Water Quality Program

Permit Submittal Electronic Certification

Permittee: KIRKLAND CITY

Permit Number: WAR045521 **Site Address:** 123 5TH AVE
KIRKLAND, WA 98033

Submittal Name: MS4 Annual Report Phase II Western

Version: 1 **Due Date:** 3/31/2026

Questionnaire

Number	Permit Section	Question	Answer
1	S9.D.6	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.	Not Applicable
2	S5.A.2; S9.D.1	Attach updated annual Stormwater Management Program Plan (SWMP Plan). (S5.A.2; S9.D.1)	Q2. SWMP Plan 2026_2_03132026133556
3	S5.A	Implemented an ongoing program to gather, track, and maintain information per S5.A.3, including costs or estimated costs of implementing the SWMP.	Yes
4	S5.A.5.b	Continued to coordinate among departments within the jurisdiction to eliminate barriers to permit compliance. (S5.A.5.b)	Yes
4a	S5.A.5.b	Attach a written description of internal coordination mechanisms. (S5.A.5.b) no later than March 31, 2026.	Q4a. Internal Coordination Mec_4a_03132026133556
5	S9.D.4	If applicable, identify other entities relied on to satisfy any of the obligations under the Permit. (S9.D.4)	Not Applicable
6	S5.C.1.a	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
12	S5.C.1.c.i	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
13	S5.C.1.c.i(a)	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
19	S5.C.2	Did you choose to adopt one or more elements of a regional program? (S5.C.2)	Yes

19a	S5.C.2	If yes, list the elements, and the regional program.	1. Puget Sound Starts Here (PSSH)Clean Car Care campaign including sidebar ads on Seattle Times website, a clean car care ad in the Seattle Kraken's yearbook, and soliciting ethnic media coverage of the Piper's Creek Salmon Festival in Spanish and Chinese media. Creation of simplified 1-page documents on clean car care translated in to Spanish, Korean, and Vietnamese, and website revisions to bring clean car are uder one holistic umbrella. 2. Participation on both the Puget Sound Starts Here Steering Committee and the Stormwater Outreach for Regional Municipalities (STORM) Steering Committee.
20	S5.C.2	Attach a description of general awareness efforts conducted, including your target audiences and subject areas, per S5.C.2.a.i.	Q20. General Awareness 2025_20_03132026133711
21	S5.C.2.a.ii(b)	Developed a behavior change campaign that is tailored to the community in accordance with S5.C.2.a.ii(b)? (Required no later than July 1, 2025)	Yes
21a	S5.C.2.a.ii(b)	Attach the strategy and schedule developed in accordance with S5.C.2.a.ii.(b).	Q21a. Behavior Change Campaign_21a_03132026133711
22	S5.C.2.a.ii(c)	Began implementing strategy outlined in S.5.C.2.a.ii(b). (S5.C.2.a.ii(c)) – Required by September 1, 2025)	Yes
24	S5.C.2.a.iii	Provided, partnered, or promoted stewardship opportunities to encourage resident participation in activities such as those described in S5.C.2.a.iii.	Yes
24a	S5.C.2.a.iii	Attach a list of stewardship opportunities provided.	Q24a. Stewardship Opportunitie_24a_03132026133712

25	S5.C.3.a	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.	Opportunity is provided for public input regularly. Interested parties can provide feedback at any time at Kirkland's online reporting portal, Our Kirkland. Our various plans are posted to Kirkland's website, comments are requested via Facebook, Instagram, e-newsletter, and press release. Google translate is available for nine languages on the City of Kirkland website.

25a	S5.C.3.a.i	Describe specific public involvement and participation opportunities provided to overburdened communities and specifically, highly impacted communities. (S5.C.3.a.i)	Kirkland does not have an overburdened community, as defined by the HEAL act and the CCA, within city limits. However, some areas of Kirkland do score as high as an 8 on the Washington Environmental Health Disparities Map. We have addressed this through our program implementation wherever possible. Examples include targeting advertising dollars for our tree rebate and certificate program to areas which have an overlap of lower canopy cover and lower income, and translating our public-facing signage, online content, and collateral into Spanish, Chinese, Russian, and Portuguese wherever possible. We continue to use our DEIB document checklist to review any newly created materials, which in addition to reviewing the need for translation take into account compatibility with screen readers and the needs of people with colorblindness. We also seek to follow best practices for hosting accessible events, which includes visual and audio guidance, as well as considerations for physical accessibility, including transportation needs. The survey for the natural yard care behavior change campaign is currently in distribution to Kirkland residents, and translated into 7 languages in an effort to meet the needs of our local community.
26	S5.C.3.	Posted the updated SWMP Plan and latest annual report on your website no later than May 31. (S5.C.3.b)	Yes

26a	S5.C.3.	List the website address in Comments field.	https://www.kirklandwa.gov/Government/Departments/Public-Works-Department/Storm-Surface-Water/Stormwater-Policies-and-Regulations
27	S5.C.4.	Maintained an electronic map of the MS4 including the requirements listed in S5.C.4.?	Yes
28	S5.C.4.b.i	Attach file that lists all known outfall locations, sizes, and materials no later than March 31, 2026. The data shall be in one of the following formats, per S5.B.3.a.viii: • ESRI file geodatabase template (feature class in a .gdb): https://fortress.wa.gov/ecy/ezshare/wq/permits/MS4GP.Mapoutfall.prelim.gdb.zip • Shapefile template: https://fortress.wa.gov/ecy/ezshare/wq/permits/MS4GP.Mapoutfall.prelim.shape.zip • ArcGIS Online template (sharing template a or b via ArcGIS Online). • Excel template: https://fortress.wa.gov/ecy/ezshare/wq/permits/MS4GP.Mapoutfall.prelim.excel.xlsx	Q28. MS4 Outfalls Kirkland 202_28_03162026074354
32	S5.C.5.b	Informed public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste. (S5.C.5.b)	Yes

32a	S5.C.5.b	Describe actions in Comments field. (S5.C.5.b)	•City trains all field staff including Police, Fire, Parks, and Planning (including Code Enforcement), Construction Inspectors, and all utility staff. Online training is deployed for all staff and audience specific training for Fire and Police. •Other education that focuses on IDDE messaging include the installation of an eco-friendly, pollution prevention sidewalk art/ message that appears when exposed to water ("Rainworks") installed at Peter Kirk Park, Kirkland Middle School, and John Muir Elementary, a free spill kit training and delivery programs, and a targeted pet waste management program (see Education and Outreach for more details). •IDDE Staff communicated with food vendors attending 12 different special events on Stormwater Pollution Prevention and Kirkland Municipal Code requirements. Educational language is included in all Special Events Permits, which the City issued 32 permits for. •City provides information to general public through BMP info cards, social media posts, spring utility bill insert highlighting pollution prevention spring cleaning activities, pollution prevention letters (3,259 letters sent), fall utility bill insert highlighting fall leaves/winter prep and trainings. City trucks and van are wrapped with spill messaging and hotline advertisement.

33	S5.C.5.c	Implemented an ordinance or other regulatory mechanism to effectively prohibit non-stormwater, illicit discharges as described in S5.C.5.c.	Yes
35	S5.C.5.d.i	Implemented procedures for conducting illicit discharge investigations in accordance with S5.C.5.d.i.	Yes
35a	S5.C.5.d.i	Cite field screening methodology in Comments field.	Kirkland's methodology is based on the permit referenced manual, the 2020 IDDE Field Screening & Source Training Manual, locally adapted to Kirkland.
36	S5.C.5.d.i(a)	Percentage of MS4 coverage area screened in the reporting year per S5.C.5.d.i. (Required to screen 12% on average each year.)	51.4
36a	S5.C.5.d.i(a)	Cite field screening techniques used to determine percent of MS4 screened.	City of Kirkland Stormwater staff screen the MS4 through catch basin inspections. All catch basins in the city are inspected every two years. These inspections are tracked in our asset management system. During each inspection, the staff are observing the structural integrity of the structure and adjoining pipes, sediment accumulation levels, and if there is any unusual flow, odor, color, or other visual indicators that would suggest a pollutant is present. If there is a water quality concern, the staff will then report a spill through the spill hotline and create a spill response work order. This will trigger notification to the Water Quality Team for investigation and follow up and the Storm Maintenance Crew to clean the storm catch basin, as well as other storm structures that have been affected.

37	S5.C.5.d.ii	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)	The Kirkland spill hotline continues to be publicized in a variety of ways, including: surface water web pages, presentations and educational events to public and staff, stickers that are handed out at the counter and at public events, on some staff business cards and e-mail signatures, during discharge response education, annual winter preparedness utility bill insert, BMP rack cards, pollution prevention letters, business pollution prevention guide, Kirkland's Erosion and Sedimentation Control Plans and notes, and Kirkland's public facing service request portal.
38	S5.C.5.d.iii	Implemented an ongoing illicit discharge training program for all municipal field staff per S5.C.5.d.iii.	Yes
39	S5.C.5.e	Implemented an ongoing program to characterize, trace, and eliminate illicit discharges into the MS4 per S5.C.5.e.	Yes
40	S5.C.5.f	Implemented an ongoing illicit discharge training program for all staff responsible for implementing the procedures and program described in S5.C.5.f.	Yes
41	S5.C.5.g	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.	WAR045521-2025-ImportedIDDEs_03132026133854
42	S5.C.6.b.i-iii	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
44		Does the ordinance or other enforceable mechanism follow a Phase I program approved by Ecology (S5.C.6.b.i)?	Yes
44a		If yes, state the title of the Stormwater Management Manual and which Phase I Program.	"King County 2021 Surface Water Design Manual", King County
45	S5.C.6.b.i. and Section 5 of Appendix 1	Number of adjustments granted to the minimum requirements in Appendix 1. (S5.C.6.b.i. and Section 5 of Appendix 1)	4

45a	S5.C.6.b.i. and Section 5 of Appendix 1	Number of adjustments granted to the Minimum Requirements #5?	0
46	S5.C.6.b.i., and Section 6 of Appendix 1	Number of exceptions granted to the minimum requirements in Appendix 1. (S5.C.6.b.i., and Section 6 of Appendix 1)	0
47	S5.C.6.c.i	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
47a	S5.C.6.c.i	Number of site plans reviewed during the reporting period.	816
48	S5.C.6.c.ii	Inspected, prior to clearing and construction, permitted development sites per S5.C.6.c.ii?	No
49	S5.C.6.c.iii	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
49a	S5.C.6.c.iii	Number of construction sites inspected per S5.C.6.c.iii.	698
49b	S5.C.6.c.iv	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
50	S5.C.6.	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
51	S5.C.6.	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
52	S5.C.6.c.viii	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)	6
53	S5.C.6.c.vi	Achieved at least 80% of scheduled construction-related inspections. (S5.C.6.c.vi)	Yes
54	S5.C.6.d	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
55	S5.C.6.e	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

56	S5.C.7.b	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,)	Q56. S-MED Table_Kirkland_56_03132026134047
57	S5.C.8.b	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)	No
58	S5.C.8.a-d	Attach a summary of actions taken to implement the source control program, per S5.C.8.a-d.	Q58. 2025 Summary of Actions f_58_03132026134117
59	S5.C.8.d	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.	Q59. 2025 Source Control Inspe_59_03132026134117
60	S5.C.8.e	Implemented an ongoing source control training program per S5.C.8.e?	Yes
61	S5.C.9.a	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
63	S5.C.9.a	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)	Yes
63a	S5.C.9.a.ii	If so, note in the Comments field what kinds of facilities are covered by this alternative standard. (S5.C.9.a)	Contech Filterra, Biopod, Modular Wetland
64	S5.C.9.a.ii	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
64a	S5.C.9.a.ii	Attach documentation of maintenance time frame exceedances that were beyond the Permittee's control.	Not Applicable
65	S.5.C.9.b.i(a)	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
66	S5.C.9.b.i(b)	Inspected stormwater treatment and flow control BMPs/facilities regulated by the Permittee per S5.C.9.b.i(b)	Yes

66a	S5.C.9.b.i(b)	Are you using a reduced stormwater treatment and flow control BMPs/facilities inspection frequency?	Yes Comment: Kirkland implemented a reduced Inspection frequency for Low Impact Development (LID) sites for the first time, starting in 2025. LID sites were inspected at a 1 year or 3 year frequency. If inspection records indicate that the LID site did not require maintenance for 6 consecutive years, inspection frequency is reduced to once every 3 years.
66b	S5.C.9.b.i(b)	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).	Q66b. LID Sites Reduced Freque_66b_03132026 134256
67	S5.C.9.b.ii	Achieved at least 80% of required inspections to verify adequate long-term O&M. (S5.C.7.b.ii)	Yes
68	S5.C.9.c.i	Annually inspected municipally owned or operated permanent stormwater treatment and flow control BMPs/facilities. (S5.C.9.c.i)	Yes
68a	S5.C.9.c.i	Number of known municipally owned or operated stormwater treatment and flow control BMPs/facilities. (S5.C.9.c.i)	843
68b	S5.C.9.c.i	Number of facilities inspected during the reporting period.	843
68c	S5.C.9.c.i	Number of facilities for which maintenance was performed during the reporting period.	103
69	S5.C.9.c.i	If using reduced inspection frequency for the first time during this permit cycle, attach documentation per S5.C.9.c.i.	Not Applicable
70	S5.C.9.c.ii	Conducted spot checks and inspections (if necessary) of potentially damaged stormwater facilities after major storms as per S5.C.7.c.ii.	Not Applicable
71	S5.C.9.c.iii	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
71a	S5.C.9.c.iii	Number of known catch basins and inlets?	16871
71b	S5.C.9.c.iii	Number of catch basins and inlets inspected during the reporting period?	8671
71c	S5.C.9.c.iii	Number of catch basins and inlets cleaned during the reporting period?	2578
72	S5.C.9.c.iii	Attach documentation of alternative catch basin inspection approach for those owned or operated by the Permittee, if used, per S5.C.9.c.iii.	Not Applicable

73	S5.C.9.d	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
79	S5.C.9.f	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
80	S5.C.9.g	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
81	S7.A	Complied with the Total Maximum Daily Load (TMDL)-specific requirements identified in Appendix 2. (S7.A)	Not Applicable
82	S7.A	For TMDLs listed in Appendix 2: Attach a summary of relevant SWMP and Appendix 2 activities to address the applicable TMDL parameter(s). (S7.A)	Not Applicable
83	S8.A.1, S8.A.2.a	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
85	S8.B.1, S5.B.2.a or S8.B.2.c	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
87	S8.C.1.b and Appendix 9	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)	Not Applicable
88	S8	If conducting stormwater discharge monitoring in accordance with S8.C.1, attach a data and analysis report per S8.C.1. and Appendix 9. (Due annually beginning March 31, 2026.)	Not Applicable
89	G3	Notified Ecology in accordance with G3 of any discharge into or from the Permittees MS4 which could constitute a threat to human health, welfare or the environment. (G3)	Yes
90	G3	Took appropriate action to correct or minimize the threat to human health, welfare, and/or the environment per G3.A.	Yes
91	Compliance with standards	Notified Ecology within 30 days of becoming aware that a discharge from the Permittee's MS4 caused or contributed to a known or likely violation of water quality standards in the receiving water. (S4.F.1)	Yes

92	Compliance with standards	If requested, submitted an Adaptive Management Response report in accordance with S4.F.3.a.	Not Applicable
93	Compliance with standards	Attach a summary of the status of implementation of any actions taken pursuant to S4.F.3 and the status of any monitoring, assessment, or evaluation efforts conducted during the reporting period. (S4.F.3.d)	Not Applicable
94	G20	Notified Ecology of the failure to comply with the permit terms and conditions within 30 days of becoming aware of the non-compliance. (G20)	Not Applicable
95	G20	Number of non-compliance notifications (G20) provided in reporting year. List permit conditions described in non-compliance notification(s) in Comments field.	Not Applicable

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

Tracey Dunlap

Signature

3/17/2026 8:50:54 AM

Date

2026 STORMWATER MANAGEMENT PROGRAM PLAN

National Pollutant Discharge Elimination System Permit

Prepared December 2025

CITY OF KIRKLAND
WASHINGTON

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Table of Contents

Introduction

The Purpose of the Stormwater Management Program Plan

This document constitutes the City of Kirkland (the "City", "Kirkland") 2026 Stormwater Management Program (SWMP) Plan, which is required to be updated annually under condition S5.A.2 of the Western Washington Phase II Municipal Stormwater Permit (the Permit). The purpose of the document is to detail actions that the City of Kirkland proposes to take between January 1, 2026, and December 31, 2026, to maintain compliance with conditions in the Permit.

The NPDES Program

The National Pollutant Discharge Elimination System (NPDES) program, created under the Federal Clean Water Act, is a program created to protect and restore water quality in lakes and streams so they can support "beneficial uses" such as fishing and swimming.

Governmental and private entities wishing to discharge water or wastewater to surface waters regulated by the Federal Government (Waters of the US) must obtain permits and comply with certain conditions or face fines and other penalties. NPDES permits have been written for discharges from construction sites, concentrated animal feeding operations, industrial activities, publicly owned wastewater treatment plants, and municipal stormwater systems.

The US Environmental Protection Agency has delegated the authority over Washington State's NPDES permits to the Washington State Department of Ecology ("Ecology"). Ecology has issued several general permits for discharges from stormwater systems that apply to municipalities with different sizes of populations and in different regions of the State (Eastern and Western Washington).

Phase I refers to municipalities with a population of greater than 100,000, and Phase II to those with a population of less than 100,000, according to the 1990 census.

