Training Academy
Engineering Technician II	Elizabeth	Adkins	City of Port Angeles	Port Angeles	CWTA-2453	2027/03/27	Current	Yes	CWT Training Academy
	Jack	Nieborsky	City of Port Angeles	Port Angeles	CWTA-2468	2027/03/27	Current	Yes	CWT Training Academy
	Richard	Amundson	City of Port Angeles	Port Angeles	CWTA-2454	2027/03/27	Current	Yes	CWT Training Academy
	Todd	Shay	City of Port Angeles	Port Angeles	CWTA-2473	2027/03/27	Current	Yes	CWT Training Academy
	Weston	Jorgenson	City of Port Angeles	Port Angeles	CWTA-2462	2027/03/27	Current	Yes	CWT Training Academy
Streets/Stormwater Superindentent	Cody	Romero	City of Port Angeles	Port Angeles	CWTA-2472	2027/03/26	Current	Yes	CWT Training Academy
Engineering Technician II	Sean	Armstrong	City of Port Angeles	Port Angeles	CWTA-2455	2027/03/26	Current	Yes	CWT Training Academy

13.63.190 - Stormwater design and construction requirements.

A. All site development activities shall comply with the standards, specifications and requirements contained in the City of Port Angeles' Urban Services Standards and Guidelines.

B. For all site developments, the City adopts and requires the use of the minimum requirements, thresholds and definitions defined in Appendix 1 of the City of Port Angeles' Western Washington Phase II Municipal Stormwater Permit.

C. For all site developments that require a stormwater treatment, flow control, or on-site stormwater management BMP/facility, the City adopts and requires the use of Chapters 2, 3 and 4 and Appendices 1-C, 1-D and 1-E, Volume I, Chapters 3 and 4, Volume II; the entirety of Volume III; the entirety of Volume IV, and the entirety of Volume V of the Department of Ecology's 2014 Stormwater Management Manual for Western Washington (SWMMWW [2014]), or most recent update.

D. Low impact development (LID) facilities are encouraged to improve water quality and aesthetics, as well as to reduce the size and cost of flow control and treatment facilities. LID facilities proposed in any site development shall be designed in accordance with the Department of Ecology's SWMMWW (2014) and shall take into account site and soil conditions, access and long-term maintenance.

E. Stormwater site plans and permanent stormwater control plans in accordance with Chapters 3 and 4 of Volume I of the Department of Ecology's SWMMWW [2014] are required and will be reviewed by the City for all site development activities that disturb one acre or more.

F. Beneficial use of roof runoff harvested for non-potable uses is allowed as expressly permitted and conditioned by the Director.

(Ord. 3568 § 1, 12/20/2016; Ord. 3367 § 2, 8/15/2009)

Create a Website Account - Manage notification subscriptions, save form progress and more.

PORT ANGELES
WASHINGTON, U.S.

Search our site...

GOVERNMENT DEPARTMENTS BUSINESS COMMUNITY HOW DO I...

Stormwater Permits

COVID-19
PERMITTING AND INSPECTION RELATED UPDATES

VIRTUAL INSPECTIONS

FREQUENTLY ASKED QUESTIONS

All Stormwater-related permit applications for the City of Port Angeles are available below. Click on the application image to open and fill out. The applications are digitally fillable PDF's and will require Adobe Reader for use outside of this browser. Click on this link to download Adobe Reader. The link will take you outside the City of Port Angeles Website.
Please submit any application and required attachments to: publicworksinbox@cityofpa.us

For construction projects that are anticipated to disturb greater than one acre of land throughout the life of the project or for sites reasonably expected to cause a violation of water quality standards, a Construction Stormwater General Permit (CSGP) is required. See the Department of Ecology's webpage here: https://ecology.wa.gov/regulations-permits/permits-certifications/stormwater-general-permits/construction-stormwater-permit

Most industrial sites in Washington are required to have an Industrial Stormwater General Permit (ISGP). See the Department of Ecology's webpage here: https://ecology.wa.gov/regulations-permits/permits-certifications/stormwater-general-permits/industrial-stormwater-permit

For developments proposing the use of Underground Injection Control (UIC) other than single-family homes receiving only residential roof runoff or used to control basement flooding, registration is required. See the Department of Ecology's webpage here on the UIC program: https://ecology.wa.gov/regulations-permits/guidance-technical-assistance/underground-injection-control-program/uic-registration-requirements-information

For all other permit types, scroll to the bottom.

STORMWATER ACTION PLAN

STORMWATER RESOURCES

Stormwater Toolkit Coverpage

Stormwater Management Tool Kit

Applicable only to small scale development projects outside of critical area buffer zones.

This packet is a step-by-step guide designed to help small scale developers navigate the State's recently adopted stormwater management requirements. This packet is comprised of FACTSHEETS and WORKSHEETS.

FACTSHEETS are designed to inform the applicant of the requirements, their intent, and provide some information about common stormwater management options available. FACTSHEETS do not need to be returned with your permit application. WORKSHEETS are designed to elicit the necessary information from the applicant about the project and guide the applicant towards approved stormwater management measures that are appropriate for their specific site and project.

The pre, during, and post-construction Best Management Practices (BMPs) detailed in this packet are pre-engineered by the City. If you chose to use this packet and its BMPs, you are agreeing to construct, operate, and maintain the BMP to the engineered specifications shown. Meeting the State's requirements are mandatory, however, utilizing this packet to meet those requirements is entirely optional. Alternatively, an applicant may choose to hire a professional or even submit their own stormwater management plan (report and drawings) that meet the minimum standards described in the City's Urban Services Standards and Guidelines Manual – which, can be downloaded free from the City's website.

FACTSHEET A: Small Project Stormwater Requirements

FACTSHEET B: 13 Elements of Construction Pollution Prevention (MR#2 ONLY)

A Complete Permit Submittal Includes:

- ☐ WORKSHEET A: Small Project Stormwater Report
- ☐ WORKSHEET A2: Stormwater Site Plan
- ☐ WORKSHEET B: Construction Stormwater Pollution Prevention Plan (SWPPP) Narrative
- ☐ WORKSHEET B2: SWPPP Site Plan
- ☐ WORKSHEET C: Infeasibility Criteria

Some permanent stormwater BMPs require specific soil types. The USDA Web Soil Survey is a free online database available for public use that can provide info. specific to your project region (https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm).

- ☐ WORKSHEET D: Post-Construction Soil Management

Additional Worksheets that May be Required:

- ☐ WORKSHEET E1: Small Project Infiltration Test
  (Required on projects < 3000 sq. ft. of hard surface that report BMP infiltration infeasibility criteria)
- ☐ WORKSHEET E2: Pilot Infiltration Test
  (Required on projects > 3000 sq. ft. of hard surface that report BMP infiltration infeasibility criteria)

During submission of your application, use the above check boxes to verify that all WORKSHEETS are present and complete. The application cannot be reviewed and approved without all applicable documentation being provided.

G:\DEVHANDS\STORMWATER\2017 Stormwater Development Tool Kit\Stormwater Management Tool Kit_COVER SHEET.docx

Fact Sheet A - Small Project

Small Project Stormwater Requirements

Factsheet A

Introduction

Construction projects that:

Create more than 2,000 square feet but less than 5,000 square feet of new plus replaced hard surface

or

Disturb more than 7,000 square feet but less than 1 acre of land

are required to meet Minimum Requirements (MRs) #1-5. Projects of this scale are generally less impactful in nature and straightforward to manage with regards to stormwater – which, is why applicants are provided the option to use the City's pre-engineered templates to meet the minimum requirements.

MR#1 - Stormwater Site Plans	(Worksheet A1 & A2)
MR#2 - Construction Stormwater Pollution Prevention Plan	(Worksheet B1 & B2)
MR#3 - Source Control	(Worksheet A)
MR#4 - Preservation of Natural Drainage Systems and Outfalls	(Worksheet A)
MR#5 - On-site Stormwater Management	(Worksheet A/C/D/E)

What is On-site Stormwater Management? (MR #5)

On-site stormwater management is a stormwater and land use management strategy that mimics how water at a site would naturally react prior to development, and uses design techniques for infiltration, filtration, storage, evaporation and transpiration. Instead of conveying and managing / treating stormwater in large facilities located at the bottom of drainage areas, LID addresses stormwater through small, distributed features located at the lot level.



Rain garden

The City offers LID rebates that apply to both new construction and reconstruction projects. For more information, visit the City of Port Angeles website at www.cityofpa.us.

What are the benefits of LID?

Low Impact Development (LID) provides many benefits to communities on a large and small-scale. Not only can it make city streets and sidewalks a greener and more aesthetically pleasing place to be, it simultaneously reduces flooding, improves water quality, and improves groundwater recharge. LID can enhance the local environment, protect public health, and improve community livability.



Permeable pavement

Port Angeles
Community and Economic Development

321 E 5th Street
Port Angeles, WA 98362
(360) 417 - 4750

1

Factsheet B - 13 Elements

Construction Pollution Prevention
Minimum Requirement # 2

FactSheet B

13 Elements of Construction Stormwater Pollution Prevention

Projects that result in less than 2,000 square feet of new plus replaced hard surface area, or disturb less than 7,000 square feet of land are not required to prepare a Construction SWPPP (Stormwater Pollution Prevention Plan), but must consider all of the 13 Elements of Construction Stormwater Pollution Prevention and develop controls for all elements that pertain to the project site.
- Stormwater Management Manual for Western Washington (2014 Amendment), Vol. I, Section 2.5.2

ELEMENT 1: PRESERVE VEGETATION / MARK CLEARING LIMITS

Purpose: To prevent unnecessary or accidental clearing and grading and/or soil compaction of areas reserved for stormwater runoff infiltration.

Application: Before beginning land disturbing activities, including clearing and grading, clearly mark all clearing limits, sensitive areas and their buffers, and trees that are to be preserved within the construction area. Retain the duff layer, native top soil, and natural vegetation in an undisturbed state to the maximum degree practicable.

ELEMENT 2: ESTABLISH CONSTRUCTION ACCESS

Purpose: To minimize sediment mobilization and prevent unnecessary ground disturbance.

Application: Limit construction vehicle access and exit to one route, if possible. If sediment is tracked off site, clean the affected roadway thoroughly at the end of each day, or more frequently as necessary (for example, during wet weather).

ELEMENT 3: CONTROL FLOW RATES

Purpose: Protect properties and waterways downstream of development sites from erosion and the associated discharge of turbid waters due to increases in the velocity and peak volumetric flow rate of stormwater runoff from the project site.

Application: Where necessary, construct stormwater retention or detention facilities as one of the first steps in grading. Assure that detention facilities function properly before constructing site improvements (e.g., impervious surfaces).

ELEMENT 4: INSTALL SEDIMENT CONTROLS

Purpose: To minimize the discharge of pollutants.

Application: Design, install, and maintain effective erosion and sediment control BMPs (sediment ponds, traps, filters, etc.) as one of the first steps in grading. These BMPs shall be functional before other land disturbing activities take place.

1

Factsheet C - Construction BMP's

Construction BMP Standards and Specifications

Factsheet C

Introduction

Best Management Practices (BMPs) are defined as schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices, that when used singly or in combination, prevent or reduce the release of pollutants. This factsheet contains standards and specifications for temporary BMPs to be used as applicable during the construction phase of a project. Often using BMPs in combination is the best method to meet Construction Stormwater Pollution Prevention Plan (SWPPP) requirements. The purpose of this Factsheet is to compile all temporary construction BMP standards and details into one location. Select the specific BMPs you plan to use on your project and attached them to your SWPPP (Worksheet B).

This Factsheet contains design standards and specifications for the following BMPs:

Source Control BMPs

- BMP C101: Preserving Natural Vegetation
- BMP C102: Buffer Zones
- BMP C103: High Visibility Fence
- BMP C105: Stabilized Construction Entrance / Exit
- BMP C106: Wheel Wash
- BMP C107: Construction Road/Parking Area Stabilization
- BMP C120: Temporary and Permanent Seeding
- BMP C121: Mulching
- BMP C122: Nets and Blankets
- BMP C123: Plastic Covering
- BMP C124: Sodding
- BMP C125: Topsoiling / Composting
- BMP C126: Polyacrylamide (PAM) for Soil Erosion Protection
- BMP C130: Surface Roughening
- BMP C131: Gradient Terraces
- BMP C140: Dust Control
- BMP C150: Materials on Hand
- BMP C151: Concrete Handling
- BMP C152: Sawcutting and Surfacing Pollution Prevention
- BMP C153: Material Delivery, Storage and Containment
- BMP C154: Concrete Washout Area
- BMP C160: Certified Erosion and Sediment Control Lead
- BMP C162: Scheduling

Runoff Conveyance and Treatment BMPs

- BMP C200: Interceptor Dike and Swale
- BMP C201: Grass-Lined Channels
- BMP C202: Channel Lining
- BMP C203: Water Bars
- BMP C204: Pipe Slope Drains
- BMP C205: Subsurface Drains
- BMP C206: Level Spreader
- BMP C207: Check Dams
- BMP C208: Triangular Silt Dike (TSD) (Geotextile-Encased Check Dam)
- BMP C209: Outlet Protection
- BMP C220: Storm Drain Inlet Protection
- BMP C231: Brush Barrier
- BMP C232: Gravel Filter Berm
- BMP C233: Silt Fence
- BMP C234: Vegetated Strip
- BMP C235: Wattles
- BMP C236: Vegetative Filtration
- BMP C240: Sediment Trap
- BMP C241: Temporary Sediment Pond
- BMP C250: Construction Stormwater Chemical Treatment
- BMP C251: Construction Stormwater Filtration
- BMP C252: High pH Neutralization Using CO2
- BMP C253: pH Control for High pH Water

1

Worksheet A1 - Small Project Report

Small Project Stormwater Report

WorkSheet A1

Small Project Stormwater Report
Narrative and Plan Submittal

HTE #_____
Permit #_____

Note: These templates are not appropriate for use on all projects. Projects that exceed the thresholds below or involve a critical area are more complex in nature and require engineering beyond the scope provided.

Instructions: Select "Yes" of "No" for each question below. If any answer below is "No", the project does not qualify as a "small" project and these templates are not applicable. If the project exceeds any threshold below, a Large Project Stormwater Plan is required. If the project area totals are below the hard surface and land disturbance minimum thresholds, than only MR 2 needs to be considered (Factsheet B)and a Stormwater Report is not necessary.

Yes	No	Criteria
		This project disturbs less than 1 acre and is not part of a larger common plan of development.
		This project converts less than 3/4 acre to lawn or landspace areas.
		This project will create, add, or replace (in any combination) 2,000 square feet, but less than 5,000 square feet, of new plus replaced hard surface. **OR** Will disturb 7,000 square feet or greater.
		This project is not occuring within a critical area, as defined in PAMC Ch. 15.20.030, and will not adversely impact a wetland, stream, water of the state, or change a natural drainage course.

Note: Re-development projects with replaced hard surfaces greater than 5000 sq-ft in size may qualify for use of this Small Project Stormwater Report. See Urban Service Standards and Guidelines Chapter 5, Figure 5.2.

Applicant Information

Site Address: _____ Parcel Number:_____

Property Owner: _____ Signature & Date:_____
I certify the provided project information to be true and correct.

Phone: _____ Email: _____

Contractor/Applicant: _____ Signature & Date:_____
I certify the provided project information to be true and correct.

Phone: _____ Email: _____

Basic Project Information

Important definitions are provided for you in FACTSHEET A!

A. Total Lot Size: _____ (sq ft)

B. Total Proposed Land to be Disturbed: _____ (sq ft) (See definition of "Land Disturbing Activity")

C. Proposed New Hard Surface Area: _____ (sq ft) (See definition of "Hard Surface" and "Impervious surface")

D. Proposed Replaced Hard Surface Area: _____ (sq ft) (See definition of "Hard Surface" and "Impervious surface")

Worksheet B1 - Small Project SWPPP

Small Project Construction SWPPP

WorkSheet B1

Stormwater Pollution Prevention Plan (SWPPP)
Narrative and Plan Submittal

HTE #_____
Permit #_____

Note: This is a template for a simplified Construction SWPPP. These templates are not appropriate for use on all projects. Projects that exceed the area and volume thresholds below or involve activity in a critical area are more complex in nature and require engineering beyond the scope provided. You should include your Construction SWPPP in your contract with your builder. A copy of the Construction SWPPP must be located at the construction site or within reasonable access to the site for construction and inspection personnel at all times.

Select "Yes" or "No" for each question below. If any answer below is "No" the project does not qualify as a "small" project and these templates are not applicable. If the project exceeds any threshold below, a Large Project Construction SWPPP is required. If the project area and volume totals are below the minimum thresholds, then only MR #2 needs to be considered (Factsheet B) and a Construction SWPPP is not required.

Yes	No	Criteria
		This project disturbs less than 1 acre and is not part of a common plan of development.
		This project will create, add, or replace (in any combination) 2,000 square feet, but less than 5,000 square feet, of new plus replaced hard surface. **OR** Will disturb 7,000 square feet or greater.
		This project will move less than 100 cubic yards of material graded on site and less than 500 cubic yards of material under the foundation of a building to be built pursuant to an approved building permit
		This project will not occur within a critical area, as defined in PAMC Ch. 15.20.030, and will not adversely impact a wetland, stream, water of the state, or change a natural drainage course.

Note: Re-development projects with replaced hard surfaces greater than 5000 sq-ft in size may qualify for use of this Small Project SWPPP. See Urban Service Standards and Guidelines Chapter 5, Figure 5.2.

Applicant Information

Site Address: _____ Parcel Number:_____

Property Owner: _____ Signature & Date:_____
I certify the provided project information to be true and correct.

Phone: _____ Email: _____

Contractor/Applicant: _____ Signature & Date:_____
I certify the provided project information to be true and correct.

Phone: _____ Email: _____

Basic Project Information

Important definitions are provided for you in FACTSHEET A!

A. Lot Size: _____ (sq ft) Cut & Fill: _____ (cu. yds.)

B. Total Proposed Land to be Disturbed: _____ (sq ft) (See definition of "Land Disturbing Activity")

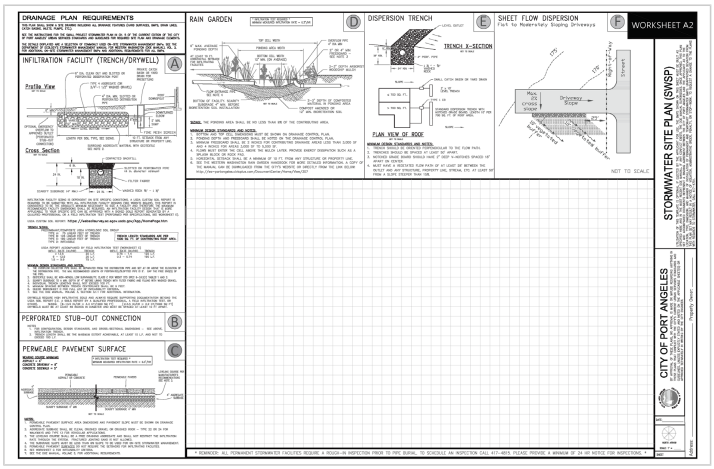
C. Total Proposed Hard Surface Area: _____ (sq ft) (See definition of "Hard Surface" and "Impervious Surface")
new + replaced

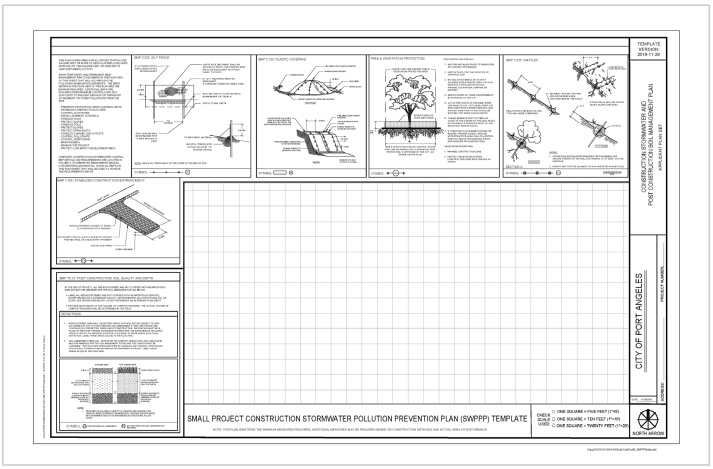
Revised 8/2017

1

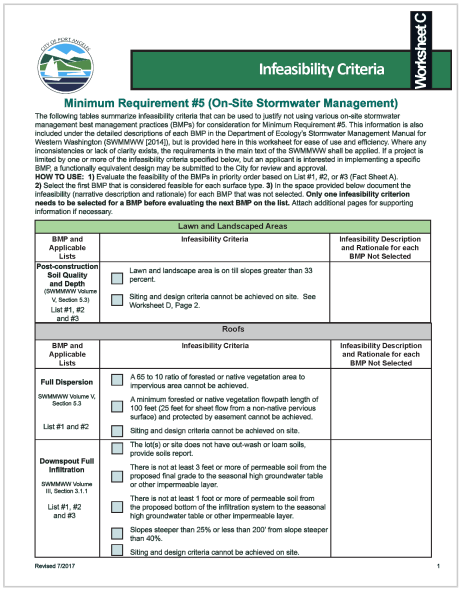
Worksheet A2 - Site Plan

Worksheet B2 - Small Project Details





Worksheet C - Infeasibility Criteria



Infeasibility Criteria — Worksheet C

Minimum Requirement #5 (On-Site Stormwater Management)

The following tables summarize infeasibility criteria that can be used to justify not using various on-site stormwater management best management practices (BMPs) for consideration for Minimum Requirement #5. This information is also included under the detailed descriptions of each BMP in the Department of Ecology's Stormwater Management Manual for Western Washington (SWMMWW [2014]), but is provided here in this worksheet for ease of use and efficiency. Where any inconsistencies or lack of clarity exists, the requirements in the main text of the SWMMWW shall be applied. If a project is limited by one or more of the infeasibility criteria specified below, but an applicant is interested in implementing a specific BMP, a functionally equivalent design may be submitted to the City for review and approval.

HOW TO USE: 1) Evaluate the feasibility of the BMPs in priority order based on List #1, #2, or #3 (Fact Sheet A). **2)** Select the first BMP that is considered feasible for each surface type. **3)** In the space provided below document the infeasibility (narrative description and rationale) for each BMP that was not selected. **Only one infeasibility criterion needs to be selected for a BMP before evaluating the next BMP on the list.** Attach additional pages for supporting information if necessary.

Lawn and Landscaped Areas		
BMP and Applicable Lists	**Infeasibility Criteria**	**Infeasibility Description and Rationale for each BMP Not Selected**
Post-construction Soil Quality and Depth (SWMMWW Volume V, Section 5.3) List #1, #2 and #3	☐ Lawn and landscape area is on till slopes greater than 33 percent. ☐ Siting and design criteria cannot be achieved on site. See Worksheet D, Page 2.	

Roofs		
BMP and Applicable Lists	**Infeasibility Criteria**	**Infeasibility Description and Rationale for each BMP Not Selected**
Full Dispersion SWMMWW Volume V, Section 5.3 List #1 and #2	☐ A 65 to 10 ratio of forested or native vegetation area to impervious area cannot be achieved. ☐ A minimum forested or native vegetation flowpath length of 100 feet (25 feet for sheet flow from a non-native pervious surface) and protected by easement cannot be achieved. ☐ Siting and design criteria cannot be achieved on site.	
Downspout Full Infiltration SWMMWW Volume III, Section 3.1.1 List #1, #2 and #3	☐ The lot(s) or site does not have out-wash or loam soils, provide soils report. ☐ There is not at least 3 feet or more of permeable soil from the proposed final grade to the seasonal high groundwater table or other impermeable layer. ☐ There is not at least 1 foot or more of permeable soil from the proposed bottom of the infiltration system to the seasonal high groundwater table or other impermeable layer. ☐ Slopes steeper than 25% or less than 200' from slope steeper than 40%. ☐ Siting and design criteria cannot be achieved on site.	

Revised 7/2017 1

Worksheet D - Compost



Post-Construction Soil Management — Worksheet D

Benefits of Healthy Soils

HTE #_____
Permit #_____

- Reduced need for irrigation, fertilizers, and pesticides
- Decreased stormwater runoff
- Decreased erosion
- Improved plant health
- Marketable buildings and landscapes

Before / After

5 Step Implementation Process

Step 1 – Retain and protect native vegetation and soil

Identify areas of the site that will not be disturbed during construction (cleared, graded, or driven on). Fence those areas to prevent impacts during construction. If neither soils nor vegetation are disturbed, these areas do not require amendment.

Step 2 – Loosen compacted subsoil, if needed

In disturbed areas (compacted by construction traffic):
- Scarify the top 4 inches of subsoil
- Rip in the first lift of topsoil
- Rip site soils 12 inches deep before tilling compost in to an 8-inch depth

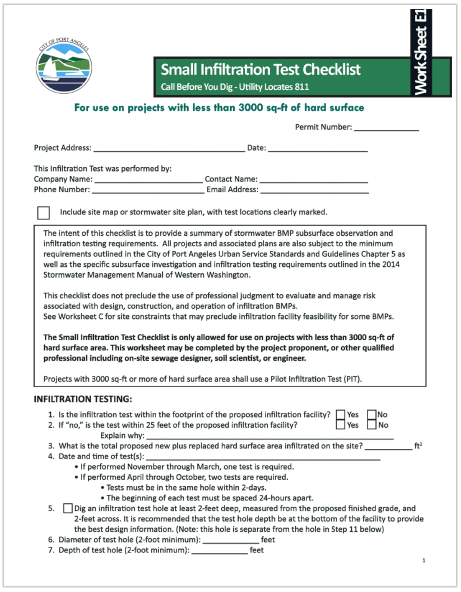
Step 3 – Restore soils that are disturbed during construction

Three options to restore disturbed soils include:

- ☐ • **Option 1**: Till compost (1.75 inches for turf areas; 3 inches for planting beds) into existing soil, or
- ☐ • **Option 2**: Stockpile and reuse existing topsoil (amend if needed to meet 5% organic matter content for turf areas; 10% organic matter content for planting beds), onsite soil test (bulk density & organic matter) required for this option, or
- ☐ • **Option 3**: Import 6 inches of topsoil (with 5 to 10% organic content, soil portion must be sandy) and scarify or till into existing soil in two 3-inch lifts

Revised 7/2017 1

Worksheet E1 - Infiltration Test



Small Infiltration Test Checklist — Worksheet E1

Call Before You Dig - Utility Locates 811

For use on projects with less than 3000 sq-ft of hard surface

Permit Number: _____

Project Address: _____ Date: _____

This Infiltration Test was performed by:
Company Name: _____ Contact Name: _____
Phone Number: _____ Email Address: _____

☐ Include site map or stormwater site plan, with test locations clearly marked.

The intent of this checklist is to provide a summary of stormwater BMP subsurface observation and infiltration testing requirements. All projects and associated plans are also subject to the minimum requirements outlined in the City of Port Angeles Urban Service Standards and Guidelines Chapter 5 as well as the specific subsurface investigation and infiltration testing requirements outlined in the 2014 Stormwater Management Manual of Western Washington.

This checklist does not preclude the use of professional judgment to evaluate and manage risk associated with design, construction, and operation of infiltration BMPs.
See Worksheet C for site constraints that may preclude infiltration facility feasibility for some BMPs.

The Small Infiltration Test Checklist is only allowed for use on projects with less than 3000 sq-ft of hard surface area. This worksheet may be completed by the project proponent, or other qualified professional including on-site sewage designer, soil scientist, or engineer.

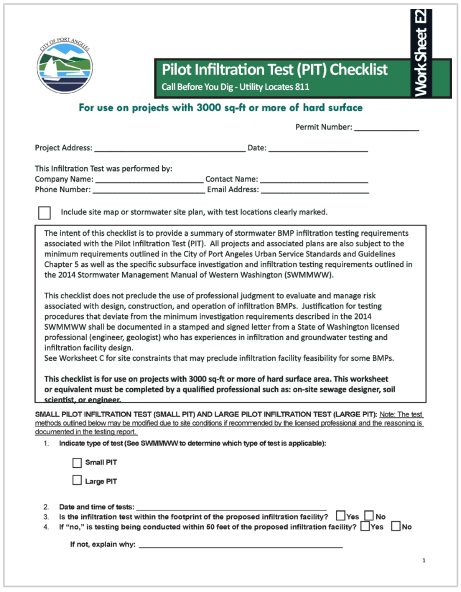
Projects with 3000 sq-ft or more of hard surface area shall use a Pilot Infiltration Test (PIT).

INFILTRATION TESTING:

1. Is the infiltration test within the footprint of the proposed infiltration facility? ☐ Yes ☐ No
2. If "no," is the test within 25 feet of the proposed infiltration facility? ☐ Yes ☐ No
   Explain why: _____
3. What is the total proposed new plus replaced hard surface area infiltrated on the site? _____ ft²
4. Date and time of test(s): _____
   - If performed November through March, one test is required.
   - If performed April through October, two tests are required.
     - Tests must be in the same hole within 2-days.
     - The beginning of each test must be spaced 24-hours apart.
5. ☐ Dig an infiltration test hole at least 2-feet deep, measured from the proposed finished grade, and 2-feet across. It is recommended that the test hole depth be at the bottom of the facility to provide the best design information. (Note: this hole is separate from the hole in Step 11 below)
6. Diameter of test hole (2-foot minimum): _____ feet
7. Depth of test hole (2-foot minimum): _____ feet

1

Worksheet E2 - PIT Test



Pilot Infiltration Test (PIT) Checklist — Worksheet E2

Call Before You Dig - Utility Locates 811

For use on projects with 3000 sq-ft or more of hard surface

Permit Number: _____

Project Address: _____ Date: _____

This Infiltration Test was performed by:
Company Name: _____ Contact Name: _____
Phone Number: _____ Email Address: _____

☐ Include site map or stormwater site plan, with test locations clearly marked.

The intent of this checklist is to provide a summary of stormwater BMP infiltration testing requirements associated with the Pilot Infiltration Test (PIT). All projects and associated plans are also subject to the minimum requirements outlined in the City of Port Angeles Urban Service Standards and Guidelines Chapter 5 as well as the specific subsurface investigation and infiltration testing requirements outlined in the 2014 Stormwater Management Manual of Western Washington (SWMMWW).

This checklist does not preclude the use of professional judgment to evaluate and manage risk associated with design, construction, and operation of infiltration BMPs. Justification for testing procedures that deviate from the minimum investigation requirements described in the 2014 SWMMWW shall be documented in a stamped and signed letter from a State of Washington licensed professional (engineer, geologist) who has experiences in infiltration and groundwater testing and infiltration facility design.
See Worksheet C for site constraints that may preclude infiltration facility feasibility for some BMPs.

This checklist is for use on projects with 3000 sq-ft or more of hard surface area. This worksheet or equivalent must be completed by a qualified professional such as: on-site sewage designer, soil scientist, or engineer.

SMALL PILOT INFILTRATION TEST (SMALL PIT) AND LARGE PILOT INFILTRATION TEST (LARGE PIT): Note: The test methods outlined below may be modified due to site conditions if recommended by the licensed professional and the reasoning is documented in the testing report.

1. **Indicate type of test (See SWMMWW to determine which type of test is applicable):**
   - ☐ **Small PIT**
   - ☐ **Large PIT**
2. **Date and time of tests:** _____
3. **Is the infiltration test within the footprint of the proposed infiltration facility?** ☐ Yes ☐ No
4. **If "no," is testing being conducted within 50 feet of the proposed infiltration facility?** ☐ Yes ☐ No
   If not, explain why: _____

1













- Building Permits
- Business Licenses and Permits
- Land Use Permits
- Fire Safety Permits
- Right of Way Use and Construction
- Parks and Recreation Permits
- Stormwater Permits
- Waste Disposal Permits
- Wastewater Permits
- Building Permit General Application

Online Payments

Job Openings

Open Data & Public

Meetings & Agendas

Permit Center

Garbage Collection

PORT ANGELES
WASHINGTON, U.S.

CONTACT US

Port Angeles, WA
321 E 5th Street
Port Angeles, WA 98362

Phone: 360-457-0411
Email Us
More contact info >

QUICK LINKS

Bids & RFPs
City Budget
Meetings & Agendas
Municipal Code
Sign Up for Notifications
Frequently Asked Questions

SITE LINKS

Accessibility
Contact Us
Copyright Notices
Home
Privacy Policy
Site Map

Government Websites by CivicPlus®

2024 Stormwater Development Review Tracking Sheet (S5.C.6.c.)

Project Manager	Public or Private?	Permit Type	Permit # or Project #	Address, Area, or Parcel Number	Project Name	MR Triggered	Plan Routing Date	Plan Review Date(s)	Initials	Plan Acceptance Date	Appendix 7 (Risk / Site Visit Date)	Initials	Const. Started?	Pre-Con ESC Insp. Date(s)	Initials	During Construction ESC Insp. Date(s)	Initials	Final Completion Inspection Date	Initials	Number of Structural BMPs Inspected	Maintenance Agreement Recorded?	As-buits recieved?	Internal notes
SA	Private	C&G	20-0085	439 Marine Dr.	POPA Temp. Stockpile	MR 1-5	1/21/2020	3/11/2020	JTB	03/11/2020	High 3/12/2020	JTB	Yes	9/23/2020	RV	2020: 9/23	RV			N/A	N/A	N/A	Inspection notes sent in by Jesse Watknitz of PoPA. Ongoing until 2024.
VM	Private	BP	20-1450, 21-1675&7	1815 Melody Ln, 1821 & 1827	Dungeness Valley Homes 3 Story Apts	MR 1-9	5/27/2021	4/12/2021 2/3/2023	VM	02/03/2023	High / 7.30.2021	VM	Yes	1/30/2024	SA	2024: 2/20, 7/25, 9/12, 10/25, 12/18, 12/27	SA						ESC visit 1/30/24, addressed through dewatering BMP
VM	Public	BP	20-0636	1707 A Street	COPA Light Ops. Building	MR 1-9	6/16/2020	6/19/2020 12/23/2020 3/9/2021	V. Mac V.Mac V. Mac	03/09/2021	High / 6.22.2019	V. Mac	No										Not issued as of 12/29/2023 - SA. Issued ~August, not started.
MM	Private	PZ	21-0058	Parcel num: 063000931120	MacRae Short Plat	MR 1-9	7/7/2022	7/18/2022 09/19/2024	VM MM	09/19/2024	N/A, Design Only	MM	No							N/A	N/A	N/A	Design only
VM MM	Private	C&G	21-0766	10th between M & Evans Ave.	Lang Subdivision	MR 1-9	6/1/2023	7.8.2021 1/31/2023 6/29/2023 8.8.2023 8/23/2023	VM MM VM	08/23/2023	Multiple renditions. Performed App. 7 Site visit in 2021	VPM	Yes	9/21/2023	SA	2023: 10/31, 2024: 7/11, 8/23, 10/9	SA RA						Incomplete submittal - missing draft O&M agreement and manual. 1/31/2023 Re-submission in review as of 5/11/2023. Includes RCP 24-0435
SA	Private	BP	21-1672	2710 W 14th St Lot 3	Yakovich/North Point Construction	MR 1-5		2/1/2022	MA	02/01/2022	Low / NA	MA	Yes	6/23/2023	SA	2023: 11/6	SA	3/21/2024	SA	N/A	N/A	N/A	Only ERPR complete, construction underway - 12/29/2023 - SA
SA	Private	BP	21-1708	1317 E 5th St	SFR and ADU	MR 1-5		1/28/22 3/24/2022 12/19/2022	MA VP SA	12/19/2022	High / 12.19.2022	SA	Yes	2/16/2024	SA	2024: 10/9	SA			N/A	N/A	N/A	Drive-bys show site looks great. Not done yet. - SA 10/9/2024 ESC concerns on site, working with contractor to address concerns. - SA 11/25/2024 - failed final inspection due - SA
SA	Public	BP	22-0170	Port Log Yard	COPA Port Repair	MR 1-5		3/2/2022	VP	03/02/2022	Low / NA	VP	No							N/A	N/A	N/A	Project has not started yet, likely will begin 2026.
SA	Private	BP	22-0593	204 Creekside	4-plex Sage Homes	MR 1-5		5/25/2022	VP	05/25/2022	NA	VP	Yes	7/14/2023	EA	2024: 10/9	SA			N/A	N/A	N/A	construction underway 12/29/2023 - SA
SA	Private	BP	22-0594	206 Creekside	4-plex Sage Homes	MR 1-5		5/25/2022	VP	05/25/2022	NA	VP	Yes	7/14/2023	EA	2024: 10/9	SA			N/A	N/A	N/A	construction underway 12/29/2023 - SA
SA	Private	BP	22-0595	208 Creekside	4-plex Sage Homes	MR 1-5		5/25/2022	VP	05/25/2022	NA	VP	Yes	7/14/2023	EA	2024: 10/9	SA			N/A	N/A	N/A	construction underway 12/29/2023 - SA
SA	Private	BP	22-0596	210 Creekside	4-plex Sage Homes	MR 1-5		5/25/2022	VP	05/25/2022	NA	VP	Yes	7/14/2023	EA	2024: 10/9	SA			N/A	N/A	N/A	construction underway 12/29/2023 - SA
SA	Private	BP	22-0747	1012 Walker St	SFR	MR 1-5		6/21/2022	SA	06/21/2022	NA	SA	Yes	7/28/2023	SA			6/17/2024	JL	N/A	N/A	N/A	construction underway 12/29/2023 - SA
VM	Private	BP	22-1122	1527 E. 1st St.	Popeyes Chicken	MR 1-9		10/10/2022 12/28/2022 1/25/2023 2/3/2023	V. Mac	02/03/2023	High / 3.15.2023	V. Mac	No										application approved 3/20/2023 Includes DP 23-0655 Hasn't started as of 12/31/2024
MM	Private	BP	22-1406 23-1084	333 Eclipse Industrial Parkway	SafeRack Tarping Station	MR 1-9		11/22/2022 12/7/2023	MM	12/07/2023	Low / NA	MM	Yes	N/A	MM	Complete prior to permitting	MM	1/10/2024	MM	2	Yes	Yes	11/22/22 application uncovered unpermitted work. New application needs submitting.awaiting second submittal 11/29/22
VM	Private	BP	22-1472	111 E. Front St.	LEKT Hotel	MR 1-9	6/6/2023	11/29/2022 12/28/2022 3/30/2023 4/18/2023 6/9/2023 8/22/2023	V. Mac	08/22/2023			No					in review as of 12/22/22					Not likely to start until 2025.
MM	Private	BP	22-1564	1002 E Park Ave	30'x40' 3 car garage w/ADU above the garage	MR 1-5		1/9/2023 1/24/2023 2/6/2023	MM MM MM	02/06/2023	High / 1.31.2023	MM	Yes	1.31.2023 2/1/2023	MM SA	2023: 9/7	SA	9/27/2024	SA	N/A	N/A	N/A	
SA	Private	BP	23-0042	1106 Walker St	Kevin Russell Const. SFR	MR 1-9		1/19/2023	SA	01/19/2023	Low / NA	SA	Yes	4/27/2023	SA			2/12/2024	JL	N/A	N/A	N/A	
SA	Private	BP	23-0072	1114 Walker St	Ace Michaels - SFR	MR 1-9		2/24/2023	SA	02/24/2023	High / 1.27.2022	SA	Yes	4/12/2023	SA			2/26/2024	SA	N/A	N/A	N/A	
SA	Private	BP	23-0344	1333 E 3rd St	ROOSTd Design Build - SFR	MR 1-5		4/21/2023	SA	04/21/2023	Low / NA	SA	Yes	1/5/2024	RV	2024: 6/14	SA	7/26/2024	NA	N/A	N/A	N/A	
SA VM	Private	BP	23-1279	4017 Fairmont Ave	H4H 4plex	MR 1-5	12/21/2023	6/12/2023 7/28/2023 8/25/2023 5/10/2024	SA MM MM MM	05/10/2024	Low / NA	MM	Yes	6/28/2024	MM					N/A	N/A	N/A	Formerly 23-0599
VM MM	Private	BP	23-0605	535 Marine Drive	Platypus Marine, Vessel Maint. Facility	MR 1-9	6/12/2023	7/12/2023	VM	07/12/2023	7/12/2023	VM	Yes										Development will be submitting inspections accountable to their engineer of record. Final inspect to occur by City. Includes: C&G 23-0877 and BP 23-1208
SA	Private	BP	23-0858	1407 Discovery Loop	Northpointe SFR	MR 1-5	8/10/2023	9/8/2023	SA	09/08/2023	Low / NA	SA	Yes	11/6/2023	NA	2024: 3/25	NA	4/23/2024	NA	N/A	N/A	N/A	
SA	Private	BP	23-0888	1118 S Cherry St	homeowner - SFR	MR 1-5	8/23/2023	9/8/2023 10/4/2023	SA	10/04/2023	Low / NA	SA	Yes	12/13/2023	SA	2024: 10/9	SA			N/A	N/A	N/A	
MM	Private	C&G	23-0792	W. 14th St.	Trailside PRD	MR 1-9	8/2/2023	8.9.2023 10.10.2023 12/19/2023	MM VM	12/19/2023	High / 12.20.2023	VM	Yes	5/28/2024	SA	2024: 10/9, 12/3	SA MM						Includes RCP 24-0318
MM	Private	BP	23-0725	1248 Lauridsen Blvd.	PUD Substation	MR 1-9	11/15/2023	8.2.2023 12.20.2023	MM VM	12.20.2023	High / 8.14.2023	MM VM	Yes	5/16/2024	NA			8/28/2024	SA	2	Yes	Yes	
RJ	Private	BP	23-1312	1409 Discovery Loop	Lot 5 Milwaukee Trails	MR 1-5	12/15/2023	12/21/2023	VM RJ	12/21/2023	Low / NA	VM	Yes	3/25/2024	NA	2024: 4/13	NA	8/6/2024	JL	N/A	N/A	N/A	
MM	Public	BP	23-1371	3501 W 18th St Bldg K	Decant Facility	MR 1-9	12/29/2023	2/5/2024	MM	02/05/2024	High / 5.23.2024	WJ	Yes	6/3/2024	WJ	2024: 6, 7, 8, 9, 10, 11, 12	WJ, DW, LB						Construction managed by Delhur Industries and inspected by Weston Jorgenson, David Wegener, and Lucio Baack.
MM	Private	BP	23-1393	1309 Forest Trail Drive	John Williams	MR 1-5	1/5/2024	1/23/2024	MM	01/23/2024	Low / NA	MM	Yes	4/30/2024	NA	2024: 9/30	MM			N/A	N/A	N/A	
RJ	Private	BP	24-0031	717 E 4th St	YMCA ELC	MR 1-9	1/9/2024	2/21/2024 7/8/2024	RJ	07/08/2024	High / 2.8.2024	RJ	Yes	11/4/2024	SA	2024: 11/8, 12/10	SA						DP 24-0932, 24-0903 BP 24-1030
MM	Private	BP	24-0067&8	632 E 11th St	Duplexes A & B	MR 1-5	1/26/2024	2/7/2024 5/22/2024 7/5/2024	MM	07/05/2024	Low / NA	MM	No							N/A	N/A	N/A	Hasn't started as of 12/31/2024.
MM	Private	BP	24-0128&9	1132 W 19th St	Duplexes A & B	MR 1-5	2/9/2024	2/9/2024 4/3/2024 5/3/24	MM	05/03/2024	Low / NA	MM	Yes	5/28/2024	SA	2024: 10/7	NA			N/A	N/A	N/A	

VM RJ	Private	C&G	24-0136	439 Marine Dr	Marine Trades	MR 1-9	2/12/2024	4/23/2024	VM RJ	04/23/2024	High / 09.26.2024	MM	Yes									Development will be submitting inspections accountable to their engineer of record. Final inspect to occur by City.
MM	Private	BP	24-0157	1633 W 11th St	SFR	MR 1-5	2/16/2024	3/21/2024 7/5/2024	SA MM	07/05/2024	Low / NA	MM	No							N/A	N/A	N/A	Hasn't started as of 12/31/2024.
SA	Private	BP	24-0175	1838 W 15th St	Manufactured Home	MR 1-5	2/23/2024	2/26/2024 5/1/2024	SA	05/01/2024	Low / NA	SA	Yes					10/14/2024	NA	N/A	N/A	N/A	
SA	Private	BP	24-0226	1102 W 11th St	Coffee Stand	MR 1-5	3/11/2024	3/19/2024	SA	03/19/2024	Low / NA	SA	No							N/A	N/A	N/A	Hasn't started as of 12/31/2024.
MM	Public	BP	24-0237	302 S Race Street	Dream Playground	MR 1-5	5/1/2024	5/6/2024	MM	05/06/2024	Low / NA	SA	Yes	5/16/2024	SA	2024: 5/22	SA	6/11/2024	JL	N/A	N/A	N/A	
SA	Private	BP	24-0245	1301 Marine Dr	CO2 Removal System	MR 1-5	3/25/2024	5/14/2024	RJ	05/14/2024	Low / NA	RJ	No							N/A	N/A	N/A	Hasn't started as of 12/31/2024.
SA	Private	BP	24-0247	1529 Discovery Loop	Milwaukee Trails	MR 1-5	3/18/2024	4/8/2024	SA	04/08/2024	Low / NA	SA	Yes			2024: 10/9	SA			N/A	N/A	N/A	
SA	Private	BP	24-0248	1531 Discovery Loop	Milwaukee Trails	MR 1-5	3/18/2024	4/8/2024	SA	04/08/2024	Low / NA	SA	Yes			2024: 10/9, 12/4	SA		NA	N/A	N/A	N/A	
SA	Private	BP	24-0249	1303 E 7th St	SFR	MR 1-5	3/18/2024	4/11/2024 8/5/2024	SA	08/05/2024	High / 10.9.2024	SA	Yes	10/9/2024	SA					N/A	N/A	N/A	
SA	Private	BP	24-0254	1024 Walker St	Adair Homes SFR	MR 1-5	3/18/2024	4/8/2024 5/31/2024	SA	05/31/2024	Low / NA	SA	Yes	8/20/2024	NA	2024: 11/27	NA			N/A	N/A	N/A	ESC visit 11/27/24, followed up via email to developer about corrective action
SA	Private	BP	24-0266	1901 W 18th St	Residential Addition	MR 1-5	3/28/2024	4/3/2024	SA	04/03/2024	Low / NA	SA	Yes			2024: 12/4	NA			N/A	N/A	N/A	Built before permit issued, 9/24/2024.
SA	Private	BP	24-0267	1815 W 7th St	Duplex	MR 1-5	4/11/2024	4/29/2024	SA	04/29/2024	Low / NA	SA	No							N/A	N/A	N/A	Issued in June, not started - as of 12/31/2024.
RJ	Private	BP	24-0321 & 0322	1104 & 1106 W Lauridsen	Duplex	MR 1-9	4/8/2024	4/22/2024 11/4/2024 12/24/2024	MM RJ RJ	12/24/2024	High / 10.29.2024	MM	No										
SA	Private	BP	24-0324	328 Hillcrest Dr	SFR	MR 1-5	4/9/2024	4/24/2024	SA	04/24/2024	Low / NA	SA	Yes	6/14/2024	JL	2024: 11/22	SA			N/A	N/A	N/A	Includes BP 24-1278 for detached garage
RJ	Private	BP	24-0357	3313 Porter Street A	Duplex	MR 1-9	4/18/2024	5/3/2024	RJ	05/03/2024	Low / NA	RJ	No										Not issued as of 11/26/2024
RJ	Private	BP	24-0359	3313 Porter Street B	Duplex	MR 1-9	4/18/2024	5/3/2024	RJ	05/03/2024	Low / NA	RJ	No										
RJ	Private	BP	24-0360	3313 Porter Street C	Duplex	MR 1-9	4/18/2024	5/3/2024	RJ	05/03/2024	Low / NA	RJ	No										Not issued as of 11/26/2024
RJ	Private	BP	24-0360	3313 Porter Street D	Duplex	MR 1-9	4/18/2024	5/3/2024	RJ	05/03/2024	Low / NA	RJ	No										Application withdrawn
SA	Private	BP	24-0367	3117 Grants View Ln	SFR	MR 1-5	4/22/2024	5/7/2024	SA	05/07/2024	Low / NA	SA	Yes							N/A	N/A	N/A	
SA	Private	BP	24-0383 & 0384	337 Rhodes	Manufactured Home & Garage	MR 1-5	4/25/2024	6/11/2024	SA	06/11/2024	Low / NA	SA	Yes	7/12/2024	NA	2024: 9/10	NA WJ			N/A	N/A	N/A	Drywell inspected.
MM	Private	BP	24-0412	2604 W 19th St	Pole Building	MR 1-5	5/15/2024	6/6/2024	SA	06/06/2024	Low / NA	SA	Yes					10/28/2024	JL	N/A	N/A	N/A	
SA	Private	BP	24-0459&60	2226 W 14th St	SFR and Garage	MR 1-5	6/7/2024	6/21/2024 9/12/2024 10/4/2024	SA MM SA	10/04/2024	Low / NA	MM	Yes			2024: 12/4	NA	12/18/2024	NA	N/A	N/A	N/A	Infiltration Trench inspected. Provided installed material reciepts due to pipe being covered before inspection
RJ	Private	BP	24-0466	2100 S Airport Road	Project Olympic	MR 1-9	5/15/2024	6/18/2024 8/26/2024	RJ RJ	08/26/2024	High / 12.31.2024	RJ	Yes	12/31/2024	RJ								Includes C&G 24-0588
SA	Private	BP	24-0468	1127 Olympus	SFR	MR 1-5	5/30/2024	6/14/2024 8/28/2024	SA	08/28/2024	Low / NA	SA	No							N/A	N/A	N/A	Not paid for as of 11/26/2024. In review as of 12/31/2024
MM	Private	BP	24-0603	211 S Valley St	Comm Addition	MR 1-5	6/12/2024	7/08/2024 8/20/2024	MM MM	08/20/2024	High / 08.21.2024	MM	Yes	12/4/2024	NA	2024: 12/30	NA			N/A	N/A	N/A	
VM	Private	BP	24-0674	439 Marine Dr	Marine Trade Stormwater Facility Only	MR 1-9	6/28/2024	7/11/2024	VM	07/11/2024	High / 09.26.2024	MM	Yes										Development will be submitting inspections accountable to their engineer of record. Final inspect to occur by City.
SA	Private	BP	24-0678	1411 Discovery Loop	SFR	MR 1-5	7/2/2024	7/16/2024	SA	07/16/2024	Low / NA	SA	Yes	10/15/2024	SA	2024: 11/14	NA			N/A	N/A	N/A	
SA	Private	C&G	24-0695	1203 E Lauridsen	PAFAC Trail Project	MR 1-5	8/9/2024	8/9/2024	SA	08/09/2024	Low / NA	SA	Yes			2024: 10/28	SA			N/A	N/A	N/A	
MM	Private	C&G	24-0719	2917 W. Edgewood Rd.	Wetland Mitigation	MR 1-9	7/10/2024	7/26/2024 8/2/2024	MM	08/02/2024	High / __.__.____		No										Not issued as of 11/26/2024
MM	Private	C&G	24-0753	1814 W 10th	Wetland Mitigation	MR 1-5	7/22/2024	8/22/2024	MM	08/22/2024	Low / NA	MM	No							N/A	N/A	N/A	Not issued as of 11/26/2024
RJ	Private	BP	24-0758	138 W 2nd St	PBH 36 Unit Multifamily	MR 1-9	7/22/2024	10/10/2024	RJ	10/10/2024	Low / NA	RJ	Yes	12/31/2024	RJ								Includes: DP 24-0275 ESC visit 11/27/2024 - spoke with applicant directly and arranged cleanup of sediment.
MM	Private	BP	24-0793,4,&5	814 W 16th	Duplex and Two ADUs	MR 1-5	8/7/2024	8/22/2024 9/6/2024	MM	09/06/2024	Low / NA	MM	Yes	10/18/2024	SA	2024: 11/27	NA			N/A	N/A	N/A	
MM	Private	BP	24-0776	213 S Oak St	Foundation	MR 1-5	7/26/2024	8/29/2024	MM	08/29/2024	Low / NA	MM	Yes			2024: 11/20	NA RJ			N/A	N/A	N/A	
SA	Private	BP	24-0846	2619 W 18th St	Mobile Home	MR 1-5	8/14/2024	10/2/2024	SA	10/02/2024	Low / NA	SA	Yes	10/11/2024	NA	2024: 10/28	SA	2024: 11/26/2024	NA	N/A	N/A	N/A	
SA	Private	BP	24-0915	1413 Discovery Loop	SFR	MR 1-5	9/5/2024	10/15/2024	SA	10/15/2024	Low / NA	SA	Yes	11/26/2024	NA					N/A	N/A	N/A	
SA	Private	BP	24-0920	1415 Discovery Loop	SFR	MR 1-5	9/5/2024	10/15/2024	SA	10/15/2024	Low / NA	SA	No							N/A	N/A	N/A	Not issued as of 11/26/2024
RJ	Private	C&G	24-0952	100 Valley Creek Dr	Reserve at Valley Creek Phase II	MR 1-9	9/17/2024	10/11/2024 11/27/2024	RJ	11/27/2024	High /12.31.2024	RJ	Yes	12/31/2024	RJ								Not issued as of 12/31/2024
RJ	Private	C&G	24-1007	Fields Dr	Staging Area	MR 1-9	9/27/2024	10/9/2024 11/18/2024	RJ RJ	11/18/2024	High / 10.09.2024	SA	No										Not issued as of 12/31/2024
RJ	Private	BP	24-1164	230 E 1st St	4PA Transitional Shelters	MR 1-5	10/28/2024	11/18/2024 _/_/_	RJ _	_/_/_	High / 12.31.2024	RJ	Yes	12/31/2024	RJ					N/A	N/A	N/A	Not issued as of 12/31/2024
SA	Private	BP	24-0927	1776 Melody Ln	Manufactured Home	MR 1-5	9/24/2024	10/8/2024 12/30/2024	SA	12/30/2024	Low / NA	SA	No							N/A	N/A	N/A	Not issued as of 12/31/2024
MR #2 ONLY PROJECTS																							
MM	Private	C&G	23-1020	909 E First St	First Race Cont Soils Removal	MR 2 ONLY	9/18/2023	10/20/2023 2/14/2024 8/13/2024	VM MM MM	08/13/2024	Low / NA	MM											
MM	Private	BP	23-1207	703 E 6th St	Convert Garage	MR 2 ONLY	1/22/2024	2/1/2024	MM	02/01/2024	Low / NA	MM											
SA	Private	BP	23-1214	117 N Oak St	Commercial Remodel	MR 2 ONLY	2/23/2024	3/21/2024	SA	03/21/2024	Low / NA	SA											
SA	Private	BP	23-1311	1902 Marine Dr	Commercial TI	MR 2 ONLY	12/15/2023	1/5/2024	SA	01/05/2024	Low / NA	SA											
MM	Public	BP	23-1327	315 Lincoln St	City Pier Tower	MR 2 ONLY	12/20/2023	1/2/2024	MM	01/02/2024	Low / NA	MM											
MM	Private	BP	23-1329	1230 W 17th St	Deck Repair	MR 2 ONLY	12/22/2023	1/2/2024	MM	01/02/2024	Low / NA	MM											
SA	Private	BP	23-1344	520 S Lincoln St	Commercial Addition	MR 2 ONLY	12/27/2023	2/9/2024	SA	02/09/2024	Low / NA	SA											
SA	Private	BP	23-1346	124 W Railroad Ave	Deck	MR 2 ONLY	12/27/2023	2/13/2024	SA	02/13/2024	Low / NA	SA											
SA	Private	BP	23-1370	233 E 9th St	Retaining Wall	MR 2 ONLY	12/29/2023	2/13/2024	SA	02/13/2024	Low / NA	SA											
	Private	BP	23-1383	114 E 9th /st	Garage Replacement	MR 2 ONLY	12/29/2023	1/23/2024	SA	01/23/2024	Low / NA	SA											
NA	Private	BP	24-0030	4119 C St	NW Builders	MR 2 ONLY	1/10/2024	1/30/2024	NA	01/30/2024	Low / NA	NA											
SA	Private	BP	24-0076	812 E Georgiana	Res Addition	MR 2 ONLY	2/22/2024	3/11/2024 5/1/2024	MM SA	05/01/2024	Low / NA	SA											
SA	Private	BP	24-0084	222 N Francis St	Remove/replace retaining wall	MR 2 ONLY	2/13/2024	2/22/2024	SA	02/22/2024	Low / NA	SA											

NA	Private	ROW CONST.	24-0100	222 N Francis St	Curb Replacement	MR 2 ONLY	2/4/2024	4/4/2024	NA	04/04/2024	Low / NA	NA										
SA	Private	BP	24-0106	433 W 13th St	Duplex	MR 2 ONLY	2/2/2024	2/27/2024	SA	02/27/2024	Low / NA	SA										
NA	Private	ROW CONST.	24-0124	831 E 2nd	Sewer repair/installation	MR 2 ONLY	2/6/2024	2/24/2024	NA	02/24/2024	Low / NA	RJ										
SA	Private	BP	24-0130	1133 W 19th St	Duplex	MR 2 ONLY	2/9/20024	5/22/2024	SA	05/22/2024	Low / NA	SA										
SA	Private	BP	24-0132	1139 W 19th St	Duplex	MR 2 ONLY	2/9/2024	2/15/2024 5/22/24	MM SA	05/22/2024	Low / NA	MM										
NA	Private	ROW CONST.	24-0133	1317 E 5th St	Driveway/sidewalk/sewer connection	MR 2 ONLY	2/12/2024	2/28/2024	NA	02/28/2024	Low / NA	RJ										
MM	Private	ROW CONST.	24-0135	1138 W Lauridsen Blvd	Taylor Built Homes	MR 2 ONLY	2/12/2024	2/14/2024 4/25/2024	MM MM	04/25/2024	Low / NA	MM										Associate with Building Permit - SA check; MR# 1-5
Hold	Private	ROW CONST.	24-0139	1102 W Lauridsen Blvd	Taylor Built Homes	MR 2 ONLY	2/13/2024	2/14/2024 On Hold	MM	On Hold	Low / NA	MM										abandoned
Hold	Private	ROW CONST.	24-0140	1110 W Lauridsen Blvd	Taylor Built Homes	MR 2 ONLY	2/13/2024	2/14/2024 On Hold	MM	On Hold	Low / NA	MM										abandoned
SA	Private	BP	24-0153	320 E 9th St	Detached Garage	MR 2 ONLY	2/16/2024	2/16/2024	SA	02/16/2024	Low / NA	SA										
MM	Private	BP	24-0362	1116 1/2 W 17th St	SFR	MR 2 ONLY	4/19/2024	5/3/2024 7/29/2024	SA MM	07/29/2024	Low / NA	MM										
SA	Private	BP	24-0160	1123 W 7th St	Demo Garage	MR 2 ONLY	2/16/2024	3/1/2024	SA	03/01/2024	Low / NA	SA										
SA	Private	BP	24-0163	1123 W 7th St	Build ADU	MR 2 ONLY	2/16/2024	3/1/2024	SA	03/01/2024	Low / NA	SA										
MM	Private	BP	24-0165	225 W 6th St	ADU	MR 2 ONLY	2/20/2024	2/20/2024	MM	02/20/2024	Low / NA	MM										
SA	Private	BP	24-0171	113 E Park Ave	Demo Garage	MR 2 ONLY	2/20/2024	3/6/2024	SA	03/06/2024	Low / NA	SA										
SA	Private	BP	24-0174	1127 Hazel St	Demo House	MR 2 ONLY	2/21/2024	2/23/2024	SA	02/23/2024	Low / NA	SA										
SA	Private	ROW CONST.	24-0181	2302-2242 W 12th St	CATV Trench	MR 2 ONLY	2/23/2024	3/6/2024	SA	03/06/2024	Low / NA	SA										
SA	Private	BP	24-0192	922 W 11th St	Demo Garage	MR 2 ONLY	2/29/2024	3/12/2024	SA	03/12/2024	Low / NA	SA										
MM	Private	ROW CONST.	24-0194	802 C St	Borings	MR 2 ONLY	3/26/2024	4/3/2024	MM	04/03/2024	Low / NA	MM										
SA	Private	BP	24-0196	140 W 11th St	Demo Garage	MR 2 ONLY	3/5/2024	3/20/2024	SA	03/20/2024	Low / NA	SA										
SA	Private	BP	24-0205	922 W W 11th St	Detached Garage	MR 2 ONLY	3/8/2024	3/20/2024	SA	03/20/2024	Low / NA	SA										
SA	Private	BP	24-0208	113 E Park	ADU	MR 2 ONLY	3/5/2024	3/20/2024	SA	03/20/2024	Low / NA	SA										
SA	Private	ROW CONST.	24-0212	2401 E 1st St	Directional Boring	MR 2 ONLY	3/4/2024	3/7/2024	SA	03/07/2024	Low / NA	SA										
SA	Private	ROW CONST.	24-0215	822 W 15th St	Driveway Replacement	MR 2 ONLY	3/6/2024	3/25/2024	SA	03/25/2024	Low / NA	SA										
SA	Private	ROW CONST.	24-0225	3803 Old Mill Road	Driveway Replacement	MR 2 ONLY	3/6/2024	3/25/2024	SA	03/25/2024	Low / NA	SA										
RJ	Private	C&G	24-0243	1402 Fairchild Airport Road	Taxiway/apron repaving	MR 2 ONLY	3/15/2024	4/11/2024	RJ	04/11/2024	Low / NA	RJ										
SA	Private	BP	24-0246	909 Francis St	SFR	MR 2 ONLY	2/22/2024	4/8/2024 Abandoned	SA	Abandoned	Low / NA	SA										
SA	Private	ROW CONST.	24-0256	410 S Race Str	Sewer repair	MR 2 ONLY	3/19/2024	3/25/2024	SA	03/25/2024	Low / NA	SA										
SA	Private	ROW CONST.	24-0257	1813 E 4th St	Boring	MR 2 ONLY	3/19/2024	3/25/2024	SA	03/25/2024	Low / NA	SA										
SA	Private	BP	24-0272	1814 W 13th St	Res Acc Structure	MR 2 ONLY	3/26/2024	4/18/2024	SA	04/18/2024	Low / NA	SA										
SA	Private	BP	24-0273	910 W 10th St	Deck Addition	MR 2 ONLY	3/29/2024	4/12/2024	SA	04/12/2024	Low / NA	SA										
MM	Private	BP	24-0274	1756 E 6th St	Residential Addition	MR 2 ONLY	4/11/2024	6/20/2024	MM	06/20/2024	Low / NA	MM										
SA	Private	BP	24-0285	216 W 7th St	Foundation Repair	MR 2 ONLY	3/27/2024	4/11/2024	SA	04/11/2024	Low / NA	SA										
NA	Private	ROW CONST.	24-0286	535 Marine Drive	Replace curb and gutter	MR 2 ONLY	4/4/2024	4/17/2024	NA	04/17/2024	Low / NA	NA										
MM	Private	ROW CONST.	24-0314	1304 Rook Dr	Extend culvert	MR 2 ONLY	4/8/2024	5/15/2024	MM	05/15/2024	Low / NA	MM										
SA	Private	BP	24-0333	1020 E 4th St	Foundation Repair	MR 2 ONLY	4/10/2024	4/25/2024	SA	04/25/2024	Low / NA	SA										
SA	Private	BP	24-0339	1209 Georgiana St	Park Model ADU	MR 2 ONLY	4/18/2024	5/3/2024	SA	05/03/2024	Low / NA	SA										
SA	Private	BP	24-0340	122 W Lauridsen Blvd	Comm Walk in Freezer	MR 2 ONLY	5/1/2024	5/2/2024	SA	05/02/2024	Low / NA	SA										
MM	Private	ROW CONST.	24-0352	1333 3rd St	Sidewalk/curbs along Ennis	MR 2 ONLY	4/15/2024	5/30/2024	MM	05/30/2024	Low / NA	MM										
SA	Private	BP	24-0370	733 1/2 W 16th St	Manufactured Home	MR 2 ONLY	4/22/2024	4/29/2024 5/24/2024	SA SA	05/24/2024	Low / NA	SA										
SA	Private	BP	24-0382	519 E Park	Helical Piers	MR 2 ONLY	4/24/2024	5/7/2024	SA	05/07/2024	Low / NA	SA										
SA	Private	BP	24-0387	3207 Maple St	Carport remodel/addition	MR 2 ONLY	4/29/2024	5/10/2024	SA	05/10/2024	Low / NA	SA										
SA	Private	ROW CONST.	24-0393	328 Lopez Ave	Emergency sewer repair	MR 2 ONLY	4/26/2024	4/29/2024	SA	04/29/2024	Low / NA	SA										
	Private	BP	24-0400	140 W 11th St	Detached Garage	MR 2 ONLY	4/30/2024	5/17/2024		05/17/2024												
SA	Private	BP	24-0401	123 W 7th St	Garage Demo	MR 2 ONLY	4/29/2024	5/13/2024	SA	05/13/2024	Low / NA	SA										
MM	Private	ROW CONST.	24-0411	Driveway	1248 E Lauridsen BLvd	MR 2 ONLY	5/18/2024	5/23/2024	MM	05/23/2024	Low / NA	MM										
MM	Private	ROW CONST.	24-0426	1309 Forest Trail	Driveway	MR 2 ONLY	5/6/2024	5/20/2024	MM	05/20/2024	Low / NA	MM										
SA	Private	BP	24-0428	1032 W 11th St	Res addition	MR 2 ONLY	5/7/2024	5/21/2024	SA	05/21/2024	Low / NA	SA										
SA	Private	Demo	24-0465	114 E 9th St	Garage Demo	MR 2 ONLY	5/14/2024	5/22/2024	SA	05/22/2024	Low / NA	SA										
SA	Private	BP	24-0462	217 S Laurel St	Detached Garage	MR 2 ONLY	5/14/2024	5/24/2024	SA	05/24/2024	Low / NA	SA										
SA	Private	BP	24-0469	830 Boathaven Dr	Temp Tent	MR 2 ONLY	5/14/2024	5/24/2024	SA	05/24/2024	Low / NA	SA										
SA	Private	BP	24-0461	615 S Chambers	Foundation Repair	MR 2 ONLY	5/14/2024	5/24/2024	SA	05/24/2024	Low / NA	SA										
SA	Private	BP	24-0465	114 E 9th St	Garage Demo	MR 2 ONLY	5/14/2024	5/24/2024	SA	05/24/2024	Low / NA	SA										
SA	Private	ROW CONST.	24-0471	807 S Lincoln St	Ground Water Monitoring	MR 2 ONLY	5/15/2024	5/15/2024	SA	05/15/2024	Low / NA	SA										
MM	Private	ROW CONST.	24-0495	118 E Eight St	Sewer repair	MR 2 ONLY	6/6/2024	6/25/2024	MM	06/25/2024	Low / NA	MM										

MM	Private	ROW CONST.	24-0496	1123 W 19th St	Sewer Connection	MR 2 ONLY	5/21/2024	5/24/2024	MM	05/24/2024	Low / NA	MM											
	Private	ROW CONST.	24-0501	439 Marine Dr	MTC Site Utility Developemt	MR 2 ONLY	5/29/2024	6/21/2024	MM	06/21/2024	Low / NA	MM											
MM	Private	ROW CONST.	24-0502	1137 US Hwy 101	Soil Boring 101 and Fairmont	MR 2 ONLY	7/24/2024	7/30/2024	MM	07/30/2024	Low / NA	MM											
MM	Private	ROW CONST.	24-0352	1333 3rd St	Sewer repair	MR 2 ONLY	5/28/2024	5/28/2024	MM	05/28/2024	Low / NA	MM											
SA	Private	ROW CONST.	24-0521	3760 Hill Cir	Utility Trench	MR 2 ONLY	5/2/2024	5/29/2024	SA	05/29/2024	Low / NA	SA											
SA	Private	BP	24-0522	2021 E 1st St	Chipotle	MR 2 ONLY	5/30/2024	6/17/2024	SA	06/17/2024	Low / NA	SA											
SA	Private	BP	24-0531	233 E 9th ST	Garage Demo	MR 2 ONLY	6/17/2024	6/17/2024	SA	06/17/2024	Low / NA	SA											
SA	Private	BP	24-0533	1530 W 4th St	Residential Addition	MR 2 ONLY	6/3/2024	6/17/2024	SA	06/17/2024	Low / NA	SA											
SA	Private	BP	24-0538	1120.5 W 8th St	Residential Remodel	MR 2 ONLY	6/3/2024	7/1/2024	SA	07/01/2024	Low / NA	SA											
MM	Private	ROW CONST.	24-0579	1522 W 5th St	Emergency Sewer	MR 2 ONLY	6/6/2024	6/18/2024	MM	06/18/2024	Low / NA	MM											
MM	Private	BP	24-0600	1120 W 8th St	Residential Remodel	MR 2 ONLY	6/17/2024	6/28/2024	MM	06/28/2024	Low / NA	MM											
MM	Private	ROW CONST.	24-0605	2903 W 18th St	Decomm Sanitary Install Sewer	MR 2 ONLY	6/18/2024	6/18/2024	MM	06/18/2024	Low / NA	MM											
SA	Private	BP	24-0608	123 W 7th St	ADU	MR 2 ONLY	6/12/2024	6/24/2024	SA	06/24/2024	Low / NA	SA											
MM	Private	BP	24-0625 & 7	925 E 9th St	ADU & Residential Remodel	MR 2 ONLY	6/17/2024	6/28/2024	MM	06/28/2024	Low / NA	MM											
SA	Private	BP	24-0628	1740 W 8th St	Detached Garage	MR 2 ONLY	6/18/2024	7/2/2024	SA	07/02/2024	Low / NA	SA											
SA	Private	BP	24-0633	405 E Front St	Residential Repair	MR 2 ONLY	6/20/2024	7/3/2024	SA	07/03/2024	Low / NA	SA											
MM	Private	BP	24-0634	1007 E 3rd St	Residential Demo	MR 2 ONLY	6/17/2024	6/28/2024	MM	06/28/2024	Low / NA	MM											
MM	Private	ROW CONST.	24-0636	1133 Hazel St	Install SSMH and Sidewalk	MR 2 ONLY	6/18/2024	6/18/2024	MM	06/18/2024	Low / NA	MM											
SA	Private	ROW CONST.	24-0649	1309 S Laurel St	Emergency Sewer Repair	MR 2 ONLY	6/21/2024	6/21/2024	SA	06/21/2024	Low / NA	SA											
MM	Private	ROW CONST.	24-0651	3123 City Lights Pl	Undergraound cable push	MR 2 ONLY	6/21/2024	7/8/2024	MM	07/08/2024	Low / NA	MM											
MM	Private	ROW CONST.	24-0652	1928 Hamilton Way	Utility trench	MR 2 ONLY	6/24/2024	7/8/2024	MM	07/08/2024	Low / NA	MM											
SA	Private	ROW CONST.	24-0692	225 W 6th St	Sewer repair	MR 2 ONLY	7/9/2024	7/24/2024	SA	07/24/2024	Low / NA	SA											
SA	Private	ROW CONST.	24-0710	733.5 W 16th St	Sewer Connection	MR 2 ONLY	7/9/2024	7/24/2024	SA	07/24/2024	Low / NA	SA											
SA	Private	BP	24-0716	312 W 10th St	Basement Addition	MR 2 ONLY	7/15/2024	7/29/2024	SA	07/29/2024	Low / NA	SA											
SA	Private	ROW CONST.	24-0718	1417 A St	Driveway	MR 2 ONLY	7/10/2024	7/23/2024	SA	07/23/2024	Low / NA	SA											
SA	Private	BP	24-0725	727 E 8th St	Retaining Wall	MR 2 ONLY	7/12/2024	7/24/2024	SA	07/24/2024	Low / NA	SA											
SA	Private	BP	24-0726	727 E 8th St	Parking lot	MR 2 ONLY	7/12/2024	7/24/2024	SA	07/24/2024	Low / NA	SA											
SA	Private	BP	24-0735	520 S Lincoln St	Commercial Remodel	MR 2 ONLY	7/15/2024	8/6/2024	SA	08/06/2024	Low / NA	SA											
SA	Private	BP	24-0741	1020 W 11th St	Residential Addition	MR 2 ONLY	7/15/2024	7/29/2024 8/7/2024	SA SA	08/07/2024	Low / NA	SA											
SA	Private	BP	24-0746	940 W 7th St	Residential Remodel	MR 2 ONLY	7/17/2024	7/30/2024	SA	07/30/2024	Low / NA	SA											
MM	Private	BP	24-0765	1315 B St	Remodel	MR 2 ONLY	8/8/2024	8/22/2024	MM	08/22/2024	Low / NA	MM											
SA	Private	ROW CONST.	24-0766	2226 W 14th ST	Sewer Connection	MR 2 ONLY	7/25/2024	8/12/2024	SA	08/12/2024	Low / NA	SA											
SA	Private	ROW CONST.	24-0767	1109 Grant Ave	Sewer Connection	MR 2 ONLY	7/25/2024	8/12/2024	SA	08/12/2024	Low / NA	SA											
SA	Private	BP	24-0768	2619 W 18th St	Demo	MR 2 ONLY	7/29/2024	8/6/2024	SA	08/06/2024	Low / NA	SA											
MM	Private	ROW CONST.	24-0788	1109 S Grant Ave	Sewer Connection	MR 2 ONLY	7/25/2024	8/22/2024	NA	08/22/2024	Low / NA	NA											
MM	Private	BP	24-0775	119 W 3rd St	Foundation for Moved Building	MR 2 ONLY	7/26/2024	8/29/2024	MM	08/29/2024	Low / NA	MM											
MM	Private	BP	24-0778&9	1120 & 1120.5 W 8th St A	ADUs	MR 2 ONLY	7/26/2024	7/30/2024	MM	07/30/2024	Low / NA	MM											
SA	Private	BP	24-0786	827 W 6th St	Residential Repair	MR 2 ONLY	7/30/2024	8/13/2024	SA	08/13/2024	Low / NA	SA											
NA	Private	ROW CONST.	24-0788	812 Georgiana St	Driveway	MR 2 ONLY	8/5/2024	8/22/2024	NA	08/22/2024	Low / NA	MM											
MM	Private	ROW CONST.	24-0821	3119 Mt Angeles Rd	Sewer service install	MR 2 ONLY	8/15/2024	8/29/2024	MM	08/29/2024	Low / NA	MM											
SA	Private	ROW CONST.	24-0829	1732 W 4th St	Sewer Connection	MR 2 ONLY	8/15/2024	8/30/2024	SA	08/30/2024	Low / NA	SA											
MM	Private	BP	24-0866	1917 W 18th St	Manufactured Home	MR 2 ONLY	8/29/2024	9/6/2024	MM	09/06/2024	Low / NA	MM											
SA	Private	BP	24-0840	830 W 13th St	Res Addition	MR 2 ONLY	9/5/2024	9/18/2024	SA	09/18/2024	Low / NA	SA											
SA	Private	ROW USE	24-0844	Golf Course Rd	Cable overlash	MR 2 ONLY	8/3/2024	8/13/2024	SA	08/13/2024	Low / NA	SA											
SA	Private	ROW CONST.	24-0880	1515 W 6th St	Sewer Repair	MR 2 ONLY	8/19/2024	9/5/2024	SA	09/05/2024	Low / NA	SA											
RJ	Private	BP	24-0890	3115 Mt Angeles Rd	Manufactured Home	MR 2 ONLY	8/27/2024	9/3/2024	RJ	09/03/2024	Low / NA	RJ											
SA	Private	ROW CONST.	24-0893	101 and Alder	Boring in ROW	MR 2 ONLY	8/28/2024	8/28/2024	SA	08/28/2024	Low / NA	SA											
SA	Private	ROW CONST.	24-0895	101 and Alder	Driveway Install	MR 2 ONLY	8/28/2024	8/28/2024	SA	08/28/2024	Low / NA	SA											
SA	Private	ROW CONST.	24-0918	802 S C St	Close Underground Tanks	MR 2 ONLY	9/5/2024	9/16/2024	SA	09/16/2024	Low / NA	SA											
MM	Private	ROW CONST.	24-0961	S Francis St and Lopez Ave	Stormdrain repair	MR 2 ONLY	9/13/2024	9/18/2024	MM	09/18/2024	Low / NA	MM											
SA	Private	ROW CONST.	24-0971	727 E 8th	Sewer Connection	MR 2 ONLY	9/12/2024	10/1/2024	SA	10/01/2024	Low / NA	SA											
SA	Private	ROW CONST.	24-0996	US 101	Sample Well Drilling	MR 2 ONLY	9/18/2024	10/8/2024	SA	10/08/2024	Low / NA	SA											

SA	Private	ROW CONST.	24-1021	337 Rhodes Rd	Driveway Apron	MR 2 ONLY	10/9/2024	10/15/2024	SA	10/15/2024	Low / NA	SA											
SA	Private	BP	24-1033	803 S Eunice St A	ADU A	MR 2 ONLY	9/30/2024	10/8/2024	SA	10/8/2024	Low / NA	SA											
SA	Private	BP	24-1038	803 S Eunice St B	ADU B	MR 2 ONLY	9/30/2024	10/8/2024	SA	10/9/2024	Low / NA	SA											
SA	Private	BP	24-1055	826 E 1st	Commercial New Construction	MR 2 ONLY	10/3/2024	10/18/2024	SA	10/15/2024	Low / NA	SA											
SA	Private	BP	24-1057	2619 W 18th St	Deck Addition	MR 2 ONLY	10/10/2024	10/21/2024	SA	10/21/2024	Low / NA	SA											
SA	Private	BP	24-1076	533 E 5th St	Garage to ADU conversion	MR 2 ONLY	10/16/2024	10/23/2024	SA	10/23/2024	Low / NA	SA											
SA	Private	BP	24-1070	914 E 6th St	Residential Foundation	MR 2 ONLY	10/8/2024	10/15/2024	SA	10/15/2024	Low / NA	SA											
SA	Private	BP	24-1074	436 Marine Dr	Drive up coffee	MR 2 ONLY	10/10/2024	10/25/2024	SA	10/25/2024	Low / NA	SA											
SA	Private	ROW CONST.	24-1119	630 Milwaukee Dr	Utility Connection	MR 2 ONLY	10/21/2024	11/7/2024	SA	11/07/2024	Low / NA	SA											
SA	Private	ROW CONST.	24-1120	1829 W 4th St	Driveway Repair	MR 2 ONLY	10/21/2024	10/31/2024	SA	10/31/2024	Low / NA	SA											
SA	Private	ROW CONST.	24-1121	1118 S Cherry St	Sewer Connection	MR 2 ONLY	10/18/2024	10/21/2024	SA	10/21/2024	Low / NA	SA											
SA	Private	ROW CONST.	24-1129	815 S Race St	Pole Removal	MR 2 ONLY	10/21/2024	10/21/2024	SA	10/21/2024	Low / NA	SA											
SA	Private	BP	24-1176	110 E 7th St	Res Accessory	MR 2 ONLY	10/30/2024	11/1/2024	SA	11/01/2024	Low / NA	SA											
SA	Private	BP	24-1180	610 W 11th St	Manufactured Home	MR 2 ONLY	11/4/2024	11/8/2024	SA	11/08/2024	Low / NA	SA											
SA	Private	BP	24-1182	531 W 5th St	Detached Garage	MR 2 ONLY	11/5/2024	11/8/2024	SA	11/08/2024	Low / NA	SA											
SA	Private	BP	24-1194	829 W 13th St	Manufactured Home	MR 2 ONLY	11/5/2024	11/8/2024 12/2/2024	SA SA	12/02/2024	Low / NA	SA											
SA	Private	ROW CONST.	24-1196	1816 W 12th	Utility Trench	MR 2 ONLY	11/4/2024	11/4/2024	SA	11/04/2024	Low / NA	SA											
SA	Private	BP	24-1198	213 S Oak St	Res Demo	MR 2 ONLY	11/5/2024	11/19/2024	SA	11/19/2024	Low / NA	SA											
MM	Private	SW DIS.	24-1207	121 E Railroad Ave	Winter Ice Village	MR 2 ONLY	11/8/2024	11/12/2024	MM	11/12/2024	Low / NA	MM											
SA	Private	BP	24-1212	121 W Front St	Winter Ice Village Tent	MR 2 ONLY	11/5/2024	11/8/2024	SA	11/08/2024	Low / NA	SA											
SA	Private	ROW CONST.	24-1216	1116/5 W 12th St	Sewer Connection	MR 2 ONLY	12/3/2024	12/23/2024	SA	12/23/2024	Low / NA	SA											
SA	Private	BP	24-1228	328 E 7th St	Public New Comm Solar	MR 2 ONLY	11/15/2024	11/22/2024	SA	11/22/2024	Low / NA	SA											
SA	Private	ROW CONST.	24-1232	1917 W 18th St	Driveway installation	MR 2 ONLY	12/2/2024	12/11/2024	SA	12/11/2024	Low / NA	SA											
MM	Private	ROW CONST.	24-1248	160 DelGuzzi Dr	Boring for Comm	MR 2 ONLY	11/14/2024	11/27/2024	MM	11/27/2024	Low / NA	MM											
RJ	Private	BP	24-1267	138 W 2nd St	Building Move	MR 2 ONLY	11/19/2024	11/25/2024	SA	11/25/2024	Low / NA	SA											
MM	Private	BP	24-1275	138 W 2nd St	Building Move Demo	MR 2 ONLY	11/20/2024	11/20/2024	MM	11/20/2024	Low / NA	MM											
SA	Private	ROW CONST.	24-1279	213 S Oak St	Sewer Connection	MR 2 ONLY	11/21/2024	11/21/2024	SA	11/21/2024	Low / NA	SA											
SA	Private	BP	24-1295	1025 Olympus	ADU	MR 2 ONLY	11/26/2024	11/26/2024	SA	11/26/2024	Low / NA	SA											
SA	Private	BP	24-1348	1632 W 6th St	Res Demo	MR 2 ONLY	12/10/2024	12/20/2024	SA	12/20/2024	Low / NA	SA											
SA	Private	BP	24-1354	1740 W 5th St	Res Remodel and Foundation	MR 2 ONLY	12/23/2024	12/24/2024	SA	12/24/2024	Low / NA	SA											
NA	Private	ROW CONST.	24-1315	2025 W 7th St	Driveway installation	MR 2 ONLY	12/3/2024	12/3/2024	NA	12/03/2024	Low / NA	NA											
SA	Private	ROW CONST.	24-1334	3117 Grants View Lane	Sewer / Stormwater conections	MR 2 ONLY	12/4/2024	12/23/2024	SA	12/23/2024	Low / NA	SA											
NA	Private	ROW CONST.	24-1379	E 2nd St - Trailer park entrance	Install Stream Monitor	MR 2 ONLY	12/19/2024	12/19/2024	NA	12/19/2024	Low / NA	NA											
MM	Private	ROW CONST.	24-1394	631 W 10th St	Sewer connection	MR 2 ONLY	12/30/2024	12/31/2024	MM	12/31/2024	Low / NA	MM											

2024 End of Year Statistics | Phase II Municiple SW Permit, WAR045028			
Category	Count	Percent	S5.C.6
Total plans reviewed for SW Review	201	100%	c.i.
Appendix 7 sites	8	-	c.ii.
Appendix 7 inspections	11	100%	c.ii.
Pre-Const. Insp. (# of sites)	37	-	c.iii.
Pre-Const. Insp. (# of insp.)	25	-	c.iii.
During Const. Insp. (# of total sites)	36	-	c.iii.
During Const. Insp. (# of sites inspd.)	30	-	c.iii.
During Const. Insp. (total # of insp.)	55	75%	c.iii.
Enforcement (# of insp.)	5	100%	-
Final Inspections Total	15	-	c.v.
Final Inspections Performed	15	100%	c.v.
(excluding MR #2-only) Projects on-going	15	-	-
(excluding MR #2-only) Projects not started	21	-	-
Total Inspections Required	101	-	-
Of Req'd, Total Inspections Achieved	**86**	**85%**	**c.vi.**
*In compliance with Permit by achieving at least 80% of required inspections			
** During Const. Insp. (total # of sites inspd.) includes Pre-const. erosion & sed. Control insp.			

13.63.260 - Property owner responsible for stormwater system maintenance.

A. Any person or persons holding title to a property for which stormwater facilities and BMPs have been required by the City of Port Angeles shall be responsible for the continual operation, maintenance and repair of the stormwater facilities and BMPs in accordance with the provisions of this chapter.

B. For privately maintained stormwater facilities, the maintenance requirements specified in the Department of Ecology's SWMMWW (2014), Chapter 4, Volume V, shall be required of the owner(s) of the subject property served by the stormwater facility.

(Ord. 3568 § 1, 12/20/2016; Ord. 3367 § 2, 8/15/2009)

13.63.270 - Maintenance covenant required for privately maintained drainage facilities.

A. Prior to the beneficial use of a project constructed under a City building permit or a stormwater discharge permit, the owner shall record a maintenance covenant which guarantees the City of Port Angeles that the stormwater facilities shall be properly operated, maintained and inspected. The restrictions set forth in such covenant shall be included in any instrument of conveyance of the subject property and shall be recorded with the Clallam County Auditor.

B. Maintenance covenants shall remain in force for the life of the development, or until the responsibility for the operation and maintenance of the subject stormwater facilities is accepted by the City of Port Angeles.

C. Maintenance covenants shall include the maintenance standards specified by the Department of Ecology's SWMMWW (2014), Chapter 4, Volume V, a list of maintenance activities and proposed inspection intervals for each element of the private stormwater system, and a guarantee that any maintenance necessary for any element of the stormwater system will be performed to the standards specified by the Department of Ecology's SWMMWW (2014), Chapter 4, Volume V and within the following schedule:

1. Within one year for wet pool facilities and retention/detention ponds;
2. Within six months for typical maintenance;
3. Within nine months for maintenance requiring re-vegetation;
4. Within two years for maintenance that requires capital construction of less than $25,000.00.

D. After satisfactory completion of a stormwater treatment and/or flow control facility meeting minimum requirements #6 and/or #7 or final plat approval, a stormwater facility maintenance bond or other surety acceptable to the City must be posted that warrants the satisfactory performance and maintenance of the stormwater facility for a period of two years. If the City assumes maintenance of the facility, the stormwater facility maintenance bond shall be posted for a period of two years from the date the City assumes maintenance responsibilities.

(Ord. 3568 § 1, 12/20/2016; Ord. 3367 § 2, 8/15/2009)

IN COMPLIANCE WITH S5.C.7.d OF ECOLOGY'S 2019-2024 PHASE II SW PERMIT

PRACTICES, POLICIES, AND PROCEDURES

APPLICABLE TO ALL LANDS OWNED, MANAGED, AND MAINTAINED BY THE CITY OF PORT ANGELES

Version 3

LAST UPDATED | 3.26.2023

This page left intentionally blank.

CITY OF PORT ANGELES

OPERATIONS AND MAINTENANCE PROGRAM SUPPORT

Date:	May 13, 2022
To:	Vince McIntyre / City of Port Angeles
Cc:	Francesca White and Ann Bryant / Osborn Consulting, Inc.
From:	Robin Kirschbaum, PE, Chester Bennett, PE Robin Kirschbaum, Inc.
Subject:	Practices, Policies, and Procedures to Reduce Stormwater Impacts (Task 4.3)

TABLE OF CONTENTS

1 Introduction 1
1.1 Purpose of this Report 1
1.2 City Owned Properties 1

2 Maintenance Activities 1
2.1 All Sites 4
2.2 Streets, Highways, Roads, Road Right-of-Ways 4
2.3 Parking Lots 5
2.4 Buildings 5
2.5 Parks and Open Space 6
2.6 Maintenance Yards 7
2.7 Stormwater treatment and flow control BMPs/facilities 7
2.8 Temporary Erosion and Sediment Control 8
2.9 Other 8

3 References 9

LIST OF FIGURES

Figure 1. Overview of City Owned Properties 3

LIST OF APPENDICES

Appendix A: Activity Specific Policies and Procedures
Appendix B: Source Control BMP Library (2019 SWMMWW, Volume IV)
Appendix C: BMP Maintenance Tables (2019 SWMMWW, Volume V)
Appendix D: List of Public Works Policies and Procedures Index (revised 1/2016)
Appendix E: List of Construction Source Control & Runoff BMPs (2019 SWMMWW, Vol. II)

1 INTRODUCTION

1.1 Purpose of this Report

The purpose of this binder is to document practices, policies, and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the City of Port Angeles (City), and road maintenance activities under the functional control of the City. Lands owned or maintained by the City include, but are not limited to: streets, parking lots, roads, highways, buildings, parks, open space, road right-of-ways, maintenance yards, and stormwater treatment and flow control BMPs/facilities.

This task is intended to help the City meet the National Pollutant Discharge Elimination System (NPDES) Phase 2 Western Washington Permit requirements in section S5.C.7.d, as administered by the Washington State Department of Ecology (Ecology). This binder compiles the information from the City already in-effect along with guidance from Ecology's 2019 Stormwater Management Manual for Western Washington (SWMMWW).

1.2 City Owned Properties

Figure 1 provides an overview of City-owned parcels. Practices, policies, and procedures have been categorized by property type in the text and tables below in Section 2.

2 MAINTENANCE ACTIVITIES

This section discusses the maintenance activities and BMPs to be implemented at various sites to reduce stormwater impacts associated with site runoff and road maintenance. For each property type owned or maintained by the City, potential maintenance activities are listed in the tables below. The following sections are intended as a guide for identifying potential maintenance activities for a specific site:

- Streets, highways, roads, and road right-of-ways (ROWs)
- Parking lots
- Buildings
- Parks and open space
- Maintenance yards
- Stormwater treatment and flow control BMPs/facilities
- Temporary Erosion and Sediment Control
- Other (Commercial, manufacturing, industrial, fueling, landscaping, storage, etc.)

Ecology has assembled a list of specific activities for all Phase II Permittees to address in their documented policies and procedures to reduce adverse stormwater impacts associated with runoff. These activities and the City's associated policies and procedures are provided in **Appendix A**. Additionally, Ecology's Stormwater Management Manual for Western Washington, which was adopted in municipal Code by the City, contains guidance and best management practices (BMPs) to control pollutants at their source. These Source Control BMPs are provided for reference in **Appendix B**. Volume V of the SWMMWW contains inspection and maintenance guidance and thresholds for specific stormwater infrastructure. These maintenance tables are

provided in **Appendix C**. The City has a wide-range of pre-defined and well-established policies and procedures for all sorts of municipal activities. An index of these policies is included in **Appendix D**. Staff can use this as a reference for awareness of other defined policies. Copies can be found at the Corp Yard and at City Hall. And finally, municipal work often entails land disturbance and construction activities. The SWMMWW contains many construction related BMPs that City Staff are required to use and implement as appropriate on all city projects. A list of these BMPs in provided in **Appendix E**. The specifics associated with each construction BMP can be found in Volume II of the SWMMWW.

City staff that have functional control and management of a municipal facility, infrastructure, or lands are responsible for knowing these the BMPs herein and for implementing them during the exercise of their duties. All municipal leadership, including Department Directors, Superintendents, and Leadworkers shall train their staff to apply stormwater protection BMPs that are appropriate for and applicable to their specific job duties. Each department shall comply with the Source Control BMPs applicable to all Sites, listed below in Section 2.1 and provided in Appendix D. Additionally, those individuals responsible for maintaining site specific stormwater conveyance and management facilities are required to maintain accountability of their infrastructure (mapping, schematics, etc.) and a copy of the stormwater inspection and maintenance guidance from the manufacturer and Ecology's associated General Level Use Designation (GULD) standards. If you have questions, contact the City's Stormwater Engineer for assistance.

Its also important to note that certain facilities within the City require a more formal stormwater management plan than the minimum standards provided herein that apply to all sites. Some of these facilities are: the Corp Yard, the Landfill/Transfer Station, the Waste Water Treatment Plant, the Transformer Storage and Handling Building. The minimum standards described herein are in addition to the requirements described in the governing documents for those facilities.

If there is a conflict between any existing or new policy or procedure, the City shall apply the more stringent standard or threshold that results in a higher level of stormwater protection and lower risk of polluted runoff.

Figure 1. Overview of City Owned Properties

This page left intentionally blank

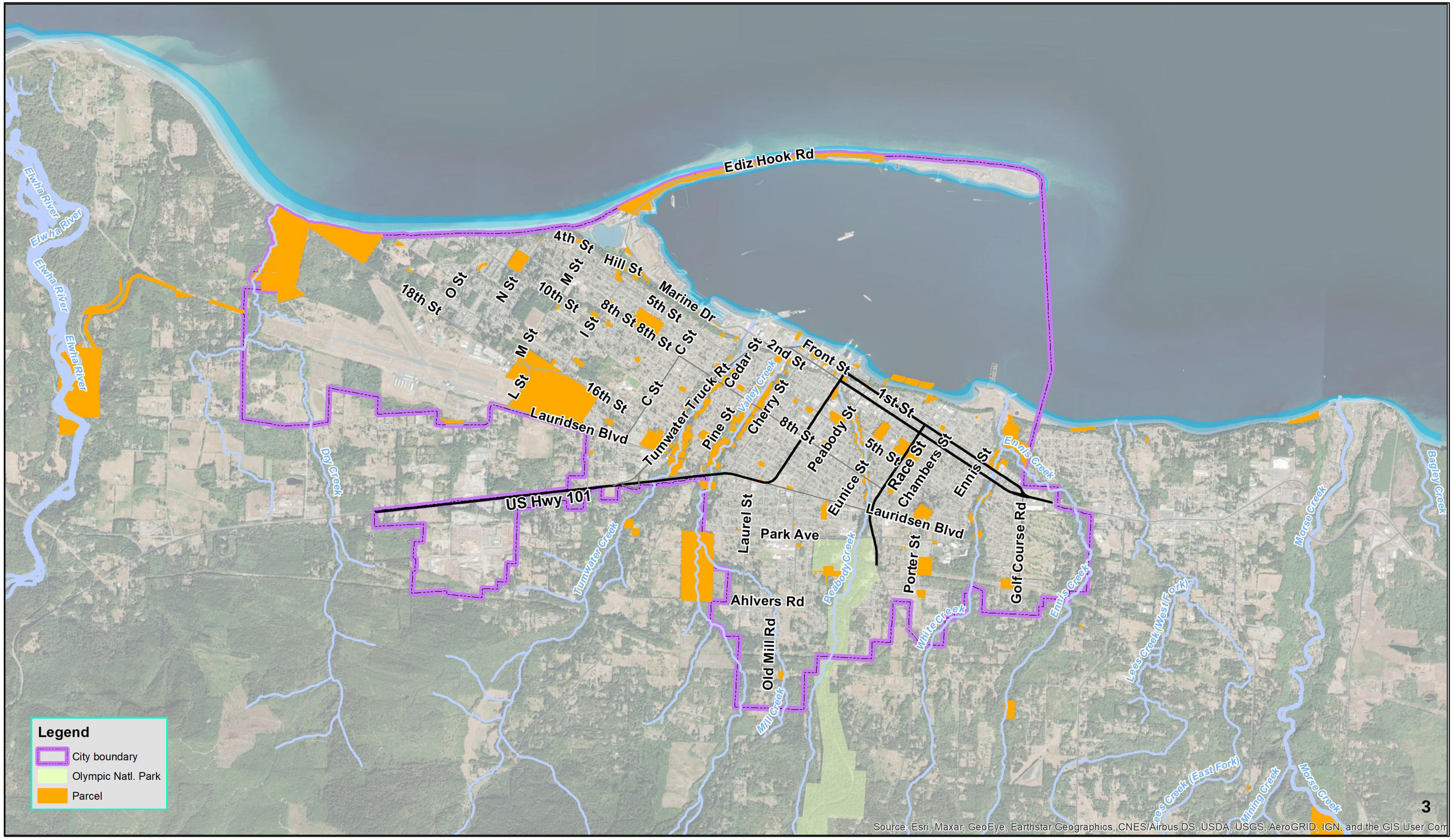


Figure 1. CITY OWNED PROPERTIES

This map is not intended for use as a legal description. Locations of features are approximate only. Topographic/Map features are +-5 feet of actual locations. This map/drawing is produced by the city of Port Angeles for its own use and purposes. Any other use of this map/drawing shall not be the responsibility of the City.

CITY OF PORT ANGELES
PRACTICES, POLICIES AND PROCEDURES (TASK 4.3)

Water main
WWater main
SWater main
Electrical distribution OH
Electrical distribution UG

3,900
Feet

N

Area Map

Vertical Datum = NAVD 88
Horizontal Datum = NAD 83/91

CITY OF PORT ANGELES
PUBLIC WORKS DEPARTMENT

2.1 All Sites

The following source control BMPs are applicable to ***all sites*** and can be found in **Appendix B**. The preceding numbering system (S4XX) comes from the SWMMWW where these BMPs originate.

- **S410 Correct illicit discharges to storm drains**
- **S453 Formation of a Pollution Prevention Team**
- **S454 Preventative maintenance / Good housekeeping**
- **S455 Spill Prevention and Cleanup**
- **S456 Employee training**
- **S457 Inspections**
- **S458 Record keeping**

The following tabulated BMPs are arranged by land-use type and have been compiled for ease of use. The goal is for City staff to be able to quickly identify the policies, procedures, or BMPs associated with that activity so that they can be easily referenced and applied.

2.2 Streets, Highways, Roads, Road Right-of-Ways

General Maintenance	• Appendix A ○ Gravel shoulder maintenance ○ Pavement striping/curb & building painting ○ Pressure washing ○ Road repair and resurfacing ○ Roadside vegetation management ○ Stormwater culvert cleaning • Appendix B ○ S406 Streets and Highways ○ S407 Dust control at disturbed land areas and unpaved roadways ○ S416 Maintenance of roadside ditches ○ S430 Urban streets ○ S440 Pet waste ○ S441 Potable water line flushing, water tank maintenance, and hydrant testing ○ S452 Goose waste ○ Appendix IV-B: Management of Street Waste Solids and Liquids
Utilities & Conveyance	• Appendix A ○ Stormwater pipe cleaning ○ Utility installation and repair • Appendix B ○ S415 Maintenance of public and private utility corridors ○ S417 Maintenance of stormwater drainage and treatment systems ○ S442 BMPs for Labeling Storm Drain Inlets on Your Property
Seasonal	• Appendix A

	○ Snow & Ice Response Plan

2.3 Parking Lots

General Maintenance	• Appendix A ○ Gravel shoulder maintenance ○ Pavement striping/curb & building painting ○ Pressure washing ○ Road repair and resurfacing ○ Roadside vegetation management ○ Stormwater culvert cleaning • Appendix B ○ S407 Dust control at disturbed land areas and unpaved roadways ○ S416 Maintenance of roadside ditches ○ S421 Parking and storage of vehicles and equipment ○ S440 Pet waste ○ S441 Potable water line flushing, water tank maintenance, and hydrant testing ○ S452 Goose waste ○ Appendix IV-B: Management of Street Waste Solids and Liquids
Utilities & Conveyance	• Appendix A ○ Stormwater pipe cleaning ○ Utility installation and repair • Appendix B ○ S415 Maintenance of public and private utility corridors ○ S417 Maintenance of stormwater drainage and treatment systems ○ S442 BMPs for Labeling Storm Drain Inlets on Your Property
Seasonal	• Appendix A ○ Snow & Ice Response Plan

2.4 Buildings

General Maintenance	• Appendix A ○ Pavement striping/curb & building painting ○ Pressure washing • Appendix B ○ S420 BMPs for Painting/ Finishing/ Coating of vehicles/ Boats/ Buildings/ Equipment ○ S431 Washing and steam cleaning vehicles, equipment, or building structures ○ S440 Pet waste ○ S441 Potable water line flushing, water tank maintenance, and hydrant testing ○ S447 Roof vents ○ S449 Nurseries and greenhouses ○ S451 Building repair, remodeling, painting, and construction

	○ S452 Goose waste ○ Appendix IV-B: Management of Street Waste Solids and Liquids
Utilities and conveyance	• Appendix A ○ Stormwater pipe cleaning ○ Utility installation and repair • Appendix B ○ S415 Maintenance of public and private utility corridors ○ S417 Maintenance of stormwater drainage and treatment systems ○ S442 BMPs for Labeling Storm Drain Inlets on Your Property
Seasonal	• Appendix A ○ Snow & Ice Response Plan

2.5 Parks and Open Space

General Maintenance	• Appendix B ○ S407 Dust control at disturbed land areas and unpaved roadways ○ S411 Landscaping and lawn/vegetation management ○ S433 Pools, spas, hot tubs, and fountains ○ S435 Pesticides and an Integrated Pest Management Program ○ S440 Pet waste ○ S441 Potable water line flushing, water tank maintenance, and hydrant testing ○ S443 Fertilizer application ○ S444 Storage of dry pesticides and fertilizers ○ S449 Nurseries and greenhouses ○ S450 Irrigation ○ S452 Goose waste ○ Appendix IV-B: Management of Street Waste Solids and Liquids
Utilities and conveyance	• Appendix A ○ Stormwater pipe cleaning ○ Utility installation and repair • Appendix B ○ S415 Maintenance of public and private utility corridors ○ S417 Maintenance of stormwater drainage and treatment systems ○ S442 BMPs for Labeling Storm Drain Inlets on Your Property

2.6 Maintenance Yards

General Maintenance	• Appendix A
	  ○ Pavement striping/curb & building painting
	  ○ Pressure washing
	  ○ Road repair and resurfacing
	  ○ Stormwater culvert cleaning
	• Appendix B
	  ○ S407 Dust control at disturbed land areas and unpaved roadways
	  ○ S412 Loading and unloading areas for liquid or solid material
	  ○ S414 Maintenance and repair of vehicles and equipment
	  ○ S420 Painting/ finishing/ coating of vehicles/ boats/ buildings/ equipment
	  ○ S421 Parking and storage of vehicles and equipment
	  ○ S426 Spills of oil and hazardous substances
	  ○ S431 Washing and steam cleaning vehicles/ equipment/ building structures
	  ○ S440 Pet waste
	  ○ S441 Potable water line flushing, water tank maintenance, and hydrant testing
	  ○ S452 Goose waste
	  ○ Appendix IV-B: Management of Street Waste Solids and Liquids

Utilities and conveyance	• Appendix A
	  ○ Stormwater pipe cleaning
	  ○ Utility installation and repair
	• Appendix B
	  ○ S415 Maintenance of public and private utility corridors
	  ○ S417 Maintenance of stormwater drainage and treatment systems
	  ○ S442 BMPs for Labeling Storm Drain Inlets on Your Property

Seasonal	• Appendix A ○ Snow & Ice Response Plan

2.7 Stormwater treatment and flow control BMPs/facilities

General Maintenance	• Appendix C ○ BMP maintenance tables

Utilities and conveyance	• Appendix A
	  ○ Stormwater pipe cleaning
	  ○ Utility installation and repair
	• Appendix B
	  ○ S415 Maintenance of public and private utility corridors
	  ○ S417 Maintenance of stormwater drainage and treatment systems
	  ○ S442 BMPs for Labeling Storm Drain Inlets on Your Property

Seasonal	• Appendix A ○ Snow & Ice Response Plan

2.8 Temporary Erosion and Sediment Control

General maintenance	• Appendix D ○ List of Construction Source Control and Runoff BMPs

2.9 Other

Commercial/ industrial/ manufacturing	• Appendix B
	  ○ S402 Commercial animal handling areas
	  ○ S403 Commercial composting
	  ○ S404 Commercial printing operations
	  ○ S405 Deicing and anti-icing operations for airports
	  ○ S408 Dust control for manufacturing areas
	  ○ S418 Manufacturing activities – outside
	  ○ S424 Roof/ building drains at manufacturing and commercial buildings
	  ○ S425 Soil erosion and sediment control at industrial sites

Fueling	• Appendix B
	  ○ S409 Fueling at dedicated stations
	  ○ S412 Loading and unloading areas for liquid or solid material
	  ○ S419 Mobile fueling of vehicles and heavy equipment
	  ○ S426 Spills of oil and hazardous substances
	  ○ S439 In-water and over-water fueling

Landscaping	• Appendix B
	  ○ S411 Landscaping and lawn/ vegetation management
	  ○ S435 Pesticides and an Integrated Pest Management Program
	  ○ S443 Fertilizer application
	  ○ S444 Storage of dry pesticides and fertilizers
	  ○ S449 Nurseries and greenhouses
	  ○ S450 Irrigation

Storage	• Appendix B
	  ○ S427 Storage of liquid, food waste, or dangerous waste containers
	  ○ S428 Storage of liquids in permanent aboveground tanks
	  ○ S429 Storage or transfer (outside) of solid raw materials, by products, or finished products
	  ○ S445 Temporary fruit storage

Miscellaneous	• Appendix B
	  ○ S413 Log sorting and handling
	  ○ S422 Railroad yards
	  ○ S423 Recyclers and scrap yards
	  ○ S432 Wood treatment areas
	  ○ S434 Dock washing
	  ○ S436 Color events
	  ○ S438 Construction demolition
	  ○ S446 Well, utility, directional, and geotechnical drilling

3 REFERENCES

Washington State Department of Ecology (Ecology) 2019. Stormwater Management Manual for Western Washington, Volumes IV – V. July. Web address: https://fortress.wa.gov/ecy/ezshare/wq/Permits/Flare/2019SWMMWW/2019SWMMWW.htm

APPENDIX A

Activity Specific Policies and Procedures:

- Pipe cleaning
- Cleaning of culverts that convey stormwater in ditch systems
- 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
- Application of fertilizers, pesticides, and herbicides according to the instructions for their use, including reducing nutrients and pesticides using alternatives that minimize environmental impacts
- Sediment and erosion control
- Landscape maintenance and vegetation disposal (integrated into the fertilizer plan above)
- Trash and pet waste management
- Building exterior cleaning and maintenance

This page left intentionally blank.

Stormwater Pipe Cleaning BMP

Description of Work
Routine cleaning of stormwater lines to remove accumulated dirt and debris.

Objectives
Remove dirt and debris to allow adequate stormwater flow reducing the likelihood of localized flooding. Provide a safe roadway surface for the traveling public.

Site Preparation
1. **Spill Kit:** Keep a spill cleanup kit in a nearby vehicle or next to the work site so that it is easily accessible. Make sure the contents of the spill kit are appropriate for the types and quantities of materials used for this work task. Refill spill kit materials before beginning work.

BMP Maintenance During Site Work

1. Pipe Cleaning:

Locate and identify pipe and locations.

Select proper nozzle for sediment or root removal.

Use jet/vactor truck for cleaning and dirt/debris containment by inserting nozzle into pipe and vacuum tube at pipe inlet or outlet depending on circumstances, ideally jetting against flow.

Engage vacuum before cleaning of line.

Engage jetting hose and proceed with cleaning of line, allowing vacuum to remove/contain sediment and debris.

If vacuum hose cannot be used due to space limitations the use of sediment removal traps is required.

3. Equipment and Vehicle Maintenance:

Clean equipment and tools off site in an area where pollutants can be contained.

Perform equipment and vehicle maintenance in areas that prevent discharges to the storm drain system.

Promptly repair or replace leaking connections, hoses and/or valves.

4. Waste Disposal:

Properly dispose of wastes at City of Port Angeles Decant Facility.

Stormwater Culvert Cleaning BMP

Description of Work
Routine cleaning of stormwater culverts to remove accumulated dirt and debris.

Objectives
Remove dirt and debris to allow adequate stormwater conveyance reducing the likelihood of localized flooding. Provide a safe roadway surface for the traveling public.

Site Preparation
1. **Spill Kit:** Keep a spill cleanup kit in a nearby vehicle or next to the work site so that it is easily accessible. Make sure the contents of the spill kit are appropriate for the types and quantities of materials used for this work task. Refill spill kit materials before beginning work.

BMP Maintenance During Site Work

1. Culvert Cleaning

Locate and identify culvert and locations.

Use jet/vactor truck for cleaning and dirt/debris containment by inserting nozzle into culvert and vacuum tube at culvert inlet or outlet depending on circumstances, ideally jetting against flow.

Engage vacuum before cleaning of culvert to reduce the potential of sediments bypassing the vacuum inlet.

Engage jetting hose and proceed with cleaning of culvert, allowing vacuum to remove/contain sediment and debris.

Culvert cleaning to be performed during dry season/periods of no water flow unless emergency situation.

2. Equipment and Vehicle Maintenance:

Clean equipment and tools off site in an area where pollutants can be contained.

Perform equipment and vehicle maintenance in areas that prevent discharges to the storm drain system.

Promptly repair or replace leaking connections, hoses and/or valves.

3. Waste Disposal:

Properly dispose of wastes at an approved dump site after pipe cleaning is finished.

Ditch Maintenance BMP

Description of Work
Routine cleaning, reshaping and regrading of stormwater ditches to remove accumulated sediment and vegetation (sod).

Objectives
Remove sediment and vegetation (sod) to allow adequate stormwater conveyance reducing the likelihood of localized flooding and reduce saturation of road sub-base along with providing a safe roadway surface for the traveling public.

Site Preparation
1. Spill Kit: Keep a spill cleanup kit in a nearby vehicle or next to the work site so that it is easily accessible. Make sure the contents of the spill kit are appropriate for the types and quantities of materials used for this work task. Refill spill kit materials before beginning work.

BMP Maintenance During Site Work

1. Ditch Maintenance:

Locate and identify ditches that need to have maintenance performed.

Ditch maintenance to be performed from March through September except in emergency situations.

Skip ditching with backhoe/excavator will be the preferred methodology. The ditch having maintenance performed will be divided into equal sections, not one of which will exceed 50 linear feet in length. The sections will alternate between areas of sediment/sod removal and areas left in natural state to act as energy dissipater and sediment filtration. If for any reason this method cannot be implemented then either triangular silt dikes, rock check dams or a combination of both shall be employed.

Areas of disturbed soil shall be hydroseeded or covered with straw within two days of ditch maintenance completion if occuring during March through June and seven days from July through September.

2. Equipment and Vehicle Maintenance:

Clean equipment and tools off site in an area where pollutants can be contained.

Perform equipment and vehicle maintenance in areas that prevent discharges to the storm drain system.

Promptly repair or replace leaking connections, hoses and/or valves.

3. Waste Disposal:

Properly dispose of wastes at an approved dump site.

Street Sweeping BMP

Description of Work

Routine sweeping of streets and alleys with mechanical and air sweepers to remove accumulated dirt and debris for safe, clean streets including the sweeping of designated routes, grids, and any non-route sweeping of streets and alleys resulting from complaints or other situations requiring a mechanical or air sweeper.

Objectives

Reduce sediments and contaminants, such as petroleum hydrocarbons, heavy metals, road wash off, snow sand, and debris, from reaching the stormwater, watercourse, stream system and other water bodies. Reduce occurrence of flooding and debris clogged drain inlets, and provide a safe roadway surface for the traveling public.

BMP Maintenance During Site Work

1. Sweeping:

Sweeping and vacuuming may not be effective when sediment is wet or when tracked soil is caked (caked soil may need to be scraped loose). Washing is not an alternative to sweeping and vacuuming because of the risk of pollutant transport.

Schedule sand removal as part of the snow and ice emergency response.

Control speed of sweeper to minimize airborne particulates and remove maximum amount of debris.

Use water spray system on sweeper to reduce dust.

Avoid sweeping up any unknown substance or any object that may be potentially hazardous.

Adjust brooms frequently; maximize efficiency of sweeping operations.

Prevent sediment from entering storm drain system.

2. Equipment and Vehicle Maintenance:

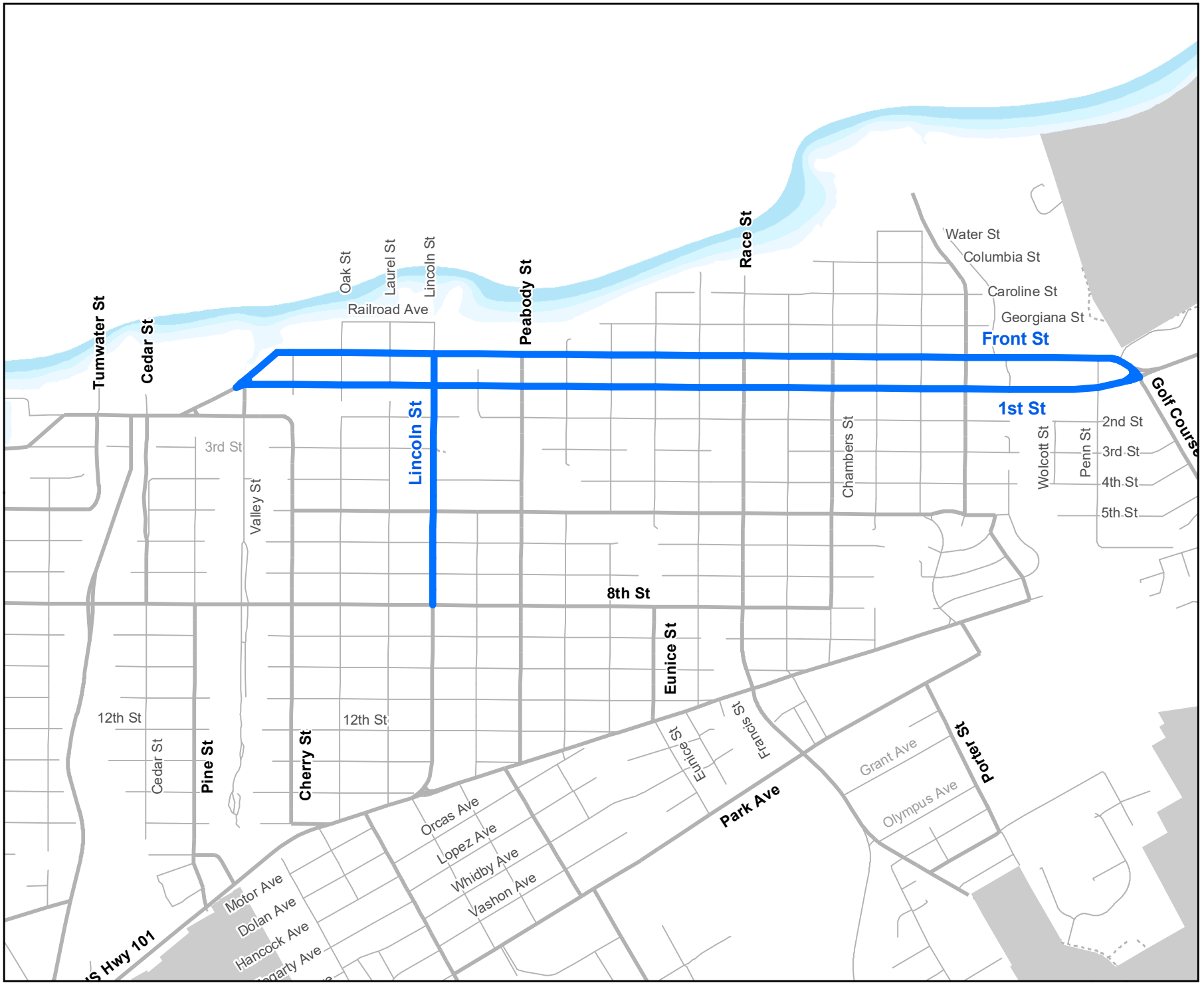
Clean equipment and tools off site in an area where pollutants can be contained.

Perform equipment and vehicle maintenance in areas that prevent discharges to the storm drain system.

Promptly repair or replace leaking connections, hoses and/or valves.

3. Waste Disposal:

Properly dispose of sweeper wastes at the City of Port Angeles Decant Facility.



Vertical Datum = NAVD 88
Horizontal Datum = NAD 83/91

1,200

Feet

Street sweeping

Monday

Map legend

County

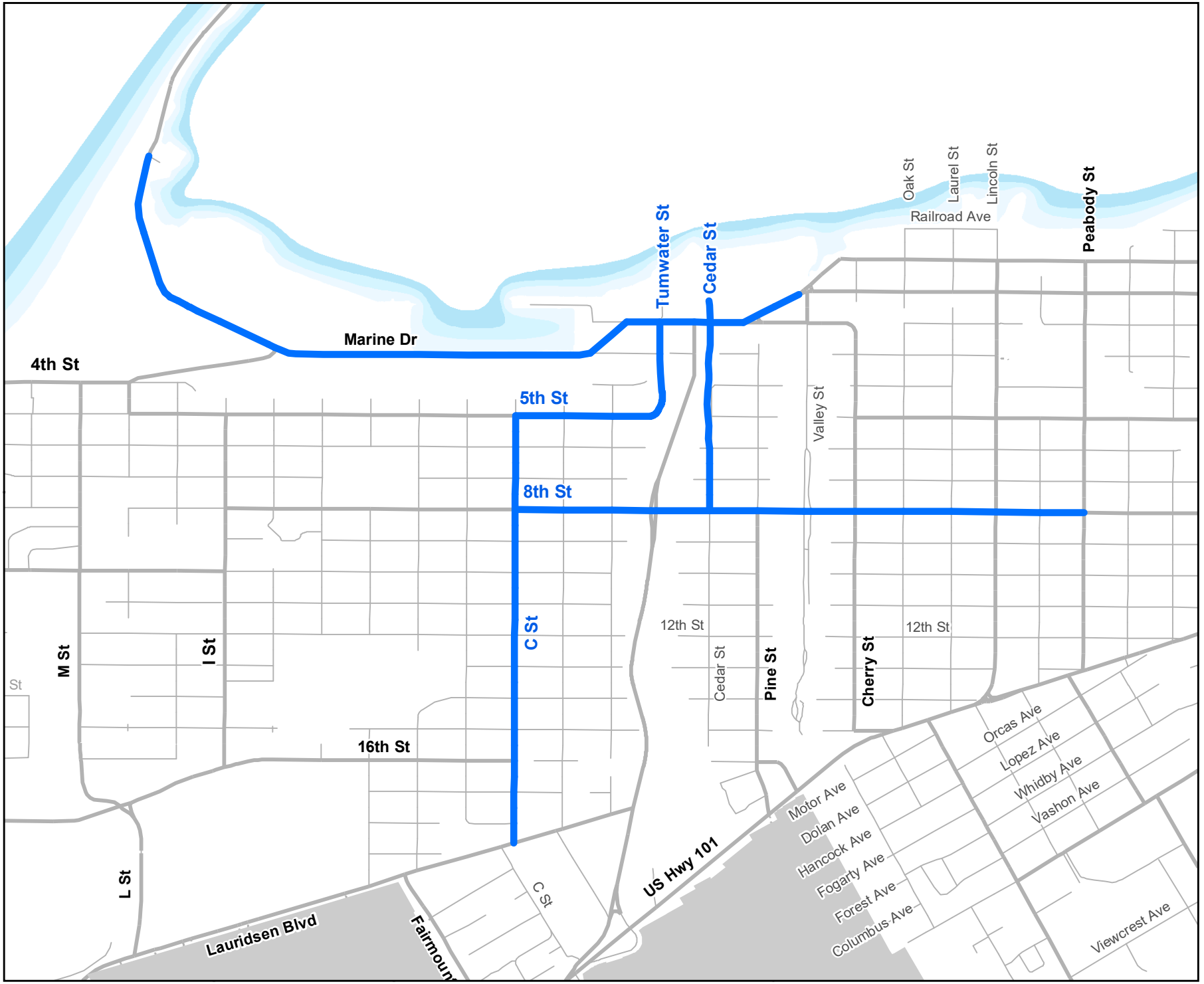
City Streets

Arterial

SideStreet

County Roads

This map is not intended to be used as a legal description.
This map/drawing is produced by the City of Port Angeles for its own use and purposes.
Any other use of this map/drawing shall not be the responsibility of the City.



Vertical Datum = NAVD 88
Horizontal Datum = NAD 83/91

N

1,200

Feet

Street sweeping

Tuesday

Map legend

County

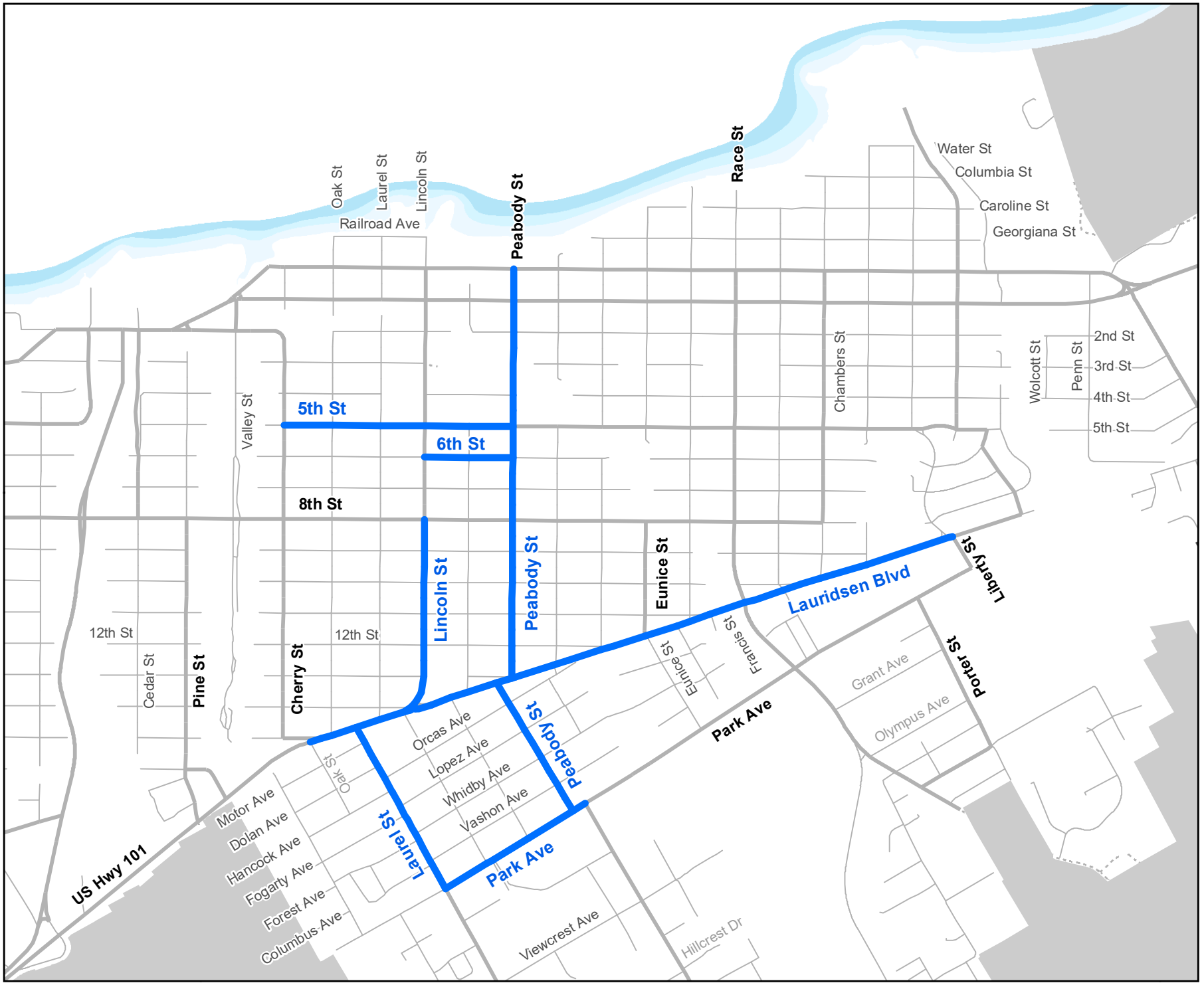
City Streets

Arterial

SideStreet

County Roads

This map is not intended to be used as a legal description.
This map/drawing is produced by the City of Port Angeles for its own use and purposes.
Any other use of this map/drawing shall not be the responsibility of the City.



Vertical Datum = NAVD 88
Horizontal Datum = NAD 83/91

N

1,200

Feet

Street sweeping

Wednesday

Map legend

County

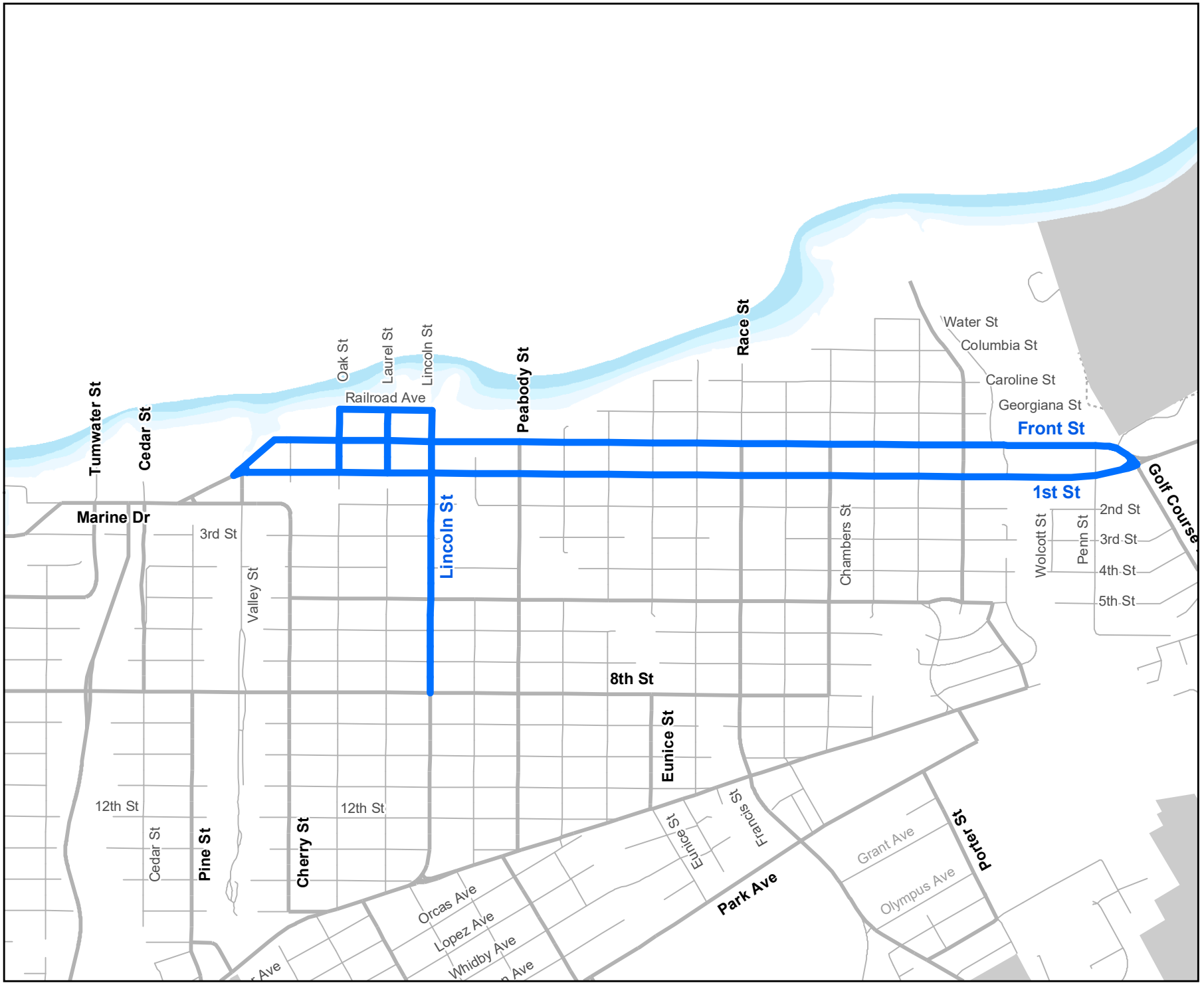
City Streets

Arterial

SideStreet

County Roads

This map is not intended to be used as a legal description.
This map/drawing is produced by the City of Port Angeles for its own use and purposes.
Any other use of this map/drawing shall not be the responsibility of the City.



Vertical Datum = NAVD 88
Horizontal Datum = NAD 83/91

N

1,200

Feet

Street sweeping

Thursday

Map legend

County

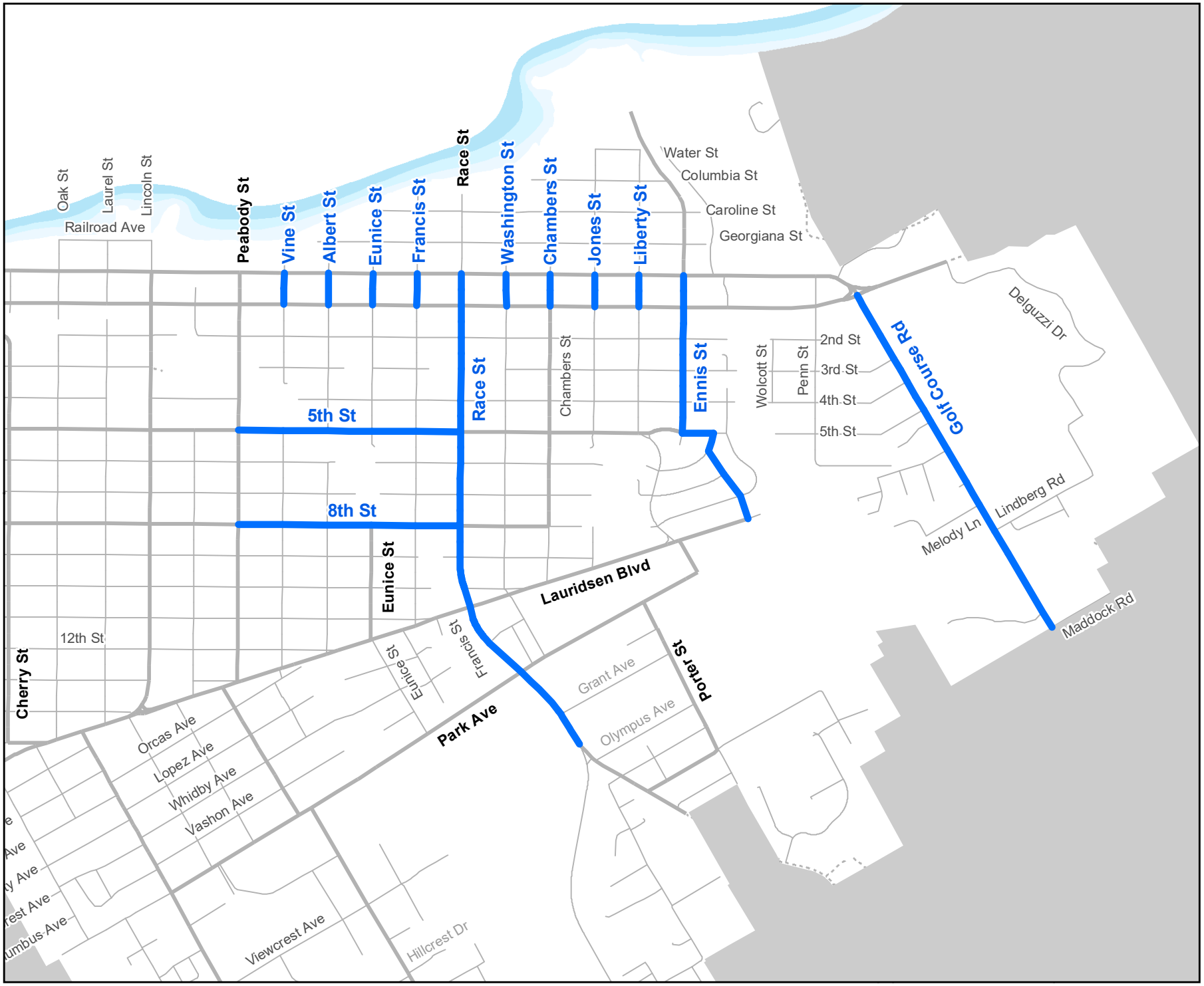
City Streets

Arterial

SideStreet

County Roads

This map is not intended to be used as a legal description.
This map/drawing is produced by the City of Port Angeles for its own use and purposes.
Any other use of this map/drawing shall not be the responsibility of the City.
S:\ARCINFO\Street\8x11 street sweeping map.mxd



Vertical Datum = NAVD 88
Horizontal Datum = NAD 83/91

1,200

Feet

Street sweeping

Friday

Map legend

County

City Streets

Arterial

SideStreet

County Roads

This map is not intended to be used as a legal description.
This map/drawing is produced by the City of Port Angeles for its own use and purposes.
Any other use of this map/drawing shall not be the responsibility of the City.

Road Repair and Resurfacing Maintenance BMP

Description of Work

Repair, replace, install, or maintain roadway surfaces. Activities include the following: square cut patching; removing paved surface or roadway base; repaving; crack sealing; overlay and pavement grinding.

Objectives

The roadway surface is part of the ROW structure. The slope of the road surface routes water and sediments off the roadway, to the shoulder, to an open drainage area or to an enclosed drainage system. Thus, the slope of the roadway surface is part of the water flow and sediment collection systems.

These activities are performed to provide a safe roadway surface for the traveling public and to reduce further roadway deterioration or failure. Most patching and resurfacing activities occur from May to October. Potholes are repaired as they occur to reduce accidents, vehicle damage, and adverse environmental impacts.

Site Preparation

1. **Spill Kit:** Keep a spill cleanup kit in a nearby vehicle or next to the work site so that it is easily accessible. Make sure the contents of the spill kit are appropriate for the types and quantities of materials used for this work task. Refill spill kit materials before beginning work.
2. **Catch Basin Filter Socks:** Install the appropriate size catch basin filter socks in catch basins of storm drain inlets that are located downslope or adjacent to the work area if needed.

BMP Maintenance During Site Work

1. Catch Basin Filter Socks:

Clean or remove and replace filter sock when sediment has filled one-third of the available storage.

2. Asphalt Repair (square cut patching, removing paved surface, repaving, skin patching, overlay and pavement grinding):

Vacuum slurry and cuttings during the activity to prevent migration off site; do not allow the material to remain on permanent concrete or asphalt paving overnight.

Use jackhammer instead or asphalt/concrete saw if vacuum is not available or during emergency situations where time prohibits the ability to acquire the vacuum.

Collect, treat, and properly dispose of runoff that comes in contact with diesel or coatings used in asphalt applications.

Continually monitor operations to determine whether cuttings or wastewater could enter the stormwater system. If observations indicate that a violation of water quality standards could occur, stop operations and immediately implement preventative measures such as berms, barriers, secondary containment, and vactor trucks.

Sweep sediment and debris into area to be patched that has had asphalt removed.

Use pick-up air sweeper to collect debris after job is complete.

Optional BMP's

Avoid sawcutting when rain is falling or expected, where feasible.

Use a sandbag barrier of containment berm to direct stormwater run-on around the construction site.

3. Crack Sealing:

Avoid this activity when rain is falling or expected.

Use pick-up air sweeper to collect debris from cleaning cracks after cracks have been sealed to prevent sediment from entering the storm drain system.

Site Cleanup

1. Catch Basin Filter Socks:

Remove the filter sock and dispose of the collected sediment in a suitable container to be hauled off site. Reuse the filter sock at another site if it remains in good condition (no rips, tears, or visible staining).

2. Waste Disposal:

Sweep or shovel loose aggregate chunks and dust, and collect the material for recycling or disposal at an approved disposal site.

Remove waste material from site and dispose of it at an approved disposal site.

Dispose of collected slurry and cuttings in a manner that does not violate groundwater or surface water quality standards.

3. Equipment and Vehicle Maintenance:

Clean equipment and tools off site in an area where pollutants can be contained.

Perform equipment and vehicle maintenance in areas that prevent discharges to the storm drain system.

Promptly repair or replace leaking connections, hoses and/or valves.

4. Waste Disposal:

Properly dispose of wastes at an approved dump site(s).

1 SNOW AND ICE RESPONSE PLAN

PUBLIC WORKS AND UTILITIES DEPARTMENT

POLICY AND PROCEDURES

PW 0502 SNOW AND ICE RESPONSE PLAN

1.0 PURPOSE:

1.1 To establish a uniform procedure to be implemented during ice and snow conditions. The plan shall be used to provide a consistent approach to responding to ice and/or snow conditions within the City of Port Angeles.

1.3 The City's principal goal during a snowstorm and/or icy conditions is to keep the major arterial streets open for the motoring public and provide access for emergency vehicles. In addition to arterial streets, priorities are given to: streets adjacent to schools, bus routes and emergency medical facilities, hills, curves, one access locations and problem intersections on residential streets. All remaining residential streets will receive service only after the above priorities are tended to, and when conditions are warranted.

2.0 ORGANIZATIONS AFFECTED:

2.1 Public Works and Utilities Department staff

2.2 Fire and Police Emergency Services

3.0 POLICY:

3.1 **PERSONNEL** - During a storm event, all effected departments and/or divisions may be called upon to perform various functions as set forth in this policy based upon the severity and duration of the event. The Street Division shall be the initial lead division in all events, **EXCEPT** when an emergency is declared due to a major storm event. In that event, the lead shall be coordinated through the Emergency Operations Center (EOC). The determination to open the EOC shall be made in accordance with the City's Emergency Response Procedures maintained by the Fire Chief.

3.2 **PLOWING** - When plowing is required, snow shall be plowed to the curbs. Windrows of snow across driveways will be created and the openings of the driveways are the responsibility of the property owner. Residential plowing shall be on the basis of one traveled lane.

3.3 **PARKING** - In extreme cases residents will be requested to park on odd or even sides of the street, controlled by the calendar date. This will allow as much snow as possible to be plowed on to the parkway and provide as much street width as practical. This residential activity will occur after the storm has passed or when the crew is sufficiently caught up on arterial plowing.

3.4 **PLOWING AREAS** shall be identified as follows:

A. **SOUTH** - Area south of Boulevard - Cherry Street East to City Limits, including Golf Course Rd area.

B. **EAST -** Cedar Street to East City Limits - Boulevard to Caroline Street.

C. **WEST –** Tumwater Truck Route to West City Limits - Boulevard to Marine Drive plus Ediz Hook.

[These areas may merge depending on direction and intensity of storm. Lower elevation assignments will be moved to assist in higher elevation areas and vice versa.]

3.5 **SNOW REMOVAL PRIORITIES** - This policy establishes the order or priority in which streets and alleys receive response:

#1 On arterial streets considered to be the minimum network which must be kept open to provide a transportation system connecting hospitals, fire stations, police stations and emergency rescue units.

#2 On other arterial streets completing the network covering the major traffic volume streets and providing access to all school and transit routes. This also includes single access or dead end streets and alleys that provide sole access to residences treated on a case by case basis.

#3 All remaining residential streets.

3.6 **STREET CLOSURES** - Streets and alleys will not be closed under ice and/or snow conditions. Streets and alleys may be temporarily closed by the Director of Public Works & Utilities when there is a threat to life safety.

3.7 **CLEARING OF PRIVATE SIDEWALKS -** City ordinance states that it is the duty of the owner or tenant of any premises abutting or adjoining any public sidewalk to remove snow and or ice obstructions and all accumulations that remain more than 48 hours from such a sidewalk. [PAMC 11.12.070]

3.8 **WORK ON PRIVATE PROPERTY** - the City does not provide snow removal, plowing, or sanding on private property, except for other public agencies with which the City has an agreement to do so.

3.9 **SUPPORT PERSONNEL -** Support personnel requirements shall depend upon the intensity and duration of the storm: Public Works & Utilities Water, Wastewater, Engineering, and Parks and Recreation Dept. will be responsible for the sidewalks, stairs, zigzag, and elderly calls for special help getting out of driveways as detailed in this policy.

3.10 **EQUIPMENT SHOP OPEN -** Equipment Services will have the shop open and a mechanic available, for the duration of the storm event, around the clock, upon approval from the Director of Public Works & Utilities.

4.0 DEFINITIONS:

4.1 **STORM CATEGORY A** - Weather resulting in icy conditions throughout the City with no snow. When the temperature is low enough and the humidity is high enough to cause moisture to freeze on the streets and/or bridges. [Generally 30 degrees and below.] This would occur when the roadway surface is frozen. All arterials, hazardous stops, hills and emergency facilities and routes are sanded and/or anti-iced only.

4.2 **STORM CATEGORY B** - 1 to 3 inches or more of snow throughout the City and the snow accumulates at the rate of 1 to 2 inches per hour. All arterials and emergency facilities are plowed, then school and transit routes, then residential streets and single access or dead end streets and select alleys that provide sole access to residences (i.e. 8/9 alley east of Chambers Street, commonly referred to as Konopaski alley) are plowed. Plowing of all other residential streets will occur after all other priority streets are plowed. Sanding will occur, as necessary, after the storm subsides.

4.3 **STORM CATEGORY C -** A major snowstorm amounting to six inches or more and falling at a rate of more than 2 inches per hour and is reportedly going to continue for an extended period of time. Concentration is given to arterials and emergency facilities. Residential streets and single access or dead end streets and select alleys that provide sole access to residences (i.e. 8/9 alley east of Chambers Street, commonly referred to as Konopaski alley) are plowed after the storm reduces in intensity. Plowing of all other residential streets will occur after all other priority streets are plowed. Sanding will occur, as necessary, after the storm subsides.

4.4 **EOC** - Emergency Operations Center.

4.5 **SNOW ACCUMULATION** - Snow depth shall be as measured at the Fire Hall at Fifth and Oak Streets

5.0 PROCEDURES:

5.1 **WINTER PRE-PLANNING** - During the months of August thru October each year, the following steps shall be taken to insure that all equipment, tools, and materials are ready and available for the upcoming winter season.

5.1.1 **Review Snow and Ice Control Plan** - This Snow and Ice Control Plan shall be reviewed and revised by August 31st. each year.

5.1.2 **Contractors and suppliers** - The list of contractors and suppliers shall be contacted and confirmed by August 31st. Check to see which contractors can be available and the kinds and types of equipment they have in the case of a major incident.

Type of equipment	Contractor and person to contact	Phone No.
Grader, Backhoes, Loaders, Trucks	Lakeside Industries (Jim Weidman)	452-7803
Grader, Backhoe, Loaders, Trucks	Bruch and Bruch (Shawn Coleman)	452-5388
4x4 Snow Blower, grader	Olympic National Park (Cody Manzer - Road Foreman's Office) (Lisa Purchek – Maintenance Supervisor 565-3175)	Work 565-3175 Cell 912-2771
Grader, Backhoe, Trucks	Horizon Excavating (Kurt Bruch)	452-9976 Office 452-9991 Shop

5.1.3 **Equipment on-board tools** - Supervisors and operators shall be responsible to see that all trucks and equipment have the necessary tools and supplies on board each vehicle to allow operators to make minor repairs and adjustments in the field. The following listed equipment shall be furnished and placed in each plow vehicle by October 15th. As the equipment and supplies are expended or used it shall be up to the driver to make sure each item is replaced. This is especially important when double shifting, to make sure that each vehicle has all of its supplies.

- Flashlight
- Flat bar
- Hammer
- Pliers

- Extra plow flags
- Shovel
- Tow chain
- Extra chain strap ties
- De-ice and scraper for windows
- Extra chain lengths and cross pieces
- Extra pair of gloves

5.1.4 **Equipment** - The Service Garage shall insure all sanding and plowing equipment is checked out for serviceability / usability by October 15th. All attachments for sanding and plowing shall be made to the vehicles so they are ready to accept sanders and plows in the case of an event.

5.1.4.1 City Snow and Ice Equipment Inventory

Equipment Description	Equipment Location	Attachments
#1790 – 2005 International 5 yd dump	Street-Corp Yard	Plow and reverse dump sander
#1581-1995 International 10yd dump	Equipment Pool-Corp Yard	Plow & slide in sander
#1579-1990 Ford 5yd dump	Street-Corp Yard	Plow & slide-in sander
#1603-2001 Freightliner 5yd dump	Street-Corp Yard	Plow & slide in sander
#1440-2008 JD 672D Grader	Street-Corp Yard	Grader
#1569-1988 Cat 926 Loader	Street-Corp Yard	Front Bucket
#1782 – GMC 5 yd dump	Water-Corp Yard	Plow and tailgate sander
#1756-1991 JD Backhoe	Water-Corp Yard	Front bucket
#1570-1995 Case Backhoe	Equipment Pool-Corp Yard	Front Bucket
#1917-1993 CAT 950F Loader	Landfill	Front bucket
#1392-2012 JCB Backhoe	Cemetery	Front bucket
#1884-2003 New Holland Backhoe	Parks Shop	Front bucket
#1350 – 2013 F-550 4X4 Dumptruck	Light Ops Yard	Boss Super V Plow
#1340 – 2013 Ford F-450 4X4 Flatbed	Street – Corp Yard	Boss Super V Plow

# 1331 – 2014 Ford F-450 4X4 Flated	Street – Corp Yard	Anti Ice tank & Boss Super V Plow
#1887- 1999 Dodge 1 ton 4x4	Cemetery	Boss plow

5.1.4.2 **GENERAL REVIEW OF EQUIPMENT**

- Hydraulic problems - hoses and fittings. Spare hose materials shall be in stock.
- Chains - All tire chains shall be inventoried, repaired and/or replaced as needed. Chains shall be readily available for mounting in the case of an event. Additional chains shall be purchased for equipment that need chains and where none are available.
- Augers
- Motors and sprockets
- Skids
- Rubber bits
- Pumps - need spare in stock
- Cylinders

5.1.4.3 **PLOWS**

- Hoses and connections to trucks
- Cylinders - seals, cracks and pins
- Blade cracks - structural bonds
- Bits - rubber - metal, tears or breaks
- Shoes -adjustable - pad wear
- Quick connects, operate easily, will fit any plow truck
- Splash shield - tears and properly attached
- Safety flags - bright and in good repair

5.1.4.4 **SANDERS**

- Augers - straight, flights in good shape
- Cover pans - easy to attach and stay in place
- Gears and chains - lubricated and adjusted
- Spinners - no bends in frame, spinner tubs in good shape, turns true
- Hoses - no cracks or leaking fittings.

5.1.4.5 **TRUCKS**

- Complete safety check

- All lighting, including cleaning of lenses
- Particular attention to brakes, charging system, battery condition, glass, mirrors, etc.
- Mechanical check
- Check to make sure that all plow trucks are interchangeable with all plows (except the patch truck)
- Complete set of chains (front and rear) for all sanding and plowing trucks, as well as, loader, motor grader, and both backhoes (rear chains only).

5.1.5 **Phone List** - Public Works & Utilities Policy PW-604 - Alarm and Emergency Communications shall be updated and distributed by August 31st.

5.1.6 **Materials** - The Street Division Superintendent shall insure that there is a sufficient supply of the following materials on hand (in the yard). The Superintendent shall also make sure that additional sand and other needed material is available from outside sources and will be readily available for pickup and/or delivery.

	Material	**Location of materials**	**Min. inventory**
5.1.6.1	SAND Angeles Concrete [457-0443] Blake Sand & Gravel [683-5227] Clallam County Road Dept. [Emergency] WSDOT Maintenance Yard [Emergency] SELECT SCREENED (larger/unwashed/emergency) Lakeside [452-7803]	Corp Yard	300 Tons
5.1.6.2	De-Ice [Ice Melt] for city maintained walkways	Corp Yard	1 ton, in 50# bags
5.1.6.3	Sandbags for potential flooding	Corp Yard	1,000 bags
5.1.6.4	Magnesium Chloride for Anti-icing	Corp Yard	6500 gallons
5.1.6.4	Road Salt	Corp Yard	30 Tons

5.1.7 **Training** - Street Superintendent shall check to make sure that all operators are sufficiently trained by October 30th and will be available in the case of an event when the crew may have to work around the clock. All crew members shall be familiar with all equipment to be used in a storm. Training shall include review of the Driver's Checklist Prior to Operation of Snow Removal Equipment. [Attachment B]

5.1.8 **Downed trees and iced over catch basins** - The work necessary to clean up downed trees and plugged catch basins will be assigned to Parks and Recreation Dept. or Water Division personnel, when Street Division crews are plowing.

5.2 **EVENTS**

*5.*2.1 **PROCEDURE FOR CALL OUT AND NIGHT SHIFT DURING SNOW OR ICE EVENTS**

*Call Pencom at 417- 4970 and inform them you are on duty, what your call # is, you are on channel 1 and inquire the areas needing addressed.

*Affirm Pencom communications with radio check.

*If leaving vehicle, inform Pencom upon leaving and estimated time of being back on duty. Radio check that you are back on duty.

*Call Pencom at 417- 4970 and inform them you are off duty, and are being relieved by other personnel, and include their call #

5.2.2 **ICY CONDITIONS ONLY AND CATEGORY A** - During the time of year that temperatures are expected to consistently reach freezing at night and early mornings, a truck equipped with a sander, fully loaded and fueled, and a second truck equipped to anti-ice, fully loaded and fueled, shall stand by to be used in the event that calls are received from Central Dispatch. The Sweeper Operator shall cease sweeping operations and sand or anti-ice those areas that historically ice up first as shown on the map in Appendix A as sanding priorities. The operator may also be directed to specific trouble areas by Central Dispatch. If there is too much area for one sander, the night Sweeper Operator shall call the Street Superintendent and request additional personnel and equipment.

5.2.3 **CATEGORY B** - Equipment and manpower will be ready and available prior to snow buildup to prevent the storm from getting ahead of operations. Crews will start mobilizing plows, as instructed by the Director of Public Works & Utilities, when the snow starts to fall and the forecast is for the storm to continue for an extended period of time. The decision will be made based on the best weather information available at the time.

5.2.3.1 The Director of Public Works & Utilities may revise the shift of the crews, depending on the intensity and duration of the storm. The plow crews would then consist of two crews of four plow drivers, plus a supervisor, scheduled for two 12 hour shifts (12 midnight to 12 noon and 12 noon to 12 midnight).

5.2.3.2 During Category B storm events, administration will consider the utilization of utility workers from other divisions or departments as needed to maintain a full roster of snow plow operators. These operators shall be assigned to the Street Division for the duration of the event and will receive training on the use of plows and sanders and will ride with plow operators for the first few days until the operator is comfortable with their abilities.

5.2.3.3 After accumulation of 2 inches or more downtown, the Parks and Recreation Dept. shall begin snow removal of parking lots at the Fire Department, City Hall, and the Senior Center. Snow will be piled in an area and in extreme cases may need to be hauled away. The listings of the lots are in the table below:

PARKING LOT

Fire Department
City Hall
Senior Center
All sidewalks adjacent to the above areas

5.2.4 **CATEGORY C** - The procedures for a major event are the same as for lessor events, EXCEPT when the snow from a single snow fall event reaches a total of six [6] inches over a 12 hour period, and the weather prediction is for a continuous snow fall over an extended period of time, then the City shall go to emergency conditions and the EOC shall be initiated. All requests for assistance shall be routed through the EOC and forwarded to the Street Division shift supervisor for implementation.

5.2.4.1 In addition to the Street shift supervisor, who will be the dispatcher from the Corp.Yard, the Public Works & Utilities Department shall appoint personnel to assist the supervisor by answering the phones, prioritizing the calls, and keeping a log of the calls.

5.2.4.2 All Public Works & Utilities Department personnel shall be under the direction of the Public Works representative in the EOC.

5.2.3.3 If the event reaches a Catergory C level the administration will utilize Utility Workers from other divisions or departments. These operators shall be assigned to the Street Division for the duration of the event and will receive training on the use of plows and sanders and will ride with plow operators for the first few days until the operator is comfortable with their abilities.

5.2.3.4 Public Information Officer - The Public Works & Utilities Department shall appoint a Public Information Officer (PIO). The PIO shall notify all agencies (Police, Fire, School,Transit) of roadway conditions and/or closures and handle all news media contacts.

5.3 **AFTER EVENT DEBRIEFING**

5.3.1 A debriefing of all personnel involved in the event shall be conducted to determine what went right and what needs to change. This debriefing should take place within 5 days of the end of the event. A debriefing with all participants of the EOC and any other involved agency shall also be conducted in the same general time frame.

5.4 **AFTER EVENT CLEANUP**

5.4.1 As soon as practical after the event has passed, the snow melted, and the threat of another major event has passed, cleanup shall begin.

5.4.2 All streets shall be swept starting with the priority arterials and ending with residential streets.

5.4.3 All equipment that was used for the event shall be checked out and repaired as needed by the service garage mechanics, and any supplies that were expended in the use of the vehicles shall be replaced by the operators.

5.4.4 Materials expended during the event shall be replenished to a level necessary to maintain the ability to respond to call outs and/or another event, depending on the time of year.

5.4.5 Catch basins shall be cleaned to remove sand and grit that has accumulated as needed.

5.4.6 Inventory shall be conducted on all streets to determine the centerline buttons that will need to be replaced and any signs that were knocked down or bent over. Inventory shall also take place to determine if any curbing has been broken or damaged by the plowing operation, both on the streets and/or parking lots cleaned by City crews.

6.0 DISCLAIMER

6.1 To the extent that any previous rule, regulation, policy or past practice, written or unwritten, is in conflict with the provisions of this policy, such is hereby withdrawn, voided and all personnel should conduct themselves in conformity with this policy. This policy is not intended to create any duty to any individual member of the public or to protect any particular or circumscribed class of persons. All or parts of this policy may be affected by at least one or more of the following which will delay all or some of the services provided:

A. Equipment breakdowns;

B. Vehicles disabled in deep snow;

C. Weather so severe as to cause crews to be called in from the streets for safety reasons such as during white-out conditions;

D. Equipment rendered inadequate by the depths of the snow or drifts;

E. Crew breaks, and breaks required for refueling, refilling of material spreaders and installing chains or new blades; and unforeseen emergencies.

Utility Installation/Repair BMP

Description of Work
Street and sidewalk cut and tunnel/trench excavation and backfilling for utility installations or repair.

Objectives
Contain sand, soil, crushed rock, and uncured controlled density fill (CDF), prevent chemicals from leaving the work site, and contain water from equipment cleanup.

Site Preparation
1. Spill Kit: Keep a spill cleanup kit in a nearby vehicle or next to the work site so that it is easily accessible. Make sure the contents of the spill kit are appropriate for the types and quantities of materials used for this work task. Refill spill kit materials before beginning work.

2. Catch Basin Filter Socks: : Install the appropriate size catch basin filter socks in catch basins of storm drain inlets that are located downslope or adjacent to the work area if needed.

BMP Maintenance During Site Work

1. Catch Basin Filter Socks:

Clean or remove and replace filter sock when sediment has filled one-third of the available storage.

2. Utility Maintenance and Repair:

When using a concrete/asphalt saw the slurry vacuum must also be used. Do not allow slurry to remain on surface overnight and redirect surface water away from jobsite while sawcutting and vacuuming. If unable to use the slurry vacuum then the saw must not be used and a jackhammer is the preferred alternative.

Wash off hand tools (screeds, shovels, rakes, floats, trowels, etc.) only into the backfilled trench, a temporary sump, or a portable container to collect and contain wash water.

Continually monitor operations to determine whether soil, aggregate, or CDF slurry could enter the stormwater system. If observations indicate that a violation of water quality

standards could occur, stop operations and immediately implement preventative measures such as berms, barriers, secondary containment, and/or vactor trucks.

Clean concrete application and mixing equipment or concrete-delivery vehicles on the work site only in a designated area where the rinse water is controlled or into a portable container for disposal at an approved disposal site.

Use hand sweeping and mechanical sweepers as needed to collect soil and sediment on adjacent paved surfaces.

If disturbed area is in a planted (grass) parking strip or other vegetated area either reseed and mulch or hydro-seed as needed for erosion and sediment control.

Site Cleanup

1. Catch Basin Filter Socks:

Remove the filter sock and dispose of the collected sediment in a suitable container to be hauled off site. Reuse the filter sock at another site if it remains in good condition (no rips, tears, or visible staining).

2. Waste Disposal:

Remove waste material from site and dispose of it at an approved disposal site.

3. Equipment and Vehicle Maintenance:

Clean equipment and tools off site in an area where pollutants can be contained.

Perform equipment and vehicle maintenance in areas that prevent discharges to the storm drain system.

Promptly repair or replace leaking connections, hoses and/or valves.

4. Waste Disposal:

Properly dispose of wastes at an approved dump site.

Pavement Striping/Curb & Building Painting BMP

Description of Work
Painting of white traffic lines (dash lines, edge lines, bike lanes and guidelines), curbs, and the outside of any City Facility.

Objectives
Protect drainage systems and water bodies from paint spills and contamination.

Site Preparation
1. Spill Kit: Keep a spill cleanup kit in a nearby vehicle or next to the work site so that it is easily accessible. Make sure the contents of the spill kit are appropriate for the types and quantities of materials used for this work task. Refill spill kit materials before beginning work.

2. Paint Storage: Store paint materials with secondary containment and tight-fitting lids

BMP Maintenance During Site Work
1. Paint Application:

Train employees in the application and cleanup of paints, finishes, and coatings to reduce misuse and overspraying.

Use only the recommended amounts of paint and apply them in a proper manner. Avoid painting when rain is falling or expected.

Continually monitor operations to determine whether paint materials could enter the separate storm drain system. If observations indicate that a violation of water quality standards could occur, stop operations and immediately implement preventative measures such as berms, barriers, secondary containment, and vactor trucks.

When painting, install catch basin filter socks in storm drain inlets that are located downslope or adjacent to the work area.

Prep site for painting by manual scraping if needed. Use gas powered push vacuum to pick up paint flakes after scraping.

Remove catch basin filter only after all work is completed.

Use a ground cloth, pail, drum, drip pan, tarpaulin, or other protective device for activities such as paint mixing and tool cleaning outside or where spills can contaminate stormwater. Whenever possible, conduct these activities inside or in an enclosed area.

Site Cleanup

1. Waste Disposal:

Follow the regulations and requirements outlined by the Washington State Department of Ecology. Some liquid wastes must be stored and handled according to special guidelines.

Remove additional waste material from site and dispose of properly.

Dispose of unused paint promptly. Recycle paints, paint thinner, solvents, wash water from pressure washers, and any other recyclable materials.

Dispose of wash water using the following methods:

Wash water from water-based paints may go into a sanitary sewer.

Wastes from oil-based paints, cleaning solvents, thinners, and mineral spirits must be disposed of through a licensed waste management firm or treatment, storage, and disposal facility.

2. Equipment and Vehicle Maintenance:

Clean equipment and tools off site in an area where pollutants can be contained.

Perform equipment and vehicle maintenance in areas that prevent discharges to the storm drain system.

Promptly repair or replace leaking connections, hoses and/or valves.

Roadway Shoulder Maintenance BMP

Description of Work
Removal of sediment, sod and debris from the shoulder road edge.

Objectives
To improve drainage, reduce flooding and ponding on roadway, restore proper grade, restore filtering capability, smooth rutting and remove buildup of sediment before entering drainage system.

Site Preparation
1. **Spill Kit:** Keep a spill cleanup kit in a nearby vehicle or next to the work site so that it is easily accessible. Make sure the contents of the spill kit are appropriate for the types and quantities of materials used for this work task. Refill spill kit materials before beginning work.

BMP Maintenance During Site Work

1. Shoulder Maintenance:

Locate and identify gravel shoulders that need to have maintenance performed.

Roadway shoulder maintenance to be performed from April through September except in emergency situations.

Perform maintenance removing buildup of sediment and sod restoring the gravel shoulder. If possible roll shoulder material to ensure proper grade and retention of sediment control qualities.

Leave vegetative strip where possible between the gravel and ditch line for biofilitration.

Areas of disturbed soil shall be hydroseeded within two days of ditch maintenance occurring if during April through June and seven days from July through September.

Use pickup sweepers to remove dirt/sediment from roadways after shoulder maintenance.

2. Equipment and Vehicle Maintenance:

Clean equipment and tools off site in an area where pollutants can be contained.

Perform equipment and vehicle maintenance in areas that prevent discharges to the storm drain system.

Promptly repair or replace leaking connections, hoses and/or valves.

3. Waste Disposal:

Properly dispose of wastes at an approved dump site.