The Western Washington Phase II Municipal Stormwater Permit

The City of Kirkland has been identified as a Phase II municipal stormwater permittee and, therefore, must establish a stormwater program that complies with conditions in the Western Washington Phase II Municipal Stormwater Permit (the "Permit"). The Permit allows municipalities to discharge stormwater from systems it owns and operates into "waters of the state" such as rivers, lakes, streams, and groundwater as long as they implement programs to reduce pollutants in stormwater to the "maximum extent practicable." To do this, permittees must conduct programs and activities in the following program areas:

- Stormwater Planning
- Public Education and Outreach
- Public Involvement and Participation
- Stormwater System (MS4) Mapping and Documentation
- Illicit Discharge Detection and Elimination
- Controlling Runoff from New Development, Redevelopment, and Construction Sites
- Source Control for Existing Development
- Stormwater Management for Existing Development
- Municipal Operations and Maintenance
- Monitoring and Assessment

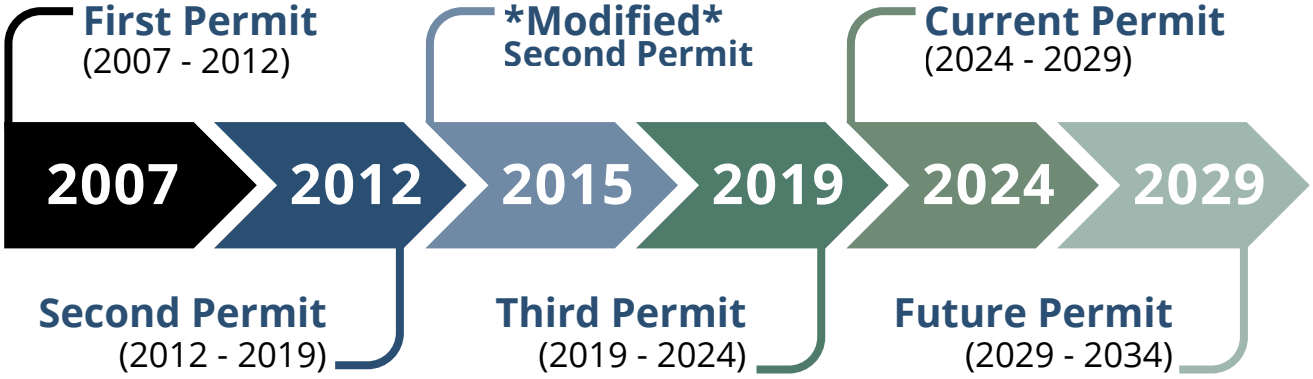
The Stormwater Management Program ("SWMP") Plan must be prepared and submitted annually. It must contain the planned actions and activities that will be conducted in the reporting year to maintain compliance with the Permit. In addition, the Permit requires the City to submit an Annual Compliance Report by March 31st of each year that details actions taken in the previous year to achieve compliance.

Full Text of the Permit:

https://ecology.wa.gov/Regulations-Permits/Permits-Certifications/Stormwater-General-Permits/Municipal-Stormwater-General-Permits/Western-Washington-Phase-II-Municipal-Stormwater

Permit History and Implementation

The Western WA Phase II Permit was originally issued in 2007 and has been reissued three times. Each permit required continued compliance with the previous permit's substantial conditions and phased implementation of new requirements over the permit cycle. The table on pages 37-41 provides implementation due dates for the current 2024-2029 Permit. Kirkland continues to be in a good position to meet deadlines and maintain full Permit compliance.



Current and Planned Activities

The following sections of the SWMP Plan describe how Kirkland is currently meeting the requirements of the Permit, and how the City plans to continue to meet those requirements in 2026. The Plan is organized to address the program components noted in Condition S5.C of the Permit.

Kirkland does not currently operate their stormwater system in a location where a Total Maximum Daily Load (TMDL) Plan has been approved, thus TMDL (S7) compliance requirements have not been included in this plan.

Coordination and Responsibilities Cont.

Compliance with the Permit requires coordination and documentation of activities in several City departments. The Public Works Department Surface Water Utility staff (Surface Water staff) will coordinate City efforts and will meet with staff from other departments regularly to verify that current and planned activities meet Permit requirements.

Activities required for Permit compliance will be carried out by the Public Works, Information Technology, Planning and Building, Parks and Community Services, City Manager's Office (including City Attorney), Finance, Fire, and Police Departments.

The Surface Water Utility - Other Activities -

This SWMP Plan details actions and activities that fall under the purview of the Permit. Stormwater management is one part of the City's overall surface water management strategy, as coordinated by the Surface Water staff.

The Surface Water Utility conducts a suite of related programs that reduce flooding, protect and improve water quality, inspect and maintain infrastructure, and protect and restore aquatic habitat in the City's streams and lakes. Although not directly required by the Permit, Kirkland's flood reduction and aquatic habitat restoration efforts further our stormwater management goals.

Kirkland's most recent Surface Water Strategic Plan (Strategic Plan) was adopted in early 2023. The Strategic Plan sets priorities and recommends projects, programs, and rates to support the utility over the next 5-10 years.

750
City of Kirkland Staff

175
Public Works Staff

13
Surface Water Staff

Stormwater Planning

Stormwater Planning requires Kirkland to enhance its existing efforts and is designed to inform and assist in the development of policies and strategies that serve as water quality management tools in order to protect receiving waters. Receiving waters are defined as the natural or reconstructed naturally occurring surface water bodies, such as creeks, streams, rivers, wetlands, or groundwater, to which stormwater flows. Kirkland has operated its stormwater system under a Strategic Plan since 1994. These Strategic Plans incorporate best available science, regulatory/permit requirements, staff expertise, and community input to direct the work of the City with regards to storm and surface water management. That plan is updated approximately every 5-10 years and is complementary to this SWMP Plan and the work of the Permit requirements.

Kirkland's Plan to Meet the Requirements of the Permit:

- **Inter-disciplinary Team:** Kirkland's inter-disciplinary team informs and assists in the development of the Stormwater Planning Program. This team is comprised of members from the Planning and Building Department, Transportation Division, Capital Improvement Program Division, Parks and Community Services Department, and Surface Water staff. Team members may vary based on current tasks of the team.
- **Coordination with Long Range Planning:** Kirkland staff actively coordinate during long-range plan updates. The City will describe how stormwater management and protection/improvement of receiving water health are informing the planning update processes as well as influencing policies and implementation strategies through a series of annual report questions. Responses for the current 2024-2029 Permit are due on March 31, 2027.
- **Low Impact Development:** Kirkland continues implementing Low Impact Development (LID) code. As local development-related codes, rules, standards, and other enforceable documents are updated and revised, LID shall remain the preferred, commonly used approach to site development.

- **Low Impact Development Cont.**
  - Kirkland staff will assess and document any newly identified administrative or regulatory barriers to the implementation of LID principles or LID Best Management Practices (BMPs) as well as the measures developed to address the barriers.
    - See our Low Impact Development website (in the link box below) for more details.
  - **Tree Canopy Goals:** Kirkland will adopt and implement tree canopy goals and policies that support stormwater management by December 31, 2028.
- **Stormwater Management Action Plan:** Kirkland completed a Stormwater Management Action Plan (SMAP) for the Totem Lake catchment area in the Juanita Creek Watershed in early 2023. Kirkland will add additional actions to this SMAP or develop a new SMAP by March 31, 2027.
  - The full plan can be found at the link box below.
- **Record Keeping:** Kirkland will continue to track and maintain records of stormwater planning activities and will summarize these activities in the Annual Compliance Report.
- **Departments Engaged:** Public Works, Planning and Building, City Manager's Office, Parks and Community Services

Low Impact Development Website:

https://www.kirklandwa.gov/Government/Departments/Development-Services-Center/Tools-and-Resources/Stormwater/LID

SMAP Full Text:

https://www.kirklandwa.gov/files/sharedassets/public/v/1/public-works/surface-water/surface-water-master-plan/appendix-n-smap.pdf

Public Education and Outreach

Kirkland provides and participates in a variety of stormwater education and outreach programs designed to build general awareness, reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts, and encourage the public to participate in stewardship activities.

Kirkland's Plan to Meet the Requirements of the Permit:

- **Regional Participation:** Kirkland is an active participant and leader in regional education and outreach groups. Staff will continue to coordinate with other permittees in Western Washington through participation in the Stormwater Outreach for Regional Municipalities (STORM) and the North King County Stormwater Outreach Group (SOGgies).
  - Kirkland participates in STORM's awareness campaign, Puget Sound Starts Here (PSSH).
- **General Awareness Programs:** Kirkland will continue to provide general awareness education and outreach programs for a variety of target audiences, including program considerations for overburdened communities. Kirkland incorporates behavior change principles in its general awareness programs to promote not just education, but a change in ongoing behavior. Examples of programs include:
  - A K-12 school outreach program to increase awareness of stormwater impacts on surface waters, including impacts from impervious surfaces.
  - Pet waste stations and educational signage throughout the city at parks and other locations. The City supplies these stations with dog waste bags.
  - Natural yard care workshops to teach residents how to care for their yards in environmentally friendly ways that are protective of water quality and reduce stormwater runoff.
  - Education, technical assistance, and financial rebates to private property owners through the Yard Smart Rain Rewards program to control the flow of runoff from their property. These Green Stormwater Infrastructure (GSI) installations include rain gardens, cisterns, and native landscaping.

- **General Awareness Programs Cont.**
  - A rebate and voucher program that provides financial incentive for private property owners to plant trees that intercept/slow water runoff.
  - An online mapping portal for property owners to explore and discover the LID facilities built on their property as well as resources for maintenance support.
  - Promoting general awareness through a variety of communication channels including utility bill inserts, direct mail, direct outreach, social media, BMP cards, and fliers.
  - The translation of outreach materials into the top languages spoken in Kirkland. Examples of this includes: Kirkland's website that incorporates Google Translate, interpretation services are available to all City staff over the phone for improved communication with residents, and translation of program materials for non-English speaking audiences.
  - The "What You Can Do For Clean Water" section of our website offers helpful information and suggested activities to prevent pollution in our stormwater. See the box below for the link to learn more.
  - Promoting Kirkland's online watershed dashboard and interactive map of water quality and stream health data. This dashboard is focused on raising general awareness about local watershed health and how it is impacted by stormwater runoff and individual actions. See the box below for a link to the dashboard.

"What You Can Do For Clean Water" Web Page:

https://www.kirklandwa.gov/Government/Departments/Public-Works-Department/Storm-Surface-Water/What-You-Can-Do-For-Clean-Water

Kirkland Water Quality Dashboard:

https://kirkland-watersheds-kirklandwa.hub.arcgis.com/pages/water-quality

- **Behavior Change Campaign:** Based on the results of the evaluation completed in 2024, Kirkland developed and implemented a new behavior change campaign for the 2024-2029 Permit cycle in 2025. The new behavior change campaign began implementation in 2025.
  - Natural yard care: Kirkland developed and began implementation of an expansion on current natural yard care programming. This program plans to promote residents to change their behavior to use less harmful pesticides through workshops, flyers, pamphlets.
  - Kirkland prioritizes working in the neighborhoods with the highest levels of phosphorus and nitrogen in their local creeks. The focus area is within the Juanita watershed, specifically the area around Billy Creek. The survey currently in distribution is translated into 7 languages in an effort to meet the needs of our local community.

Previous Behavior Change Campaign Material

- **Stewardship Opportunities:** Kirkland will continue to provide stewardship opportunities for community members through various programs.
  - Labeling storm drains: Volunteers affix neighborhood storm drains with labels stating, “Drains to Lake Washington – Only Rain Down the Drain.” These markers raise awareness on the connection between our neighborhoods and local water bodies.

- **Stewardship Opportunities Cont.**
  - Green Kirkland Partnership stewardship events: The City of Kirkland, nonprofit partners, businesses, and the community work together to form the Green Kirkland Partnership. The Green Kirkland Partnership's mission is to restore and maintain healthy forested and natural parklands (totaling over 500 acres) by building a supportive community that works together to protect Kirkland's valuable natural resources for current and future generations. Achieving this involves training volunteers in restoration activities and providing support from restoration partners, contractors and skilled natural areas staff. The partnership's activities are primarily led by dedicated volunteers and include community-based restoration efforts such as replanting areas with native trees and invasive plant removal, as well as education, outreach, and engagement with the community.
  - Park pet waste stewards: A team of volunteers help keep existing pet waste stations stocked with bags and monitor un-scooped pet waste in potential "hot spot" parks to gather baseline data for future targeted education and outreach efforts.

  - Cross Kirkland Corridor Adopt-a-Trail: Local volunteer groups including Kirkland neighborhood associations, community service groups, businesses, and individuals can adopt quarter-mile segments of the Cross Kirkland Corridor, pledging to remove litter from the area twice a year. They also have the option to do a yearly removal of invasive plants found in their section. The up-to-date roster of adopted segments can be found on the City's volunteer webpage.

- **Stewardship Opportunities Cont.**
  - Water Watchers volunteers: Water Watchers is a community-based water monitoring program operated by the Sno-King Watershed Council. Water Watcher volunteers in Kirkland monitor physical and chemical indicators of stream health on local creeks. Data collected by the volunteers helps inform the Kirkland community on watershed health and supplements water quality data collected by City staff.

Above: Water Waters volunteers.

Above: Kirkland's Environmental Education & Outreach Specialist at a community event.

- **Record Keeping:** Kirkland will continue to track and maintain records of public education and outreach activities and will summarize these activities in the Annual Compliance Report.
- **Departments Engaged:** Public Works, Parks and Community Services, City Manager's Office

Public Involvement

Kirkland is committed to providing ongoing opportunities for the public to provide input on the development of this annual plan and on other initiatives/plans designed to improve water quality.

Kirkland's Plan to Meet the Requirements of the Permit:

- **Opportunities for Public Input:** The City welcomes comments from the public throughout the year.
  - To facilitate public comment, the City provides a contact number for residents to call on the customer service portal, "Our Kirkland." The contact number is posted on Kirkland's stormwater webpage.
  - Public comment can also be provided to City Council members at twice a month City Council Meetings.
  - Kirkland invites the public to review and comment on the Stormwater Management Program Plan annually. As with prior years, this year's staff will post the draft plan to the City website. Feedback is solicited through a Press Release, City social media outlets, and via City e-newsletters.
  - Kirkland also seeks to involve the public in stormwater management and clean water related decisions outside of the SMWP Plan. Staff engage the community during the planning and construction of stormwater infrastructure projects and during development of stormwater-related policy and strategic plans.
- Kirkland will document methods used to identify overburdened communities by December 31, 2026. In the instance that Kirkland concludes the city doesn't have a specific geographic area that meets the Permit's definition of overburdened community, the City is committed to a safe, inclusive, and welcoming community for all people and strives to reach and seek involvement from vulnerable community members. This includes residents who are low-income, identify as a racial or ethnic minority, and English language learners amongst other identities.

- **Accessibility:** Kirkland contracts with a language translation service, "Language Line." Verbal interpretation services are available to all staff to improve communication with the public. Additionally, the City-wide website utilizes Google Translate and includes an intuitive and pictograph-based experience. Computers are available for public use at City Hall at no cost to the user. Kirkland provides hybrid access to public meetings, utilizing multiple virtual platforms for distribution.

Above: "Shut the Lid" sign translated into 9 languages.

Left: Pollution prevention Business Outreach translated into Spanish.

- **Transparency:** Kirkland posts the annual Stormwater Management Program Plan and Annual Compliance Reports to our website by May 31st each year. These documents can be found at the link in the box below.
- **Record Keeping:** Kirkland will continue to track and maintain records of public involvement activities and will summarize these activities in the Annual Compliance Report.
- **Departments Engaged:** Public Works, Planning and Building, City Manager's Office

"Our Kirkland" Web Page:

https://kirklandwa.qscend.com/ourkirkland

Stormwater Policies and Regulations Web Page:

https://www.kirklandwa.gov/Government/Departments/Public-Works-Department/Storm-Surface-Water/Stormwater-Policies-and-Regulations

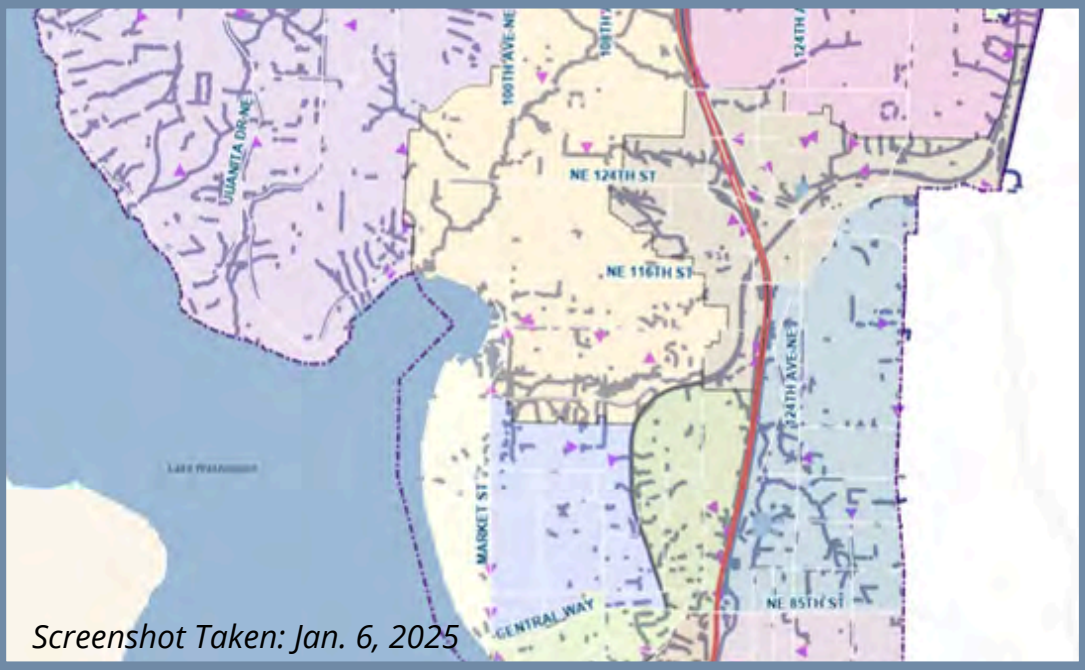
Stormwater System (MS4) Mapping and Documentation

Kirkland maintains an internal and external facing GIS-based map of the stormwater system.