Roadside Vegetation Management BMP

Description of Work
Vegetation management of roadside areas to include shoulders, ditches, vision triangles, etc.

Objectives
To control and remove vegetation for the purpose of stormwater control and the safety of the traveling public.

Site Preparation
1. **Spill Kit:** Keep a spill cleanup kit in a nearby vehicle or next to the work site so that it is easily accessible. Make sure the contents of the spill kit are appropriate for the types and quantities of materials used for this work task. Refill spill kit materials before beginning work.

BMP Maintenance During Site Work

1. Vegetation Maintenance:

Locate and identify roadside areas that need to have vegetation maintenance performed.

Mechanical vegetation maintenance will be the preferred method of control for all open ditch and roadside areas. Vegetation to be left at a minimum of 4 inches in height to minimize scalping of soil surface,

Herbicides will be used per Public Works Policies and Procedures Integrated Nutrient, Pest Management, and Landscaping Plan for curb and gutter vegetation control.

2. Equipment and Vehicle Maintenance:

Clean equipment and tools off site in an area where pollutants can be contained.

Perform equipment and vehicle maintenance in areas that prevent discharges to the storm drain system.

Promptly repair or replace leaking connections, hoses and/or valves.

3. Waste Disposal:

Any vegetation that needs to be removed from roadside areas will be disposed of at the City of Port Angeles Compost Facility. Do not dispose of collected vegetation by dumping it into waterways or storm drain systems.

Dust Control Maintenance BMP

Description of Work
Routine street sweeping by both mechanical and air sweepers.

Routine gravel road maintenance to include grading, graveling, and application of magnesium chloride.

Objectives
Reduce the surface and air transport of dust, thereby preventing pollutants from infiltrating into stormwater.

Site Preparation
1. **Spill Kit:** Keep a spill cleanup kit in a nearby vehicle or next to the work site so that it is easily accessible. Make sure the contents of the spill kit are appropriate for the types and quantities of materials used for this work task. Refill spill kit materials before beginning work.

BMP Maintenance During Site Work

1. Dust Control Maintenance:

Use mechanical and air sweepers on paved streets for both routine sweeping and sweeping of construction areas.

Locate and identify gravel roads that are in need of maintenance.

Grading of gravel roads to be performed during spring and fall months to reduce/eliminate the amount of dust generated during maintenance operations.

Use fractured basalt rock with limited fine sediments.

Use only the recommended amount of magnesium chloride and apply it in the proper manner to reduce the potential for polluting storm and surface waters. Apply where needed to promote adhesion of finer particles and retain surface moisture. Magnesium chloride can be applied during the initial grading procedure or during the summer months to moisten the roadway surface and reduce dust particles from becoming airborne.

Leave vegetative strip where possible between the gravel and ditch line for biofilitration.

2. Equipment and Vehicle Maintenance:

Clean equipment and tools off site in an area where pollutants can be contained.

Perform equipment and vehicle maintenance in areas that prevent discharges to the storm drain system.

Promptly repair or replace leaking connections, hoses and/or valves.

INTEGRATED NUTRIENT, PEST MANAGEMENT, & LANDSCAPING PLAN

PW-0506

1.0 PURPOSE:

1.1 This Integrated Nutrient, Pest Management, and Landscaping Plan is part of the City's Stormwater Phase II operational requirements for best management practices. The purpose is preventing the discharge of contaminants into the storm drainage system, surface waters, and groundwater, and to reduce the contamination of surface and stormwater or groundwater in the most efficient and least costly way. This document addresses the use of fertilizers, pesticides, and herbicides throughout City grounds and the landscaping practices in the Parks.

2.0 ORGANIZATIONS AFFECTED:

2.1 Public Works & Utilities Department staff whose positions involve the management or work involved with the application of fertilizers, pesticides, and herbicides throughout City grounds and the landscaping practices in the Parks.

2.2 Overall responsibility for the maintenance and management of this plan is with the Deputy of Operations, Public Works and Utilities Department. The administration of the plan has been delegated to the Superintendent, Parks Maintenance in consultation with the City's Stormwater Engineer.

3.0 POLICY:

3.1 All Public Works & Utilities Department staff shall comply with the requirements in this plan.

3.2 All Public Works & Utilities Department staff involved with the use of fertilizers, pesticides, and herbicides throughout City grounds and the landscaping practices in the Parks shall be trained on the requirements in this plan on at least an annual basis and as soon as practical when new practices are employed, or new personnel are hired.

4.0 PROCEDURES:

4.1 Landscaping and Turf Management BMP'S

1. Description. Landscaping and lawn maintenance can include grading, soil transfer, vegetation removal, pesticide and fertilizer applications, and watering. These type of maintenance activities can contaminate stormwater with fertilizer, soil, and pesticide runoff. Proper landscape management, such as proper plant selection, practical turf areas/use of mulches, efficient water use, and appropriate maintenance can effectively reduce water use and contaminants that can runoff into the stormwater system.

2. Turf/Lawn BMP

    1) Train employees in the proper application of lawn care products.

    2) Minimize/eliminate fertilizer applications. Use slow release or naturally derived (organic) fertilizers when possible. Recommended organic fertilizer is SoundGro (5-4-0)

3) Determine the proper fertilizer application for the areas that being applied. There is a chart located at the Park Shop that lists the amount of fertilizer, both synthetic and organic, that gives the proper amount of fertilizer used per square feet recommended by the manufacturer. Only certain parks/facilities get fertilized, so check the chart for proper areas.

4) Select the appropriate grass seed mixture for our area. The recommended mixture is a three way blend of blue certified perennial rye grass. There is a chart located at the Park Shop that lists the amount of grass seed that gives the proper amount of seed to be used per square foot as recommended by the manufacturer. Only certain parks/facilities get seeded, so check chart for proper facilities.

5) Use fertilization equipment so as to minimize or eliminate broadcasting fertilizer beyond the boundaries of the intended application, and particularly avoid fertilizers from landing in streets, and parking lots. Any fertilizer or grass seed that was discharged onto the sidewalk/street will be cleaned off. If fertilizing within 100 feet of ditches, swales, wetland buffer areas and top of banks or creeks, a slow release organic fertilizer, such as SoundGro, must be used in these areas during the proper times of year, such as spring and fall. These parks/facilities include and are not limited to, Estuary Park, Francis Street Park, the Senior Center, Sail & Paddle Park, and Harborview Park.

6) When mowing set the mowing height at the highest acceptable level and mow at times and intervals designed to minimize stress on the turf. Generally mowing only 1/3 of the grass blade height will prevent stressing the turf.

7) When possible, conduct mulch-mowing and leave grass clippings on turf.

8) Dispose of grass clippings, leaves, sticks, or other collected vegetation, by taking it to the Transfer Station Compost Facility. Do not dispose of collected vegetation by dumping it into waterways or storm drainage systems.

9) Limit watering as necessary to supplement rainwater. One inch per week is adequate.

10) An approved list of fertilizers/grass seed used by the City of Port Angeles is listed below. Product/manufacturers name may vary and use of any other product must be approved by the Park Superintendent.

    a) SoundGro Organic Fertilizer

    b) Synthetic Fertilizer

    c) Weed & Feed Fertilizer

    d) Plant Marble Water Soluble Fertilizer

    e) Osmocote

    f) Certified Blue Perennial Rye Grass

11) Standardized records will be kept on all fertilizer, herbicide, and pesticides applied by City employees. The WSDA Pesticide Application Record (Version 1) Form, appendix 5.1, will be filled out and then turned into the division superintendent. All records will be kept for seven years.

3. Landscaping/Vegetation BMP

1) Employees will be trained in the proper application of herbicide products.

2) The proper herbicide/fertilizer application for the types of soil and vegetation encountered will be determined and applied in accordance with the manufactures recommendations.

3) Use manual and/or mechanical methods of vegetation removal rather than applying herbicides, where practical.

4) Do not dispose of collected vegetation into waterways or storm drainage systems. Dispose of grass clippings, leaves, sticks, or other collected vegetation, by taking it to the Transfer Station Compost Facility. Do not dispose of collected vegetation by dumping into waterways or storm drainage systems.

5) Use mulch to help retain water, reduce weed growth, prevent erosion, and improve the soil for plant growth.

6) No exposed soils should be left unworked for more than two days during the wet season (October 1st-April 30th) and seven days during the dry season (May 1st-Septemer 30th). Exposed and unworked soils shall be stabilized by application of effective BMP's that prevent erosion. Applicable BMP's include, but are not limited to: temporary and permanent seeding, sodding, mulching, plastic covering, and erosion control fabrics and matting.

7) Appropriate plant selection is encouraged. Local and regional plants are environmentally friendly and are generally more water efficient and disease resistant.

8) Water plants in early morning and water only when needed to enhance plant root growth and avoid runoff problems. Drip irrigation is preferred in landscaping areas.

9) An approved list of herbicides used by the City of Port Angeles is listed below. Product/manufacturers name may vary and use of any other product must be approved by the Parks Maintenance Superintendent.

    a) Weed and Feed Fertilizer

    b) Moss Out & Rid Moss

    c) Round-Up

    d) Crossbow

    e) Casaron

    f) Limestone

    g) Surflan

    h) Vaporooter

10) Standardized records will be kept on all fertilizer, herbicide, and pesticides applied by City employees. The WSDA Pesticide Application Record (Version 1) Form, appendix 5.1, will be filled out and then turned into the division superintendent. All records will be kept for seven years.

4. Pesticide BMP

1) Pesticides shall be used sparingly, and only as a last resort. The following BMP must be followed:

2) Choose the least toxic pesticide available that is capable of reducing the infestation to acceptable levels. The pesticide should readily degrade in the environment and/or have properties that strongly bind it to the soil. Any pest control used should be conducted at the life stage when the pest is more vulnerable. Any method used should be site specific, and not used wholesale over a wide area.

3) Apply the pesticide according to the label directions. Under no conditions shall pesticides be applied in quantities that exceed manufacturer's instructions.

4) Mix the pesticides and clean the application equipment in an area where accidental spills will not enter surface or ground waters, and will not contaminate the soil.

5) Store pesticides in enclosed areas or in covered impervious containment. Ensure that pesticide contaminated stormwater or spills/leaks of pesticides are not discharged to storm drains. Do not hose down the paved areas to a storm drain or ditch. Store and maintain appropriate spill cleanup materials in a location known to all City employees near the storage area.

6) Clean up any spilled pesticides and ensure that the pesticide contaminated waste materials are kept in designated covered and contained areas.

7) Do not spray pesticides within 100 feet of open waters including wetlands, ponds, streams, sloughs and drainage ditch or channel that leads to open water except when approved by Ecology or the local jurisdiction. All sensitive areas including wells, creeks and wetlands must be flagged prior to spraying.

8) Notification of Pesticide-Sensitive Individuals. City staff must follow the requirements for Pesticide Sensitive Individuals that are contained within RCW 17.21.420 and 17.21.430 of the Washington Pesticide Application Act. Applicators are required to notify those on the list when making ornamental or right-of-way applications adjacent to their property. Notification of the date and approximate time of the application shall be made in writing, in person or by telephone. This notification must be at least two hours prior to the application except in the case of an immediate service call in which case notification can be made at the time of the application.

9) Certified applicators making landscape applications to the properties listed below are required to post the applications with a marker on the following properties:

a) Residential Property

b) Commercial Property

c) Golf Courses

d) Parks, cemeteries, rest stops, etc.

e) Schools

f) Nursery Schools

g) Licensed Day Cares

10) Spray applications should only be conducted during weather conditions as specified on the product label and in accordance with applicable local and state regulations. Do not apply during rain or immediately before expected rain.

11) Standardize records will kept on all fertilizer, herbicide, and pesticides applied by city employees. The WSDA Pesticide Application Record (Version 1) Form, appendix 5.1, will be filled out and then turned into the division superintendent. All records will be kept for seven years.

4.2 Vegetation, Fertilizer, and Integrated Pest Management:

1. Vegetation Management BMP

1) Use at least an eight-inch layer of topsoil with at least 8 percent organic matter to provide a sufficient vegetation-growing medium.

2) Install engineered soil/landscape systems to improve the infiltration and regulation of stormwater in landscaped areas. Increasing the percent of organic matter and depth of the topsoil can improve the soils, reduce the disease and drought resistance of the vegetation, and reduce fertilizer demand.

3) Aerate lawns regularly in areas of heavy use where the soil tends to become compacted. Aeration should be conducted while the grasses in the lawn are growing most vigorously.

4) When possible, remove layers of thatch greater than ¾-inch deep.

5) Set the mowing height at the highest acceptable level and mow at times and intervals designed to minimize stress on the turf. Generally mowing only 1/3 of the grass blade height will prevent stressing the turf. When turf is mowed too short its productivity is decreased and there is less growth of roots and rhizomes. The turf then becomes more disease prone and is more reliant on pesticides, fertilizers and irrigation to remain healthy.

6) When possible, develop practical turf areas and alternative landscaping.

2. Fertilizer Management BMP

1) Turfgrass is most responsive to nitrogen fertilization, followed by potassium and phosphorus. Fertilization needs vary by site depending on plant, soil and climatic conditions.

2) Fertilizers should be applied in amounts appropriate for the target vegetation and at the time of year that minimizes losses to surface and ground waters.

3) When possible, use slow release fertilizers. SoundGro (5-4-0) is recommended.

4) Time fertilizer applications to periods of maximum plant uptake generally fall and spring applications are recommended, although the athletic fields can be fertilized during the spring, summer, fall, and winter to ensure the fields/turf are in safe playing conditions.

5) Properly trained persons will apply all fertilizers. Fertilizers should not be applied to grass swales, bio-filters, or buffer areas that drain to sensitive water bodies unless approved by the City's Stormwater Engineer.

3. Integrated Pest Management BMP

1) The City's use of pesticides has historically been limited to applications on localized problems. Only the use of over the counter pesticide products are authorized for use by City workers to control pests such as ants, rodents, bees/wasps, aphids, white flies, and fungus. Application will be made only in accordance with the manufacturer's label directions. Under no conditions shall pesticides be applied in quantities that exceed manufacturer's instructions. For pesticide application other than that prescribed above, a certified commercial applicator may be authorized by the Park's Maintenance Superintendent.

2) General broadcasting of pesticides is prohibited without the expressed authorization of the Park's Maintenance Superintendent, and only after consulting with the City's Stormwater Engineer over the possible risks, consequences, and mitigations.

4.3 Administrative

1) Each division manager within Public Works & Utilities is responsible for their employee's recertification and credits for their pesticide application card. Upon recertification a copy of their card needs to be forwarded to the Parks Maintenance Superintendent.

2) Annually, the WSDA pesticide application records need to be forwarded to the Parks Maintenance Superintendent for any fertilizing, herbicides, and pesticides that were applied for that year.

5.0 APPENDIX:

5.1 WSDA Pesticide Application Record (Version 1) Form

SEDIMENT AND EROSION CONTROL PLAN

PW-0507

1.0 PURPOSE:

1.1 This Sediment and Erosion Control Plan is part of the City's Stormwater Phase II operational requirements for best management practices. The purpose is preventing the discharge of sediments or pollutants into the storm drainage system, surface waters, and groundwater, and to reduce the contamination of surface and stormwater or groundwater in the most efficient and least costly way.

2.0 ORGANIZATIONS AFFECTED:

2.1 Public Works & Utilities Department staff whose positions involve the management or work involved with the disturbance of soils or any task that may cause erosion from all lands owned or maintained by the City.

2.2 Overall responsibility for the maintenance and management of this plan is with the Deputy Director of Operations, Public Works and Utilities Department. The administration of the plan has been delegated to the Street/Stormwater Superintendent in consultation with the City's Stormwater Engineer.

3.0 POLICY:

3.1 All Public Works & Utilities Department staff shall comply with the requirements in this plan.

3.2 Public Works & Utilities Department staff involved in tasks that ultimately cause disturbance of soil or any tasks that may cause erosion from all lands owned or maintained by the City will be trained through an ongoing training program that shall address the importance of protecting water quality, operation and maintenance standards, selecting appropriate Best Management Practices (BMP), and ways to perform their job activities to prevent or minimize impacts to water quality.

4.0 PROCEDURES:

4.1 Operations and Maintenance BMP

1. Description: Activities that require sediment and erosion control can include pipe cleaning, cleaning of culverts that convey stormwater in ditch systems, ditch maintenance, street cleaning, road repair and resurfacing (including pavement grinding), snow and ice control, utility installation and repair, maintaining roadside areas (including vegetation management), and dust control. Proper landscape management, such as proper plant selection, practical turf areas/use of mulches, efficient water use, and appropriate maintenance can effectively reduce water use and contaminants that can runoff into the stormwater system.

2. Sediment and Erosion Control BMP

   Current BMP for operations and maintenance procedures exist for the following activities and will be followed by City personnel. They can be found at the following location: N:\PWKS\Stormwater\Stormwater Management Program - SWMP\5 - O&M\BMPs

   - Ditch maintenance
   - Gravel Shoulder Placement and Regrading
   - Roadside Vegetation Removal/Maintenance
   - Stormwater Culvert Cleaning
   - Street Sweeping
   - Dust Control
   - Pavement Striping and Curb/Building Painting
   - Road Repair and Resurfacing
   - Snow and Ice Control
   - Stormwater Pipe Cleaning
   - Utility Installation and Repair

3. Additional Sediment and Erosion Control BMP

   Additional Sediment and Erosion Control BMP can be located in the Stormwater Management Manual for Western Washington if the above BMP fail to address specific job needs.

TRASH MANAGEMENT PLAN
PW- 1015

1.0 PURPOSE:

1.1 This Trash Management Plan is part of the City's Stormwater Phase II operational requirements for best management practices. The purpose is to minimize or prevent the discharge of floating materials and pollutants into storm water runoff from trash and garbage collection containers.

2.0 ORGANIZATIONS AFFECTED:

2.1 Public Works & Utilities Department staff whose positions involve trash management/collection throughout the City.

2.2 Overall responsibility for the maintenance and management of this plan is with the Deputy Director of Operations, Public Works and Utilities Department. The administration of the plan has been delegated to the Superintendent of Solid Waste in consultation with the City's Stormwater Engineer.

3.0 POLICY:

3.1 All Public Works and Utilities Department staff shall comply with the requirements in this plan.

3.2 All Public Works and Utilities Department staff involved with trash management shall be trained on the requirements of this plan on at least an annual basis and as soon as practical when new practices are employed, or new personnel are hired.

4.0 Training:

4.1 Staff training may include regular tailgate sessions for those responsible for trash management. Tailgate sessions should provide information on the selected storm water BMP's and methods for preventing discharge of pollutants into the storm drain system. Encourage employees to create new BMP's; their suggestions will likely reduce labor and increase storm water runoff protection.

4.2 Training records shall be retained by the Solid Waste Superintendent and copies forwarded to the City Stormwater Engineer for inclusion in the annual reporting requirements.

5.0 PROCEDURES:

5.1 Trash Management BMP's

5.1.1 Keep dumpsters, trashcans and recycling bins covered, except when filling or emptying. Schedule pickup frequency to keep trash from holding the cover open. Open lids allow contact with storm water, which dissolves and transports contaminants into the storm water system. Open lids also invite pests to spread trash around.

5.1.2 Check that the compactor, dumpster, or trash can are in good condition, with no holes or accumulation of grime. Trash containers should be leak-free. When necessary, report containers that need to be cleaned or replaced to the Solid Waste Superintendent.

5.1.3 Regularly inspect the trash enclosure and general area for problems such as trash not in the container and accumulation of grease or food on the ground. Report findings to the Solid Waste Superintendent for notification of non-complying property owners.

5.1.4 Clean trash cans in a designated area with a connection to the sanitary sewer. Confirm before using drains to ensure proper disposal. Never discharge wash-water to storm drains or offsite.

5.1.5 If possible, designate an area for trash collection away from storm drains. This allows problems at the trash container to be corrected before reaching the storm drain or flow offsite.

Building Exterior Cleaning and Maintenance BMP

Description of Work
Surface preparation and the application of paints, finishes and/or coatings to the exterior surfaces of buildings.

Objectives
Protect stormwater from pollutants that include organic compounds, oils and greases, heavy metals, and suspended solids.

Site Preparation

1. Spill Kit: Keep a spill cleanup kit in a nearby vehicle or next to the work site so that it is easily accessible. Make sure the contents of the spill kit are appropriate for the types and quantities of materials used for this work task. Refill spill kit materials before beginning work.

2. Catch Basin Filter Sock: Install the appropriate size catch basin filter socks in catch basins of storm drain inlets that are located downslope or adjacent to the work area if needed.

3. Pollutant Control Approach: Cover and contain painting and sanding operations and apply good housekeeping and preventive maintenance practices to prevent the contamination of stormwater with painting oversprays and grit from sanding. Use ground or drop cloths underneath outdoor painting, scraping, sandblasting work.

Applicable Operational BMPs:

- Train employees in the careful application of paints, finishes, and coatings to reduce misuse and over spray. Temporarily store collected debris daily.
- Do not conduct spraying, blasting, or sanding activities over open water or where wind may blow paint into water.
- Wipe up spills with rags and other absorbent materials immediately. Do not hose off spills and painting equipment. If water is used for cleaning, convey it to appropriate treatment and disposal (sanitary system).
- On marine dock areas sweep rather than hose down debris. Collect any hose water generated and convey to appropriate treatment and disposal.
- Use a storm drain cover, filter fabric, or similarly effective runoff control device if dust, grit, washwater, or other pollutants may escape the work area and enter a catch basin. The containment device(s) must be in place at

the beginning of the workday. Collect contaminated runoff and solids and properly dispose of such wastes before removing the containment device(s) at the end of the workday.

- Use a ground cloth, pail, drum, drip pan, tarpaulin, or other protective device for activities such as paint mixing and tool cleaning outside or where spills can contaminate stormwater.
- Properly dispose of all wastes and prevent all uncontrolled releases to the air, ground, or water.
- Clean brushes and tools covered with non-water based paints, finishes, or other materials in a manner that allows collection of used solvents (e.g., paint thinner, turpentine, xylol, etc.) for recycling or proper disposal.
- Store toxic materials under cover (tarp, etc.) during precipitation events and when not in use to prevent contact with stormwater.

Applicable Structural Source Control BMPs:

- Enclose and/or contain all work while using a spray gun or conducting sand blasting and in compliance with applicable air pollution control, OSHA, and WISHA requirements. Do not conduct outside spraying, grit blasting, or sandblasting activities during windy conditions which render containment ineffective.

Recommended Additional BMPs:

- Clean paintbrushes and tools covered with water-based paints in sinks connected to sanitary sewers or in portable containers that can be dumped into a sanitary sewer drain.
- Recycle paint, paint thinner, solvents, pressure washwater, and any other recyclable materials.
- Use efficient spray equipment such as electrostatic, air atomized, high volume/low pressure, or gravity fed spray equipment.
- Purchase recycled paints, paint thinner, solvents, and other products if feasible.

APPENDIX B

Source Control BMP Library (2019 SWMMWW, Volume IV)

- **IV-1 Source Control BMPs Applicable to *All Sites***
  - S410 BMPs for Correcting Illicit Discharges to Storm Drains
  - S453 BMPs for Formation of a Pollution Prevention Team
  - S454 BMPs for Preventive Maintenance / Good Housekeeping
  - S455 BMPs for Spill Prevention and Cleanup
  - S456 BMPs for Employee Training
  - S457 BMPS for Inspections
  - S458 BMPs for Record Keeping
- **IV-2 Cleaning or Washing Source Control BMPs**
  - S431 BMPs for Washing and Steam Cleaning Vehicles / Equipment / Building Structures
  - S434 BMPs for Dock Washing
  - S441 BMPs for Potable Water Line Flushing, Water Tank Maintenance, and Hydrant Testing
- **IV-3 Roads, Ditches, and Parking Lot Source Control BMPs**
  - S405 BMPs for Deicing and Anti-Icing Operations for Airports
  - S406 BMPs for Streets and Highways
  - S415 BMPs for Maintenance of Public and Private Utility Corridors and Facilities
  - S416 BMPs for Maintenance of Roadside Ditches
  - S417 BMPs for Maintenance of Stormwater Drainage and Treatment Systems
  - S421 BMPs for Parking and Storage of Vehicles and Equipment
  - S430 BMPs for Urban Streets
- **IV-4 Soil Erosion, Sediment Control, and Landscaping Source Control BMPs**
  - S407 BMPs for Dust Control at Disturbed Land Areas and Unpaved Roadways and Parking Lots
  - S408 BMPs for Dust Control at Manufacturing Areas
  - S411 BMPs for Landscaping and Lawn / Vegetation Management
  - S425 BMPs for Soil Erosion and Sediment Control at Industrial Sites
  - S435 BMPs for Pesticides and an Integrated Pest Management Program
  - S444 BMPs for the Storage of Dry Pesticides and Fertilizers
  - S449 BMPs for Nurseries and Greenhouses
  - S450 BMPs for Irrigation
- **IV-5 Storage and Stockpiling Source Control BMPs**
  - S427 BMPs for Storage of Liquid, Food Waste, or Dangerous Waste Containers
  - S428 BMPs for Storage of Liquids in Permanent Aboveground Tanks
  - S429 BMPs for Storage or Transfer (Outside) of Solid Raw Materials, Byproducts, or Finished Products
  - S445 BMPs for Temporary Fruit Storage
- **IV-6 Transfer of Liquid or Solid Materials Source Control BMPs**
  - S409 BMPs for Fueling At Dedicated Stations
  - S412 BMPs for Loading and Unloading Areas for Liquid or Solid Material

- S419 BMPs for Mobile Fueling of Vehicles and Heavy Equipment
- S426 BMPs for Spills of Oil and Hazardous Substances
- S439 BMPs for In-Water and Over-Water Fueling

- **IV-7 Other Source Control BMPs**
  - S401 BMPs for the Building, Repair, and Maintenance of Boats and Ships
  - S402 BMPs for Commercial Animal Handling Areas
  - S403 BMPs for Commercial Composting
  - S404 BMPs for Commercial Printing Operations
  - S413 BMPs for Log Sorting and Handling
  - S414 BMPs for Maintenance and Repair of Vehicles and Equipment
  - S418 BMPs for Manufacturing Activities - Outside
  - S420 BMPs for Painting/Finishing/Coating of Vehicles/Boats/Buildings/Equipment
  - S422 BMPs for Railroad Yards
  - S423 BMPs for Recyclers and Scrap Yards
  - S424 BMPs for Roof / Building Drains at Manufacturing and Commercial Buildings
  - S432 BMPs for Wood Treatment Areas
  - S433 BMPs for Pools, Spas, Hot Tubs, and Fountains
  - S436 BMPs for Color Events
  - S438 BMPs for Construction Demolition
  - S440 BMPs for Pet Waste
  - S442 BMPs for Labeling Storm Drain Inlets On Your Property
  - S443 BMPs for Fertilizer Application
  - S446 BMPs for Well, Utility, Directional and Geotechnical Drilling
  - S447 BMPs for Roof Vents
  - S451 BMPs for Building, Repair, Remodeling, Painting, and Construction
  - S452 BMPs for Goose Waste

- **IV-A: Urban Land Uses and Pollutant Generating Sources**
  - 1. Manufacturing Businesses
    - Cement
    - Chemical Manufacturing
    - Concrete Products
    - Electrical Products
    - Food and Kindred Products
    - Glass Products
    - Industrial Machinery & Equipment, Trucks & Trailers, Aircraft, Aerospace, & Railroad
    - Metal Products
    - Paper, Pulp, and Paperboard Mills
    - Paper Products
    - Petroleum Products
    - Printing
    - Rubber and Plastic Products
    - Ship and Boat Building and Repair Yards
    - Wood
    - Wood Treatment

        - Other Manufacturing Businesses
    - 2. Transportation and Communication
        - Airfields and Aircraft Maintenance
        - Fleet Vehicle Yards
        - Railroads
        - Warehouses and Mini-Warehouses
        - Other Transportation and Communication
    - 3. Retail and Wholesale Businesses
        - Gas Stations
        - Recyclers and Scrap Yards
        - Commercial Composting
        - Restaurants/Fast Food
        - Retail/General Merchandise
        - Retail/Wholesale Vehicle and Equipment Dealers
        - Retail/Wholesale Nurseries and Building Materials
        - Retail/Wholesale Chemicals and Petroleum
        - Retail/Wholesale Foods and Beverages
        - Other Retail/Wholesale Businesses
    - 4. Service Businesses
        - Animal Care Services
        - Commercial Car and Truck Washes
        - Equipment Repair
        - Laundries and Other Cleaning Services
        - Marinas and Boat Clubs
        - Golf and Country Clubs
        - Miscellaneous Services
        - Professional Services
        - Vehicle Maintenance and Repair
        - Multifamily Residences
        - Construction Businesses
    - 5. Public Agency Activities
        - Introduction
        - Public Facilities and Streets
        - Maintenance of Open Public Space Areas
        - Maintenance of Public Stormwater Pollutant Control Facilities
        - Water and Sewer Districts and Departments
        - Port Districts
- **IV-B: Management of Street Waste Solids and Liquids**

This page left intentionally blank.

APPENDIX C

BMP Maintenance Tables (2019 SWMMWW, Volume V)

This page left intentionally blank.

APPENDIX D

Existing City of Port Angeles Policies and Procedures Index (revised 1/2016)

This page left intentionally blank.

PUBLIC WORKS & UTILITIES DEPARTMENT
POLICY AND PROCEDURES
INDEX

Note that items that are shaded below are associated with the Building Division, which is now a part of the Department of Community Development. Therefore some of these files are obsolete or have not been updated.

INDEX BY POLICY DIVISIONS

0001 Introduction
0002 Index by Policy and Alpha listing

0010 DEPARTMENT ISSUES
0011 Department Mission and Values
0012 Divisions Missions
0013 Customer Relations

0100 CLERICAL PROCEDURES
0101 Letters and Memos
0102 Telephone Message Recording
0103 Records Management – Laserfiche & Microfilm
0104 Zoning Map Amendments

0200 OFFICE PROCEDURES
0201 Public Nuisances
0202 Abatement of Junk Vehicles
0203 Key Disbursement to City Facilities
0204 Purchasing Policy/Procedure
0205 Assignment of Street Addresses
0206 Disposal of Surplus Property (City Attorney)
0207 Trees in Unopened Street, Alleys and City-Owned Lots in Greenbelt
0208 System Development Charges and Developer Reimbursement Charges
0209 Public Works Construction and Right-of-Way Permits
0210 Traffic Committee
0211 Community Service Worker Program

0300 PERSONNEL
0301 Personnel Agreement and Salary Ordinances with AFSCME #1619
0302 Personnel Agreement and Salary Ordinances with Administrative Group
0303 Personnel Agreement and Salary Ordinances with IBEW Local #997
0304 Personnel Position Descriptions
0305 Time and Equipment Cards
0306 Smoking at Public Works Facilities
0307 Employee Performance Evaluation
0308 Employee orientation
0309 Interviews
0310 Superior Performance Awards Program
0312 Sick Leave and Notice to Supervisor
0313 Work Standards
0314 Travel Time Procedures
0315 Out of Class Assignments
0316 Employee Morale and Welfare Funds

0400 PROJECT ADMINISTRATION
0401 Right of Way Acquisition Procedures
0402 Project Administration (after Notice to Proceed)
0403 Consultant Selection for Professional Services
0404 Change Orders on Construction Projects
0405 Project Bidding-Small Works Roster Procedures
0406 Women and Minority Owned Business Solicitations
0407 Project Bidding-Competitive Bidding Procedures
0408 Materials Bidding Procedures
0409 Equipment Bidding Procedures
0410 Consultant Contract Management
0411 Local Improvement Districts and Neighborhood Cooperative Improvements
0412 Consultant Roster Procedures
0413 Operations Contracts

0500 STREETS & PARKS
0501 Street and Sidewalk Maintenance and Sidewalk Construction
0502 Snow Plan
0503 Block Watch Signs
0504 Chemical Hazard Communication Program-PK
0505 Chemical Hazard Communication Program-ST
0506 Integrated Nutrient, Herbicide, & Landscaping Plan
0507 Sediment and Erosion Control Plan
0508 Retroreflectivity Sign Change Out

0600 FIELD OPERATIONS
0601 Scheduling of Work
0602 Work Orders
0603 Estimate Request to do Work for Other Departments
0604 Alarm and Emergency Communications
0605 Confined Space Entry
0606 Excavation and Trenching
0607 Accident Prevention Program and Safety Manual
0608 Spill Response Plan
0609 Voluntary Respiratory Protection Program
0610 Illicit Discharge Detection & Elimination (IDDE) Response
0611 Engineering Services and Infrastructure Configuration Control
0612 Reporting Loss of Operating Capability

0700 EQUIPMENT USAGE
0701 Rental and Loan of City Barricades
0702 Special Equipment Rental Rates
0703 Pool Car usage
0704 Equipment Rental Rates
0705 Replacement/Addition of Fleet Equipment
0706 Equipment Maintenance
0708 Chemical Hazard Communication Program
0709 Vehicle Idling Policy

0800 WASTEWATER UTILITY
0801 Sampling and Testing of Wastewater
0802 Septic Waste Discharge Sampling and Manifest Forms
0803 Sewer Rate - Equivalent Plumbing Fixture Count Method
0804 Industrial Pre-Treatment Program
0805 Wastewater Treatment Plant Lab Forms
0806 Wastewater Collection System Forms
0807 Management Reports
0808 Accidental Spill Prevention Program
0809 Chemical Hazard Communication Program
0810 Off Site Clean Waste Disposal
0811 Sewer Pump Sta. No. 4 - Flomatcher Operate

POLICY AND PROCEDURE INDEX

0812 P.A. Landfill Stormwater Pollution Prevention Plan

0900 WATER UTILITY

0901 Repairing, Tapping and Cutting Asbestos-Cement Pipe
0902 Sampling and Testing of Potable Water
0903 Backflow Prevention Policy
0904 Peabody Heights Dam Emergency Action Plan
0905 Peabody Heights Dam O&M Manual
0906 Reservoir Drawdown and Draining Procedures
0907 Water Shortage Response Plan
0908 Chemical Hazard Communication Program
0909 Access to City Facilities on Private Property
0910 Industrial Water Line Maintenance SOP

1000 SOLID WASTE DIVISION

1001 Gravel Sales at Landfill
1002 Collection Vehicle Operation
1003 Collection Vehicle Operator Training
1004 Collection Vehicle Daily Equipment Checks
1005 Collection Vehicle Operator Periodic Maintenance
1006 Vehicle Stickers Allowing Landfill Usage
1007 Landfill Employee Bloodborne Pathogen Safety
1008 Sampling and Testing of the Landfill
1009 Waste Acceptance Policy
1010 Wildlife Hazard Management Plan for Landfill
1011 Landfill Closure Plan
1012 Landfill Post-Closure Plan
1013 Chemical Hazard Communication Program - Disposal
1014 Chemical Hazard Communication Program – Collection
1015 Trash Management Plan

1100 BUILDING DIVISION

1101 Building Permit Fees
1102 Building Permit Plan Submittal and Review
1103 Certificate of Occupancy for New/Change in Use
1104 Project Concept Review Committee
1105 House Move Permits
1106 Courtesy Inspections or Construction Inquiries
1107 Design Assistance
1108 Permit Issuance for Warranty Work
1109 Building Permit Expiration Notification
1110 Bed and Breakfast Permit Procedures
1111 Mobile Home installation
1112 Sign Area Interpretation
1113 A-Frame Signs
1114 Fuel Burning Appliances and Chimneys
1115 Restrooms in Buildings with Public Access Interpretation and Restaurants
1116 Site and Foundation Drainage
1117 Driveway Access on Corner Lots
1118 Vertical Rebar in Footings/Foundations
1119 Removal or Placement of Underground Fuel Tanks
1120 Rated and Non-Rated Plywood
1121 Re-Roof Over Cedar Shingles
1122 How to Obtain a Building Permit for Residential Work
1123 Evaluation and Assessment of Buildings and Other Structures After an Earthquake or Other Disaster
1124 Abatement of a Dangerous Structure
1125 Plan Review of Non-Residential Energy

0850 STORMWATER

0851 Corps Yard Stormwater Pollution Prevention Plan

1200 POWER MANAGEMENT/CONSERVATION

1201 Fuel Cell, Solar, Wind, Hydropower Net Metering
1202 Placement of Telecommunications Facilities

1300 ELECTRIC UTILITY

1301-01 Service Area Agreement
1301-02 Service Wheeling Agreement
1301 Service Territory
1302 Electric Utility Line Extensions
1303 Service Upgrades and Maintenance
1304 Overhead to Underground Conversions
1305 Electric Utility Easements
1306 Lighting
1307 Utility Joint Use Poles
1308 Current Diversion
1310 Vegetation Control
1311 Chemical Hazard Communication Program
1312 Light Operations Accident Prevention Program
1313 Flame Resistant Clothing
1314 Streetlight Pole Banner Policy
1315 Metering Responsibilities and Functions

1400 RECREATION

1401 The Gateway Usage Policy
1402 Community Athletics Programs Non-Discrimination Policy
1403 Recreation Division Hiring Policy

9000 INDIVIDUAL FORMS

9001 Vacation Request
9002 Conference and Workshop Report
9003 Early Check Request
9004 Private Vehicle Mileage Request
9005 Hold Harmless for Entry Onto Private Property
9006 Construction Code Board of Appeals Handout
9007 deleted - see 1124_01
9008a PW Department Route Slip - Engineering
9008b PW Department Route Slip - Divisions
9009 Temporary Construction Easement
9010 Handout Cover - Counter Service
9011 Handout - Counter Service Comment Page
9012 Storm Event Complaint Form
9013 Document Recording Cover Sheet
9014 Landfill Operations Inspection Form
9015 Landfill Random Waste Inspection Report
9016 Route Slip - everyone [8/99]

9500 MONTHLY REPORT FORMS

APPENDIX E

List of Construction Source Control and Runoff BMPs (2019 SWMMWW, Volume II)

- **II-3.2 Construction Source Control BMPs**
  - BMP C101: Preserving Natural Vegetation
  - BMP C102: Buffer Zones
  - BMP C103: High-Visibility Fence
  - BMP C105: Stabilized Construction Access
  - BMP C106: Wheel Wash
  - BMP C107: Construction Road / Parking Area Stabilization
  - BMP C120: Temporary and Permanent Seeding
  - BMP C121: Mulching
  - BMP C122: Nets and Blankets
  - BMP C123: Plastic Covering
  - BMP C124: Sodding
  - BMP C125: Topsoiling / Composting
  - BMP C126: Polyacrylamide (PAM) for Soil Erosion Protection
  - BMP C130: Surface Roughening
  - BMP C131: Gradient Terraces
  - BMP C140: Dust Control
  - BMP C150: Materials on Hand
  - BMP C151: Concrete Handling
  - BMP C152: Sawcutting and Surfacing Pollution Prevention
  - BMP C153: Material Delivery, Storage, and Containment
  - BMP C154: Concrete Washout Area
  - BMP C160: Certified Erosion and Sediment Control Lead
  - BMP C162: Scheduling
- **II-3.3 Construction Runoff BMPs**
  - BMP C200: Interceptor Dike and Swale
  - BMP C201: Grass-Lined Channels
  - BMP C202: Riprap Channel Lining
  - BMP C203: Water Bars
  - BMP C204: Pipe Slope Drains
  - BMP C205: Subsurface Drains
  - BMP C206: Level Spreader
  - BMP C207: Check Dams
  - BMP C208: Triangular Silt Dike (TSD)
  - BMP C209: Outlet Protection
  - BMP C220: Inlet Protection
  - BMP C231: Brush Barrier
  - BMP C232: Gravel Filter Berm
  - BMP C233: Silt Fence
  - BMP C234: Vegetated Strip
  - BMP C235: Wattles

- BMP C236: Vegetative Filtration
- BMP C240: Sediment Trap
- BMP C241: Sediment Pond (Temporary)
- BMP C250: Construction Stormwater Chemical Treatment
- BMP C251: Construction Stormwater Filtration
- BMP C252: Treating and Disposing of High pH Water

This page left intentionally blank.

Stormwater Pollution Prevention Plan (SWPPP)

for:

Maintenance Facility ("Corp Yard")
1703 South B Street Port Angeles, WA 98362
Public Works and Utilities
City of Port Angeles

In compliance with S5.C.7.f of Washington State Department of Ecology's
2019-2024 Western Washington Phase II Municipal Stormwater Permit

SWPPP Origination Date: August, 2007

Substantial SWPPP Update:

September 23, 2022

_____
Eric Wheatley,
Deputy Director of Operations

_____
Jonathan Boehme, P.E.
City Engineer

_____
Mike Healy
Interim Director of Public Works

Contents

1 Introduction and Contact Information 2
1.1 Facility Information 2
1.2 Contact Information/Responsible Parties 2
1.3 Background 3
1.3.1 Goals and Objectives 3
1.3.2 Plan Organization 4
1.4 Updates to this SWPPP 4
1.5 Revisions 4
1.6 Stormwater Pollution Prevention Team 5
2 Facility Assessment 5
2.1 Facility Description 5
2.1.1 Activity 7
2.1.2 Regular Business Hours 8
2.1.3 General Layout 8
2.1.4 Drainage 8
2.2 Activity, Materials Inventory, and Associated Pollutants 9
2.2 Spills and Leaks 15
3 Best Management Practices (BMPs) 16
3.1 Operational Source Control BMPs 18
3.1.1 Good Housekeeping 18
3.1.2 Preventative Maintenance 19
3.1.3 Spill Prevention and Emergency Cleanup: 20
3.1.4 Employee Training 21
3.1.5 Inspections, Reporting, and Recordkeeping 21
3.1.6 Illicit Discharges and Dry Weather Inspections 22
3.2 Structural Source Control BMPs 23
3.3 Treatment BMPs 23
3.4 Erosion and Sediment Control BMPs 24
4 Monitoring Plan 24
5 References 26
SWPPP Appendices 27
Appendix A – Summary of Prior Plan Revisions A1
Appendix B – List of Definitions B1
Appendix C – Weather Inspection Forms C1
Appendix D – Spill and Leak Log D1
Appendix E – Employee Training Log E1
Appendix F – SWPPP Certification Form F1

List of Figures

Figure 1. General Location Map 6
Figure 2. Vicinity Map 7
Figure 3. Site Map 11

List of Tables

Table 1. Pollution Prevention Team 5
Table 2. Significant Materials Exposed to Rainfall 13
Table 3. Areas Associated with Pollution Generating Activity 14
Table 4. Areas of Site Where Potential Spills/Leaks Could Occur 16
Table 5. Summary of Site BMPs 17
Table 6. Good Housekeeping 18
Table 7. Preventative Maintenance 19
Table 8. Inspections 21
Table 9 Treatment BMPs 24
Table 10. Site Discharge Locations 25

QUICK REFERENCE GUIDE

This Stormwater Pollution Prevention Plan (SWPPP) contains detailed information needed to perform and maintain Best Management Practices (BMPs) to prevent stormwater pollution. The following table summarizes the primary action items that the users of the plan will perform on a recurring basis.

Frequency	Action
Per Event (daily)	P2 team and other facility personnel note spills, leaks, and other possible pollutants to stormwater system. Note: part of the facility's surface water drainage connects to the sanitary sewer as shown on the site map (Figure 1). • Notify P2 team leader of problems. • Note changes to facility that could affect stormwater quality and notify P2 team leader.
Dry Season July – Sept	• Conduct one dry-weather inspection during the period July-September after 7 days dry weather (complete Appendix C Form 1) • Prior to start of the wet season, remove accumulated sediments in catch basins and other BMPs; clean up debris, old equipment, and other materials exposed to rainfall
Wet Season Oct – June	• Conduct quarterly wet weather monitoring once per quarter in each of three quarters during the period October-June (complete Appendix C Form 2)
Quarterly	• Inspect all material storage areas, areas of industrial activity and BMPs, perform maintenance as needed once per quarter (complete Appendix C Form 3)
Annual	• Conduct employee training (complete Appendix E Form)
As needed	• Update SWPPP to maintain relevancy with the facility

1 Introduction and Contact Information

1.1 Facility Information

Facility Information

Name of Facility: City of Port Angeles Public Works and Utilities Maintenance Facility ("Corp Yard")

Street: 1703 South B Street

City: Port Angeles State: WA ZIP Code: 98362

County: Clallam

Latitude: 48°6'40" N Longitude: 123°27'38" W

Total area of the site: 9.04 (acres)

Estimated area of activity at site exposed to stormwater: 3.73 (acres)

Discharge Information

Does this facility discharge stormwater into surface waters? ☐ Yes ☒ No

Does this facility discharge stormwater into a municipal storm water conveyance system (MS4)? ☒ Yes ☐ No

Estimated area of the site tributary to the MS4: 4.04 (acres)

1.2 Contact Information/Responsible Parties

Facility Operator (s):

Name: Deputy Director of Operations
Address: 1703 South B Street
City, State, Zip Code: Port Angeles, WA 98362
Telephone Number: (360) 417-4802
Email address: Publicworks@cityofpa.us
Fax number: (360) 417-4709

Facility Owner (s):

Name: Director of Public Works
Address: 321 E. 5th Street
City, State, Zip Code: Port Angeles, WA 98362
Telephone Number: (360) 417-4801
Email address: Publicworks@cityofpa.us
Fax number: (360) 417-4709

SWPPP Contact:

Name: Street / Stormwater Superintendent
Telephone number: (360) 417-4825
Email address: IllicitDischarge@cityofpa.us
Fax number: (360) 417-4709

1.3 Background

This SWPPP applies to the City of Port Angeles (City) Public Works and Utilities Maintenance and Operations Facility (also known as the "Corp yard"), located at 1703 South B Street, Port Angeles, WA 98362 (Figure 1). This SWPPP provides a facility assessment, which includes a site map, inventory of activities and materials, and discussion of where potential spills and leaks could occur; and identifies the related maintenance, monitoring and inspection of stormwater best management practices (BMPs) on-site.

This facility is subject to the Western Washington Phase II Municipal Stormwater Permit (MS4 Permit); a National Pollution Discharge Elimination System (NPDES) permit administered by the Washington State Department of Ecology (WDOE 2019B). The site's original SWPPP was developed in August 2007 with periodic updates being performed over the years as necessary to maintain relevancy with the facility and the permit. This SWPPP update has been performed in accordance with S5.C.8.f of the 2019-2024 MS4 permit (WDOE 2019B).

While the Industrial Stormwater General Permit (ISGP) SWPPP Template was used as a basis for document organization, this facility is not subject to an NPDES Industrial Stormwater General Permit (ISGP) as activities categorically requiring ISPG coverage are not performed at this location (WDOE 2019A).

Regarding stormwater runoff and site utilization; the site has been divided into three tributary basins: areas tributary to the MS4, areas tributary to the sanitary sewer system, and areas tributary to a vegetated closed depressional area with no stormwater outlet. In general, pollution generating activities that cannot be performed or housed under cover, are performed in areas with inlets connected to the sanitary sewer system. The onsite stormwater system consists of various stormwater catch basins connected into conveyance tied into the City's MS4 that eventually discharges to Tumwater Creek. Aside from some minor vegetative filtration and a few grass-lined conveyance ditches, there are no onsite stormwater treatment or detention/retention facilities maintained on the site.

1.3.1 Goals and Objectives

This SWPPP is intended to satisfy the following goals:

1. To implement and maintain Best Management Practices (BMPs) that identify, reduce, eliminate, and/or prevent the discharge of stormwater pollutants;
2. To prevent violations of surface water quality, ground water quality, or sediment management standards; and
3. To eliminate the discharges of unpermitted process wastewater, domestic wastewater, non-contact cooling water, and other illicit discharges to stormwater drainage systems.

Given these goals, the plan provides for satisfying the following objectives:

1. Identify potential sources of stormwater pollution that may affect the quality of stormwater discharges associated with the City's Public Works and Utilities Department maintenance facility operations;
2. Evaluate the potential for stormwater contamination from these sources;
3. Identify the stormwater BMPs that will be used at the facility for the prevention and control of pollutants in stormwater discharges; and
4. Identify operation, maintenance, inspections, monitoring and record keeping needed for these BMPs.

The SWPPP will be reviewed by the City's Pollution Prevention (P2) Team annually to ensure that the elements of the plan are effective. Modifications to the SWPPP will be made as needed to reflect changing conditions at the facility, such as new or differing operations, facility modifications, and BMPs.

1.3.2 Plan Organization

The SWPPP has been prepared to follow the general requirements as appropriate in the Guidance Manual for Preparing/Updating a Stormwater Pollution Prevention Plan for Industrial Facilities issued by the WA Department of Ecology (WDOE 2004) and the Stormwater Management Manual for Western Washington (WDOE 2019C). While this guidance manual applies to certain facilities covered under the ISGP, the Corp Yard facility is not covered by the ISGP. Blank copies of inspection and record keeping forms are contained in the Appendix.

A new light utility building is proposed to be built north of Building M, outside the site boundaries (Figure 2). This building will have its own operational SWPPP and will most-likely not be included in future revisions of this SWPPP.

1.4 Updates to this SWPPP

Major updates to this SWPPP include the following:

- Applied the Washington State Department of Ecology's (2022) SWPPP template as the basis
- Updated and improved accuracy of site map (Figure 2) and associated description of activities
- Updated and verified contacts and responsibilities
- Added information regarding the drainage of Area #2 and improvements that will be made
- Improved navigability with bookmarks and links

See Appendix A for detailed documentation on this and previous updates of this SWPPP.

1.5 Revisions

This SWPPP should be revised for significant updates that affect BMPs, the facility (activities, materials, and drainage) or other reasons that could significantly affect stormwater quality. Revisions for typographical errors in the SWPPP or improving the quality of the map or other changes that are more administrative in

function would not require a revision to the SWPPP. Facility information that could be subject to change is contained in summary tables and a site map (Figure 2) that can be readily updated as needed in the future and attached to the SWPPP as amendments.

1.6 Stormwater Pollution Prevention Team

An important part of this SWPPP and a principal BMP is the City's Stormwater Pollution Prevention (P2) Team, with specific roles and responsibilities as identified in Table 1. This table should be updated as roles and responsibilities change.

Table 1. Pollution Prevention Team

Staff Names and/or Title	Individual Responsibilities
Street and Stormwater Superintendent	P2 Team Leader is responsible for implementing the SWPPP, coordinating with other users of the facility, and providing administrative support and coordination for all aspects of reporting
Fleet Manager, Equipment Services Division	Performs/Reviews BMPs and provides updates for SWPPP as necessary for Automotive maintenance shop, fueling, and used fluid management
Stormwater Leadworker	Performs SWPPP inspections, visual monitoring, and maintains the SWPPP inspection forms and records
Street and Stormwater Superintendent	Performs/Reviews BMPs and provides updates for SWPPP as necessary for maintenance, sweeping, cleaning sewer/storm lines and catch-basins, and aggregate stockpile control
Superintendent, Water/Wastewater Division	Performs/Reviews BMPs and provides updates for SWPPP as necessary for oil-water separator (OWS), vehicle wsh area, mowing of berms and swales, and aggregate stockpile control
Engineering Division	Supports Operations with permit compliance and reporting, SWPPP updates, and annual staff training
Deputy Director of Light Operations	Performs/Reviews BMPs and provides updates for SWPPP as necessary for Transformer yard management, Spill Prevention, Control, and Countermeasure (SPCC) plan (Parametrix 2003) implementation & training
Deputy Director of Public Works and Utilities	Oversees the Facility and implementation of the SWPPP.

2 Facility Assessment

2.1 *Facility Description*

This approximately nine-acre site is located in the southwest portion of the City of Port Angeles, Washington (Figure 1). The facility is bounded by A and B streets and Tumwater Truck Route on the West and East sides, and 16th Street and Lauridsen Blvd on the North and South sides, respectively (Figure 2).

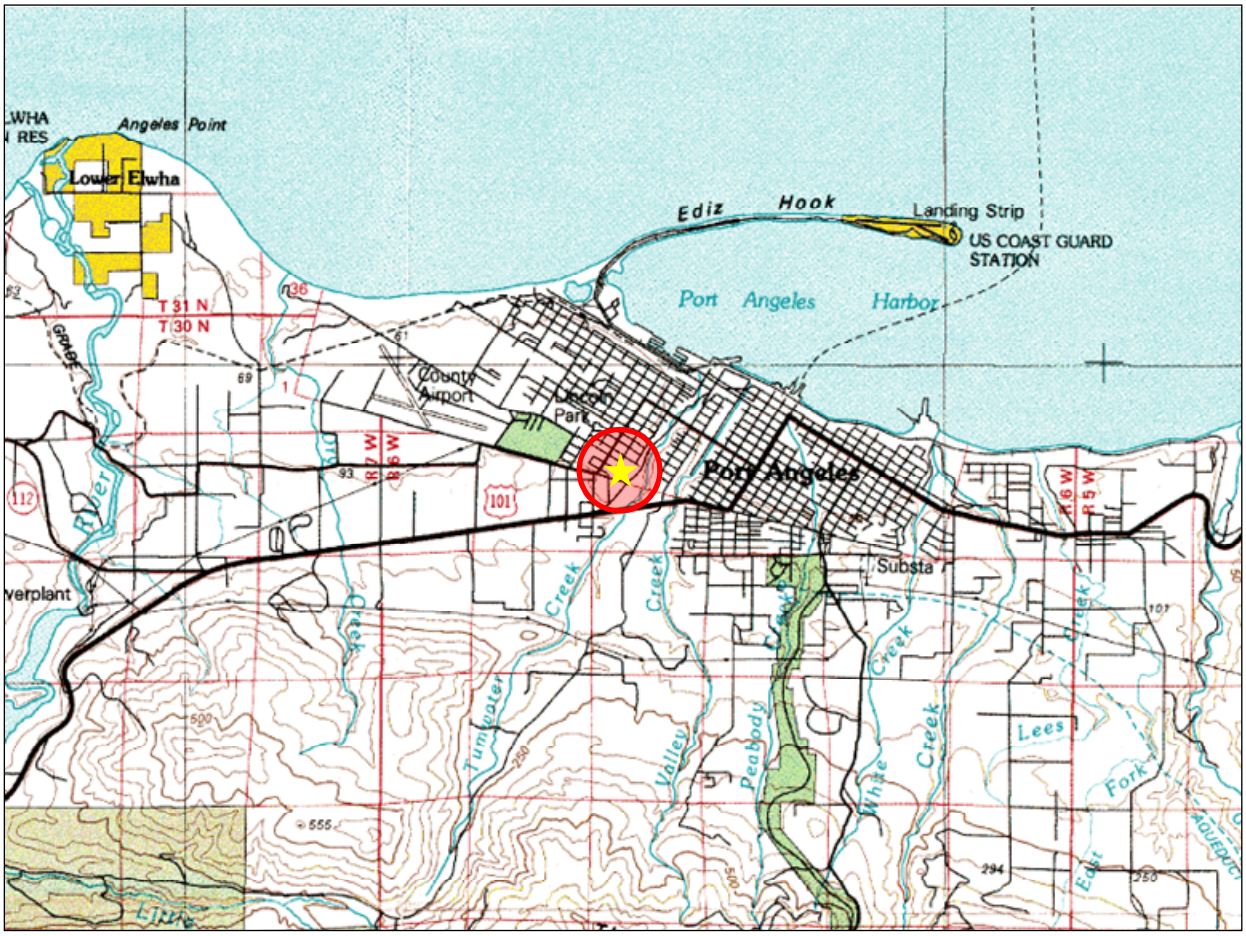


Figure 1. General Location Map

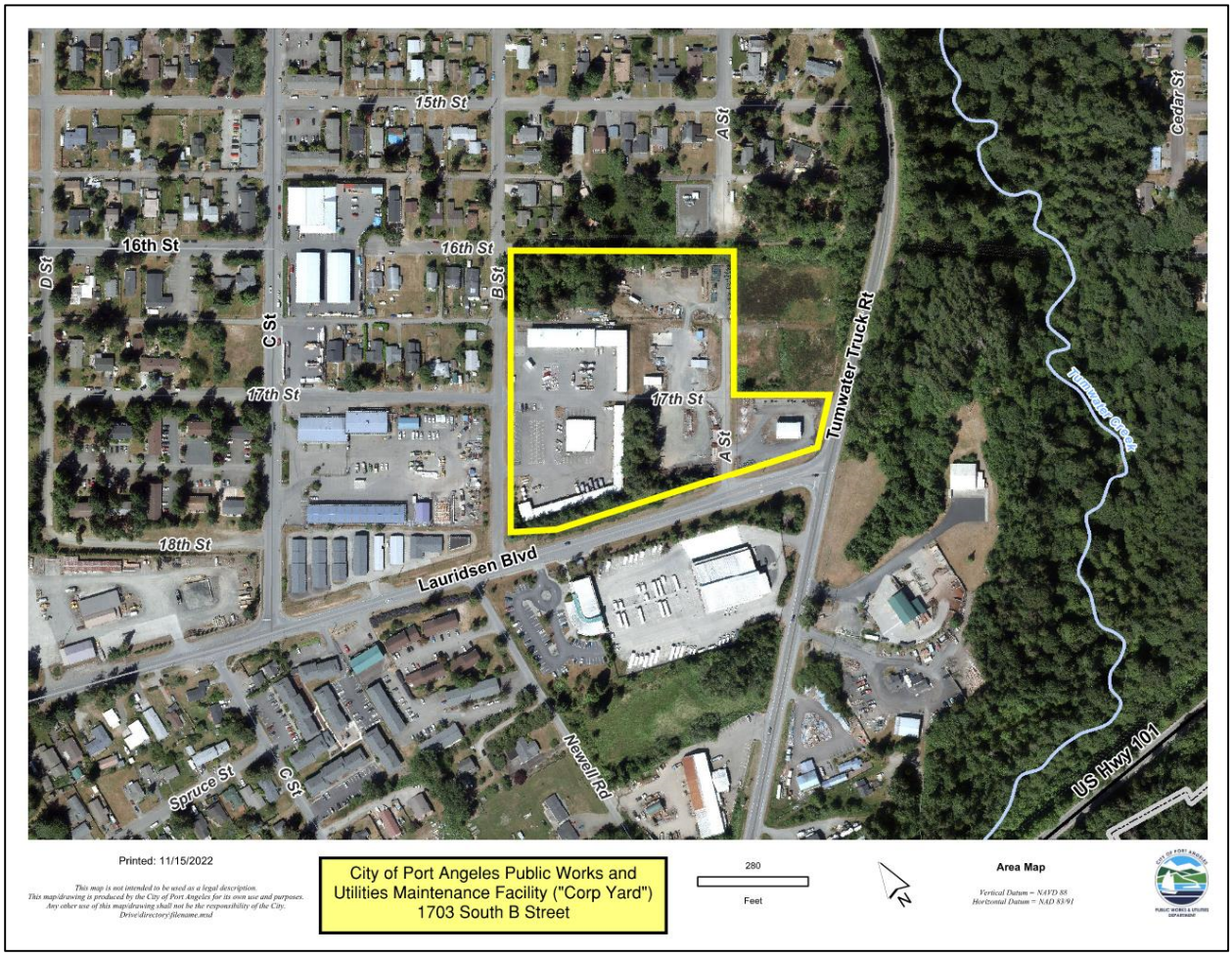


Figure 2. Vicinity Map

2.1.1 Activity

This facility primarily serves as a launching and landing site for Public Works Operations (Sanitary, Storm, Streets, Solid Waste, & Water) in support of maintenance, repair, and improvement activities and projects throughout the community. Other departments periodically frequent the site to use the fueling station and to receive vehicle maintenance. Secondary activities routinely occurring at the site include:

- Fleet vehicle maintenance and fueling
- Warehousing and storage of materials incidental to the performance of services, such as
    - Pipe, valves, meters, fixtures, structures, rings, covers, cans, signs, and other appurtenances necessary to support public works utilities
    - Aggregates and surfacing materials necessary for backfill, utility bedding, and re-surfacing
    - Transformers and utility poles
    - Winter road safety materials (traction sand, de-icer, equipment)

- Vehicle and equipment washing in the wash facility
- Staging of public works vehicles in buildings and paved areas (cars, shop trucks, heavy equipment, sweepers, eductor "vactor" trucks, solid waste trucks, etc.)
- Employee Parking

Section 2.2 provides more detailed, area-by-area breakdown of routine activities performed onsite.

2.1.2 Regular Business Hours

The Corp Yard is not open to the public. Operational hours for employees are typically between 7:00 am and 3:30 pm, Monday through Friday, with scheduled closures during all major national holidays. Scheduled and unscheduled variances from the standard work schedule are common and necessary to perform night work, seasonal work, or to respond to an emergency.

2.1.3 General Layout

The general layout of the site is shown on the Site Map provided in Figure 3. There are five material storage yards marked on the map. These areas do not have constructed drainage systems, and only one (Area 5) is paved. The others are gravel-surfaced. The buildings and the vehicle wash facility provide various uses as described in detail below in this section. The vehicle wash facility was installed in 2015. The wash facility design does not permit wash water to flow outside of the confines of the facility and the facility drains into sanitary sewer after going through sediment and oil/water separators.

The site map is based on site visits performed by City staff, a compilation of existing maps provided by the City, and flow/dye testing performed by the City in 2006. This map should be updated as needed for significant facility or operational changes.

2.1.4 Drainage

Approximately one half of the paved areas and some rooftop areas drain to the local sanitary (combined) sewer, while the remainder of the paved areas and rooftops drain to a separate storm drainage system (Figure 3). The storm drainage leaves the site via the drainage lines along A Street and eventually discharges to Tumwater Creek. Drainage from other private and public lands combine in this conveyance system before discharging at the 11th Street outfall to Tumwater Creek.

Tumwater creek is approximately 5 miles in length and is one of several relatively small creeks that drain north from the foothills through the City to the Port Angeles Harbor in this portion of WRIA 18. The last 1.5 mile (approximate) of the creek passes through the City limits and flows in a wooded ravine adjacent to the Tumwater Truck Route (State Route 117). The facility covered by this SWPPP is approximately adjacent to river mile 1.3 of Tumwater Creek, just north of the Highway 101 crossing. This creek was placed in a Category 5 status for fecal coliform bacteria on the 2004 §303(d) list[1]. The Department of Ecology reports

[1] A category 5 listing in the WA State Water Quality Assessment places a water body on the §303(d) list of the Clean Water Act. A category 5 listing indicates that Ecology has data showing that the water quality standards have been exceeded for one or more pollutants, and there is no TMDL (total maximum daily load, also known as a "water clean up plan") or pollution control plan already in place. TMDLs will eventually be required for the water bodies in this category. In the case of Tumwater Creek, the 2004 Category 5 listing is based on third party data that indicate periodic exceedances of fecal coliform criteria, though much of the data appear to

Tumwater Creek is currently 303(d) listed for fecal coliform bacteria with the most recent assessment being performed in 2018.

As shown on Figure 2, the principal storm drain line that crosses the facility contains drainage from up gradient entities not related to this facility (such as the WSDOT maintenance facility immediately to the west). Thus, the apparent outfall to Tumwater creek would be expected to convey runoff from multiple sources, properties and jurisdictions.

Ordinarily, rainfall on Area 2 primarily infiltrates and does not channelize. However, as of recent, during heavy rain events, it has been observed to channelize and flow towards/along A Street shoulder and enter MH1 and possibly CB4. This runoff can be turbid due to uncovered material stockpiles. An O&M project has been scheduled for 2023 to re-define the grassy swale that eventually leads to CB4 and upgrade it with stormwater check dams to provide filtration, settling, and storage.

2.2 Activity, Materials Inventory, and Associated Pollutants

Activities that have the potential to generate pollutants take place under cover or in areas connected to the sanitary sewer system. On the south side of the site, pre-existing catch basins (SS1 and SS9) were strategically disconnected from storm and connected into the nearby sanitary system. Some minor uncovered equipment servicing takes place in this area along with staging of garbage tucks, which inherently have a potential to pollute. On the north side of the site, area drains SS2-SS6 are also connected to the sanitary system as vehicles requiring servicing in the covered maintenance facility are staged in this area. As shown on Figure 3, most of the employee parking lot and some of the vehicle staging areas are tributary to stormwater.

Transformer storage and dispositioning operations take place in the Area #1 storage yard and Building M. New transformers are temporarily stored in this location until installation, and used transformers are temporarily stored after oil is removed in Building M (oil is disposed offsite by a contractor). These activities have an existing spill prevention, control and countermeasure (SPCC) plan that is cross-referenced in this SWPPP (Parametrix, 2003). This SPCC plan was most-recently updated in Fall 2022.

Leaky transformers or transformers otherwise retired from service are stored inside Building M per the SPCC. Transformer oil is removed from old units and transferred into drums inside this building. The building floor slopes to the center, has no drain and was designed specifically to provide secondary containment for potential spills. An SPCC plan covers this facility and provides for training and BMPs during bulk oil transfer to tanker trucks outside on the paved apron (Parametrix, 2003). There are no direct drainage connections to the storm water system from Building M or from the paved area around it. The storm drainage line shown on the site map (Figure 3) that collects offsite runoff and passes under the transformer storage building does not receive any drainage from this area.

Previous versions of this document report that the building (Building M) has two roof gutter downspouts that do not connect to the drainage system, but are connected to a French drain. A review of the construction plans was not able to confirm the existence of French drains, however, Staff also was not able to disprove

indicate relatively low levels that meet the criteria. Other similar creeks in the vicinity also have various categories of listing for fecal coliforms, a common situation for urban and rural streams but not necessarily indicative of a direct public health risk.

their existence either. The paved surfaces in this area have a constructed drainage system consisting of an oil/water separator that is tied into sanitary sewer. Asphalt curbing has been installed around the perimeter of the facility and contains runoff so that it is no longer able to infiltrate the soil by passing under the fence to the area of grass cover along Tumwater Truck Route, State Route (SR) 117. All runoff is directed into the oil/water separator on site and into the City's sanitary sewer system.

Traffic marking paint, the paint sprayer, misc. tools, and landscape control materials are stored inside Building K. The building is outfitted with an emergency water sprinkler system and secondary containment is provided for all liquid storage containers.

Table 2 details significant materials exposed to rainfall and the associated method of storage. The majority of these materials are resources incidental to the performance of offsite utility repairs and road maintenance, including aggregate and traction sand. Waste materials, such as catch basin sediments and street sweepings, are not stored onsite; they are dewatered and managed at the City's transfer station. Areas of site activity are further summarized in Table 3.

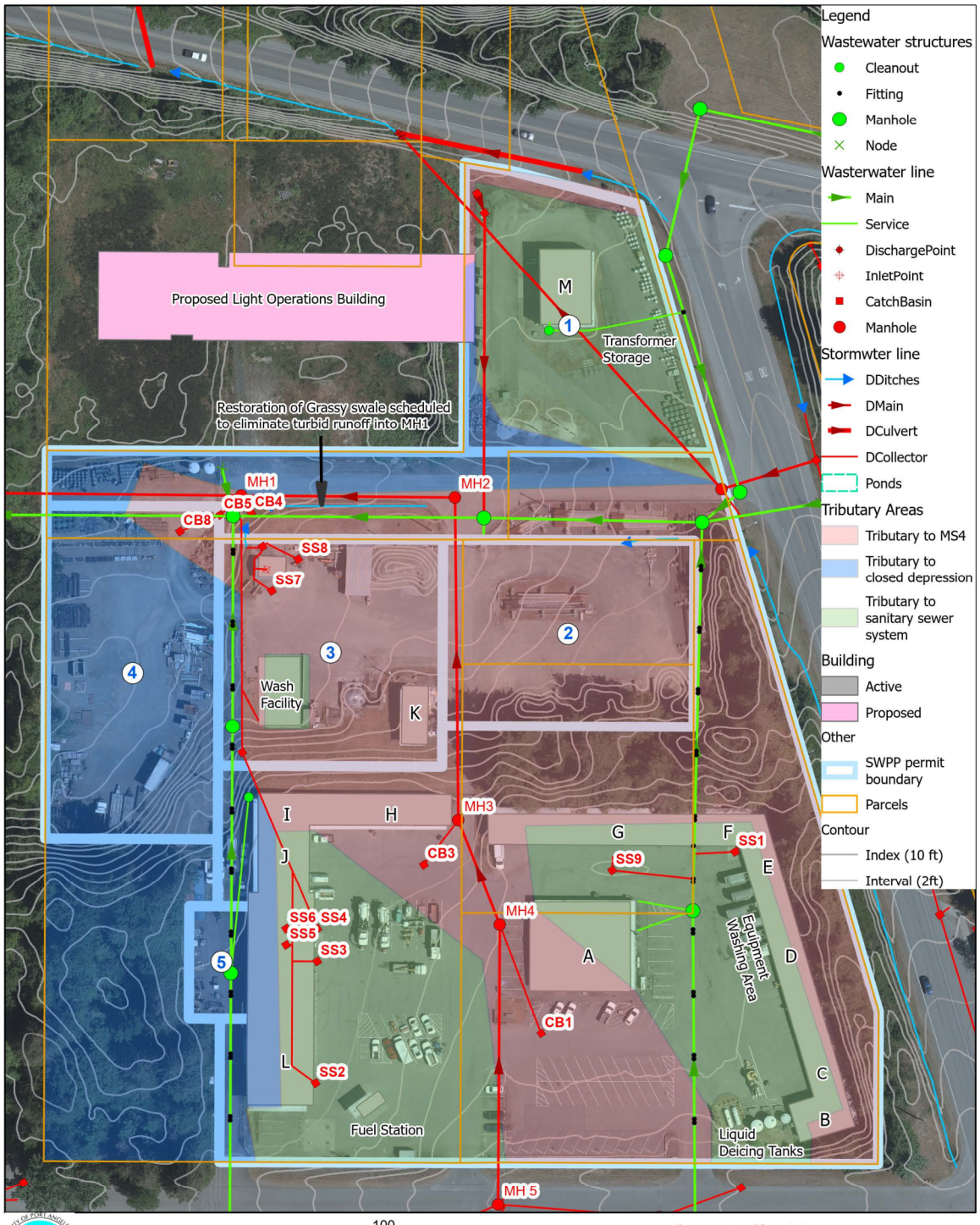


Figure 3. Site Map

This page left intentionally blank.

Table 2. Significant Materials Exposed to Rainfall

List of Significant Materials	Period of Possible Exposure	Quantity of Possible Exposure	Areas	Method of storage, handling, treatment, or disposal
New transformers	Continuous	varies up to approx. 200	Area #1	Stored outside Building M, connected to sanitary sewer.
Used transformers (good condition)	Loading, unloading	varies up to approx. 100	Area #1	Stored outside Building M, connected to sanitary sewer.
Transformer oil	Loading, unloading	varies up to approx. 300 gal.	Area #1	New oil stored inside Building M, used oil transferred offsite per SPCC plan. Area connected to sanitary sewer.
Utility poles: wood, concrete, metal, fiberglass	Continuous	varies	Area #2	New and used poles stored outside in unpaved areas with no direct connection to storm drainage system. Area #2 is tributary to CB4 during heavy rain events. Vegetated swale with check dams provide runoff treatment.
Sand, gravel	Continuous	approx. 300 yd3	Areas #2 & #3	Traction sand is stored in covered bulk pile in an unpaved area. Other piles are contained in ecology block bins. Area #3 drains to CB6, CB7 and into grass swale, which ordinarily drains to stormwater CB4 and CB5.
Miscellaneous drainage and utility equipment	continuous	Varies	Areas #4 & #5	Uncovered storage for equipment (culverts, pipe, structures, rings, covers, valves, cans, etc) going into or recently taken out of service. Stored outside in unpaved areas with no direct connection to storm drainage system. Areas #4 & #5 are predominantly tributary to closed depressional area with no known outlet.
Liquid roadway deicer (mag. chloride)	Loading, unloading, dispensing	Two 6,500 Gal Tanks	SW corner of site near Building B	Bulk roadway deicing fluid (magnesium chloride) is stored outside in two above ground 6,500 gallon tanks and dispensed on site. Area drains to SS9, which is connected to sanitary sewer.
Salt Brine	Loading, unloading, dispensing	One 3,000 Gal Tank	SW corner of site near Building B	Salt brine is in stored one above ground 3,000 gallon tank. Area drains to SS9.
Roadway Salt	Loading, unloading, dispensing	Approx. 30 tons	Area #3	Stored in eco block bins with roof and each pile also covered with tarps.

List of Significant Materials	Period of Possible Exposure	Quantity of Possible Exposure	Areas	Method of storage, handling, treatment, or disposal
Vehicle fuel (gasoline and diesel)	Loading, unloading, dispensing	None (in Underground Storage Tank [UST])	Fuel Station near NW corner of site	Stored in USTs. Area around the fuel island is tributary to inlets connected to the sanitary sewer system.
Crack Seal Material	Loading, unloading, dispensing	None, under cover	Inside Buildings E and F	One to two drums of cold-flow asphalt product are stored inside Building F.
Maintenance Materials (cold mix asphalt, topsoil)	Continuous	Varies up to ~20 yd^3 of each	Areas #2 & 3	Stockpiles contained in wooden bins in Area #3, which drains to CB6, CB7 and into grass lined swale and into CB4 and CB5. Area #2 has no direct storm drainage system. Both areas tributary to stormwater under heavy rainfall.
Incidental vehicle sources	Periodic	Varies	Paved parking areas	Incidental leaks and drips of lubricants, coolant, and other emissions from personal and fleet vehicles parked onsite. Much of the paved parking areas drain to the sanitary sewer via inlets SS1-SS4 and SS9, some parking drains to CB1, and CB3.
Miscellaneous equipment removed from service and utility poles (new and used)			Portions of Areas #1, 2, and 4	Stored in unpaved (gravel) portions of the listed locations. Area #1 is connected to the sanitary sewer system. Runoff primarily infiltrates in areas 3 & 4. Area 4 is tributary to CB4 during heavy rainfall events.

Table 3. Areas Associated with Pollution Generating Activity

Activity	Location	Likelihood and Reason for Pollutants Being Present in a Stormwater Discharge
Road maintenance material piles (sand/covered, salt/covered aggregate/uncovered)	Storage area 2,3	Possible during heavy rainfall events: Area #3 drains to CB6, CB7, which drain to grass swale to storm drain CB4. Area #2 has no direct storm drainage system, however, is tributary to CB4. Improvements to vegetated swale with check dams scheduled for 2023 to further reduce risk of discharge.
Outside vehicle/equipment washing	Storage Area #3	Not likely: Vehicle wash facility design does not permit wash water to flow outside of the confines of the facility and the facility drains into sanitary sewer after going through sediment and oil/water separators.
Outside vehicle/equipment washing	Building E & F	Not likely: Drains to sanitary sewer at SS1, unlikely to drain or be tracked to adjacent storm drainage area due to steep grading in the area around the wash station.

Activity	Location	Likelihood and Reason for Pollutants Being Present in a Stormwater Discharge
Bulk liquid roadway deicer (mag. Chloride) storage and transfer, two 6,500 gal tanks	Building B	Not likely: Leaks or spills would drain to sanitary sewer (SS9).
Bulk liquid roadway deicer (salt brine) storage and transfer, one 3,000 gal tank	Building B	Not likely: Leaks or spills would drain to sanitary sewer (SS9).
Transformer storage	Building M	Not likely, old units stored inside; covered by SPCC plan; area connected to sanitary sewer.
Fleet vehicle fueling	Fuel Island near Building L	Not likely: Work area drains to sanitary at SS2.
Fleet vehicle maintenance	Inside Building L and high bay	Not likely: Inside work area drains to sanitary floor drains inside building, high bay to SS5, SS6
Outside vehicle service and washing	Restricted to covered areas or areas tributary to SS.	Not likely: Restricted to areas tributary to sanitary sewer at SS1-SS4 and SS9.
Outside material and vehicle fluid container storage	Building L north side (Area #5)	Not likely: Uncovered miscellaneous, empty and sealed containers, small equipment, and metal resources. Offsite sheetflow to grass, no direct drain inlets to stormwater.
Outside material storage	Areas #2 & #4	Not likely: uncovered stored materials are generally inert and/or non-pollution generating. Storage areas are unpaved with well draining soils. No direct connection to stormwater. Tributary to CB4, CB5, & & CB8 during heavy rain events.

2.2 *Spills and Leaks*

The locations of potential spills would most likely be limited to the following areas and activities described in

Table 4. According to facility managers, there have been no notable spills or leaks[2] since the last update of this SWPPP (Appendix A). Significant spills and leaks or discharges into the stormwater system will be

[2] Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under Code of Washington (CWA) Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC §9602.

recorded. Minor spills and leaks are cleaned up using spill kits and are not necessary to be logged. A spill log is provided in Appendix D.

See Section 3.1.3 for more information on spill prevention and emergency cleanup.

Table 4. Areas of Site Where Potential Spills/Leaks Could Occur

Area where spill/leak could occur	Drainage to	Notes
Liquid deicer tank loading and dispensation (SW corner of site)	Sanitary sewer (SS9)	In the event of catastrophic rupture of the tanks, it is highly unlikely that the material could leak or spill and drain to the storm system. Releases could occur when these tanks are filled or when the liquid is dispensed to trucks for application in winter conditions or for dust control. Vehicle barriers have been added to protect the tanks. Routine inspections of the tanks are performed.
Vehicle fueling station (NW corner of site)	Sanitary sewer (SS2)	Spill kit onsite
Vehicle maintenance shop (Building L)	Sanitary sewer (SS2)	Storage drums have secondary containment sumps and are stored on covered racks to prevent rainfall exposure. However, small spills during handling could potentially occur on the adjacent paved area, which drains by sheetflow under the fence to a grassed area. Employee training provided and spill response kit onsite.
Transformer yard (Area 1)	N/A	Old transformers are stored inside Building M designed for spill control. Used oil is removed inside the building and stored in drums that are transferred to a disposal truck using secondary containment as covered under an SPCC Plan (Parametrix, 2003 – last update 2022).
Vehicle parking area incidental leaks or spills of fleet or private vehicle fluids	SS1-4, SS9,CB1 & CB3	All parking areas inspected for significant leaks and spills. Employee training provided. A spill cleanup kit is onsite.

3 Best Management Practices (BMPs)

Stormwater BMPs include a number of different types of structures, activities, or practices that will help prevent or reduce stormwater pollution. These BMPs fall into three general categories: source controls (operational and structural), treatment, and erosion and sediment control. The City adopts the Department of Ecology's minimum standards for BMPs as described in Volume IV of their Stormwater Management Manual for Western Washington (SWMMWW). Here is a direct link to the SWMMWW:

https://fortress.wa.gov/ecy/ezshare/wq/Permits/Flare/2019SWMMWW/2019SWMMWW.htm

Table 5 summarizes current BMPs that are being implemented at this facility. These BMPs are described in detail in Sections 3.1 through 3.4.