Kirkland's Plan to Meet the Requirements of the Permit:

- **Mapping:** Kirkland will continue to maintain and build on our existing map of the municipal stormwater system. This includes attributes of stormwater system outfalls with size and material, discharge points, receiving waters (other than groundwater), stormwater treatment and flow control BMPs/facilities owned and operated by the City, geographic areas that do not discharge stormwater to surface waters, tributary conveyances to all known outfalls and discharge points (24-inch diameter or larger), connections between other municipalities and public entities, all connections authorized after February 16, 2007, and all known connections from the MS4 to privately-owned stormwater systems.
  - Preparing to meet the following new mapping requirement deadlines for the 2024-2029 NPDES permit cycle:
    - Locations of all known MS4 outfalls, size, and materials will be submitted by March 31, 2026.
    - Map tree canopy to support stormwater management on City-owned or operated property by December 31, 2026.
    - Map and assess acreage of MS4 tributary basins to outfalls, 24-inches in diameter or larger, by March 31, 2028.
    - Map overburdened communities in relation to stormwater treatment and flow control BMPs/facilities, outfalls, discharge points, and tree canopy by December 31, 2028.
  - Updating and managing GIS data is completed in alignment with documented procedures and quality control standards. Kirkland receives records drawings, including stormwater infrastructure, from development activities.

- **Mapping Cont.**
  - Record drawings are field verified by Public Works staff prior to being integrated into the online GIS map.
  - Improving and updating our maps by incorporating data gathered from field inspections (CCTV, catch basin inspection, IDDE, etc.) to progressively update and improve the accuracy of the stormwater system map.
  - Utilizing data to build flow control inspection lists and stormwater treatment lists for both public and private properties. The inspections are performed under the Operations and Maintenance section of this Plan.
- **Transparency:** Kirkland maintains a public facing GIS-based interactive map of the stormwater system. The map can be found on this website: http://maps.kirklandwa.gov. A screenshot of the map can be found below. Maps are available to Ecology/other permittees upon request in electronic format.
- **Record Keeping:** Kirkland will continue to track and maintain records of MS4 Mapping and Documentation activities and will summarize these activities in the Annual Compliance Report.
- **Departments Engaged:** Public Works, Information Technology



Screenshot Taken: Jan. 6, 2025

Illicit Discharge Detection and Elimination (IDDE)

Kirkland's Illicit Discharge Detection and Elimination (IDDE) program is designed to prevent contamination of surface water and groundwater by monitoring, tracking, and removing non-stormwater discharges into the stormwater system.

Kirkland's Plan to Meet the Requirements of the Permit:

- **Ongoing IDDE program to detect and address non-stormwater discharges and illicit connections:** The City's ongoing IDDE program is designed to characterize, trace the source, and eliminate illicit discharges, spills, and illicit connections, into the municipal stormwater system.
  - The City responds to and investigates all calls and reports regarding environmental concerns such as illegal dumping, spills, illicit discharges, and illicit connections.
  - Spills Hotline: 425-587-3900, is Kirkland's hotline for reporting of spills, water quality concerns, and other illicit discharges. The hotline operates 24-hours, 7-days a week.
    - During regular business hours, calls are received and responded to by the Storm Operations and Maintenance crew of the Public Works and Surface Water staff.
    - After-hour calls are managed by Kirkland's emergency dispatch and standby maintenance crews.
    - Kirkland investigates all reports received. Records of all calls and the City's follow-up actions are maintained.
    - The hotline is publicized on the City's website, social media, annual winter preparedness utility bill inserts, BMP rack cards, the business pollution prevention guide, Kirkland's erosion and sedimentation control plans, business cards/email signatures of select staff, and Kirkland's public facing service request portal. The hotline is also promoted at presentations and educational events to the public…

- **Ongoing IDDE Program to Detect and Address Non-Stormwater Discharges and Illicit Connections Cont.**
    - ...and City staff, at discharge response outreach, and on stickers available at City Hall and public events.
  - Kirkland takes pride in our fast IDDE program response time. The Permit requires that all activities are performed at these minimum timelines:
    - Immediately respond to all illicit discharges which constitute a threat to human health, welfare, or the environment
    - Investigate within 7 days any potential illicit discharge
    - Initiate an investigation within 21 days for any suspected illicit connection
    - Once an illicit connection is confirmed, Kirkland uses a compliance strategy to eliminate illicit connections within 6-months
  - IDDE procedures are detailed in the City's IDDE Manuals, which have been adapted from 2020 Illicit Connection and Illicit Discharge Field Screening & Source Training Manual.
  - Kirkland educates public employees, businesses, and the general public about illicit discharges and the hazards associated with improper disposal of waste. Examples include the Department of Ecology's Pollution Prevention Assistance Program, King County Local Hazardous Waste Management Program, and general awareness campaigns. Kirkland also provides spill kits to businesses.
  - Kirkland is preparing to coordinate with firefighting agencies that respond to areas that discharge to the MS4. By December 31, 2026, a procedure will be in place to notify the Surface Water staff when PFAS-containing AFFFs are used. By January 1, 2027, Kirkland will update and implement procedures to minimize discharges of PFAS-containing AFFFs to the MS4.

- **Kirkland Municipal Code: 15.52.090 and 1.12.200: Illicit Discharge Detection and Elimination:**
  - Kirkland Municipal Code (KMC) 15.52.090 and 1.12.200 prohibits non-stormwater illicit discharges into Kirkland's stormwater system and provides the regulatory authority and framework for enforcement. Kirkland adopted the Permit definitions for allowable discharges and conditionally allowable discharges. These code sections are updated as needed to support the program. Code will be updated by July 1, 2027, to meet new requirements.

Above: Spill response material shed at Marina Park.

  - Code Implementation:
    - The ongoing IDDE strategy strives to achieve compliance through public education and technical assistance. When education, technical assistance, and voluntary correction agreements do not achieve compliance, KMC 1.12 and 15.52 provides guidance on progressive enforcement.
    - Pollution discharged into the municipal storm drain system and/or surface and ground waters (illicit discharges) violates KMC 15.52 and subjects the violator(s) to fines and/or cleanup costs imposed by City and/or State agencies (KMC 1.12). Enforcement is only pursued if education has been initially provided.

- **PCBs in Building Materials:** By July 1, 2027, Kirkland is preparing to implement code that prohibits routine external building washdown of commercial, industrial, and multi-story residential structures that were constructed or renovated between 1950 and 1980. Buildings confirmed or suspected to have PCB-containing materials will not be allowed to discharge washdown to the MS4.

- **PCBs in Building Materials Cont.** If a building was previously addressed for PCB-containing materials, it will be exempt from this rule.
- **MS4 Screening:** Kirkland has an ongoing program that screens the stormwater system for potential sources of non-stormwater discharges and illicit connections. Kirkland performs this screening through catch basin inspection. During each inspection, staff observe the structural integrity of the catch basin and adjoining pipes, sediment accumulation levels, and determine if there is any unusual flow, odor, color, or other visual indicators that suggest a pollutant is present. If there is a water quality concern, the staff will report a spill through the spill hotline. This results in a notification to the storm maintenance crew, who respond and maintain storm structures affected. Surface Water staff are also notified for further investigation/follow up.
  - The City field screens, at minimum, 12% of the municipal stormwater system each year.
- **Training:** Kirkland has an ongoing training program for staff, including field staff, on the identification, reporting, and response to illicit discharges into the municipal stormwater system. Additionally, Kirkland ensures that all IDDE response staff are trained on the characterization, source tracing, and elimination methods of illicit discharges, spills, and illicit connections into the stormwater system.
- **Record Keeping:** Kirkland will continue to track and maintain records of illicit discharge detection and elimination activities and will summarize these activities in the Annual Compliance Report and as required by Appendix 13 of the Permit.
  - Kirkland will maintain the internal data tracking system and will import data into Ecology's Water Quality Web IDDE portal as needed/requested.
- **Departments Engaged:** Public Works, Planning and Building, City Manager's Office, Information Technology, Parks and Community Services, Fire, Police

Controlling Runoff from New Development, Redevelopment, and Construction Sites

Kirkland reviews development plans and inspects development sites during the construction process to ensure erosion and sediment control best management practices are in place and that stormwater facilities are installed and maintained as designed. In addition, the City requires the use of Low Impact Development stormwater practices and principles. Kirkland plans to carry forward these policies and approaches in 2025.

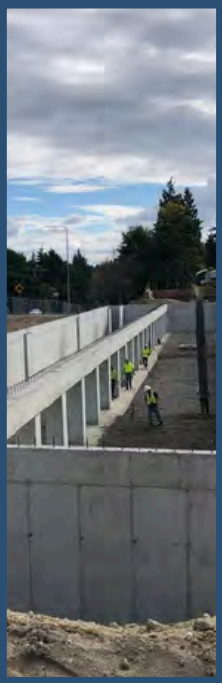
Kirkland's Plan to Meet the Requirements of the Permit:

- **Ongoing Program:** Stormwater Management Standards for Development, Redevelopment, and Construction Sites. This program applies to private and public development and includes transportation projects.
  - Kirkland Municipal Code Chapter 15.52 addresses runoff from new development, redevelopment, and construction sites; it also gives the City authority to inspect and enforce adopted standards.
  - As of July 1, 2022, Kirkland adopted the 2021 King County Surface Water Design Manual. These stormwater design standards are equivalent to the minimum technical requirements detailed in the Permit, Appendix 1.
  - By June 30, 2027, Kirkland will adopt an updated Surface Water Design Manual.
  - Kirkland has expanded on the King County Surface Water Design Manual, by adopting an addendum of pre-approved plans and policies for site development. These policies are reviewed and updated annually. They can be found at the link in the box below.
  - Kirkland does not grant exceptions or variances to the minimum requirements detailed in Appendix 1.

Pre-Approved Plans Web Page:

https://www.kirklandwa.gov/Government/Departments/Development-Services-Center/Tools-and-Resources/Pre-Approved-Plans/Storm-Drainage-Pre-Approved-Plans

- **Ongoing Program Cont.**
  - In the instance an adjustment occurs, Kirkland will maintain a record of the adjustment.
- **Review Plans and Inspect Development/Redevelopment Sites:**
  - Kirkland has implemented a permitting process program to review development plans, inspect sites during construction, and take enforcement action against those failing to (1) follow approved guidelines or (2) provide facilities as required during plan review. This program ensures proposed development projects in Kirkland comply with the current Surface Water Design Manual.
  - The City's current cross-departmental permitting process includes civil/site plan review and approval process, inspection, and enforcement to meet standards established by the Permit for all qualifying sites (new and redeveloped). This approach will continue in 2026. The City's oversight of new and redevelopment projects occurs in phases.

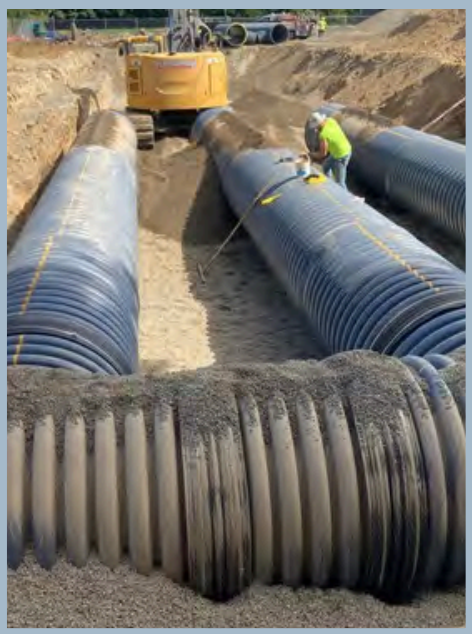


Above: Stormwater vault construction.

Kirkland's Oversight Process New and Redevelopment

1. **Prior** to construction, during the plan review and acceptance process
2. **Before** the site is cleared during an initial site construction inspection
3. **During** construction via construction site inspections
4. **Post-construction** as part of the stormwater infrastructure acceptance inspection

- **Review Plans and Inspect Development/Redevelopment Sites Cont.**
  - Proposals for public and private projects are reviewed by City engineers or qualified engineering firms to ensure compliance with Kirkland's standards, including LID requirements. City staff inspect all qualifying public and private construction sites continuously to ensure that temporary erosion and sediment control measures have been selected, placed, and installed properly.
  - City staff also inspect the stormwater drainage system that may be impacted by private home construction. This occurs, at a minimum, twice per 12-month period, with at least four months between inspections, until 90% of the lots have been built out, or when construction has stopped, and the site is stabilized. In the event that facilities and stormwater conveyance do require cleaning during construction, the responsible parties must perform maintenance/cleaning.



Above: Storm detention at Rose Hill Elementary School.

  - Kirkland inspectors have the authority to enforce Kirkland Municipal Code 15.52 using corrective action notices and stop work orders to ensure the protection of receiving waters from construction impacts.
- **Notice of Intent:** As a part of the development and redevelopment permitting process, Kirkland will continue to provide applicants with physical/digital copies of the "Construction Stormwater General Permit Notice of Intent," the "Industrial Stormwater General Permit Notice of Intent," and the registration requirements for Underground Injection Control Wells.

Above: Erosion control at 132nd Square Park, Stormwater Park.

- **Training:**
  - Staff increases their knowledge base by staying up-to-date with new or revised stormwater regulations. Staff are also expected to attend internal and external trainings on erosion control, LID techniques, stormwater design models, standards, and practices.
  - Through the Developer's Forum and associated listserv, Kirkland provides the development community and the public with information and updates on proposed changes to stormwater design requirements, codes, processes and procedures.
- **Record Keeping:** Kirkland will continue to track and maintain records of actions related to controlling runoff from development, redevelopment, and construction sites and summarize these activities in the Annual Compliance Report.
- **Departments Engaged:** Public Works, Planning and Building

Stormwater Management for Existing Development

Stormwater Management for Existing Development is a new section of the Permit (Section S5.C.7) that requires Kirkland to control or reduce stormwater discharges from existing development to receiving waters. Projects will focus on strategic stormwater investments over longer planning timeframes.

Kirkland's Plan to Meet the Requirements of the Permit:

- **Planned Project List:** Kirkland will provide a list in each Annual Compliance Report of planned projects scheduled during the 2024-2029 Permit cycle term that meet the assigned equivalent acreage of 15 acres. Equivalent acres are calculated as described in Appendix 12 of the Permit.
  - Kirkland is considering all qualifying project types available:
    - Stormwater facility retrofits are projects that retrofit existing treatment or flow control facilities or install new treatment or flow control facilities.
    - Land management and development strategies to protect or conserve certain lands from impervious surface conversions or native vegetation removal.
    - Focused, enhanced, or customized stormwater management actions identified in the Stormwater Management Action Plan (SMAP).
    - Maintenance with capital construction costs of at least $25,000. This project type applies to maintenance or repair projects that improve the treatment performance of stormwater facilities.
    - Property acquisition for water quality and/or flow control benefits are property purchases of a site, likely to be developed, to permanently prevent it from being developed.
    - Restoration of riparian buffers are projects that restore riparian buffers above the ordinary high watermark by protecting and restoring hydrologic capacity.

Above: Construction of infiltration facility in residential area.

- **Planned Project List Cont.**
  - Restoration of forest cover are projects that restore forest cover by protecting or restoring hydrologic capacity.
  - Floodplain reconnection projects on water bodies that are not flow control exempt per Appendix 1 will provide flow reduction and runoff treatment benefits.
  - Permanent removal of impervious surfaces are projects that permanently remove impervious surfaces and replace with pervious, vegetated surfaces.
  - Sweeping and line cleaning of the public stormwater system in addition to the requirements identified in Permit section S5.C.9 Operation and Maintenance.

- **Planned Project List Cont.**
  - The following projects are Kirkland's current projects for the 2024-2029 permit term:
    - 100th Ave NE Water Quality Treatment: Stormwater treatment facility for improved water quality for stormwater entering Juanita Creek and Lake Washington.
    - North Rose Hill Retrofit Site #1: Filterra stormwater treatment facility for improved water quality for stormwater entering Forbes Creek and Lake Washington.
    - North Rose Hill Retrofit Site #2: Stormwater treatment and infiltration facility for improved water quality and hydrology for stormwater entering Forbes Creek and Lake Washington.
- **Timeline:** Kirkland has completed the identified projects, in advance of the March 31, 2028 deadline.
- **Departments Engaged:** Public Works

Both: Construction of 100th Ave NE Water Quality Treatment facility.

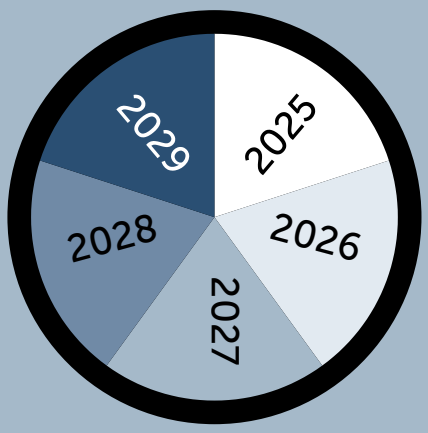
Source Control for Existing Development

Kirkland's Source Control Program is designed to prevent and reduce pollutants in runoff from areas of existing development that discharge to the stormwater system. This is accomplished by utilizing inspection and enforcement of best management practices at the source of potential pollution-generating activities.

Kirkland's Plan to Meet the Requirements of the Permit:

- **Source Control Ordinance:** Kirkland has adopted KMC 15.52.100, which requires Best Management Practices (BMPs) for pollutant generating sources on existing development. The City has adopted King County's Pollution Prevention Manual for Source Control BMPs. Kirkland will adopt updated code for this program by August 1, 2027.
- **Source Control Program:** This program requires the activities listed below.
  - Maintain an inventory: This current inventory identifies institutional, commercial, and industrial sites that have the potential to generate stormwater system pollutants. The list of applicable activities is available in Appendix 8 of the NPDES Permit. Kirkland will continue to identify sites that have the potential to generate pollutants and will maintain the list with information gathered through inspections or outreach efforts. The inventory will be updated at least once during the Permit term.
  - Inform all Sites: Kirkland informs all sites on the inventory about activities that may generate pollutants and the source control requirements applicable to those activities. Kirkland expects to communicate with the site inventory throughout the permit cycle and will provide specific outreach applicable to either the site's geographic location or type of business.
  - Implement Inspection Program: Kirkland has implemented an inspection program that supports these sites in applying operational and/or structural BMPs to prevent illicit discharges or violations of surface water, ground water, or sediment management standards.

- **Souce Control Program Cont.**
  - Annually, staff will complete the number of inspections equal to 20% of the businesses/sites listed in the inventory and 100% of sites identified via credible complaints.
- **Enforce the Program:** Kirkland prioritizes technical assistance and general support to achieve compliance. Any site that has failed to adequately implement BMPs will receive follow-up actions from the City. These actions may include phone calls, letters, emails, follow-up inspections, or enforcement.
- **Maintain Records:** Kirkland will maintain program records, including documentation of each site visit, inspection records, denial of entry occurrences, warning letters, notices of violation, and other enforcement records that demonstrate an effort to bring sites into compliance.
- **Train Staff:** Kirkland will train all staff responsible for implementing the program. Training topics include the legal authority for source control, source control BMPs and their proper application, inspection protocols, lessons learned, typical cases, and enforcement procedures. Staff may receive training through Ecology's Pollution Prevention Assistance Program and/or through the Washington Stormwater Center's Source Control Training.
- **Departments Engaged:** Public Works



20%

of Sites Inspected per Year

Above: Kirkland business is in compliance with all environmental regulations and also switched to toxic-free receipt paper.

Operations and Maintenance

Kirkland has a robust Operations and Maintenance (O&M) program that ensures the stormwater system is inspected and maintained to prevent or reduce potential impacts on stormwater drainage and receiving waters.

Kirkland's Plan to Meet the Requirements of the Permit:

- **Maintenance Standards:** Kirkland adheres to maintenance standards from the 2021 King County Surface Water Design Manual (Appendix A) and proprietary system recommendations as necessary (i.e. Contech's Filterra and Modular Wetlands, Oldcastle's Biopod system). The City will adopt an updated manual by June 30, 2027.
- **Ongoing Program to Inspect and Maintain the MS4:**
  Public System -
  - Every two years Kirkland inspects all municipally owned catch basins and inlets. If the inspection indicates that cleaning or repair is needed, those activities are completed within the permit allowed timelines, generally within 6 months.
  - Kirkland inspects all municipally owned and operated water quality treatment and flow control facilities. If inspection indicates that cleaning or repair is needed, those activities are completed within the permit allowed timelines, generally within 1 year.
  - Kirkland spot check's multiple locations throughout the storm and surface water system, including stormwater treatment and flow control facilities, after storm events. In the event that these spot checks show widespread damage or maintenance needs, Kirkland will continue the investigation and take maintenance actions on affected areas/facilities.
  - Kirkland will continue to maintain compliance by achieving at least 95% of required inspections.

  Private System -
  - The City operates an inspection program of private water quality treatment and flow control facilities under our jurisdiction to determine if maintenance is required.

Private System Cont. -

- Kirkland is now implementing a reduced inspection frequency program. Inspection frequency is reduced based on maintenance records of double the length of time of the reduced inspection frequency. For example, sites that will be inspected every other year have had 4 consecutive years of inspections that did not require maintenance.
  - Beginning in 2025, low impact development (LID) sites are inspected at a 1-year or 3-year frequency. Beginning in 2026, private stormwater facilities will be inspected at a 1-year or 2-year inspection frequency.
- The inspected properties must meet the following guidelines: (1) they discharge to the MS4, and (2) were permitted after 2010. KMC 15.52 establishes enforcement procedures.
- Kirkland will continue to achieve, at minimum, 80% of required inspections and keep records of all actions taken through this program.

- **Practices, Policies, and Procedures to Reduce Stormwater Impacts of Municipal Operations:** The City O&M program implements practices, policies and procedures to reduce stormwater impacts caused by runoff from land owned or maintained by Kirkland and road maintenance activities performed by the City. These practices were documented in 2022 and will be updated by December 31, 2027.

Above: Crews performing maintenance on a structure with City vactor truck.

At Least
90%
of Priority Areas Swept, 3x Annually

- **Street Sweeping Program:** Kirkland is preparing to develop and implement a municipal street-sweeping program by July 1, 2027. This program focuses on sweeping priority areas, such as high-traffic streets and streets that serve commercial or industrial land use areas, at least three times each year. One of the three sweeps will occur between July and September. At least 90% of the priority areas will be swept during each sweeping event. Kirkland will begin reporting on this program on March 31, 2028. Kirkland currently owns street sweepers and operates a street sweeping program. This program will be modified to meet the requirements of the permit.
- **Training:** O&M staff receives training on the importance of protecting water quality during maintenance operations, inspection procedures, relevant water quality and operations and maintenance standards, selecting appropriate BMPs, ways to perform their job activities to prevent or minimize impacts to water quality, and procedures to report water quality concerns. Training is conducted in meetings, in the field, and in workshops.
- **Record Keeping:** Kirkland will continue to track and maintain records of O&M activities and will summarize activities in the Annual Compliance Report.
- **Departments Engaged:** Public Works, Parks and Community Services, Planning and Building

Monitoring and Assessment

An important part of understanding the impacts of management actions on the health of stormwater is to analyze their progress. The Permit allows jurisdictions to undertake monitoring and assessment within their jurisdiction or contribute to a regional fund called the Stormwater Action Monitoring (SAM) Group, where studies are undertaken by consensus of the contributing members.

Kirkland's Plan to Meet the Requirements of the Permit:

- **Regional Participation:** Kirkland has opted to participate in the SAM Group for both (Permit section S8.A) Regional Status and Trends Monitoring and (Permit section S8.B) Effectiveness and Source Identification Studies. The City is an active member in the decision-making process and participates in SAM through several sub-committees. Staff also provide data for regional studies as requested. For information about SAM-sponsored monitoring projects, please visit their website: https://ecology.wa.gov/Regulations-Permits/Reporting-requirements/Stormwater-monitoring/Stormwater-Action-Monitoring
- Regional Status and Trends Monitoring: Kirkland contributes $23,393 annually to the SAM program and will pay by the required due date, August 15, 2026.
- Effectiveness and Source Identification Studies: Kirkland contributes $34,621 annually to the SAM program and will pay by the required due date, August 15, 2026.
- **Kirkland Monitoring Programs:** Kirkland conducts water quality sampling and aquatic macroinvertebrate (stream bug) sampling in several creeks to evaluate stream health. While not required under the permit, these activities complement and inform other permit activities.
- **Record Keeping:** Kirkland will continue to track and maintain records of Monitoring and Assessment activities and will summarize these activities in the Annual Compliance Report.
- **Departments Engaged:** Public Works

Underground Injection Control Wells (UIC) Program

The NPDES Permit does not authorize discharges to groundwater from any facility regulated under the Underground Injection Control (UIC) Wells Program. Kirkland, however, does operate an Underground Injection Control Wells Program according to Chapter 173-218 of the Washington Administrative Code and under a jurisdiction-wide Stormwater Management Program. Full details of our UIC program can be found in the link box below.

UIC Program Web Page:

https://www.kirklandwa.gov/Government/Departments/Public-Works-Department/Storm-Surface-Water/Stormwater-Policies-and-Regulations

For details on Kirkland Storm & Surface Water Activities not addressed in this SWMP Plan, contact the Public Works Department.

(425) 587-3800

stormwater@kirklandwa.gov

https://www.kirklandwa.gov/Government/Departments/Public-Works-Department/Storm-Surface-Water

Appendix A: Permit Due Dates

Permit Section	Year (by QTR)		2024		2025				2026				2027				2028				2029	
	Requirements	Deadline	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
S5.A.	**Stormwater Management Program Plan**																					
	Provide annual estimated SWMP costs in annual report	Annually, starting 3/31/2027											■				■				■	
	Written description of internal coordination mechanisms among departments	3/31/2026							■													
S5.C.1.	**Stormwater Planning**																					
	Coordination with long-range plan updates	3/31/2027											■									
	Adopt and implement tree canopy goals and policies to support stormwater management	12/31/2028																		■		
	Develop new Stormwater Management Action Plan (SMAP), or additional actions for existing SMAP	3/31/2027											■									

Permit Section	Year (by QTR)		2024		2025				2026				2027				2028				2029	
	Requirements	Deadline	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
S5.C.2.	**Public Education and Outreach**																					
	Develop behavior change campaign	7/1/2025																				
	Implement behavior change campaign	9/1/2025																				
	Evaluate behavior change campaign and use resulting measure to make changes to increase effectiveness	3/31/2029																				
S5.C.3.	**Public Involvement and Participation**																					
	Document methods used to identify overburdened communities	12/31/2026																				
S5.C.4.	**MS4 Mapping and Documentation**																					
	Locations of all known MS4 outfalls, size, and materials	3/31/2026																				
	Map tree canopy to support stormwater management	12/31/2026																				

Permit Section	Year (by QTR)		2024		2025				2026				2027				2028				2029	
	Requirements	Deadline	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
S5.C.4.	**MS4 Mapping and Documentation *continued***																					
	Map and access acreage of MS4 tributary basins to outfalls	3/31/2028																				
	Map overburdened communities relative to stormwater treatment	12/31/2028																				
S5.C.5.	**Illicit Discharge Detection and Elimination (IDDE)**																					
	Update code to meet new requirements	7/1/2027																				
	Coordinate with firefighting agencies that respond in Kirkland to be notified when PFAS-containing AFFF firefighting foam is used	12/31/2026																				
	Update and implement procedures to minimize discharges of PFAS-containing AFFFs to the MS4	1/1/2027																				

Permit Section	Year (by QTR)		2024		2025				2026				2027				2028				2029	
	Requirements	Deadline	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
S5.C.6.	**Control Runoff from New Development, Redevelopment, and Construction Sites**																					
	Adopt and implement revised stormwater development codes to reduce impervious surface, protect vegetation, and minimize stormwater runoff	6/30/2027																				
S5.C.7.	**Stormwater Management for Existing Development**																					
	Provide list of planned projects scheduled that meet the assigned 15 equivalent acres	Annually																				
	Fund and implement stormwater retrofit projects	3/31/2028																				
S5.C.8.	**Source Control for Existing Development**																					
	Adopt updated manual	8/1/2027																				

Permit Section	Year (by QTR)		2024		2025				2026				2027				2028				2029	
	Requirements	Deadline	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
S5.C.9.	**Municipal Pollution Prevention, Operation, & Maintenance**																					
	Update maintenance standards	6/30/2027																				
	Document policies, procedures, and practices that reduce stormwater impacts from municipal lands.	12/31/2027																				
	Implement a municipal street sweeping program	7/1/2027																				
S8	**Monitoring**																					
	Participate in and pay into Regional Monitoring efforts	Annually by August 15																				
S9	**Reporting**																					
	Submit Annual Report	Annually by March 31																				

Appendix B: Public Comments

From: Susan Vossler
To: Stormwater
Subject: comment--Stormwater Plan
Date: Thursday, February 26, 2026 11:41:05 PM

CAUTION/EXTERNAL: This email originated from outside the City Of Kirkland. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello.
Litter must be considered a storm water pollutant.
Highway 405 runs through Kirkland. Photos attached are of storm drains along 405 in Kirkland. Note the plastic and styrofoam litter pollution.
I propose that very regular litter maintenance/street cleaning along 405 north and south be included in actions of the Kirkland SMP.
Thank you
Susan Vossler

Appendix B: Public Comments

Appendix B: Public Comments

From: Randy Heaton [redacted]
Sent: Tuesday, March 3, 2026 8:51 PM
To: stormwater@kirkland.gov; Angela Peterson <Apeterson@kirklandwa.gov>; Susan Vossler [redacted]
Subject: Re: Trash into drains

> **CAUTION/EXTERNAL:** This email originated from outside the City Of Kirkland. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Angela,
My previous email to the stormwater group bounced back, not sure why. Anyway I am forwarding it with attached pictures.

I pick up litter 2-3 days a week around Kirkland and am often cleaning out drains. I don't see much of anything really going into drains other than litter as few people water their lawns in summer nor wash cars at home. I am thankful for your group's work and wish you all the success. FYI, I have hundreds of pics of litter in Kirkland FWIW.

Regards,
Randy Heaton
[redacted]

On Sat, Feb 28, 2026 at 1:31 PM Randy Heaton [redacted] wrote:

> TO Whom it May Concern:
>
> Your listening to citizens on how to cleanup Kirkland's stormwater is great and I wish you success. I am writing to express my concerns that litter is one of the large contributors to stormwater polution. I have been volunteering picking up litter in Kirkland since 2019.
>
> Attached are 5 photos.
>
> 1. A home that has trash overflowing right by a storm drain.
> 2. Another home that frequently had overflowing trash on a hill where there are two

Appendix B: Public Comments

drains within 30 feet of the home.
3. The Houghton transfer station traffic are responsible for A LOT of litter that goes into the drain at the corner of 60th and 116th Ave NE. I don't have a picture but just last week someone lost a bunch of styrofoam packing peanuts. I picked up easily over 200 peanuts and saw at least 3 in the storm drain.
4. LItter on 405 is terrible and often flows into retention ponds and/or storm drains on 405. I believe the litter in this picture ultimately flows into a culvert that moves it into Yarrow Creek near 520.

Thanks for your groups work!

Regards,
Randy Heaton
[redacted]

2026 Stormwater Management Program Plan

stormwater@kirklandwa.gov

City of Kirkland Annual Report Question 4a.

Attach a written description of internal coordination mechanisms.

Kirkland coordinates internally among departments to reduce barriers to permit compliance. This happens through regularly scheduled inter and intra departmental meetings, trainings, city-wide planning efforts, and project specific coordination. Regularly scheduled meetings include:

- Weekly Public Works managers meetings
- Every other week Development Engineering Services Division of Public Works Department coordination meetings
- Monthly Public Works and Finance Departments coordination meetings, Utility Policy Meeting with the City Manager, Public Works Managers and Supervisors coordination meetings, the Capital Improvement Program Steering Team Meeting, Public Works communications meetings, Surface Water Utility Managers and Supervisors meetings, and Surface Water Division of Public Works meetings
- Quarterly Public Works and Parks and Community Services Departments coordination meetings
- Surface Water Division meets with all other Departments as needed.

These various meetings provide a regular opportunity to share and discuss permit requirements, policy considerations, upcoming projects, provide training, and address any other related items. This coordination greatly reduces barriers to permit implementation.

The Surface Water Division, within the Public Works department, leads NPDES permit compliance efforts. They provide training to all other departments and support permit compliance when other departments lead permit-related tasks. In addition, the Surface Water Team regularly coordinates with the City Manager's Office to ensure public requests related to the permit (e.g. illicit discharges, catch basin maintenance, or private drainage inspection) are routed to the correct staff members.

City of Kirkland Stormwater Management Program		Kirkland Education and Outreach Summary for 2025									
NPDES Phase II	**Permit Citation S5.C.2**	**a.i.(a)**		**a.i.(b)**		**a.i**					
		Target Audience				**Subject Areas**					
		General Public (including school age children)	Businesses, including home-based and mobile businesses	Engineers, contractors, developers, property owners/managers, and land use planners		General Impacts of stormwater on surface waters	Impacts from impervious surfaces	Low Impact Development (LID) principles and LID BMPs	Technical standards for stormwater site and erosion control plans	Stormwater treatment and flow control BMPs/facilities	Source control BMPs for building materials to reduce pollution to stormwater
Program Name	**Program Description**										
School Outreach and Education (K-12)	General stormwater & BMP education via in-school programming, youth events, virtual programs, and online curriculum. (134 classroom programs for 3,016 students).	X				X	X	X			
Flood Prevention and Leaf Management	Outreach to Kirkland residents including all utlity billing customers and all residents within 250 feet of drainage issues between 2024-2025 regarding keeping storm drains clear of leaves to protect neighborhoods from flooding. Program provides stormwater education to the general public.	X	x			X	x				
Puget Sound Starts Here (regional)	Kirkland participates in regional advertising (including PSSH month), media, and web projects with other stormwater permittees and ECONet organizations to advertise and inform the public of best practices and behaviors.	X	X			X	x				
Pet Waste Outreach	City staff provide education on disposal of pet waste at various events, signage and plastic bag stations at parks and other open spaces, mailers, etc.	X				X					
General Outreach	City uses newsletters, utility inserts, Facebook, Instagram, direct mailers, multiple City web pages to increase awareness of stormwater impacts on surface water, including seasonal tips and topics. City also attends farmers markets and community events.	X	X			X	X	X			
Private Drainage System Inspections and Technical Assistance Program	City staff contact property owners, inspect private storm drainage systems (beyond those required by the permit), and provide technical assistance with stormwater facility maintenance, dumpster and trash compactor maintenance, and prevention of illicit discharges.	X	X			X	X	X	X		
Pollution Prevention Assistance Technical Assistance and Hazardous Waste Management and Reduction	Provides hands-on technical assistance and outreach to small businesses to develop practical methods for proper use and storage of automotive chemicals, cleaning supplies, other hazardous materials, equipment maintenance, and prevention of illicit discharges.		X			X	X				
Best Management Practices Information Cards	Provides brief, updated, and translated BMP information cards for specific audiences (e.g. residents, business owners, construction, mobile businesses, etc.)	X	X	X		X					
Natural Yard Care Program	Kirkland hosts 2-3 Natural Yard Care classes annually. We also promote Cascade Water Alliance-sponsored online trainings on sustainable garden design and edible landscapes. Advertises other landscape-focused classes hosted by partner organizations (King County, King Conservation District).	X		X		X					

City of Kirkland Stormwater Management Program		Kirkland Education and Outreach Summary for 2025									
NPDES Phase II	**Permit Citation S5.C.2**	**a.i.(a)**		**a.i.(b)**		**a.i**					
		Target Audience				**Subject Areas**					
		General Public (including school age children)	Businesses, including home-based and mobile businesses	Engineers, contractors, developers, property owners/managers, and land use planners		General Impacts of stormwater on surface waters	Impacts from impervious surfaces	Low Impact Development (LID) principles and LID BMPs	Technical standards for stormwater site and erosion control plans	Stormwater treatment and flow control BMPs/facilities	Source control BMPs for building materials to reduce pollution to stormwater
Program Name	**Program Description**										
Yard Smart Rain Rewards	Kirkland provides free technical assistance and rebates to property owners to install stormwater retrofit projects like rain gardens, native landscaping, and cisterns on their property.	X	X	X		X	X	X		X	
Developers Forum	Kirkland Developers forum is used to increase awareness of technical standards for stormwater site and erosion control plans, LID principles and techniques, stormwater treatment and flow control BMPs/facilities, and stormwater training opportunities.			X				X	X	X	
Pollution Prevention Letters	Kirkland sends letters to properties near the site of spills/pollutants entering the stormwater system where the source is unidentifiable. The letters focus on raising awareness regarding the impacts of pollution.	X	X			X	X				
Tree Planting Rebate	Kirkland provides rebates and pre-paid certificates to property owners to plant trees on their property to help reduce stormwater runoff in neighborhoods.	X		X		X	X	X			
Online interactive map of LID facilities in Kirkland	Kirkland provides an online map for property owners to identify and locate LID faciliites built on their properties and to access maintenance guides and resources. We also notify all LID owners annually of the LID on their property and how to maintain.	X						X		X	
Stream Health Water Quality Report Cards	Kirkland developed educational watershed report cards sharing and highlighting the results of our water quality monitoring program and describing actions community members can take to protect water quality.	x				X	X	X			
Dashboard for Watershed Health	Kirkland promotes our interactive water quality dashboard that includes educational information about Kirkland's watersheds, water quality monitoring results, and stream bug monitoring results. Education focuses on what residents can do to help improve stream health.	X				X	X	X			
Stormwater Retrofit Facilities Public Involvement	Kirkland engaged residents in the Cedar Creek and High Woodlands watersheds about designs for stormwater retrofit facilities. Efforts included direct mailers, community meetings, web page, surveys, and an email listserv.	X				X	X	X		X	

2026 BEHAVIOR CHANGE CAMPAIGN STRATEGY & SCHEDULE

CITY OF KIRKLAND
WASHINGTON

Table of Contents

This document has been prepared in accordance with section S5.C.2.ii.(b) of the National Pollution Discharge Elimination System permit.