Table 5. Summary of Site BMPs

Type	BMP	Frequency of Performance
Operational	S453: Pollution Prevention (P2) Team (Table 1)	Ongoing
Operational	S454: Good Housekeeping	Ongoing
Operational	S454: Preventive Maintenance	Quarterly
Operational	S455: Spill Prevention and Emergency Cleanup	As needed
Operational	S456: Employee Training	Upon hire, Annually
Operational	S457: Inspections	Annually
Operational	S458: Recordkeeping & Reporting	Annually & event
Operational	S410: Illicit Discharges and Dry Weather Inspections	Ongoing
Source Control	Sanitary drainage for most outside activity	Permanent
Source Control	S431: Washing vehicles, equipment, & buildings	Permanent
Source Control	S414: Maint. And repair of vehicles and Equipment (Equip. Services)	Permanent
Source Control	S421: Parking and Storage of Vehicles and Equipment	Ongoing
Operational	S435: Pesticides and an Integrated Pest Manag. Prog.	Ongoing
Source Control	S444: Covered storage for pesticide/herbicide materials	Permanent
Source Control	Covered storage for transformer oil and used transformers	Permanent
Source Control	Factory painted metal roofing	Permanent
Source Control	S429: Covered and/or bermed bulk material storage	Permanent & As needed
Source Control	S427: Storage of Liquid or Dangerous Waste Containers	Ongoing
Source Control	Drip pans for leaking equip. parked outside	As needed
Operational	S430: Vacuum Sweeper throughout yard	As needed
Source Control	S417: Maintenance of Stormwater System (including CB sump cleaning)	Annually
Source Control	S442: Labeling Storm Drain Inlets	Renew stenciling as needed
Treatment	S416: Maintenance of Roadside Ditch (vegetated ditch along A street)	Ongoing
Treatment	Catch basins with sumps	Permanent
Treatment	Catch basin outlets with oil retention elbows	Permanent
Treatment	Oil/water separator (baffle type) for sanitary drainage to and from vehicle wash facility	Permanent
Source Control	S412: Loading and Unloading areas for Liquid or Solid material	Permanent
Source Control	S409: Fueling at dedicated stations	Ongoing
Source Control	S428: Storage of Liquids in Permanent Aboveground Tanks	Permanent

Type	BMP	Frequency of Performance
Operational	S411: Landscaping and Lawn/Veg. Management	As needed
Operational	S419: Mobile Fueling of vehicles and Heavy Equipment	As needed
Erosion and Sediment Control (ESC)	S425: Monitor wet weather runoff and inspect gravel surfaced areas (See Section 4).	Quarterly

3.1 Operational Source Control BMPs

Operational source control BMPs include activities and practices that can be implemented to prevent stormwater pollution, which include the following items:

1. Stormwater Pollution Prevention (P2) Team (Section 1.6)
2. Good housekeeping
3. Preventive maintenance
4. Spill prevention and emergency cleanup
5. Employee training
6. Inspections, reporting, and recordkeeping
7. Illicit discharges and dry weather inspections

3.1.1 Good Housekeeping

Good housekeeping involves "common sense" activities that are used to keep a clean and orderly workplace. Good housekeeping techniques help prevent rainfall from contacting materials and waste and potentially contaminating stormwater. In addition, a clean workplace helps prevent accidental spills and promotes a safer work environment. Good housekeeping practices that are utilized at the facility are listed in Table 7.

Table 6. Good Housekeeping

Activity	Frequency
Routine sweeping of paved surfaces	As needed
Vacuum paved surfaces with a vacuum sweeper (or a sweeper with a vacuum attachment) to remove accumulated pollutants	Quarterly
Periodic cleanup of debris and old equipment	Quarterly
Regular removal of trash and garbage	As needed
Routine inspection for leaks or spills	Daily
Waste and material minimization programs	Annually
Prevent bulk material piles from erosion and raveling, use covers or berms when piles not in use	After use
Use drip pans or containers under parts or vehicles that drip or that are likely to drip liquids, such as during dismantling of liquid containing parts or removal or transfer of liquids.	As needed

Do not hose down the contained stockpile area to a storm drain or a conveyance to a storm drain or to a receiving water.	Ongoing

3.1.2 Preventative Maintenance

Preventive maintenance promotes effective stormwater BMPs and minimizes the potential for facility operations to impact stormwater. Inspections help determine if the BMPs are working as intended. The preventive maintenance program consists of inspection, cleaning, and repair activities.

Table 7. Preventative Maintenance

Activity	Frequency
Clean catch basins	As needed to maintain the depth of debris reaches 60% of the sump depth or when the debris surface is less than 6 inches below the outlet pipe
Inspect all equipment	Monthly
Clean up all spills and leaks	Immediately

Personnel responsible for implementing the inspection program are identified in Section 1.6. These quarterly inspections will cover the following items using Form 3 (in Appendix C):

- All material storage areas (Table 2)
- All areas of industrial activity (Table 3)
- Source control and treatment BMPs (
- Table 5)

Particular attention is given to all equipment, pipes, valves, and tanks where spills or leaks are possible (Section 2.3). Vehicles and material transfer equipment are included in the inspections. Hoses and seals from this type of equipment frequently leak fuel, lubricants, coolants or hydraulic fluids. Leaking equipment will be taken out of service or leaks will be prevented from spilling on the ground until repaired. Spills and leaks will be cleaned up immediately (e.g., using absorbents, vacuuming, etc.) to prevent the discharge of pollutants.

A vehicle wash facility was installed in 2015 (Figure 2). The design does not permit wash water to flow outside of the confines of the facility and the facility drains into sanitary sewer after going through sediment and oil/water separators. The wash facility sump will be cleaned as needed.

Debris and trapped sediment will be removed from all catch basins with sumps once annually or more or less frequently as needed based on inspections. When possible during the wet weather season, brief inspections should also occur during and after heavy rainfall to confirm proper drainage and operation of the various BMPs.

3.1.3 Spill Prevention and Emergency Cleanup:

For the locations of potential spills and leaks see Section 2.2. An SPCC plan covers the transformers facility (Building M) and provides for training and BMPs during bulk oil transfer to tanker trucks outside on the paved apron (Parametrix, 2003 – Updated 2022).

The following BMPs are employed on site to prevent spills and respond to spills or leaks.

- Maintain a spill log that includes the following information for chemical and petroleum spills: date, time, amount, location, and reason for spill; date/time clean-up completed, notifications made and staff involved (Appendix D)
- Train employees on the safe techniques for handling materials used on the site and to check for leaks and spills (Section 3.1.4)
- Locate spill kits within 25 feet of all stationary fueling stations, fuel transfer stations, and mobile fueling units. At a minimum, spill kits shall include:
    - Oil absorbents capable of absorbing 15 gallons of fuel.
    - A storm drain plug or cover kit.
    - A non-water containment boom, a minimum of 10 feet in length with a 12-gallon absorbent capacity.
    - A non-metallic shovel.
    - Two five-gallon buckets with lids.

Current best practice guidance for Spill Prevention and Emergency Cleanup states:

> *Store all chemical liquids, fluids, and petroleum products, on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater. Prevent precipitation from accumulating in containment areas with a roof or equivalent structure or include a written plan on how it will manage and dispose of accumulated water if a containment area cover is not practical. Locate spill kits within 25 feet of all stationary fueling stations, fuel transfer stations, and mobile fueling units. At a minimum, spill kits shall include:*
>
> - *Oil absorbents capable of absorbing 15 gallons of fuel.*
> - *A storm drain plug or cover kit.*
> - *A non-water containment boom, a minimum of 10 feet in length with a 12 gallon absorbent capacity.*
> - *A non-metallic shovel.*
> - *Two five-gallon buckets with lids.*
>
> *Do not lock shut-off fueling nozzles in the open position. Do not "topoff" tanks being refueled. Block, plug or cover storm drains that receive runoff from areas where fueling, during fueling. Use drip pans or equivalent containment measures during all petroleum transfer operations. Locate materials, equipment, and activities so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas). Use drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible. Drain fluids from equipment and vehicles prior to on-site storage or disposal. Maintain a spill log that includes the following information for chemical and petroleum spills: date, time, amount, location, and reason for spill; date/time clean-up completed, notifications made and staff involved.*

3.1.4 Employee Training

Employee training should familiarize all employees with the intent and components of the SWPPP. Training will be provided for all existing employees on an annual basis and for all new employees when they begin work at the facility. The content of the training will include, at a minimum:

- An overview of what is in the SWPPP
- How employees make a difference in complying with the SWPPP and preventing contamination of stormwater
- Spill response procedures, good housekeeping, maintenance requirements, and material management practices

In addition to this annual training, personnel are to be reminded of the objectives and specifics of the SWPPP requirements during the routine safety training sessions, such as tailboards. Training identified in the SPCC plan for transformer yard operations will also be implemented (Parametrix, 2003).

A worksheet is provided in the Appendix E to help keep records of the employees who have completed the training program. This form will be completed annually and kept in the SWPPP file. A log of the dates on which specific employees received training will also be kept in the SWPPP file.

3.1.5 Inspections, Reporting, and Recordkeeping

Inspections

Personnel responsible for implementing the Preventive Maintenance (PM) Inspections and keeping records are identified in Section 1.6, with inspection types and frequencies identified in this section. Use Form 3 (Appendix C) for recording these quarterly PM inspections.

In addition to the quarterly PM inspections, two other types of inspections will be implemented. Wet season monitoring will be conducted once each quarter during the three wet season quarters (October-June). A dry season inspection will be conducted once each year for the purpose of identifying non- stormwater discharges. See Section 3.1.6 (Illicit Discharges and Dry Weather Inspections) and Section 4 (Monitoring Plan) for instructions on conducting these inspections, associated Forms 1 and 2 respectively (see Appendix C). Inspections to be conducted are summarized in Table 8.

Table 8. Inspections

Inspection	Frequency	Section	Forms
Preventative Maintenance Inspections	Quarterly	Section 3.1.2	Form 3, Appendix C
Wet Season Monitoring	Quarterly during wet season (October to June)	Section 4	Form 2, Appendix C
Dry Season Inspection	Once each during dry season (July to September	Section 3.1.6	Form 1, Appendix C

Recordkeeping

All records of inspections and training and other information will be maintained for a 5-year period, including:

- Annual dry weather non-stormwater inspection (Appendix C Form 1, one per year)
- Quarterly wet weather inspections (Appendix C Form 2, three per year during the wet season)
- Quarterly Preventative Maintenance inspections (Appendix C Form 3, four per year)
- Training (Appendix E, one per year)
- Spills (Appendix D)
- Modifications to the facility that require changes to this SWPPP
- Changes to this SWPPP

All records will be collected in a SWPPP file kept onsite and shall include the following information:

- Date and name of individual recording the information
- Areas and/or activities affected
- Problems found
- Corrective actions taken

3.1.6 Illicit Discharges and Dry Weather Inspections

This SWPPP provides two means of assessing illicit and non-stormwater discharges: an initial drainage confirmation and ongoing annual dry-weather inspections. The initial drainage confirmation using dye/flow testing was performed in June 2006 by City Public Works staff. This testing confirmed that the sanitary and storm drains are separated at this facility and verified the drainage configuration shown in the site map (Figure 2).

Dry-weather inspections will be performed at least once annually during the three-month period from July through September after a period of at least seven consecutive days of dry weather. The inspection results will be recorded in the form supplied in the Appendix C (Form 1). These completed forms will be kept in the SWPPP file. The dry season inspection provides visual inspections for non-stormwater discharges such as domestic wastewater, process wastewater (including leachate), and vehicle wash water (non-contact cooling water is not present onsite).

Because there are no direct outfalls from the facility, the dry-weather inspection locations focus on four storm drain manholes indicated as MH1-MH4 on the site map (Figure 2). If no discharge is present at MH1, then the inspection can be determined complete (because MH2-MH4 are up gradient in this drain line). If a discharge is present in MH1, then each of the up gradient manholes (MH2-MH4) will also be inspected and discharge characteristics noted on the inspection form. See Section 4 for description of presence/absence/magnitude of discharge characteristics. If flow is present, the approximate discharge rate will be indicated on the inspection form (i.e. < 10 gpm or >10 gpm).

If needed, the furthest up gradient location, MH5, located to the west of the facility on B Street, may be inspected to determine if dry-weather flows may be originating from offsite areas. If this is the case, make note on the inspection form and indicate whether these flows appear to be contaminated.

Each of the above locations will be inspected during dry-weather for odors, discolorations, abnormal flows or other suspect conditions that could indicate an illicit, non-stormwater discharge. As a general rule, the pipes entering and leaving these manholes should be dry during dry weather. However, dry-weather flows could be attributable to groundwater infiltrating the system. An absence of significant visual indications as outlined below will presume this is the case.

The dry-weather inspections will rely on visual observations to discern the potential for dry-weather discharges to be associated with facility operations or from groundwater. If there are visible flows, the inspection results will indicate the potential location where the flows originate and associated visual indicators. If dry-weather flow is obviously contaminated as indicated by foam, sediment, sheen, odor, debris, etc., then the P2 team leader will be notified immediately and steps will be taken to identify the source and cease the activity. If the source of the contamination is from offsite (i.e. present in MH5), then the P2 team leader will notify the potential offsite entity(s) responsible, where possible.

Potential dry-weather discharges to the storm drain system that could occur from the Corp Yard include the following:

1. Erroneous outside vehicle washing in paved storm drainage areas near Buildings A, G and H (vehicle washing is restricted to areas draining to sanitary sewer, i.e. SS1-SS9.).
2. Utility vault dewatering for the vault near the northwest corner of Building A and CB1
3. Fire hydrant flushing may occur but would most likely drain to the sanitary sewer or be captured by a tank truck.

If an illicit discharge is discovered, the P2 team shall implement the City's illicit discharge detection and elimination program and will respond according to that program's protocols and timelines.

3.2 Structural Source Control BMPs

Structural source control BMPs prevent the contact of rainfall with potential pollutants by eliminating or reducing the exposure of materials or activities. The following source control BMPs are used at this facility:

- Vehicle and equipment washing is restricted to areas draining to the sanitary sewer as indicated in Figure 2. Vehicles or equipment shall not be washed in the paved areas draining to CB1 and CB3.
- Covered areas (buildings) are provided for parking various vehicles and equipment and conducting the transformer servicing.
- Covered storage with secondary containment is provided for vehicle lubricant drums outside of Building L. Empty containers awaiting disposal and not under cover shall have lids securely fixed and water-tight. Onsite storage of waste materials shall be kept to a minimum.
- Covered storage is provided for landscape management chemicals in Building K.

3.3 Treatment BMPs

This facility has several conventional treatment BMP's as listed in Table 10. Each of these will be inspected twice annually. Catch basin sumps will be cleaned annually unless inspections indicate a higher or lower frequency of maintenance for certain areas (Section 3.1.2).

Table 9 Treatment BMPs

Type	Location
Catch basins with sumps (Type 1)	CB1-CB8
Catch basin outlets with oil retention elbows	All CBs
Oil Water Separators (in sanitary sewer line)	2 in sanitary line that collect runoff from SS2 – SS6 and the vehicle wash facility, 1 in northeast corner of transformer yard
Vegetated ditch	Along A street between MH1-MH2

3.4 Erosion and Sediment Control BMPs

Exposed soils are minimal and grass, tree and shrub cover is sufficient to prevent significant erosion. Therefore, no ESC BMPs are needed. However, there is some erosion potential related to the gravel surfaced Areas #1-#5 (these areas are shown in Figure 2). The once quarterly wet weather monitoring and inspections (covered in Section 3.1.5) will determine if improvements are needed to minimize turbid runoff. Covers or berms will be used as needed to prevent erosion and raveling of bulk material piles.

4 Monitoring Plan

There are no permits or other conditions that prescribe or require stormwater sampling for this facility. Therefore, the monitoring for this facility will rely upon quarterly visual inspections of discharge quality to indicate obvious or potential problems. Coupled with the other BMPs for this facility such as housekeeping, maintenance, and dry weather inspections (see Section 3), this approach should be well suited to minimize the potential for adverse conditions in stormwater quality. Furthermore, there are no direct outfalls from the facility to receiving waters and outfalls in the vicinity appear to receive drainage from multiple sources in addition to this facility. Based on drainage maps and visual inspections, site storm drainage leaves the site by one of 5 catch basins connected to the A-street pipe, or via the oil/water separator from the Transformer yard (Building M) that is tied into sanitary sewer. See Figure 2.

The monitoring plan outlined below identifies the resources, locations, frequency, visual indicators and recording to be used in monitoring the facility.

Monitoring will be performed during the wet season at least once-quarterly by a designated member of the P2 team.

1. Monitoring will be conducted during significant rainfall resulting in visible stormwater runoff and discharges from the site. This rainfall should be approximately 0.1" or more in a 24-hour period, but site conditions and local rainfall patterns should be taken into account so that monitoring can begin soon after significant runoff begins.
2. The monitoring is not required to be conducted outside of regular business hours or during unsafe conditions.
3. All points of *discharge* to surface water or *storm sewers* will be monitored and include those listed in Table 11.
4. Monitoring methods consist of making observations of the visual characteristics of flows entering the storm drain catch basins and sheetflows leaving the locations above. These observations

include recording the absence or presence and degree of the indicators outlined below. For more information, consult chapter 11 of the Illicit Discharge Detection and Elimination Guidance Manual (Center for Watershed Protection, 2004).

a. Floatables-indicate if very obvious trash or other controllable debris, such as landscaping material, leaf litter, etc.
b. Foam due to soap/detergent/cleaning product. Stormwater often can be slightly foamy from pollen and other natural organic material. Indicate if very obvious and persistent foam is present that could indicate a potential soap/detergent/cleaning agent which may also be accompanied by a fragrant odor. Suds that break up quickly may be due to turbulence and/or natural conditions and not necessarily have an illicit origin.
c. Sheen-a rainbow hue on the water surface commonly indicative of petroleum products, often present in parking lot runoff.
d. Turbidity-and indication of light penetration or relative cloudiness, indicates as "very obvious" if the water looks like coffee with cream.
e. Sediment-coarse material such as sand, gravel.
f. Odor: describe odor such as rotten eggs, solvent, fuel/oil, cleaning agent, etc. Make sure the odor is not related to other sources beyond the runoff being inspected. If gasoline or a flammable solvent is suspected, leave the immediate area, notify facility management immediately and take action to prevent fire or explosion.
g. Discoloration other than turbidity: indicate general color. Stormwater is typically yellowish. A red/orange color can indicate rust from iron pipes or iron bacteria. Other colors such as white could indicate paint or cleaning agent emulsions.

5. The observations above and other information will be recorded on the wet weather monitoring Form 2 (see Appendix C). The rainfall during the prior day and during the period of monitoring will be indicated on the data form. Consult local rainfall data and indicate the source used on the form. The National Weather Service has a gage at Fairchild airport nearby, see https://www.weather.gov/wrh/timeseries?site=KCLM
6. The monitoring results on Form 2 will be reviewed quarterly by the P2 team leader. The P2 team leader will note any follow up actions indicated by the visual monitoring.
7. Records of monitoring results will be maintained for up to five years in the SWPPP file.

Table 10. Site Discharge Locations

Structure ID	Common Description	Discharge Type	Comments
CB1	Catch Basin	Storm Drain	In main paved area
CB3	Catch Basin	Storm Drain	In main paved area
CB4	Catch Basin	Storm Drain	Near wash facility
CB5	Catch Basin	Storm Drain	Near wash facility
N/A	Sheetflow		If present, draining from material storage Areas #2, #4, and #5 (Area #3 drains to sanitary, but potential overflow would be indicated when inspecting CB4)

5 References

Center for Watershed Protection, 2004. Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and technical Assessments. R. Pitt and other authors. Center for Watershed Protection, Ellicott City MD. October 2004.

Parametrix, 2003. Spill Prevention, Control and Countermeasure Plan. Parametrix Consultants. November 2003. Updated November 2022.

WDOE 2004. Guidance Manual for Preparing/Updating a Stormwater Pollution Prevention Plan for Industrial Facilities. WA Department of Ecology Publication Number 04-10-030 April 2004

WDOE 2019A. The Industrial Stormwater General Permit (ISGP). A National Pollutant Discharge Elimination System and State Waste Discharge General Permit for Stormwater Discharges Associated with Industrial Activities. WA Department of Ecology. Issued November 20,2019. Effective January 1, 2020.

WDOE 2019B. Western Washington Phase II Municipal Stormwater Permit. National Pollutant Discharge Elimination System and State Waste Discharge General Permit for discharges from Small Municipal Separate Storm Sewers (MS4) in Western Washington. WA Department of Ecology. Issued July 1, 2019. Effective August 1, 2019. Expires July 31, 2024.

WDOE 2019C. Stormwater Management Manual for Western Washington. WA Department of Ecology. July.

WDOE 2022. Washington State Department of Ecology Industrial Stormwater Pollution Prevention Plan Template. Accessed from Ecology's website https://ecology.wa.gov/Asset-Collections/Doc-Assets/Water-quality/Water-Quality-Permits/Industrial-Stormwater/Industrial-Stormwater-Pollution-Prevention-Plan-Te. September 23.

SWPPP Appendices

Attach the following documentation to the SWPPP:

Appendix A – Summary of Prior Plan Revisions
Appendix B – List of Definitions
Appendix C – Weather Inspection Worksheets
Appendix D – Spill and Leak Log
Appendix E – Employee Training Log
Appendix F – SWPPP Certification or Recertification Form (for Level 1, 2, or 3 Corrective Action(s))

Appendix A – Summary of Prior Plan Revisions

*Revisions to the original Corp Yard SWPPP that were made during minor routine reviews and updates were not carried forward after the 2022 substantial update. This table has been reset and will be used moving forward to track minor updates and changes made since the 2022 rewrite. Previous edits are still recorded in Appendix A of the 2016 version, which is kept on file at the Corp Yard and can be made available for review upon request.

Notable Document History:

- Origination in August 2007 by Brown & Caldwell. Signed by M. Puntenney & G. Cutler.
- Updated February 2013 by Brown & Caldwell. Signed by M. Abed & G. Cutler.
- Updated February 2016 by COPA. Signed by J. Boehme, J. Burke, & C. Fulton.

No.	Date	Changed From	Changed To

Appendix B – List of Definitions

LIST OF DEFINITIONS

The following definitions are used in this SWPPP, with indications of whether the citations are from Ecology (WDOE 2019B) or from EPA.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the state. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. (WDOE). BMPs generally fall into three categories: source controls (operational and structural), treatment practices, and erosion and sediment control. Typical source controls include operating procedures, good housekeeping, sweeping, spill controls, etc. Typical treatment BMPs include catch basins, sumps, oil water separators and bioswales. Erosion and sediment control BMPs generally apply to construction sites, but may be applicable to industrial sites if significant soils are exposed or erosion potential exists.

Capital Improvements means the following improvements which will require capital expenditures (WDOE):

1. Treatment BMPs, including but not limited to: biofiltration systems including constructed wetlands; settling basins, oil/water separation equipment, and detention and retention basins.
2. Manufacturing modifications, including process changes for source reduction, if capital expenditures for such modifications are incurred.
3. Concrete pads and dikes and appropriate pumping for collection of stormwater and transfer to control systems, from manufacturing areas such as loading, unloading, outside processing, fueling and storage of chemicals, equipment, and wastes.
4. Roofs and appropriate covers for manufacturing areas.

Combined Sewer means a sewer which has been designed to serve as a sanitary sewer and a storm sewer, and into which inflow is allowed by local ordinance. (WDOE).

Domestic Wastewater means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or other places, together with such ground water infiltration or surface waters as may be present. (WDOE)

Erosion and Sediment Control BMPs means BMPs that are intended to prevent erosion and sedimentation, such as preserving natural vegetation, seeding, mulching and matting, plastic covering, filter fences, and sediment traps and ponds. Erosion and sediment control BMPs are synonymous with stabilization and structural BMPs. (WDOE)

General Permit means a permit that covers multiple dischargers of a point source category within a designated geographical area, in lieu of individual permits being issued to each discharger. (WDOE)

Illicit Discharge means any discharge that is not composed entirely of stormwater except discharges pursuant to a separate NPDES permit and discharges resulting from fire fighting activities. (WDOE). See also **Non-Stormwater Discharges.**

ISGP means the NPDES Industrial Stormwater General Permit, issued by Ecology for stormwater discharges associated with industrial activities (Issued November 20,2019. Effective January 1, 2020.).

Leachate means water or other liquid that has percolated through raw material, product, or waste and contains substances in solution or suspension as a result of the contact with these materials. (WDOE)

National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking, and reissuing, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of pollutants to surface waters on the state from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington Department of Ecology. (WDOE)

Non-Stormwater Discharges are discharges of process wastewaters, vehicle wash waters, cooling waters, or any other wastewaters associated with the facility into the stormwater collection system. Other discharges must be addressed in a separate NPDES permit. (EPA) See also **Illicit Discharges**. Certain non-stormwater discharges are conditionally approved under the ISGP but are subject to specific provisions, including identifying the location, flow volumes, quality, potential for water quality issues and ability to apply appropriate BMPs. Examples of conditionally approved non-stormwater discharges under an ISGP include:

- Discharges from fire fighting activities;
- Fire protection system flushing, testing, and maintenance;
- Discharges of potable water including water line flushing, provided that water line flushing must be de-chlorinated prior to discharge;
- Uncontaminated air conditioning or compressor condensate;
- Irrigation drainage;
- Uncontaminated ground water or spring water;
- Discharges associated with dewatering of foundations, footing drains, or utility vaults where flows are not contaminated with process materials such as solvents;
- Incidental windblown mist from cooling towers that collects on rooftops or areas adjacent to the cooling tower. This does not include intentional discharges from cooling towers such as piped cooling tower blow down or drains.

Operational (Source Control) BMPs means a schedule of activities, prohibition of practices, maintenance procedures, employee training, good housekeeping, and other managerial practices to prevent or reduce the pollution of waters of the state. Not included are BMPs that require construction of pollution control devices (structural source control or treatment BMPs). (WDOE)

Point Source means any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, and container from which pollutants are or may be discharged to surface waters of the state. This term does not include return flows from irrigated agriculture. (WDOE)

Pollutant means the discharge of any of the following to waters of the state: dredged soil; solid waste; incinerator residue; filter backwash; sewage; garbage; sewage sludge; munitions; chemical wastes;

biological materials; radioactive materials; heat-wrecked or discarded equipment; rock; sand; cellar dirt; and industrial, municipal, and agricultural waste. This term does not include sewage from vessels within the meaning of Section 312 of the FWPCA, nor does it include dredged or fill material discharged in accordance with a permit issued under Section 404 of the FWPCA. (WDOE)

Pollution means contamination or other alteration of the physical, chemical, or biological properties of waters of the state, including change in temperature, taste,
color, turbidity, or odor of the waters; or such discharge of any liquid, gaseous, solid, radioactive, or other substance into any waters of the state as will or is likely to create a nuisance or render such waters harmful, detrimental, or injurious to the public health, safety, or welfare; or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses; or to livestock, wild animals, birds, fish, or other aquatic life. (WDOE)

Process Wastewater means any water which, during manufacturing or processing, comes into direct contact or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. (WDOE)

Regular Business Hours means those time frames when the facility is engaged in its primary production process, but does not include additional shifts or weekends when partial staffing is at the site primarily for maintenance and incidental production activities. Regular business hours do not include periods of time that the facility is inactive and unstaffed. (EPA)

Significant Amounts means an amount of a pollutant in a discharge that is amenable to available and reasonable methods of prevention or treatment; or an amount of a pollutant that has a reasonable potential to cause a violation of surface or ground water quality or sediment management standards. (WDOE)

Significant Material includes, but is not limited to, raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101 (14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with stormwater discharges. (WDOE)

Source Control BMPs means physical, structural, or mechanical devices or facilities that are intended to prevent pollutants from entering stormwater. A few examples of source control BMPs are erosion control practices, maintenance of stormwater facilities, constructing roofs over storage and working areas, and directing wash water and similar discharges to the sanitary sewer or a dead-end sump. (WDOE)

Stormwater is the runoff from a storm event, snowmelt runoff, and surface runoff and drainage. It does not include infiltration and runoff from agricultural land. (EPA)

Stormwater Associated with Industrial Activity means the discharge from any conveyance that is used for collecting and conveying stormwater and that is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. It may also, on a case-by-case basis, include stormwater from any portion of an industrial site subject to pollutants of a significant amount (WDOE). The term does not include discharges from facilities or activities excluded from the NPDES program. The term includes,

but is not limited to, stormwater discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material-handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR 401); sites used for the storage and maintenance of material-handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. The term also includes stormwater discharges from all areas listed in the previous sentence (except access roads) where material-handling equipment or activities, raw materials, intermediate product, final products, waste materials, by-products, or industrial machinery are exposed to stormwater. Material-handling activities include the following: storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product, or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots, as long as the drainage from the excluded areas is not mixed with stormwater drained from the above-described areas. Industrial facilities (including industrial facilities that are federally, state, or municipally owned or operated that meet the description of the facilities listed in this paragraph) include those facilities designated under 40 CFR 122.26(a)(1)(v). (EPA)

Surface Waters of the State includes lakes, rivers, ponds, streams, inland waters, salt waters, and all other surface waters and water courses within the jurisdiction of the State of Washington. (WDOE)

Treatment BMPs means BMPs that are intended to remove pollutants from stormwater. A few examples of treatment BMPs are detention ponds, oil/water separators, biofiltration, media filtration, and constructed wetlands. (WDOE)

Water Quality means the chemical, physical, and biological characteristics of water, usually with respect to its suitability for a particular purpose. (WDOE)

Waters of the State includes those waters as defined as "waters of the United States" in 40 CFR Subpart 122.2 within the geographic boundaries of Washington state and "waters of the state" as defined in Chapter 90.48 RCW, which include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and water courses within the jurisdiction of the State of Washington. (WDOE)

WDOE means the state of Washington Department of Ecology.

Appendix C – Weather Inspection Forms

Form 1 Dry-Weather Inspection

Dry Weather Visual Monitoring (during period July-September)
for City of Port Angeles Public Works Maintenance Facility ("Corp Yard") SWPPP
(7) Conducted on:_____by _____
(8) Rainfall amount in prior 7 day period:_____(inches) Source of rainfall data:_____

(1) location	(2) time	(3) no discharge?	(4) discharge present? < 10 gpm	(4) discharge present? >10 gpm	Sediment	Turbidity	Color	Sheen	Odor	Foam	Floatables	other	(6) Remarks (describe presence and degree)
MH1													
MH2													
MH3													
MH4													
MH5 (if needed)													

Instructions (areas numbered in form above):
1. Remove manhole lids and visually inspect for presence of flow in pipes, use SWPPP facility map Figure 2-3
2. Record time of each observation using 24 hour clock (military) time notation
3. If pipes are dry, indicate by checking the "no discharge" column.
4. If flow is present, indicate by checking approximate discharge range column. A residential hose fully open would be about 1-5 gpm
5. where flow is present, indicate each characterisitc as either absent (0), or present with relative magnitude in each box: 1 = slightly observable, 2=very obvious
6. If one or more characteristics are present, describe visual observation
7. Record date of inspections and name of who conducted the work
8. Record the approximate rainfall occurring in the 7-day period before the inspections
9. P2 Team leader must review and sign this form and indicate any follow up actions needed
10. Save original and a copy of this completed form in the SWPPP file

Other observations/comments:

Results reviewed by: _____(name)_____(signature)
Follow up actions needed:

Form 2 Wet Weather Monitoring

Wet Weather Visual Monitoring
for City of Port Angeles Public Works Maintenance Facility ("Corp Yard") SWPPP
(5) Conducted on:_____by_____
(6) Rainfall amount in prior day:____(inches) Rainfall during monitoring period:____(inches) Source of rainfall data:_____

(1) location	(2) time	Sediment	Turbidity	Color	Sheen	Odor	Foam	Floatables	Other	(4) Remarks (describe presence and degree)
CB1										
CB3										
CB4										
CB5										
CB6										
CB7										
Transformer yard										
Material storage #2										
Material storage #4										
Material storage #5										

Instructions:
1. Visually inspect surface sheetflows to drainage locations indicated, use SWPPP facility map Figure 2-3
2. Record time of each observation using 24 hour clock (military) time notation
3. Record absence (0), or presence and magnitude in each box: 1 = slightly observable, 2 = very obvious
4. If present, describe visual observation
5. Record date of inspections and name of who conducted the work
6. Record the approximate rainfall occurring in the day before and during the inspections
7. P2 Team leader must review and sign this form and indicate any follow up actions needed
8. Save original and a copy of this completed form in the SWPPP file

OTHER observations:

Location	Time									Remarks

Results reviewed by:_____(name)_____(signature)
Follow up actions needed:

Form 3 Quarterly Preventative Maintenance BMP Inspections

Preventative Maintenance BMP Inspections **CITY OF PORT ANGELES MAINTENANCE FACILITY**	Completed By: _____ Title: _____ Date: _____

BMPs	Inspection Item	Satisfactory?	Action Needed
Good Housekeeping	1.Cleanup of debris and old equipment		
	2.Routine sweeping of paved surfaces		
	3.Vacuum paved surfaces with a vacuum sweeper (or a sweeper with a vacuum attachment) to remove accumulated pollutants-		
	4 Removal of trash and garbage		
	5 Other		
Preventive Maintenance	1.Catch basin sump cleaning (once annually)		
	2.Fleet vehicle parking areas-leaks indicate need for PM		
	3.Other-		
Spill Prevention and Cleanup	1.Liquid deicer tanks-check for leaks, drips		
	2.Secondary containment for vehicle lubricant, Building L		
	3.Drip pans for fleet vehicles as needed		
	4.Parking areas		
	5.Fueling station		
Source Control BMPs	1. Covers or berms for bulk material piles		
	2.Vehicle washing only in sanitary drain areas		
	3.Used transformers stored inside Building M		
	4.Catch basin stenciling		
Treatment BMPs	1.Grass ditch along A street between MH1-MH2, mow as needed		
	2.Oil control elbows in catch basins (look for oil)		

Appendix D – Spill and Leak Log

List of Significant Spills and Leaks	Worksheet #1_____ Completed by:_____ Title:_____ Date:_____

List all spills and leaks (as indicated on Worksheet #1A) of toxic or hazardous pollutants that were significant. Significant spills and leaks include but are not limited to, release of oil or hazardous substances in excess of reportable quantities (see Section 2 of text). Although not required, we suggest you list spills and leaks of non-hazardous materials.

		Description				Response Procedure		
Date (month/day/year)	Location (as indicated on site map)	Type of Material	Quantity	Source, If Known	Reason for Spill/Leak	Amount of Material Recovered	Material No longer exposed to Storm-water (Yes/No)	Preventive Measure Taken

Spill Log	Worksheet #1A Completed by: Title: Date:

List all chemical and petroleum spills and leaks

		Description				Response Procedure		
Date and Time	Location	Amount	Type of Material	Source, If Known	Reason for Spill/Leak	Notifications Made	Staff Involved	Comments

Appendix E – Employee Training Log

Training Log

EMPLOYEE TRAINING **CITY OF PORT ANGELES MAINTENANCE FACILITY**	Completed By: _____ Title: _____ Date: _____

Describe the annual training of employees on the SWPPP, addressing spill response, good housekeeping, and material management practices.

Training Topics	Brief Description of Training Program/Materials (e.g., film, newsletter, course)	Schedule for Training (list dates)	Attendees
1). Line Workers			
Spill Prevention and Response			
Good Housekeeping			
Material Management Practices			
2). P2 Team			
SWPPP Implementation			

EMPLOYEE TRAINING **CITY OF PORT ANGELES MAINTENANCE FACILITY**	Completed By: _____ Title: _____ Date: _____

Describe the annual training of employees on the SWPPP, addressing spill response, good housekeeping, and material management practices.

Training Topics	Brief Description of Training Program/Materials (e.g., film, newsletter, course)	Schedule for Training (list dates)	Attendees
Monitoring Procedures			

Appendix F – SWPPP Certification Form

The Permittee shall use this form to sign and certify that the Stormwater Pollution Prevention Plan (SWPPP) is complete, accurate and in compliance with Conditions S3 and S8 of the Industrial Stormwater General Permit.

- A SWPPP certification form needs to be completed and attached to all SWPPPs.
- Each time a Level 1, 2, or 3 Corrective Action is required, this form needs to be re-signed and re-certified by the Permittee, and attached to the SWPPP.

Is this SWPPP certification in response to a Level 1, 2 or 3 Corrective Action? ☐Yes ☐No

If <u>Yes</u>:

- Type of Corrective Action?: ☐Level 1 ☐Level 2 ☐Level 3
- Date SWPPP update/revision completed:_____.

"I certify under penalty of law that this SWPPP 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 information to determine compliance with the Industrial Stormwater General Permit. Based on my inquiry of the person or persons who are responsible for stormwater management at my facility, this SWPPP is, to the best of my knowledge and belief, true, accurate, and complete, and in full compliance with Permit Conditions S3 and S8, including the correct Best Management Practices from the applicable Stormwater Management Manual. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

_____	_____
Operator's Printed Name *	Title
_____	_____
Operator's Signature *	Date

***** Federal regulations require this document to be signed as follows:
For a corporation, by a principal executive officer of at least the level of vice president;
For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

This document shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Ecology.
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

Changes to authorization. If an authorization under number 2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of number 2 above shall be submitted to Ecology prior to, or together with, any reports, information, or applications to be signed by an authorized representative.

City of Port Angeles | Public Stormwater Facilities Tracking - 2024

Stormwater Facilities- 2024	Asset ID #	Date of Inspection(s)	Cityworks WO#	Maint. Required?	Date(s) of Maintenance	Cityworks WO#(s)	NOTES:
Bioretention Cells (79)							
5th and H, NW Corner	928, 929, 930	3/13/2024	13543	yes	4/1/24 thru 10/30/24	16129	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
5th and H, NE Corner	921, 922	3/13/2024	13543	yes	4/1/24 thru 10/30/24	16129	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
5th and H, SE Corner	923, 924	3/13/2024	13543	yes	4/1/24 thru 10/30/24	16129	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
5th and H, SW Corner	925, 926, 927	3/13/2024	13543	yes	4/1/24 thru 10/30/24	16129	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
5th and K, NW Corner	897, 898	3/13/2024	13545	yes	4/1/24 thru 10/30/24	16131	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
5th and K, NE Corner	904	3/13/2024	13545	yes	4/1/24 thru 10/30/24	16131	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
5th and K, SE Corner	901, 902, 903	3/13/2024	13545	yes	4/1/24 thru 10/30/24	16131	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
5th and K, SW Corner	899, 900	3/13/2024	13545	yes	4/1/24 thru 10/30/24	16131	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
5th and L, NW Corner	889	3/13/2024	13546	yes	4/1/24 thru 10/30/24	16132	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
5th and L, NE Corner	896, 895	3/13/2024	13546	yes	4/1/24 thru 10/30/24	16132	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
5th and L, SE Corner	892, 893, 894	3/13/2024	13546	yes	4/1/24 thru 10/30/24	16132	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
5th and L, SW Corner	890, 891	3/13/2024	13546	yes	4/1/24 thru 10/30/24	16132	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
6th and H, NW Corner	936, 937, 938	3/13/2024	13549	yes	4/1/24 thru 10/30/24	16135	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.

6th and H, NE Corner	931, 932	3/13/2024	13549	yes	4/1/24 thru 10/30/24	16135	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
6th and H, SE Corner	933	3/13/2024	13549	yes	4/1/24 thru 10/30/24	16135	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
6th and H, SW Corner	934, 935	3/13/2024	13549	yes	4/1/24 thru 10/30/24	16135	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
6th and K, NW Corner	910, 911	3/13/2024	13548	yes	4/1/24 thru 10/30/24	16136	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
6th and K, NE Corner	905, 906	3/13/2024	13548	yes	4/1/24 thru 10/30/24	16136	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
6th and K, SE Corner	907, 908	3/13/2024	13548	yes	4/1/24 thru 10/30/24	16136	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
6th and K, SW Corner	909	3/13/2024	13548	yes	4/1/24 thru 10/30/24	16136	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
6th and M, NE Corner	883, 884	3/13/2024	13547	yes	4/1/24 thru 10/30/24	16137	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
6th and M, SW Corner	887	3/13/2024	13547	yes	4/1/24 thru 10/30/24	16137	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
6th and M, SE Corner	885, 886	3/13/2024	13547	yes	4/1/24 thru 10/30/24	16137	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
6th and M, NW Corner	888	3/13/2024	13547	yes	4/1/24 thru 10/30/24	16137	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
7th and H, NW Corner	943, 944	3/13/2024	13550	yes	4/1/24 thru 10/30/24	16138	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
7th and H, NE Corner	939, 940	3/13/2024	13550	yes	4/1/24 thru 10/30/24	16138	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
7th and H, SE Corner	941	3/13/2024	13550	yes	4/1/24 thru 10/30/24	16138	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.

7th and H, SW Corner	942	3/13/2024	13550	yes	4/1/24 thru 10/30/24	16138	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
7th and K, NW Corner	912	3/13/2024	13544	yes	4/1/24 thru 10/30/24	16139	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
7th and K, NE Corner	919, 920	3/13/2024	13544	yes	4/1/24 thru 10/30/24	16139	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
7th and K, SE Corner	915, 917, 918	3/13/2024	13544	yes	4/1/24 thru 10/30/24	16139	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
7th and K, SW Corner	913, 914	3/13/2024	13544	yes	4/1/24 thru 10/30/24	16139	several hours were spent at this intersection's bioretention cells weeding, removing garbage, trimming vegetation, power sweeping, and blowing the permeable sidewalks and curblines.
Waterfront Park Phase #2 near Oak St. (west cell)	5707	8/14/2024	16140	yes	4/1/24 thru 10/30/24	16161	hours were spent at this bioretention cell weeding, removing garbage, trimming vegetation.
Waterfront Park Phase #2 near Oak St. (east cell)	5708	8/14/2024	16141	yes	4/1/24 thru 10/30/24	16142	hours were spent at this bioretention cell weeding, removing garbage, trimming vegetation.
Railroad Ave., furthest west	70	8/14/2024	16143	yes	4/1/24 thru 10/30/24	16157	hours were spent at this bioretention cell weeding, removing garbage, trimming vegetation, adding plants, and adding bark.
Railroad Ave., 2nd from the west	71	8/14/2024	16143	yes	4/1/24 thru 10/30/24	16157	hours were spent at this bioretention cell weeding, removing garbage, trimming vegetation, adding plants, and adding bark.
Railroad Ave., 3rd from the west	72	8/14/2024	16143	yes	4/1/24 thru 10/30/24	16157	hours were spent at this bioretention cell weeding, removing garbage, trimming vegetation, adding plants, and adding bark.
Railroad Ave., 4th from the west	73	8/14/2024	16143	yes	4/1/24 thru 10/30/24	16157	hours were spent at this bioretention cell weeding, removing garbage, trimming vegetation, adding plants, and adding bark.
Railroad Ave., 5th from the west	74	8/14/2024	16143	yes	4/1/24 thru 10/30/24	16157	hours were spent at this bioretention cell weeding, removing garbage, trimming vegetation, adding plants, and adding bark.
Railroad Ave., 6th from the west	75	8/14/2024	16143	yes	4/1/24 thru 10/30/24	16157	hours were spent at this bioretention cell weeding, removing garbage, trimming vegetation, adding plants, and adding bark.
Railroad Ave., 7th from the west	76	8/14/2024	16143	yes	4/1/24 thru 10/30/24	16157	hours were spent at this bioretention cell weeding, removing garbage, trimming vegetation, adding plants, and adding bark.
Oak St., furthest north and west	77	8/14/2024	16151	yes	4/1/24 thru 10/30/24	16152	hours were spent at this bioretention cell weeding, removing garbage, trimming vegetation, adding plants, and adding bark.
Oak St., furthest north and east	78	8/14/2024	16151	yes	4/1/24 thru 10/30/24	16152	hours were spent at this bioretention cell weeding, removing garbage, trimming vegetation, adding plants, and adding bark.
Oak St., furthest south and west	79	8/14/2024	16151	yes	4/1/24 thru 10/30/24	16152	hours were spent at this bioretention cell weeding, removing garbage, trimming vegetation, adding plants, and adding bark.
Oak St., furthest south and east	80	8/14/2024	16151	yes	4/1/24 thru 10/30/24	16152	hours were spent at this bioretention cell weeding, removing garbage, trimming vegetation, adding plants, and adding bark.
Pump Station #4 (Wastewater department)	3298, 3301, 3302	8/14/2024	16279	yes	3/30/24 thru 10/11/24	16280	hours were spent at this bioretention cell weeding, removing garbage, trimming vegetation, adding plants, and adding bark.
City Hall- near Vern Burton (Park's department)	new - no ID assigned						installed Sept 2024
City Hall- 3rd and Peabody corner	new - no ID assigned						installed Sept 2024

Stormwater Facilities- 2024	Asset ID #	Date of Inspection(s)	Cityworks WO#	Maint. Required?	Date(s) of Maintenance	Cityworks WO#(s)	NOTES:
Catch Basins REBUILT (14)	17293	9/15/2023	11582	yes	3/13/2024	16162	
	17340	9/15/2023	11508	yes	7/10/2024	16162	
wo# for 2023 rebuilds is 13318	17708	7/10/2024	na	yes	7/10/2024	16162	
	16217	10/6/2023	11580	yes	7/2/2024	16162	
	17707	3/21/2024	na	yes	3/21/2024	16162	
	16401	11/9/2023	11218	yes	7/12/2024	16162	
	15996	11/9/2023	10722	yes	3/6/2024	16162	
	17343	11/9/2023	10904	yes	6/25/2024	16162	
	17070	12/19/2023	11058	yes	6/25/2024	16162	

	15647	1/17/2023	7594	yes	7/2/2024	16162	
	16359	7/3/2024	na	yes	7/3/2024	16162	
	17572	3/16/2024	11501	yes	7/27/2024	16162	
	16214	10/6/2023	11283	yes	8/22/2024	16162	
	16175	12/19/2023	10663	yes	7/25/2024	16162	
Stormwater Facilities- 2024	**Asset ID #**	**Date of Inspection(s)**	**Cityworks WO#**	**Maint. Required?**	**Date(s) of Maintenance**	**Cityworks WO#(s)**	**NOTES:**
CAVFS (7)							
C St. Ext.	6759	6/11/2024	16164	yes	3/4/24 thru 11/11/24	16168	
C St. Ext.	6760	6/11/2024	16164	yes	3/4/24 thru 11/11/24	16168	
C St. Ext.	6761	6/11/2024	16164	yes	3/4/24 thru 11/11/24	16168	
C St. Ext.	6762	6/11/2024	16164	yes	3/4/24 thru 11/11/24	16168	
C St. Ext.	6763	6/11/2024	16164	yes	3/4/24 thru 11/11/24	16168	
C St. Ext.	6764	6/11/2024	16164	yes	3/4/24 thru 11/11/24	16168	
C St. Ext.	6751	6/11/2024	16164	yes	3/4/24 thru 11/11/24	16168	
Stormwater Facilities- 2024	**Asset ID #**	**Date of Inspection(s)**	**Cityworks WO#**	**Maint. Required?**	**Date(s) of Maintenance**	**Cityworks WO#(s)**	**NOTES:**
ConTech Filters (9)							
8th and A St.	19, 20	8/22/2024	16169	yes	10/15/2024	16170	
8th and Cedar	17, 18	8/22/2024	16171	no			
8th and Pine	15, 16	8/22/2024	16172	no			
8th and Cherry	13, 14	8/22/2024	16173	no			
16th and Maloney	26	8/22/2024	16174	no			
Stormwater Facilities- 2024	**Asset ID #**	**Date of Inspection(s)**	**Cityworks WO#**	**Maint. Required?**	**Date(s) of Maintenance**	**Cityworks WO#(s)**	**NOTES:**
Large Culverts (16) Dry Season Inspection- walk thru with engineering dep. rep.							
Whites Creek	721, 2673, 2847, 4344	did not occur					
6th and Valley	337, 338	7/16/2024					
Marine Dr. and Tumwater St.	4340	7/16/2024					
Peabody RV Park to Harbor	4346, 3380, 4345, 4025	4/23/2024	Performed by WSDOT (Piper Petit and Port Angeles Maintenance Crew) with COPA (greg Haskins and Weston Jorgenson)				
5th and Peabody	1909	did not occur					
3rd and Peabody	1911	did not occur					
8th and Francis	1930, 1910	did not occur					
Park St. at dip just west of Race St.	910	did not occur					
Stormwater Facilities- 2024	**Asset ID #**	**Date of Screening**	**Tonage of garbage**	**Date of testing**	**Edge Analytics test reference # and date**	**Site Hauled to**	**Yards Hauled**
Decant Facility at Transfer station SOILS Screening and Transport							
Street Sweepings **IMPORTANT!!! Use code 2240 at weigh station**	Decant 'sweepings' bay	6/4,5,6/2024	on file	10/10/2024	24-30646, 12/6/24	onsite - adjacent and west of gun range trailer at TS	
						offsite - truck route triangle- 3/18/24 (15), 4/16/24 (30)	45
						offsite - Hwy 101 Pond access- 3/19,20/24 (35)	35
Vactor Eductings (Stormwater) **IMPORTANT!!! Use code 1710 at weigh station**	Decant 'eductings' bay	none				adjacent and west of gun range trailer at TS	
Vactor Eductings (Wastewater)	Decant 'wastewater solids' bay	na					
Contaminated Soils	Decant 'contaminated soils' bay	na					
Stormwater Facilities- 2024	**Asset ID #**	**Date of Inspection(s)**	**Cityworks WO#**	**Maint. Required?**	**Date(s) of Maintenance**	**Cityworks WO#(s)**	**NOTES:**
Detention Pipes (Dgravity or DInline Storage) & Flow Control (33)	**pipe#/flow control#**	**Date of Inspection(s)**	**Cityworks WO#**	**Maint. Required?**			
8th and A	6136/18409	3/21-25/24	16243	no			
8th and Cedar	6130/na	3/21-25/24	16243	no			
8th and Cherry	6116/na	3/21-25/24	16243	no			
8th and Pine	6124/na	3/21-25/24	16243	no			
O St. on W. side, just S. of 10th (adjacent to house # 1002)	266/18223	3/21-25/24	16243	no			
O St. on W. side, S. of 10th (south of #266)	267/18223	3/21-25/24	16243	no			
Heritage Ct. (~100' west of Heritage Ct on priv. prop.)	1987/846	3/21-25/24	16243	no			
14th on S. side, just E. of N St.	1363/504	3/21-25/24	16243	no			
14th on S. side, just W. of Aurora Ct.	1064/17937	3/21-25/24	16243	no			
Aurora Ct on W. side	299/17937	3/21-25/24	16243	no			
Aurora Ct on E. side	300/17937	3/21-25/24	16243	no			
15th on N. side, between H St. and I St.	4528/18062	3/21-25/24	16243	no			
16th on N. side, bordering W. side of house #2239	1058/17905	3/21-25/24	16243	no			
16th on N. side, bordering S. side of house #2239	1057/17905	3/21-25/24	16243	no			
16th on N. side across from Maloney Ct.	6343/18482	3/21-25/24	16243	no			
16th on N. side across from Maloney Ct.	6342/18482	3/21-25/24	16243	no			
16th on N. side across from Maloney Ct.	6341/18482	3/21-25/24	16243	no			
Lauridsen Blvd Bridge	15205/25898	3/21-25/24	16243	no			
Cathleen St. on westside, just S. of 10th St.	4660/18093	3/21-25/24	16243	no			
Cathleen St. on eastside, just S. of 10th St.	2803/18093	3/21-25/24	16243	no			

Jeri Lynn St., near Joshua	1067/818	3/21-25/24	16243	no			
Milwaukee Dr. (between 10th and Renee Ln.)	2099/18041	3/21-25/24	16243	no			
Milwaukee Dr. (between Renee and Joshua)	46/18041	3/21-25/24	16243	no			
Pendley Ct	6804/18704	3/21-25/24	16243	no			
Pendley Ct	6805/18704	3/21-25/24	16243	no			
Pendley Ct	6806/18704	3/21-25/24	16243	no			
Rolling Hills Ct.	303/16728	3/21-25/24	16243	no			
Rolling Hills Dr., W. side	304/16728	3/21-25/24	16243	no			
Rolling Hills Dr., E. side	247/16728	3/21-25/24	16243	no			
Eckard on N. side, just west of Porter	1942/na	3/21-25/24	16243	no			
Eckard on S. side, just west of Porter	1943/na	3/21-25/24	16243	no			
Porter on E. side, just S. of Campbell	115/18082	3/21-25/24	16243	no			
Juniper Ln, N. side from 201 to 217	224/18111	3/21-25/24	16243	no			
Stormwater Facilities- 2024	**Asset ID #**	**Date of Inspection(s)**	**Cityworks WO#**	**Maint. Required?**	**Date(s) of Maintenance**	**Cityworks WO#(s)**	**NOTES:**
EcoStorm Filter Plus (Block Media Filter) (2)							
Eco Storm Plus (First and Valley)	25	2/29/2024	16177	yes	2/29/2024	16178	
Eco Storm Plus (old PS#4)	2433	2/29/2024	16179	yes	2/29/2024	16180	
Stormwater Facilities- 2024	**Asset ID #**	**Date of Inspection(s)**	**Cityworks WO#**	**Maint. Required?**	**Date(s) of Maintenance**	**Cityworks WO#(s)**	**NOTES:**
Energy Dissapators (Dischargepoint- 'Storm Vortech, … misc.) (8)							
Under the 8th St Bridge over Valley St.	14 (west)	8/23/2024	16175	no			
Under the 8th St Bridge over Valley St.	16 (east)	8/23/2024	16175	no			
Under the 8th St Bridge over Tumwater Truck Rt.	19 (west)	8/23/2024	16175	no			
Under the 8th St Bridge over Tumwater Truck Rt.	18 (east)	8/23/2024	16175	no			
Bottom of ravine at Cemetary	100	8/23/2024	16175	no			
Under Lauridsen Blvd. Bridge	3418	8/23/2024	16175	no			
Crown Park Aquaswirl	21	8/23/2024	16175	no			
10th and N (NW corner)	200	8/23/2024	16175	no			
Stormwater Facilities- 2024	**Asset ID #**	**Date of Inspection(s)**	**Cityworks WO#**	**Maint. Required?**	**Date(s) of Maintenance**	**Cityworks WO#(s)**	**NOTES:**
Filterra Units (2x's per year INSPECT) (25)							
Lauridsen Blvd Bridge - 817 E Blvd	1234	3/8/24 and 10/10/24	13525/16176	yes	3/4/24 thru 11/11/24	16184	items were maintained per inspection and bark was replaced with vactor removal.
10th and Race St.(north)	1235	3/8/24 and 10/10/24	13522/16185	yes	3/4/24 thru 11/11/24	16186	items were maintained per inspection and bark was replaced with vactor removal.
10th and Race St.(south)	1236	3/8/24 and 10/10/24	13524/16187	yes	3/4/24 thru 11/11/24	16188	items were maintained per inspection and bark was replaced with vactor removal.
SW corner of Francis and Lauridsen Blvd	4833	3/8/24 and 10/10/24	13515/16189	yes	3/4/24 thru 11/11/24	16191	items were maintained per inspection and bark was replaced with vactor removal.
Mid-block on the w.side of Francis between Lauridsen and Lopez	4834	3/8/24 and 10/10/24	13529/16192	yes	3/4/24 thru 11/11/24	16193	items were maintained per inspection and bark was replaced with vactor removal.
SW corner of Francis and Lopez at round-a-bout	4835	3/8/24 and 10/10/24	13533/16194	yes	3/4/24 thru 11/11/24	16196	items were maintained per inspection and bark was replaced with vactor removal.
NW corner of Francis and Whidby	4836	3/8/24 and 10/10/24	13534/16199	yes	3/4/24 thru 11/11/24	16201	items were maintained per inspection and bark was replaced with vactor removal.
Mid-block on the n. side of Whidby between Francis and Eunice	4837	3/8/24 and 10/10/24	13535/16202	yes	3/4/24 thru 11/11/24	16203	items were maintained per inspection and bark was replaced with vactor removal.
Mid-block on the s. side of Lopez between Francis and Eunice	4842	3/8/24 and 10/10/24	13530/16204	yes	3/4/24 thru 11/11/24	16205	items were maintained per inspection and bark was replaced with vactor removal.
Mid-block on the n. side of Lopez between Francis and Eunice	4845	3/8/24 and 10/10/24	13532/16206	yes	3/4/24 thru 11/11/24	16207	items were maintained per inspection and bark was replaced with vactor removal.
In the 'center' of the block between Lauridsen/Lopez and Eunice/Francis	4843	3/8/24 and 10/10/24	13528/16208	yes	3/4/24 thru 11/11/24	16209	items were maintained per inspection and bark was replaced with vactor removal.
SW Corner of 6th and Francis	840	3/8/24 and 10/10/24	13511/16210	yes	3/4/24 thru 11/11/24	16211	items were maintained per inspection and bark was replaced with vactor removal.
SW Corner of 4th and Francis	838	3/8/24 and 10/10/24	13512/16212	yes	3/4/24 thru 11/11/24	16214	items were maintained per inspection and bark was replaced with vactor removal.
NE Corner of 4th and Francis	837	3/8/24 and 10/10/24	13514/16215	yes	3/4/24 thru 11/11/24	16216	items were maintained per inspection and bark was replaced with vactor removal.
NW Corner of 4th and Francis	839	3/8/24 and 10/10/24	13513/16217	yes	3/4/24 thru 11/11/24	16218	items were maintained per inspection and bark was replaced with vactor removal.
SW corner of 2nd and Francis	836	3/8/24 and 10/10/24	13521/16220	yes	3/4/24 thru 11/11/24	16221	items were maintained per inspection and bark was replaced with vactor removal.
NE Corner of 4th and Albert	835	3/8/24 and 10/10/24	13518/16222	yes	3/4/24 thru 11/11/24	16224	items were maintained per inspection and bark was replaced with vactor removal.
SW Corner of 3rd and Albert	833	3/8/24 and 10/10/24	13516/16225	yes	3/4/24 thru 11/11/24	16226	items were maintained per inspection and bark was replaced with vactor removal.
SE Corner of 2nd and Albert	834	3/8/24 and 10/10/24	13520/16227	yes	3/4/24 thru 11/11/24	16228	items were maintained per inspection and bark was replaced with vactor removal.
10th and M (new install spring 2019)	6434	3/8/24 and 10/10/24	13504/16229	yes	3/4/24 thru 11/11/24	16230	items were maintained per inspection and bark was replaced with vactor removal.
10th and Westview Dr. (new install spring 2019)	6038	3/8/24 and 10/10/24	13505/16231	yes	3/4/24 thru 11/11/24	16232	items were maintained per inspection and bark was replaced with vactor removal.

10th and Seamount Dr. (south side)(new install spring 2019)	6037	3/8/24 and 10/10/24	13507/16233	yes	3/4/24 thru 11/11/24	16234	items were maintained per inspection and bark was replaced with vactor removal.
10th and Seamount Dr. (north side)(new install spring 2019)	6036	3/8/24 and 10/10/24	13506/16235	yes	3/4/24 thru 11/11/24	16236	items were maintained per inspection and bark was replaced with vactor removal.
10th and N St. (south side)(new install spring 2019)	6034	3/8/24 and 10/10/24	13510/16237	yes	3/4/24 thru 11/11/24	16238	items were maintained per inspection and bark was replaced with vactor removal.
10th and N St. (north side)(new install spring 2019)	6035	3/8/24 and 10/10/24	13509/16239	yes	3/4/24 thru 11/11/24	16241	items were maintained per inspection and bark was replaced with vactor removal.
Stormwater Facilities- 2024	**Asset ID #**	**Date of Inspection(s)**	**Cityworks WO#**	**Maint. Required?**	**Date(s) of Maintenance**	**Cityworks WO#(s)**	**NOTES:**
Permeable Surfaces (47)							
5th and H St. (sidewalks)	1309, 1310, 1311, 1312	12/9/2024	16242	yes	12/10/24 and 12/11/24	16244	moss cleaned by travis truckenmiller
5th and K St. (sidewalks)	1700, 1701, 1702	12/9/2024	16245	yes	12/10/24 and 12/11/24	16244	moss cleaned by travis truckenmiller
5th and L St. (sidewalks)	1703, 1704, 1705	12/9/2024	16246	yes	12/10/24 and 12/11/24	16244	moss cleaned by travis truckenmiller
6th and H St. (sidewalks)	1313, 1314, 1315	12/9/2024	16247	yes	12/10/24 and 12/11/24	16244	moss cleaned by travis truckenmiller
6th and K St. (sidewalks)	1697, 1698, 1699	12/9/2024	16248	yes	12/10/24 and 12/11/24	16244	moss cleaned by travis truckenmiller
6th and M St. (sidewalks)	1706, 1707, 1708	12/9/2024	16249	yes	12/10/24 and 12/11/24	16244	moss cleaned by travis truckenmiller
7th and H St. (sidewalks)	1316, 1317	12/9/2024	16250	yes	12/10/24 and 12/11/24	16244	moss cleaned by travis truckenmiller
7th and K St. (sidewalks)	1318, 1319, 1320	12/9/2024	16251	yes	12/10/24 and 12/11/24	16244	moss cleaned by travis truckenmiller
Solar Lane	2097	12/9/2024	16254	yes	engineering invlolvement needed		cleaned once a month by vacuum sweeper
18th St. sidewalk, west of N ST.	5704	12/9/2024	16255	no			
Dunker Dr. sidewalk on west side of road	5697, 5698, 5699, 5700, 5701, 5702	12/9/2024	16256	no			
1st and Race St.	1299, 1300 ,1301, 1302	12/11/2024	16257	no			
1st and Race St.	1304, 1305, 1306, 1307	12/11/2024	16257	no			
1st and Race St.	1308	12/11/2024	16257	no			
Race St. between 1st and 2nd St.	1297, 1298	12/11/2024	16257	no			
4/5 Alley Chambers-Washington	2897	12/9/2024	16258	yes	1/1/24 thru 12/31/24	16260	cleaned once a month by vacuum sweeper
Front-Georgiana, Francis-Eunice	2898	12/9/2024	16259	yes	1/1/24 thru 12/31/24	16260	cleaned once a month by vacuum sweeper
Olympus and Mt. Angeles	new - no ID assigned	12/9/2024	na	no			
City Hall EAST PARKING LOT	new - no ID assigned	na	na	na	1/1/24 thru 12/31/24	16260	cleaned once a month by vacuum sweeper
Stormwater Facilities- 2024	**Asset ID #**	**Date of Inspection(s)**	**Cityworks WO#**	**Maint. Required?**	**Date(s) of Maintenance**	**Cityworks WO#(s)**	**NOTES:**
Ponds and bioswales (4)							
Airport Corners - East of Access Rd	51	1/24/2024	13358	yes	3/4/24 thru 11/11/24	16264	
Airport Corners - West of Access Rd - South Pond	50	1/24/2024	13355	yes	3/4/24 thru 11/11/24	16264	
Airport Corners - West of Access Rd - North Pond	481	1/24/2024	13357	yes	3/4/24 thru 11/11/24	16264	
Red Lion Motel - East of Parking Area	18	1/24/2024	13359	yes	3/4/24 thru 11/11/24	16264	sprayed moss with .25% Semera SC
Pump Stations	**Asset ID #**	**Date of Inspection(s)**	**Cityworks WO#**	**Maint. Required?**	**Date(s) of Maintenance**	**Cityworks WO#(s)**	**NOTES:**
Stevens School Pumpstation	2, 17328, 7	11/14/2024	16265	no			
Swirl Concentrator (3)	**Asset ID #**	**Date of Inspection(s)**	**Cityworks WO#**	**Maint. Required?**	**Date(s) of Maintenance**	**Cityworks WO#(s)**	**NOTES:**
Crown Park Aquaswirl	9	12/11/2024	16267	yes			
1100 Walker St. Vortech (by Contech)	22	12/11/2024	16268	no			
Blackball Ferry Vortech (by Contech)	12	12/11/2024	16269	yes			

Catch Basins: (2681 total as of 3/3/20)	2682
Catch Basins Inspected	1496
Catch Basins Cleaned	1496

Catch Basins: EASTSIDE of TOWN, NIGHT SHIFT, and PRIORITY	**MAINTENANCE GRID**	**Inspect WO#**	**Amount Inspected:**	**Clean WO#**	**Amount Cleaned**	**NOTES:**
	5	one per cb, on file	1	one per cb, on file	1	
	7	one per cb, on file	1	one per cb, on file	1	
	12	one per cb, on file	3	one per cb, on file	3	
	13	one per cb, on file	9	one per cb, on file	9	
	16	one per cb, on file	15	one per cb, on file	15	(2) could not be located
	17	one per cb, on file	11	one per cb, on file	11	
	18	one per cb, on file	35	one per cb, on file	35	
	19	one per cb, on file	123	one per cb, on file	123	(4) sewer lids, (5) landscape plaza yard drains, (12) could not locate
	20	one per cb, on file	84	one per cb, on file	84	(9) could not locate, (1) offline sewer connected, (1) inside Marine Science building
	21	one per cb, on file	157	one per cb, on file	157	(5) could not locate, (2) rebuilt
	22	one per cb, on file	103	one per cb, on file	103	(1) could not locate, (1) manhole, (3) rebuilt
	23	one per cb, on file	45	one per cb, on file	45	(1) rebuilt
	26	one per cb, on file	34	one per cb, on file	34	
	27	one per cb, on file	28	one per cb, on file	28	
	28	one per cb, on file	22	one per cb, on file	22	(2) Contech Filter Vaults, (1) could not locate
	29	one per cb, on file	61	one per cb, on file	61	(2) Contech Filter Vaults, (1) could not locate
	30	one per cb, on file	154	one per cb, on file	154	(1) could not locate
	31	one per cb, on file	117	one per cb, on file	117	(1) could not locate
	32	one per cb, on file	61	one per cb, on file	61	(1) rebuilt
	37	one per cb, on file	26	one per cb, on file	26	(1) drain, not a CB

	38	one per cb, on file	20	one per cb, on file	20	
	40	one per cb, on file	2	one per cb, on file	2	
	41	one per cb, on file	37	one per cb, on file	37	
	47	one per cb, on file	3	one per cb, on file	3	
	57	one per cb, on file	56	one per cb, on file	56	
	58	one per cb, on file	66	one per cb, on file	66	(1) could not locate, (3) rebuilt
	59	one per cb, on file	16	one per cb, on file	16	(1) could not locate
	60	one per cb, on file	25	one per cb, on file	25	(1) could not locate
	61	one per cb, on file	16	one per cb, on file	16	
	62	one per cb, on file	45	one per cb, on file	45	
	63	one per cb, on file	2	one per cb, on file	2	(1) overflow inside reservior not a CB
	64	one per cb, on file	27	one per cb, on file	27	(4) could not locate
	65	one per cb, on file	22	one per cb, on file	22	(1) Rebuilt
	67	one per cb, on file	20	one per cb, on file	20	(1) manhole
	68	one per cb, on file	13	one per cb, on file	13	(2)could not locate
	69	one per cb, on file	4	one per cb, on file	4	(1) could not locate
	90	one per cb, on file	26	one per cb, on file	26	(1) could not locate
	91	one per cb, on file	6	one per cb, on file	6	
		TOTAL Inspected:	**1496**	**TOTAL Cleaned:**	**1496**	
Storm Event Inlet and Flood Prevention Inspection			5035 (parent)			
Storm Inlets Annual Storm Prep Liability Inspection (September)	several, see work order	9/27/2023	16278			
Crown Park Aquaswirl (McKinnley Agreement) water testing (twice: (1) winter storm event and (1) summer storm event)		5/7/2024	9/27/2024	Results obtained by Tyler White, WW Treatment Plant Superintendent		
10 Year Storm Event (if occurs)	did not occur					
Corp Yard- SWPPP inspections	wet weather 1st quarter	4/15/2024	na	yes	October - June	
	wet weather 2nd quarter	5/31/2024	na	yes	October - June	
	dry weather 3rd quarter	9/10/2024	na	yes	July - September	
	wet weather 4th quarter	12/20/2024	na	yes	October - June	

2024 Stormwater Treatment Facilities - TOTAL AMOUNT: based on individual asset ##'s

Treatment and Flow Control BMP's	**Structures**	**Inspected**	**Maintained**		
Total	**209**	**206**	**145**		
Biofiltration Cells	**79**	**77**	**77**	**Two new facilities did not require inspection or maintenance**	
CAVFS	**7**	**7**	**7**		
ConTech Filters Chambers	**9**	**9**	**1**		
Detention Pipes (DGravity)	**33**	**33**	**0**		
Eco Storm Plus Block Media Filter Chambers	**2**	**2**	**2**		
Filterra Units	**25**	**25**	**25**		
Permeable Surfaces	**47**	**46**	**27**	**One new facility did not require inspection or maintenance**	
Ponds and bioswales	4	**4**	**4**		
Swirl Concentrator	**3**	**3**	**2**		

City of Port Angeles | Private Stormwater Facility Annual Inspections - 2024

Count	Development Title	Annual Inspection Date	Inspection Date(s)	Initials	Number of Treatment and Flow Control BMPs/Facilities	Facility Log Submitted?	Deficiencies found?	Enforcement	Enforcement Resolution	Site Compliant?	Site Address	Contact Person Responsible for Maintenance	Contact Information	Billing Info	Billing Status	Notes
1	Black Ball - Ferry Terminal West Pier Replacement	Oct-24	10/22/2024	MM	1	Yes	No	N/A	N/A	Yes	101 Railroad Ave.	Rian Anderson	randerson@cohoferry.com	Black Ball Ferry Line 101 Railroad Ave Port Angeles, WA, 98362	Paid	Replaced all 22 filters in September of 2024.
2	Turner Unit - Boys & Girls Clubs of the Olympic Peninsula	Dec-24	12/2/2024	MM	4	No	No	N/A	N/A	Yes	2301 S. Francis St.	Mary Budke	mbudke@bgc-op.org (360) 477-2641, (360) 683-8095	Boys & Girls Clubs of the Olympic Peninsula PO Box 4167 Sequim, WA 98382	Paid	Staffing inconsistencies have led to poor record keeping.
3	Clallam County - Courthouse Raingarden Retrofit	Oct-24	10/31/2024	MM	7	No	Yes	Working with County to abandoned railed porous asphalt retrofit.	Ongoing	Yes	223 E. 4th St.	Troy Blaine	troy.blaine@clallamcountywa.gov (360) 417-2340	Parks, Fair & Facilities Department 223 East 4th Street, Suite 7 Port Angeles, WA 98362	Paid	Staff has changed and new lead has been educated on responsibiliites.
4	Collegiate Housing International - Apartments	Oct-24	10/28/2024	MM	3	No	No	N/A	N/A	Yes	1134 E. Park Ave	Isaac Smith Curtis Brackett	isaac@chiportangeles.com curtis@chiportangeles.com (415) 662-0750	Collegiate Housing International LLC 4102 S. Regal Ste. 201 Spokane, WA 98223	Paid	Site is in good order.
5	Cook-Ainscough - SFR	Nov-24	11/15/2024	MM	3	Yes	No	N/A	N/A	Yes	844 Willow Ave.	Kerri Cook	upriversoul@hotmail.com (360) 333-5042	Kerri Cook 844 Willow Ave Port Angeles, WA 98362	Paid	Site is in good order. Recommending reduced inspection schedule for 2025.
6	Delhur - Critchfield Industrial Site	Aug-24	8/30/2024	MM	5	Yes	No	N/A	N/A	Yes	Critchfiled Dr & Edgewood Dr.	Alan Escuredo	aescuredo@delhur.com (360) 775 - 9422	Delhur Industries, Inc. P.O. Box 1116 Port Angeles, Washington 98362	Paid	Site is in good order.
7	Campell Ave. PRD Phase 2A & 2B	Aug-24	8/2/2024	MM	2	No	Yes	Education has been provided to developer and HOA regarding the swale. Will follow up with support.	Ongoing with a timeline of six months ending April 2025.	Yes	Rook Drive	Kurt Hansen	kurt@northpointeconstructionllc.com (360) 775 - 5450	Green Crow Investments Co. LLC. PO Box 2439 Port Angles, WA 98362	Paid	Continuing to work with new HOA and several homeowners who have modified a drainage swale on their properties.
8	Maloney Heights - Subdivision	Nov-24	11/19/2024	MM	1	Yes	No	N/A	N/A	Yes	Off 16th St.	Mark Parker	markb4parker@gmail.com (714) 955 - 1021	Lindsay Million, Maloney Heights HOA Secretary 2311 W 16th St Port Angeles, WA 98363	Paid	Site is in good order with HOA established and having a good understanding of their responsibilities.
9	Maloney Heights - Serenity House	Nov-24	11/7/2024	MM	4	No	No	N/A	N/A	Yes	2321 W. 18th St.	Edward Bittick	edward.bittick@serenityhouseclallam.org (360) 215 - 0476	Serenity House of Clallam County P.O. Box 4047 Port Angeles, WA 98362	Paid	Staff has changed and new lead has been educated on responsibiliites.
10	McDonalds	Oct-24	10/22/2024	MM RJ	2	Yes	Yes	Two catch basins at levels requiring maintenance.	Maintenance timeline requires this to be addressed by April 2025.	Yes	1706 E. Front St.	Roger Zepeda	roger.zepeda@us.stores.mcd.com	Gomez Northwest Inc 9700 Harbor Place STE 219 Mukilteo, WA 98275	Paid	New ownership has so far been an improvement in addressing past deficienfies. Treatment vault now functioning.
11	North Olympic Healthcare Network - Family Medicine	Nov-24	11/4/2024	MM	2	No	No	N/A	N/A	Yes	240 W Front St	John-David Burkavage Tammy Reid	jburkavage@nohn-pa.org (408) 368 - 8911 Treid@nohn-pa.org	North Olympic Healthcare Network 240 W Front St. Port Angeles, WA 98362	Paid	Staff has changed and new lead has been educated on responsibiliites.
12	North Olympic Library System - Annex	Oct-24	10/29/2024	MM	1	Yes	No	N/A	N/A	Yes	401 Orcus Ave	Brian Phillips	bphillips@nols.org (360) 417 - 8500 ext 7743	North Olympic Library System, Port Angeles 2210 South Peabody Street Port Angeles, WA 98362	Paid	Site is in good order. Recommending reduced inspection schedule for 2025.
13	Olympic Medical Center - Medical Office Building and parking lots	Dec-24	12/4/2024	MM	10	Yes	Yes	A few structures require maintenance.	Maintenance timeline requires these to be addressed by June 2025.	Yes	939 Caroline St	Jason Francis	jfrancis@olympicmedical.org (360) 417 - 7621	Olympic Medical Center 939 Caroline St Port Angeles, WA 98362	Paid	Site is in overall good order with some structures requiring maintenance or repair, and others nearing maint. levels.
14	Penninsula Housing Authority - Mt Angeles View Phase 1	Apr-24	4/24/2024 5/2/2024	MM	28	Yes	No	N/A	N/A	Yes	2603 S Francis St.	Marc Schultz Annie O'Rourke	mschulz@peninsulapha.org (360) 797 - 4768 aorourke@peninsulapha.org (360) 452 - 7631 ext. *841	Peninsula Housing Authority 2603 South Francis Street Port Angeles, WA 98362	Paid	Site is in good order.
15	Pendley Estates	Dec-24	12/3/2024	MM	3	No	Yes	Timeline has been established to addressed maintenance needs.	Contact has been made with a local company to perform the work. Follow up required.	Yes	Southside of West 14th Street, across from Samara Drive	Individual homeowners, see file for info.	Individual homeowners, see file for info.	Individual homeowners, see file for info.	Unsent	Continuing to work with homeowners on their collectively owned infrastructure. Spoke with Cody Slack and Deborah McCracken during visit. Erika Andrews has made progress in getting a quote for service.
16	Peninsula Behavioral Health - 2016 Parking Lot	emailed	12/19/2024	HC	3	Yes	No	N/A	N/A	Yes	118 E. 8th St.	Wes Zimmer	wesz@peninsulabehavioral.org (360) 461-7386	Peninsula Behavioral Health 118 East 8th Street Port Angeles, WA 98362	Paid	Site is in good order with past items addressed.
17	Peninsula College - Allied Health Building and Parking Lot & Soccer Fields	Nov-24	11/8/2024	MM	12	No	Yes	One catch basin requires maintenance.	Maintenance timeline requires these to be addressed by May 2025.	Yes	1502 E Lauridsen Blvd	Matt Sperr JD Smith	msperr@pencol.edu jsmith@pencol.edu (360) 460 - 3292	Finance and Administration, Peninsula College 1502 E Lauridsen Boulevard Port Angeles, WA 98362	Paid	Site is in good order.
18	Port of Port Angeles - Airport Industrial Park	Sep-24	9/26/2024	MM	6	Yes	Yes	Onsite operations will remove vegetation overgrowth at pond spillway.	Addressed by POPA Operations.	Yes	2200 W 18th ST	Jesse Waknitz	jessew@portofpa.com	Port of Port Angeles P.O. Box 1350 Port Angeles, WA 98362	Paid	Minor deficiencies with overgrowth around pond outlet structures and overflow has been addressed by local operations.
19	Port of Port Angeles - Around Again	Sep-24	9/26/2024	MM	5	Yes	No	N/A	N/A	Yes	2604 W. 18th St.	POPA - Jesse Waknitz	jessew@portofpa.com	Port of Port Angeles P.O. Box 1350 Port Angeles, WA 98362	Paid	Site is in good order. Recommending reduced inspection schedule for 2025.
20	Port of Port Angeles - Marine Terminal SW Treatment Facility & Marine Trades Area Wash-down Facility	Sep-24	9/26/2024	MM	1	Yes	Yes	Onsite operations will remove woodchips from catch basin missed by recent service.	Addressed by POPA Operations.	Yes	615 Marine Drive	Jesse Waknitz	jessew@portofpa.com	Port of Port Angeles P.O. Box 1350 Port Angeles, WA 98362	Paid	Site is in good order with one catch basin being beyond maintenance levels and quickly addressed afterwards.
21	Shore Aquatic Center	Dec-24	12/4/2024	MM	3	No	Yes	Filter vault requires maintenance.	Maintenance timeline requires these to be addressed by June 2025.	Yes	225 East 5th St.	Steve Burke	steve@sacpa.org (360) 460 - 3526	Shore Metropolitan Park District 225 E 5th St Port Angeles, WA 98362	Paid	Minor deficiency with west parking lot filter vault.
22	Northwest Kidney Center	Nov-24	11/14/2024	MM	3	Yes	No	N/A	N/A	Yes	707 South Chase St.	Ashish Kumar	ashish.kumar@nwkidney.org (206) 720 - 3761	Northwest Kidney Centers, Inc. 12901 20th Ave South SeaTac, WA 98168	Paid	Site is in good order. Recommending reduced inspection schedule for 2025.
23	Port Angeles Waterfront Center	Sep-24	9/27/2024	RJ	2	No	No	N/A	N/A	Yes	Front & Oak	Vance Mattix	vance@fieldhallevents.org (360) 775 - 7252	Port Angeles Waterfront Center PO Box 71 Port Angeles, WA 98362	Paid	Staff has changed and new lead has been educated on responsibiliites.
24	Two-Tenant Building	Oct-24	10/11/2024	MM HC	4	Yes	No	N/A	N/A	Yes	2027 E 1st Street	Paul Fredson	paul@wilsonrm.com (509) 853 - 1060	Wilson Real Estate, 222 S 1st St Yakima, WA 98901	Paid	Staff has changed and new lead has been educated on responsibiliites.
25	Port Angeles Hardwood Truck Staging Area	Oct-24	10/31/2024	MM	2	Yes	No	N/A	N/A	Yes	333 Eclipse Industrial Parkway	Scott Ellis	ScottE@pahardwood.com	Port Angeles Hardwood 333 Eclipse Industrial Parkway, Port Angeles, WA 98363	Paid	Site is in good order. Please include purchasing@pahardwood.com for all invoices.
	Milwaukee Trails Subdivision	Construction									W 14th St. and Milwaukee Drive	Dennis Yakovich	dennis@northpointeconstructionllc.com (360) 460 - 2600			Pond and bioswale constructed. Less than 80% of lots complete.
	Platypus Marine - Vessel Maintenance Facility	Construction									535 Marine Drive	TBD, use: Judson Linnabary	judson@platypus.com			Under construction.
	Marine Trades	Construction									439 Marine Drive	Jesse Waknitz	jessew@portofpa.com			Under construction.
	Dungeness Valley Homes 3 Story Apts	Construction									1815 Melody Lane	TBD, use: Andy Hines	dungenessvalleyhomes@gmail.com (360) 461 - 1405			Under construction.
	Lang Subdivision	Construction									1735 W 10th Street	TBD, use: Dan Williams	angel77@olypen.com (360) 460 - 1007			Pond constructed. Less than 80% of lots complete.
	Trailside PRD	Construction									Lot 2 Short Plat 80-5-3 (Vol. 9, Pg. 67) Suburban Lot 79	TBD				Under construction.
	Popeyes	Pre-development									1527 E 1st Street	Charlie Patton	charlie.patton@ambrosiaqsr.com (503) 781 - 8967			Permit issued but not started as of 9/23/2024
	West Parking Lot	Pre-development									115 W Front Street	TBD, use: Dustin Schmitt	dustinpa33@gmail.com (360) 477 - 9875			Permit issued 7/18/2023 but no construction known as of yet
	Lower Elwha Klallam Tribe - Downtown Hotel	Pre-development									111 E Front Street	TBD, use: Lower Elwha Klallam Tribe	info@elwha.org (360) 452 - 8471			In design

Year end Stats:	Scheduled	Achieved	Passed 1st time	Deficient Sites	Resolved	Progressive enforcement ongoing	Compliant sites
	25	25	16/25	9/25	2/9	7/9	25/25
	100%		64%	36%	22%	78%	100%

Implementation of the City's Source Control (SC) Program | 2024 Summary of Actions Taken

Per S5.C.8.b.iii and S5.C.8.b.iv of the Permit

- Performed SC inspections, exceeding the minimum 20% inspection rate of the business inventory list.
- Documented inspection results and provided guidance to businesses inspected.
- Followed up with inspected businesses as required to achieve regulatory compliance.
- Continued development of a funding plan for the City's SC program by partnering again with the Pollution Prevention Assistance (PPA) program.
- Distributed a multi-program outreach brochure (SC & PPA) for local small businesses and orgs.
- Distributed business sector-specific brochures for business sectors commonly inspected for SC.
- SC inspector continued various trainings, including obtaining a HAZWOPER 40 certification.
- Continued partnering with the City's Wastewater Source Control Coordinator for combined inspections to combat F.O.G.
- SC inspector continues partnering with Clallam County Streamkeepers to assist in tracking local water pollutants from their point source to their ultimate discharge into State waters.
- Maintains a digital inspection database via Survey123 (Esri) to increase reporting, tracking, and analysis efficiency/capability. Fully implemented.
- Maintains HUB Dashboards (Esri) for SC inspector and supervisors to track program progress/status. Fully implemented.
- Maintains an online SC HUB platform (Esri) for program participants to access inspection documents, upload documents, access utility maps, and view pertinent informational material.
- Purchased additional equipment and supplies needed to perform work.