PERMIT LANGUAGE: S5.C.2.ii.(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.

Kirkland has opted to develop a new strategy and schedule for a new priority audience and BMP behavior change campaign.

Strategy

Campaign Background, Purpose, and Focus

The City of Kirkland's many creeks, lakes, and scenic water views have encouraged residents to spend significant time outdoors, regardless of the season. Many outdoor activities can create toxic runoff, impacting the lives of our residents, greater community, and wildlife. To learn more about how our local waterways are being impacted physically, chemically, and biologically, the City monitors the health of our 12 watersheds. This monitoring has informed the creation of our current behavior change campaign. Ultimately, our behavior change campaign should work to protect the water quality of Kirkland waterways and Lake Washington by helping people make positive adjustments to their actions.

This permit cycle, our focus is increasing the adoption of natural yard care practices to reduce the amount of nitrogen and phosphorus that pollutes stormwater runoff. The campaign is a pilot program that focuses on a subbasin of Juanita Creek. This strategy provides valuable information about the priority audience, benefits and motivators, and tools that promote positive behavior change.

Campaign Framework

This behavior change campaign will follow the social marketing framework, outlined by Nancy Lee and Philip Kotler.

The Ten Steps in the Planning Process for a Social Marketing Campaign, by Nancy Lee and Philip Kotler, are:

1. Describe the Background, Purpose, and Focus
2. Conduct a Situation Analysis
3. Select and Describe the Target Market (Priority Audience)
4. Set Marketing Objectives and Goals
5. Identify Audience Barriers, Benefits, and Competition
6. Write a Positioning Statement
7. Develop a Strategic Marketing Mix (Outreach materials and methods)
8. Determine an Evaluation Plan
9. Establish a Campaign Budget
10. Outline an Implementation Plan

Strategy

Situation Analysis

For this situation analysis, City staff completed a strengths, weaknesses, opportunities, and threats (SWOT) analysis. This identifies internal strengths and weaknesses of City programming, as well as external opportunities and threats within our range of reach. The situation analysis also identifies influential others, and potential campaign competition. This gives a foundation for the campaign to identify and reach our priority audience, as well as the creation of future outreach materials and methods.

Strengths (Internal):

- Existing natural yard care program at the City
- Internal funding availability
- Robust internal Stormwater Division staffing
- Regional expertise and previous experience on this topic
- Management support
- Recent success with regional and local behavior change campaigns, including "Shut the Lid" dumpster campaign, "Don't Drip and Drive" car oil campaign, and Pet Waste pick up program.
- Recent water quality messaging has been successful

Weaknesses (Internal):

- Current Natural Yard Care ambassador program has not been utilized in the last year
- Natural Yard Care classes offered to residents were not well attended in 2025

Opportunities (External):

- Water quality is a top priority for the community, as seen by survey responses in our Surface and Stormwater Strategic Plan development process
- Lessons learned from previous and current natural yard care program
- Community and neighborhood relationship building
- Cultivating a strong group of ambassadors to encourage the community at a grassroots level

Strategy

Situation Analysis Continued

Threats (External):

- Residents are unaware of the environmental impact of their current yard care routine
- Residents are unaware of the ingredients that make up yard care products
- Linguistic and cultural considerations impacting accessibility
- Changes may require financial resources/incentives
- Being eco-friendly is seen as a luxury
- Recent layoffs in the tech industry (Diab, 2024)

Influential Others:

- Landscapers
- Private landlords
- Neighbors
- Family
- Friends
- HOAs (etc.)
- Pest control companies

Competition:

- Using standard fertilizers and pesticides is known, advertised widely, and inexpensive
- Eco-friendly products are often more expensive, creating a significant upfront cost for a long-term benefit

Strategy

Priority Audience:

The priority audience for this campaign are residents of the City of Kirkland, who have autonomy over their yard care, living within the south mainstem subbasin of the Juanita Creek basin that flows to the Billy Creek 1 water quality testing site. See "Historical Background" for more detail on how this location was selected.

Audience Psychographic Traits:

- Value the look and feel of a maintained yard
- Are interested in being environmentally-friendly
- Responsible for the care and maintenance of their yard

Audience Demographic Traits:

- Age: millenials (age 30 - 45)
- Location: Juanita and Finn Hill neighborhoods of Kirkland

These psychographic and demographic traits were prioritized due to the expectation that this priority audience would comprise the "help me" category of audience segmentation. This category is also known as "early adopters" stage in the Diffusion of Innovation theory, where a few people are doing the behavior, but it isn't common practice or widely understood.

Existing Programming at the City of Kirkland:

1. Yard Smart
2. Natural Yard Care Classes
    a. Lawn Care
3. Wildlife Habitat Classes
    a. General wildlife
    b. Bug specific
4. Natural Yard Care Website Page
5. Watershed Monitoring and Report Cards
    a. Water Quality Dashboard

Strategy

Research and Review

Research collected focused on the following:

1. History and current landscape of the Billy Creek area to identify general areas of water quality concern.
2. Locations of significance around Billy Creek to identify what neighborhood features the priority audience may find valuable or currently frequent.
3. Sociological and aesthetic psychology perspective on the American lawn to understand what features of the lawn are important to the average person, and why they are important.

Historical Background:
The City of Kirkland Stormwater Division currently monitors the water quality of 16 sites across the City. Testing is conducted once a month and is compiled into an annual water quality report with scores indicating the level of concern: low medium or high. The report and scores are then published digitally and offered as a physical copy to residents.

One of these 16 water quality testing site sites, a stream point known as “Billy 1,” is between 95th Place NE & NE 125th Place (Parcel PIN: 1138020240). This site is within the Juanita watershed. For the purposes of this behavior change campaign, we are looking at a the portion of the south mainstem subbasin of the Juanita Creek basin that flows to “Billy 1". The stream is a tributary of Juanita Creek, which flows into Lake Washington at Juanita Beach Park.

“Billy 1” consistently shows elevated concentrations of nitrogen and phosphorus. Elevated concentrations of these elements indicate that runoff from the surrounding area is polluted with fertilizer and human/animal feces. Prior to our recent testing, Billy Creek doesn’t have consistent water quality data records.

Historically, Lake Washington has struggled with maintaining acceptable water quality. Much of the lake’s watershed is heavily impacted by human activity, being highly developed and urban – 63% of the area is considered fully developed.

Strategy

Research and Review Continued

For a little under 20 years, between 1941 and 1963, Lake Washington was receiving significant amounts of secondary treated sewage from lakeshore treatment plants, ultimately contributing to eutrophication and poor water quality. Nutrient conditions, particularly elevated phosphorus levels, contributed to an algal bloom in 1955. Since this time, Washington's impressive restoration of the lake has been a massive success. "Lake Washington became substantially less eutrophic… during which time the watershed population grew by more than 350,000 people (>34%). We consider this a success story… likely due at least in part to environmental efforts (whether regulatory or voluntary) to protect water quality and aquatic habitat. The type of development was likely a key contributor: we found no net loss of forest area and little increase in developed land area (4.7% from 2001 to 2021). Instead of expanding into new areas, redevelopment increased density on already-developed land and likely drove improvements in stormwater treatment and other environmental protections" (Nidzgorski, 2025). As of 2025, all nitrogen and phosphorus levels are in the natural range.

As our lakeshore region continues to develop, it's critical that we continue practices that have a positive impact on the health of our local waterways. With a site like "Billy 1" that show such concerning nutrient levels, it is our responsibility to involve and inform the surrounding community the influence their behaviors have. This behavior change campaign aims to address residents directly to find what motivates their yard care decision making and habits.

Strategy

Research and Review Continued

Billy Creek location basics:

1. Includes the Juanita and Finn Hill Neighborhoods
2. Water quality testing location (Billy 1): Open Space JU2 at the intersection of NE 125th Place & 95th Place NE
3. Area around the water quality testing location includes:
    a. Parks/Open Spaces
    b. Wetlands
    c. Primarily single-family homes

Billy Creek geographic basics:

1. Soil includes:
    a. Vashon recessional Lake Juanita deposits
    b. Vashon recessional lacustrine deposits
2. Tributary of Juanita Creek, which flows into Lake Washington
3. West to East flow - major parks are downstream of the water quality testing location

Strategy

Research and Review Continued

American lawns:

- Lawns are a historical farming system
  - Farming is driven by consumers, lawn maintenance is driven by producers
    - Consumers: those who buy the product; in this case, customers
    - Producers: those who create the product; in this case, those responsible for their yard care
- The United States amplified the lawn as a slice of farming life
- Lawns now use an unprecedented amount of chemicals
  - 20-40% of all toxins can be attributed to home lawns in some cases
- Humans prioritize what they can see rather than what they cannot
  - This leads to a lack of concern for the longevity of plants and insects
  - Also leads to a lack of concerns for the impacts of their actions further down the system. For example, runoff in the stormwater system.
- Humans prioritize immediate problems over what they perceive as ecological politics

Strategy

Research and Review Continued

Viewing the Lawn as Art - Aesthetic Theory:
Aesthetic theory connects to philosophical questions about value, perception, and human experience. The theory examines questions like “why do we value some pieces of art over others?”

Two theories within aesthetic theory touch on behavior change strategies:

1. Institutional theory: social and cultural institutions define what is considered art, this theory is often attributed to Hegel. For example, the cultural ideal of the “American Dream” with a white picket fence and a lawn influence what we consider art.
2. Aesthetic experience: highlights the viewer’s subjective and transformative interaction with art, this theory is often attributed to Kant. For example, the interactions we have while doing yard care influences how we see our yard as art.

Looking at the American lawn, we can use the aesthetic theory to assume that the appearance of the lawn is:

- Linked to perceived and relative prosperity
- Influenced heavily by media
- Perceived link to neighborhood safety, value, & participation
    - Upholding the social contract
        - Social contract theory “is the view that persons’ moral and/or political obligations are dependent upon a contract or agreement among them to form the society in which they live.”

Strategy

Summary and Next Steps

The City of Kirkland's stormwater behavior change campaign takes a look at a current water quality issue and seeks to address it through collective action of residents. We have identified our audience, have started to examine their barriers and motivators (Appendix D), and have implemented a survey (Appendix C) that will influence the campaign direction.

In 2026, the City will conduct focus groups, with the goals of gaining more in-depth audience understanding and reaching a more diverse audience than the existing survey. That information will drive the marketing and style of the campaign.

Future planning will be informed by the continuous water quality monitoring and pollutant data provided by local, regional, and state organizations. The behavior change campaign planning and implementation will be responsive to information and data gathered about the built and natural environment upstream from "Billy 1".

Schedule

	Complete by	Task
X	3/2025	Collect data on local water quality and identify sites with poor water quality due to elevated nitrogen and phosphorus levels
X	6/2025	Identify priority audience and research audience barriers, benefits, and motivators (Step 1-3 Community Based Social Marketing)
X	7/1/2025	Finalize “Strategy & Schedule” documentation (Step 3 Community Based Social Marketing)
X	7/1/2025	Begin the development of outreach items, survey (Step 7 Community Based Social Marketing)
X	9/1/2025	Begin implementing developed strategy, distributing survey (Pilot testing, Step 4-6 Community Based Social Marketing)
X	3/31/2026	Turn in project Strategy & Schedule with annual NPDEDS permit reporting requirements

Schedule

	Complete by	Task
	8/2026	Conduct a focus group to further engage the local community and expand our reach to diverse audiences (Steps 5-7 Community Based Social Marketing)
	9/2026	Evaluate Pilot testing and make strategy adjustments to improve outcomes and reach goals (Step 4 Community Based Social Marketing)
	9/2026	Create evaluation plan, budget, and implementation plan as indicated by Pilot testing (Step 8-10 Community Based Social Marketing)
	10/2026	Implement campaign strategy to target audience (Step 5 Community Based Social Marketing)
	2/2029	Compile and document effectiveness data (*start Dec. 2028*)

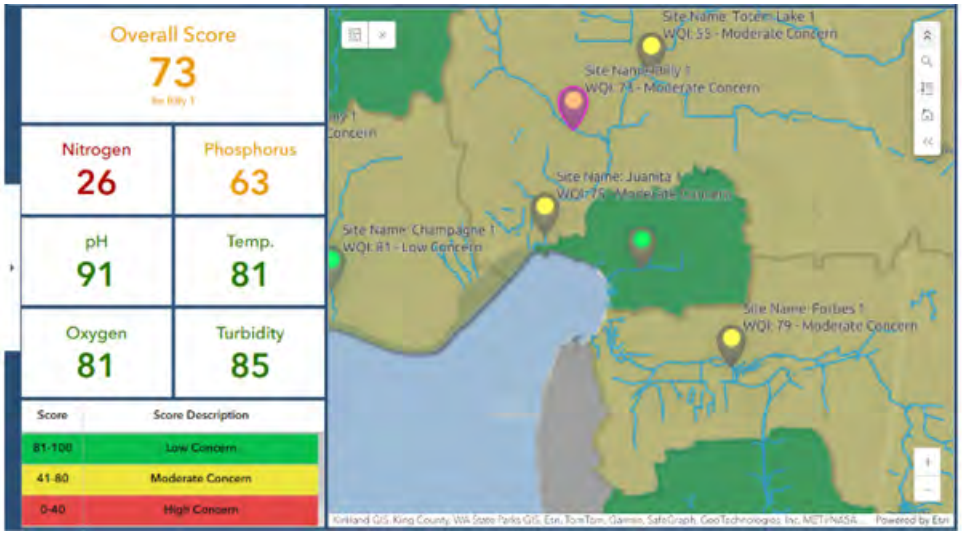
Schedule

	Complete by	Task
	3/31/2029	Finalize campaign evaluation report to document: • Changes in audience understanding • Changes in audience behavior • Changes in audience communication • Strategies and effectiveness • Process to implement strategies • Recommended changes for future improvement
	4/1/2029 - Ongoing	Revise as needed based on final evaluation to continue effective implementation of the behavior change program and future programming

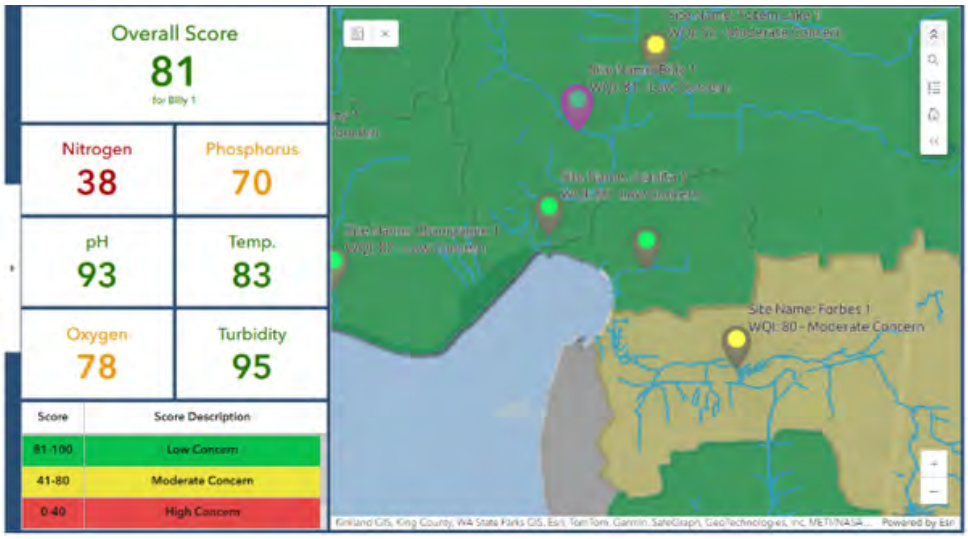
Appendix A

Historical Watershed Water Quality Dashboard Data for Billy Creek:

2021



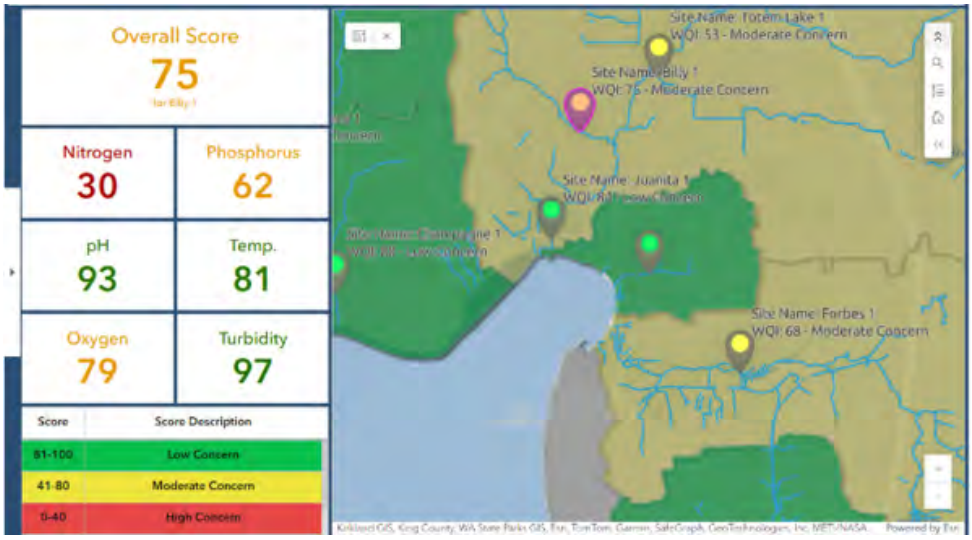
2022



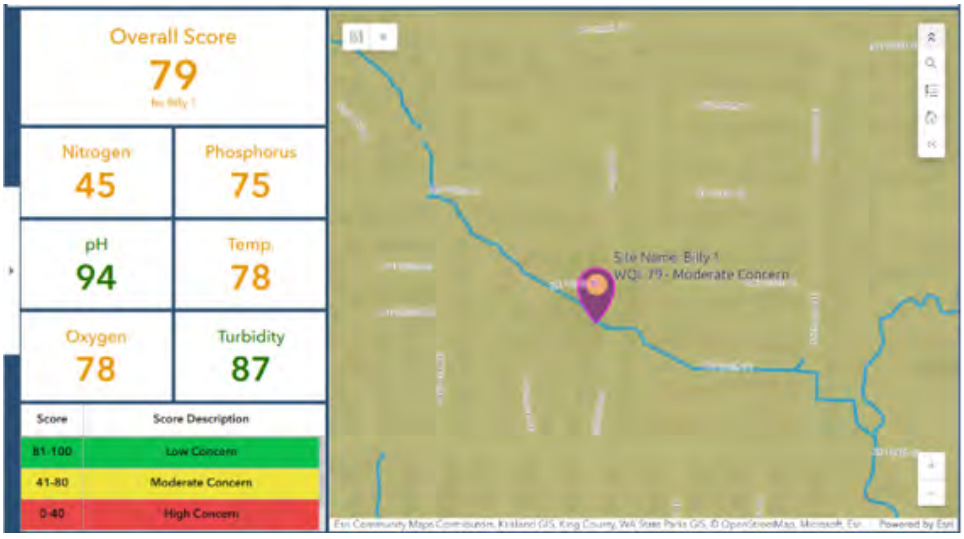
Appendix A

Historical Watershed Water Quality Dashboard Data for Billy Creek:

2023



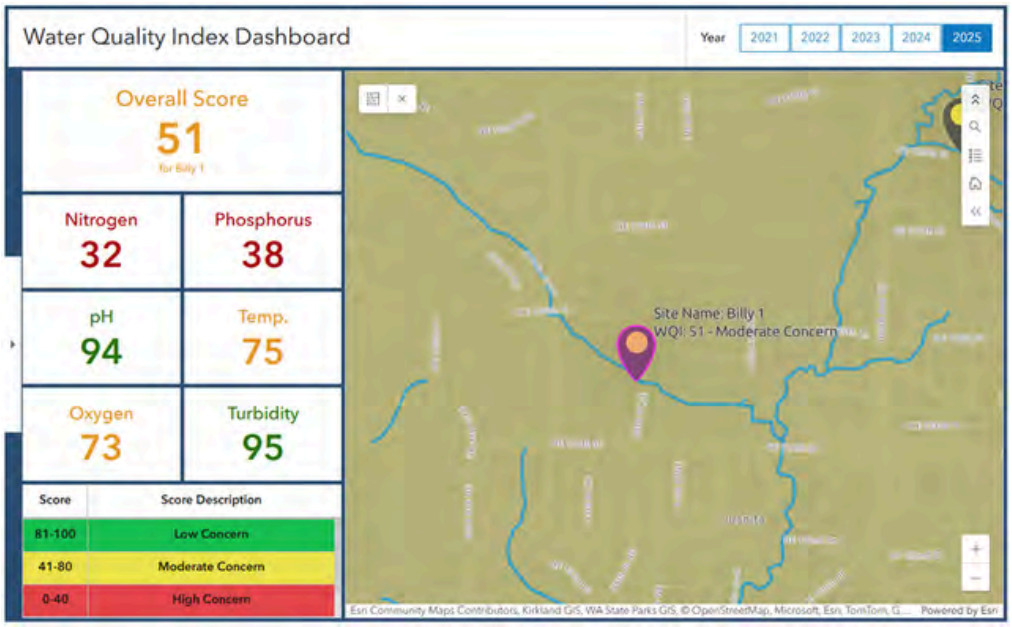
2024



Appendix A

Historical Watershed Water Quality Dashboard Data for Billy Creek:

2025



Appendix B

Natural Yard Care Survey Questions:

Disclaimer: **The City of Kirkland is asking a random sample of Kirkland residents to give their opinions on yard care. The City will use the results of this survey to guide our community outreach efforts.** This survey will take between 5 and 10 minutes to complete. After the eligibility questions (1 and 2), all questions are optional, your participation is voluntary, and all answers are anonymous.

1. This survey is intended for people living in Kirkland. Do you live in Kirkland?
   a. Yes
   b. No

2. Where you live, do you have a yard, grass yard, garden, or other greenspace associated with your home? This can include a yard that is maintained by someone else, such as in an apartment complex.
   a. Yes
   b. No

For this survey, the image below is what we consider a storm drain.

Appendix B

Natural Yard Care Survey Questions:

3. As you understand it, where does water **go after it enters a storm drain**? Please check all that apply.
   a. A sewage treatment plant - the same place where water from your toilets, showers, and sink goes
   b. A water treatment plant separate from a sewage treatment plant
   c. Soaks into soil, or groundwater
   d. To a creek, lake, the Puget Sound, or other body of water
   e. To a drainage pond
   f. I'm not sure
   g. Other (please specify)

4. In your opinion, how significant of a problem is pollution in Kirkland's creeks and lakes?
   a. A big problem
   b. A moderate problem
   c. A small problem
   d. Not a problem
   e. I'm not sure

5. What housing type do you live in?
   a. Single-family home
   b. Apartment or Senior Housing
   c. Condo
   d. Townhome
   e. Accessory Dwelling Unit (ADU)
   f. Mobile Home
   g. Other (please specify)

Appendix B

Natural Yard Care Survey Questions:

6. Who maintains your yard, garden, or greenspace? Check all that apply.
    a. I do, or someone else in my house does
    b. A professional landscaper or my private landlord (non-agency landlord)
    c. An organization (ex. HOA or an apartment maintenance crew)
    d. Other (please specify)

7. On average, how often do you maintain your yard?
    a. It depends on the season
    b. Monthly
    c. Twice a month
    d. Weekly
    e. Twice a week or more
    f. Unsure

8. What do you enjoy the most about yard maintenance? You may like more than one option, but please select your favorite aspect.
    a. Seeing and connecting with my neighbors
    b. The aesthetic look and feel after it is complete
    c. Being outside/it is peaceful
    d. The physical activity
    e. Unsure
    f. I don't enjoy yard maintenance
    g. Other (please specify)

Appendix B

Natural Yard Care Survey Questions:

9. Which of the following do you currently use on your yard? Check all that apply.
   a. Herbicides and/or pesticides
   b. Natural weed and/or pest deterrents
   c. Fertilizers such as “Weed & Feed” (For example: Scotts, Vigoro)
   d. Compost and/or mulch
   e. I don’t use any products
   f. Other (please specify)

10. How do you select the products you use on your yard? Products include: fertilizer, pest removers, weed killers, grass seed/sod, mulch, and more. Check all that apply.
   a. Price
   b. Digital research or recommendation
   c. Personal recommendation
   d. Eco-friendliness/Green product
   e. Appearance (for example: using beauty bark to improve the look of your yard)
   f. None of the above

Appendix B

Natural Yard Care Survey Questions:

"Natural Yard Care" is a method of maintaining your yard. It involves transitioning away from traditional products like pesticides to create a green space for your family and wildlife.

11. What might keep you from practicing natural yard care? Check all that apply.
    a. It seems easier to continue my routine and/or this sounds like a lot of work
    b. I don't know where to start
    c. I think it's expensive
    d. I don't like the way it looks
    e. I'm concerned it will attract pests
    f. Unsure
    g. Other (please specify)
    h. I currently practice natural yard care

12. Rank how much the following would encourage you to care for your yard "naturally." 1 being the most, 6 being the least motivating.
    a. I want to help wildlife, insects, and plants
    b. I think it reduces pollution and/or helps the environment
    c. I feel good about doing it
    d. I want to know more about yard care in general
    e. I could be given free products and/or a monetary prize
    f. Nothing

Appendix B

Natural Yard Care Survey Questions:

13. What would help you care for your yard naturally the most? You may like more than one option, but please select the most helpful tool.
    a. Gardening tools
    b. Money
    c. Access to mulch/compost
    d. Access to professionals
    e. Book or guide
    f. Personalized help from an expert at my home
    g. A flyer of summarized information
    h. Workshops, classes, and/or webinars
    i. Unsure

14. If you have any questions or comments, please share in this comment box.

15. If you would like to sign up for our monthly Kirkland Conserves newsletter, please provide the information below. Note: Providing this information removes the anonymity of your responses. This question will not be used in the analysis process.
    a. Name
    b. Email Address

16. Are you interested in sharing more of your thoughts in an interview or focus group setting? Note: Providing this information removes the anonymity of your responses. This question will not be used in the analysis process.

Appendix B

Natural Yard Care Survey Questions:

Demographic Information
Disclaimer: These questions are used to evaluate whether our outreach efforts are reaching a representative sample of Kirkland residents. They are optional, and will be kept anonymous.

17. What is your age?
    a. Under 18
    b. 18-24
    c. 25-34
    d. 35-44
    e. 45-54
    f. 55-64
    g. 65+

18. What race or ethnicity best describes you? Please check all that apply.
    a. American Indian
    b. Alaska Native
    c. Asian or Asian American
    d. Black or African American
    e. Hispanic or Latino
    f. Middle Eastern or North African
    g. Native Hawaiian
    h. Pacific Islander
    i. White or Caucasian
    j. Prefer to Not Respond
    k. Other (please specify)

Appendix B

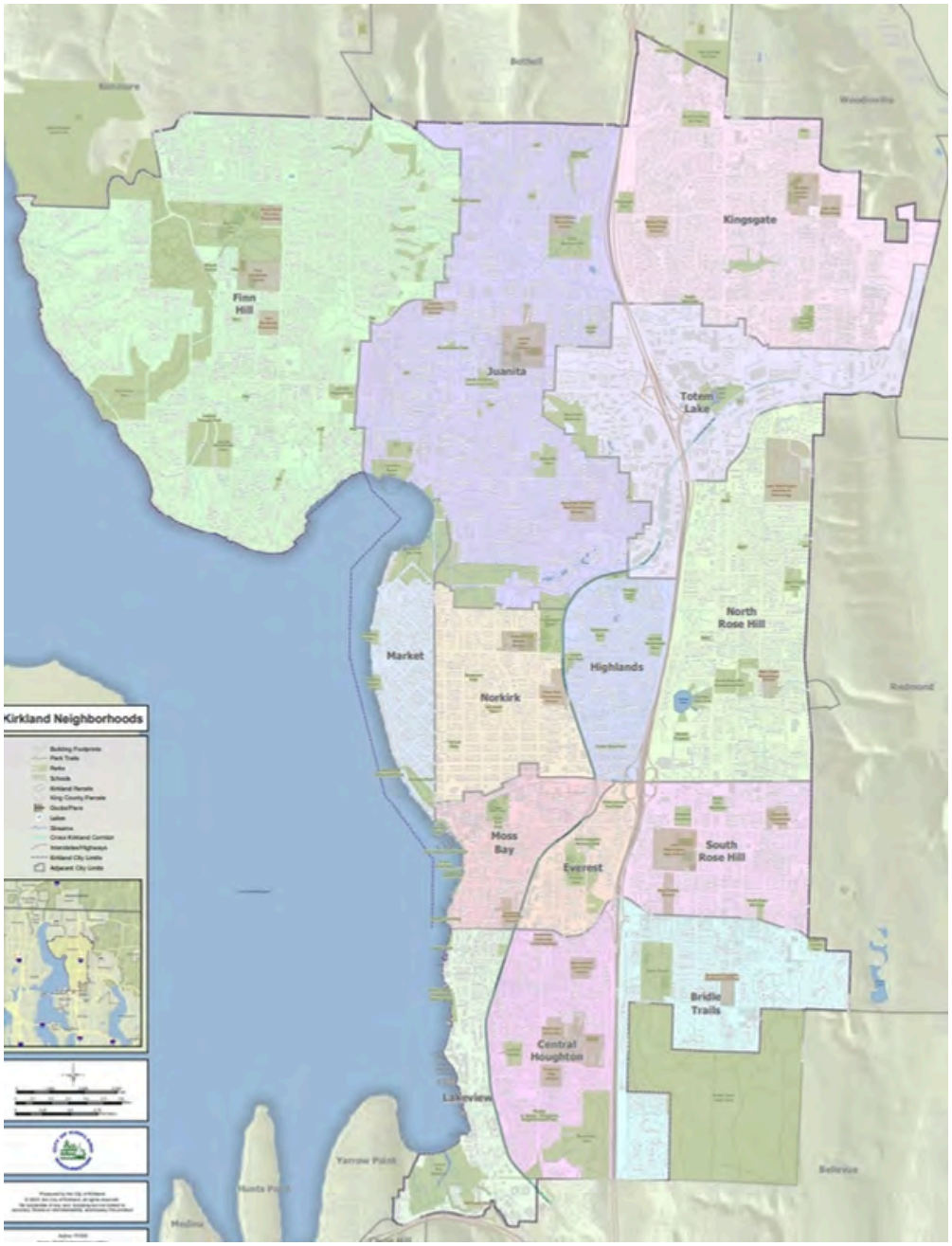
Natural Yard Care Survey Questions:

19. What was your estimated household income last year?
    a. Under $15,000
    b. Between $15,000 and $29,999
    c. Between $30,000 and $49,999
    d. Between $50,000 and $74,999
    e. Between $75,000 and $99,999
    f. Between $100,000 and $149,999
    g. Between $150,000 and $200,000
    h. Over $200,000

20. Which Kirkland neighborhood do you live in? See the map image below if you're unsure.
    a. Bridle Trails
    b. Central Houghton
    c. Everest
    d. Finn Hill
    e. Highlands
    f. Juanita
    g. Kingsgate
    h. Lakeview
    i. Market
    j. Moss Bay
    k. Norkirk
    l. Rose Hill (North)
    m. Rose Hill (South)
    n. Totem Lake

Appendix B

Natural Yard Care Survey Questions:



Appendix C

Priority Audience Analysis

The following tables provide a deeper analysis of the priority audience. They focus on expanding our understanding of Step 5 of the Planning Process for a Social Marketing Campaign: Identify Audience Barriers, Benefits, and Competition.

The first table (2 pages) explores spheres of influences - identifying individuals or groups within each sphere that may influence the primary audience. The table considers how they influence and what their level of influence is, as well as gives suggestions as to how the City can support these influential people.

The second table reviews external deterrents and details potential solutions that our behavior change campaign presents. It helps to answer the question, “What in the social environment deters our audience from practicing natural yard care?”

The third table explores internal deterrents and the potential solutions. It helps answer the question, “Why, psychologically and emotionally, wouldn’t our audience want to practice natural yard care?”

The fourth and fifth tables look into the external and internal motivators, respectively, that our audience has. These identified motivators also show what deterrents they address, and how the City can amplify these motivators.

The sixth table details behavior change and access moments; these moments are critical to reaching our audience to guide them toward behavior change and natural yard care.

The seventh and final table further brainstorms how we can create buzz and reach our audience multiple times naturally. These moments hope to expand the message and reach our priority audience’s spheres of influence.