Source Control Program | Inspections Performed in 2024

Program Manager: R. Jeffries
SC/PPA Inspector: Howard Carlseen

PAMC: 13.63
Phase II SW Permit: S5.C.8.b.ii

Count	Visit Type	Inspection Date	Business Name	Business Address	Location City	Location Zip	NAICS Code
1	initial	3/25/2024	Race Street Auto Parts	1230 E 1st St	Port Angeles	98362	441310
2	initial	8/5/2024	Autozone #4110	1936 E 1st St	Port Angeles	98362	441310
3	initial	8/5/2024	Harbor Freight Tools #596	1940 E 1st St Ste 168	Port Angeles	98362	444130
4	followup	1/24/2024	Tractor Supply Company	114 E Lauridsen Blvd	Port Angeles	98362	444240
5	initial	8/2/2024	Grandview Grocery	802 C St S	Port Angeles	98363	445110
6	initial	9/11/2024	Sunrise Meats, Inc.	Sunrise Meats, Inc.	Port Angeles	98362	445210
7	initial	8/7/2024	Fairmount Market (Shell)	1127 W Hwy 101	Port Angeles	98363	447110
8	followup	8/29/2024	48 Degrees North Restaurant	221 N Lincoln St	Port Angeles	98362	721110
9	followup	9/27/2024	48 Degrees North Restaurant	221 N Lincoln St	Port Angeles	98362	721110
10	followup	10/3/2024	48 Degrees North Restaurant	221 N Lincoln St	Port Angeles	98362	721110
11	initial	5/29/2024	48 Degrees North Restaurant	221 N Lincoln St	Port Angeles	98362	721110
12	followup	10/17/2024	Moby Duck Chowder & Seafood	222 N Lincoln St, Ste 101	Port Angeles	98362	722330
13	screening	10/22/2024	Moby Duck Chowder & Seafood	222 N Lincoln St, Ste 101	Port Angeles	98362	722330
14	followup	9/23/2024	Moby Duck Chowder & Seafood	222 N Lincoln St, Ste 101	Port Angeles	98362	722330
15	followup	9/23/2024	Moby Duck Chowder & Seafood	222 N Lincoln St, Ste 101	Port Angeles	98362	722330
16	initial	8/21/2024	Moby Duck Chowder & Seafood	222 N Lincoln St, Ste 101	Port Angeles	98362	722330
17	initial	8/22/2024	Bar N9NE	229 W 1st St	Port Angeles	98362	722410
18	initial	4/1/2024	Westside Pizza	612 S Lincoln St	Port Angeles	98362	722511
19	followup	4/12/2024	Westside Pizza	612 S Lincoln St	Port Angeles	98362	722511
20	initial	5/7/2024	Tendy's Garden	920 E 1st St	Port Angeles	98362	722511
21	followup	6/7/2024	Tendy's Garden	920 E 1st St	Port Angeles	98362	722511
22	followup	6/20/2024	Tendy's Garden	920 E 1st St	Port Angeles	98362	722511
23	followup	6/21/2024	Kokopelli Grill	203 E Front St	Port Angeles	98362	722511
24	followup	6/21/2024	Hook & Line Pub	201 E Front St	Port Angeles	98362	722511
25	followup	6/21/2024	Sergio's Hacienda	205 E 8th St Ste B	Port Angeles	98362	722511
26	initial	6/26/2024	Fiesta Jalisco	636 E Front St	Port Angeles	98362	722511
27	followup	6/27/2024	Chestnut Cottage Restaurant	929 E Front St	Port Angeles	98362	722511
28	followup	7/25/2024	Next Door	113 W 1st St, Ste #A	Port Angeles	98362	722511
29	followup	7/25/2024	Sergio's Hacienda	205 E 8th St Ste B	Port Angeles	98362	722511

30	followup	7/29/2024	Fiesta Jalisco	636 E Front St	Port Angeles	98362	722511
31	initial	8/7/2024	Fairmount Restaurant	1127 W Hwy 101	Port Angeles	98363	722511
32	followup	8/9/2024	Next Door	113 W 1st St, Ste #A	Port Angeles	98362	722511
33	followup	8/9/2024	Sergio's Hacienda	205 E 8th St Ste B	Port Angeles	98362	722511
34	followup	9/6/2024	Fairmount Restaurant	1127 W Hwy 101	Port Angeles	98363	722511
35	followup	9/23/2024	New Day Eatery	102 W Front St	Port Angeles	98362	722511
36	initial	10/1/2024	Yodelin Broth Company	112 W Lauridsen Blvd	Port Angeles	98362	722511
37	followup	10/9/2024	New Day Eatery	102 W Front St	Port Angeles	98362	722511
38	followup	10/10/2024	New Day Eatery	102 W Front St	Port Angeles	98362	722511
39	followup	10/15/2024	Fast Burritos	940 E 1st St	Port Angeles	98362	722511
40	followup	10/17/2024	Fast Burritos	940 E 1st St	Port Angeles	98362	722511
41	followup	10/22/2024	The Rail	128 E Railroad Ave	Port Angeles	98362	722511
42	followup	11/6/2024	Asian Buffet	1940 E 1st St, Ste 160	Port Angeles	98362	722511
43	followup	5/13/2024	Shirley's Cafe	612 S Lincoln St	Port Angeles	98362	722511
44	initial	5/22/2024	Hook & Line Pub	201 E Front St	Port Angeles	98362	722511
45	followup	7/26/2024	Grayson's	208 E 8th St, Ste A	Port Angeles	98362	722511
46	initial	8/19/2024	Asian Buffet	1940 E 1st St, Ste 160	Port Angeles	98362	722511
47	followup	9/20/2024	Asian Buffet	1940 E 1st St, Ste 160	Port Angeles	98362	722511
48	followup	9/23/2024	The Rail	128 E Railroad Ave	Port Angeles	98362	722511
49	followup	10/25/2024	Fresh Wok	1603 E Front St	Port Angeles	98362	722511
50	initial	4/2/2024	Shirley's Cafe	612 S Lincoln St	Port Angeles	98362	722511
51	initial	5/16/2024	Chestnut Cottage Restaurant	929 E Front St	Port Angeles	98362	722511
52	initial	5/21/2024	Sergio's Hacienda	205 E 8th St Ste B	Port Angeles	98362	722511
53	initial	5/22/2024	Kokopelli Grill	203 E Front St	Port Angeles	98362	722511
54	initial	6/20/2024	Next Door	113 W 1st St, Ste #A	Port Angeles	98362	722511
55	initial	7/11/2024	Grayson's	208 E 8th St, Ste A	Port Angeles	98362	722511
56	initial	8/20/2024	The Rail	128 E Railroad Ave	Port Angeles	98362	722511
57	initial	8/22/2024	New Day Eatery	102 W Front St	Port Angeles	98362	722511
58	initial	8/23/2024	Fresh Wok	1603 E Front St	Port Angeles	98362	722511
59	initial	9/11/2024	Fast Burritos	940 E 1st St	Port Angeles	98362	722511
60	initial	10/1/2024	The Empossible Eden Cafe, LLC	704 Marine Dr	Port Angeles	98363	722511
61	initial	10/15/2024	Pho New Saigon	106 W Front St	Port Angeles	98362	722511
62	followup	5/13/2024	Taco Time	1105 E Front St	Port Angeles	98362	722513
63	initial	8/15/2024	Jack in the Box	902 E Front St	Port Angeles	98362	722513
64	followup	8/20/2024	Wendys	1830 E 1st St	Port Angeles	98362	722513
65	followup	9/13/2024	Taco Time	1105 E Front St	Port Angeles	98362	722513

66	followup	10/4/2024	Jack in the Box	902 E Front St	Port Angeles	98362	722513
67	followup	12/2/2024	Jack in the Box	902 E Front St	Port Angeles	98362	722513
68	followup	10/18/2024	Joshua's Restaurant	113 Del Guzzi Dr	Port Angeles	98362	722513
69	initial	4/5/2024	Taco Time	1105 E Front St	Port Angeles	98362	722513
70	initial	8/13/2024	Wendys	1830 E 1st St	Port Angeles	98362	722513
71	initial	9/23/2024	Little Devil's Lunchbox	315 E 1st St	Port Angeles	98362	722513
72	initial	9/23/2024	Little Devil's Grill	824 S C St	Port Angeles	98363	722513
73	initial	9/26/2024	Joshua's Restaurant	113 Del Guzzi Dr	Port Angeles	98362	722513
74	initial	10/9/2024	Gordy's Pizza and Pasta	1123 E 1st St	Port Angeles	98362	722513
75	followup	4/26/2024	Starbucks #68183	2027 E 1st St	Port Angeles	98362	722515
76	followup	11/19/2024	Frugals	1520 E Front St	Port Angeles	98362	722515
77	initial	4/3/2024	Starbucks #68183	2027 E 1st St	Port Angeles	98362	722515
78	initial	5/23/2024	The Great Northern Coffee Bar	118 W 1st St	Port Angeles	98362	722515
79	initial	6/21/2024	Lincoln Street Coffee Pot	902 Lincoln St #A	Port Angeles	98362	722515
80	initial	10/18/2024	Frugals	1520 E Front St	Port Angeles	98362	722515

Source Control Program | 2024 Business Inspection List

Program Manager: R. Jefferies | **PAMC: 13.63**

Data Source: WA Dept. of Revenue (DOR) | **SC/PPA Inspector: Howard Carlseen** | **Phase II SW Permit: S5.C.8.b.ii**

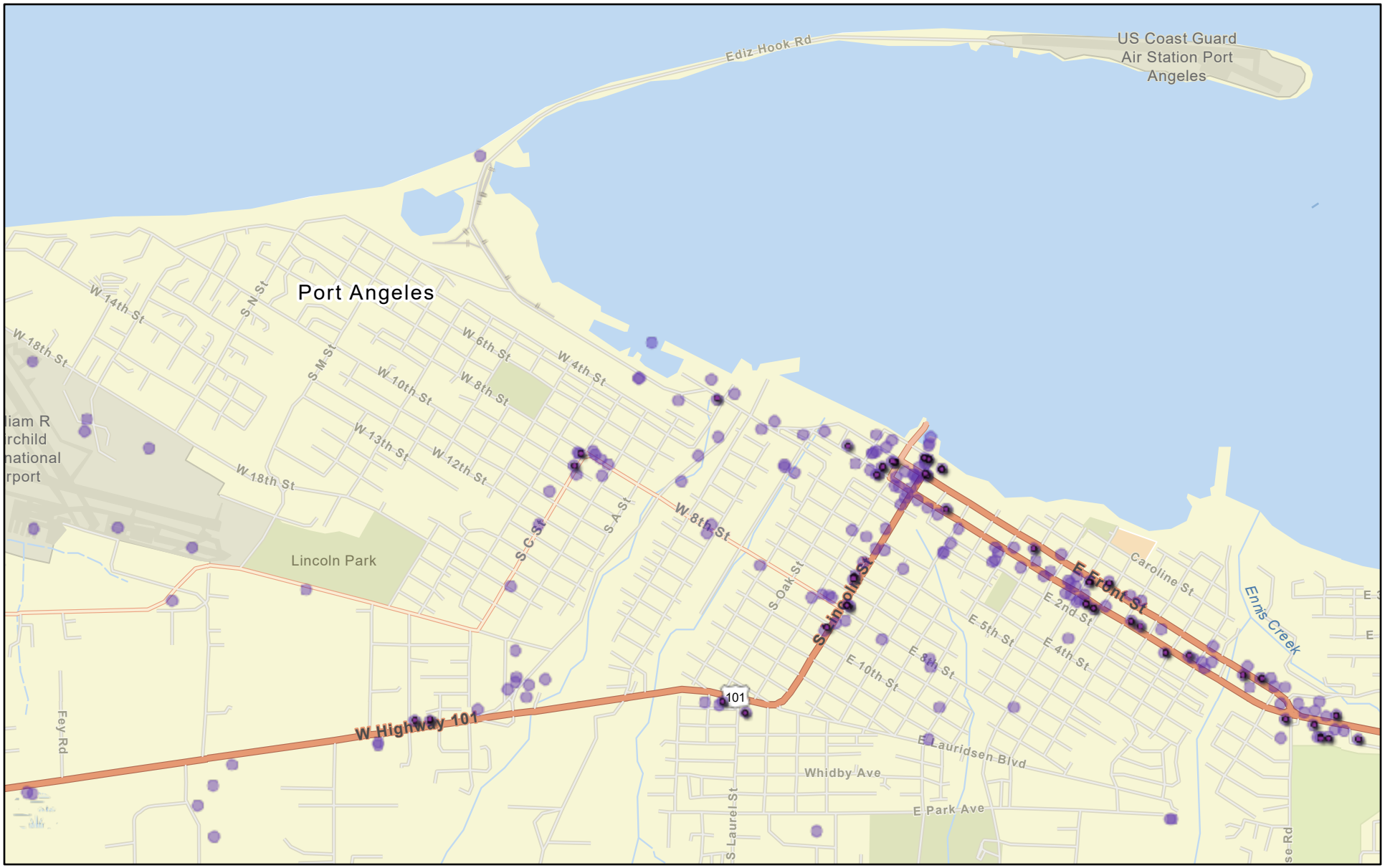
Count	Business Name	Location Address	Location City	Location State	Location Zip	NAICS	NAICS Code Description	Appendix 8 Code
1	1ST ST MARKET & DELI (DASHMESH PETROLEUM 13 INC)	210 E 1ST ST	PORT ANGELES	WA	98362	447110	Gasoline Stations with Convenience Stores	447 (Automotive Dealers and Gas Service Stations)
2	48 DEGREES NORTH RESTAURANT & RED LION HOTEL	221 N LINCOLN ST	PORT ANGELES	WA	98362	721110	Hotels (except Casino Hotels) and Motels	722 (Food Services and Drinking Places)
3	A & A APPLIANCE SERVICE, INC.	914 S EUNICE ST	PORT ANGELES	WA	98362	444180	Other Building Material Dealers	8114xx (Repair and Maintenance)
4	ALDERSON'S AUTO BODY AND PAINT, INC.	1935 EDGEWOOD DR	PORT ANGELES	WA	98363	811121	Automotive Body, Paint, and Interior Repair and Maint	8111xx (Repair and Maintenance)
5	ALL METAL RECYCLING	124 S ALBERT ST	PORT ANGELES	WA	98362	423930	Recyclable Material Merchant Wholesalers	423930 (Wholesale Trade- Durable Goods)
6	ALOHA SMOOTHIES LLC	412 S LINCOLN ST	PORT ANGELES	WA	98362	722330	Mobile Food Services	722 (Food Services and Drinking Places)
7	ANGELES BREWING SUPPLIES	116 N LINCOLN ST	PORT ANGELES	WA	98362	312120	Breweries	312 (Beverage, Food, and Tobacco Manufacturing)
8	ANGELES COMPOSITE TECHNOLOGIES, INC.	2138 W 18TH ST	PORT ANGELES	WA	98362	325211	Plastics Material and Resin Manufacturing	325 (Chemical Manufacturing)
9	ANGELES ELECTRIC, INC.	524 E 1ST ST	PORT ANGELES	WA	98362	238210	Electrical Contractors and Other Wiring Installation Co	238 (Specialty Trade Contractors)
10	ANGELES MACHINE WORKS, INCORPORATED.	404 E 2ND ST	PORT ANGELES	WA	98362	332710	Machine Shops	332 (Fabricated Metal Product Manufacturing)
11	ANGELES MILLWORKS & LUMBER CO., INC.	1601 S C ST	PORT ANGELES	WA	98362	444190	Other Building Material Dealers	444 (Building Materials, Hardware, Garden Supplies)
12	ANGELES PLUMBING & PUMPS	917 W 8TH ST	PORT ANGELES	WA	98363	238220	Plumbing, Heating, and Air-Conditioning Contractors	238 (Specialty Trade Contractors)
13	ARCO AM/PM - AYUSH & ANSH INC III	807 S LINCOLN ST	PORT ANGELES	WA	98362	447110	Gasoline Stations with Convenience Stores	447 (Automotive Dealers and Gas Service Stations)
14	ARROW MARINE GROUP aka WASHINGTON MARINE REPAIR LLC	830 MARINE DR	PORT ANGELES	WA	98362	811490	Other personal and household goods repair & mainter	811 (Repair & Maintenance)
15	ASIAN BUFFET	1940 E 1ST ST STE 160	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
16	AUTOZONE #4110	1936 E 1ST ST	PORT ANGELES	WA	98362	441310	Automotive Parts and Accessories Stores	441 (Automotive Dealers and Gas Service Stations)
17	AVIS CAR RENTAL or HECKMAN ENTERPRISES	111 E 8TH ST	PORT ANGELES	WA	98362	532111	Passenger Car Rental	5321xx (Rental and Leasing Services)
18	BAR N9NE	229 W 1ST ST	PORT ANGELES	WA	98362	722410	Drinking Places (Alcoholic Beverages)	722 (Food Services and Drinking Places)
19	BARBECUE aka MYOPIC MEATS, LLC	110 E 1ST ST	PORT ANGELES	WA	98362	722513	Limited-Service Restaurants	722 (Food Services and Drinking Places)
20	BARHOP BREWING	124 W RAILROAD AVE	PORT ANGELES	WA	98362	424810	Beer and Ale Merchant Wholesalers	4248xx (Wholesale Trade- Nondurable Goods)
21	BARHOP BREWING	2506 W 19TH ST	PORT ANGELES	WA	98362	424810	Beer and Ale Merchant Wholesalers	4248xx (Wholesale Trade- Nondurable Goods)
22	BAYVIEW TRANSMISSION AND MUFFLER INC	2026 E 1ST ST	PORT ANGELES	WA	98362	811113	Automotive Transmission Repair	8111xx (Repair and Maintenance)
23	BELLA ITALIA	118 E 1ST ST	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
24	BELLA ROSA COFFEE SHOP	403 S LINCOLN ST STE 1	PORT ANGELES	WA	98362	722515	Snack and Nonalcoholic Beverage Bars	722 (Food Services and Drinking Places)
25	BOURBON WEST	125 W FRONT ST	PORT ANGELES	WA	98362	722410	Drinking Places (Alcoholic Beverages)	722 (Food Services and Drinking Places)
26	BRUCE'S SPECIALTY AUTO	109 N ENNIS	PORT ANGELES	WA	98362	811111	General Automotive Repair	8111xx (Repair and Maintenance)
27	BRUCH & BRUCH CONSTRUCTION, INC.	1706 W HIGHWAY 101	PORT ANGELES	WA	98363	237310	Highway, Street, and Bridge Construction	237 (Heavy and Civil Engineering Construction)
28	BUENA LUZ BAKERY	1105 S EUNICE ST	PORT ANGELES	WA	98362	311811	Retail Bakeries	311 (Beverage, Food, and Tobacco Manufacturing)
29	C STREET MINI MART AND FOOD	901 S C ST	PORT ANGELES	WA	98363	445120	Convenience Stores	445 (Food and Beverage Stores)
30	CAUDILL DISTILLERY	125 MOTOR AVE	PORT ANGELES	WA	98362	312120	Breweries	312 (Food, Beverage, and Tobacco Manufacturing)
31	CENTURYLINK QC	406 S LAUREL	PORT ANGELES	WA	98362	237130	Power and Communication Line and Related Structure	237 (Heavy and Civil Engineering Construction)
32	CHESTNUT COTTAGE RESTAURANT	929 E FRONT ST	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
33	CLALLAM TRANSIT SYSTEM	4100 TUMWATER TRUCK RTE	PORT ANGELES	WA	98362	485210	Interurban and Rural Bus Transportation	485 (Transit and Ground Passenger Transportation)
34	CONVERGENCE DESIGN & APPAREL LLC	1013 1/2 W 11TH ST	PORT ANGELES	WA	98363	323113	(**Observed NIACS**) Commercial Screen Printing	323 (Commercial Screen Printing)
35	COUNTRY AIRE NATURAL FOODS	200 W 1ST ST	PORT ANGELES	WA	98362	445298	All Other Specialty Food Stores	445 (Food and Beverage Stores)
36	DAREN'S POINT S TIRE & SERVICE	320 TUMWATER TRUCK RTE	PORT ANGELES	WA	98363	441320	(**Observed NIACS**) Tire Dealers	4413xx (Automotive Parts, Accessories & Tire Stores)
37	DAVE'S HEATING & COOLING SERVICE, INC.	1206 S C ST	PORT ANGELES	WA	98363	238220	Plumbing, Heating, and Air-Conditioning Contractors	238 (Specialty Trade Contractors)
38	DELHUR INDUSTRIES, INC.	4333 S TUMWATER TRUCK RTE	PORT ANGELES	WA	98362	237990	Other Heavy and Civil Engineering Construction	237 (Heavy and Civil Engineering Construction)
39	DISCOVER E-BIKE, LLC	109 N OAK ST	PORT ANGELES	WA	98362	441227	Motorcycle, ATV, and All Other Motor Vehicle Dealers	441227 (Motorcycle, ATV, & All Other Motor Vehicle)
40	DOMINO'S PIZZA aka TERBOR ENTERPRISES LLC	1210 E FRONT ST STE B	PORT ANGELES	WA	98362	722513	Limited-Service Restaurants	722 (Food Services and Drinking Places)
41	DOWN TO EARTH LANDSCAPING & EXCAVATION	306 S VALLEY ST	PORT ANGELES	WA	98362	561730	Landscaping Services	238 (Specialty Trade Contractors)
42	DOWNRIGGERS RESTAURANT	115 E RAILROAD AVE	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
43	DRAKES U-BAKE PIZZA & SUBS	819 S LINCOLN ST	PORT ANGELES	WA	98362	722513	Limited-Service Restaurants	722 (Food Services and Drinking Places)
44	EASY STREET COFFEE AND TEA HOUSE LLC	128 W 1ST ST	PORT ANGELES	WA	98362	722515	Snack and Nonalcoholic Beverage Bars	722 (Food Services and Drinking Places)
45	ELECTRIC CLOUD COFFEE LLC	630 E 1ST ST	PORT ANGELES	WA	98362	722515	Snack and Nonalcoholic Beverage Bars	722 (Food Services and Drinking Places)
46	ENTERPRISE RENT-A-CAR	902 E 1ST ST STE D	PORT ANGELES	WA	98362	532111	Passenger Car Rental	5321xx (Rental and Leasing Services)
47	EVANS AUTOMOTIVE	1938 E ENNIS CREEK RD	PORT ANGELES	WA	98362	811111	General Automotive Repair	8111xx (Repair and Maintenance)
48	EVERGREEN COLLISION CENTERS, INC. & EVERGREEN TOWING	820 E FRONT ST STE B	PORT ANGELES	WA	98362	811121	Automotive Body, Paint, and Interior Repair and Maint	8111xx (Repair and Maintenance)
49	EVERGREEN MEATS	306 S VALLEY ST	PORT ANGELES	WA	98362	424470	Meat and Meat Product Merchant	4247xx (Wholesale Trade - Nondurable Goods)
50	EXTRA MILE TECH & ELECTRICAL	1246 W HIGHWAY 101	PORT ANGELES	WA	98362	238210	Electrical Contractors and Other Wiring Contractors	238210 (Electrical contractors & other wiring cont.)
51	FAIRMOUNT MARKET (SHELL HWY 101)	1137 W HIGHWAY 101	PORT ANGELES	WA	98363	447110	Gasoline Stations with Convenience Stores	447 (Automotive Dealers and Gas Service Stations)
52	FAIRMOUNT RESTAURANT aka FAIRMOUNT DINER	1127 HWY 101 W	PORT ANGELES	WA	98363	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
53	FAST BURRITOS	940 EAST FIRST STREET	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)

54	FASTENAL COMPANY	724 E 1ST ST	PORT ANGELES	WA	98362	423710	Hardware Merchant Wholesalers	4237xx (Wholesale Trade- Durable Goods)
55	FIESTA JALISCO OF PORT ANGELES	636 E FRONT ST	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
56	FIREHOUSE GRILL	117 E 8TH ST	PORT ANGELES	WA	98362	722513	Limited-Service Restaurants	722 (Food Services and Drinking Places)
57	FIRST RACE CAR WASH	907 E 1ST ST	PORT ANGELES	WA	98362	811192	Car Washes	811192 (Repair and Maintenance)
58	FIRST STREET CHEVRON OR CHEVRON PORT ANGELES	601 E 1ST ST	PORT ANGELES	WA	98362	447110	Gasoline Stations with Convenience Stores	447 (Automotive Dealers and Gas Service Stations)
59	FIRST STREET HAVEN	107 E 1ST ST	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
60	FKC CO., LTD.	2708 W 18TH ST	PORT ANGELES	WA	98363	333248	Other Industrial Machinery Manufacturing	333 (Machinery, Computer, and Elec. Prod Man.)
61	FOGTOWN COFFEE BAR	1105 E FRONT ST	PORT ANGELES	WA	98362	722515	Snack and Nonalcoholic Beverage Bars	722 (Food Services and Drinking Places)
62	FOOD MART (MARATHON)	331 W 1ST ST	PORT ANGELES	WA	98362	457110	Gasoline Stations with Convenience Stores	447 (Automotive Dealers and Gas Service Stations)
63	FRANK'S AUTO REPAIR & PARTS INC.	1416 E FRONT ST	PORT ANGELES	WA	98362	811111	General Automotive Repair	8111xx (Repair and Maintenance)
64	FRESH WOK	1603 E FRONT ST	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
65	FRUGALS	1520 E FRONT ST	PORT ANGELES	WA	98362	722515	Snack and Nonalcoholic Beverage Bars	722 (Food Services and Drinking Places)
66	FULL WESTERN INDUSTRIAL	4130 TUMWATER TRUCK RTE	PORT ANGELES	WA	98363	811121	Automotive Paint, Body, & Interior Repair	8111xx (Repair and Maintenance)
67	GATEWAY	120 N LINCOLN ST	PORT ANGELES	WA	98362	722410	Drinking Places (Alcoholic Beverages)	722 (Food Services and Drinking Places)
68	GEORGE ZINK SALVAGE	3140 SADDLE CLUB RD	PORT ANGELES	WA	98362	423930	Recyclable Material Merchant Wholesalers	423930 (Wholesale Trade- Durable Goods)
69	GORDY'S PIZZA & PASTA	1123 E 1ST ST	PORT ANGELES	WA	98362	722513	Limited-Service Restaurants	722 (Food Services and Drinking Places)
70	GRANDVIEW GROCERY, INC	802 C ST SOUTH	PORT ANGELES	WA	98362	445110	Supermarkets and Other Grocery (except Convenienc	445 (Food and Beverage Stores)
71	GRAY MOTORS	1937 E 1ST ST	PORT ANGELES	WA	98362	441120	Used Car Dealers	441 (Automotive Dealers and Gas Service Stations)
72	GRAYSON'S	205 E 8TH ST	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
73	HARBINGER BREWERY	2358 W HIGHWAY 101	PORT ANGELES	WA	98362	312130	Wineries	312 (Beverage, Food, and Tobacco Manufacturing)
74	HARBOR FREIGHT TOOLS #596	1940 E 1ST ST_STE 168	PORT ANGELES	WA	98362	444130	Hardware Stores	444 (Building, Hardware, Garden Supplies Dealers)
75	HAWK DIESEL MARINE SERVICES, LLC	934 MARINE DR	PORT ANGELES	WA	98363	811490	Other personal and household goods repair and main	8114xx (Other Personal & Household Goods Repair)
76	HECKMAN ENTERPRISES, INC.	111 E 8TH ST	PORT ANGELES	WA	98362	532111	Passenger Car Rental	5321xx (Rental and Leasing Services)
77	HIGH TIDE SEAFOODS, INC.	808 MARINE DR	PORT ANGELES	WA	98363	424460	Fish and Seafood Merchant Wholesalers	4244xx (Wholesale Trade- Nondurable Goods)
78	HIGHER GROUNDS ESPRESSO CORPORATION	802 C ST	PORT ANGELES	WA	98363	722515	Snack and Nonalcoholic Beverage Bars	722 (Food Services and Drinking Places)
79	HIGHWAY 101 FOOD MART aka DHOOT LLC (SHELL ROAD RUNNER	1023 E FRONT ST	PORT ANGELES	WA	98362	457110	Gasoline Stations with Convenience Stores	447 (Automotive Dealers and Gas Service Stations)
80	HOAGLAND INC aka THURMAN SUPPLY	1807 E FRONT ST	PORT ANGELES	WA	98362	444190	Other Building Material Dealers	444 (Building, Hardware, Garden Supplies Dealers)
81	HOCH CONSTRUCTION	4201 TUMWATER TRUCK RTE	PORT ANGELES	WA	98363	236115	New Single-Family Housing Construction (except For-	236 (Construction of Buildings)
82	HOOK & LINE PUB	201 E FRONT ST	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
83	HORIZON EXCAVATING, INC.	2346 W HIGHWAY 101	PORT ANGELES	WA	98363	238910	Site Preparation Contractors	238xxx (Specialty Trade Contractors)
84	HWY 101 SERVICES LLC	2450 W HIGHWAY 101	PORT ANGELES	WA	98363	811192	Car Washes	8111xx (Repair and Maintenance)
85	JACK IN THE BOX aka AJP ENTERPRISES, LLC	902 E FRONT ST	PORT ANGELES	WA	98362	722513	Limited-Service Restaurants	722 (Food Services and Drinking Places)
86	JASMINE BISTRO	222 N LINCOLN ST STE 111	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
87	JIMMY JOHNS aka FNS FOOD SERVICE GROUP, LLC	108 DEL GUZZI DR	PORT ANGELES	WA	98362	722513	Limited-Service Restaurants	722 (Food Services and Drinking Places)
88	JOSHUA'S RESTAURANT	113 DEL GUZZI DR	PORT ANGELES	WA	98362	722513	Limited-Service Restaurants	722 (Food Services and Drinking Places)
89	JUST REWARDS ESPRESSO	1001 E 1ST ST # A	PORT ANGELES	WA	98362	722515	Snack and Nonalcoholic Beverage Bars	722 (Food Services and Drinking Places)
90	KNIGHT FIRE PROTECTION	2509 W 19TH ST	PORT ANGELES	WA	98362	238220	Plumbing, Heating, and Air-Conditioning Contractors	238 (Specialty Trade Contractors)
91	KOKOPELLI GRILL	203 E FRONT ST	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
92	LA BELLE CREPERIE aka BURNETTE, NICHOLAS	222 N LINCOLN ST STE 103	PORT ANGELES	WA	9362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
93	LAKESIDE INDUSTRIES, INC.	163 ECLIPSE WEST DR	PORT ANGELES	WA	98363	238990	All Other Specialty Trade Contractors	238 (Specialty Trade Contractors)
94	LAUREL LANES CAFÉ	108 8TH ST W	PORT ANGELES	WA	98362	722515	Snack and Nonalcoholic Beverage Bars	722 (Food Services and Drinking Places)
95	LD'S WOODFIRE GRILL	929 WEST 8TH STREET	PORT ANGELES	WA	98363	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
96	LINCOLN INDUSTRIAL CORPORATION, INC. DBA LINCOLN WELDIN	4130 TUMWATER TRUCK RTE	PORT ANGELES	WA	98362	333924	Industrial Truck, Tractor, Trailer, and Stacker Machine	333 (Machinery, Computer, and Elec Product Man)
97	LINCOLN MOBIL (DASHMESH PETROLEUM 13 INC)	504 S LINCOLN ST	PORT ANGELES	WA	98362	447110	Gasoline Stations with Convenience Stores	447 (Automotive Dealers and Gas Service Stations)
98	LINCOLN PARK GROCERY	1500 W LAURIDSEN BLVD	PORT ANGELES	WA	98363	445110	Supermarkets and Other Grocery (except Convenienc	445 (Food and Beverage Stores)
99	LINCOLN STREET COFFEE POT	902 LINCOLN ST # A	PORT ANGELES	WA	98363	722515	Snack and Nonalcoholic Beverage Bars	722 (Food Services and Drinking Places)
100	LITTLE DEVIL'S GRILL	824 S C ST	PORT ANGELES	WA	98362	722513	Limited-Service Restaurants	722 (Food Services and Drinking Places)
101	LITTLE DEVIL'S LUNCHBOX	315 E 1ST ST	PORT ANGELES	WA	98362	722513	Limited-Service Restaurants	722 (Food Services and Drinking Places)
102	LOLA'S CAFE	112 A S LINCOLN ST	PORT ANGELES	WA	98362	722513	Limited-Service Restaurants	722 (Food Services and Drinking Places)
103	M&P GARAGE DOORS INC	502 1/2 W 8TH ST	PORT ANGELES	WA	98362	238350	Finish Carpentry Contractors	238 (Specialty Trade Contractors)
104	MARINE DRIVE CHEVRON	402 MARINE DR	PORT ANGELES	WA	98363	447110	Gasoline Stations with Convenience Stores	447 (Automotive Dealers and Gas Service Stations)
105	MCDONALD'S aka LAURIER ENTERPRISES INC aka PENINSULA MC	1706 E FRONT	PORT ANGELES	WA	98362	722513	Limited-Service Restaurants	722 (Food Services and Drinking Places)
106	MCPHEE'S PARKWAY GROCERY	717 S RACE ST	PORT ANGELES	WA	98362	445110	Supermarkets and Other Grocery (except Convenienc	445 (Food and Beverage Stores)
107	MIGHTY PINE BREWING, LLC	540 E 8TH ST	PORT ANGELES	WA	98362	312120	Breweries	312 (Beverage, Food, and Tobacco Manufacturing)
108	MOBILE MUSIC UNLIMITED / SOUNDS GREAT, INC.	532 E 1ST ST	PORT ANGELES	WA	98362	441310	Automotive Parts and Accessories Stores	441 (Automotive Dealers and Gas Service Station)
109	MOBY DUCK CHOWDER & SEAFOOD	222 N LINCOLN ST STE 101	PORT ANGELES	WA	98362	722330	Mobile Food Services	722 (Food Services and Drinking Places)
110	N C MACHINERY CO	73 ECLIPSE INDUSTRIAL PKWY	PORT ANGELES	WA	98362	423810	Construction and Mining (except Oil Well) Machinery	4238xx (Wholesale Trade- Durable Goods)
111	NEW DAY EATERY	102 W FRONT ST	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
112	NEW MOON CRAFT TAVERN	130 S LINCOLN ST	PORT ANGELES	WA	98362	722410	Drinking Places (Alcoholic Beverages)	722 (Food Services and Drinking Places)
113	NEXT DOOR GASTROPUB	113 W 1ST STE #A	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)

114	NORTH OLYMPIC PENINSULA SKILLS CENTER	905 W 9TH ST	PORT ANGELES	WA	98363	611110	Elementary and Secondary Schools	6111xx (Educational Services)
115	NORTHWEST FUDGE AND CONFECTIONS	108 W 1ST ST	PORT ANGELES	WA	98362	445292	Confectionery and Nut Stores	445 (Food and Beverage Stores)
116	OLYMPIC ELECTRIC COMPANY, INC.	4230 TUMWATER TRUCK RTE	PORT ANGELES	WA	98363	238210	Electrical Contractors and Other Wiring Installation Co	238 (Specialty Trade Contractors)
117	OLYMPIC POWERSPORTS	221 S PEABODY ST STE A	PORT ANGELES	WA	98362	811111	General Automotive Repair	8111xx (Repair and Maintenance)
118	OLYMPIC PRINTERS, INC.	310 E 1ST ST	PORT ANGELES	WA	98362	323111	Commercial Printing (except Screen and Books)	323 (Printing and Related Support Actvities)
119	OLYMPIC TIRE & AUTO REPAIR, INC.	731 E 1ST ST	PORT ANGELES	WA	98362	811111	General Automotive Repair	8111xx (Repair and Maintenance)
120	O'REILLY AUTO PARTS #2750	1911 E 1ST ST	PORT ANGELES	WA	98362	441310	Automotive Parts and Accessories Stores	441 (Automotive Dealers and Gas Service Stations)
121	PA FAR WEST MACHINE & HYDRAULICS aka MICHAEL J MILLER LL	4317 TUMWATER TRUCK RTE	PORT ANGELES	WA	98362	811310	Commercial and Industrial Machinery and Equipment	8113xx (Repair and Maintenance)
122	PAPA MURPHYS	1405 E FRONT ST	PORT ANGELES	WA	98362	722513	Limited Service Restaurants	722 (Food Services and Drinking Places)
123	PAYNE CUSTOMS, LLC	4317 TUMWATER TRUCK RTE	PORT ANGELES	WA	98363	811121	Automotive Body, Paint, and Interior Repair and Main	8111xx (Repair and Maintenance)
124	PEN PRINT, INC.	230 E 1ST ST STE A	PORT ANGELES	WA	98362	323111	Commercial Printing (except Screen and Books)	323 (Printing and Related Support Actvities)
125	PENINSULA AUTOMOTIVE LLC	2012 S OAK ST	PORT ANGELES	WA	98362	811111	General Automotive Repair	8111xx (Repair and Maintenance)
126	PENINSULA BOTTLING CO., INC.	311 S VALLEY ST	PORT ANGELES	WA	98362	445320	Beer, Wine, and Liquor Stores	445 (Food and Beverage Stores)
127	PENINSULA COLLEGE	1502 E LAURIDSEN BLVD	PORT ANGELES	WA	98362	722310	Food Service Contractors	722 (Food Services and Drinking Places)
128	PENINSULA COLLEGE	1502 E LAURIDSEN BLVD	PORT ANGELES	WA	98362	611310	Colleges, Universities, and Professional Schools	6113xx (Educational Services)
129	PETROCARD, INC.	501 MARINE DR	PORT ANGELES	WA	98363	447190	Other Gasoline Stations	447 (Automotive Dealers and Gas Service Stations)
130	PETROCARD, INC.	605 TUMWATER TRUCK ROUTE	PORT ANGELES	WA	98363	447190	Other Gasoline Stations	447 (Automotive Dealers and Gas Service Stations)
131	PETROCARD, INC.	832 BOATHAVEN DR	PORT ANGELES	WA	98362	447190	Other Gasoline Stations	447 (Automotive Dealers and Gas Service Stations)
132	PETROCARD, INC. (PACIFIC PRIDE)	516 S TUMWATER TRUCK ROUTE	PORT ANGELES	WA	98363	447190	Other Gasoline Stations	447 (Automotive Dealers and Gas Service Stations)
133	PHO NEW SAIGON	106 W FRONT ST	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
134	PIES CAKES AND MORE	1940 E 1ST ST STE#156	PORT ANGELES	WA	98362	311811	Retail Bakeries	311 (Beverage, Food, and Tobacco Manufacturing)
135	PIZZA HUT aka EMERALD CITY PIZZA LLC	902 E 1ST ST STE A	PORT ANGELES	WA	98362	722513	Limited Service Restaurants	722 (Food Services and Drinking Places)
136	PLATYPUS MARINE, INC.	518 MARINE DR	PORT ANGELES	WA	98362	336612	Boat Building	336 (Transportation Equipment Manufacturing)
137	PORT ANGELES AUTO GLASS	833 E 1ST ST	PORT ANGELES	WA	98362	811122	Automotive Glass Replacement Shops	8111xx (Repair and Maintenance)
138	PORT ANGELES FARMERS MARKET	125 E FRONT ST	PORT ANGELES	WA	98362	445230	Fruit and Vegetable Retailers	445 (Food and Beverage Stores)
139	PORT ANGELES HARDWOOD, LLC	333 ECLIPSE INDUSTRIAL PARKWAY	PORT ANGELES	WA	98362	321211	Hardwood Veneer and Plywood Manufacturing	321 (Wood Product Manufacturing)
140	PORT ANGELES SCHOOL DISTRICT	304 E PARK	PORT ANGELES	WA	98362	722310	Food Service Contractors	722 (Food Services and Drinking Places)
141	RACE STREET AUTO PARTS	1230 E 1ST ST	PORT ANGELES	WA	98362	441310	Automotive Parts and Accessories Stores	441 (Automotive Dealers and Gas Service Stations)
142	RAINBOW SWEEPERS, INC.	4101 TUMWATER TRUCK RTE	PORT ANGELES	WA	98363	238990	All Other Specialty Trade Contractors	238 (Specialty Trade Contractors)
143	RANDY'S AUTO SALES INC & MOTORSPORTS	819 E 1ST	PORT ANGELES	WA	98362	441120	Used Car Dealers	441 (Automotive Dealers and Gas Service Stations)
144	RICHMOND 2-WAY RADIO aka GRITCO, LLC	1246 W HIGHWAY 101	PORT ANGELES	WA	98363	443142	Electronics Stores	238 (Specialty Trade Contractors)
145	RODOCKER WOODWORKS, LLC	302 S TUMWATER TRUCK RTE	PORT ANGELES	WA	98362	444190	Other Building Material Dealers	444 (Building, Hardware, Garden Supplies Dealers)
146	ROOSEVELT	115 E RAILROAD AVE	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
147	RUDDELL AUTO, INC	110 S GOLF COURSE RD	PORT ANGELES	WA	98362	441110	New Car Dealers	441 (Automotive Dealers and Gas Service Stations)
148	RUDY'S AUTOMOTIVE	202 N FRANCIS ST	PORT ANGELES	WA	98362	811111	General Automotive Repair	8111xx (Repair and Maintenance)
149	SABAI THAI	903 W 8TH ST	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
150	SAFEWAY FUEL STATION # 1492	110 E 3RD ST	PORT ANGELES	WA	98362	447190	Other Gasoline Stations	447 (Autommotive Services and Gas Service Stations)
151	SAFEWAY STORE #1492	110 E 3RD ST	PORT ANGELES	WA	98362	445110	Supermarkets and Other Grocery (except Convenienc	445 (Food and Beverage Stores)
152	SASQUATCH DONUTS LLP	135 E 1ST ST	PORT ANGELES	WA	98362	311811	Retail Bakeries	311 (Beverage, Food, and Tobacco Manufacturing)
153	SERGIO'S HACIENDA	205 E 8TH ST STE B	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
154	SHIRLEY'S CAFE	612 S LINCOLN ST	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
155	SMUGGLER'S LANDING RESTAURANT & LOUNGE	115 E RAILROAD AVE # 101	PORT ANGELES	WA	98362	722410	Drinking Places (Alcoholic Beverages)	722 (Food Services and Drinking Places)
156	SODEXO AMERICA- #72001096	731 MARINE DR	PORT ANGELES	WA	98363	722310	Food Service Contractors	722 (Food Services and Drinking Places)
157	SONGOKU	134 W FRONT ST	PORT ANGELES	WA	98362	722513	Limited-Service Restaurants	722 (Food Services and Drinking Places)
158	SPRUCE	128 E FRONT ST	PORT ANGELES	WA	98362	722410	Drinking Places (Alcoholic Beverages)	722 (Food Services and Drinking Places)
159	STARBUCKS #68183	2027 E 1ST ST	PORT ANGELES	WA	98362	722515	Snack and Nonalcoholic Beverage Bars	722 (Food Services and Drinking Places)
160	STEVE'S MUFFLER SHOP	931 W 8TH ST	PORT ANGELES	WA	98363	811112	Automotive Exhaust System Repair	8111xx (Repair and Maintenance)
161	STRAIT ALIGNMENT & BRAKES	120 S ALBERT	PORT ANGELES	WA	98362	811118	Other Automotive Mechanical and Electrical Repair ar	8111xx (Repair and Maintenance)
162	STRAIT AUTO INC (LITTLE CAR CORNER)	402 E 1ST ST	PORT ANGELES	WA	98362	441120	Used Car Dealers	441 (Automotive Dealers and Gas Service Stations)
163	SUNRISE CARWASH	1333 E 1ST ST	PORT ANGELES	WA	98362	811192	Car Washes	8111xx (Repair and Maintenance)
164	SUNRISE MEATS, INC.	1325 E 1ST ST	PORT ANGELES	WA	98362	445210	Meat Markets	445 (Food and Beverage Stores)
165	TACO BELL/KFC aka ORCHARD LLC	2001 E 1ST ST	PORT ANGELES	WA	98362	722513	Limited-Service Restaurants	722 (Food Services and Drinking Places)
166	TACO TIME	1105 E 1ST ST	PORT ANGELES	WA	98362	722513	Limited-Service Restaurants	722 (Food Services and Drinking Places)
167	TENDY'S GARDEN	920 E 1ST ST	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
168	THE ANSWER FOR YOUTH	826 E 1ST ST	PORT ANGELES	WA	98362	813410	Civic and Social Organizations	444 (Building Materials, Hardware, Garden Supplies)
169	THE BEANERY	116 EAST W FRONT ST	PORT ANGELES	WA	98362	453220	Gift, Novelty, and Souvenir Stores	722 (Food Services and Drinking Places)
170	THE BLACKBIRD COFFEEHOUSE	336 E 8TH ST	PORT ANGELES	WA	98362	722515	Snack and Nonalcoholic Beverage Bars	722 (Food Services and Drinking Places)
171	THE COFFEE BOX	224 E 1ST ST	PORT ANGELES	WA	98362	722515	Snack and Nonalcoholic Beverage Bars	722 (Food Services and Drinking Places)
172	THE DAILY GRIND LLC	1919 E 1ST ST	PORT ANGELES	WA	98362	722515	Snack and Nonalcoholic Beverage Bars	722 (Food Services and Drinking Places)
173	THE EMPOSSIBLE EDEN CAFÉ	704 MARINE DR	PORT ANGELES	WA	98363	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
174	THE FRONT STREET ALIBI	1605 E FRONT ST STE A	PORT ANGELES	WA	98362	722410	Drinking Places (Alcoholic Beverages)	722 (Food Services and Drinking Places)

175	THE GREAT NORTHERN COFFEE BAR	118 W 1ST ST	PORT ANGELES	WA	98362	722515	Snack and Nonalcoholic Beverage Bars	722 (Food Services and Drinking Places)
176	THE METTA ROOM	132 E FRONT ST	PORT ANGELES	WA	98362	722410	Drinking Places (Alcoholic Beverages)	722 (Food Services and Drinking Places)
177	THE RAIL	128 E RAILROAD AVE	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
178	THE STRAIT SLICE	121 1/2 W 1ST ST	PORT ANGELES	WA	98362	722513	Limited-Service Restaurants	722 (Food Services and Drinking Places)
179	TONI'S SERVICE CENTER	302 W 8TH ST	PORT ANGELES	WA	98362	811111	General Auto Repair	8111xx (Repair and Maintenance)
180	TRACTOR SUPPLY COMPANY	114 E LAURIDSEN BLVD	PORT ANGELES	WA	98362	444240	Nursery, Garden Center, and Farm Supply	444 (Building Materials, Hardware, Garden Supplies)
181	TRANCO TRANSMISSIONS	703 E 1ST ST	PORT ANGELES	WA	98362	811113	Automotive Transmission Repair	8111xx (Repair and Maintenance)
182	TRINITY ATV	221 S PEABODY ST, #A	PORT ANGELES	WA	98362	811490	Other Personal and Household Goods Repair and Ma	8114xx (Repair and Maintenance)
183	VAN DYKE FLOORS	821 E 1ST ST	PORT ANGELES	WA	98363	238330	Flooring Contractors	238 (Specialty Trade Contractors)
184	WATERFRONT AUTOMOTIVE	930 MARINE DR	PORT ANGELES	WA	98363	811111	General Automotive Repair	8111xx (Repair and Maintenance)
185	WENDYS aka WTCWEND	1830 E 1ST ST	PORT ANGELES	WA	98362	722513	Limited-Service Restaurants	722 (Food Services and Drinking Places)
186	WESTPORT, L.L.C. aka WESTPORT YACHT	637 MARINE DR	PORT ANGELES	WA	98362	336612	Boat Building	336 (Transportation Equipment Manufacturing)
187	WESTSIDE PIZZA	612 S LINCOLN ST	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)
188	WILDER AFFORDABLE HOMES	1536 E FRONT ST	PORT ANGELES	WA	98362	441110	New Car Dealers	441 (Automotive Dealers and Gas Service Stations)
189	WILDER RV	1527 E FRONT ST	PORT ANGELES	WA	98362	441110	New Car Dealers	441 (Automotive Dealers and Gas Service Stations)
190	WILLY'S SMOKE SHOP	1409 E 1ST ST	PORT ANGELES	WA	98362	445120	Convenience Stores	445 (Food and Beverage Stores)
191	YODELIN BROTH COMPANY	112 W LAURIDSEN BLVD	PORT ANGELES	WA	98362	722511	Full-Service Restaurants	722 (Food Services and Drinking Places)

Source Control Annual Report 2024



Map Legend

Light Purple = Inventory

Dark Purple = Sites Inspected

1:46,747

0 0.28 0.55 1.1 mi

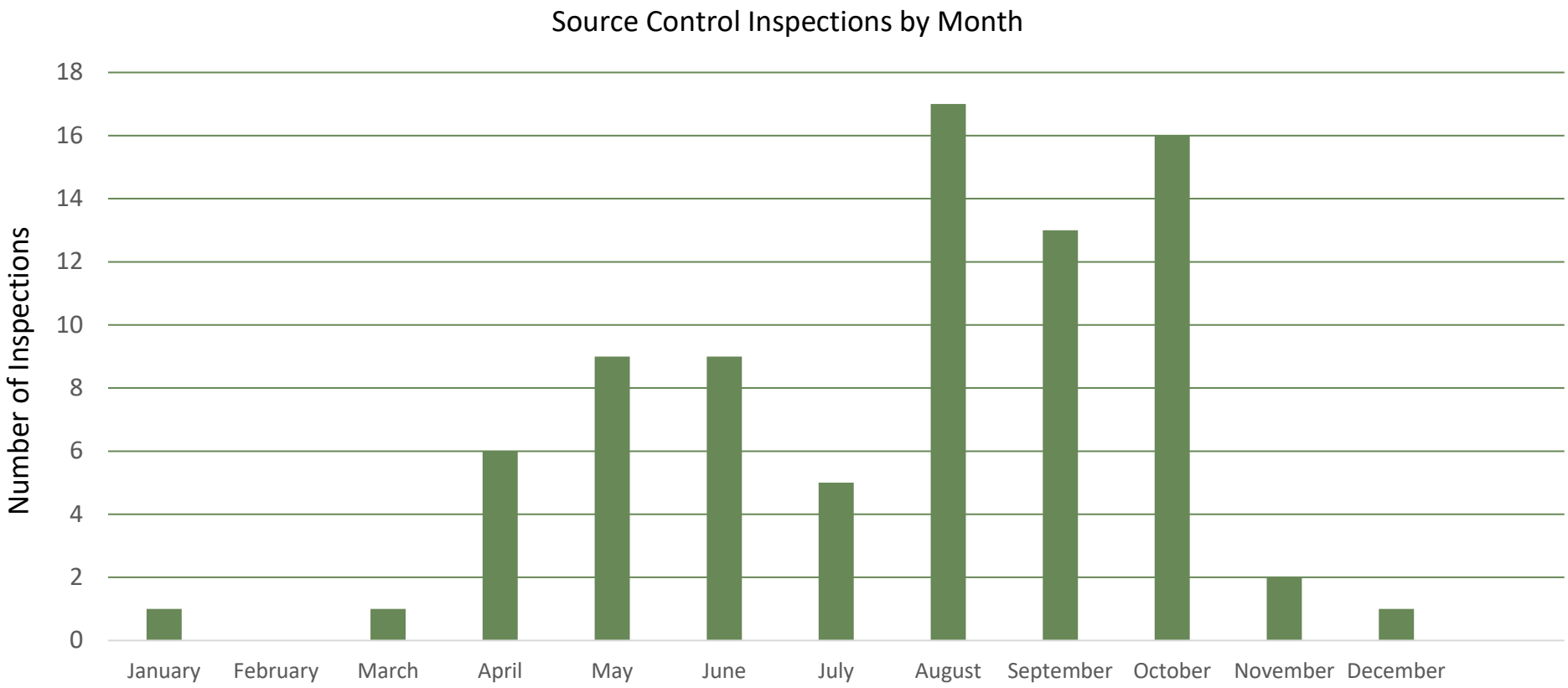
0 0.42 0.85 1.7 km

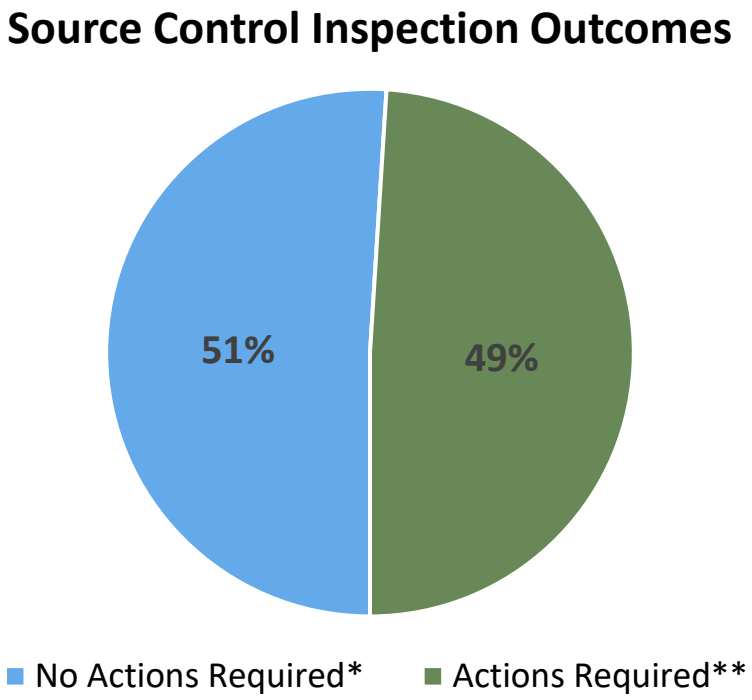
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community

2024 Business Source Control Annual Report

City of Port Angeles

Date of Report: 01/02/2025
Date Range of Report: 01/01/2024 – 12/31/2024
Sites in Source Control Program Inventory: 191
Total Source Control Inspections (Initial + Follow-ups): 80
Inventory Inspection Rate: $\frac{80}{191}$ = 42%



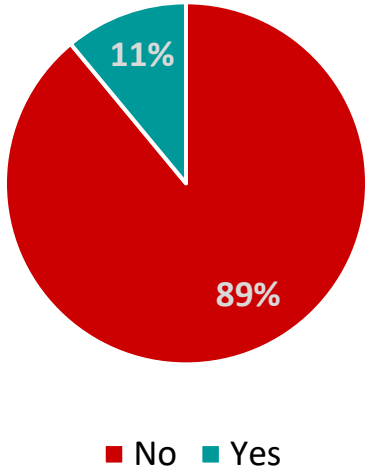


**No Actions Required:* no issues were uncovered during the initial inspection, *or* any issues uncovered were resolved during the visit.

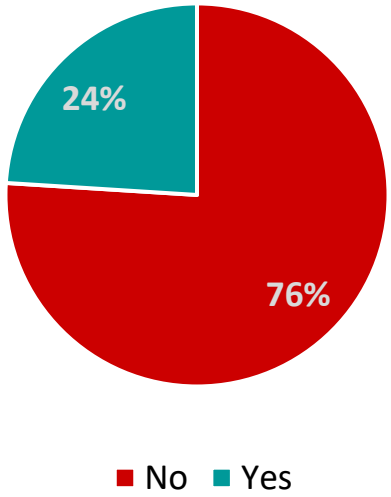
***Actions Required:* businesses received official communication requesting actions be taken to address issues that could not be resolved during the initial visit.

Top Issue #1 – Spill Preparedness

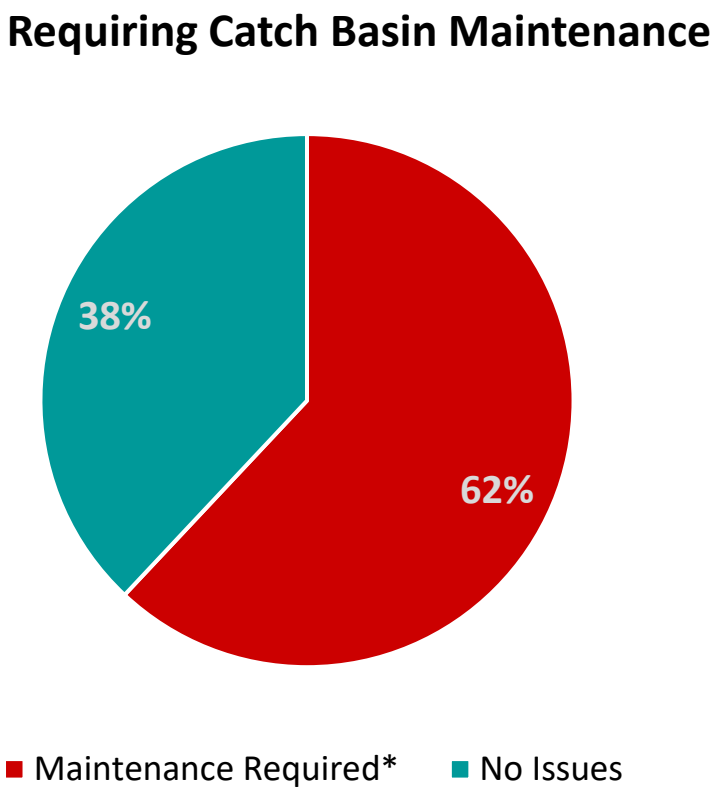
Does the site possess a written Spill Response Plan?



Does the site possess appropriate Spill Response materials?

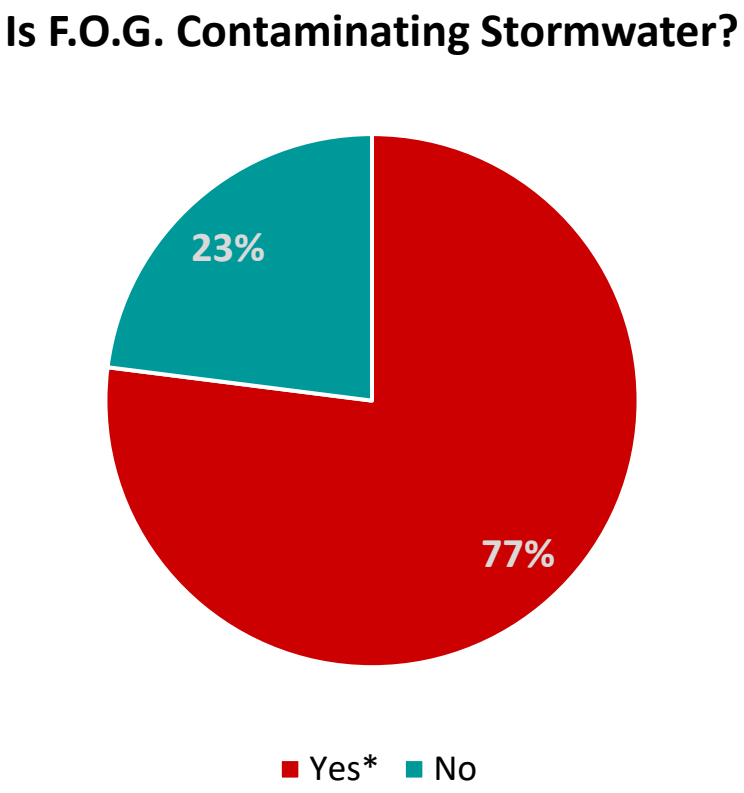


Top Issue #2 – Maintaining Stormwater Assets



*In most instances, “maintenance” refers to having sediment and other accumulated materials inside catch basin vaults removed.
Note: Percentages only refer to sites with catch basins present.

Top Issue #3 – F.O.G. Contaminating Stormwater



*Only applicable to sites with outdoor grease containers.

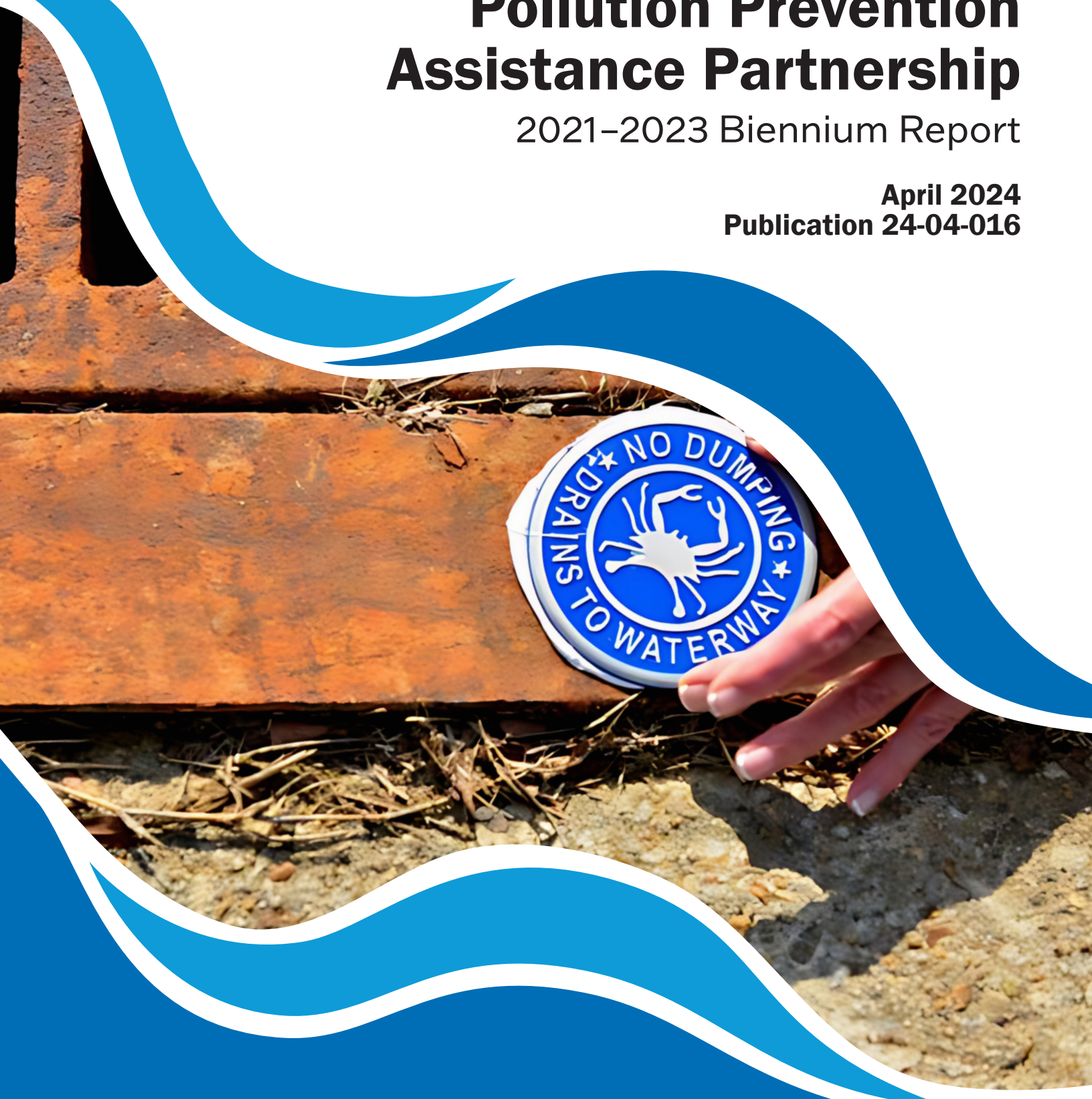
Pollution Prevention Assistance

DEPARTMENT OF ECOLOGY
State of Washington

Pollution Prevention Assistance Partnership

2021–2023 Biennium Report

April 2024
Publication 24-04-016



PUBLICATION INFORMATION

This document is available on the Department of Ecology's website at:
https://apps.ecology.wa.gov/publications/summarypages/2404016.html

CONTACT INFORMATION

Washington State Department of Ecology
Hazardous Waste & Toxics Reduction Program
P.O. Box 47600
Olympia, WA 98504-7600

Phone: 360-407-6000

Website: ecology.wa.gov

ACCESSIBILITY

To request materials in a format for the visually impaired, contact the Hazardous Waste and Toxics Reduction Program at 360-407-6700 or hwtrpubs@ecy.wa.gov. Persons with impaired hearing may call Washington Relay Service at 711. Persons with a speech disability may call TTY at 877-833-6341.

CONTENTS

MEET THE PARTNERSHIP	2
WHAT IS POLLUTION PREVENTION ASSISTANCE?	3
PARTNER JURISDICTIONS	4
INDUSTRIES SERVED	6
TECHNICAL ASSISTANCE VISITS	7
ISSUES AND RESOLUTIONS IN THE 2021–2023 BIENNIUM	8
TRAINING FOR PPA SPECIALISTS	10
SMALL CHANGE VOUCHER PROGRAM	12
PARTNER SUCCESS STORIES	18
PRODUCT REPLACEMENT PROGRAM	24
CONCLUSION & LOOKING FORWARD	31

MEET THE PARTNERSHIP

In 2007, the Washington State Legislature funded the Local Source Control partnership. This pollution prevention assistance program helps small businesses reduce and manage potential wastes to protect water, soil, and air quality.

In 2016, we renamed the partnership to Pollution Prevention Assistance (PPA). This new name emphasizes how the program benefits the public and businesses. The PPA connects and trains local, regional, and state specialists to solve pollution prevention problems at the source.

The PPA partnership includes specialists from local jurisdictions throughout Washington cities, counties, and health districts.

Through interagency agreements with the Department of Ecology:

- Local jurisdictions get funding to provide free, one-on-one technical assistance to small businesses.
- Local jurisdictions' specialists teach businesses how to:
  - Manage their wastes properly.
  - Help diagnose and fix stormwater-related issues.
- Specialists provide help with complicated regulatory issues.

The PPA partnership is not an enforcement program. Businesses aren't subject to fines or administrative orders from this program.

WHAT IS POLLUTION PREVENTION ASSISTANCE?

PPA is a technical assistance program that helps small quantity generators prevent pollution.

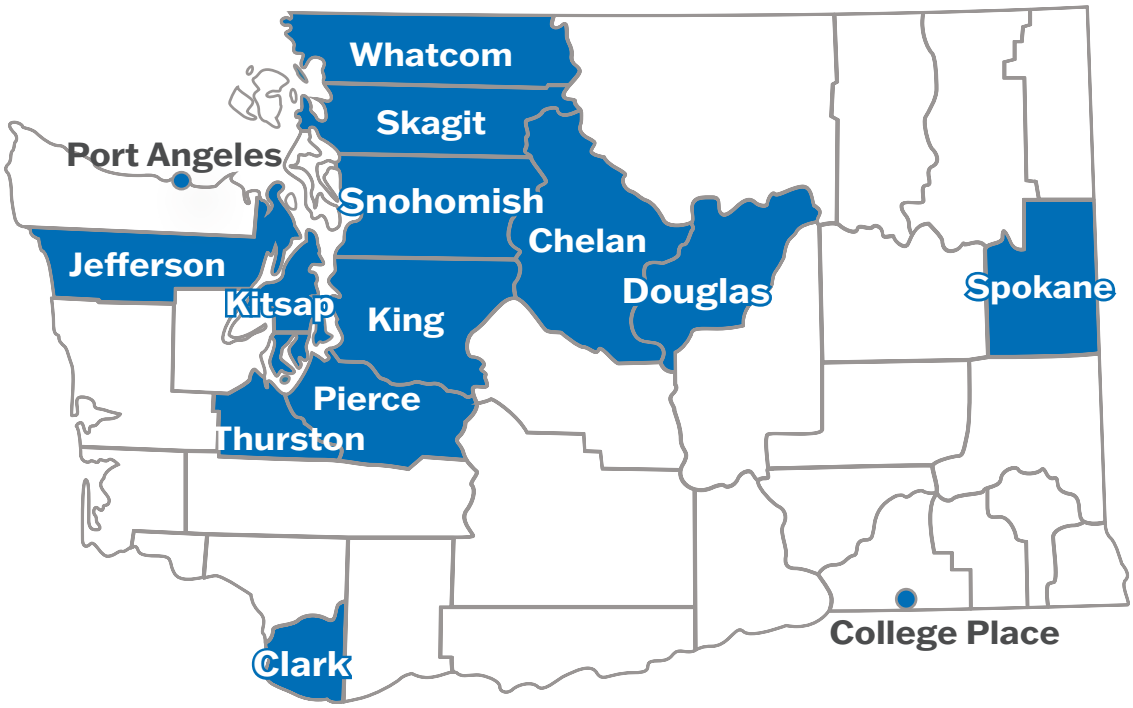
The problem: Small businesses often have limited access to expert help on stormwater management or hazardous waste handling and disposal. Hands-on assistance and regulatory advice are hard to find.

The solution: PPA specialists in participating jurisdictions offer free, on-site technical assistance to help small businesses identify and fix possible pollution concerns. This assistance and regulatory advice reduces health risks for employees and prevents pollution from harming Washington's environment and communities.

PPA helps businesses:

- Adopt safer material-handling and storage practices.
- Learn how to properly recycle and dispose of waste in their area.
- Use fewer toxic chemicals in their processes or replace them with safer alternatives.
- Plan for spill prevention and preparedness.
- Manage interior and exterior drainage systems to reduce impacts to stormwater.

PARTNER JURISDICTIONS



During the 2021–2023 biennium, PPA partnerships included 65 specialists from 28 counties and health districts. PPA partners were in three critical areas: Puget Sound, the Columbia River Basin, and the Spokane River Basin.

Small businesses in other counties who are interested in participating in these programs can reach out to Ecology to get similar kinds of technical assistance.

2021–2023 PARTNER JURISDICTIONS

Chelan County
Chelan-Douglas Health District

Clallam County
City of Port Angeles

Clark County
Clark County Department of Public Works
Clark County Public Health
City of Vancouver

Douglas County
Chelan-Douglas County Health District

Island County
Island County Public Health

Jefferson County
Jefferson County Public Health

King County
City of Bothell
City of Issaquah
City of Kirkland
City of Redmond
City of Renton
City of Shoreline
King County Water and Land Resources Division
Seattle Public Utilities

Kitsap County
Kitsap Public Health District

Pierce County
City of Lakewood
City of Puyallup
City of Sumner
Tacoma-Pierce County Health Department

Skagit County
Skagit County Department of Public Health

Snohomish County
Snohomish Health District

Spokane County
Spokane Regional Health District

Thurston County
Thurston County Public Health

Walla Walla County
City of College Place

Whatcom County
City of Bellingham
Whatcom County Health Department

INDUSTRIES SERVED

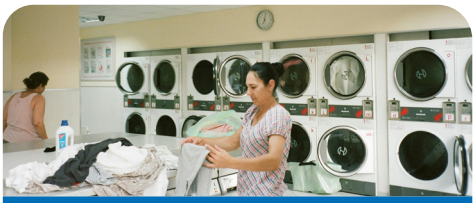
PPA specialists serve most industries. During the 2021–2023 biennium, some of the most common industries served were:



Restaurants, cafes, and bars.



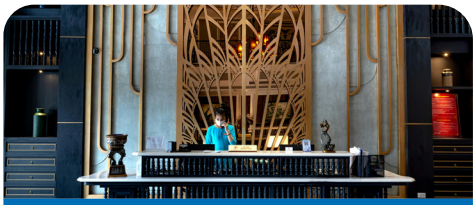
Automotive repair facilities including body shops.



Commercial and personal laundry services.



Gas stations with convenience stores.



Hotels (except casino hotels) and motels.



Supermarkets and other grocery stores.



Landscaping companies.



Elementary and secondary schools.

TECHNICAL ASSISTANCE VISITS

In the 2021–2023 biennium, PPA specialists made 7,661 visits to businesses in Washington. Businesses with more complex or higher-priority issues often received multiple visits.

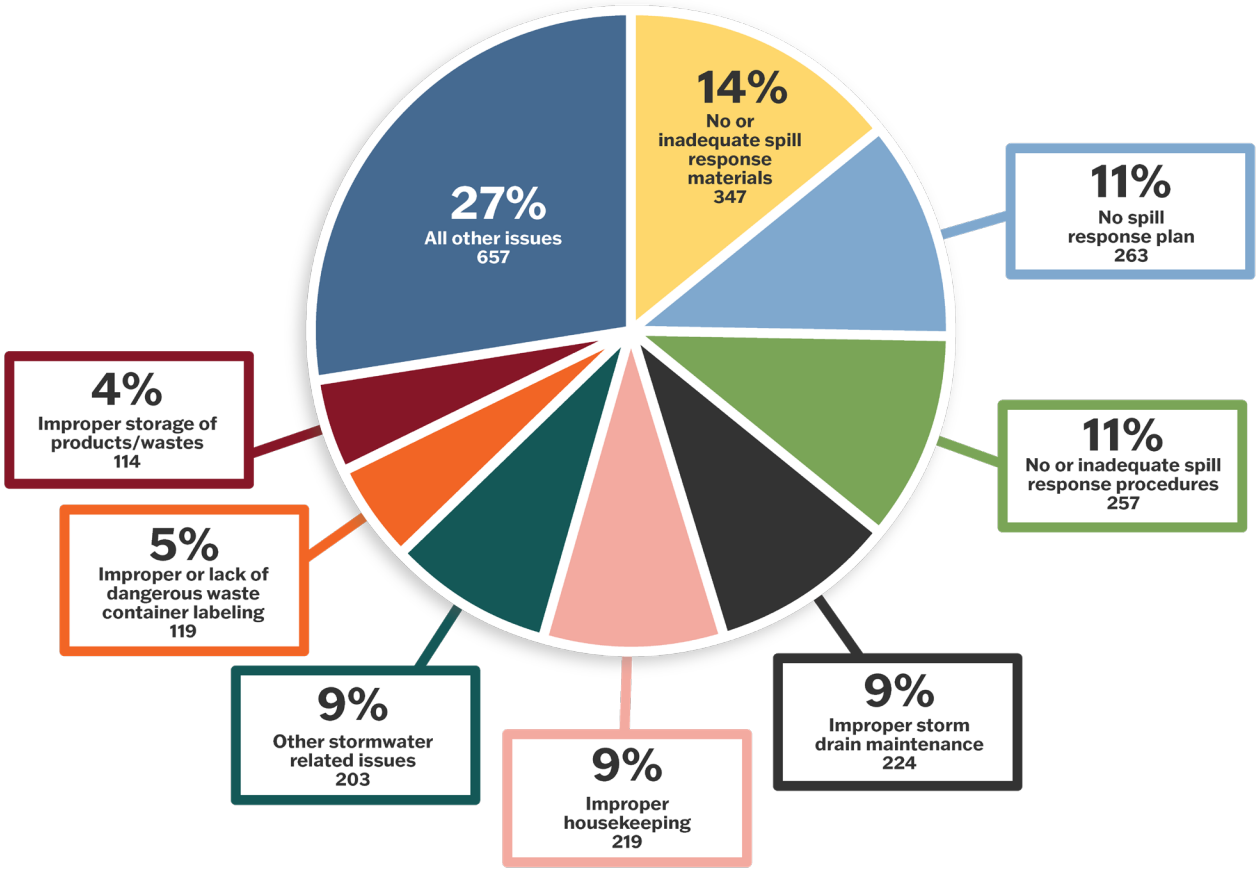
While some businesses contact the PPA partnership, most visits are initiated by specialists. Each partner runs their own local outreach program, which can include social media, emails, mailed letters, phone calls, community events, or drop-in visits. Because the PPA program is voluntary, specialists inform businesses of the program and promote the program's benefits when arranging a visit.

Specialists look closely at a business's practices and then offer solutions when practices could pollute the environment. They recommend ways to comply with local and state regulations and suggest safer alternatives to the hazardous materials the businesses use, store, and dispose of every day. This advice contributes to a safer environment for employees and customers—and often saves the business money.

ISSUES AND RESOLUTIONS IN THE 2021–2023 BIENNIUM

Specialists found 2,599 issues in 28 categories. By the end of the biennium, they helped resolve 75 percent (1,942) of the issues. The eight most common issues were:

- No or inadequate spill response materials: 347 (14%)
- No spill response plan: 263 (11%)
- No or inadequate spill response procedures: 257 (11%)
- Improper storm drain maintenance: 224 (9%)
- Improper housekeeping: 219 (9%)
- Other stormwater-related issues: 203 (9%)
- Improper or lack of dangerous waste container labeling: 119 (5%)
- Improper storage of products/wastes: 114 (4%)



We consider some issues high priority because they have the highest risk of harming human health or the environment. The **top five high-priority issues** found are:

- Improper storage of products/wastes: 114 (4%)
- Improperly stored dangerous waste: 86 (3%)
- Discharging processed wastewater to storm drains: 76 (3%)
- Improperly stored containerized materials: 62 (2%)
- Waste not disposed of properly: 59 (2%)

Some issues can be remedied quickly, such as properly labeling containers or having a spill kit. Other issues can take more time and money, like rearranging storage areas to provide cover, or changing vehicle washing stations so that only rain goes down the storm drain.

In their non-enforcement role, specialists work with businesses to address issues in a way that makes sense environmentally and economically, even if that takes some time. Specialists work with resources from Ecology or other agencies to find innovative solutions. Unresolved issues are only referred to enforcement agencies if the business no longer makes efforts to address them and they pose a serious threat to human health and the environment. If businesses continue to work with their specialists, there shouldn't be enforcement actions for any identified issues.

TRAINING FOR PPA SPECIALISTS

Specialists must understand and communicate the regulatory requirements for waste handling and processes. They must understand best management practices that apply to a wide range of businesses.

Ecology developed and continues to improve PPA specialist training:

- **2019–2021 biennium**: Ecology and the PPA training committee developed a self-training system for new specialists.
- **2021–2023 biennium**: 40 specialists completed the trainings and provided feedback.
- **2023–2025 biennium**: Ecology will review these modules based on that feedback.

New specialists must also participate in live virtual discussion panels every other month for their first year. These panels allow them to ask Ecology staff and experienced specialists questions and analyze scenarios they may encounter in the field.

All specialists have access to Ecology staff expertise, creating a broad system of information exchange and enhancing assistance to businesses. Ecology provides contact information for all the specialists and facilitates conversations through online and in-person events. Communication between partners and Ecology allows for collaboration across the partnership between new and experienced specialists. No specialists are on their own. We are one big team!