Audience Spheres of Influence			
Who in this sphere influences your audience?	How do these individuals or groups influence the primary audience?	Is their level of influence high, medium, or low?	What do we need to do to support the desired behavior change?
Inner Circle			
Spouses, significant others, children	They have a pre-existing desire for what the yard looks like	High	Make materials that are aesthetically desirable to all members of the family Host Earth Day events at local schools with information on lawn care that kids can bring home
Personal Community			
Neighbors	They have an expectation for what the neighborhood should look like, and what their neighbors' yards should look like	Medium	Outreach neighborhood wide Utilize neighborhood ambassadors to showcase the good behavior in their neighborhood
Friends/Extended family/Houseguests	They come over to the host's house with the understanding that they will have a good time, and that includes the appearance and cleanliness of their yard.	Medium (for extended family) Low (for friends/houseguests)	Ensure the residents are confident in the changes they're making, and can share with these folks that the yard will look good even if it doesn't right now Confidence will also help the residents not be influenced by the opinions of others

Who in this sphere influences your audience?	How do these individuals or groups influence the primary audience?	Is their level of influence high, medium, or low?	What do we need to do to support the desired behavior change?
Wider Community			
Neighbors who the individual doesn't have an existing relationship with	Neighbors that aren't directly around but live in the full neighborhood and may drive by.	Low	Have messaging touch the entire neighborhood
News media	Sharing information and lighthearted stories	Low	Reach out to news "celebrities" aka Cisco of Gardening with Cisco
Institution / Organization / System level			
Industry leaders (weed-n-feed etc.)	Sharing information across all media forms	Medium	Directly explain the negatives of these products
Industry leaders (Lowes, Home Depot, other hardware stores)	Showcase large advertising for "norm" brands (i.e. Scott's)	High	Put alternative signage on the shelves of these stores
Policy			
Kirkland City Council	Implement code across the city	Low	Implement a local code restriction on polluting products
Direct Influencers			
Code enforcement	Enforce the city code	Low	If a code were implemented by the City Council, they would be responsible for the fines
Business owners	Sell yard maintenance products	High	Pledge to sell and promote more eco-friendly yard maintenance alternatives

External Deterrents to Primary Audience			
EXTERNAL deterrents	**Which external deterrents may exist in your behavior journey?**	**How or why would this deterrent exist?**	**How can the project overcome this deterrent?**
Lack of accessibility	x	• lack of public transportation in Kirkland • lack of educational materials in languages other than English • natural yard care products are typically more expensive than the norm	Create materials in many languages. Conduct workshops across the city and at different times of day. Supply educational briefs via mail and email, reducing the need to travel to get information. Provide a rebate or giveaway of the first round of products.
Choice overload	x	• there are many brands and methods of natural yard care • green-washing products that look eco-friendly but are actually not impactful	Test different methods of sharing the correct aspects of natural yard care, ensure the process leads to people making the correct selection. Create a guide of words that they should look out for aka what makes a product eco-friendly. Remove any mention of brands.
Lacking skills	x	• they are likely currently maintaining their yard in a way that harms the environment, so they are out of practice on starting a new way to do yard maintenance	Create a step-by-step "how to" guide that will make residents confident in their ability to start a new process from scratch. Can also find areas in that guide they are already doing and start from there. May seem less daunting.
Difficult to do	x	• our audience is already interested in yard care/gardening, but they haven't practiced it in an eco-friendly way • the initial changes to the yard appearance can be unappealing to look at (dead grass, new plants that aren't lush, lack of flowering plants)	Create materials that show the changes over time, with a realistic timeline. They can see that the bare/ugly stage only lasts for a bit, but have realistic expectations for their yard.

Internal Deterrents to Primary Audience			
INTERNAL deterrents	**Which internal deterrents may exist for your audience?**	**Why might this deterrent exist for the audience?**	**How can the project help reduce or remove this deterrent?**
Forgetfulness	x	Forget to pick up the eco-friendly materials every time they purchase. When ordering online, the less eco-friendly options are more prevalent and promoted.	Create a catch-phrase to remember and be advertised in stores. Increase communication during the spring and summer months - fall months for planting in the PNW. Create digital ads to combat the standard marketing. Try to create a balance between our marketing and the "big business'" marketing.
Status quo bias	x	Are used to purchasing their standard products.	Encourage change with a pledge/coupons/rebates.
Fear of change	x	Fear that their yard will be ugly. Fear that their neighbors will be judgemental of their yard looking different than the rest.	Create a reasonable timeline with photos of what the yard will look like. Create a yard sign for people to put up, telling their neighbors what they're doing and why it looks the way it does. Show yards that have been using natural yard care for years, at every level/type. (Ex. gardens, lawns, small yards) Present on the topic of natural yard care at neighborhood association meetings & libraries.
Lack of confidence	x	Not confident in their ability to identify an eco-friendly product. Not confident in their ability to continue the work until it pays off.	Create a guide of words to look for. Create a slogan for the words.
Lack of trust	x	General lack of trust in government programs.	Make content come from "Kirkland Conserves" aka the green branch of the city that isn't city-branded.

Motivators your audience may need THE MOST.	Which deterrents in the behavior journey will this motivator help overcome?	How will the project increase, create, and/or promote this motivator?	Why or how will this motivator overcome those deterrents?
EXTERNAL MOTIVATORS			
Social Proof	Fear of change, lacking skills, difficult to do, lack of trust, status quo	Creating a community of neighbors that practice natural yard care.	Using neighbors as a method of marketing, rather than the government accounts. Creating a community that can help one another with the practices/processes. Creating a network of people to collaborate with.
Tangible Benefits	Lack of accessibility, forgetfulness	Physically giving away product/rebate for product. Creating a guide in multiple languages. Saving on their water bill over time. Ambassadors get recognition for being involved.	Increases the ease of someone to get the product if we give it away/pay for it. People can't forget to purchase the product if they already have it.
Co-creation	Choice overload, lacking skills, lack of confidence	Promotes the residents' stake in their community and their environment. Workshops and listening sessions to identify pain-points in the behavior journey.	They are designing the materials that will help them gain the skills and confidence to practice natural yard care.

Motivators your audience may need THE MOST.	Which deterrents in the behavior journey will this motivator help overcome?	How will the project increase, create, and/or promote this motivator?	Why or how will this motivator overcome those deterrents?
INTERNAL MOTIVATORS			
Belonging	Fear of change, status quo	Cultivating a community of people that practice and learn natural yard care. Neighborhood associations focus. Creating a sort of "club" of gardeners/yard maintainers.	Working collaboratively with their peers makes change less scary, and their neighbors may already be in the community - thus they won't be judgemental of the yard's appearance. The community can change the local status quo.
Self-efficacy	Difficult to do, lack of confidence	Showcasing the impact made with water quality updates, bird watching identification updates, etc. Showcasing good practices with the ambassador program.	Feeling like they're making a difference means they 1) know what they're doing and 2) are being effective.
Intrinsic Benefits	Lacking skills, fear of change, difficult to do	Promote that using eco-friendly products is safer for pets and families. Good for the environment.	If something is good for their families, the difficulty is less impactful.
Purpose	Lack of trust	Improving local water quality. Improving local wildlife habitat.	Improving the local environment through personal actions can override their lack of trust in the government.
Intrinsic benefits	Fear of change	Better for your health	When people are concerned for their health and the health of their family, they are more willing to make significant routine changes.

1) Describe the moment when you can or need to reach the audience.	2) What will be your media mix for this moment?	3) What is your message for this moment?	4) How can you make the moment more special?
Behavior change moments: when the action/behavior should happen or when the audience may decide to do the action/behavior			
When they're purchasing their yard products at a hardware store	A frame sign next to the product rows, shelf flags	Call to action to choose the safer option	Reward the behavior with a discount on the eco-friendly product
When they're using their new product for the first time, and should be doing it correctly	A small "how-to" guide taped to the product at the store	Learn how much and where to apply the product so it is safest	Share an image on social media and tag the City to receive a shoutout in the next City podcast
Audience access moments: times when you will have access to the audience, e.g. at a planned event or festival, on your website, during meetings or a visit to your location.			
At "City Hall for All" annual event	Informational flyers, registration for an upcoming workshop	Learning about what harmful chemicals are in their current products	Provide free bottles of the safer alternative, or coupons for them
On Kirkland city social media	Photos and videos of people gardening and/or mowing their lawn without any product	You can maintain your yard differently than you do now, and it will still look good	Make it a fun video featuring a Kirkland icon such as the Mayor, explaining how she maintains her yard
At neighborhood association meetings	A powerpoint workshop presentation, flyer handouts with basic information, business cards	Learning about the harm of weed-and-feed style products and the benefits to their lawn of using better products	Provide coupons for them to share with their neighbors

Stretch Outreach Brainstorm		
Going beyond	What are the additional reach opportunities here?	What could be your media mix for these moments?
The in-between moments for your audience.	Signage around the City and the Juanita neighborhood	Bus advertising, bus stop advertising, flyers in small business windows and on City bulletin boards, fun stickers
The wider community around the audience.	Wider community, such as the neighborhood associations and City social media/podcast accounts, sharing how they've changed their behaviors	Small handouts, photos of happy neighbors in their lawns, testimonial graphics
Specific sources of influence in their personal community, inner circle or as direct influencers.	Kirkland icons and artists	Video testimonials and interviews from Kirkland icons such as the Mayor, local artists, the local gardening group, the local birding group

Appendix D

Literature Review Citations

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Appendix D

Literature Review Quotations:

Akinnawo, S. O. (2023):

"Furthermore, environmental studies in European countries from the year 2005 to 2012 have revealed that only an estimated 40–60% of nitrate and phosphate in the applied fertilizer was reportedly used up by plants…"

"…degradation of water quality, extinction of submerged plants, loss of biodiversity in an aquatic ecosystem, increased microbial biomass and productivity, recurrent presence of cyanobacterial blooms, increased level of waterborne diseases and economic loss in aquatic food products and finances…"

"Human anthropogenic activities such as the use of fertilizers, and detergents as well as the disposal of untreated sewage and aquaculture effluent have significantly increased the level of nutrient loading into water bodies. These anthropogenic activities continuously increase the level of nutrients (nitrate and phosphate) in the water body to a level that exceeds the self-purifying capacity of these water bodies, consequently leading to cultural eutrophication.

Appendix D

Literature Review Quotations:

Moore, J. W., Schindler, D. E., Scheuerell, M. D., Smith, D., & Frodge, J. (2003):
"Population growth, and specifically residential development, is associated with many environmental impacts (3), including nutrient pollution and subsequent eutrophication…"

"Lake Washington, which is larger than the other lakes, but was included because it is a key urban lake in Seattle that has had a history of water quality problems, including eutrophication…"

"Lake Washington in urban Seattle was restored from a eutrophic status by pollution regulations inspired by a grassroots environmental movement, perhaps the most famous lake restoration success story…"

Appendix D

Literature Review Quotations:

Toran, L., & Grandstaff, D. (2007):
“Use of lawn chemicals in residential areas may contribute nonpoint source (NPS) pollutants, such as nutrients, pesticides, and herbicides to streams.”

“In contrast, there is no correlation between K and total N in stormwater (Figure 5). The data form a scatter plot, with K:N ratios ranging from 0.5 to 13. If the source of the nutrients was lawn chemicals, rather than biological, one would expect variation in the ratios because lawn product ratios vary, and also the uptake of nutrients can change the ratios. The distinctly different plots for the creek and the stormwater are the evidences that the nitrogen concentration of storm discharge has a different source, and the high K suggests the source of N is lawn chemicals, not just atmospheric deposition of nitrate.”

“As the number of homes and area increase, it may be more likely that homes using lawn chemicals are part of the area, which results in nutrients being transported in the stormwater discharge. When there are a smaller number of homes, the likelihood that treatment has been applied decreases. Thus, the observed concentrations seem to be linked to localized occurrences of lawn chemical application.”

Appendix D

Literature Review Quotations:

Steele, M. K., McDowell, W. H., & Aitkenhead-Peterson, J. A. (2010):
"Human alteration of the landscape by agriculture has increased the delivery of N to surface waters (Boyer et al., 2002), both by increases in coverage of N-fixing crops (legumes and rice [Oryza sativa L.] in association with cyanobacteria) and by the synthesis of inorganic nitrogen fertilizers (Galloway et al., 2004)..."

"Pet food may be a particularly important part of the total food load because N in food is released as waste from the animal and is more likely to be deposited onto lawns and other green spaces and subject to leaching and runoff, rather than entering the wastewater stream with human wastes..."

"Fertilizer applications and fossil fuel combustions may also be a significant input. Groffman et al. (2004) estimated that lawn fertilization in Baltimore (14.4 kg N ha−1 yr−1) was greater than atmospheric deposition. In Hong Kong the estimate for lawn fertilization was about 8 kg N ha−1 yr−1 (Warren-Rhodes and Koenig, 2001)."

"Surface water in urban catchments around the world generally has higher phosphorus concentrations than surface water in rural catchments (Meybeck, 1998; Winter and Duthie, 2000; Bhatt and McDowell, 2007). For example, a 10-yr record of catchments in the greater Seattle area found stream water phosphorus concentrations were correlated with urban land cover, and most urban streams had on average 95% higher total phosphorus and 122% higher soluble reactive phosphorus than the most forested streams (Brett et al., 2005) Inputs of P to an urban watershed include fertilizers, human and pet food, atmospheric deposition, and P-containing consumer and industrial products (Davis and Gentry, 2000)."

Appendix D

Literature Review Quotations:

Steele, M. K., McDowell, W. H., & Aitkenhead-Peterson, J. A. (2010):
"The resulting buildup of P in agricultural soil from overfertilization with either chemical fertilizers or manures has been a recognized problem for water quality and the prevention of cultural eutrophication (Sharpley et al., 1994). Similar problems occur in urban ecosystems where overfertilization with chemical fertilizers, biosolids used in sod production, or manures from pets can lead to nutrient buildups in soil compared with less human-impacted systems (Baker et al., 2001; Pouyat et al., 2007). Fertilizer use in urban catchments has been found to contribute to the elevated P concentrations in streams (LaValle, 1975; Waschbusch et al., 1999). For example, lawns and streets were found to be the primary source of phosphorus to urban streams in Madison, WI. As a result of fertilizer application, lawns were estimated to contribute between 49 and 61% of the total P load in urban streams (Waschbusch et al., 1999). Influencing the amount and timing of P fertilization in urban ecosystem through education and extension may be more difficult than in agriculture because of the greater number of residents in any given urban watershed. Working with lawn care companies may provide a more effective avenue to influence a greater area of fertilized turf and horticultural areas in a city."

"Beautiful lawns and green spaces are generally a valued part of urban landscapes and balance the large areas of impervious surfaces, but from the perspective of urban water quality, urban green spaces and lawn care may also contribute to detectable concentrations of pesticides (Struger and Fletcher, 2007). The contribution of pesticides to total organic carbon concentrations is very small; however, these compounds may impact aquatic ecosystem function and quality of water for drinking at very low concentrations. The frequency of pesticides detected in urban streams is high, and concentrations often exceed those set for the protection of aquatic biota (USGS, 1999; Hoffman et al., 2000). A wide range of pesticides has been found (Table 15–4), including insecticides,

Appendix D

Literature Review Quotations:

Steele, M. K., McDowell, W. H., & Aitkenhead-Peterson, J. A. (2010):
"fungicides, and herbicides. Of particular concern is the frequent detection of organochlorine pesticides, including DDT [1,1,1-trichloro2,2-bis(4-chlorophenyl)ethane] and DDT metabolites in water, sediment, and fish tissue samples in watersheds dominated by urban land uses (Yamamoto et al., 1997; USGS, 1999; Black et al., 2000). Golf courses are often thought of as large contributors to pesticide concentrations; however, Struger and Fletcher (2007) found that golf courses in the Don and Humber watersheds, tributaries of Lake Ontario near Toronto, Canada were not significant contributors of pesticides, possibly due to the integrated pest management plans required by the city. They suggested that detection of pesticides is more likely due to use in home lawn care (Struger and Fletcher, 2007). Compared with agriculture, the contribution of pesticides to watersheds by urbanized areas may be greater than expected based on acreage. A study comparing biocide concentrations in agricultural and urban streams in seven locations around the United States found disproportionately higher concentrations of insecticides than herbicides in urban streams relative to agricultural streams (Hoffman et al., 2000). Although the herbicide contribution of all urban areas is likely very small compared with the contribution from agriculture, the contribution of insecticides may be of similar magnitude in urban and agricultural areas and should not be overlooked (Hoffman et al., 2000)."

City of Kirkland Annual Report Question 24a. for 2025

Attach a list of Stewardship Opportunities

Park Pet Waste Steward Volunteer Program: Volunteers help monitor and count the frequency of un-scooped dog waste in local parks to help identify problem areas and establish baseline data for future outreach efforts.

Water Watchers: Water Watchers is a community-based water monitoring program operated by the Sno-King Watershed Council. Water Watcher volunteers in Kirkland monitor physical and chemical indicators of stream health on local creeks. Data collected by the volunteers helps inform the community regarding watershed health and supplement water quality data collected by City staff.

Green Kirkland Partnership Stewardship Events: The Green Kirkland Partnership is an alliance between the City of Kirkland, nonprofit partners, businesses and the community to restore and maintain more than 500 acres of natural area parkland in the City. The Green Kirkland mission is to restore and maintain healthy forested and natural parklands by building a supportive community that works together to protect Kirkland's valuable natural resources for current and future generations. Much of this restoration work is completed by dedicated volunteers. Achieving this involves training volunteers in restoration activities and providing support from restoration partners, contractors, and skilled natural areas staff. The Partnership's activities include community-based restoration efforts like replanting areas with native trees and invasive plant removal, as well as education, outreach and engagement with our community. Opportunities for volunteer stewardship events are offered multiple times per month.

Storm Drain Marking: Volunteers mark neighborhood storm drains with labels stating "Lake Washington Starts Here – Only Rain Down the Drain." The purpose of these markers is to raise awareness regarding connection between our neighborhoods and local water bodies.

Cross Kirkland Corridor Adopt-a-Trail: Local volunteers have adopted quarter-mile segments of the corridor and pledged to remove litter twice per year. They also have the option of doing a yearly invasive plants removal project in their section. All 23 segments are currently adopted. Adopters include Kirkland neighborhood associations, businesses, individuals, families and community service groups.