To support PPA specialists, we:

- Provide regular training opportunities to foster their continued education.
- Host semi-annual all-staff trainings to give specialists a chance to learn about best management practices and regulatory updates.
- Facilitate up to nine webinars per year. These webinars keep specialists up-to-date on changing regulations and introduce new topics. Partner jurisdictions or other agencies often present during the webinars, which allows for a wide array of topics and points of view.

SMALL CHANGE VOUCHER PROGRAM

PPA's Small Change Voucher is a reimbursement program. We provide up to $500 per business, per year for pollution prevention expenses. Because the voucher is flexible, partners can work with businesses to find tailored solutions to pollution issues. The voucher helps businesses make changes and protect the business, their employees, the public, and the environment.

SMALL CHANGE VOUCHER SUCCESS STORIES

King County

Located outside of Woodinville, near the Sammamish River, Viva Farms provides training on sustainable organic farming to resource-limited farmers. More than 1,000 farmers, 15 percent of whom are Spanish-speaking, have learned about sustainable organic farming through Viva Farms' bilingual programs. During a January 2023 PPA visit, King County specialists noticed that dangerous materials, like gasoline and fertilizer, weren't stored in secondary containment. In addition, they were stored outside, where containers can degrade and leak, exposing farmers, the public, and the environment to dangerous wastes or chemicals.

King County staff worked with Viva Farms to identify solutions and used the Small Change Voucher to reimburse the purchase of secondary containment and tarps. Today, Viva Farms stores their chemicals in large totes and uses tarps to create temporary storage areas outside so materials are protected from the rain. In addition to buying storage totes and tarps, using the Small Change Voucher helped build a relationship between King County and Viva Farms. King County continues to collaborate with Viva Farms to provide outreach on pollution prevention practices to farmers in training.


Professional
Grower's Mix
Our Expertise in Growing
ALFALFA MEAL

City of Redmond

A new manager at a local floor cleaner manufacturer discovered twelve waste drums at their facility. The PPA specialist requested that the manager dispose of the waste properly, but the business was concerned about cost. When the specialist told the manager about the Small Change Voucher, she was happy to learn that funds were available and said it would help make the case to her boss.

The PPA specialist worked with the manager over several months to address the disposal and other action items found during the initial PPA visit. After follow-up visits and email communication, the manager sent the PPA specialist the receipt for the disposal of the drums, and the specialist worked with her agency's accounting department for voucher reimbursement. The voucher incentive helped remove a barrier to proper disposal.


HAZARDOUS WASTE

Kitsap Public Health District

In March 2023, Jakob Hughes of the Kitsap Public Health District visited Rolling Bay Automotive on Bainbridge Island. Throughout the site visit, Jakob and the site contact discussed how the business would benefit from an oil receiver. Instead of using open-topped drain pans to collect and move oil around the shop, an oil receiver is a closed container that would cut down on potential spills. While an oil receiver would help protect the environment, it didn't fit into the business's budget.

Jakob thought this would be a perfect use of the voucher program and issued a Small Change Voucher for an oil receiver along with the needed accessories, like drain funnels and pans. In April 2023, Jakob received copies of receipts and verified the equipment was in use. Kitsap Public Health District was able to immediately send the reimbursement check to the business, without needing to do additional paperwork through Ecology or the Office of Financial Management. As of this report, Rolling Bay Automotive continues use of these products at their shop.


LINCOLN
LINCOLN
LINCOLN
LINCOLN
CORNWELL QUALITY TOOLS
WARNING
WARNING
O'Reilly FIRST CALL

PARTNER SUCCESS STORIES

PORT ANGELES: RUDDELL AUTO

In early June 2023, the City of Port Angeles performed a PPA visit at Ruddell Auto, the largest car dealership in the city. In addition to car sales, full-service maintenance and repair is performed on site. Along with other pollution prevention issues, they found a high-priority environmental issue: the dealership performed vehicle washes outside and discharged the resulting wash water into a nearby stormwater catch basin. Vehicles were washed in this area for several years.

The issue was mentioned to managers at the dealership. At the time, they didn't know that wash water from vehicle washes shouldn't enter the stormwater system. This was an excellent opportunity for education. Port Angeles PPA specialists explained the difference between stormwater and sanitary wastewater systems, and the importance of keeping wash water out of the stormwater system. The dealership's managers were attentive and receptive to the information.

The PPA specialists requested that Ruddell Auto quickly develop a plan to stop discharging wash water into the municipal separate storm sewer system and perform vehicle washes in an area that either drains into a sanitary sewer or into a water reclamation system. The PPA specialists thoroughly inspected the drainage infrastructure and found a better area for vehicle washes by identifying a concrete pad with a drain connected to the sanitary sewer. This area may have been originally designed for washing vehicles, but this was forgotten over time.

Ruddell Auto's managers were able to move vehicle washing operations within a few days, and all wash water is now discharged to the city's sanitary system.



CITY OF VANCOUVER: KASO PLASTICS

In March of 2023, PPA specialists Brett Raunig and Nicole Esposito visited a local plastic manufacturing company named Kaso Plastics.

During the site visit, they noted the business did not have secondary containment for hydraulic oil. The specialists also had housekeeping concerns about plastic chips around the loading dock. Brett and Nicole explained to the manager that the chips contaminate the catch basin and stormwater system located under the dumpster. They provided the company with secondary containment and guidance on the housekeeping needed to protect the stormwater infrastructure.

The manager appreciated the technical assistance visit and free secondary containment pallet.

On a follow-up visit, PPA specialists checked on the housekeeping progress and reminded the business of their stormwater responsibilities. In July, they received photos showing the hydraulic oil being properly stored on secondary containment pallets. The company also moved the dumpster, thoroughly cleaned the loading dock area, and placed a filter fabric insert into the catch basin.

Recently, the facility had to relocate the dumpster over the loading dock storm drain again. Now they know the regulatory requirements they need to meet and the environmental impact they could have. As a result, they increased their cleaning and filter replacement frequency. They also implemented a weekly sweep of their loading dock area to keep it free of small plastics and other debris.



KITSAP PUBLIC HEALTH DISTRICT

On April 25, 2023, the Kitsap Public Health District (KPHD) performed a PPA visit at Orchard Place in the Southworth area of Port Orchard. Orchard Place is a multi-business complex that is home to Blue Agave Mexican Grill and Alan's Country Cafe.

The restaurants share the same dumpster. Fats, oils, and grease (FOG) containers are located behind the complex, near a stormwater drain. The dumpster area was littered with garbage, built-up FOG, and unmarked 55-gallon drums. PPA specialist Thomas Jury worked with Kitsap County's stormwater division to test for contaminants. Test results were below regulatory limits, but the FOG and other garbage could still impact human health and the environment, especially if they reached the nearby Puget Sound.

The garbage debris, spilled FOG, and contaminated soil needed to be removed and disposed of properly. Thomas also asked the businesses to close the gate to the dumpster area and keep it locked to prevent future illegal dumping.

On May 22, 2023, Thomas followed up with the business managers. The two business owners worked together to hire a contractor. The contractor removed and properly disposed of the garbage and contaminated soil. Once all the debris was properly cleaned, Waste Management removed the dumpsters so they could clean underneath them. The contractor pressure washed the area, properly capturing all solids for disposal, and brought the site back into compliance.



Before



After



Before



After

PRODUCT REPLACEMENT PROGRAM

Our Product Replacement Program (PRP) is a cutting-edge, preventative program that identifies and reduces problematic chemicals impacting Washington. This program allows us to proactively address problems before they become bigger and more costly to clean up. It provides:

- Reimbursement funding for eligible businesses.
- Opportunities for businesses to transition to less toxic options.

PPA specialists are critical for PRP's success. They support PRP efforts by providing on-the-ground assistance to businesses and organizations, answering questions about the program, explaining the project terms and conditions, assisting with paperwork, and providing technical assistance and advice on process changes.

Over the last biennium, PPA specialists contacted more than 250 businesses and organizations. These contacts raise awareness and increase participation in the various PRP projects.

During the time, the PRP made significant strides to protect the environment and public health from the worst-of-the-worst product and chemical combinations. Specifically, the PRP achieved the following milestones.





PERC DRY CLEANING

From July 1, 2021 to June 30, 2023, Ecology and the PPA specialists worked with 23 businesses to either replace or decommission their PERC dry cleaning machines. Machines were replaced with either professional wet cleaning, the preferred technology, or with high flash hydrocarbon.

A follow-up survey to these businesses' owners gave the program a satisfaction rating of 4.4 out of 5 stars. This program will continue to provide reimbursements until all dry cleaners that want to convert to safer products have made the transition or until funding runs out.



AUTO DEGREASERS

Ecology has helped more than 100 automotive repair shops transition from dangerous solvents to less hazardous alternatives. An additional 240 are currently transitioning.

On average, shops received around $5,000 in reimbursement funding to switch, usually covering 75 to 100 percent of the cost.

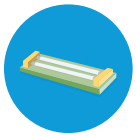
- Shops choose their alternative degreaser and become eligible for more reimbursement if they choose safer products.
- The most common alternative is EPA Safer Choice[1] certified, the highest, most preferred replacement product type—eligible for up to $10,000.

Reimbursement funding might help PPA specialists get their foot in the door, but the specialists are irreplaceable. They walk the business through the paperwork, address any issues, and continue to follow up with the facility. PPA specialists perform almost all in-person visits for this program, from introducing the voucher to confirming the alternative is being used by the facility.

The automotive degreaser reimbursement program will continue as long as there are auto shops interested in switching, and funding is available to reimburse them.

---

1 epa.gov/saferchoice



PCB LIGHT REPLACEMENT IN SCHOOLS

One school has successfully applied for and received reimbursement for replacing old lights that contain PCBs.

The program has received limited response, even though Ecology and Department of Health:

- Advertised or discussed the program with several school districts and school-related groups.
- Expanded the program to include private schools and daycare centers.
- Offered an increased reimbursement amount of $50,000 to Tribal schools.

School officials indicated they lack the resources and capacity to conduct the work themselves or to contract out the work. To address this barrier, the PRP plans to hire a qualified contractor who will connect with schools and conduct identification, replacement, and disposal work.

BISPHENOL THERMAL RECEIPT REPLACEMENT

Thermal receipts that contain bisphenols (like BPA or BPS) are toxic and associated with health conditions such as:

- Reproductive issues.
- Hormonal imbalances.
- Cardiovascular problems.
- Developmental abnormalities.
- Insulin resistance.

Because of risks associated with BPA and BPS, the manufacture, sale, and distribution of thermal receipts containing intentionally added bisphenols will be prohibited in Washington State beginning January 1, 2026.

The PRP has a project designed to assist businesses with switching to bisphenol-free thermal receipts before the ban takes effect. Qualifying businesses may take advantage of one of three tiers for reimbursement:

- $150 for thermal receipts free from intentionally added bisphenols.
- $250 for thermal receipts that have been certified by a robust material health assessment such as GreenScreen Certified™.
- Up to $1,000 for a receiptless point-of-sale device.

PPA specialists can offer this PRP to businesses during their regular site visits.



FLAME-RETARDANT RECREATIONAL FOAM PILOT PROJECT

From a survey sent out to Washington gymnastics facilities in 2020, the PRP identified two eligible gyms to participate in the flame-retardant recreational foam pilot project. This pilot project will:

- Work with gyms to test and designate their foam waste for proper disposal.
- Conduct an intensive cleaning of their foam pits after foam removal.
- Provide replacement foam that is free of intentionally added flame retardants.

This process will help us determine the feasibility and funding requirements for a future reimbursement program. We will also identify barriers and opportunities for future flame-retardant foam replacements.

CONCLUSION & LOOKING FORWARD

IMPACTS FROM COVID-19

In the 2021–2023 biennium, PPA specialists returned to some normalcy after several years of COVID-19 impacting their work. Partners got out into the field with regularity, and we increased the total number of visits compared to the previous biennium.

NPDES CHANGES

The National Pollutant Discharge Elimination System (NPDES) permit program is a federal program that addresses water pollution by regulating point sources that discharge pollutants to waters of the United States. NPDES Phase II permit requirements came into effect on January 1, 2023. This new set of requirements affects our partners in different ways. Partners implementing the new regulations for the first time have encountered challenges when doing PPA and NPDES visits.

An internal workgroup was formed within the PPA partnership to help those jurisdictions manage the overlap of the two programs. Ecology will continue to work with our partners to help implement the PPA and NPDES rules and regulations in their jurisdictions.

TRAINING AND COLLABORATION

In spring of 2023, the partnership hosted the first in-person all-staff training since 2019 and benefited from getting together in person. The partnership is challenged with personnel turnover at partner agencies. Any opportunity to meet face-to-face makes it easier to collaborate and more comfortable for specialists to reach out to each other to discuss issues encountered in the field. Ecology also hosted a table at the biennial municipal stormwater conference MuniCon, resulting in great discussions with potential partners.

Going forward, we will continue to offer one in-person training per year to continue building personal connections to improve collaboration. We also host a virtual training each year.

NEW PARTNERS AND NEW PRODUCT REPLACEMENT PROGRAMS

During the 2023–2025 biennium, Ecology is adding the City of Federal Way, the City of Longview, and the Grant County Health District to the partnership. We look forward to working with them to implement the PPA program in their jurisdictions.

Our Product Replacement Program is working to launch a few new programs during the 2023–2025 biennium. One program will assist cosmetology schools and businesses with finding and using safer alternatives. We will also work with school science labs to clean out old chemicals used for lab demonstrations or replace school demonstrations and experiments with green chemistry to reduce exposure to harmful chemicals.

We look forward to another biennium working with our partners to bring pollution prevention assistance to small businesses in Washington State.


W920

DEPARTMENT OF ECOLOGY
State of Washington

Pollution Prevention Assistance

QUESTIONS? CONTACT US!

Andy Maher
Andy.Maher@ecy.wa.gov
509-290-7806

ecology.wa.gov/PPA

DEPARTMENT OF ECOLOGY
State of Washington

Certified Erosion and Sediment Control Lead Database (CESCL)

Query Leads

CESCL Home

Query Results

Back to Query

Export Excel

Show 100 entries

Keyword Search: (search within the visible data)

List of Leads

First Name	Last Name	Company	City	CESCL #	Expires	Status	Display?	Training Provider
Matthew	Moore	City of Port Angeles	Port Angeles	CWTA-89888224	2025/11/05	Current	Yes	CWT Training Academy
David	Wegener	City of Port Angeles	Port Angeles	CWTA-2518	2027/03/28	Current	Yes	CWT Training Academy

First Name	Last Name	Company	City	CESCL #	Expires	Status	Display?	Training Provider
Eric	Walrath	City of Port Angeles	Port Angeles	CWTA-2517	2027/03/28	Current	Yes	CWT Training Academy
Tim	Tucker	City of Port Angeles	Port Angeles	CWTA-2515	2027/03/28	Current	Yes	CWT Training Academy
Travis	Truckenmiller	City of Port Angeles	Port Angeles	CWTA-2514	2027/03/28	Current	Yes	CWT Training Academy
Jordan	Sage	City of Port Angeles	Port Angeles	CWTA-2513	2027/03/28	Current	Yes	CWT Training Academy
Steve	Rutz	City of Port Angeles	Port Angeles	CWTA-2512	2027/03/28	Current	Yes	CWT Training Academy
Joshua	Roening	City of Port Angeles	Port Angeles	CWTA-2511	2027/03/28	Current	Yes	CWT Training Academy
Jeremy	Pozernick	City of Port Angeles	Port Angeles	CWTA-2509	2027/03/28	Current	Yes	CWT Training Academy
Michael	Poats	City of Port Angeles	Port Angeles	CWTA-2508	2027/03/28	Current	Yes	CWT Training Academy

First Name	Last Name	Company	City	CESCL #	Expires	Status	Display?	Training Provider
Jason	Paynter	City of Port Angeles	Port Angeles	CWTA-2506	2027/03/28	Current	Yes	CWT Training Academy
Matthew	Moore	City of Port Angeles	Port Angeles	CWTA-2504	2027/03/28	Current	Yes	CWT Training Academy
Gavin	Medley	City of Port Angeles	Port Angeles	CWTA-2503	2027/03/28	Current	Yes	CWT Training Academy
Vince	McIntyre	City of Port Angeles	Port Angeles	CWTA-2502	2027/03/28	Current	Yes	CWT Training Academy
Luke	Leonard	City of Port Angeles	Port Angeles	CWTA-2500	2027/03/28	Current	Yes	CWT Training Academy
Ryan	Jeffries	City of Port Angeles	Port Angeles	CWTA-2499	2027/03/28	Current	Yes	CWT Training Academy
Hunter	Heckenlaible	City of Port Angeles	Port Angeles	CWTA-2498	2027/03/28	Current	Yes	CWT Training Academy
Greg	Haskins	City of Port Angeles	Port Angeles	CWTA-2497	2027/03/28	Current	Yes	CWT Training Academy

First Name	Last Name	Company	City	CESCL #	Expires	Status	Display?	Training Provider
Rick	Hartley	City of Port Angeles	Port Angeles	CWTA-2496	2027/03/28	Current	Yes	CWT Training Academy
Jeff	Groves	City of Port Angeles	Port Angeles	CWTA-2495	2027/03/28	Current	Yes	CWT Training Academy
Jad	Groves	City of Port Angeles	Port Angeles	CWTA-2494	2027/03/28	Current	Yes	CWT Training Academy
Jeff	Gagnon	City of Port Angeles	Port Angeles	CWTA-2493	2027/03/28	Current	Yes	CWT Training Academy
Leyton	Evans	City of Port Angeles	Port Angeles	CWTA-2491	2027/03/28	Current	Yes	CWT Training Academy
Howard	Carlseen	City of Port Angeles	Port Angeles	CWTA-2488	2027/03/28	Current	Yes	CWT Training Academy
Howard	Carlseen	City of Port Angeles	Port Angeles	CWTA-2488	2027/03/28	Current	Yes	CWT Training Academy
Howard	Carlseen	City of Port Angeles	Port Angeles	CWTA-2488	2027/03/28	Current	Yes	CWT Training Academy

First Name	Last Name	Company	City	CESCL #	Expires	Status	Display?	Training Provider
Howard	Carlseen	City of Port Angeles	Port Angeles	CWTA-2488	2027/03/28	Current	Yes	CWT Training Academy
Howard	Carlseen	City of Port Angeles	Port Angeles	CWTA-2488	2027/03/28	Current	Yes	CWT Training Academy
Howard	Carlseen	City of Port Angeles	Port Angeles	CWTA-2488	2027/03/28	Current	Yes	CWT Training Academy
Jared	Bridges	City of Port Angeles	Port Angeles	CWTA-2486	2027/03/28	Current	Yes	CWT Training Academy
Joshua	Borte	City of Port Angeles	Port Angeles	CWTA-2485	2027/03/28	Current	Yes	CWT Training Academy
Jonathan	Boehme	City of Port Angeles	Port Angeles	CWTA-2484	2027/03/28	Current	Yes	CWT Training Academy
Patrick	Bartholick	City of Port Angeles	Port Angeles	CWTA-2483	2027/03/28	Current	Yes	CWT Training Academy
Lucio	Baack	City of Port Angeles	Port Angeles	CWTA-2482	2027/03/28	Current	Yes	CWT Training Academy

First Name	Last Name	Company	City	CESCL #	Expires	Status	Display?	Training Provider
Zachary	Alderson	City of Port Angeles	Port Angeles	CWTA-2481	2027/03/28	Current	Yes	CWT Training Academy
Caleb	Adams	City of Port Angeles	Port Angeles	CWTA-2480	2027/03/28	Current	Yes	CWT Training Academy
Todd	Shay	City of Port Angeles	Port Angeles	CWTA-2473	2027/03/27	Current	Yes	CWT Training Academy
Todd	Shay	City of Port Angeles	Port Angeles	CWTA-2473	2027/03/27	Current	Yes	CWT Training Academy
Todd	Shay	City of Port Angeles	Port Angeles	CWTA-2473	2027/03/27	Current	Yes	CWT Training Academy
Todd	Shay	City of Port Angeles	Port Angeles	CWTA-2473	2027/03/27	Current	Yes	CWT Training Academy
Todd	Shay	City of Port Angeles	Port Angeles	CWTA-2473	2027/03/27	Current	Yes	CWT Training Academy
Todd	Shay	City of Port Angeles	Port Angeles	CWTA-2473	2027/03/27	Current	Yes	CWT Training Academy

First Name	Last Name	Company	City	CESCL #	Expires	Status	Display?	Training Provider
Cody	Romero	City of Port Angeles	Port Angeles	CWTA-2472	2027/03/26	Current	Yes	CWT Training Academy
Brent	Robinson	City of Port Angeles	Port Angeles	CWTA-2471	2027/03/27	Current	Yes	CWT Training Academy
Brent	Robinson	City of Port Angeles	Port Angeles	CWTA-2471	2027/03/27	Current	Yes	CWT Training Academy
Brent	Robinson	City of Port Angeles	Port Angeles	CWTA-2471	2027/03/27	Current	Yes	CWT Training Academy
Brent	Robinson	City of Port Angeles	Port Angeles	CWTA-2471	2027/03/27	Current	Yes	CWT Training Academy
Brent	Robinson	City of Port Angeles	Port Angeles	CWTA-2471	2027/03/27	Current	Yes	CWT Training Academy
Brent	Robinson	City of Port Angeles	Port Angeles	CWTA-2471	2027/03/27	Current	Yes	CWT Training Academy
Jack	Nieborsky	City of Port Angeles	Port Angeles	CWTA-2468	2027/03/27	Current	Yes	CWT Training Academy

First Name	Last Name	Company	City	CESCL #	Expires	Status	Display?	Training Provider
Jack	Nieborsky	City of Port Angeles	Port Angeles	CWTA-2468	2027/03/27	Current	Yes	CWT Training Academy
Jack	Nieborsky	City of Port Angeles	Port Angeles	CWTA-2468	2027/03/27	Current	Yes	CWT Training Academy
Jack	Nieborsky	City of Port Angeles	Port Angeles	CWTA-2468	2027/03/27	Current	Yes	CWT Training Academy
Jack	Nieborsky	City of Port Angeles	Port Angeles	CWTA-2468	2027/03/27	Current	Yes	CWT Training Academy
Jack	Nieborsky	City of Port Angeles	Port Angeles	CWTA-2468	2027/03/27	Current	Yes	CWT Training Academy
Brody	Merritt	City of Port Angeles	Port Angeles	CWTA-2467	2027/03/27	Current	Yes	CWT Training Academy
Brody	Merritt	City of Port Angeles	Port Angeles	CWTA-2467	2027/03/27	Current	Yes	CWT Training Academy
Brody	Merritt	City of Port Angeles	Port Angeles	CWTA-2467	2027/03/27	Current	Yes	CWT Training Academy

First Name	Last Name	Company	City	CESCL #	Expires	Status ▲	Display?	Training Provider
Brody	Merritt	City of Port Angeles	Port Angeles	CWTA-2467	2027/03/27	Current	Yes	CWT Training Academy
Brody	Merritt	City of Port Angeles	Port Angeles	CWTA-2467	2027/03/27	Current	Yes	CWT Training Academy
Brody	Merritt	City of Port Angeles	Port Angeles	CWTA-2467	2027/03/27	Current	Yes	CWT Training Academy
Casey	McFarlan	City of Port Angeles	Port Angeles	CWTA-2466	2027/03/27	Current	Yes	CWT Training Academy
Casey	McFarlan	City of Port Angeles	Port Angeles	CWTA-2466	2027/03/27	Current	Yes	CWT Training Academy
Casey	McFarlan	City of Port Angeles	Port Angeles	CWTA-2466	2027/03/27	Current	Yes	CWT Training Academy
Casey	McFarlan	City of Port Angeles	Port Angeles	CWTA-2466	2027/03/27	Current	Yes	CWT Training Academy
Casey	McFarlan	City of Port Angeles	Port Angeles	CWTA-2466	2027/03/27	Current	Yes	CWT Training Academy

First Name	Last Name	Company	City	CESCL #	Expires	Status	Display?	Training Provider
Casey	McFarlan	City of Port Angeles	Port Angeles	CWTA-2466	2027/03/27	Current	Yes	CWT Training Academy
Brad	Landes	City of Port Angeles	Port Angeles	CWTA-2464	2027/03/27	Current	Yes	CWT Training Academy
Brad	Landes	City of Port Angeles	Port Angeles	CWTA-2464	2027/03/27	Current	Yes	CWT Training Academy
Brad	Landes	City of Port Angeles	Port Angeles	CWTA-2464	2027/03/27	Current	Yes	CWT Training Academy
Brad	Landes	City of Port Angeles	Port Angeles	CWTA-2464	2027/03/27	Current	Yes	CWT Training Academy
Brad	Landes	City of Port Angeles	Port Angeles	CWTA-2464	2027/03/27	Current	Yes	CWT Training Academy
Brad	Landes	City of Port Angeles	Port Angeles	CWTA-2464	2027/03/27	Current	Yes	CWT Training Academy
Weston	Jorgenson	City of Port Angeles	Port Angeles	CWTA-2462	2027/03/27	Current	Yes	CWT Training Academy

First Name	Last Name	Company	City	CESCL #	Expires	Status	Display?	Training Provider
Weston	Jorgenson	City of Port Angeles	Port Angeles	CWTA-2462	2027/03/27	Current	Yes	CWT Training Academy
Weston	Jorgenson	City of Port Angeles	Port Angeles	CWTA-2462	2027/03/27	Current	Yes	CWT Training Academy
Weston	Jorgenson	City of Port Angeles	Port Angeles	CWTA-2462	2027/03/27	Current	Yes	CWT Training Academy
Weston	Jorgenson	City of Port Angeles	Port Angeles	CWTA-2462	2027/03/27	Current	Yes	CWT Training Academy
Weston	Jorgenson	City of Port Angeles	Port Angeles	CWTA-2462	2027/03/27	Current	Yes	CWT Training Academy
Dave	Cameron	City of Port Angeles	Port Angeles	CWTA-2458	2027/03/27	Current	Yes	CWT Training Academy
Dave	Cameron	City of Port Angeles	Port Angeles	CWTA-2458	2027/03/27	Current	Yes	CWT Training Academy
Dave	Cameron	City of Port Angeles	Port Angeles	CWTA-2458	2027/03/27	Current	Yes	CWT Training Academy

First Name	Last Name	Company	City	CESCL #	Expires	Status	Display?	Training Provider
Dave	Cameron	City of Port Angeles	Port Angeles	CWTA-2458	2027/03/27	Current	Yes	CWT Training Academy
Dave	Cameron	City of Port Angeles	Port Angeles	CWTA-2458	2027/03/27	Current	Yes	CWT Training Academy
Dave	Cameron	City of Port Angeles	Port Angeles	CWTA-2458	2027/03/27	Current	Yes	CWT Training Academy
Sean	Armstrong	City of Port Angeles	Port Angeles	CWTA-2455	2027/03/26	Current	Yes	CWT Training Academy
Richard	Amundson	City of Port Angeles	Port Angeles	CWTA-2454	2027/03/27	Current	Yes	CWT Training Academy
Richard	Amundson	City of Port Angeles	Port Angeles	CWTA-2454	2027/03/27	Current	Yes	CWT Training Academy
Richard	Amundson	City of Port Angeles	Port Angeles	CWTA-2454	2027/03/27	Current	Yes	CWT Training Academy
Richard	Amundson	City of Port Angeles	Port Angeles	CWTA-2454	2027/03/27	Current	Yes	CWT Training Academy

First Name	Last Name	Company	City	CESCL #	Expires	Status	Display?	Training Provider
Richard	Amundson	City of Port Angeles	Port Angeles	CWTA-2454	2027/03/27	Current	Yes	CWT Training Academy
Richard	Amundson	City of Port Angeles	Port Angeles	CWTA-2454	2027/03/27	Current	Yes	CWT Training Academy
Elizabeth	Adkins	City of Port Angeles	Port Angeles	CWTA-2453	2027/03/27	Current	Yes	CWT Training Academy
Elizabeth	Adkins	City of Port Angeles	Port Angeles	CWTA-2453	2027/03/27	Current	Yes	CWT Training Academy
Elizabeth	Adkins	City of Port Angeles	Port Angeles	CWTA-2453	2027/03/27	Current	Yes	CWT Training Academy
Elizabeth	Adkins	City of Port Angeles	Port Angeles	CWTA-2453	2027/03/27	Current	Yes	CWT Training Academy
Elizabeth	Adkins	City of Port Angeles	Port Angeles	CWTA-2453	2027/03/27	Current	Yes	CWT Training Academy
Elizabeth	Adkins	City of Port Angeles	Port Angeles	CWTA-2453	2027/03/27	Current	Yes	CWT Training Academy

First Name	Last Name	Company	City	CESCL #	Expires	Status	Display?	Training Provider
Hunter	Heckenlaible	City of Port Angeles	Port Angeles	CWTA-106437537	2027/06/18	Current	Yes	CWT Training Academy
Jared	Bridges	City of Port Angeles	Port Angeles	CWTA-106203343	2027/06/14	Current	Yes	CWT Training Academy

Showing 1 to 100 of 203 entries

Previous 1 2 3 Next

© 2025 - Department of Ecology

Educational Sessions Attended:

- Community Outreach with ArcGIS StoryMaps
- Artificial Intelligence for Public Works – Closing the Gap
- Sustainable Treescapes and Healthy Trees
- Back to the Future: Comprehensive Planning and Climate Change
- Ecology Stormwater Manual Revisions: What They Mean for You
- Funding Stormwater Projects with Ecology Grants and Loans

Matthew Moore

From: Erin Ingersoll <erini@meetingvisions.net>
Sent: Friday, February 23, 2024 11:24 AM
To: Matthew Moore
Subject: Registration Confirmed - 2024 APWA - WA Spring Conference

[CAUTION - EXTERNAL EMAIL]



Dear Matthew,

Your registration has been confirmed. Please save this email for future reference.

Event: 2024 APWA - WA Spring Conference

Event Dates: April 10 - 11, 2024

Location: Hilton Vancouver

Attending: Matthew Moore

Print a Receipt/Invoice: Click here

Need to modify your registration or make a payment?

You'll need your confirmation number: **47NT5RTYLK7**

Modify your registration: Click here

Make a payment:Click here

Confirmation Number: 47NT5RTYLK7 (Required to view and modify the registration)

Hotel Information:
All conference events (unless otherwise noted) are at the Hilton Vancouver Washington.

APWA Group Rate: $174/night

https://group.hilton.com/0oq6h7

Golf Tournament:
Remember to sign up for the APWA Golf Tournament, Tuesday, April 9, (Check in starts at 11am, Shotgun start at 12:00).

Matthew Moore

Order Date	Invoice	Order Type	Item	Item Type	Amt Ordered	Amt Paid	Amt Due
23-Feb-2024 11:24 AM PT	conf-02232024-0554	Online Charge	Discounted Project of the Year Awards Ticket	Quantity Item	$50.00	$50.00	$0.00
23-Feb-2024 11:24 AM PT	conf-02232024-0554	Online Charge	First Timer - Full Conference Non-Member	Admission Item	$350.00	$350.00	$0.00
					Amt Ordered	**Amt Paid**	**Amt Due**
				Total	$400.00	$400.00	$0.00

We look forward to seeing you in Vancouver!

Sincerely,

APWA WA Conference Planning Team

Having trouble with the link? Simply copy and paste the entire address listed below into your web browser:
https://www.cvent.com/api/email/dispatch/v1/email/view/p2-q466klpqgqhn4m-qx47948p-avv-cx4x?view=html

If you no longer want to receive emails from Erin Ingersoll please click the link below.
Opt-Out

Your payment for the 2024 APWA - WA Spring Conference event has been successfully processed. Please save this email for your records.

Transaction Information

Item	Transaction Information		Quantity	Amount
First Timer - Full Conference Non-Member		$350.00	1	$350.00
Discounted Project of the Year Awards Ticket		$50.00	1	$50.00
		Transaction Total		$400.00

Registration Confirmation Number: 47NT5RTYLK7
View your registration

If you have any questions about this transaction or email, please contact Erin Ingersoll directly at erini@meetingvisions.net.

CITY OF PORT ANGELES
WASHINGTON, U. S. A.
Public Works & Utilities Department

11/25/2024

Angela Vincent
Municipal Stormwater Permit Implementation Planner
Washington State Department of Ecology
Southwest Regional Office
PO Box 47775
Olympia, WA 98504-7775

Subject: Required Notification for S8 Monitoring and Assessment for the City of Port Angeles Phase II Municipal Stormwater General Permit

Dear Angela Vincent:

In accordance with Section S8 of the Monitoring and Assessment portion of the Phase II Western Washington Municipal Stormwater General Permit, this letter serves to notify the Washington State Department of Ecology (Ecology) that the City of Port Angeles (the City) wishes to meet the requirements associated with the City's General Permit WAR045028 by selecting the following options:

- For S8.A, under the Regional Status and Trends Monitoring requirements, we select the collective fund option listed under S8.A.2.a.
- For S8.B, under the Stormwater Management Program (SWMP) Effectiveness and Source Identification Studies, we select the collective fund option listed under S8.B.2.a.

The City's Department of Public Works and Utilities has responsibility for the overall development and implementation of the stormwater management program. As such, it is the appropriate level of certification for submitting information to Ecology when requested or as required.

Please contact Ryan Jeffries for questions concerning City of Port Angeles efforts to comply with the Phase II Municipal Stormwater Permit.

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 gathered and evaluated 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 willful violations.

Phone: 360-417-4800 / **Fax**: 360-417-4542
Website: www.cityofpa.us / **Email**: publicworks@cityofpa.us
321 East Fifth Street / Port Angeles, WA 98362-3206

Sincerely,

Scott Curtin
Director of Public Works and Utilities

CC: Nathan West, City Manager
Jonathan Boehme, City Engineer
Ryan Jeffries, Stormwater Engineer

Mail Date: September 4, 2024

SAM
Stormwater Action Monitoring

Permit Number: RS-WAR045028

ATTN: Vincent McIntyre

PORT ANGELES CITY
321 E 5TH ST
PORT ANGELES WA 98362-3206

Water Quality Program
Stormwater Action Monitoring
2024 Cost Share Program

Invoice Number	24-RS-WAR045028-1
2024 Amount Due	$9,059.00
2024 Amount Paid	$0.00
2024 Remaining Balance	$9,059.00

Program	Due	Paid	Balance	Due date
Effective Studies and Source ID	$5,855.00	$0.00	$5,855.00	12/01/2024
Puget Sound Status and Trends	$3,204.00	$0.00	$3,204.00	12/01/2024

2024 Annual Contribution

Budget Code: 406-7412-538-4990
Line Item: ECY Monitoring & Assess. Fee
Dept/Div Approval: PWKS / ENG / Stormwater
Date: 11/5/2024
Signature: Ryan Jeffries

Please send check or money order in US currency payable to

WASHINGTON STATE DEPARTMENT OF ECOLOGY

(DO NOT SEND CASH)

Mail the payment with the payment voucher / coupon to:

Washington State Department of Ecology
Cashiering Unit
PO BOX 47611
Olympia, WA 98504-7611

You can pay online https://apps.ecology.wa.gov/ecoepay/by via credit card(convenience fees apply)or echeck.

Questions? Contact the SAM Program Coordinator if you have questions about your contribution amounts. For questions about payments applied, please contact the Water Quality Fee Unit via email at: wqfeeunit@ecy.wa.gov

----------Detach and return this payment voucher with your check or money order. ----------

Water Quality Program

Invoice	24-RS-WAR045028-1

Total Amount Due	$9,059.00
Cust Acct #	ECY-012522

ATTN: VINCENT MCINTYRE
PORT ANGELES CITY
321 E 5TH ST
PORT ANGELES WA 98362-3206

Mail payment to
Washington State Department of Ecology
Cashiering Unit
PO BOX 47611
Olympia, WA 98504-7611

Vendor: 83106 406-7412-538-4990

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

PO Box 47600, Olympia, WA 98504-7600 • 360-407-6000

September 4, 2024

City of Port Angeles
321 E 5th St
Port Angeles, WA 98362-3206
RS-WAR045028

RE: Annual SAM Invoice 2024 - City of Port Angeles

Dear Vincent McIntyre:

According to our records, your municipality is participating in the Stormwater Action Monitoring (SAM) program to comply with Special Condition S8. of the:

- Phase I Municipal Stormwater Permit, or
- Phase II Western Washington Municipal Stormwater Permit

The 2024 SAM invoice is enclosed. See the invoice for instructions on how send your payment. Receipts for SAM payments are maintained in Ecology's Water Quality Permitting and Reporting Information System (PARIS) database.

For information on effectiveness and source control studies and our long-term monitoring projects visit SAM at Ecology's SAM webpage[1].

For questions, please contact Raghu Namburi, SAM Coordinator & Engineer, at raghu.namburi@ecy.wa.gov.

Sincerely,

Jeff Killelea

Jeff Killelea, Manager
Permit & Technical Services Section
Water Quality Program

Enclosure

[1] https://ecology.wa.gov/Regulations-Permits/Reporting-requirements/Stormwater-monitoring/Stormwater-Action-Monitoring

Stormwater Action Monitoring 2023 Annual Report

Stormwater Action Monitoring (SAM) is the regional cooperative stormwater monitoring option in the municipal stormwater permits.

SAM is the alternative to outfall monitoring in the permits.

The SAM program funds projects to improve stormwater management, reduce pollution, improve water quality, and reduce flooding. The projects do this by measuring stormwater impacts on the environment, evaluating the effectiveness of stormwater management techniques, and suggesting changes to the stormwater manuals, local practices, and permit requirements. SAM projects also build tools, techniques, and resources for permittees.

All jurisdictions, large and small, can benefit from SAM projects by using findings to protect local lakes, rivers, streams, wetlands, and Puget Sound.

https://ecology.wa.gov/SAM

This is the ninth annual report from the Washington State Department of Ecology (Ecology) on implementation of Stormwater Action Monitoring (SAM), a collaborative program funded by more than 90 Western Washington cities and counties, the ports of Seattle and Tacoma, and the Washington State Department of Transportation (WSDOT). Ecology manages SAM's revenues, expenditures, agreements, and communication of findings.

Highlights for 2023

The Stormwater Work Group (SWG) and SAM organized the fourth solicitation round for new projects in 2023. Proposed studies were presented to an audience of stormwater managers, permittees, and interested stakeholders at a workshop in August. Permittee were polled on their preferences in Sepetember. In November, SWG considered the permittee voting and made the decision to fund five new projects. These projects will begin in 2024-25. We anticipate starting the planning process for new projects again in 2025, as Round 5.

Program Management

Stormwater Work Group

SWG meets four times per year to implement, improve, and expand the regional stormwater monitoring program. The group strives for consensus around a cooperative program that leverages existing programs, scientific expertise, and other capacity to improve our understanding of stormwater impacts and evaluate the effectiveness of stormwater management actions.

The SWG welcomes participation on the group's subcommittees and caucuses. All meetings are open to the public. See the SWG website.

What is the connection between SAM and the SWG?

The SWG sets priorities and oversees the budget for SAM. All SAM projects are selected and approved by the SWG. The SWG makes recommendations to support SAM implementation and other stormwater-related monitoring.

Permittees fund SAM. Permittees, state and federal agencies, and universities all provide leadership on SAM projects. Ecology serves as the administrative entity that manages expenditures of funds to implement SAM.

The Pooled Resources Oversight Committee (PRO-C) is a subgroup of SWG and oversees SAM project scopes, schedules, budgets, and SAM contracting decisions. PRO-C also provides review and recommendations to the SWG on Ecology's administration of the SAM. Both the SWG and PRO-C are formal committees whose members represent stakeholder groups.

Who makes up SAM?

SAM receives annual revenue from Cities, Counties, Ports, WSDOT and the US Navy via an option in the NPDES Municipal stormwater permits.

Cities: Aberdeen, Algona, Anacortes, Arlington, Auburn, Bainbridge Island, Battle Ground, Bellevue, Bellingham, Black Diamond, Bonney Lake, Bothell, Bremerton, Brier, Buckley, Burien, Burlington, Camas, Centralia, Clyde Hill, Covington, Des Moines, DuPont, Duvall, Edgewood, Edmonds, Enumclaw, Everett, Federal Way, Ferndale, Fife, Fircrest, Gig Harbor, Granite Falls, Issaquah, Kelso, Kenmore, Kent, Kirkland, Lacey, Lake Forest Park, Lake Stevens, Lakewood, Longview, Lynden, Lynnwood, Maple Valley, Marysville, Medina, Mercer Island, Mill Creek, Milton, Monroe, Mount Vernon, Mountlake Terrace, Mukilteo, Newcastle, Normandy Park, Oak Harbor, Olympia, Orting, Pacific, Port Angeles, Port Orchard, Poulsbo, Puyallup, Redmond, Renton, Sammamish, SeaTac, Seattle, Sedro-Woolley, Shoreline, Snohomish, Snoqualmie, Steilacoom, Sumner, Tacoma, Tukwila, Tumwater, University Place, Vancouver, Washougal, Woodinville.

Counties: Clark, Cowlitz, King, Kitsap, Pierce, Skagit, Snohomish, Thurston, Whatcom.

Ports: Tacoma and Seattle.

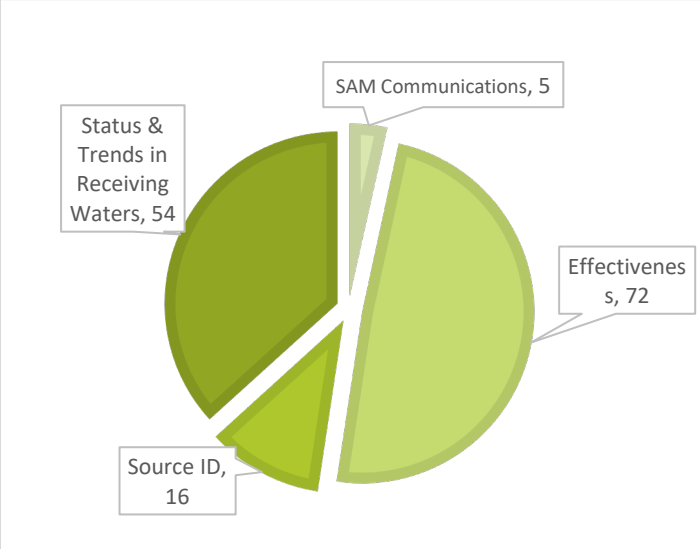
Agencies: Washington Department of Transportation and the United States Navy.

In-kind funds have been received from Washington Departments of Ecology, Agriculture, and Fish and Wildlife, the United States Geological Survey**,** Penn Cove Shellfish**,** and Cedar Grove Composting.

Administration

Contracts and Agreements

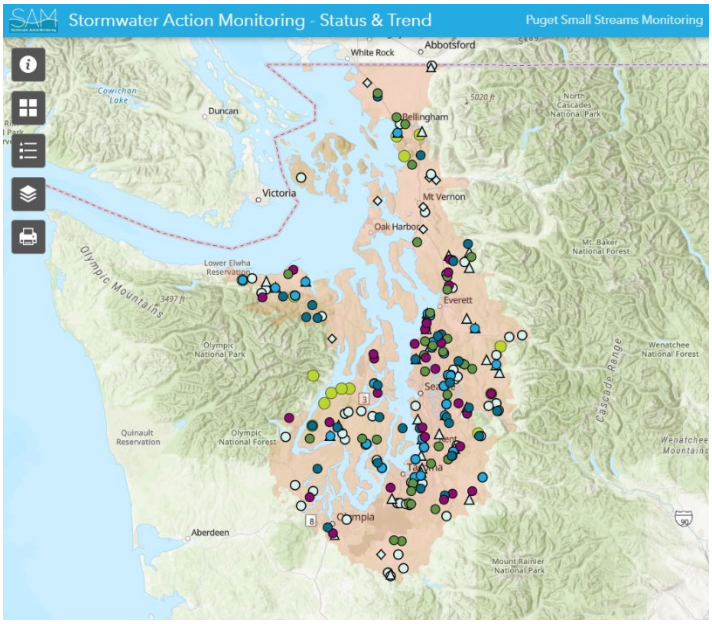
Since 2014, SAM staff with assistance from Ecology's fiscal, management, and contracts sections have processed about 150 contracting actions. Actions include initiating new contracts, making amendments, and closing completed contracts. In 2023, four contracts were completed and closed out and five were amended. We continue to build in contingencies, time to hire subcontractors, and time to incorporate review processes that are expected by technical committees and Ecology's SAM staff to minimize the high rate of amendments.



Status & Trend Studies of Receiving Waters

Are conditions in receiving waters getting better or worse?

SAM is assessing the impacts of stormwater runoff in urban and urbanizing areas in the Puget Sound and Lower Columbia River watersheds. These studies are long-term and active each year. Reports completed in 2023 are showcased in the blue boxes.



Puget Sound Basin Studies

Stormwater managers know that effective and lasting improvements to infrastructure, best management practices, and changing behaviors of Puget Sound residents takes time. Long-term monitoring of key environments help us determine if conditions are getting better in the areas adjacent to urban areas. Two receiving waters studies cover the Puget Sound watershed. Each study monitors 33 randomly selected sites from across four levels of impervious cover and two reference sites.

- **Puget Small Streams (PSS):** U.S. Geological Survey (USGS) leads the small urban streams assessment for SAM. Monitoring includes water, sediment, macroinvertebrate sampling and physical habitat assessment. Water level and temperature using sensors are monitored continuously throughout the year. Restrictions related to the pandemic continue to impact field work, chemical analysis, and

reporting. The annual reports for water year 2020 was publishing in early 2024. The 2021 and 2022 report will now likely be published in winter 2024.

- **Puget Sound Nearshore Mussels:** Washington Department of Fish and Wildlife (WDFW) leads the biannual nearshore assessment for SAM. WDFW wrapped up their laboratory analysis from the 2020/2021 survey. They are expected to publish these findings in summer 2024. They also began their next round of monitoring in fall of 2023. The findings from 2023/2024 are expected to be published in summer 2025.

Lower Columbia River Study

The Lower Columbia Urban Streams (LCUS) study monitors small urban streams in Clark and Cowlitz counties. The LCUS study design includes trend sites that will be monitored yearly and status sites that will be sampled at five-year intervals. Trend analyses will be conducted every five years.

Clark County leads this streams assessment for SAM. Monitoring includes water, sediment, macroinvertebrate sampling and physical habitat assessment. Water level and temperature using sensors are monitored continuously throughout the year. Clark County completed the third round of sampling in 2023. They also produced a report of their findings from water year 2022.

2022 Lower Columbia Urban Streams Findings

Annual Report, October 2023

Monitoring began in late 2021 and continued through summer 2022. Stream health conditions in this study are measured by multiple indicators. Some findings from water year 2022 include:

- Most stream flow measurements met criteria for supporting salmonoid use, while no site met the temperature criteria.
- Benthic Index of Biotic Integrity (BIBI) scores generally declined in subwatersheds with increasing impervious surface and traffic. All but two sites had “Poor or Very Poor” BIBI scores with human disturbance index percentages greater than 14. All but one site with greater than 54% riparian cover had “Fair” BIBI scores. Sites with less than 54% riparian cover typically had “Poor or Very Poor” BIBI scores.
- Metal concentrations in stream sediments were below the cleanup standards.

Over time, this study will provide enough data to categorize LCUS streams in good, fair, or poor condition. Trend analyses and risk assessments will be conducted every five years to identify the key stressors causing poor stream conditions in the region. Read the full report.

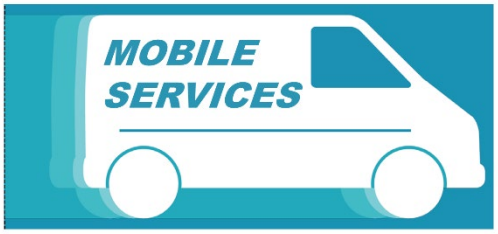
Source Identification Projects



What are the common sources of illicit discharges and best ways to reduce them?

SAM Source Identification projects identify common problems and propose regional actions on source control to prevent transport of pollutants in stormwater. Two projects were active at the beginning of 2023 with one finishing in fall 2023. The completed study is shown in the blue box:

- **Mobile Business:** King County and consultants have worked with the WA Department of Revenue to pull business listing information to help jurisdictions identify mobile business types from business licensing data. A pilot outreach effort in southern King County wraped up in 2023. The pilot program recommend ways to identify mobile businesses and methods to conduct inspections and outreach for



the purposes of stormwater source control and pollution prevention. Three new outreach brochures were developed during the Pilot Program on mobile automobile repair, commercial landscaping, and pressure/power washing. The engagement with the Pilot Program participants to select the topics and outreach brochure content helped create more relevant materials for permittee use across the region.

Business Source Control & Inspection Program Guidance

SAM Fact Sheet #31, August 2023

Ecology's 2019 Phase II Municipal Separate Storm Sewer (MS4) National Pollutant Discharge Elimination System permit required permittees for the first time to develop and implement a source control business/site inspection program. A few Phase I and Phase II jurisdictions with existing business inspection programs offered to share lessons learned. Washington Stormwater Center (WSC) and consultants updated a 2020 guidance manual with new chapters, an online training program, outreach materials in several languages, and many other tools, videos, and examples. Municipal stormwater permittees who are developing or refining their business source control and inspection programs will be able to access this guidance and resources to help meet their permit requirements. The 2023 manual provides resources, templates, and strategies developed based on research, input, and experiences of jurisdictions that have developed similar programs.

This SAM project funded development of a free online training program based on the popular in-person trainings held in 2023. the training which highlights critical items related to developing an inspection program, conducting inspections, and identifying potential issues. The course consists of four modules:

1. Overviews of the manual, source control BMPs, and the permit
2. Setting up an Inspection Program
3. Implementing an Inspection Program
4. Additional Resources

Effectiveness Studies

How well are required or innovative stormwater management practices working?

SAM is measuring the effectiveness of BMPs and stormwater management actions to reduce negative hydrologic impacts and the discharge of pollutants to receiving waters. Bulleted studies were active in 2023, and completed SAM projects are shown in the blue boxes.



- **Paired watershed retrofit and restoration:** The City of Redmond paired watershed study is in year 8 of 10. Annual Reports for Water Years 2021 and 2022 were published this year. The 2016-2022 Trend Analysis Report originally planned as a standalone document was incorporated into the 2021 Annual Report.
- **Hydrologic performance of the oldest bioretention**: The City of Olympia tested the infiltration rate of 50 older bioretention facilities to evaluate influential factors on the best designs and maintenance lessons learned. The findings are expected to be published in a report in early 2024.
- **Evaluation of BMP Maintenance**: The City of Bellevue evaluated the maintenance thresholds or conditions for ponds, vaults, trenches, and tanks through a permittee survey and a literature data review. Preliminary findings were published in two memos in 2023. A white paper in 2024 will

incorporate these findings to recommend how BMP maintenance efforts can be adjusted to maximize overall environmental outcomes to meet permit requirements.

- **Ditch Maintenance for water quality study:** WSU's study to evaluate different ditch shapes and grass mixtures for roadside ditch reseeding completed data collection in 2023. Their final report and a presentation of the findings is expected in 2024.
- **Longevity of bioretention soil mix for toxicity reduction**: WSU continues to evaluate coho toxicity reduction by the 60:40 default bioretention soil mix. Ecology leveraged this existing SAM study to add 3 additional water years for coho toxicity and quantification of the emergent 6PPD-quinone compound using legislative proviso funds. The findings are expected to be published in late 2024.

- **Hydrologic benefit of smaller street trees**: WSU and the Evergreen State College began data collection in a project quantifying the effectiveness of young, small trees to mitigate stormwater runoff in Western Washington. This study builds off a previous SAM study of the hydrologic benefits of mature trees.

Guidance for evaluating the effectiveness of public education and outreach programs

SAM Fact Sheet #28, February 2023

In this project, Washington State University and Evergreen StormH20 used surveys and literature to evaluate which types of stormwater problems are amenable to, and best addressed by, behavior-change efforts. Washington municipal-stormwater permittees now have an online decision-support tool, templates, guidance, and training available to guide their work on prioritizing stormwater-education efforts and evaluating effectiveness of their programs.

Cities and counties cannot fully control all the stormwater draining from the urban environment. Aspects of their stormwater management programs which aim to change behaviors of households, businesses, and others are critical tools in improving stormwater quality and protecting our natural resources. Managers can use information from the website, literature review, and evaluation guidance manual to help select suitable behavior change campaigns and then evaluate those efforts using valid approaches. Those evaluations can inform their decisions on management needs and future campaigns. The Evaluation Guidance Manual includes information about social marketing and community-based social marketing resources, sample size selection, common evaluation instruments, data types, and analysis methods. Permittees may also use the report template to meet their permit reporting requirements.

Particle size importance for stormwater characterization and BMP effectiveness

SAM Fact Sheet #29, August 2023

Washington State Department of Natural Resources and Evergreen StormH20 completed a literature review of the size of particles in stormwater, bound contaminants, and the effectiveness of a range of treatment approaches for those particle sizes.

Sources of particles to stormwater include automotive, local soil erosion products, and atmospheric deposition. The most transported sizes appear to be clay and silt sizes.

Literature reviewed focused on heavy metals, nutrients, and PAHs attached to particles, which suggests pollutant concentrations are generally higher for clay and silt-sized particles. Targeting clay and silt-sized particles may remove the highest amounts of metals, nutrients, and bacteria.

Studies with particle size data for BMP influent and effluent were located for 19 structural and one operational BMP. Most BMPs were highly effective at removing silt and fine sand sized particles. Proceed with caution, though-- these findings are based on only a few data points or a single study and there are many BMPs for which data were not located.



Mesocosom testing facility at WSU-Puyallup used in the outlet control study

Outlet control performance for bioretention facilities

SAM Fact Sheet #30, August 2023

Washington Stormwater Center and Aspect Consulting evaluated performance of flow controlling outlet for bioretention facilities. Both water quality and water quantity performance results were compared to bioretention facilities operated with the typical media filter hydraulic controls to find advantages for sites trying to optimize bioretention facility performance.

Bioretention systems can be designed to rely on the permeability of the bioretention soil media (BSM) to restrict flow rates (i.e., “media control”) or incorporate flow-restricting devices (valves or orifices) on the underdrain outlets to throttle flow rates through the system (i.e., “outlet control”). This research compared discharges from both outlet-controlled and media-controlled designs.

When effluent stormwater pollutant concentration is of primary concern, an outlet control approach provides limited benefit. This approach moderately improved treatment performance for some pollutants but may increase the risk of leaching pollutants from BSM, particularly for compost-based media that already have the potential to leach. An outlet control approach could be beneficial for applications where (1) more predictable and longer residence times are desired to target specific analytes, or (2) there is concern about short-circuiting through a portion of the media bed and exhausting the treatment capacity along the short-circulate pathway, and (3) the selected bioretention media has limited risks for nutrient and dissolved copper leaching. Outlet control effectively slows the water down, increases residence time, and saturates the full media bed more often. This study shows no impact on O&M or plant health associated with this outlet control bioretention designs.

SAM's 2023 Communications

In 2023, SAM-funded projects garnered significant attention with presentations at regional environmental and municipal conferences. This year SAM projects were featured at the Green Stormwater Infrastructure Summit and MuniCon. Project leads also presented at several local American Public Works Association (APWA) stormwater managers' meetings. These conferences and meetings are an important opportunity to disseminate research findings and foster a broader understanding of effective stormwater management.

The SAM program's website serves as a central hub for project information and program administration. Each active study is granted its own project page, ensuring that detailed and up-to-date information is readily accessible. When completed, projects are concisely summarized in the website's accordion sections—find them under Effectiveness Studies, Source Identification, and Status and Trends. The SAM webpages are filled with stormwater resources, including factsheets, comprehensive final reports, educational presentations, and informative videos.

Additionally, the website hosts our regular newsletters and a compilation booklet of studies conducted between 2013-2019. We're working on the second compilation booklet for studies conducted between 2019-2024 and are excited to unveil it in 2024!

Fond Farewell to Brandi

While SAM rounded out 2023 under her leadership, in February 2024 Brandi Lubliner left Ecology to take a role in stormwater and watershed planning at the City of Tacoma. Brandi was SAM's first coordinator and was instrumental in getting the program off the ground. She laid a solid foundation for the program's continued success. We are grateful for her work and are also very glad she didn't go far!



Subscribe to our newsletter

We use the GovDelivery Subscriber Service to register new contacts. From the Ecology email subscriber preferences page, enter your email address, click to add subscriptions, and navigate to the Water Quality Program list to subscribe to:

- **STORMWATER-ACTION-MONITORING**: a newsletter announcing SAM study findings and upcoming workshops.
- **STORMWATER-WORK-GROUP**: meeting agendas, materials, summaries, and announcements related to SWG.

Contact information

Raghu Namburi
SAM Coordinator
Raghu.Namburi@ecy.wa.gov
360-628-4989

Chelsea Morris
SAM Scientist
Chelsea.Morris@ecy.wa.gov
564-999-3052

ADA accessibility

To request an ADA accommodation, contact Ecology by phone at 360-407-6600 or email at Raghu.Namburi @ecy.wa.gov, or visit https://ecology.wa.gov/accessibility. For Relay Service or TTY call 711 or 877-833-6341.

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. This work has resulted in the identification (2016) and disconnection (2017) of a broken subsurface side sewer line leaking into a Storm main which was discharging into Peabody Creek. Attached is the 2018 sampling plan. This plan was in effect during 2024 where throughout the year, the geometric mean remained below the threshold for determining when IDDE investigation is necessary; however, where the levels for E.coli in Peabody Creek remain high, investigations in the area will continue to identify and eliminate sources of pollution. An additional sampling location is planned for Peabody Creek in 2025 just south of Park Avenue (Mile 1.3) where an outfall repair is planned for late summer.

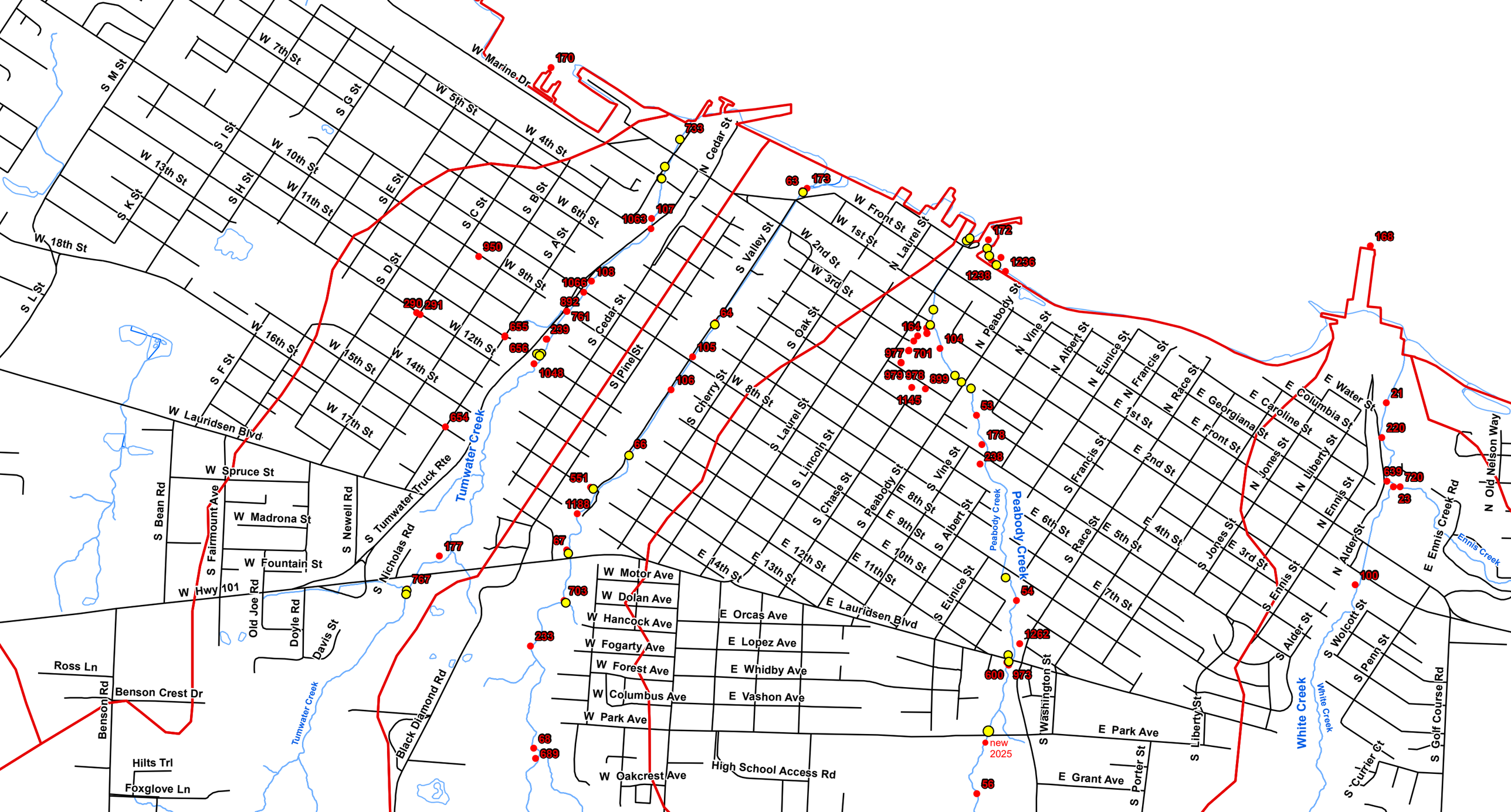
City of Port Angeles project: Streamkeepers Grab-Sample Plan, *revised 4/30/18*

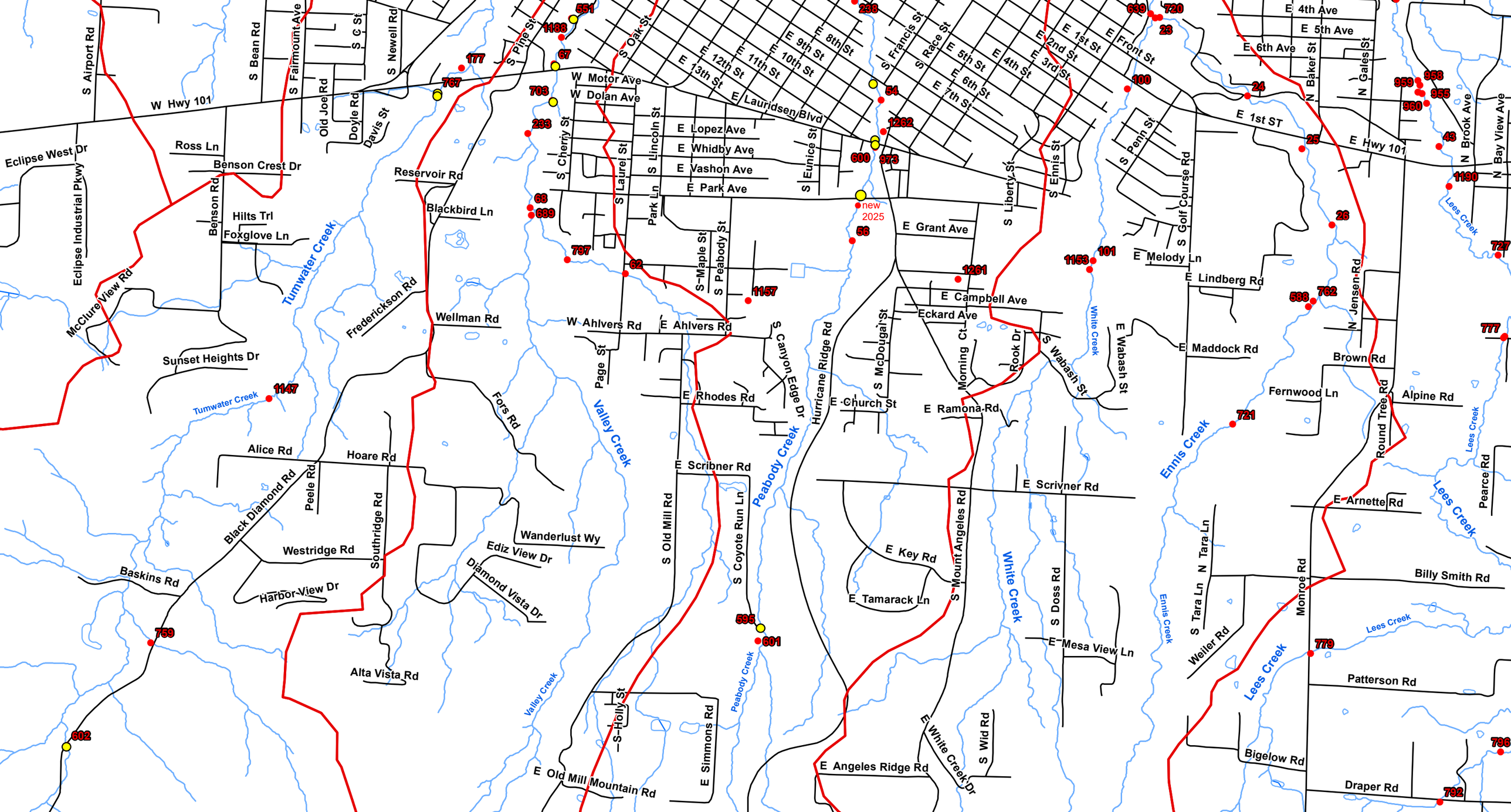
****Include Precip (24 hr) readings or multi-day retrospectives of preceding wet and dry periods, based on a reliable local weather station****

--Organize sampling tours around volunteer/lab availability; min. 2 volunteers needed, and lab is generally available M-Th before 2 PM.
--Try for 50% monthly wet-weather tours during the year, where "wet" is defined as ≥ 0.15" of rain-equivalent within the prior 24 hours.
--If 50% wet-weather tours have not been taken as the year progresses, conduct a wet-weather tour if volunteers are available even if a dry-weather tour has already been conducted that month.
--Conduct two "storm" (defined as ≥ 1" of rain-equivalent within the prior 24 hours) tours per year, preferably in different seasons, with or without volunteers, even if a sample has already been taken that month.
--If volunteers are available, precede "storm" sampling tours with pre-storm tours, preferably the day prior to the storm.
--If a "storm" tour has been conducted during a month, no further tours will be conducted that month.
--If two "storm" tours have not been conducted by the end of November, consider relaxing the 1" criterion in December.
--For "wet-weather" or "storm" sampling, use best judgment to label each visit as Baseflow; First-Flush; Rising-Curve; Peak; or Post-Peak, considering storm intensity, turbidity, flow velocity, and stream stage relative to what it was pre-storm. The storm may iterate back and forth through multiple stages during a sampling tour.

	Monthly Samples--Organize around volunteer availability; Aim for 6 dry-weather and 6 wet-weather samples
	Peabody 0.0 (when possible)
	Peabody 0.2 (just u/s of final culvert; include stage reading)
	Peabody 0.2 rep
	Peabody 0.2a (pipe d/s of trailer park office)
	Peabody 0.2b (u/s of pipe)
	Peabody 0.4b (u/s of trailers, d/s of plunge pool below culvert)
	Peabody 0.4 (u/s of Peabody St.)
W	Peabody 0.4a (storm input under Peabody St.)
	Peabody 0.9 (beneath water pipe, d/s of kids' play area)
	Peabody 1.2 (beneath Lauridsen, u/s of stormwater flume)
	Peabody 1.2c (beneath Lauridsen, stormwater flume)
C	Peabody 1.4 (National Park loop trail, u/s of u/s crossing)
	Tumwater 0.0 (across from Westport side door)
	Tumwater 0.0 rep
	Tumwater 0.8 (d/s of storm input below Tumwater Truck Rt)
	Tumwater 0.8d (storm pipe below Tumwater Truck Route)
	Tumwater 0.8e (u/s of storm input below Tumwater Truck Rt)
	Tumwater 1.5 (u/s of Hwy 101, d/s of storm input from west)

	Additional sites for storm sampling (see above)--aim for 1 pre-storm and 1 during-storm or just-after-storm sample (preferably on consecutive days) 2x/yr if possible (preferably in different seasons)
C	Peabody 2.9 (Coyote Run Lane off Scrivner Rd)
	Tumwater 0.1 (d/s of storm pipe)
W	Tumwater 0.1b (LB storm drain input @ 3rd St.)
	Tumwater 0.1a (@ 3rd St. u/s of LB storm drain input)
	Tumwater 1.5a (u/s of Hwy 101, u/s of storm input from west)
	Tumwater 1.5b (u/s of Hwy 101, storm channel from west)
	Tumwater 4.4 (3142 Black Diamond Rd)
	Valley 0.0 (when possible)
	Valley 0.4 (u/s of final culvert @ 6th St)
	Valley 0.4 rep
	Valley 0.7 (@ 12th St., near end of Valley Street)
	Valley 1.0 (u/s of "flatbed" bridge @ 14th St)
	Valley 1.2 (d/s of Hwy 101)
	Valley 1.4 (Vern Samuelson Trail ~0.1 mile u/s of Hwy 101)
	Semi- Annual Marine Samples--fecal + entero (big 500 mL bottles)
	PA Harbor @Hollywood west
	PA Harbor @Hollywood central
	PA Harbor @Hollywood east
	PA Harbor @Peabody mouth
	PA Harbor @Peabody mouth rep


W Marine Dr
W 7th St
W 5th St
W 4th St
W 6th St
W 9th St
W 10th St
W 11th St
W 12th St
W 13th St
W 14th St
W 15th St
W 16th St
W 17th St
W 18th St
S M St
S L St
S K St
S I St
S H St
S G St
S F St
S E St
S D St
S C St
S B St
S A St
N Cedar St
S Cedar St
S Valley St
S Oak St
S Pine St
S Cherry St
S Lincoln St
S Chase St
S Peabody St
S Vine St
S Albert St
S Eunice St
S Francis St
S Race St
S Jones St
S Ennis St
S Alder St
S Liberty St
S Washington St
S Wolcott St
S Penn St
S Golf Course Rd
S Currier Ct
S Porter St
N Peabody St
N Vine St
N Albert St
N Eunice St
N Francis St
N Race St
N Jones St
N Liberty St
N Ennis St
N Alder St
N Old Nelson Way
E Water St
E Columbia St
E Caroline St
E Georgiana St
E Front St
E 1st St
E 2nd St
E 3rd St
E 4th St
E 5th St
E 6th St
E 7th St
E 8th St
E 9th St
E 10th St
E 11th St
E 12th St
E 13th St
E 14th St
E Lauridsen Blvd
E Park Ave
E Grant Ave
W Front St
W 1st St
W 2nd St
W 3rd St
W Lauridsen Blvd
W Spruce St
W Madrona St
W Fountain St
W Hwy 101
W Motor Ave
W Dolan Ave
W Hancock Ave
W Fogarty Ave
W Forest Ave
W Columbus Ave
W Park Ave
W Oakcrest Ave
E Orcas Ave
E Lopez Ave
E Whidby Ave
E Vashon Ave
High School Access Rd
S Bean Rd
S Fairmount Ave
S Newell Rd
S Tumwater Truck Rte
S Nicholas Rd
Old Joe Rd
Doyle Rd
Davis St
Black Diamond Rd
Benson Rd
Ross Ln
Benson Crest Dr
Hilts Trl
Foxglove Ln
Tumwater Creek
Peabody Creek
White Creek
Ennis Creek
E Ennis Creek Rd
new 2025
170
733
63
173
172
1236
1238
168
107
1063
108
1066
950
892
761
290
291
655
656
239
1048
684
64
105
106
66
551
1188
67
177
767
703
233
68
689
56
104
977
701
979
978
899
1145
53
178
238
54
1262
600
973
21
220
339
720
23
100


W Hwy 101
S Airport Rd
S Bean Rd
S Fairmount Ave
S C St
S Newell Rd
Old Joe Rd
Doyle Rd
Davis St
S Pine St
S Oak St
E 8th St
E 9th St
E 10th St
E 11th St
E 12th St
E 13th St
E Lauridsen Blvd
W Motor Ave
W Dolan Ave
S Cherry St
S Laurel St
S Lincoln St
Park Ln
E Lopez Ave
E Whidby Ave
E Vashon Ave
E Park Ave
S Eunice St
S Francis St
S Race St
E 5th St
E 6th St
E 7th St
E 4th St
E 3rd St
E 2nd St
E 1st St
E Front St
S Liberty St
S Ennis St
S Penn St
S Golf Course Rd
E 4th Ave
E 5th Ave
E 6th Ave
N Baker St
N Gales St
E 1st ST
E Hwy 101
N Brook Ave
N Bay View Ave
Lees Creek
Eclipse West Dr
Eclipse Industrial Pkwy
Ross Ln
Benson Crest Dr
Benson Rd
Hilts Trl
Foxglove Ln
McClure View Rd
Reservoir Rd
Blackbird Ln
Tumwater Creek
Frederickson Rd
Wellman Rd
Sunset Heights Dr
Tumwater Creek
Alice Rd
Hoare Rd
Black Diamond Rd
Peele Rd
Southridge Rd
Westridge Rd
Baskins Rd
Harbor View Dr
Alta Vista Rd
Fors Rd
Wanderlust Wy
Ediz View Dr
Diamond Vista Dr
S Maple St
S Peabody St
E Grant Ave
E Campbell Ave
Eckard Ave
E Melody Ln
E Lindberg Rd
E Maddock Rd
Brown Rd
Fernwood Ln
Alpine Rd
Round Tree Rd
N Jensen Rd
Pearce Rd
E Arnette Rd
Billy Smith Rd
Monroe Rd
Patterson Rd
Bigelow Rd
Draper Rd
W Ahlvers Rd
E Ahlvers Rd
Page St
E Rhodes Rd
S Canyon Edge Dr
Valley Creek
Peabody Creek
Hurricane Ridge Rd
E Church St
S McDougal St
Morning Ct
Rook Dr
S Wabash St
E Wabash St
White Creek
E Ramona Rd
E Scribner Rd
S Old Mill Rd
S Coyote Run Ln
E Scrivner Rd
E Key Rd
E Tamarack Ln
S Mount Angeles Rd
S Doss Rd
E Mesa View Ln
Ennis Creek
S Tara Ln
N Tara Ln
Weiler Rd
S Holly St
E Simmons Rd
E Old Mill Mountain Rd
E Angeles Ridge Rd
E White Creek Dr
S Wid Rd
new 2025
177
767
703
67
551
1188
293
68
699
797
62
1157
56
600
973
1262
54
238
639
720
23
100
24
25
959
958
955
960
43
1190
26
727
1153
101
1261
536
762
777
721
1147
595
601
759
602
779
796
792

DocuSign Envelope ID: 834496C5-4831-4284-83CE-D64BB0163400

332.22.007

2a
01/27/22

INTER-LOCAL AGREEMENT
BETWEEN
CITY OF PORT ANGELES
AND
CLALLAM COUNTY
FOR STREAM WATER QUALITY MONITORING
2022 – 2026
PSA-2022-53

This Inter-Local Agreement is between the City of Port Angeles (herein after referred to as "the City") and Clallam County (herein after referred to as "the County") for the purpose of volunteer recruitment, training and coordination for water quality monitoring, and associated data storage and reporting. Funding for this work is through the City of Port Angeles.

WHEREAS, the Inter-Local Cooperation Act, RCW 39.34, provides that any two public agencies of the state having separate authority to exercise a particular power may enter into an agreement for cooperative or joint exercise of that power; and

WHEREAS, the City is a municipal corporation of the State of Washington, and the County is a political subdivision of the State of Washington, and each party has the authority to contract for water quality monitoring services under Article XI § 11 of the Washington State Constitution; Chapter 17.10 RCW; Chapter 36.89 RCW; Chapter 85.15 RCW; and

WHEREAS, the City desires to monitor levels of bacteria, and other water quality parameters in the streams and harbor of Port Angeles, in a systematic and scientific manner; and

WHEREAS, the City would like to use the services of the County's Streamkeepers program; and

WHEREAS, the County will benefit from the information gathered by the City's monitoring of the above-mentioned water quality parameters in the County's own water quality monitoring projects.

Therefore, it is mutually agreed that:

A. The County's Responsibilities:

1. Project management: The County shall track work hours and budget of the County's Streamkeepers program to ensure effective expenditure of funds and provide a breakdown of hours and activities on pay applications.
2. Recruit and train volunteers through the County's Streamkeepers program to perform water-quality monitoring in the Port Angeles area.
3. Devise a sampling plan in conjunction with the City. Sample sites, parameters, and periodicity will be agreed upon by Streamkeepers and the City. Sites will have safe access. Where a sampling site is not accessible from a public road or other easement, the City will obtain the landowner's permission for Streamkeepers' staff and/or volunteers to access the site. Baseline sampling is expected to include monthly sampling for *Escherichia coli* (*E. coli*) bacteria in freshwater streams and *Enterococci* bacteria in marine waters. The sampling plan will depend upon funding and laboratory costs.

DocuSign Envelope ID: 834496C5-4831-4284-83CE-D64BB0163400

4. Sampling for benthic macroinvertebrates will occur in 2022 in approved locations central to each streams extent within the City limits for the following creeks: Peabody, Valley, Tumwater, & Ennis. Additional sampling events or locations must be approved by the City in advance and have funds available within the approved budget. Benthic Macroinvertebrate sampling is to occur on a 5-year interval. It is anticipated that these same sites will be sampled again in 2027 under the next ILA.
5. Conduct water quality monitoring (done by staff or volunteers), including collection of samples, in situ measurements, and installation and retrieval of continuous data loggers at designated sample sites using standard Streamkeepers protocols and quality-control measures.
6. Conduct quarterly stream flow monitoring at agreed-upon sites using standard Streamkeepers equipment, protocols, and quality-control measures. Flow monitoring data is to be included in the annual report to the City.
7. Submit samples to laboratories for analysis:

   a. Bacterial and other water-quality samples to the County Environmental Health Lab or, when the County Environmental Health Lab is unable to perform the analysis, another state accredited lab as defined in RCW 43.21A.230 and WAC 173-50-040.

   b. Benthic macroinvertebrate samples to professional taxonomy laboratories for identification and verification.
8. Record, confirm, and analyze all results, and report them to the City as soon as possible but no later than 30 days following collection via the standard reporting/recordkeeping formats as used by the County's Streamkeepers program. Along with providing the sampling results, produce and submit to the City each month a table of data for that month, and a brief written summary pointing out any anomalies or exceedances of State water quality standards that may warrant follow-up investigation by the City's Illicit Discharge Detection and Elimination (IDDE) response team.
9. Produce and submit to the City a yearly report compiling the collected data for the year and providing detailed graphical and statistical analysis and interpretation of results. In addition, where appropriate, annual data is to be overlain and compared against data collected during previous years. The report shall discuss trending, comparisons, anomalies, etc., and calculate and report statistical significance of results as appropriate.
10. Produce and submit to the City a comprehensive report on water quality trends in Port Angeles streams over the period 2001-2021. This comprehensive report is to be submitted to the City no later than December 31st, 2023.

B. <u>The City's Responsibilities:</u>

1. Provide direction as to overall sampling design, including sites, parameters, and periodicity.
2. In the instance a sampling site is not accessible from a public road or other easement, obtain landowner permission to access the site for sampling purposes.
3. Arrange with analytical laboratories for payment, as appropriate. Expected laboratory services include:

DocuSign Envelope ID: 834496C5-4831-4284-83CE-D64BB0163400

a) Water samples for pollutant analysis. The 2022 lab fees at the Clallam County Environmental Health Laboratory are $35.00 per sample for *E. coli* and $40.00 per sample for *Enterococci* bacterial tests. Payment of lab fees will be based on current year sample rates as set by the Clallam County Environmental Health Laboratory. If other parameters, methods, or laboratories are used, fees will vary.

b) Benthic macroinvertebrate samples for taxonomic analysis per the Benthic Index of Biological Integrity (B-IBI). Laboratory fees are estimated at $430 per sample, however, rates are known to fluctuate and cannot be accurately determined in advance, but the City will use the same taxonomist(s) the County uses and will pay the same rate, including pro-rated costs for Quality Assurance laboratory analysis.

4. The City will pay for staff time and costs for the services described in "A." above at the staff billing rate set by the County, and the actual cost of incidental material. The staff billing rate will be the composite rate of the staff salary set by Clallam County. The County will invoice the City monthly, and the City will pay within 30 days. The 2022 Streamkeeper Coordinator's billing rate is $50.82 per labor hour. Subsequent years will be billed at the established staff billing rate set by Clallam County.

5. City's maximum obligation: The total cost of services for the above tasks, including payments to Streamkeepers and laboratories, shall not exceed $14,000 for year 2022 and $21,000 for each additional calendar year, totaling $98,000 for the years 2022 through 2026.

C. General Conditions:

1. Duration: Unless terminated by either party, this agreement shall commence on the date of execution, and shall remain in effect through December 31, 2026.

2. Modification: This Agreement may be amended or altered only by written agreement of the designated representatives of both the City and the County upon the signature of such representatives. The amendment shall explicitly state that it is an amendment to this Agreement.

3. Termination: This Agreement may be terminated by either party sixty (60) days after receipt of written notice of intent to terminate; PROVIDED that either party may immediately terminate this Agreement for public convenience or in the event of a financial emergency. If this contract is terminated or expires, the City is obligated to reimburse the County for all costs incurred in performance of the Agreement prior to its termination or expiration.

4. Property: The parties do not intend to purchase or acquire any real or personal property in performance of this Agreement, other than the supplies necessary to perform this Agreement. Property purchased or acquired in performance of this Agreement will remain with the purchasing party upon termination or expiration of this Agreement.

5. Ownership of Items Produced: All writing, programs, data, public records or other materials prepared by the County and/or its consultants, subcontractors, or volunteers, in connection with performance of this Agreement will be entered into the Clallam County Water Resources

DocuSign Envelope ID: 834496C5-4831-4284-83CE-D64BB0163400

database, and then delivered to the City. The parties recognize and acknowledge that all such information is available to the public.

6. Non-Discrimination: The County shall not discriminate against any person on the basis of race, creed, political ideology, color, national origin, sex, marital status, sexual orientation, age, or the presence of any sensory, mental or physical handicap.

7. Defense, Indemnity, Hold Harmless: The County shall defend, indemnify, and hold the City harmless from and against any liability for any/all injuries to person or property arising from the sole negligent act or omission of the County or its elected officials, department heads, agents, or employees in performance of this Agreement.

   The City shall defend, indemnify, and hold the County harmless from and against any liability for any/all injuries to person or property arising from the sole negligent act or omission of the City or its elected officials, department heads, agents, or employees in performance of this agreement.

8. Administration: This Agreement will be administered by the County's Streamkeepers program.

   The County's contact is: Joel Green, Streamkeepers Coordinator, Clallam County, 223 E. 4th Street, Suite 5, Port Angeles, WA 98362, (360) 417-2281, joel.green@clallamcountywa.gov

   The City's contact is: Vince McIntyre, Stormwater Engineer, City of Port Angeles, 321 E. 5th Street, Port Angeles, WA 98362, (360) 417-4701, Vmcintyr@cityofpa.us.

DocuSign Envelope ID: 834496C5-4831-4284-83CE-D64BB0163400

IN WITNESS HEREOF, this Agreement is executed by Clallam County and by the City of Port Angeles, Washington.

CITY OF PORT ANGELES

DocuSigned by:
Nathan West
0F7345F35344417...
Nathan West, City Manager

Dated: 10/6/2022

Attest:

DocuSigned by:
Kari Martinez-Bailey
C3E8F3647C5341C...
Kari Martinez-Bailey, City Clerk

Approved As To Form:

DocuSigned by:
William Bloor
E5EC5FBD4113427...
William E. Bloor, City Attorney

CLALLAM COUNTY BOARD OF COMMISSIONERS

Mark Ozias, Chair

Dated: 9/27/22

CLERK OF THE BOARD CLALLAM COUNTY COMMISSIONERS PORT ANGELES WA

Attest:

Loni Gores, Clerk of the Board

Approved As To Form:

Dee Boughton, Deputy Prosecuting Attorney

Stormwater Management Program | Annual Report to ECY

S5.C.2.a.iii. - List of Stewardship Opportunities provided in 2024

1. **Streamkeepers of Clallam County**
   The City has long-partnered with Streamkeepers of Clallam County in support of their water Quality monitoring program that utilizes trained volunteers to collect water quality data. The City and the County executed a new 5-year Inter-local Agreement with Streamkeepers in 2022. See attached 2022-2026 ILA. A few notable additions to the agreement are:
   - Benthic macroinvertebrate sampling on Tumwater, Peabody, Valley, and Ennis Creeks
   - Production of a comprehensive 20-year report
   - Sampling for E.Coli (freshwater) and E. Cocci (marine waters).

Puget Sound Stream Benthos

Home Analysis ▸ Monitoring Projects ▸ Login About Us Site Map

Analysis: Benthic Index of Biotic Integrity Show Criteria

Clear & Use Default Options | Show Fewer Options

Area	Project	Location or Keyword
All Streams	All Projects	

Aggregation	Score Type	Metric
Don't Aggregate	0-100 B-IBI	Overall Score

Replicate Handling	Taxonomic Resolution/STE (See lists)	Taxa at Visit Metrics
Combine replicates, then calculate	2012 STE	...

Taxa Attributes (See lists)	Taxa Mapping	Taxa at Visit Filter
Fore, Wisseman, 2012 (recommended for 0-100 B-IE	Use original taxa	...

Number of Organisms ○ Count per Sample ◉ Count per Visit
Min: Max: 500 ○ Flag ○ Omit ◉ Omit/Subsample[1] ○ Omit/Subsample[2]

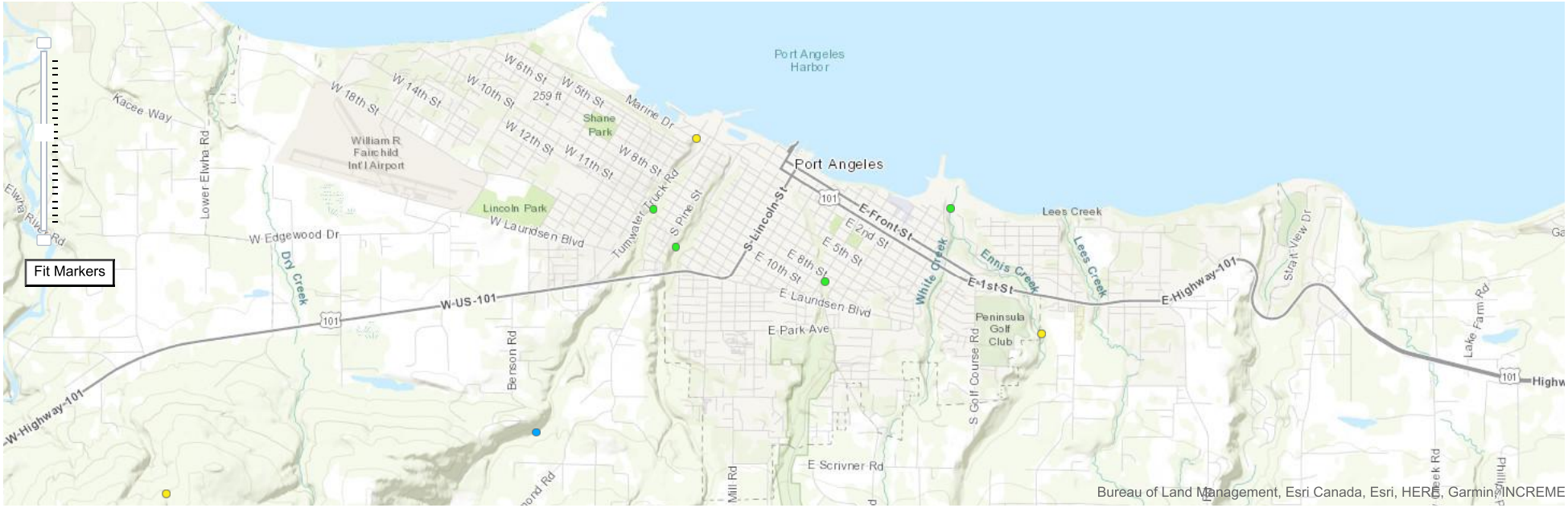
Year ◉ Latest per Site in Range ○ All in Range
Range from 2021 through Latest

☐ Open in new tab | Plot on Map | Tabulate | Show Samples | Download...

Click on biotic health markers for score details.
524 scores between years 2021 and 2024 returned

☑ Cluster scores for faster loading

Very Poor Poor Fair Good Excellent



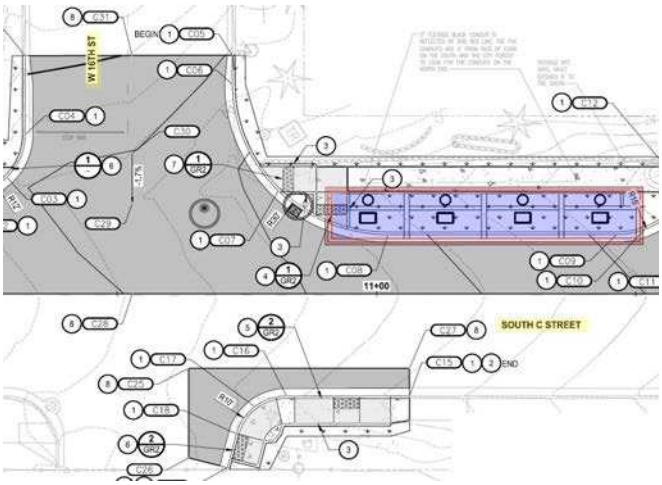
Jurisdiction: **City of Port Angeles**
Western Washington Phase II Municipal Stormwater Permit **WAR045028**
Date: 3/3/2025
Regards: **Appendix 12 - Stormwater Management Existing Development (SMED) Program Reporting - S5.C.7**

City of Port Angeles Project List

Project Name	**Project Type** (Opportunistic , Stormwater facility retrofit, or non-structural project types)	**Transportation-related Project Type** (yes/no)	**Status**	**Latitude/ Longitude** (decimal degrees)	**Receiving Waterbody Name**	**Cost Estimate** ($)	**Basin Area** (acres)	**LID Equivalent Area** (acres)	**Runoff Treatment (RT) Equivalent Area** (acres)	**Flow Control (FC) Equivalent Area** (acres)	**Non-structural or Regional Collaboration Project Area (acres)**	**Tribal Benefits (tribal waters eg. Elwha)**	**Overburdened Communities**	**Total Equivalent Acres**	**Oppurtunistic non-structural projects in addition to 25% (acreage, and project type)**	**Completed Stormwater Facility Retrofit Acreage in excess to be applied for next permit term**	**Stormwater facility retrofits planning and projections**	**Comments**
City Hall Parking Lot LID Retrofit WQC-2023-PoAnPW-00153	Facility Retrofit	yes	complete	48.114000 / -123.431138	Peabody Creek	$1,609,518	Basin 1 / Bioretention Cell 1: 1.351ac Basin 2 / Bioretention Cell 2: 0.224ac	0 ac	1.575 ac	Basin1 - (0.49x1.351)=0.662 ac Basin2 - (0x0.224)=0	0 ac	No	Yes, CoPA	2.237 ac	NA	0	NA	construction complete fall 2024 FC ratio 0.49 for basin 1, basin 2 does not include flow control facilities; CoPA cost $177,428.12 ECY cost $1,432,090.00
16th Street Storm LID Project - WQC-2024-PoAnPW-00217	Facility Retrofit	Yes	construction fully funded	C St. (48.113486 / -123.463389) D St. (48.114209 / -123.465272) E St. (48.115020 / -123.467250)	Tumwater Creek	$1,767,914	BasinC=17.44 ac Basin D=2.5 ac BasinE=092 ac	0 ac	20.86 ac	0 ac	0 ac	No	Yes, CoPA	20.86 ac	NA	1.6 ac	1.6 ac	Final design is ongoing; flow control is not proposed

16th Street Stormwater Retrofit - "C" to "E" Streets

TR0715



Project Status: Design
Condition: Fair
Latitude / Longitude: 48.113367, -123.463338
Project Manager: Jonathan Boehme
Estimated Life: 40 years
Type: Restoration

ABOUT THE PROJECT:

This project will use retrofit techniques to add treatment to existing stormwater infrastructure between "C" and "E" Streets. Department of Ecology (ECY) offered the City a grant with no match requirements for project design. Parametrix was retained in 2020 to assist the City in developing the design. Design was completed in 2022. In early 2023 Ecology preliminarily awarded the project a $1.49M construction grant requiring a 10% match from the City, but the grant was amended.

JUSTIFICATION:

Stormwater in the basin runs to Tumwater Creek, a 303d listed for water quality impairment. Stormwater from this arterial roadway is unmanaged and tributary to Tumwater Creek.

During design, due to site constraints, the project extent was narrowed from "C" Street - "L" Street down to just the eastern half of 16th Street and LID was replaced with retrofit stormwater media filters installed into the existing collection and conveyance system at "C," "D," and "E" Street intersections. The image above is a plan view of the proposed treatment facility at C & 16th Street that would provide treatment to approximately 17 acres of tributary area before conveyance to Tumwater Creek.

FUNDING SOURCES	PRIOR YEARS	BUDGET 2024	CAPITAL FACILITIES PLAN 2025	2026	2027	2028	2029	2030
Reserves Stormwater Fund		$ 12,000	$ 88,000					
Grants	146,600	67,000	1,667,300					
Bonds								
General Fund								
Donations/Insurance Reim.								
REET 2	10,000							
TOTAL	$ 156,600	$ 79,000	$ 1,755,300	$ 0	$ 0	$ 0	$ 0	$ 0

EXPENDITURES	Prior	2024	2025	2026	2027	2028	2029	2030
Capital Costs	146,600	67,000	1,777,300					
TOTAL	$ 146,600	$ 67,000	$ 1,777,300	$ 0	$ 0	$ 0	$ 0	$ 0

OTHER OPERATING COSTS	Prior	2024	2025	2026	2027	2028	2029	2030
Other								
TOTAL OTHER COSTS	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0

Estimated Total Project Cost: $1,990,900
Estimated Total Design Cost: $67,000
Estimated Personnel Hours for Project: 1,308
Estimated Personnel Costs for Project: $88,000

TECHNICAL MEMORANDUM

Date: October 31, 2024

To: Vince McIntyre, PE, City of Port Angeles Public Works

From: Colleen Mitchell, PE

Subject: Port Angeles City Hall Parking Lot LID Retrofit - Final Equivalent New/Redevelopment Area (*Ecology Grant Number WQC-2023-PoAnPW-00153)*

The stormwater management improvements installed to retrofit the City Hall Parking Lot in the City of Port Angeles include permeable pavement, bioretention, trees, and rainwater cisterns. Table 1 summarizes the tributary areas to each stormwater facility.

Table 1. Basin Areas

Basin	Tributary Surface	Tributary Area		Totals
		Square Feet (SF)	Acres (AC)	Area (AC)
Basin 1: Bioretention Cell #1	Permeable Pavement	29,993	0.690	1.351
	Impervious Pavement	4,789	0.109	
	Roof	3,479	0.080	
	Lawn/Landscape	20,562	0.472	
Basin 2: Bioretention Cell #2	Impervious Pavement	7,459	0.171	0.224
	Lawn/Landscape	2,310	0.053	
	Totals:	68,592	1.575	1.575

1329 N. State Street, Suite 200 | Bellingham, WA 98225 360.398.5075 herrerainc.com

Runoff Treatment Ratio

Runoff treatment is analyzed below for the Project area. The treatment ratio is based on the following equation:

$$\text{Ratio}_{\text{WRT-1}} = \frac{\text{Design flowrate or volume for proposed retrofit treatment BMP}}{\text{Design flow rate or volume to meet new/redevelopment criteria}}$$

If $\text{Ratio}_{\text{WRT-1}} > 1$, then set $\text{Ratio}_{\text{WRT-1}} = 1$

$\text{Area}_{\text{WRT-1}} = \text{Ratio}_{\text{WRT-1}} \times$ Contributing Basin Area

Bioretention Cell #1 treats runoff from over 98 percent of the average annual runoff from Basin 1 and Bioretention Cell #2 treats runoff from over 99 percent of the average annual runoff from Basin 2, both of which exceed the 91 percent minimum volume required to meet new/redevelopment criteria, so the runoff treatment ratio is equal to 1. With a runoff treatment ratio of 1, the equivalent redevelopment area is equal to the proposed contributing area of 1.575 acres.

Flow Control Ratio

The proposed stormwater facilities are analyzed for flow control benefit based on the following equation:

$$\text{Ratio}_{\text{WFC-2}} = \frac{\text{Surface Area of proposed Bioretention or Permeable Pavement}}{\text{Surface Area of Bioretention or Permeable Pavement to meet new/redevelopment criteria}}$$

If $\text{Ratio}_{\text{WFC-2}} > 1$, then set $\text{Ratio}_{\text{WFC-2}} = 1$

$\text{Area}_{\text{WFC-2}} = \text{Ratio}_{\text{WFC-2}} \times$ Contributing Basin Area

The flow control ratio method requires sizing each facility to the applicable redevelopment flow control standard. The applicable standard is to match the pre-development (forested) peak flow rates from half the 2-year through the full 50-year recurrence interval event and compare that facility size to the proposed facilities. A model was run based on the proposed surfaces and areas within Basin 1 routed to a vault size using AutoVault. The volume at the overflow elevation of the vault is calculated to be 0.424 acre-feet. The volume of water stored in the permeable ballast beneath the permeable pavement at the overflow elevation is calculated to be (0.75 feet deep x 30,035 square feet x 40% voids = 9,010.5 cubic feet) 0.207 acre-feet. This results in a flow control ratio of (0.207 acre-feet / 0.424 acre-feet) 0.49 for Basin 1. With a flow control ratio of 0.49, the equivalent new/redevelopment area equals (0.49 x 1.351 acres) 0.662 acres.

Basin 2 does not include flow control facilities and has not been included in this calculation.

The existing downstream storm system has less capacity than both the proposed system and the anticipated peak runoff rates, so a backwatering effect is possible. A model was developed in SSA to assess potential surcharge conditions. In this model, each basin's unit hydrograph, with peak runoff from Table 8, was routed through the proposed facilities. The model used the hydrodynamic routing methodology, which allows pressure flow in pipes. The furthest downstream surveyed catch basin on each alignment was chosen as the downstream boundary location, and a full pipe tailwater condition was assumed. A maximum hydraulic grade line profile was developed that shows the calculated water surface within each pipe and structure along the trunk line from the downstream boundary to the upstream end of the project.

After analysis, it was determined that the anticipated backwatering effect would cause full-pipe pressure flow within parts of the proposed pipe network, however none of the structures are expected to surcharge. The lowest available freeboard for each basin's proposed facilities is shown in Table 10. All other structures have greater freeboard, and the complete hydraulic profiles are included in Appendix D.

Table 10. Backwater Analysis Summary

Basin	Structure with Lowest Freeboard	Freeboard (ft)
C	CB#6	1.43
D	D1 Treatment System	2.57
E	Existing CB#E1	2.94

7. QUANTIFY THE WATER QUALITY BENEFIT

As discussed in Section 6.1, the water quality flow rate (flow rate at or below which 91% of the estimated runoff volume will be treated) will be fully treated in each Basin by using a vault type Oldcastle BioPod™ Biofilter System.

To quantify the water quality benefit in retrofit scenarios such as this Project, the Manual requires a comparison between the size of the proposed retrofit BMP and the BMP that would be required to meet new/redevelopment criteria. This is completed by calculating the flow control ratio and the runoff treatment ratio. However, due to the Project being exempt from flow control, the flow control ratio cannot be calculated.

The proposed retrofit treatment flow rates and equivalent treatment areas can be found in Table 11.

Table 11. Water Quality Benefit Summary

	A	B	C	D	
Basin No.	Basin Area (acre)	Design BMP Size	BMP Sized to meet new/redevelopment criteria	Runoff Treatment Ratio (B ÷ C)	Equivalent New/Redevelopment Area (acre) (A x D)
C	17.44	12'x38'	12'x38'	1	17.44
D	2.5	6'x8'	6'x8'	1	2.5
E	0.92	4'x6'	4'x6'	1	0.92
				Total	**20.86**

The flow rate that would be required per the new/redevelopment criteria for each Basin is treated in full. Therefore, the runoff treatment ratio for each site is 1 (Example: (Basin C) 1.02 cfs/1.02 cfs). To determine the equivalent treatment area, the ratio is multiplied by the total area of the basin. The sum of all the basins is 20.86 acres. Therefore, 20.86 acres of equivalent treatment area is being provided by this Project.

8. ENGINEER'S OPINION OF PROBABLE COST

A cost estimate was prepared based on the 30% design using AutoCAD Civil 3D to determine quantities. The cost for the entire Project is estimated to be $1,303,891 which may vary based on final design. This cost includes a 30% contingency. See Appendix G for the engineer's opinion of probable cost.

9. PROPOSED SCHEDULE

This schedule includes design milestones, including Ecology deliverable review times as shown below. A detailed project schedule can be found in Appendix H:

- March 18, 2021 — Ecology Review and approval
- November 16, 2021 — Alternatives Analysis
- October 22, 2021 — Survey
- February 4, 2022 — Submit 30% plans, specifications, and estimate (PS&E) to City
- February 9, 2021 — Submit Design Report to City
- February 28, 2022 — Submit 30% plans, specifications, estimate (PS&E), and Design Report to Ecology
- April 14, 2022 — Ecology Approval
- June 15, 2022 — Submit 90% PS&E and Design Report to City
- July 13, 2022 — Submit 90% PS&E and Design Report to Ecology
- October 21, 2022 — Ecology Approval
- December 30, 2022 — Ecology grant funding expiration date

City Hall Parking Lot LID Retrofit
CITY OF PORT ANGELES
WQC-2023-PoAnPW-00153
7/01/2022 – 1/31/2025

Final Total Project Cost: $ 1,609,518.12

Ecology Funded Water Quality Improvement Cost: $ 1,432,090.00

Additional Water Quality Improvement Cost: $177,428.12

Project Description

This project improves water quality in the Peabody Creek Watershed through the installation of bioretention at the East City Hall Parking Lot in the City of Port Angeles. This project reduces the pollutant load through treatment or infiltration to surface water for:

- ☒ Total Suspended Solids (TSS)
- ☒ Oil (Total Petroleum Hydrocarbons)-
- ☒ Dissolved Copper-
- ☒ Dissolved Zinc-
- ☒ Total Phosphorus-

Does this project provide flow control?

- ☒ Yes

  If checked "Yes," this project provides flow control by:

  - ☐ Increasing stormwater infiltration
  - ☒ Providing stormwater detention
- ☐ No
- ☐ No, because it is flow control exempt

Is this part of a larger project?

- ☐ Yes

  If checked "Yes," then the Other Project Cost (not directly tied to water quality improvements) is $___
- ☒ No

Additional benefits of this project include:

- Demonstration of residential-scale cisterns for citizens to replicate at their homes
- Installation of permeable pavements, even where infiltration is infeasible
- Installation of large trees to provide shade and absorb stormwater
- Interpretive signage to inform neighbors and visitors of the BMPs installed and their benefits

Port Angeles City Hall is centrally located in the community, visible to and often visited by local residents and the development community. Stormwater runoff from the City Hall parking lot is conveyed to Peabody Creek; a salmon bearing stream that is 303(d) listed for bacteria. This retrofit project in the east City Hall parking lot will improve long-term health of Peabody creek by providing treatment and flow control. Prior to this project, the parking lot was paved with traditional asphalt and the surrounding landscape was mainly grass and non-native plantings. Stormwater from the area previously drained directly to nearby Peabody Creek without water quality treatment or flow control. By demonstrating a variety of green stormwater infrastructure practices, including permeable pavements, bioretention, tree planting, and rainwater harvesting, the project also serves as an

example to neighbors and the development community to what good stormwater stewardship looks like and how elements could be replicated at their home or project and serve a similar balance and function.

Project Accomplishments

In order to improve water quality, the City of Port Angeles

- ☒ Designed
- ☒ Constructed

Two bioretention cells, two types of permeable pavement (PHMA with paver walkways), five rainwater cisterns, and installed 23 trees for the Contributing Area with commercial/institutional land use.

The project was successfully constructed during the summer of 2024, prior to the beginning of the rainy season, ready to provide stormwater benefits in the fall. The project includes an interpretive sign to inform neighbors and the development community about what green infrastructure practices are and what benefits they provide. The project was completed on time, built with locally available materials and employed local contractors and specialists.

Water Quality and Environmental Improvements

Evaluating water quality benefits from retrofit projects can be challenging. Often, the existing built environment does not have enough undeveloped land left to build BMPs that would be sufficient to effectively manage all the stormwater generated by the drainage basin. In the retrofit program, Ecology encourages local communities to build the largest facility that will fit in the available space and then uses a calculation that was developed with stakeholder input to evaluate the amount of treatment and flow control provided in retrofit projects on a common basis for reporting purposes. Ecology calls this area the runoff treatment or flow control equivalent area. Using this equivalent area, we can estimate the amount of solids removed per year that the project can achieve, using a given amount of pollutant removal and the annual runoff. We can also estimate the area that has runoff similar to pre-developed conditions created through the retrofit project. The following table lists the equivalent area values for this project:

*For projects that include construction, fill out the cells in the table below. The Ecology Engineer will calculate and fill out the **solids removed per year** cell.*

Basin Description		Runoff Treatment		Flow Control
Contributing Area (ac)	Estimated Pollution Generating Impervious Surface (ac)	Equivalent New/ Redevelopment Area (ac)	Solids removed per year (lbs.)	Equivalent New/ Redevelopment Area (ac)
1.575	0.861	1.575	315	0.662

The City website provided virtual updates throughout the project, and currently includes a video compilation of construction progress photos on their website: https://cityofpa.us/1345/City-Hall-East-Parking-Lot-LID-Retrofit

Lessons Learned

Material availability and pricing varies greatly based on location. It was critical to work with local suppliers to confirm availability of materials early in design, checking in as the project neared construction to reconfirm. The degradation factor for permeable ballast, choker coarse, and key stone for pavers should be set at the highest locally available. These aggregates are extensively traversed by heavy equipment during placement and

grading and are subject to wear. Even with a relatively high depredation factor (greater than 30), the contractor still opted to protect high traffic areas with plating to reduce wear and subsequent fines being generated that may compromise final infiltration rates. Lack of accountability of previously buried infrastructure, both on the public and private side, proved to be the biggest cause of delay, change order, and added cost to the project. More exploration (pot holing) during design would have been well worth the while to avoid headaches during construction. Make provisions in the construction grant agreement ahead of time to actually implement the IDP, when a discovery is found. For a parking lot, minimizing overall footprint is actually in conflict with long-term performance of permeable asphalt. Smaller overall footprint seems better for LID but it requires more static wheel turning to get in and out of parking spots. To ensure long life, protection, and performance of the wear coarse its better to increase drive aisles so vehicles can get in and out of parking spaces with less static turning of the wheel.

The Next Steps for Continued Success

The construction of the parking lot and stormwater improvements is complete. Operations and maintenance of the improvements will be done by City maintenance and operations crews including regenerative pavement cleaning, mulch replacement in the bioretention cells, removing sediment from catch basins, and cleaning of cistern filters, keeping an eye out to ensure the systems are working as intended. Long-term performance of permeable pavement is dependent upon adequate maintenance intervals and using appropriate equipment for the job. The City has applied for a grant to develop an enhanced maintenance program for the facility that would allow the City to partner with Ecology to purchase a permeable pavement cleaning vehicle that would ensure long term function and continued success of the project.

Two Project Photos

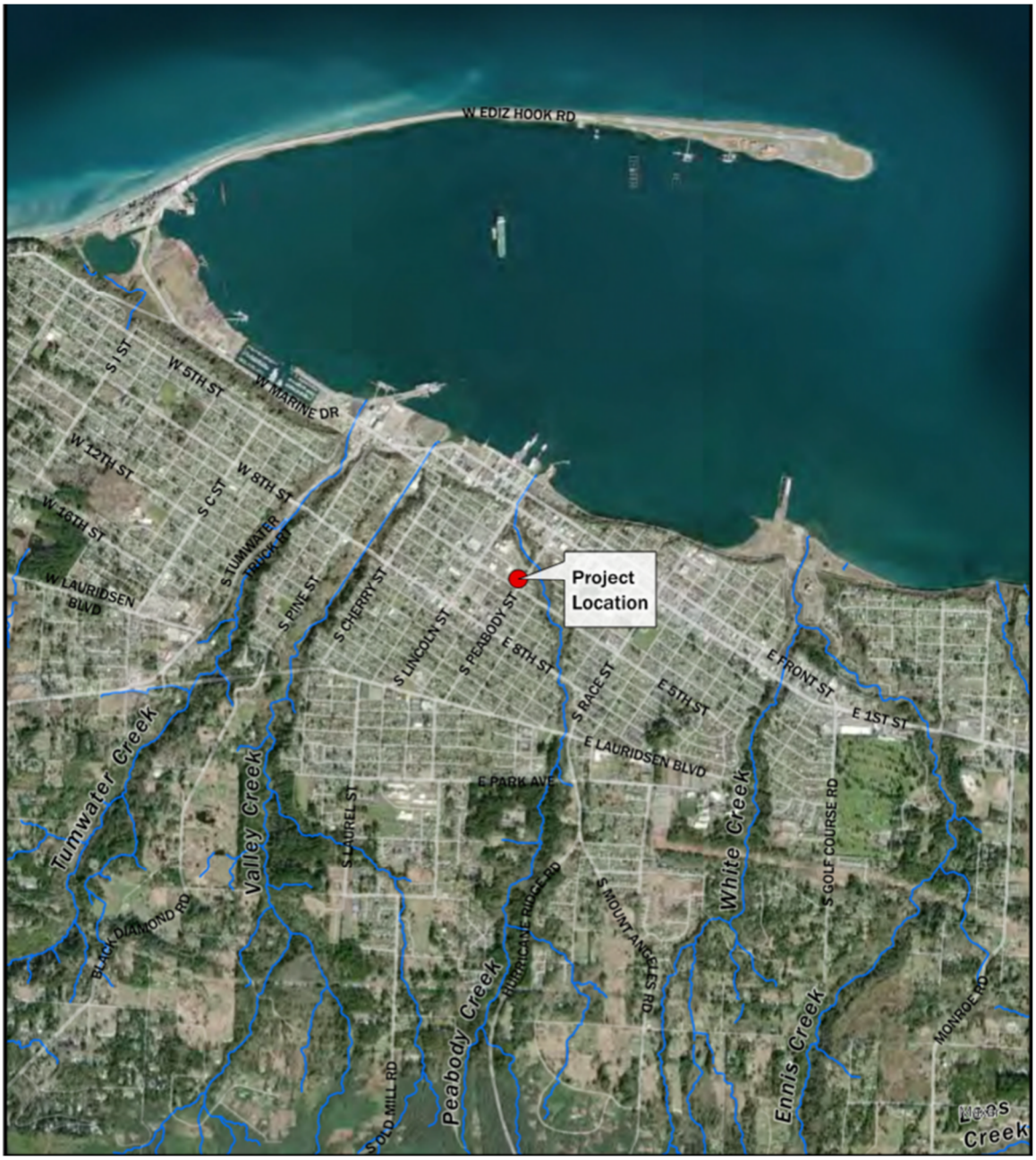


Parking Lot Retrofit with Permeable Pavement, Bioretention and Large Trees



Onsite Bioretention with Distribution Runnel, and Cisterns in Background

Project Map Area



Vicinity Map for Port Angeles City Hall East Parking Lot Retrofit (321 E 5th Street, Port Angeles, WA 98362)

Project Management Contact Information

Project Manager: Vince McIntyre, PE
Address: 321 E 5th Street, Port Angeles, WA 98362
Phone: (360)417-4701
Email: vmcintyr@cityofpa.us
Website: https://cityofpa.us/

Issuance Date:	July 1, 2024
Effective Date:	August 1, 2024
Expiration Date:	July 31, 2029

WESTERN WASHINGTON PHASE II MUNICIPAL STORMWATER PERMIT

National Pollutant Discharge Elimination System and
State Waste Discharge General Permit for discharges from
Small Municipal Separate Storm Sewer Systems
In Western Washington

State of Washington
Department of Ecology
Olympia, WA 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 *et seq*.

Until this Permit expires, is modified, or revoked, Permittees that have properly obtained coverage under this Permit are authorized to discharge to waters of the State in accordance with the special and general conditions which follow.



Vincent McGowan, P.E.
Water Quality Program Manager
Washington State Department of Ecology

This page intentionally left blank

TABLE OF CONTENTSTABLE OF CONTENTS

S1. PERMIT COVERAGE AREA AND PERMITTEES 1

A. Geographic Area of Permit Coverage 1
B. Regulated Small Municipal Separate Storm Sewer Systems (MS4s) 1
C. Permit Waivers 3
D. Obtaining Coverage Under this Permit 4

S2. AUTHORIZED DISCHARGES 8

A. Stormwater Discharges 8
B. Non-Stormwater Discharges 8
C. Responsibilities and Liabilities 8
D. Compliance with State and Local Authorizations 8
E. Indian Country 9

S3. RESPONSIBILITIES OF PERMITTEES 10

A. Compliance with Conditions 10
B. Reliance on Another Entity 10

S4. COMPLIANCE WITH STANDARDS 11

A. Prohibition of Discharge of Toxicants 11
B. Compliance with Standards 11
C. MEP Standard 11
D. AKART Standard 11
E. Responsibilities of Permittees 11
F. Violations of Water Quality Standards and Adaptive Management 11
G. Revoke and Reissue Permit 14

S5. STORMWATER MANAGEMENT PROGRAM FOR CITIES, TOWNS, AND COUNTIES 15

A. Stormwater Management Program General Requirements 15
B. Stormwater Management Program Standards 17
C. Stormwater Management Program Components 17
1. Stormwater Planning 17
2. Public Education and Outreach 20
3. Public Involvement and Participation 23
4. MS4 Mapping and Documentation 24
5. Illicit Discharge Detection and Elimination 26
6. Controlling Runoff from New Development, Redevelopment, and Construction Sites 32

7. Stormwater Management for Existing Development 35
8. Source Control Program for Existing Development 37
9. Operations and Maintenance 40

S6. STORMWATER MANAGEMENT PROGRAM FOR SECONDARY PERMITTEES.....48

A. Secondary Permittees and New Secondary Permittees Coverage..... 48
B. Coordination 49
C. Legal Authority..... 49
D. Stormwater Management Program for Secondary Permittees 49
1. Public Education and Outreach..... 49
2. Public Involvement and Participation 50
3. Illicit Discharge Detection and Elimination..... 50
4. Construction Site Stormwater Runoff Control 54
5. Post-Construction Stormwater Management for New Development and Redevelopment..... 55
6. Pollution Prevention and Good Housekeeping for Municipal Operations 55

S7. COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS 58

A. TMDL Specific Requirements 58

S8. MONITORING AND ASSESSMENT 58

A. Regional Status and Trends Monitoring..... 58
B. Stormwater Management Program (SWMP) Effectiveness and Source Identification Studies..... 59
C. Stormwater Discharge Monitoring..... 60
D. Payments into the Stormwater Action Monitoring Collective Fund. 61

S9. REPORTING & RECORDKEEPING REQUIREMENTS 62

A. Annual Report Submittal..... 62
B. Records Retention..... 62
C. Records Available to the Public..... 62
D. Annual Report for Cities, Towns, and Counties..... 62
E. Annual Report for Secondary Permittees..... 63

GENERAL CONDITIONS..... 64

DEFINITIONS AND ACRONYMS 73

LIST OF APPENDICES

APPENDIX 1. Minimum Technical Requirements for New Development and Redevelopment

APPENDIX 2. Total Maximum Daily Load Requirements

APPENDIX 3. Annual Report Questions for Cities, Towns and Counties

APPENDIX 4. Annual Report Questions for Secondary Permittees

APPENDIX 5. Annual Report Questions for New Permittees

APPENDIX 6. Street Waste Disposal

APPENDIX 7. Determining Construction Site Damage Transport Potential

APPENDIX 8. Businesses and Activities that are Potential Sources of Pollutants

APPENDIX 9. Stormwater Discharge Monitoring

APPENDIX 10. Equivalent Programs for Runoff Controls for New Development, Redevelopment, and Construction Sites

APPENDIX 11. Annual Contribution Amounts to Stormwater Action Monitoring Collective Funds

APPENDIX 12. Stormwater Management for Existing Development Reporting

APPENDIX 13. IDDE Reporting Data and Format

APPENDIX 14. Stormwater Management Action Plan Requirements for New Permittees

ADA ACCESSIBILITY

The Department of Ecology is committed to providing people with disabilities access to information and services by meeting or exceeding the requirements of the Americans with Disabilities Act (ADA), Section 504 and 508 of the Rehabilitation Act, and Washington State Policy #188.

To request ADA Accommodation, contact Water Quality Reception at 360-407-6600. For Washington Relay Service or TTY call 711 or 877-833-6341. Visit Ecology's accessibility webpage[1] for more information.

For document translation services, call Water Quality Reception at 360-407-6600.

Para publicaciones en español, por favor llame a la Recepción de Calidad del Agua al 360-407-6600.

[1] https://ecology.wa.gov/About-us/Accessibility-equity/Accessibility/

SPECIAL CONDITIONS

S1. PERMIT COVERAGE AREA AND PERMITTEES

A. Geographic Area of Permit Coverage

This Permit is applicable to owners or operators of regulated small Municipal Separate Storm Sewer Systems (MS4s) located west of the eastern boundaries of the following counties: Whatcom, Skagit, Snohomish, King, Pierce, Lewis, and Skamania.

1. For all cities required to obtain coverage under this Permit, the geographic area of coverage is the entire incorporated area of the city.
2. For all counties required to have coverage under this Permit, the geographic area of coverage is the urban areas and urban growth areas associated with permitted cities under the jurisdictional control of the county. The geographic area of coverage also includes any urban growth area contiguous to permitted urban areas under the jurisdictional control of the county.
3. For Whatcom County, the geographic area of coverage also includes the unincorporated Birch Bay urban growth area.

   For Thurston County, the geographic area of coverage also includes the unincorporated Yelm urban growth area.
4. For Secondary Permittees required to obtain coverage under this Permit, the minimum geographic area of coverage is all areas identified under S1.A.1 and S1.A.2. At the time of Permit coverage, the Washington State Department of Ecology (Ecology) may establish a geographic area of coverage specific to an individual Secondary Permittee.
5. All regulated small MS4s owned or operated by the Permittees named in S1.D.2.a(i), and (ii), and S1.D.2.b and located in another city or county area requiring coverage under this Permit, or the *Phase I Municipal Stormwater Permit* or the *Eastern Washington Phase II Municipal Stormwater Permit*, are also covered under this Permit.

B. Regulated Small Municipal Separate Storm Sewer Systems (MS4s)

All operators of regulated small MS4s are required to apply for and obtain coverage under this Permit or be permitted under a separate individual permit, unless waived or exempted in accordance with Section S1.C.

1. A regulated small MS4:
    a. Is a "Small MS4" as defined in the *Definitions and Acronyms* section at the end of this Permit; and
    b. Is located within, or partially located within, an urban area as defined by the latest decennial census conducted by the U.S. Census Bureau, or designated by Ecology pursuant to 40 CFR 123.35(b) or 40 CFR 122.26(f); and
    c. Discharges stormwater from the MS4 to a surface water of Washington State; and
    d. Is not eligible for a waiver or exemption under S1.C, below.
2. All other operators of MS4s, including special purpose districts, which meet the criteria for a regulated small MS4 shall obtain coverage under this Permit. Other operators of small MS4s may include, but are not limited to: flood control, or diking and drainage districts; schools, including universities; and correctional facilities that own or operate a small MS4 serving non-agricultural land uses.
3. Any other operators of small MS4s may be required by Ecology to obtain coverage under this Permit or an alternative NPDES permit if Ecology determines the small MS4 is a significant source of pollution to surface waters of the State. Notification of Ecology's determination that permit coverage is required will be through the issuance of an Administrative Order issued in accordance with Chapter 90.48 RCW.
4. The owner or operator of a regulated small MS4 may obtain coverage under this Permit as a Permittee, Co-Permittee, or Secondary Permittee as defined in S1.D.1, below.
5. Pursuant to 40 CFR 122.26(f), any person or organization may petition Ecology to require that additional small MS4s obtain coverage under this Permit. The process for petitioning Ecology is:
    a. The person or organization shall submit a complete petition in writing to Ecology. A complete petition shall address each of the relevant factors for petitions outlined on Ecology's website.
    b. In making its determination on the petition, Ecology may request additional information from either the petitioner or the entity that is the subject of the petition.
    c. Ecology will make a final determination on a complete petition within 180 days of receipt of the petition and inform both the petitioner and the MS4 of the decision, in writing.

d. If Ecology's final determination is that the candidate MS4 will be regulated, Ecology will issue an order to the operator of the MS4 requiring them to obtain coverage under this Permit. The order will specify:

   i. The geographic area of permit coverage for the MS4.

   ii. Any modified dates or deadlines for developing and implementing this Permit, as appropriate to the MS4, and for submitting their first annual report.

   iii. A deadline for the operator of the MS4 to submit a complete Notice of Intent (NOI, provided on Ecology's website) to Ecology.

C. Permit Waivers

Owners and operators of an otherwise regulated small MS4 are not required to obtain coverage under this Permit if:

1. The small MS4 is operated by:

   a. A federal entity, including any department, agency, or instrumentality of the executive, legislative, and judicial branches of the Federal government of the United States.

   b. Federally recognized Indian Tribes located within Indian Country, including all trust or restricted lands within the 1873 Survey Area of the Puyallup Tribe of Indians.

   c. The Washington State Department of Transportation.

Or

2. The portions of the small MS4 located within the census defined urban area(s) serve a total population of less than 1000 people ***and*** a, b, and c, below ***all*** apply:

   a. The small MS4 is not contributing substantially to the pollutant loadings of a physically interconnected MS4 that is regulated by the NPDES stormwater program.

   b. The discharge of pollutants from the small MS4 has not been identified as a cause of impairment of any water body to which the MS4 discharges.

   c. In areas where an EPA approved TMDL has been completed, stormwater controls on the MS4 have not been identified as necessary to meet wasteload allocations established in the TMDL that address the pollutant(s) of concern.

In determining the total population served, both resident and commuter populations shall be included. For example:

- For publicly operated school complexes including universities and colleges, the total population served would include the sum of the average annual student enrollment plus staff.
- For flood control, diking, and drainage districts, the total population served would include residential population and any non-residents regularly employed in the areas served by the small MS4.

D. Obtaining Coverage Under this Permit

All operators of regulated small MS4s are required to apply for and obtain coverage in accordance with this Section, unless waived or exempted in accordance with Section S1.C.

1. Unless otherwise noted, the term "Permittee" shall include a city, town, or county Permittee, New Permittee, Co-Permittee, Secondary Permittee, and New Secondary Permittee as defined below:
   a. "Permittee" is a city, town, or county owning or operating a regulated small MS4 applying and receiving a permit as a single entity.
   b. "New Permittee" is a city, town, or county that is subject to *the Western Washington Phase II Municipal Stormwater General Permit* and was not subject to the Permit prior to August 1, 2024.
   c. "Co-Permittee" is any owner or operator of a regulated small MS4 that is applying in a cooperative agreement with at least one other applicant for coverage under this Permit. Co-Permittees own or operate a regulated small MS4 located within or in proximity to another regulated small MS4.
   d. A "Secondary Permittee" is an operator of a regulated small MS4 that is not a city, town, or county. Secondary Permittees include special purpose districts and other MS4s that meet the criteria for a regulated small MS4 in S1.B, above.
   e. "New Secondary Permittee" is a Secondary Permittee that is covered under a Municipal Stormwater General Permit and was not covered by the Permit prior to August 1, 2024.
2. Operators of regulated small MS4s have submitted, or shall submit, to Ecology either a Notice of Intent (NOI) for Coverage under National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater General Permit or a Duty to Reapply - NOI provided on Ecology's Water Quality Permitting Portal (WQWebPortal).

a. The following Permittees and Secondary Permittees submitted a Duty to Reapply - NOI to Ecology prior to February 1, 2024:

   i. **Cities and towns:** Aberdeen, Algona, Anacortes, Arlington, Auburn, Bainbridge Island, Battle Ground, Bellevue, Bellingham, Black Diamond, Bonney Lake, Bothell, Bremerton, Brier, Buckley, Burien, Burlington, Camas, Centralia, Clyde Hill, Covington, Des Moines, DuPont, Duvall, Edgewood, Edmonds, Enumclaw, Everett, Federal Way, Ferndale, Fife, Fircrest, Gig Harbor, Granite Falls, Issaquah, Kelso, Kenmore, Kent, Kirkland, Lacey, Lake Forest Park, Lake Stevens, Lakewood, Longview, Lynden, Lynnwood, Maple Valley, Marysville, Medina, Mercer Island, Mill Creek, Milton, Monroe, Mountlake Terrace, Mount Vernon, Mukilteo, Newcastle, Normandy Park, Oak Harbor, Olympia, Orting, Pacific, Port Orchard, Port Angeles, Poulsbo, Puyallup, Redmond, Renton, Sammamish, SeaTac, Sedro-Woolley, Shelton, Shoreline, Snohomish, Snoqualmie, Steilacoom, Sumner, Tukwila, Tumwater, University Place, Vancouver, Washougal, and Woodinville.

   ii. **Counties:** Cowlitz, Kitsap, Thurston, Skagit, and Whatcom.

   iii. **Secondary Permittees:** Bainbridge Island School District #303, Bellingham School District, Bellingham Technical College, Cascadia College, Central Kitsap School District, Centralia College, Clark College, Consolidated Diking Improvement District #1 of Cowlitz County, Edmonds Community College, Evergreen College, Highline Community College, Kelso School District, Kent School District, Longview School District, Lower Columbia College, Port of Anacortes, Port of Bellingham, Port of Everett, Port of Olympia, Port of Skagit County, Port of Vancouver, Skagit Valley College, University of Washington Bothell, Washington State University Vancouver, Washington State Department of Enterprise Services (Capitol Campus), Washington Department of Corrections (Larch Corrections Center, Monroe Correctional Complex, Washington Corrections Center for Women, and Washington State Penitentiary), Western Washington University, and Whatcom Community College.

b. Operators of regulated small MS4s have submitted or shall submit to Ecology a "Notice of Intent (NOI) for Coverage under National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater General Permit" provided on Ecology's website before the effective date of this Permit, with the following exceptions:

   i. Operators of regulated small MS4s located in the Cities of Ridgefield and Yelm, and Sound Transit shall submit a NOI, or application, to Ecology no later than 30 days after the effective date of this Permit.

ii. Operators of regulated small MS4s listed in S1.D.2.a do not need to submit a new application to be covered under this Permit.

c. For operators of regulated small MS4s listed in S1.D.2.a, coverage under this Permit is automatic and begins on the effective date of this Permit, unless the operator chooses to opt out of this General Permit. Any operator of a regulated small MS4 that is opting out of this Permit shall submit an application for an individual MS4 permit in accordance with 40 CFR 122.33(b)(2)(ii) no later than the effective date of this Permit.

d. Operators of regulated small MS4s which want to be covered under this Permit as Co-Permittees shall each submit a NOI to Ecology.

e. Operators of regulated small MS4s which are relying on another entity to satisfy all of their permit obligations shall submit a NOI to Ecology.

f. Operators of small MS4s designated by Ecology pursuant to S1.B.3 of this Permit shall submit a NOI to Ecology within 120 days of receiving notification from Ecology that permit coverage is required.

3. Application Requirements

a. For NOIs submitted after the issuance date of this Permit, the applicant shall include a certification that the public notification requirements of WAC 173-226-130(5) have been satisfied. Ecology will notify applicants in writing of their status concerning coverage under this Permit within 90 days of Ecology's receipt of a complete NOI.

b. Each Permittee applying as a Co-Permittee shall submit a NOI provided on Ecology's website. The NOI shall clearly identify the areas of the MS4 for which the Co-Permittee is responsible.

c. Permittees relying on another entity or entities to satisfy one or more of their permit obligations shall notify Ecology in writing. The notification shall include a summary of the permit obligations that will be carried out by another entity. The summary shall identify the other entity or entities and shall be signed by the other entity or entities. During the term of the Permit, Permittees may terminate or amend shared responsibility arrangements by notifying Ecology, provided this does not alter implementation deadlines.

d. Secondary Permittees required to obtain coverage under this Permit, and the *Phase I Municipal Stormwater Permit* or the *Eastern Washington Phase II Municipal Stormwater Permit*, may obtain coverage by submitting a single NOI.

S2. AUTHORIZED DISCHARGES

A. Stormwater Discharges

This Permit authorizes the discharge of stormwater to surface waters and to groundwaters of the State from MS4s owned or operated by each Permittee covered under this Permit, in the geographic area covered pursuant to S1.A. These discharges are subject to the following limitations:

1. Discharges to groundwaters of the State through facilities regulated under the Underground Injection Control (UIC) program, Chapter 173-218 WAC, are not authorized under this Permit.
2. Discharges to groundwaters not subject to regulation under the federal *Clean Water Act* are authorized in this Permit only under state authorities, Chapter 90.48 RCW, the *Water Pollution Control Act*.

B. Non-Stormwater Discharges

This Permit authorizes discharges of non-stormwater flows to surface waters and to groundwaters of the State from MS4s owned or operated by each Permittee covered under this Permit, in the geographic area covered pursuant to S1.A, only under one or more of the following conditions:

1. The discharge is authorized by a separate NPDES or State Waste Discharge permit.
2. The discharge is from emergency firefighting activities. See Special Conditions S5.C.5, S6.D.3 to address non-stormwater discharges (e.g., discharges associated with cleanup after the emergency).
3. The discharge is from another illicit or non-stormwater discharge that is managed by the Permittee as provided in Special Condition S5.C.5 or S6.D.3.

These discharges are also subject to the limitations in S2.A.1 and S2.A.2, above.

C. Responsibilities and Liabilities

This Permit does not relieve entities that cause illicit discharges, including spills of oil or hazardous substances, from responsibilities and liabilities under state and federal laws and regulations pertaining to those discharges.

D. Compliance with State and Local Authorizations

Discharges from MS4s constructed after the effective date of this Permit shall receive all applicable state and local permits and use authorizations, including compliance with Chapter 43.21C RCW (the *State Environmental Policy Act*).

E. Indian Country

This Permit does not authorize discharges of stormwater to waters within Indian Country as defined in 18 U.S.C. §1151, or to waters subject to water quality standards of Indian Tribes, including portions of the Puyallup River and other waters on trust or restricted lands within the 1873 Survey Area of the Puyallup Tribe of Indians Reservation, except where authority has been specifically delegated to Ecology by the U.S. Environmental Protection Agency. The exclusion of such discharges from this Permit does not waive any rights the State may have with respect to the regulation of the discharges. Indian Country includes:

1. All land within any Indian Reservation notwithstanding the issuance of any patent and including rights-of-way running through the reservation. This includes all federal, tribal, and Indian and non-Indian privately owned land within the reservation.
2. All off-reservation Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.
3. All off-reservation federal trust lands held for Native American Tribes.

   Puyallup Exception: Following the "Puyallup Tribes of Indians Land Settlement Act of 1989," 25 USC §1773; the permit does apply to land within the Puyallup Reservation except for discharges to surface water on land held in trust by the federal government.

S3. RESPONSIBILITIES OF PERMITTEES

A. Compliance with Conditions

Each Permittee covered under this Permit is responsible for compliance with the terms of this Permit for the regulated small MS4s that they own or operate. Compliance with (1) or (2) below is required as applicable to each Permittee, whether the Permittee has applied for coverage as a Permittee, Co-Permittee, or Secondary Permittee.

1. All city, town, and county Permittees are required to comply with all conditions of this Permit, including any appendices referenced therein, except for Special Condition S6 – *Stormwater Management Program for Secondary Permittees*.
2. All Secondary Permittees are required to comply with all conditions of this Permit, including any appendices referenced therein, except for Section S5 – *Stormwater Management Program for Cities, Towns, and Counties* and S8 – *Monitoring and Assessment*.

B. Reliance on Another Entity

Permittees may rely on another entity to satisfy one or more of the requirements of this Permit. Permittees that are relying on another entity to satisfy one or more of their permit obligations remain responsible for permit compliance if the other entity fails to implement permit conditions. Permittees may rely on another entity provided all the requirements of 40 CFR 122.35(a) are satisfied including, but not limited to:

1. The other entity, in fact, implements the Permit requirements.
2. The other entity agrees to take on responsibility for implementation of the Permit requirement(s) on the Permittee's behalf. This shall be indicated on the NOI or Annual Report.

S4. COMPLIANCE WITH STANDARDS

A. Prohibition of Discharge of Toxicants

In accordance with RCW 90.48.520, the discharge of toxicants to waters of the State of Washington which would violate any water quality standard, including toxicant standards, sediment criteria, and dilution zone criteria is prohibited. The required response to such discharges is defined in Section S4.F, below.

B. Compliance with Standards

This Permit does not authorize a discharge which would be a violation of Washington State *Surface Water Quality Standards* (Chapter 173-201A WAC), *Groundwater Quality Standards* (Chapter 173-200 WAC), *Sediment Management Standards* (Chapter 173-204 WAC), or human health-based criteria in the *National Toxics Rule* (40 CFR 131.45). The required response to such discharges is defined in Section S4.F, below.

C. MEP Standard

The Permittee shall reduce the discharge of pollutants to the Maximum Extent Practicable (MEP).

D. AKART Standard

The Permittee shall use All Known, Available, and Reasonable methods of prevention, control, and Treatment (AKART) to prevent and control pollution of waters of the State of Washington.

E. Responsibilities of Permittees

In order to meet the goals of the *Clean Water Act*, and comply with S4.A, S4.B, S4.C, and S4.D, each Permittee shall comply with all of the applicable requirements of this Permit as identified in S3 – *Responsibilities of Permittees*.

F. Violations of Water Quality Standards and Adaptive Management

A Permittee remains in compliance with S4 despite any discharges prohibited by S4.A or S4.B, when the Permittee undertakes the following response toward long-term water quality improvement:

1. A Permittee shall notify Ecology in writing within 30 days of becoming aware, based on credible site-specific information that a discharge from the MS4 owned or operated by the Permittee is causing or contributing to a known or likely violation of Water Quality Standards in the receiving water. Written notification provided under this subsection shall, at a minimum, identify the source of the site-specific information, describe the nature and extent of the known or likely violation in the receiving water, and explain the reasons why the MS4 discharge is believed to be causing or contributing to the problem. For ongoing or continuing violations, a single written notification to Ecology will fulfill this requirement.
2. In the event that Ecology determines, based on a notification provided under S4.F.1 or through any other means, that a discharge from an MS4 owned or operated by the Permittee is causing or contributing to a violation of Water Quality Standards in a receiving water, Ecology will notify the Permittee in writing that an adaptive management response, outlined in S4.F.3, below, is required, unless:
    a. Ecology also determines that the violation of Water Quality Standards is already being addressed by a Total Maximum Daily Load (TMDL) or other enforceable water quality cleanup plan; or
    b. Ecology concludes the MS4 contribution to the violation will be eliminated through implementation of other permit requirements.
3. Adaptive Management Response
    a. Within 60 days of receiving a notification under S4.F.2, or by an alternative date established by Ecology, the Permittee shall review its Stormwater Management Program (SWMP) and submit a report to Ecology. The report shall include:
        i. A description of the operational and/or structural BMPs that are currently being implemented to prevent or reduce any pollutants that are causing or contributing to the violation of Water Quality Standards, including a qualitative assessment of the effectiveness of each Best Management Practice (BMP).
        ii. A description of potential additional operational and/or structural BMPs that will or may be implemented in order to apply AKART on a site-specific basis to prevent or reduce any pollutants that are causing or contributing to the violation of Water Quality Standards.

iii. A description of the potential monitoring or other assessment and evaluation efforts that will or may be implemented to monitor, assess, or evaluate the effectiveness of the additional BMPs.

iv. A schedule for implementing the additional BMPs including, as appropriate: funding, training, purchasing, construction, monitoring, and other assessment and evaluation components of implementation.

b. Ecology will, in writing, acknowledge receipt of the report within a reasonable time and notify the Permittee when it expects to complete its review of the report. Ecology will either approve the additional BMPs and implementation schedule or require the Permittee to modify the report as needed to meet AKART on a site-specific basis. If modifications are required, Ecology will specify a reasonable time frame in which the Permittee shall submit, and Ecology will review the revised report.

c. The Permittee shall implement the additional BMPs, pursuant to the schedule approved by Ecology, beginning immediately upon receipt of written notification of approval.

d. The Permittee shall include with each subsequent annual report a summary of the status of implementation and the results of any monitoring, assessment or evaluation efforts conducted during the reporting period. If, based on the information provided under this subsection, Ecology determines that modification of the BMPs or implementation schedule is necessary to meet AKART on a site-specific basis, the Permittee shall make such modifications as Ecology directs. In the event there are ongoing violations of water quality standards despite the implementation of the BMP approach of this Section, the Permittee may be subject to compliance schedules to eliminate the violation under WAC 173-201A-510(4) and WAC 173-226-180 or other enforcement orders as Ecology deems appropriate during the term of this Permit.

e. A TMDL or other enforceable water quality cleanup plan that has been approved and is being implemented to address the MS4's contribution to the Water Quality Standards violation supersedes and terminates the S4.F.3 implementation plan.

f. Provided the Permittee is implementing the approved adaptive management response under this Section, the Permittee remains in compliance with Special Condition S4, despite any on-going violations of Water Quality Standards identified under S4.A or B, above.

g. The adaptive management process provided under Section S4.F is not intended to create a shield for the Permittee from any liability it may face under 42 U.S.C. 9601 et seq. or Chapter 70.105D RCW.

G. Revoke and Reissue Permit

Ecology may modify or revoke and reissue this General Permit in accordance with G14 – *General Permit Modification and Revocation*, if Ecology becomes aware of additional control measures, management practices, or other actions beyond what is required in this Permit that are necessary to:

1. Reduce the discharge of pollutants to the MEP;
2. Comply with the state AKART requirements; or
3. Control the discharge of toxicants to waters of the State of Washington.

S5. STORMWATER MANAGEMENT PROGRAM FOR CITIES, TOWNS, AND COUNTIES

A. Stormwater Management Program General Requirements

Each Permittee shall develop and implement a Stormwater Management Program (SWMP). A SWMP is a set of actions and activities comprising the components listed in S5 and any additional actions necessary to meet the requirements of applicable TMDLs pursuant to S7 – *Compliance with Total Maximum Daily Load Requirements* and S8 – *Monitoring and Assessment*. This Section applies to all cities, towns, and counties covered under this Permit (termed as "Permittee," including cities, towns, and counties that are Co-Permittees).

New Permittees subject to this Permit, as described in S1.D.1.b, shall fully meet the requirements in S5 as modified in footnotes below or as specified in an alternate schedule as a condition of coverage by Ecology. Permittees obtaining coverage after the issuance date of this Permit shall fully meet the requirements in S5 as specified in an alternate schedule as a condition of coverage by Ecology.

1. At a minimum, the Permittee's SWMP shall be implemented throughout the geographic area subject to this Permit as described in S1.A.[2]
2. Each Permittee shall prepare written documentation of the SWMP, called the SWMP Plan. The SWMP Plan shall be organized according to the program components in S5.C, or a format approved by Ecology and shall be updated at least annually for submittal with the Permittee's annual reports to Ecology (see S9 – *Reporting Requirements*). The SWMP Plan shall be written to inform the public of the planned SWMP activities for the upcoming calendar year, and shall include a description of:
    a. Planned activities for each of the program components included in S5.C.
    b. Any additional planned actions to meet the requirements of applicable TMDLs pursuant to S7– *Compliance with Total Maximum Daily Load Requirements*.
    c. Any additional planned actions to meet the requirements of S8 – *Monitoring and Assessment*.
3. The SWMP shall include an ongoing program for gathering, tracking, maintaining, and using information to evaluate SWMP development, implementation, and permit compliance and to set priorities.

[2] New Permittees shall fully develop and implement the SWMP in accordance with the schedules contained in this Section no later than March 31, 2029.

a. Each Permittee shall track the cost or estimated cost of development and implementation of each component of the SWMP and sources of funding. This information shall be provided with each Annual Report, no later than March 31, 2027. Permittees shall provide annual average costs (or estimates) to implement the SWMP and TMDL requirements.[3]

b. Each Permittee shall track the number of inspections, follow-up actions because of inspections, official enforcement actions, and types of public education activities as required by the respective program component. This information shall be included in the annual report.

4. Permittees shall continue implementation of existing stormwater management programs until they begin implementation of the updated stormwater management program in accordance with the terms of this Permit, including implementation schedules.

5. Coordination among Permittees

a. Coordination among entities covered under municipal stormwater NPDES permits may be necessary to comply with certain conditions of the SWMP. The SWMP shall include, when needed, coordination mechanisms among entities covered under a municipal stormwater NPDES permit to encourage coordinated stormwater-related policies, programs, and projects within adjoining or shared areas, including:

i. Coordination mechanisms clarifying roles and responsibilities for the control of pollutants between physically interconnected MS4s covered by a Municipal Stormwater Permit.

ii. Coordinating stormwater management activities for shared water bodies, or watersheds among Permittees to avoid conflicting plans, policies, and regulations.

b. The SWMP shall include coordination mechanisms among departments within each jurisdiction to eliminate barriers to compliance with the terms of this Permit. Permittees shall include a written description of internal coordination mechanisms in the Annual Report due no later than March 31, 2026.

[3] New Permittees shall begin cost tracking as required in S5.A.3.a, no later than January 1, 2026.

B. Stormwater Management Program Standards

The SWMP shall be designed to reduce the discharge of pollutants from regulated small MS4s to the MEP, meet state AKART requirements, and protect water quality.

C. Stormwater Management Program Components

The SWMP shall include the components listed below. To the extent allowable under state or federal law, all components are mandatory for city, town, or county Permittees covered under this Permit.

1. Stormwater Planning

Each Permittee shall implement a Stormwater Planning program to inform and assist in the development of policies and strategies as water quality management tools to protect receiving waters.

The minimum performance measures are:

a. Each Permittee shall continue to convene an inter-disciplinary team to inform and assist in the development, progress, and influence of this program.[4]

b. Coordination with long-range plan updates.

   i. Each Permittee shall describe how stormwater management needs and protection/improvement of receiving water health are (or are not) informing the long-range or comprehensive planning update processes and influencing policies and implementation strategies in their jurisdiction in the Annual Report, due March 31, 2027. The Annual Report shall describe the water quality and watershed protection policies, strategies, codes, and other measures intended to protect and improve local receiving water health through planning, considering stormwater management needs or limitations.

c. Low Impact Development (LID) code-related requirements.

   i. Permittees shall continue to require LID Principles and LID BMPs when updating, revising, and developing new local development-related codes, rules, standards, or other enforceable documents, as needed.

      The intent shall be to make LID the preferred and commonly used approach to site development. The local development-related codes, rules, standards, or other enforceable documents shall be designed to

[4] New Permittees shall convene an interdisciplinary team no later than August 1, 2025.

minimize impervious surfaces, native vegetation loss, and stormwater runoff in all types of development situations, where feasible.

(a) Annually, each Permittee shall assess and document any newly identified administrative or regulatory barriers to implementation of LID Principles or LID BMPs since local codes were updated in accordance with the 2013 Permit, and the measures developed to address the barriers. If applicable, the report shall describe mechanisms adopted to encourage or require implementation of LID principles or LID BMPs.

ii. By December 31, 2028, New Permittees shall review, revise, and make effective their local development-related codes, rules, standards, or other enforceable documents to incorporate and require LID principles and LID BMPs. New Permittees shall conduct a similar review and revision process, and consider the range of issues, outlined in the following document: *Integrating LID into Local Codes: A Guidebook for Local Governments* (Puget Sound Partnership, 2012).

New Permittees shall submit a summary of the results of the review and revision process with the annual report due no later than March 31, 2029. This summary shall be in the required format described in Appendix 5 and include, at a minimum, a list of the participants (job title, brief job description, and department represented), the codes, rules, standards, and other enforceable documents reviewed, and the revisions made to those documents which incorporate and require LID principles and LID BMPs. The summary shall include existing requirements for LID principles and LID BMPs in development-related codes. The summary shall be organized as follows:

(a) Measures to minimize impervious surfaces;

(b) Measures to minimize loss of native vegetation; and

(c) Other measures to minimize stormwater runoff.

iii. No later than December 31, 2028, adopt and implement tree canopy goals and policies to support stormwater management. Permittees shall consider how existing or future tree canopy can support stormwater management and water quality improvements in receiving waters. Establish a long-term (e.g. 5, 10 year or longer) goal of canopy, existing or future projection, to be used for stormwater management that is appropriate to the jurisdiction. Specific considerations for canopy for

stormwater management on Permittee-owned or operated lands shall include (but are not limited to):

(a) Maintaining or increasing canopy in overburdened communities.

(b) Maintaining existing mature canopy.

Document considerations, reasoning, and rationale for goals and policies.

d. Stormwater Management Action Planning (SMAP).[5] Permittees shall conduct a similar process and consider the range of issues outlined in the *Stormwater Management Action Planning Guidance* (Ecology, 2024; Publication no. 24-10-027) for one new priority catchment or additional actions for an existing SMAP.[6] A purpose of the SMAP is to support implementation in the Stormwater Management for Existing Development (SMED) Program with the identification of strategic investments through the identification of projects and actions.

i. Stormwater Management Action Plan (SMAP). No later than March 31, 2027, Permittees shall complete and submit a SMAP for at least one new high priority catchment area, or additional actions for an existing SMAP, that identifies all of the following:

(a) A description of the stormwater facility retrofits needed for the area, including the BMP types and preferred locations. Include projects that address transportation-related runoff from high traffic areas.

(b) Land management/development strategies and/or actions identified for water quality management.

(c) Focused, enhanced, or customized implementation of stormwater management actions related to Permit sections within S5, including:

- IDDE field screening;
- Prioritization of Source Control inspections;
- O&M inspections or enhanced maintenance; or
- Public Education and Outreach behavior change programs.

Identified actions shall support other specifically identified stormwater management strategies and actions for the basin overall, or for the catchment area in particular.

[5] New Permittees are exempt from S5.C.1.d. for this Permit term.
[6] City of Shelton shall follow the SMAP requirements outlined in Appendix 14.

(d) If applicable, identification of changes needed to local long-range plans to address SMAP priorities.

(e) A proposed implementation schedule and budget sources for:

- Short-term actions (i.e., actions to be accomplished within six years); and
- Long-term actions (i.e., actions to be accomplished within seven to 20 years).

(f) Actions in the SMAP that may benefit overburdened communities, including specifically vulnerable populations and highly impacted Communities.

(g) A process and schedule to provide future assessment and feedback to improve the planning process and implementation of procedures or projects.

2. Public Education and Outreach

The SWMP shall include an education and outreach program designed to:

- Build general awareness about methods to address and reduce impacts from stormwater runoff;
- Effect behavior change to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts; and
- Create stewardship opportunities that encourages community engagement in addressing the impacts from stormwater runoff.

Permittees may choose to meet these requirements individually or as a member of a regional group. Regional collaboration on general awareness or behavior change programs, or both, includes Permittees developing a consistent message, determining best methods for communicating the message, and when appropriate, creating strategies to effect behavior change. If a Permittee chooses to adopt one or more elements of a regional program, the Permittee should participate in the regional group and shall implement the adopted element(s) of the regional program in the local jurisdiction.

The minimum performance measures are:

a. Each Permittee shall implement an education and outreach program. The program design shall be based on local or regional (or a combination of both) water quality information and priority audience characteristics to identify high priority audiences, subject areas, and/or BMPs. Based on the priority

audience's demographic, the Permittee shall consider delivering its selected messages in language(s) other than English, as appropriate to the priority audience.[7]

i. ***General awareness.*** To build general awareness, Permittees shall annually select, at a minimum, one priority audience and one subject area from either (a) or (b):

(a) *Priority audiences:* General public (including overburdened communities, school age children, college/university, or trade students) or businesses (including home-based, or mobile businesses). Subject areas:

- General impacts of stormwater on surface waters, including impacts from impervious surfaces.
- Low impact development (LID) principles and LID BMPs.

(b) *Priority audiences:* Engineers, contractors, developers, property owners/managers, or land use planners. Subject areas:

- Technical standards for stormwater site and erosion control plans.
- LID principles and LID BMPs.
- Stormwater treatment and flow control BMPs/facilities.
- Source control BMPs for building materials to reduce pollution to stormwater, including but not limited to stormwater pollution from PCB-containing materials.

(c) Permittees shall provide subject area information to the priority audience on an ongoing or strategic schedule.

ii. ***Behavior change.*** To affect behavior change, Permittees shall select, at a minimum, one priority audience and one BMP.

(a) *Priority Audiences:* Residents, landscapers, property managers/owners, developers, school age children, college/university, trade students, or businesses (including home-based or mobile businesses).

BMPs:

[7] New Permittees shall begin implementing the requirements of S5.C.2.a no later than August 1, 2027.

- Use and storage of: pesticides, fertilizers, and/or other household chemicals.
- Use and storage of: automotive chemicals, hazardous cleaning supplies, carwash soaps, and/or other hazardous materials.
- Prevention of illicit discharges.
- Yard care techniques protective of water quality.
- Carpet cleaning.
- Repair and maintenance BMPs for: vehicles, equipment, and/or home/buildings.
- Pet waste management and disposal.
- LID Principles and LID BMPs.
- Stormwater facility maintenance, including LID facilities.
- Dumpster and trash compactor maintenance.
- Litter and debris prevention.
- Sediment and erosion control.
- (Audience specific) Source control BMPs (refer to S5.C.8).
- (Audience specific) Locally important, municipal stormwater-related subject area.

(b) Social marketing campaign development. Based on the recommendation from 2024 evaluation and report, no later than July 1, 2025, each Permittee shall follow social marketing practices and methods and develop a campaign that is tailored to the community, including development of a program evaluation plan. Each Permittee shall:[8]

1. Develop a strategy and schedule to implement the existing campaign more effectively; or
2. Develop a strategy and schedule to expand the existing campaign to a new priority audience or BMPs; or

[8] No later than August 1, 2025, New Permittees shall follow social marketing practices and methods to develop a behavior change program that is tailored to the community per S5.C.2.a.ii(b).

3. Develop a strategy and schedule for a new priority audience and BMP behavior change campaign.

(c) Behavior change campaign implementation. No later than September 1, 2025, begin to implement the strategy developed in S5.C.2.a.ii.(b).[9]

(d) Behavior change campaign evaluation. No later than March 31, 2029, evaluate and submit report on:

1. The changes in understanding and adoption of behaviors resulting from the implementation of the strategy; and

2. Any planned or recommended changes to the campaign to be more effective; describe the strategies and process to achieve the results.

(e) Behavior change campaign adaptive management. Permittees shall use results of the evaluation to continue to direct effective methods and implementation of the ongoing behavior change program.

iii. ***Stewardship.*** Each Permittee shall provide, partner with, or promote stewardship opportunities to encourage residents or businesses to participate in activities or events planned and organized within the community, such as: stream teams, storm drain marking, volunteer monitoring, riparian plantings, and watershed habitat improvement. Permittees may provide, partner with, or promote stewardship opportunities created or organized by existing organizations (including non-Permittees).[10]

3. Public Involvement and Participation

Permittees shall provide ongoing opportunities for public involvement and participation through advisory councils, public hearings, watershed committees, participation in developing rate-structures or other similar activities. Each Permittee shall comply with applicable state and local public notice requirements when developing elements of the SWMP and SMAP.

The minimum performance measures are:

a. Permittees shall create opportunities for the public, including overburdened communities, to participate in the decision-making processes involving the development, implementation, and update of the Permittee's SMAP and

[9] No later than October 1, 2025, New Permittees shall begin to implement the strategy developed in S5.C.2.a.ii(b).
[10] New Permittees shall implement the stewardship requirements according to S5.C.2.a.iii no later than August 1, 2027.

SWMP.[11] Permittees shall document specific outreach measures for overburdened communities.

i. Annually, document specific public involvement and participation opportunities provided to overburdened communities and specifically, highly impacted communities.

ii. No later than December 31, 2026, document methods used to identify overburdened communities.

b. Each Permittee shall post on their website their SWMP Plan and the Annual Report, required under S9.A, no later than May 31 each year. All other submittals shall be available to the public upon request.

4. MS4 Mapping and Documentation

The SWMP shall include an ongoing program for mapping and documenting the MS4.[12]

The minimum performance measures are:

a. *Ongoing Mapping:* Each Permittee shall maintain mapping data for the features listed below:

i. Known MS4 outfalls and known MS4 discharge points.

(a) Map outfall size and material, where known.

ii. Receiving waters, other than groundwater.

iii. Stormwater treatment and flow control BMPs/facilities owned or operated by the Permittee.

iv. Geographic areas served by the Permittee's MS4 that do not discharge stormwater to surface waters.

v. Tributary conveyances to all known outfalls and discharge points with a 24-inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems. The following features or attributes (or both) shall be mapped:

(a) Tributary conveyance type, material, and size where known.

(b) Associated drainage areas.

[11]New Permittees shall develop and begin to implement requirements according to S5.C.3.a no later than August 1, 2025. New Permittees are exempt from SMAP this permit term.

[12]New Permittees shall meet the requirements to map the MS4 according to S5.C.4 no later than March 31, 2029, except where otherwise noted in this Section.

(c) Land use.

vi. Connections between the MS4 owned or operated by the Permittee and other municipalities or public entities.

vii. All connections to the MS4 authorized or allowed by the Permittee after February 16, 2007. [13,14]

viii. All known connections from the MS4 to a privately owned stormwater system.

b. *New Mapping.* Each Permittee shall:

i. No later than March 31, 2026, submit locations of all known MS4 outfalls according to the standard templates and format provided in the Annual Report. Report the size and material of the outfalls, where known.

ii. No later than December 31, 2026, using available, existing data, map tree canopy to support stormwater management on Permittee-owned or operated properties. Permittees shall develop and follow a methodology to intentionally identify canopy for stormwater management purposes, which may be updated annually or as needed.

iii. No later than March 31, 2028, implement a methodology to map and assess acreage of MS4 tributary basins to outfalls with a 24-inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems that have stormwater treatment and flow control BMPs/facilities owned or operated by the Permittee. Submit with the March 31, 2028 Annual Report a map(s) (.pdf) and table (.xlsx) with a breakdown of the MS4 tributary basins quantifying estimated acres managed or unmanaged by stormwater treatment and flow control BMPs/facilities owned or operated by the Permittee.

iv. No later than December 31, 2028, using available, existing data map overburdened communities in relation to stormwater treatment and flow control BMPs/facilities, outfalls, discharge points, and tree canopy on Permittee-owned or operated properties.

c. The required format for mapping is electronic (e.g. Geographic Information System, CAD drawings, or other software that can map and store points,

[13]New Permittees shall meet the requirements of S5.C.4.a.vii after August 1, 2024, for all connections to the MS4 authorized after August 1, 2024.

[14]Permittees do not need to map the following residential connections: individual driveways, sump pumps, or roof downspouts.

lines, polygons, and associated attributes), with fully described mapping standards.

d. To the extent consistent with national security laws and directives, each Permittee shall make available to Ecology, upon request, available maps depicting the information required in S5.C.4.a through c, above.

e. Upon request, and to the extent appropriate, Permittees shall provide mapping information to federally recognized Indian Tribes, municipalities, and other Permittees. This Permit does not preclude Permittees from recovering reasonable costs associated with fulfilling mapping information requests by federally recognized Indian Tribes, municipalities, and other Permittees.

5. Illicit Discharge Detection and Elimination

The SWMP shall include an ongoing program designed to prohibit, prevent, detect, characterize, trace, and eliminate illicit connections and illicit discharges into the MS4.[15]

The minimum performance measures are:

a. The program shall include procedures for reporting and correcting or removing illicit connections, spills, and other illicit discharges when they are suspected or identified. The program shall also include procedures for addressing pollutants entering the MS4 from an interconnected, adjoining MS4.

Illicit connections and illicit discharges shall be identified through, but not limited to, field screening, inspections, complaints/reports, construction inspections, maintenance inspections, source control inspections, and/or monitoring information, as appropriate.

b. Permittees shall inform public employees, businesses, and the public of hazards associated with illicit discharges and improper disposal of waste.

c. Each Permittee shall implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater, illicit discharges into the Permittee's MS4 to the maximum extent allowable under state and federal law. The ordinance or other regulatory mechanism in effect as of the effective date of this Permit shall be revised, if necessary, to meet the requirements of this Section no later than July 1, 2027.

[15]New Permittees shall meet the requirements of S5.C.5 no later than August 1, 2026 except where otherwise noted in this Section.

i. *Allowable Discharges:* The regulatory mechanism does not need to prohibit the following categories of non-stormwater discharges:

(a) Diverted stream flows

(b) Rising groundwaters

(c) Uncontaminated groundwater infiltration (as defined at 40 CFR 35.2005(b)(20))

(d) Uncontaminated pumped groundwater

(e) Foundation drains

(f) Air conditioning condensation

(g) Irrigation water from agricultural sources that is commingled with urban stormwater

(h) Springs

(i) Uncontaminated water from crawl space pumps

(j) Footing drains

(k) Flows from riparian habitats and wetlands

(l) Non-stormwater discharges authorized by another NPDES or State Waste Discharge permit

(m) Non-stormwater discharges from emergency firefighting activities in accordance with S2 Authorized Discharges

ii. *Conditionally allowable discharges:* The regulatory mechanism may allow the following categories of non-stormwater discharges only if the stated conditions are met:

(a) Discharges from potable water sources, including but not limited to water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges shall be dechlorinated to a total residual chlorine concentration of 0.1 ppm or less, pH-adjusted, if necessary, and volumetrically and velocity controlled to prevent re-suspension of sediments in the MS4.

(b) Discharges from lawn watering and other irrigation runoff, including from reclaimed water sources. These discharges shall be minimized

through, at a minimum, public education activities and water conservation efforts.

(c) Discharges from swimming pools, spas, and hot tubs. The discharges shall be dechlorinated/debrominated to a total residual concentration of 0.1 ppm or less, free from sodium chloride, pH-adjusted, and reoxygenated if necessary, volumetrically and velocity controlled to prevent re-suspension of sediments in the MS4. Discharges shall be thermally controlled to prevent an increase in temperature of the receiving water. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.

(d) Street and sidewalk wash water and water used to control dust. The Permittee shall reduce these discharges through, at a minimum, public education activities and/or water conservation efforts. To avoid washing pollutants into the MS4 Permittees shall minimize the amount of street wash and dust control water used.

(e) Routine external building washdown that does not use detergents for buildings built or renovated before 1950 and after 1980. These discharges shall be reduced through, at minimum, public education activities and water conservation efforts.

Commercial, industrial, and multi-story residential structures constructed or renovated between the years 1950 and 1980 (i.e. those most likely to have PCB-containing building materials), shall be assessed for PCB-containing materials consistent with *How to find and address PCBs in building materials* (Ecology, 2024, Publication No. 22-04-024) prior to routine building washdown to the MS4. Structures confirmed or suspected to have PCB-containing materials shall not discharge washdown to the MS4.

Single-family residential buildings are exempt from PCB assessment prior to building washdown, for the purposes of this section. Structures built or renovated between 1950-1980 and determined to be without PCB-containing materials may conduct routine building washdown (without detergents) as described above.

(f) Other non-stormwater discharges. The discharges shall be in compliance with the requirements of a pollution prevention plan reviewed by the Permittee which addresses control of such discharges.

iii. The Permittee shall further address any category of discharges in (i) or (ii), above if the discharges are identified as significant sources of pollutants to waters of the State.

iv. The ordinance or other regulatory mechanism shall include escalating enforcement procedures and actions.

d. Each Permittee shall implement an ongoing program designed to detect and identify non-stormwater discharges and illicit connections into the Permittee's MS4.[16] The program shall include the following components:

i. Procedures for conducting investigations of the Permittee's MS4, including field screening and methods for identifying potential sources. These procedures may also include source control inspections.

The Permittee shall implement a field screening methodology appropriate to the characteristics of the MS4 and water quality concerns. Screening for illicit connections may be conducted using *Illicit Connection and Illicit Discharge Field Screening and Source Tracing Guidance Manual* (Herrera Environmental Consultants, Inc.; May 2020), or another methodology of comparable or improved effectiveness. The Permittee shall document the field screening methodology in the Annual Report.

(a) All Permittees shall complete field screening for an average of 12% of the MS4 each year.[17]

ii. A publicly listed and publicized hotline or other telephone number for public reporting of spills and other illicit discharges.

iii. An ongoing training program for all municipal field staff who, as part of their normal job responsibilities, might come into contact with or otherwise observe an illicit discharge and/or illicit connection to the MS4, on the identification of an illicit discharge and/or connection, and on the proper procedures for reporting and responding to the illicit discharge and/or connection. Follow-up training shall be provided, as needed, to address changes in procedures, techniques, requirements, or staffing. Permittees shall document and maintain records of the trainings provided and the staff trained.[18]

[16]New Permittees shall fully implement the requirements of S5.C.5.d no later than August 1, 2028.

[17]New Permittees shall complete S5.C.5.d.i requirements for field screening covering at least 40% of the MS4 within the Permittee's coverage area no later than December 31, 2028, and on average 12% each year thereafter.

[18]New Permittees shall develop and begin implementing the ongoing training program described in S5.C.5.d.iii no later than March 31, 2026.

e. Each Permittee shall implement an ongoing program designed to address illicit discharges, including spills and illicit connections, into the Permittee's MS4.[19] The program shall include:

i. Procedures for characterizing the nature of, and potential public or environmental threat posed by, any illicit discharges found by or reported to the Permittee. Procedures shall address the evaluation of whether the discharge must be immediately contained and steps to be taken for containment of the discharge.

ii. Procedures for the post-emergency clean-up of firefighting activities:

(a) No later than December 31, 2026, the Permittee shall coordinate with firefighting agencies/departments that serve the areas that discharge to the MS4 to be notified when PFAS-containing AFFFs are used during emergency firefighting activities.

(b) No later than January 1, 2027, Permittee shall update and implement procedures to minimize discharges to the MS4 during post-emergency clean-up and disposal activities including, but not limited to, the immediate clean-up in all situations where PFAS-containing AFFFs have been used, diversions, and other measures that prevent discharges to the MS4. The Permittee is not expected to deploy control measures during an emergency.

iii. Procedures for tracing the source of an illicit discharge; including visual inspections and, when necessary, opening manholes, using mobile cameras, collecting and analyzing water samples, and/or other detailed inspection procedures.

iv. Procedures for eliminating the discharge including notification of appropriate authorities (including owners or operators of interconnected MS4s), notification of the property owner, technical assistance, follow-up inspections, and use of the compliance strategy developed pursuant to S5.C.5.c.iv, including escalating enforcement and legal actions if the discharge is not eliminated.

v. Compliance with the provisions in (i)-(iv) above shall be achieved by meeting the following timelines:

[19]New Permittees shall fully develop and implement the requirements of S5.C.5.e no later than August 1, 2028.

(a) Immediately respond to all illicit discharges, including spills, which are determined to constitute a threat to human health, welfare, or the environment, consistent with General Condition G3.

(b) Investigate (or refer to the appropriate agency with the authority to act) within 7 days, on average, any complaints, reports, or monitoring information that indicates a potential illicit discharge.

(c) Initiate an investigation within 21 days of any report or discovery of a suspected illicit connection to determine the source of the connection, the nature and volume of discharge through the connection, and the party responsible for the connection.

(d) Upon confirmation of an illicit connection, use the compliance strategy in a documented effort to eliminate the illicit connection within 6 months. All known illicit connections to the MS4 shall be eliminated.

f. Permittees shall train staff who are responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges, including spills, and illicit connections, to conduct these activities. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements, or staffing. Permittees shall document and maintain records of the training provided and the staff trained.[20]

g. Recordkeeping: Each Permittee shall track and maintain records of the activities conducted to meet the requirements of this Section. In the Annual Report, each Permittee shall submit data for the illicit discharges, spills, and illicit connections including those that were found by, reported to, or investigated by the Permittee during the previous calendar year. The data shall include the information and format specified in Appendix 13 and WQWebIDDE. Each Permittee may either use their own system or WQWebIDDE for recording this data.

[20]New Permittees shall meet the requirements of S5.C.5.f no later than March 31, 2026.

6. Controlling Runoff from New Development, Redevelopment, and Construction Sites

Each Permittee shall implement and enforce a program to reduce pollutants in stormwater runoff to a regulated small MS4 from new development, redevelopment, and construction site activities. The program shall apply to private and public development, including transportation projects.[21]

The minimum performance measures are:

a. Implement an ordinance or other enforceable mechanism that addresses runoff from new development, redevelopment, and construction site projects.

   No later than June 30, 2027, each Permittee shall adopt and make effective a local program, that meets the requirements of S5.C.6.b(i) through (iii), below, and shall apply to all applications[22] submitted:

   i. On or after July 1, 2027.

   ii. Prior to January 1, 2017, that have not started construction[23] by July 1, 2022.[24]

   iii. Prior to July 1, 2022, that have not started construction by July 1, 2027.

   iv. Prior to July 1, 2027, that have not started construction by July 1, 2032.

b. The ordinance or other enforceable mechanism shall include, at a minimum:

   i. The Minimum Requirements, thresholds, and definitions in Appendix 1, or the 2019 Appendix 1 amended to include the changes identified in Appendix 10, or Phase I program approved by Ecology and amended to include Appendix 10, for new development, redevelopment, and construction sites. Adjustment and exceptions criteria equivalent to those in Appendix 1 shall be included. More stringent requirements may

[21]For continuing Permittees, this means continuing to implement existing programs developed under previous permits until updates are made to meet the schedules defined. *New Permittees shall meet the requirements of S5.C.6 no later than June 30, 2027, except where otherwise specified in this Section.*

[22]In this context, "application" means, at a minimum a complete project description, site plan, and, if applicable, SEPA checklist. Permittees may establish additional elements of a completed application.

[23]In this context "started construction" means the site work associated with, and directly related to the approved project has begun. For example: grading the project site to final grade or utility installation. Simply clearing the project site does not constitute the start of construction. Permittees may establish additional requirements related to the start of construction.

[24]**For Lynden, Snoqualmie S5.C.6.a.ii is replaced with these dates**: Prior to January 1, 2018, that have not started construction by January 1, 2023. **For Aberdeen S5.C.6.a.ii is replaced with these dates**: Prior to July 1, 2018, that have not started construction by June 30, 2023. **Shelton S5.C.6.a.ii and iii is replaced with these dates:** Prior to January 1, 2023, which have not started construction by January 1, 2028.

be used, and/or certain requirements may be tailored to local circumstances through the use of Ecology-approved basin plans or other similar water quality and quantity planning efforts. Such local requirements and thresholds shall provide equal protection of receiving waters and equal levels of pollutant control to those provided in Appendix 1.

ii. The local requirements shall include the following requirements, limitations, and criteria that, when used to implement the minimum requirements in Appendix 1 (or program approved by Ecology under the 2024 Phase I Permit), will protect water quality, reduce the discharge of pollutants to the MEP, and satisfy the State requirement under Chapter 90.48 RCW to apply AKART prior to discharge:

(a) Site planning requirements;

(b) BMP selection criteria.

(c) BMP design criteria.

(d) BMP infeasibility criteria.

(e) LID competing needs criteria.

(f) BMP limitations.

Permittees shall document how the criteria and requirements will protect water quality, reduce the discharge of pollutants to the MEP, and satisfy the state AKART requirements.

Permittees who choose to use the requirements, limitations, and criteria above in the *Stormwater Management Manual for Western Washington*, or a Phase I program approved by Ecology, may cite this choice as their sole documentation to meet this requirement.

iii. The legal authority, through the approval process for new development and redevelopment, to inspect and enforce maintenance standards for private stormwater facilities approved under the provisions of this Section that discharge to the Permittee's MS4.

c. The program shall include a permitting process with site plan review, inspection, and enforcement capability to meet the standards listed in (i) through (iv) below, for both private and public projects, using qualified personnel (as defined in *Definitions and Acronyms*). At a minimum, this program shall be applied to all sites that meet the minimum thresholds adopted pursuant to S5.C.6.b.i, above.

i. Review of all stormwater site plans for proposed development activities.

ii. Inspect, prior to clearing and construction, all 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*. As an alternative to evaluating each site according to Appendix 7, Permittees may choose to inspect all construction sites that meet the minimum thresholds adopted pursuant to S5.C.6.b.i, above.

iii. Inspect all permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls. Enforce, as necessary, based on the inspection.

iv. Each Permittee shall manage maintenance activities to inspect all stormwater treatment and flow control BMPs/facilities, and catch basins, in new residential developments at least twice per 12-month period with no less than 4 months between inspections, until 90% of the lots are constructed (or when construction has stopped and the site is fully stabilized), to identify maintenance needs and enforce compliance with maintenance standards as needed.

v. Inspect all permitted development sites upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater facilities. Verify that a maintenance plan is completed and responsibility for maintenance is assigned for stormwater treatment and flow control BMPs/facilities. Enforce, as necessary, based on the inspection.

vi. Compliance with the inspection requirements in (ii) through (v), above, shall be determined by the presence and records of an established inspection program designed to inspect all sites. Compliance shall be determined by achieving at least 80% of required inspections annually. The inspections may be combined with other inspections provided they are performed using qualified personnel.

vii. The program shall include a procedure for keeping records of inspections and enforcement actions by staff including inspection reports, warning letters, notices of violations, and other enforcement records. Records of maintenance inspections and maintenance activities shall be maintained.

viii. An enforcement strategy shall be implemented to respond to issues of non-compliance.

d. The program shall make available to representatives of proposed new development and redevelopment, as applicable: the link to the online *Construction Stormwater General Permit* Notice of Intent (NOI) form for construction activity, a link to the online *Industrial Stormwater General Permit* NOI form for industrial activity, and a link to the online registration requirements for Underground Injection Control (UIC) wells. Permittees shall continue to enforce local ordinances controlling runoff from sites that are also covered by stormwater permits issued by Ecology.[25]

e. Each Permittee shall ensure that all staff whose primary job duties are 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. Follow-up training shall be provided as needed to address changes in procedures, techniques, or staffing. Permittees shall document and maintain records of the training provided and the staff trained.[26]

7. Stormwater Management for Existing Development

Each Permittee shall implement a Program to control or reduce stormwater discharges to waters of the State from areas of existing development.[27] The Program shall aim to focus on strategic stormwater investments over longer planning timeframes.

The minimum performance measures are:

a. Permittees shall implement stormwater facility retrofits, or tailored SWMP actions that meet the criteria described in Appendix 12, using one or a combination of the following:

   i. Strategic stormwater investments identified in Stormwater Management Action Plan(s) (SMAPs, S5.C.1.d.), or similar stormwater planning process; and/or

   ii. Opportunistic stormwater investments identified by leveraging projects outside of SMAP areas to improve stormwater management and infrastructure.

[25]New Permittees shall meet the requirements of S5.C.6.d beginning no later than August 1, 2024.
[26]New Permittees shall meet the requirements of S5.C.6.e no later than December 31, 2027.
[27] New Permittees are exempt from this permit section.

b. With each Annual Report, each Permittee shall provide a list of planned, individual projects scheduled for funding or implementation during this Permit term for the purpose of meeting the assigned equivalent acreage in Appendix 12. This list shall include at a minimum the information and use the formatting specified in Appendix 12 (.xlsx file format).

c. No later than March 31, 2028, Permittees shall fully fund, start construction, or completely implement project(s) that meet the assigned equivalent acreage and submit documentation with the Annual Report (due on March 31, 2028) as described in Appendix 12.[28]

   i. Projects that started construction on or after January 1, 2023, may be included towards achieving the acres required.

   ii. Permittees may contribute to meeting an overall regional goal to satisfy this permit requirement as described in S5.C.7.d.

   iii. Permittees that completely implement stormwater facility retrofit projects by the expiration date of this Permit that will exceed the area required for this Permit term may apply the excess as a credit to be used for the next Permit term (e.g. 2029-2034 Permit term), not to exceed 50% of the next Permit's requirement.

   iv. Permittees shall report which projects may provide Tribal benefits and benefits to overburdened communities including specifically Vulnerable Populations and Highly Impacted Communities.

d. Permittees may collaborate to meet a regional goal.

   i. Each Permittee is required to manage at least 0.5 equivalent acres within their own jurisdiction but may receive acreage credit for contributing to meeting an overall regional goal outside their defined MS4 Permit coverage area. For Permittees assigned 0.5 acres, participation and in-kind services to regional collaboration projects may count as the contribution for this Permit term if there is regional agreement on the strategy.

   ii. Permittees may contribute to a regional goal, that is the sum of Phase II partners assigned acreage from Appendix 12. Projects may be implemented outside of Permit coverage areas to meet their individual requirement as part of a regional goal where benefits to receiving waters within the Permit coverage areas are identified and anticipated.

[28] See Appendix 12 for descriptions of project status types: fully fund, start construction, and completely implement.

e. Permittees shall report the amount of estimated or projected equivalent acres managed by stormwater facility retrofits for the next Permit term (e.g. 2029-2032). This report shall be submitted to Ecology no later than March 31, 2028.

8. Source Control Program for Existing Development

The Permittee shall implement a program to prevent and reduce pollutants in runoff from areas of existing development that discharge to the MS4. The program shall include application of source control BMPs, inspections, and enforcement.

The minimum performance measures are:

a. Permittees shall enforce ordinance(s), or other enforceable documents, requiring the application of source control BMPs for pollutant generating sources associated with existing land uses and activities (see Appendix 8 to identify pollutant generating sources). [29]

Permittees shall update and make effective the ordinance(s), or other enforceable documents, as necessary to meet the requirements of this Section no later than August 1, 2027.

The requirements of this subsection are met by using the source control BMPs in the SWMMWW, or a Phase I Program approved by Ecology. In cases where the manual(s) lack guidance for a specific source of pollutants, the Permittee shall work with the owner/operator to implement or adapt BMPs based on the best professional judgement of the Permittee.

Applicable operational source control BMPs shall be required for all pollutant generating sources. Structural source control BMPs, or treatment BMPs/facilities, or both, shall be required for pollutant generating sources if operational source control BMPs do not prevent illicit discharges or violations of surface water, groundwater, or sediment management standards because of inadequate stormwater controls. Implementation of source control requirements may be done through education and technical assistance programs, provided that formal enforcement authority is available to the Permittee and is used as determined necessary by the Permittee, in accordance with S5.C.8.d., below.

[29] No later than August 1, 2026, New Permittees shall adopt and make effective ordinance(s), or other enforceable documents, requiring the application of source control BMPs for pollutant generating sources associated with existing land uses and activities (see Appendix 8 to identify pollutant generating sources).

b. Permittees shall implement a program to identify publicly and privately owned institutional, commercial, and industrial sites which have the potential to generate pollutants to the MS4.[30] Permittees shall update the inventory at least once every 5 years. The inventory shall include:

   i. Businesses and/or sites identified based on the presence of activities that are pollutant generating (refer to Appendix 8); and

   ii. Other pollutant generating sources, based on complaint response, such as: home-based businesses and multi-family sites.

c. Permittees shall implement an inspection program, performed by qualified personnel, for sites identified pursuant to S5.C.8.a.i., above.[31]

   i. All identified sites with a business address shall be provided information about activities that may generate pollutants and the source control requirements applicable to those activities. This information shall be provided by mail, telephone, electronic communications, or in person. This information may be provided all at one time or spread out over the Permit term to allow for tailoring and distribution of the information during site inspections.

   ii. The Permittee shall annually complete the number of inspections equal to 20% of the businesses and/or sites listed in their source control inventory to assess BMP effectiveness and compliance with source control requirements. The Permittee may count follow-up compliance inspections at the same site toward the 20% inspection rate. The Permittee may select which sites to inspect each year and is not required to inspect 100% of sites over a 5-year period. Sites may be prioritized for inspection based on their land use category, potential for pollution generation, proximity to receiving waters, or to address an identified pollution problem within a specific geographic area or sub-basin.

   iii. Each Permittee shall inspect 100% of sites identified through credible complaints.

   iv. Permittees may count inspections conducted based on complaints, or when the property owner denies entry, to the 20% inspection rate.

[30] No later than August 1, 2027, New Permittees shall establish an inventory that follows this permit section.
[31] No later than January 1, 2028, New Permittees shall implement an inspection program for sites identified.

v. Annual Reporting of inspections shall be organized by business type or activities with potential to generate pollutants to the MS4. Standard Industrial Code (SIC), Major Group, and NAICS numbers may be provided for reference as noted in Appendix 8.

d. Permittees shall implement a progressive enforcement policy that requires sites to comply with stormwater requirements within a reasonable time period as specified below:[32]

i. If the Permittee determines, through inspections or otherwise, that a site has failed to adequately implement required BMPs, the Permittee shall take appropriate follow-up action(s), which may include phone calls, reminder letters, emails, or follow-up inspections.

ii. When a Permittee determines that a site has failed to adequately implement BMPs after a follow-up inspection(s) the Permittee shall take enforcement action as established through authority in its municipal codes or ordinances, or through the judicial system.

iii. Each Permittee shall maintain records, including documentation of each site visit, inspection reports, warning letters, notices of violations, and other enforcement records demonstrating an effort to bring sites into compliance. Each Permittee shall also maintain records of sites that are not inspected because the property owner denies entry.

iv. A Permittee may refer non-emergency violations of local ordinances to Ecology, provided, the Permittee also makes a documented effort of progressive enforcement. At a minimum, a Permittee's enforcement effort shall include documentation of inspections and warning letters or notices of violation.

v. Application and enforcement of local ordinances at sites identified pursuant to S5.C.8.a.i., including sites with discharges authorized by a separate NPDES permit.

[32] No later than January 1, 2028, New Permittees shall implement a progressive enforcement policy as described in this permit section.

e. Permittees shall train staff who are responsible for implementing the source control program to conduct these activities.[33] The ongoing training program shall cover the legal authority for source control, source control BMPs and their proper application, inspection protocols, lessons learned, typical cases, and enforcement procedures. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements, or staff. Permittees shall document and maintain records of the training provided and the staff trained.

9. Operations and Maintenance

Each Permittee shall implement and document a program to regulate maintenance activities and to conduct maintenance activities by the Permittee to prevent or reduce stormwater impacts.[34]

The minimum performance measures are:

a. Each Permittee shall implement maintenance standards that are as protective, or more protective, of facility function than those specified in the *Stormwater Management Manual for Western Washington,* or a Phase I program approved by Ecology. For facilities which do not have maintenance standards, the Permittee shall develop a maintenance standard. No later than June 30, 2027, Permittees shall update their maintenance standards as necessary to meet the requirements of this Section.

   i. The purpose of the maintenance standard is to determine if maintenance is required. The maintenance standard is not a measure of the facility's required condition at all times between inspections. Exceeding the maintenance standard between inspections and/or maintenance is not a Permit violation.

   ii. Unless there are circumstances beyond the Permittee's control, when an inspection identifies an exceedance of the maintenance standard, maintenance shall be performed:

      - Within 1 year for typical maintenance of facilities, except catch basins.
      - Within 6 months for catch basins.
      - Within 2 years for maintenance that requires capital construction of less than $25,000.

[33] New Permittees shall develop and implement a training program no later than December 31, 2027.
[34] New Permittees shall develop and implement the requirements of S5.C.9 no later than June 30, 2027 except where otherwise noted in this Section.

Circumstances beyond the Permittee's control include 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 exceedance of the required timeframe, the Permittee shall document the circumstances and how they were beyond their control.

b. Maintenance of stormwater treatment and flow control BMPs/facilities regulated by the Permittee:

   i. The program shall include provisions to verify adequate long-term O&M of stormwater treatment and flow control BMPs/facilities that are permitted and constructed pursuant to S5.C.6.c and shall be maintained in accordance with S5.C.9.a.

      The provisions shall include:

      (a) Implementation of an ordinance or other enforceable mechanism that:

         - Clearly identifies the party responsible for maintenance in accordance with maintenance standards established under S5.C.9.a.
         - Requires inspection of facilities in accordance with the requirements in (b), below.
         - Establishes enforcement procedures.

      (b) Annual inspections of all stormwater treatment and flow control BMPs/facilities that discharge to the MS4 and were permitted by the Permittee according to S5.C.6.c, including those permitted in accordance with requirements adopted pursuant to the 2007-2024 Ecology municipal stormwater permits, unless there are maintenance records to justify a different frequency. Inspections shall be conducted by qualified personnel or a qualified third party.

      Permittees may reduce the inspection frequency based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with G19 – *Certification and Signature*.

ii. Compliance with the inspection requirements in (b), above, shall be determined by the presence and records of an established inspection program designed to inspect all facilities, and achieving at least 80% of required inspections annually.

iii. The program shall include a procedure for keeping records of inspections and enforcement actions by staff, qualified personnel, and qualified third parties, including inspection reports, warning letters, notices of violations, and other enforcement records. Records of maintenance inspections and maintenance activities shall be maintained.

c. Maintenance of stormwater facilities owned or operated by the Permittee:

i. Each Permittee shall implement a program to annually inspect all municipally owned or operated stormwater treatment and flow control BMPs/facilities. Permittees shall implement appropriate maintenance action(s) in accordance with the adopted maintenance standards. The inspection program shall be implemented by qualified personnel.

Permittees may reduce the inspection frequency based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with G19 – *Certification and Signature*.

ii. Each Permittee shall spot check potentially damaged stormwater treatment and flow control BMPs/facilities after major storm events (24-hour storm event with a 10 year or greater recurrence interval). If spot checks indicate widespread damage/maintenance needs, inspect all stormwater treatment and flow control BMPs/facilities that may be affected. Conduct repairs or take appropriate maintenance action in accordance with maintenance standards established above, based on the results of the inspections.

iii. Each Permittee shall continue to inspect all catch basins and inlets owned or operated by the Permittee by December 31, 2025 and every two years after.[35] Clean catch basins if the inspection indicates cleaning is needed to comply with maintenance standards established in the *Stormwater Management Manual for Western Washington.* Decant water shall be disposed of in accordance with Appendix 6 – *Street Waste Disposal*.

The following alternatives to the standard approach of inspecting all catch basins every two years may be applied to all or portions of the system:

(a) The catch basin inspection schedule of every two years may be changed as appropriate to meet the maintenance standards based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records for catch basins, the Permittee may substitute written statements to document a specific, less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experiences and shall be certified in accordance with G19 – *Certification and Signature*.

(b) Inspections every two years may be conducted on a "circuit basis" whereby 25% of catch basins and inlets within each circuit are inspected to identify maintenance needs. Include an inspection of the catch basin immediately upstream of any MS4 outfall, discharge point, or connections to public or private storm systems, if applicable. Clean all catch basins within a given circuit for which the inspection indicates cleaning is needed to comply with maintenance standards established under S5.C.9.a, above.

(c) The Permittee may clean all pipes, ditches, and catch basins and inlets within a circuit once during the Permit term. Circuits selected for this alternative must drain to a single point.

iv. Compliance with the inspection requirements in S5.C.9.c.i-iii, above, shall be determined by the presence of an established inspection program achieving at least 95% of required inspections.

[35] New Permittees shall inspect and, if needed, clean all catch basins and inlets owned or operated by the Permittee in accordance with the requirements of S5.C.7.c once during the permit term, to be completed no later than December 31, 2028 and every two years after.

d. Implement 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. No later than December 31, 2027, document the practices, policies, and procedures. Lands owned or maintained by the Permittee include but are not limited to: streets; parking lots; roads; highways; buildings; parks; open space; road rights-of-way; maintenance yards; and stormwater treatment and flow control BMPs/facilities.

   The following activities shall be addressed:

   i. Pipe cleaning.

   ii. Cleaning of culverts that convey stormwater in ditch systems.

   iii. Ditch maintenance.

   iv. Street cleaning.

   v. Road repair and resurfacing, including pavement grinding.

   vi. Snow and ice control.

   vii. Utility installation.

   viii. Pavement striping maintenance.

   ix. Maintaining roadside areas, including vegetation management.

   x. Dust control.

   xi. Application of fertilizers, pesticides, and herbicides according to the instructions for their use including reducing nutrients and pesticides and using alternatives that minimize environmental impacts.

   xii. Sediment and erosion control.

   xiii. Landscape maintenance and vegetation disposal.

   xiv. Trash and pet waste management.

   xv. Building exterior cleaning and maintenance.

      (a) For Permittee-owned buildings built or renovated between 1950-1980, update policies, practices, or procedures to include Source Control BMPs to minimize PCBs from entering the MS4. Permittees shall not discharge washdown water to the MS4 if the building is confirmed or suspected to have PCB-containing materials.

   xvi. Preparing Permittee-owned buildings for renovation or demolition.

(a) Update policies, practices, or procedures to include Source Control BMPs for building materials to prevent PCBs from entering the MS4 in preparation for and during demolition and renovations.

e. No later than July 1, 2027, develop and implement a municipal street sweeping program to focus on priority areas and times during the year that would reasonably be expected to result in the maximum water quality benefits to receiving waters. The following program elements shall be included:

i. Priority areas: Apply street sweeping program to curbed municipal streets that discharge to outfalls and meet any of the following criteria:

(a) High traffic streets, such as arterials or collectors.

(b) Streets that serve commercial or industrial land use areas.

ii. Program timing: Sweep priority areas at least once between July and September each year and at least two additional times a year as determined by the Permittee to provide additional water quality benefits. For calendar year 2027, only one sweeping event is required between July and December.

(a) Compliance during this Permit term shall be determined by records of a sweeping program designed to sweep all priority areas identified and sweeping at least 90% of priority areas each sweeping event.

(b) Permittee may document reasoning for alternative sweeping timing and frequency based on local conditions (e.g., climate) and estimated pollutant deposition quantities. Documentation shall also be based on actual maintenance experience and be certified in accordance with G19 – *Certification and Signature*.

iii. Operational Procedures: Procedures to follow equipment design performance specifications to ensure that street sweeping equipment is operated at the proper design speed with appropriate verification, and that it is properly maintained.

iv. Street Waste Disposal: Dispose of sweeper waste material in accordance with Appendix 6 – *Street Waste Disposal*.

v. Reporting: No later than March 31, 2028, submit with the Annual Report the following information about the priority areas:

(a) Priority areas swept identified on a map (i.e. streets that are considered high traffic (estimated number of vehicles served/or arterials or collectors, and streets serving commercial or industrial land use).

(b) Sweeping date(s).

(c) Sweeping frequency.

(d) Type of sweeper.

(e) Total curb miles of priority areas and curb miles swept.

(f) Approximation of street waste solids removed for each sweeping event (indicate unit of measurement and wet or dry weight, where available).

f. Implement a Stormwater Pollution Prevention Plan (SWPPP) 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 the *Industrial Stormwater General Permit* or another NPDES permit that authorizes stormwater discharges associated with the activity. SWPPPs shall include the following information, at a minimum:

i. A detailed description of the operational and structural BMPs in use at the facility and a schedule for implementation of additional BMPs when needed. BMPs selected shall be consistent with the *Stormwater Management Manual for Western Washington*, or a Phase I program approved by Ecology. The SWPPP shall be updated as needed to maintain relevancy with the facility.

ii. At minimum, annual inspections of the facility, including visual observations of discharges, to evaluate the effectiveness of the BMPs, identify maintenance needs, and determine if additional or different BMPs are needed. The results of these inspections shall be documented in an inspection report or check list.

iii. An inventory of the materials and equipment stored on-site, and the activities conducted at the facility which may be exposed to precipitation or runoff and could result in stormwater pollution.

iv. A site map showing the facility's stormwater drainage, discharge points, and areas of potential pollutant exposure.

v. A plan for preventing and responding to spills at the facility which could result in an illicit discharge.

g. Implement an ongoing training program for employees of the Permittee whose primary construction, operations, or maintenance job functions may impact stormwater quality. The training program shall address the importance of protecting water quality, operation and maintenance standards, inspection procedures, relevant SWPPPs, selecting appropriate BMPs, street sweeper operation, ways to perform their job activities to prevent or minimize impacts to water quality, and procedures for reporting water quality concerns. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements, or staffing. Permittees shall document and maintain records of training provided. The staff training records to be kept include dates, activities or course descriptions, and names and positions of staff in attendance.

h. Maintain records of the activities conducted to meet the requirements of this Section.

S6. STORMWATER MANAGEMENT PROGRAM FOR SECONDARY PERMITTEES

A. Secondary Permittees and New Secondary Permittees Coverage

This Section applies to all Secondary Permittees and all New Secondary Permittees, whether coverage under this Permit is obtained individually or as a Co-Permittee with a city, town, county, or another Secondary Permittee.

New Secondary Permittees subject to this Permit shall fully meet the requirements of this Section as modified in the footnotes in S6.D below, or as established as a condition of coverage by Ecology.

1. To the extent allowable under state, federal or local law, all components are mandatory for each Secondary Permittee covered under this Permit, whether covered as an individual Permittee or as a Co-Permittee.
2. Each Secondary Permittee shall develop and implement a Stormwater Management Program (SWMP). A SWMP is a set of actions and activities comprising the components listed in S6 and any additional actions necessary to meet the requirements of applicable TMDLs pursuant to S7 – *Compliance with Total Maximum Daily Load Requirements*. The SWMP shall be designed to reduce the discharge of pollutants from regulated small MS4s to the MEP and protect water quality.
3. Unless an alternate implementation schedule is established by Ecology as a condition of Permit coverage, the SWMP shall be developed and implemented in accordance with the schedules contained in this Section and shall be fully developed and implemented no later than four and one-half years from the initial Permit coverage date. Secondary Permittees that are already implementing some or all of the required SWMP components shall continue implementation of those components.
4. Secondary Permittees may implement parts of their SWMP in accordance with the schedule for cities, towns, and counties in S5, provided they have signed a memorandum of understanding or other agreement to jointly implement the activity or activities with one or more jurisdictions listed in S1.D.2.a or S1.D.2.b and submitted a copy of the agreement to Ecology.
5. Each Secondary Permittee shall prepare written documentation of the SWMP, called the SWMP Plan. The SWMP Plan shall be updated annually to include a description of program activities for the upcoming calendar year and shall be submitted with the Annual Report.

B. Coordination

Secondary Permittees shall coordinate stormwater-related policies, programs, and projects within a watershed and interconnected MS4s. Where relevant and appropriate, the SWMP shall coordinate among departments of the Secondary Permittee to ensure compliance with the terms of this Permit.

C. Legal Authority

To the extent allowable under state law and federal law, each Secondary Permittee shall be able to demonstrate that they can operate pursuant to legal authority which authorizes or enables the Secondary Permittee to control discharges to and from MS4s owned or operated by the Secondary Permittee.

This legal authority may be a combination of statutes, ordinances, permits, contracts, orders, interagency agreements, or similar instruments.

D. Stormwater Management Program for Secondary Permittees

The SWMP for Secondary Permittees shall include the following components:

1. Public Education and Outreach

Each Secondary Permittee shall implement the following stormwater education strategies:

a. Storm drain inlets owned or operated by the Secondary Permittee that are located in maintenance yards, in parking lots, along sidewalks, and at pedestrian access points shall be clearly labeled with a message similar to "Dump no waste – Drains to waterbody."[36]

   As identified during visual inspection and regular maintenance of storm drain inlets per the requirements of S6.D.3.d and S6.D.6.a.i, below, or as otherwise reported to the Secondary Permittee, any inlet having a label that is no longer clearly visible and/or easily readable shall be re-labeled within 90 days.

b. Each year beginning no later than three years from the initial date of Permit coverage, public ports, colleges, and universities shall distribute educational information to tenants and residents on the impact of stormwater discharges on receiving waters, and steps that can be taken to reduce pollutants in stormwater runoff. Distribution may be by hard copy or electronic means. Appropriate topics may include:

[36]New Secondary Permittees shall label all inlets as described in S6.D.1.a no later than four years from the initial date of permit coverage.

i. How stormwater runoff affects local water bodies.

ii. Proper use and application of pesticides and fertilizers.

iii. Benefits of using well-adapted vegetation.

iv. Alternative equipment washing practices, including cars and trucks that minimize pollutants in stormwater.

v. Benefits of proper vehicle maintenance and alternative transportation choices; proper handling and disposal of vehicle wastes, including the location of hazardous waste collection facilities in the area.

vi. Hazards associated with illicit connections and illicit discharges.

vii. Benefits of litter control of pet waste.

viii. Source control BMPs for building materials to reduce pollution to stormwater including, but not limited to, stormwater pollution from PCB-containing materials.

2. Public Involvement and Participation

Each year, no later than May 31, each Secondary Permittee shall:

a. Make the annual report available on the Permittee's website; and

b. Make available on the Permittee's website, the latest updated version of the SWMP Plan.

3. Illicit Discharge Detection and Elimination

Each Secondary Permittee shall:

a. From the initial date of Permit coverage, comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Secondary Permittee is located that govern non-stormwater discharges.

b. Implement appropriate policies prohibiting illicit discharges,[37] and an enforcement plan to ensure compliance with illicit discharge policies.[38] These policies shall address, at a minimum: illicit connections, non-stormwater discharges, including spills of hazardous materials, and improper disposal of pet waste and litter. Policies shall be revised, if necessary, to meet the requirements of this Section no later than July 1, 2027.

   i. *Allowable discharges*: The policies do not need to prohibit the following categories of non-stormwater discharges:

      (a) Diverted stream flows

      (b) Rising groundwaters

      (c) Uncontaminated groundwater infiltration (as defined at 40 CFR 35.2005(b)(20))

      (d) Uncontaminated pumped groundwater

      (e) Foundation drains

      (f) Air conditioning condensation

      (g) Irrigation water from agricultural sources that is commingled with urban stormwater

      (h) Springs

      (i) Uncontaminated water from crawl space pumps

      (j) Footing drains

      (k) Flows from riparian habitats and wetlands

      (l) Discharges from emergency firefighting activities in accordance with S2 – *Authorized Discharges*

      (m) Non-stormwater discharges authorized by another NPDES or State Waste Discharge Permit

[37]New Secondary Permittees shall develop and implement appropriate policies prohibiting illicit discharges and identify possible enforcement mechanisms as described in S6.D.3.b no later than one year from the initial date of permit coverage.

[38]New Secondary Permittees shall develop and implement an enforcement plan as described in S6.D.3.b no later than 18 months from the initial date of permit coverage.

ii. *Conditionally allowable discharges*: The policies may allow the following categories of non-stormwater discharges only if the stated conditions are met and such discharges are allowed by local codes:

(a) Discharges from potable water sources including, but not limited to, water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges shall be dechlorinated to a total residual chlorine concentration of 0.1 ppm or less, pH-adjusted if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments in the MS4.

(b) Discharges from lawn watering and other irrigation runoff, including from reclaimed water sources. These discharges shall be minimized through, at a minimum, public education activities and water conservation efforts conducted by the Secondary Permittee and/or the local jurisdiction.

(c) Discharges from swimming pools, spas, and hot tubs. The discharges shall be dechlorinated/debrominated to a total residual concentration of 0.1 ppm or less, free from sodium chloride, pH-adjusted and reoxygenated if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments in the MS4. Discharges shall be thermally controlled to prevent an increase in temperature of the receiving water. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.

(d) Street and sidewalk wash water, water used to control dust. The Secondary Permittee shall reduce these discharges through, at a minimum, public education activities and/or water conservation efforts conducted by the Secondary Permittee and/or the local jurisdiction. To avoid washing pollutants into the MS4, the Secondary Permittee shall minimize the amount of street wash and dust control water used.

(e) Routine external building washdown that does not use detergents for buildings built before 1950 and after 1980. These discharges shall be reduced through, at minimum, public education activities or water conservation efforts, or both.

Commercial, industrial, and multi-story residential structures constructed or renovated between the years 1950 and 1980 (i.e. those most likely to have PCB containing building materials), shall be assessed for PCB-containing materials consistent with *How to Find PCBs in Building Materials* (Ecology, 2024; Publication No. 22-040-024) prior to routine building washdown to the MS4. Structures confirmed or suspected to have PCB-containing materials shall not discharge washdown water to the MS4. Structures built between 1950-1980, without PCB-containing materials, may proceed with routine building washdown (without detergents) as described above.

(f) Other non-stormwater discharges shall be in compliance with the requirements of a pollution prevention plan reviewed by the Permittee which addresses control of such discharges.

iii. The Secondary Permittee shall address any category of discharges in (i) or (ii), above, if the discharge is identified as a significant source of pollutants to waters of the State.

c. Maintain a storm sewer system map showing the locations of all known MS4 outfalls and discharge points, labeling the receiving waters (other than groundwater) and delineating the areas contributing runoff to each outfall and discharge point. Make the map (or completed portions of the map) available on request to Ecology and to the extent appropriate to other Permittees.

i. No later than December 31, 2026, the required format for mapping is an electronic format with fully described mapping standards.[39]

ii. No later than March 31, 2027, Permittees shall submit locations of all known MS4 outfalls according to the standard templates and format provided in the Annual Report. This reporting shall include the size and material of the outfalls.

d. Conduct field inspections and visually inspect for illicit discharges at all known MS4 outfalls and discharge points. Visually inspect at least one third (on average) of all known outfalls and discharge points each year beginning no later than two years from the initial date of Permit coverage. Implement procedures to identify and remove any illicit discharges. Keep records of inspections and follow-up activities.

[39]New Secondary Permittees shall meet the requirements of S6.D.3.c no later than four and one-half years from the initial date of permit coverage.

e. Implement a spill response plan that includes coordination with a qualified spill responder.[40]

f. No later than two years from initial date of Permit coverage, provide staff training or coordinate with existing training efforts to educate staff on proper BMPs for preventing illicit discharges, including spills. Train all Secondary Permittee staff who, as part of their normal job responsibilities, have a role in preventing such illicit discharges.

4. Construction Site Stormwater Runoff Control

From the initial date of Permit coverage, each Secondary Permittee shall:

a. Comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Secondary Permittee is located that govern construction phase stormwater pollution prevention measures.

b. Ensure that all construction projects under the functional control of the Secondary Permittee which require a construction stormwater permit obtain coverage under the NPDES *Construction Stormwater General Permit* or an individual NPDES permit prior to discharging construction related stormwater.

c. Coordinate with the local jurisdiction regarding projects owned or operated by other entities which discharge into the Secondary Permittee's MS4, to assist the local jurisdiction with achieving compliance with all relevant ordinances, rules, and regulations of the local jurisdiction(s).

d. Provide training or coordinate with existing training efforts to educate relevant staff in erosion and sediment control BMPs and requirements or hire trained contractors to perform the work.

e. Coordinate, as requested, with Ecology or the local jurisdiction to provide access for inspection of construction sites or other land disturbances which are under the functional control of the Secondary Permittee during land disturbing activities and/or construction period.

[40]New Secondary Permittees shall develop and implement a spill response plan as described in S6.D.3.e no later than four and one-half years from the initial date of permit coverage.

5. Post-Construction Stormwater Management for New Development and Redevelopment

From the initial date of Permit coverage, each Secondary Permittee shall:

a. Comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Secondary Permittee is located that govern post-construction stormwater pollution prevention measures.

b. Coordinate with the local jurisdiction regarding projects owned or operated by other entities which discharge into the Secondary Permittee's MS4 to assist the local jurisdiction with achieving compliance with all relevant ordinances, rules, and regulations of the local jurisdiction(s).

6. Pollution Prevention and Good Housekeeping for Municipal Operations

Each Secondary Permittee shall:

a. Implement a municipal operation and maintenance (O&M) plan to minimize stormwater pollution from activities conducted by the Secondary Permittee. The O&M Plan shall include appropriate pollution prevention and good housekeeping procedures for all of the following operations, activities, and/or types of facilities that are present within the Secondary Permittee's boundaries and under the functional control of the Secondary Permittee.[41] The O&M Plan Shall be updated, as needed, no later than July 1, 2027.

   i. *Stormwater collection and conveyance systems* including catch basins, stormwater pipes, open channels, culverts, and stormwater treatment and flow control BMPs/facilities. The O&M Plan shall address, at a minimum: scheduled inspections and maintenance activities including cleaning and proper disposal of waste removed from the system. Secondary Permittees shall properly maintain stormwater collection and conveyance systems owned or operated by the Secondary Permittee and annually inspect and maintain all stormwater facilities to ensure facility function.

   Secondary Permittees shall establish maintenance standards that are as protective or more protective of facility function than those specified in the *Stormwater Management Manual for Western Washington*. Secondary Permittees shall review their maintenance standards to ensure they are consistent with the requirements of this Section.

[41]New Secondary Permittees shall develop and implement the operation and maintenance plan described in S6.D.6.a no later than three years from initial date of permit coverage.

Secondary Permittees shall conduct spot checks of potentially damaged permanent stormwater treatment and flow control BMPs/facilities following major storm events (24-hour storm event with a 10-year or greater recurrence interval).

ii. *Roads, highways, and parking lots*. The O&M Plan shall address, at a minimum: deicing, anti-icing, and snow removal practices; snow disposal areas; material (e.g., salt, sand, or other chemical) storage areas; and all-season BMPs to reduce road and parking lot debris and other pollutants from entering the MS4.

iii. *Vehicle fleets*. The O&M Plan shall address, at a minimum: storage, washing, and maintenance of Secondary Permittee vehicle fleets; and fueling facilities. Secondary Permittees shall conduct all vehicle and equipment washing and maintenance in a self-contained covered building or in designated wash and/or maintenance areas.

iv. *External building maintenance*. The O&M Plan shall address, at a minimum: building exterior cleaning and maintenance including cleaning, washing, painting; maintenance and management of dumpsters; and other maintenance activities. For buildings owned by the Secondary Permittee and built or renovated between 1950 and 1980, the O&M Plan shall include building material assessment for PCBs consistent with *How to Find and Address PCBs in Building Materials* guidance (Ecology, 2024; Publication No. 22-040-024) prior to exterior building washdown to the MS4. Structures confirmed or suspected to have PCB-containing materials shall not discharge washdown water to the MS4.

v. *Preparing Permittee-owned buildings for renovation or demolition.* The O&M Plan shall address Source Control BMPs for building materials to prevent PCBs from entering the MS4 in preparation for and during demolition and renovations.

vi. *Parks and open space*. The O&M Plan shall address, at a minimum: proper application of fertilizer, pesticides, and herbicides; sediment and erosion control; BMPs for landscape maintenance and vegetation disposal; and trash and pet waste management.

vii. *Material storage facilities and heavy equipment maintenance or storage yards*. Secondary Permittees shall develop and implement a Stormwater Pollution Prevention Plan to protect water quality at each of these facilities owned or operated by the Secondary Permittee and not covered under the *Industrial Stormwater General Permit* or under another NPDES

permit that authorizes stormwater discharges associated with the activity.

viii. *Other facilities* that would reasonably be expected to discharge contaminated runoff. The O&M Plan shall address proper stormwater pollution prevention practices for each facility.

b. From the initial date of Permit coverage, Secondary Permittees shall also have permit coverage for all facilities operated by the Secondary Permittee that are required to be covered under the *Industrial Stormwater General Permit* or another NPDES permit that authorizes discharges associated with the activity.

c. The O&M Plan shall include sufficient documentation and records as necessary to demonstrate compliance with the O&M Plan requirements in S6.D.6.a(i) through (viii), above.

d. No later than three years from the initial date of Permit coverage, Secondary Permittees shall implement a program designed to train all employees whose primary construction, operations, or maintenance job functions may impact stormwater quality. The training shall address:

i. The importance of protecting water quality.

ii. The requirements of this Permit.

iii. Operation and maintenance requirements.

iv. Inspection procedures.

v. Ways to perform their job activities to prevent or minimize impacts to water quality.

vi. Procedures for reporting water quality concerns, including potential illicit discharges (including spills).

S7. COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS

The following requirements apply if an applicable TMDL is approved for stormwater discharges from MS4s owned or operated by the Permittee. Applicable TMDLs are TMDLs which have been approved by EPA on or before the issuance date of this Permit or prior to the date that Ecology issues coverage under this Permit, whichever is later.

A. TMDL Specific Requirements

1. For applicable TMDLs listed in Appendix 2, affected Permittees shall comply with the specific requirements identified in Appendix 2. Each Permittee shall keep records of all actions required by this Permit that are relevant to applicable TMDLs within their jurisdiction. The status of the TMDL implementation shall be included as part of the annual report submitted to Ecology. Each annual report shall include a summary of relevant SWMP and Appendix 2 activities conducted in the TMDL area to address the applicable TMDL parameter(s).
2. For applicable TMDLs not listed in Appendix 2, compliance with this Permit shall constitute compliance with those TMDLs.

S8. MONITORING AND ASSESSMENT

A. Regional Status and Trends Monitoring

1. All Permittees that chose S8.A.2 Regional Status and Trends Monitoring Option in the *Phase II Western Washington Municipal Stormwater Permit*, August 1, 2019 – July 31, 2024, shall make a one-time payment into the Stormwater Action Monitoring (SAM) collective fund to implement regional small streams and marine nearshore areas status and trends monitoring in Puget Sound or, urban streams in the Lower Columbia River basin. This payment is due on or before December 1, 2024. Submit payment amount according to Section S8.D, below.
2. All City and County Permittees covered under the *Phase II Western Washington Municipal Stormwater Permit*, August 1, 2019 – July 31, 2024, except the Cities of Aberdeen and Centralia, shall notify Ecology in writing which of the following two options for regional status and trends monitoring (S8.A.2.a or S8.A.2.b) the Permittee chooses to carry out during this Permit term. The written notification with G19 signature is due to Ecology no later than December 1, 2024. Either option will fully satisfy the Permittee's obligations under this Section (S8.A.2). Each Permittee shall select a single option for this Permit term.

a. Make annual payments into a Stormwater Action Monitoring (SAM) collective fund to implement regional receiving water status and trends monitoring of either: small streams and marine nearshore areas in Puget Sound, or urban streams in Clark and Cowlitz Counties in the Lower Columbia River basin, depending on the Permittee's location. The annual payments into the collective fund are due on or before August 15 each year beginning in 2025. Submit payments according to Section S8.D, below.

Or

b. Conduct stormwater discharge monitoring per the requirements in Section S8.C.

B. Stormwater Management Program (SWMP) Effectiveness and Source Identification Studies

1. All Permittees that chose S8.B Effectiveness Studies Option in the *Phase II Western Washington Municipal Stormwater Permit,* August 1, 2019 – July 31, 2024, shall make a one-time payment into the collective fund for Stormwater Action Monitoring (SAM) to implement effectiveness studies and source identification studies. The payment is due on or before December 1, 2024. Submit payment according to Section S8.D, below.
2. All City and County Permittees covered under the *Phase II Western Washington Municipal Stormwater Permit*, August 1, 2019 – July 31, 2024, shall notify Ecology in writing which of the following two options (S8.B.2.a or S8.B.2.b) for effectiveness and source identification studies the Permittee chooses to carry out during this Permit term. The written notification with G19 signature is due to Ecology no later than December 1, 2024. Either option will fully satisfy the Permittee's obligations under this Section (S8.B.2). Each Permittee shall select a single option for this Permit term.

   a. Make annual payments into a SAM collective fund to implement effectiveness and source identification studies. The annual payments into the collective fund are due on or before August 15 each year beginning in 2025. Submit payments according to Section S8.D, below.

   Or

   b. Conduct stormwater discharge monitoring per the requirements in Section S8.C.

3. All Permittees shall provide information as requested for effectiveness and source identification studies that are under contract with Ecology as active Stormwater Action Monitoring (SAM) projects. These requests will be limited to records of SWMP activities and associated data tracked and/or maintained in accordance with S5 – *Stormwater Management Program for Cities, Towns, and Counties* and/or S9 – *Reporting Requirements*. A maximum of three requests during the Permit term from the SAM Coordinator will be transmitted to the Permittee's permit coordinator via Ecology's regional permit manager. The Permittee shall have 90 days to provide the requested information.

C. Stormwater Discharge Monitoring.

1. This Section applies only to Permittees who choose to conduct stormwater discharge monitoring per S8.A.2.b and/or S8.B.2.b in lieu of participation in the regional status and trends monitoring and/or effectiveness and source identification studies. These Permittees shall conduct monitoring in accordance with Appendix 9 and an Ecology-approved Quality Assurance Project Plan (QAPP) as follows:

   a. Permittees who choose the option to conduct stormwater discharge monitoring for either S8.A.2 or S8.B.2 shall monitor three independent discharge locations.

      Permittees who choose the option to conduct stormwater discharge monitoring for both S8.A.2 and S8.B.2 shall conduct this monitoring at a total of six locations; at least four locations shall be independent (one location may be nested in another basin).

   b. No later than February 1, 2025, each Permittee shall submit to Ecology a draft stormwater discharge monitoring QAPP for review and approval. The QAPP shall be prepared in accordance with the requirements in Appendix 9. The final QAPP shall be submitted to Ecology for approval as soon as possible following finalization, and before August 15, 2025 or within 60 days of receiving Ecology's comments on the draft QAPP (whichever is later).

   c. Flow monitoring shall begin no later than October 1, 2025, or within 30 days of receiving Ecology's approval of the final QAPP (whichever is later). Stormwater discharge monitoring shall be fully implemented no later than October 1, 2026.

   d. Data and analyses shall be reported annually in accordance with the Ecology-approved QAPP. Each Permittee shall enter into the Department's Environmental Information Management (EIM) database all water and solids concentration data collected pursuant to Appendix 9.

i. Within 60 days of completing the study, or no later than March 31, 2029, publish a final report with the results of the study and recommended future actions based on findings, include a summary of results.

D. Payments into the Stormwater Action Monitoring Collective Fund.

1. This Section applies to all Permittees who choose to make annual payments into the SAM collective funds for S8.A *Regional Status and Trends Monitoring* and/or S8.B *Effectiveness and Source Identification Studies*.
2. Permittees submitting payment for S8.A.1. or S8.B.1., payment amounts are listed in Appendix 11 of the WWA Phase II Municipal Stormwater Permit, August 1, 2019– July 31, 2024.
3. Each Permittee's S8.A.2.a and S8.B.2.a payment amounts are listed in Appendix 11 and in the invoices that will be sent to the Permittee approximately three months in advance of each payment due date. Mail payments according to the instructions in the invoice.

S9. REPORTING & RECORDKEEPING REQUIREMENTS

A. Annual Report Submittal

1. No later than March 31 of each year beginning in 2025, each Permittee shall submit an Annual Report. The reporting period for the first Annual Report will be from January 1, 2024, through December 31, 2024. The reporting period for all subsequent Annual Reports will be the previous calendar year unless otherwise specified.
2. Permittees shall submit Annual Reports electronically using Ecology's Water Quality Permitting Portal (WQWebPortal) available on Ecology's website.

B. Records Retention

Each Permittee is required to keep all records related to this Permit and the SWMP for at least five years after the expiration date of this Permit.

C. Records Available to the Public

Each Permittee shall make all records related to this Permit and the Permittee's SWMP available to the public at reasonable times during business hours. The Permittee will provide a copy of the most recent annual report to any individual or entity, upon request.

1. A reasonable charge may be assessed by the Permittee for making photocopies of records.
2. The Permittee may require reasonable advance notice of intent to review records related to this Permit.

D. Annual Report for Cities, Towns, and Counties

Each annual report shall include the following:

1. A copy of the Permittee's current Stormwater Management Program Plan (SWMP Plan), as required by S5.A.2.
2. Submittal of the annual report form as provided by Ecology pursuant to S9.A, describing the status of implementation of the requirements of this Permit during the reporting period.

3. Attachments to the annual report form including summaries, descriptions, reports, and other information as required, or as applicable, to meet the requirements of this Permit during the reporting period, or as a required submittal. Refer to Appendix 3 for annual report questions.[42]
4. If applicable, notice that the MS4 is relying on another entity to satisfy any of the obligations under this Permit.
5. Certification and signature pursuant to G19.D, and notification of any changes to authorization pursuant to G19.C.
6. A notification of any annexations, incorporations or jurisdictional boundary changes resulting in an increase or decrease in the Permittee's geographic area of Permit coverage during the reporting period.

E. Annual Report for Secondary Permittees

Each annual report shall include the following:

1. A copy of the Permittee's current Stormwater Management Program Plan (SWMP Plan), as required by S6.A.2.
2. Submittal of the annual report form as provided by Ecology pursuant to S9.A, describing the status of implementation of the requirements of this Permit during the reporting period.
3. Attachments to the annual report form including summaries, descriptions, reports, and other information as required, or as applicable, to meet the requirements of this Permit during the reporting period. Refer to Appendix 4 for annual report questions.
4. If applicable, notice that the MS4 is relying on another entity to satisfy any of the obligations under this Permit.
5. Certification and Signature pursuant to G19.D, and notification of any changes to authorization pursuant to G19.C.
6. A notification of any jurisdictional boundary changes resulting in an increase or decrease in the Secondary Permittee's geographic area of Permit coverage during the reporting period.

[42]New Permittees refer to Appendix 5 for annual report questions.

GENERAL CONDITIONS

G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this Permit shall be consistent with the terms and conditions of this Permit.

G2. PROPER OPERATION AND MAINTENANCE

The Permittee shall, at all times, properly operate and maintain all facilities and systems of collection, treatment, and control (and related appurtenances) which are installed or used by the Permittee for pollution control to achieve compliance with the terms and conditions of this Permit.

G3. NOTIFICATION OF DISCHARGE, INCLUDING SPILLS

If a Permittee has knowledge of a discharge, including spills, into or from a MS4 which could constitute a threat to human health, welfare, or the environment, the Permittee shall:

A. Take appropriate action to correct or minimize the threat to human health, welfare and/or the environment.

B. Notify the Ecology regional office and other appropriate spill response authorities immediately but in no case later than within 24 hours of obtaining that knowledge.

C. Immediately report spills or other discharges which might cause bacterial contamination of marine waters, such as discharges resulting from broken sewer lines and failing onsite septic systems, to the Ecology regional office and to the Washington State Department of Health, Shellfish Program.

D. Immediately report spills or discharges of oils or hazardous substances to the Ecology regional office and to the Washington Emergency Management Division at 1-800-258-5990.

G4. BYPASS PROHIBITED

The intentional bypass of stormwater from all or any portion of a stormwater treatment BMP whenever the design capacity of the treatment BMP is not exceeded, is prohibited unless the following conditions are met:

A. Bypass is: (1) unavoidable to prevent loss of life, personal injury, or severe property damage; or (2) necessary to perform construction or maintenance-related activities essential to meet the requirements of the *Clean Water Act* (CWA); and

B. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated stormwater, or maintenance during normal dry periods.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

G5. RIGHT OF ENTRY

The Permittee shall allow Ecology, or an authorized representative of Ecology (including an authorized contractor acting as a representative of Ecology), upon the presentation of credentials and such other documents as may be required by law, to:

A. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records shall be kept under the conditions of this Permit;

B. To have access to, and copy at reasonable cost and at reasonable times, any records that shall be kept under the terms of the Permit;

C. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit;

D. Sample or monitor at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

G6. DUTY TO MITIGATE

The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this Permit which has a reasonable likelihood of adversely affecting human health or the environment.

G7. PROPERTY RIGHTS

This Permit does not convey any property rights of any sort, or any exclusive privilege.

G8. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in the Permit shall be construed as excusing the Permittee from compliance with any other applicable federal, state, or local statutes, ordinances, or regulations.

G9. MONITORING

A. Representative Sampling

Samples and measurements taken to meet the requirements of this Permit shall be representative of the volume and nature of the monitored discharge, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

B. Records Retention

The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this Permit, and records of all data used to complete the application for this Permit, for a period of at least five years. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Ecology. On request, monitoring data and analysis shall be provided to Ecology.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates and times the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Test Procedures

All sampling and analytical methods used to meet the monitoring requirements in this Permit shall conform to the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136, unless otherwise specified in this Permit or approved in writing by Ecology.

E. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations or at a minimum frequency of at least one calibration per year. Calibration records should be maintained for a minimum of three years.

F. Lab Accreditation

The Permittee shall ensure all monitoring data that it is required to submit to Ecology under this Permit is prepared by a laboratory registered or accredited under the provisions of Accreditation of Environmental Laboratories, Chapter 173-50 WAC. Flow, temperature, and settleable solids are exempt from this requirement. Conductivity, turbidity, and pH are also exempt from this requirement, unless the laboratory must be registered or accredited for any other parameter. Quick methods of field detection of pollutants are exempted from this requirement when the purpose of the sampling is identification and removal of a suspected illicit discharge.

G. Additional Monitoring

Ecology may establish specific monitoring requirements in addition to those contained in this Permit by administrative order or Permit modification.

G10. REMOVED SUBSTANCES

With the exception of decant from street waste vehicles, the Permittee shall not allow collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of stormwater to be resuspended or reintroduced to the MS4 or to waters of the State. Decant from street waste vehicles resulting from cleaning stormwater facilities may be reintroduced only when other practical means are not available and only in accordance with the *Street Waste Disposal* guidelines in Appendix 6. Solids generated from maintenance of the MS4 may be reclaimed, recycled, or reused when allowed by local codes and ordinances. Soils that are identified as contaminated pursuant to Chapter 173-350 WAC shall be disposed at a qualified solid waste disposal facility (see Appendix 6).

G11. SEVERABILITY

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit shall not be affected thereby.

G12. REVOCATION OF COVERAGE

The director may terminate coverage under this General Permit in accordance with Chapter 43.21B RCW and Chapter 173-226 WAC. Cases where coverage may be terminated include, but are not limited to the following:

A. Violation of any term or condition of this General Permit;

B. Obtaining coverage under this General Permit by misrepresentation or failure to disclose fully all relevant facts;

C. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;

D. A determination that the permitted activity endangers human health or the environment, or contributes significantly to water quality standards violations;

E. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090; and

F. Nonpayment of permit fees assessed pursuant to RCW 90.48.465.

Revocation of coverage under this General Permit may be initiated by Ecology or requested by any interested person.

G13. TRANSFER OF COVERAGE

This Permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the Permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

G14. GENERAL PERMIT MODIFICATION AND REVOCATION

This General Permit may be modified, revoked and reissued, or terminated in accordance with the provisions of WAC 173-226-230. Grounds for modification, revocation and reissuance, or termination include, but are not limited to, the following:

A. A change occurs in the technology or practices for control or abatement of pollutants applicable to the category of dischargers covered under this General Permit;

B. Effluent limitation guidelines or standards are promulgated pursuant to the CWA or Chapter 90.48 RCW, for the category of dischargers covered under this General Permit;

C. A water quality management plan containing requirements applicable to the category of dischargers covered under this General Permit is approved;

D. Information is obtained which indicates that cumulative effects on the environment from dischargers covered under this General Permit are unacceptable; or

E. Changes in state law that reference this Permit.

G15. REPORTING A CAUSE FOR MODIFICATION OR REVOCATION

A Permittee who knows or has reason to believe that any activity has occurred, or will occur, which would constitute cause for modification or revocation and reissuance under General Condition G12, G14, or 40 CFR 122.62 shall report such plans, or such information, to Ecology so that a decision can be made on whether action to modify, or revoke and reissue, this Permit will be required. Ecology may then require submission of a new or amended application. Submission of such application does not relieve the Permittee of the duty to comply with this Permit until it is modified or reissued.

G16. APPEALS

A. The terms and conditions of this General Permit, as they apply to the appropriate class of dischargers, are subject to appeal within thirty days of issuance of this General Permit in accordance with Chapter 43.21B RCW, and Chapter 173-226 WAC.

B. The terms and conditions of this General Permit, as they apply to an individual discharger, are appealable in accordance with Chapter 43.21B RCW within thirty days of the effective date of coverage of that discharger. Consideration of an appeal of General Permit coverage of an individual discharger is limited to the General Permit's applicability or non-applicability to that individual discharger.

C. The appeal of General Permit coverage of an individual discharger does not affect any other dischargers covered under this General Permit. If the terms and conditions of this General Permit are found to be inapplicable to any individual discharger(s), the matter shall be remanded to Ecology for consideration of issuance of an individual permit or permits.

D. Modifications of this Permit are appealable in accordance with Chapter 43.21B RCW and Chapter 173-226 WAC.

G17. PENALTIES

40 CFR 122.41(a)(2) and (3), 40 CFR 122.41(j)(5), and 40 CFR 122.41(k)(2) are hereby incorporated into this Permit by reference.

G18. DUTY TO REAPPLY

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. The Permittee shall apply for permit renewal at least 180 days prior to the specified expiration date of this Permit.

G19. CERTIFICATION AND SIGNATURE

All formal submittals to Ecology shall be signed and certified.

A. All permit applications shall be signed by either a principal executive officer or ranking elected official.

B. All formal submittals required by this Permit shall be signed by a person described, above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described, above, and submitted to Ecology; and

2. The authorization specifies either an individual or a position having responsibility for the overall development and implementation of the stormwater management program. A duly authorized representative may thus be either a named individual or any individual occupying a named position.

C. Changes to authorization. If an authorization under condition G19.B.2 is no longer accurate because a different individual or position has responsibility for the overall development and implementation of the stormwater management program, a new authorization satisfying the requirements of condition G19.B.2 shall be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Certification. Any person signing a formal submittal under this Permit shall make the following certification:

"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 gathered and evaluated 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 willful violations."

G20. NON-COMPLIANCE NOTIFICATION

In the event a Permittee is unable to comply with any of the terms and conditions of this Permit, the Permittee shall:

A. Notify Ecology of the failure to comply with the permit terms and conditions in writing within 30 days of becoming aware that the non-compliance has occurred. The written notification shall include all of the following:

1. A description of the non-compliance, including dates.
2. Beginning and end dates of the non-compliance, and if the compliance has not been corrected, the anticipated date of correction.
3. Steps taken or planned to reduce, eliminate, or prevent reoccurrence of the non-compliance.

B. Take appropriate action to stop or correct the condition of non-compliance.

G21. UPSETS

Permittees shall meet the conditions of 40 CFR 122.41(n) regarding "Upsets." The conditions are as follows:

A. ***Definition***. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

B. ***Effect of an upset***. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph (C) of this condition are met. Any determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, will not constitute final administrative action subject to judicial review.

C. ***Conditions necessary for demonstration of upset***. A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:

1. An upset occurred and that the Permittee can identify the cause(s) of the upset;
2. The permitted facility was at the time being properly operated;
3. The Permittee submitted notice of the upset as required in 40 CFR 122.41(l)(6)(ii)(B) (24-hour notice of noncompliance); and
4. The Permittee complied with any remedial measures required under 40 CFR 122.41(d) (Duty to Mitigate).

D. ***Burden of proof***. In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G22. DUTY TO PROVIDE INFORMATION

The Permittee shall furnish to Ecology, within a reasonable time, any information which the Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Ecology upon request, copies of records required to be kept by this permit.

G23. OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Ecology, it shall promptly submit such facts or information.

G24. OTHER REQUIREMENTS OF 40 CFR

The other requirements of 40 CFR Part 122.41 and 40 CFR Part 122.42 are incorporated in this permit by reference.

DEFINITIONS AND ACRONYMS

This Section includes definitions for terms used in the body of the Permit and in all the appendices except Appendix 1. Terms defined in Appendix 1 are necessary to implement requirements related to Appendix 1.

40 CFR means Title 40 of the Code of Federal Regulations, which is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government.

AKART means All Known, Available, and Reasonable methods of prevention, control, and Treatment. See also state *Water Pollution Control Act*, RCW 90.48.010 and RCW 90.48.520.

All Known, Available and Reasonable Methods of Prevention, Control and Treatment (AKART) refers to the state *Water Pollution Control Act*, RCW 90.48.010 and RCW 90.48.520.

Applicable TMDL means a TMDL which has been approved by EPA on or before the issuance date of this Permit, or prior to the date that Ecology issues coverage under this Permit, whichever is later.

Aqueous Film-Forming Foam (AFFF) is a type of foam used to fight liquid-fueled fires (i.e., those started by oil, gasoline, or other flammable liquids).

Beneficial Uses means uses of waters of the State which include, but are not limited to: use for domestic, stock watering, industrial, commercial, agricultural, irrigation, mining, fish and wildlife maintenance and enhancement, recreation, generation of electric power and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the State.

Best Management Practices are the schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices approved by Ecology that, when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to waters of Washington State.

BMP means Best Management Practice.

Bypass means the diversion of stormwater from any portion of a stormwater treatment facility.

Circuit means a portion of a MS4 discharging to a single point or serving a discrete area determined by traffic volumes, land use, topography, or the configuration of the MS4.

Component or **Program Component** means an element of the Stormwater Management Program listed in S5 - *Stormwater Management Program for Cities, Towns, and Counties*, S6 – *Stormwater Management Program for Secondary Permittees*, S7 – *Compliance with Total Maximum Daily Load Requirements*, or S8 – *Monitoring and Assessment*, of this Permit.

Conveyance System means that portion of the municipal separate storm sewer system designed or used for conveying stormwater.

Co-Permittee means an owner or operator of an MS4 which is in a cooperative agreement with at least one other applicant for coverage under this Permit. A Co-Permittee is an owner or operator of a regulated MS4 located within or in proximity to another regulated MS4. A Co-Permittee is only responsible for permit conditions relating to discharges from the MS4 the Co-Permittee owns or operates. See also 40 CFR 122.26(b)(1).

CWA means the federal *Clean Water Act* (formerly referred to as the federal *Water Pollution Control Act* or federal *Water Pollution Control Act Amendments of 1972*) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. (6-483 and Pub. L. 97-117, 33 U.S.C. 1251 et seq.).

Director means the Director of the Washington State Department of Ecology, or an authorized representative.

Discharge Point means the location where a discharge leaves the Permittee's MS4 through the Permittee's MS4 facilities/BMPs designed to infiltrate.

Entity means a governmental body, or a public or private organization.

EPA means the U.S. Environmental Protection Agency.

Fully Stabilized means the establishment of a permanent vegetative cover, or equivalent permanent stabilization measures (such as riprap, gabions, or geotextiles) which prevents erosion.

General Permit means a permit which covers multiple dischargers of a point source category within a designated geographical area, in lieu of individual permits being issued to each discharger.

Groundwater means water in a saturated zone or stratum beneath the surface of the land or below a surface water body. Refer to Chapter 173-200 WAC.

Hazardous Substance means any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical, or biological properties described in WAC 173-303-090 or WAC 173-303-100.

Heavy Equipment Maintenance or Storage Yard means an uncovered area where any heavy equipment, such as mowing equipment, excavators, dump trucks, backhoes, or bulldozers are washed or maintained, or where at least five pieces of heavy equipment are stored on a long-term basis.

Highway means a main public road connecting towns and cities.

Hydraulically Near means runoff from the site discharges to the sensitive feature without significant natural attenuation of flows that allows for suspended solids removal. See Appendix 7- *Determining Construction Site Sediment Damage Potential* for a more detailed definition.

Hyperchlorinated means water that contains more than 10 mg/Liter chlorine.

Illicit Connection means any infrastructure connection to the MS4 that is not intended, permitted or used for collecting and conveying stormwater or non-stormwater discharges allowed as specified in this Permit (S5.C.5 and S6.D.3). Examples include sanitary sewer connections, floor drains, channels, pipelines, conduits, inlets, or outlets that are connected directly to the MS4.

Illicit Discharge means any discharge to a MS4 that is not composed entirely of stormwater or of non-stormwater discharges allowed as specified in this Permit (S5.C.5 and S6.D.3).

Impervious Surface means a non-vegetated surface area that either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. A non-vegetated surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or stormwater areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam or other surfaces which similarly impede the natural infiltration of stormwater.

Land Disturbing Activity means any activity that results in a change in the existing soil cover (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to clearing, grading, filling and excavation. Compaction that is associated with stabilization of structures and road construction shall also be considered land disturbing activity. Vegetation maintenance practices, including landscape maintenance and gardening, are not considered land disturbing activity. Stormwater facility maintenance is not considered land disturbing activity if conducted according to established standards and procedures.

LID means Low Impact Development.

LID BMP means Low Impact Development Best Management Practices.

LID Principles means land use management strategies that emphasize conservation, use of on-site natural features, and site planning to minimize impervious surfaces, native vegetation loss, and stormwater runoff.

Low Impact Development (LID) means a stormwater and land use management strategy that strives to mimic pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration by emphasizing conservation, use of on-site natural features, site planning, and distributed stormwater management practices that are integrated into a project design.

Low Impact Development Best Management Practices (LID BMP) means distributed stormwater management practices, integrated into a project design, that emphasize pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration. LID BMPs include, but are not limited to, bioretention, rain gardens, permeable pavements, roof downspout controls, dispersion, soil quality and depth, vegetated roofs, minimum excavation foundations, and water re-use.

Material Storage Facilities means an uncovered area where bulk materials (liquid, solid, granular, etc.) are stored in piles, barrels, tanks, bins, crates, or other means.

Maximum Extent Practicable refers to paragraph 402(p)(3)(B)(iii) of the federal *Clean Water Act* which reads as follows: Permits for discharges from municipal storm sewers shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system, design, and engineering methods, and other such provisions as the Administrator or the State determines appropriate for the control of such pollutants.

MEP means Maximum Extent Practicable.

MS4 means Municipal Separate Storm Sewer System.

Municipal Separate Storm Sewer System means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

1. Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the CWA that discharges to waters of Washington State.
2. Designed or used for collecting or conveying stormwater.
3. Which is not a combined sewer.
4. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

5. Which is defined as “large” or “medium” or “small” or otherwise designated by Ecology pursuant to 40 CFR 122.26.

National Pollutant Discharge Elimination System means the national program for issuing, modifying, revoking, and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318, and 405 of the federal *Clean Water Act*, for the discharge of pollutants to surface waters of the State from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington State Department of Ecology.

Native Vegetation means vegetation comprised of plant species, other than noxious weeds, that are indigenous to the coastal region of the Pacific Northwest, and which reasonably could have been expected to naturally occur on the site. Examples include trees such as Douglas Fir, western hemlock, western red cedar, alder, big-leaf maple; shrubs such as willow, elderberry, salmonberry, and salal; and herbaceous plants such as sword fern, foam flower, and fireweed.

New Development means land disturbing activities, including Class IV General Forest Practices that are conversions from timber land to other uses; structural development, including construction or installation of a building or other structure; creation of hard surfaces; and subdivision, short subdivision and binding site plans, as defined and applied in Chapter 58.17 RCW. Projects meeting the definition of redevelopment shall not be considered new development. Refer to Appendix 1 for a definition of hard surfaces.

New Permittee means a city, town, or county that is subject to the Western Washington Municipal Stormwater General Permit and was not subject to the permit prior to August 1, 2024.

New Secondary Permittee means a Secondary Permittee that is covered under a Municipal Stormwater General Permit and was not covered by the permit prior to August 1, 2024.

NOI means Notice of Intent.

Notice of Intent (NOI) means the application for, or a request for coverage under, a General Permit pursuant to WAC 173-226-200.

Notice of Intent for Construction Activity means the application form for coverage under the *Construction Stormwater General Permit*.

Notice of Intent for Industrial Activity means the application form for coverage under the *Industrial Stormwater General Permit*.

NPDES means National Pollutant Discharge Elimination System.

Outfall means a point source as defined by 40 CFR 122.2 at the point where a discharge leaves the Permittee's MS4 and enters a surface receiving waterbody or surface receiving waters. Outfall does not include pipes, tunnels, or other conveyances which connect segments of the same stream or other surface waters and are used to convey primarily surface waters (i.e., culverts).

Overburdened Community means a geographic area where vulnerable populations face combined, multiple environmental harms and health impacts, and includes, but is not limited to, highly impacted communities.

> "Vulnerable populations" means population groups that are more likely to be at higher risk for poor health outcomes in response to environmental harms, due to:
>
> (i) Adverse socioeconomic factors, such as unemployment, high housing and transportation costs relative to income, limited access to nutritious food and adequate health care, linguistic isolation, and other factors that negatively affect health outcomes and increase vulnerability to the effects of environmental harms; and
>
> (ii) Sensitivity factors, such as low birth weight and higher rates of hospitalization.
>
> "Vulnerable populations" includes, but is not limited to:
>
> - Racial or ethnic minorities;
> - Low-income populations;
> - Populations disproportionately impacted by environmental harms; and
> - Populations of workers experiencing environmental harms.
>
> "Highly impacted community" means a community designated by the Department of Health based on cumulative impact analyses or a community located in census tracts that are fully or partially on "Indian country" as defined in 18 U.S.C. Sec. 1151.

PCBs means Polychlorinated biphenyls.

Permittee unless otherwise noted, the term "Permittee" includes city, town, or county Permittee, Co-Permittee, New Permittee, Secondary Permittee, and New Secondary Permittee.

PFAS means Per and Polyfluoroalkyl Substances

Physically Interconnected means that one MS4 is connected to another storm sewer system in such a way that it allows for direct discharges to the second system. For example, the roads with drainage systems and municipal streets of one entity are physically connected directly to a storm sewer system belonging to another entity.

Project site means that portion of a property, properties, or rights-of-way subject to land disturbing activities, new hard surfaces, or replaced hard surfaces. Refer to Appendix 1 for a definition of hard surfaces.

QAPP means Quality Assurance Project Plan.

Qualified Personnel means someone who has professional training in the aspects of stormwater management for which they are responsible and are under the functional control of the Permittee. Qualified Personnel may be staff members, contractors, or trained volunteers with professional certification. Permittees may train and certify volunteers.

Qualified Third Party means someone who has professional training in the aspects of stormwater management for which they are responsible but are hired by private entities and not under the functional control of the Permittee. Qualified Third Parties may be contractors, or consultants.

Quality Assurance Project Plan means a document that describes the objectives of an environmental study and the procedures to be followed to achieve those objectives.

RCW means the Revised Code of Washington State.

Receiving Waterbody or **Receiving Waters** means naturally and/or reconstructed naturally occurring surface water bodies, such as creeks, streams, rivers, lakes, wetlands, estuaries, and marine waters, or groundwater, to which a MS4 discharges.

Reclaimed water means water derived in any part from a wastewater with a domestic wastewater component that has been adequately and reliably treated to meet the requirements of Chapter 173-219 WAC, so that it can be used for beneficial purposes. Reclaimed water is not considered a wastewater**.**

Redevelopment means, on a site that is already substantially developed (i.e., has 35% or more of existing hard surface coverage), the creation or addition of hard surfaces; the expansion of a building footprint or addition or replacement of a structure; structural development including construction, installation or expansion of a building or other structure; replacement of hard surface that is not part of a routine maintenance activity; and land disturbing activities. Refer to Appendix 1 for a definition of hard surfaces.

Regulated Small Municipal Separate Storm Sewer System means a Municipal Separate Storm Sewer System which is automatically designated for inclusion in the Phase II stormwater permitting program by its location within an Urban Area, or by designation by Ecology and is not eligible for a waiver or exemption under S1.C.

Runoff is water that travels across the land surface and discharges to water bodies either directly or through a collection and conveyance system. See also "**Stormwater**."

SAM means Stormwater Action Monitoring.

Secondary Permittee is an operator of a regulated small MS4 which is not a city, town or county. Secondary Permittees include special purpose districts and other public entities that meet the criteria in S1.B.

Sediment/Erosion-Sensitive Feature means an area subject to significant degradation due to the effects of construction runoff, or areas requiring special protection to prevent erosion. See Appendix 7 *Determining Construction Site Sediment Damage Potential* for a more detailed definition.

Shared Water Bodies means water bodies, including downstream segments, lakes and estuaries that receive discharges from more than one Permittee.

Significant Contributor means a discharge that contributes a loading of pollutants considered to be sufficient to cause or exacerbate the deterioration of receiving water quality or instream habitat conditions.

Small Municipal Separate Storm Sewer System means an MS4 that is not defined as "large" or "medium" pursuant to 40 CFR 122.26(b)(4) & (7) or designated under 40 CFR 122.26 (a)(1)(v).

Source Control BMP means a structure or operation that is intended to prevent pollutants from coming into contact with stormwater through physical separation of areas or careful management of activities that are sources of pollutants. The SWMMWW separates source control BMPs into two types. Structural Source Control BMPs are physical, structural, or mechanical devices, or facilities, that are intended to prevent pollutants from entering stormwater. Operational BMPs are non-structural practices that prevent or reduce pollutants from entering stormwater.

Stormwater means runoff during and following precipitation and snowmelt events, including surface runoff, drainage or interflow.

Stormwater Action Monitoring (SAM) is the regional stormwater monitoring program for Washington State. This means a stormwater-focused monitoring and assessment program consisting of these components: status and trends monitoring in small streams and marine nearshore areas, stormwater management program effectiveness studies, and source identification projects. The priorities and scope for SAM are set by a formal stakeholder group that selects the studies and oversees the program's administration.

Stormwater Associated with Industrial and Construction Activity means the discharge from any conveyance which is used for collecting and conveying stormwater, which is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant, or associated with clearing, grading and/or excavation, and is required to have an NPDES permit in accordance with 40 CFR 122.26.

Stormwater Facility Retrofits means both: projects that retrofit existing treatment and/or flow control facilities; and new flow control or treatment facilities or BMPs that will address impacts from existing development.

Stormwater Management Program (SWMP) means a set of actions and activities designed to reduce the discharge of pollutants from the MS4 to the MEP and to protect water quality, and comprising the components listed in S5 (for cities, towns, and counties) or S6 (for Secondary Permittees) of this Permit and any additional actions necessary to meet the requirements of applicable TMDLs pursuant to S7 –*Compliance with TMDL Requirements*, and S8– *Monitoring and Assessment*.

Stormwater Treatment and Flow Control BMPs/Facilities means detention facilities, permanent treatment BMPs/facilities; and bioretention, vegetated roofs, and permeable pavements that help meet Appendix 1 Minimum Requirements #6 (treatment), #7 (flow control), or both.

Surface Waters includes lakes, rivers, ponds, streams, inland waters, salt waters, and all other surface waters and water courses within the jurisdiction of the State of Washington.

SWMMWW or ***Stormwater Management Manual for Western Washington*** means the technical manual published by the Department of Ecology in 2024 (Publication No. 24-10-013, 2024*).*

SWMP means Stormwater Management Program.

TMDL means Total Maximum Daily Load.

Total Maximum Daily Load (TMDL) means a water cleanup plan. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The calculation must include a margin of safety to ensure that the water body can be used for the purposes the state has designated. The calculation must also account for seasonable variation in water quality. Water quality standards are set by states, territories, and tribes. They identify the uses for each water body, for example, drinking water supply, contact recreation (swimming), and aquatic life support (fishing), and the scientific criteria to support that use. The *Clean Water Act*, Section 303, establishes the water quality standards and TMDL programs.

Tributary Conveyance means pipes, ditches, catch basins, and inlets owned or operated by the Permittee and designed or used for collecting and conveying stormwater.

UGA means Urban Growth Area.

Urban Growth Area (UGA) means those areas designated by a county pursuant to RCW 36.70A.110.

Urban Area means urban areas with a population of 50,000 or more people. Urban Areas are designated by the U.S. Census Bureau based on the most recent decennial census.

Vehicle Maintenance or Storage Facility means an uncovered area where any vehicles are regularly washed or maintained, or where at least 10 vehicles are stored.

Water Quality Standards means *Surface Water Quality Standards*, Chapter 173-201A WAC, *Groundwater Quality Standards*, Chapter 173-200 WAC, and *Sediment Management Standards*, Chapter 173-204 WAC.

Waters of the State includes those waters as defined as "waters of the United States" in 40 CFR Subpart 122.2 within the geographic boundaries of Washington State and "waters of the State" as defined in Chapter 90.48 RCW which includes lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface waters and water courses within the jurisdiction of the State of Washington.

Waters of the United States refers to the definition in 40 CFR 122.2.