Outfall_ID	Permit_Number	Latitude_Decimal_Degrees	Longitude_Decimal_Degrees	Horizontal_Datum	Horizontal_Coordinate_Accuracy	Horizontal_Coordinate_Collection_Method	Pipe_Or_Ditch_Size	Pipe_or_Ditch_Size_Units	Pipe_Or_Ditch_Material
16	WAR045521	47.68963967	-122.2176446	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
17	WAR045521	47.69010239	-122.217657	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
31	WAR045521	47.6875146	-122.2173536	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Plain Concrete
41	WAR045521	47.69438211	-122.2168878	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Reinforced Concrete
97	WAR045521	47.69705257	-122.2155431	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	10	inches	Plain Concrete
134	WAR045521	47.67984022	-122.2139212	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
200	WAR045521	47.67793017	-122.2126249	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Corrugated Aluminum
215	WAR045521	47.67770604	-122.2123055	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
225	WAR045521	47.67745017	-122.2120157	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
254	WAR045521	47.67696218	-122.2113679	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
379	WAR045521	47.67499084	-122.2094496	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	48	inches	Reinforced Concrete
467	WAR045521	47.67536743	-122.2088168	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Corrugated Aluminum
472	WAR045521	47.67537176	-122.2087254	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
501	WAR045521	47.67485945	-122.2081448	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Corrugated Aluminum
516	WAR045521	47.66759792	-122.2077639	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
517	WAR045521	47.66765616	-122.2077655	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
521	WAR045521	47.66557425	-122.2076577	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
556	WAR045521	47.66644828	-122.2073021	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
560	WAR045521	47.65953756	-122.2070809	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Plain Concrete
671	WAR045521	47.71928497	-122.2078282	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Plain Concrete
689	WAR045521	47.67058002	-122.2064001	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
696	WAR045521	47.67387405	-122.2064485	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Reinforced Concrete
750	WAR045521	47.67163938	-122.2059176	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Reinforced Concrete
751	WAR045521	47.67243226	-122.2059315	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Reinforced Concrete
765	WAR045521	47.67304153	-122.2058568	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Reinforced Concrete
1726	WAR045521	47.66667115	-122.1967379	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
2073	WAR045521	47.68071637	-122.1932911	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
2159	WAR045521	47.6839291	-122.1922768	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
2327	WAR045521	47.71926733	-122.1911529	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
3139	WAR045521	47.68402733	-122.1785139	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Polyethylene
3140	WAR045521	47.68398119	-122.1785104	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Polyethylene
3330	WAR045521	47.68775724	-122.1756406	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Ductile Iron
4173	WAR045521	47.71560047	-122.2183988	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
4176	WAR045521	47.70584183	-122.2180644	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
4179	WAR045521	47.70636897	-122.21804	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
4182	WAR045521	47.70671595	-122.2180283	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
4185	WAR045521	47.70725062	-122.2180142	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
4188	WAR045521	47.70781695	-122.2179982	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
4265	WAR045521	47.70532201	-122.2168569	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Solid Wall Polyethylene
4282	WAR045521	47.70532056	-122.2167124	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
4283	WAR045521	47.70494718	-122.2166937	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
4299	WAR045521	47.70923147	-122.2167043	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Plain Concrete
4309	WAR045521	47.69498118	-122.2162682	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
4316	WAR045521	47.71046472	-122.2166256	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
4332	WAR045521	47.7112858	-122.2164757	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Solid Wall Polyethylene

4400	WAR045521	47.71350309	-122.2158394	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
4417	WAR045521	47.71344501	-122.2156038	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Corrugated Aluminum
4474	WAR045521	47.70833381	-122.2149437	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
4516	WAR045521	47.70781202	-122.2145753	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
4644	WAR045521	47.712363	-122.213568	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
4660	WAR045521	47.64507424	-122.211638	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
4686	WAR045521	47.70758319	-122.2131117	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Solid Wall Polyethylene
4693	WAR045521	47.71848016	-122.2133639	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Plain Concrete
4771	WAR045521	47.64324246	-122.2101658	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
4900	WAR045521	47.70328933	-122.210766	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	36	inches	Corrugated Aluminum
4912	WAR045521	47.71197638	-122.2109501	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
5032	WAR045521	47.71157138	-122.2104526	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
5033	WAR045521	47.70236231	-122.2102205	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
5094	WAR045521	47.6965625	-122.2099603	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Reinforced Concrete
5105	WAR045521	47.67628269	-122.2093867	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	36	inches	Reinforced Concrete
5189	WAR045521	47.70041618	-122.2095217	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	36	inches	Corrugated Aluminum
5206	WAR045521	47.67628871	-122.2087889	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	10	inches	Plain Concrete
5252	WAR045521	47.67635112	-122.2083359	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
5303	WAR045521	47.67637755	-122.2080642	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
5305	WAR045521	47.69940762	-122.2086565	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
5314	WAR045521	47.69523649	-122.208505	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
5354	WAR045521	47.69507392	-122.2082498	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
5364	WAR045521	47.70265997	-122.2083403	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Corrugated Aluminum
5368	WAR045521	47.66302646	-122.2072853	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
5368.1	WAR045521	47.66302646	-122.2072853	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
5372	WAR045521	47.69485821	-122.2081166	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
5379	WAR045521	47.67648299	-122.2075984	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Plain Concrete
5384	WAR045521	47.69879847	-122.2081466	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
5394	WAR045521	47.7145593	-122.2082924	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
5396	WAR045521	47.714672	-122.2085014	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Reinforced Concrete
5440	WAR045521	47.66305324	-122.2069918	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Solid Wall Polyethylene
5441	WAR045521	47.69315245	-122.2077631	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
5446	WAR045521	47.67507889	-122.2072669	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Plain Concrete
5460	WAR045521	47.70254561	-122.2079502	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
5465	WAR045521	47.64355028	-122.2063712	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
5475	WAR045521	47.71512212	-122.2082393	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
5481	WAR045521	47.6950101	-122.2076892	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Galvanized Corrugated Iron
5497	WAR045521	47.69140558	-122.2075319	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
5499	WAR045521	47.66305164	-122.2067825	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
5518	WAR045521	47.66843126	-122.2068876	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
5562	WAR045521	47.6683888	-122.2067585	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
5562.1	WAR045521	47.6683888	-122.2067585	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	10	inches	Plain Concrete
5603	WAR045521	47.71596918	-122.2079193	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Plain Concrete
5613	WAR045521	47.67534433	-122.2068085	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Plain Concrete
5625	WAR045521	47.71672915	-122.2078539	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Plain Concrete
5630	WAR045521	47.71714343	-122.2078441	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Plain Concrete

5631	WAR045521	47.71726056	-122.2078438	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Plain Concrete
5636	WAR045521	47.71782196	-122.2078452	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Ductile Iron
5640	WAR045521	47.7183349	-122.2078372	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Plain Concrete
5680	WAR045521	47.67670124	-122.2065865	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
5685	WAR045521	47.71277257	-122.2075295	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
5730	WAR045521	47.6630451	-122.2060101	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Corrugated Aluminum
5749	WAR045521	47.69684757	-122.2066591	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Polyvinyl Chloride
5756	WAR045521	47.71605936	-122.2072846	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Plain Concrete
5852	WAR045521	47.67684015	-122.2059464	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Ductile Iron
5869	WAR045521	47.67685869	-122.2058631	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Ductile Iron
5878	WAR045521	47.67686958	-122.205813	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Plain Concrete
5880	WAR045521	47.71310313	-122.2067717	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
5896	WAR045521	47.67551247	-122.2056936	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Plain Concrete
5919	WAR045521	47.67692351	-122.2055651	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Plain Concrete
6008	WAR045521	47.65655029	-122.2046126	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Solid Wall Polyethylene
6039	WAR045521	47.67702902	-122.2050808	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Plain Concrete
6043	WAR045521	47.66288578	-122.204705	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Plain Concrete
6046	WAR045521	47.6630747	-122.2046793	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
6077	WAR045521	47.67706303	-122.2049257	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
6090	WAR045521	47.65173299	-122.2042459	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Reinforced Concrete
6102	WAR045521	47.67707119	-122.2048885	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
6109	WAR045521	47.67550851	-122.2048154	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Reinforced Concrete
6114	WAR045521	47.6686611	-122.2046179	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
6119	WAR045521	47.65107343	-122.2041347	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Reinforced Concrete
6148	WAR045521	47.65047469	-122.20387	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
6153	WAR045521	47.65022941	-122.2038319	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Reinforced Concrete
6159	WAR045521	47.65003436	-122.2038025	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Corrugated Aluminum
6181	WAR045521	47.64931429	-122.2036916	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
6193	WAR045521	47.67717963	-122.2043937	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Plain Concrete
6199	WAR045521	47.64878052	-122.2036226	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Reinforced Concrete
6245	WAR045521	47.69312603	-122.2046603	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
6248	WAR045521	47.67722921	-122.2041847	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
6253	WAR045521	47.69317224	-122.2045655	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
6269	WAR045521	47.67548465	-122.2040363	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Polyvinyl Chloride
6283	WAR045521	47.67548277	-122.2039662	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Plain Concrete
6290	WAR045521	47.67728465	-122.2039574	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
6320	WAR045521	47.64787942	-122.2030751	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Reinforced Concrete
6328	WAR045521	47.6754792	-122.2037853	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
6330	WAR045521	47.71557078	-122.2048428	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Plain Concrete
6384	WAR045521	47.67547507	-122.2035744	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Reinforced Concrete
6406	WAR045521	47.66871337	-122.2032669	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
6427	WAR045521	47.67734892	-122.2034796	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
6428	WAR045521	47.64735793	-122.2026381	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
6459	WAR045521	47.67546806	-122.2032719	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Reinforced Concrete
6484	WAR045521	47.6774182	-122.2031962	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	36	inches	Corrugated Aluminum
6500	WAR045521	47.64399513	-122.2022887	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete

6515	WAR045521	47.67545904	-122.203032	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Plain Concrete
6562	WAR045521	47.64667916	-122.2020076	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
6565	WAR045521	47.65652597	-122.2022562	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Reinforced Concrete
6594	WAR045521	47.67752397	-122.2026852	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Ductile Iron
6630	WAR045521	47.64623268	-122.2016857	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Corrugated Aluminum
6638	WAR045521	47.67544783	-122.2024231	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
6644	WAR045521	47.71804249	-122.2035227	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
6654	WAR045521	47.64502379	-122.2015483	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Reinforced Concrete
6689	WAR045521	47.66833934	-122.2020539	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Polyvinyl Chloride
6693	WAR045521	47.718	-122.2036	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
6759	WAR045521	47.68702727	-122.2023612	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
6764	WAR045521	47.67544278	-122.2020476	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Plain Concrete
6770	WAR045521	47.66686479	-122.2018118	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
6778	WAR045521	47.66771646	-122.2018136	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
6783	WAR045521	47.66672617	-122.2017772	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Reinforced Concrete
6861	WAR045521	47.69355213	-122.2020491	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
6910	WAR045521	47.66254039	-122.2010682	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Plain Concrete
6919	WAR045521	47.66672986	-122.2011493	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
6935	WAR045521	47.67543346	-122.2013046	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
6941	WAR045521	47.69342532	-122.2018305	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
6961	WAR045521	47.66121061	-122.2007741	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
6966	WAR045521	47.66180073	-122.2007693	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
6969	WAR045521	47.66231693	-122.200761	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
6972	WAR045521	47.66256114	-122.2007564	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
6981	WAR045521	47.6872271	-122.2013844	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
6987	WAR045521	47.649575	-122.2003577	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Reinforced Concrete
7012	WAR045521	47.64502984	-122.2001055	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Reinforced Concrete
7024	WAR045521	47.6480418	-122.2001403	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Plain Concrete
7026	WAR045521	47.67805829	-122.2009238	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Polyvinyl Chloride
7035	WAR045521	47.6519286	-122.2003989	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
7048	WAR045521	47.67542983	-122.2007617	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
7062	WAR045521	47.6450995	-122.1999046	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
7080	WAR045521	47.66672213	-122.2003684	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Plain Concrete
7092	WAR045521	47.66672213	-122.2002967	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Plain Concrete
7097	WAR045521	47.65246663	-122.1999008	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Solid Wall Polyethylene
7138	WAR045521	47.64966133	-122.1996402	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
7143	WAR045521	47.65255427	-122.1996617	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
7150	WAR045521	47.67542121	-122.2002429	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Plain Concrete
7155	WAR045521	47.66671863	-122.1999773	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Reinforced Concrete
7197	WAR045521	47.6967633	-122.2006023	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
7219	WAR045521	47.66196272	-122.1995848	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
7237	WAR045521	47.66230596	-122.1995403	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
7252	WAR045521	47.66672331	-122.1995762	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Reinforced Concrete
7258	WAR045521	47.66115732	-122.1994044	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
7259	WAR045521	47.65256749	-122.1991724	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
7277	WAR045521	47.71331422	-122.2006953	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum

7278	WAR045521	47.64970685	-122.1990095	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
7312	WAR045521	47.67847057	-122.1995857	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
7312.1	WAR045521	47.67847057	-122.1995857	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
7316	WAR045521	47.69312288	-122.1999565	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Solid Wall Polyethylene
7318	WAR045521	47.6930635	-122.1999524	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
7322	WAR045521	47.69258807	-122.1999208	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
7331	WAR045521	47.67538186	-122.1994421	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Plain Concrete
7332	WAR045521	47.6611561	-122.1990452	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
7382	WAR045521	47.6753686	-122.1991992	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
7409	WAR045521	47.69568205	-122.1996311	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
7440	WAR045521	47.69296897	-122.1994601	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
7459	WAR045521	47.66243418	-122.1985323	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
7463	WAR045521	47.66670047	-122.1986345	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Plain Concrete
7464	WAR045521	47.71333004	-122.1998565	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
7474	WAR045521	47.66093879	-122.1984377	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
7494	WAR045521	47.67535527	-122.1987543	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
7502	WAR045521	47.66670091	-122.1984891	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Reinforced Concrete
7524	WAR045521	47.66075278	-122.198268	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
7548	WAR045521	47.6593116	-122.1981424	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
7554	WAR045521	47.65971906	-122.1981385	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
7559	WAR045521	47.65996933	-122.1981377	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
7564	WAR045521	47.66023602	-122.1981392	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
7571	WAR045521	47.67877718	-122.1985371	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Plain Concrete
7611	WAR045521	47.6458724	-122.1974766	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Solid Wall Polyethylene
7626	WAR045521	47.71331592	-122.1991929	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
7637	WAR045521	47.69651079	-122.1986867	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
7647	WAR045521	47.67893555	-122.198036	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
7647.1	WAR045521	47.67893555	-122.198036	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
7676	WAR045521	47.6666933	-122.1976489	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Reinforced Concrete
7686	WAR045521	47.64671563	-122.1970543	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
7691	WAR045521	47.65896842	-122.1972901	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
7693	WAR045521	47.67461227	-122.1977298	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Asbestos Cement
7702	WAR045521	47.69550223	-122.1982505	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
7719	WAR045521	47.64619914	-122.1968454	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
7772	WAR045521	47.66667035	-122.1968987	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Solid Wall Polyethylene
7855	WAR045521	47.67894529	-122.1969385	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
7858	WAR045521	47.6767355	-122.1968749	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
7862	WAR045521	47.67828676	-122.1969146	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	36	inches	Plain Concrete
7862.1	WAR045521	47.67828676	-122.1969146	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
7862.2	WAR045521	47.67828676	-122.1969146	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
7863	WAR045521	47.67846893	-122.1969178	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
7876	WAR045521	47.67656334	-122.1968535	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	36	inches	Reinforced Concrete
7876.1	WAR045521	47.67656334	-122.1968535	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
7876.2	WAR045521	47.67656334	-122.1968535	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Solid Wall Polyethylene
7876.3	WAR045521	47.67656334	-122.1968535	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
7876.4	WAR045521	47.67656334	-122.1968535	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Solid Wall Polyethylene

7883	WAR045521	47.69675132	-122.1973674	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
7901	WAR045521	47.67816359	-122.1968218	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
7902	WAR045521	47.71289047	-122.197729	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
7913	WAR045521	47.69570071	-122.1972058	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
7915	WAR045521	47.69584846	-122.1972011	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
7923	WAR045521	47.66208898	-122.196292	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
7950	WAR045521	47.66659725	-122.1963344	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
7952	WAR045521	47.69493801	-122.1970982	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
7955	WAR045521	47.65884427	-122.1961386	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
7958	WAR045521	47.64750609	-122.1958281	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
7977	WAR045521	47.6671374	-122.1962888	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
7977.1	WAR045521	47.6671374	-122.1962888	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
7984	WAR045521	47.66818948	-122.1963015	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
7984.1	WAR045521	47.66818948	-122.1963015	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	
7984.2	WAR045521	47.66818948	-122.1963015	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	
7989	WAR045521	47.66936938	-122.1963145	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
7998	WAR045521	47.67056294	-122.1963296	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
8008	WAR045521	47.67104724	-122.1963318	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Plain Concrete
8009	WAR045521	47.67175872	-122.196342	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Ductile Iron
8019	WAR045521	47.67391273	-122.1963702	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
8026	WAR045521	47.67456269	-122.1963623	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Ductile Iron
8069	WAR045521	47.71129683	-122.1972111	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
8075	WAR045521	47.66668556	-122.1960457	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
8087	WAR045521	47.64767535	-122.1954424	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Corrugated Aluminum
8093	WAR045521	47.67903166	-122.196272	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Solid Wall Polyethylene
8101	WAR045521	47.64769811	-122.1953841	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Corrugated Aluminum
8123	WAR045521	47.66668322	-122.1958287	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Plain Concrete
8145	WAR045521	47.67811615	-122.1959413	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
8174	WAR045521	47.67837016	-122.1956701	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Corrugated Aluminum
8183	WAR045521	47.68837315	-122.1958406	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
8255	WAR045521	47.67895829	-122.1951865	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
8264	WAR045521	47.69062721	-122.1954396	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
8273	WAR045521	47.67679929	-122.1950681	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Corrugated Aluminum
8402	WAR045521	47.68918709	-122.1942947	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
8487	WAR045521	47.67329629	-122.1936126	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
8496	WAR045521	47.67908712	-122.1937342	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Plain Concrete
8500	WAR045521	47.67907988	-122.1937276	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Galvanized Corrugated Iron
8516	WAR045521	47.6797353	-122.1936579	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
8523	WAR045521	47.68987532	-122.1939014	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
8533	WAR045521	47.6931819	-122.1939298	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
8550	WAR045521	47.6848361	-122.1936103	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
8566	WAR045521	47.68485828	-122.1935737	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Ductile Iron
8581	WAR045521	47.68247535	-122.193433	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
8592	WAR045521	47.68838248	-122.1935508	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
8597	WAR045521	47.68222685	-122.1933752	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
8606	WAR045521	47.68146404	-122.1933324	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum

8611	WAR045521	47.68136989	-122.1933239	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
8613	WAR045521	47.68389292	-122.1933884	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Corrugated Aluminum
8616	WAR045521	47.68401725	-122.1933873	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Corrugated Aluminum
8620	WAR045521	47.68662302	-122.1934411	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Solid Wall Polyethylene
8632	WAR045521	47.68736256	-122.1934442	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
8643	WAR045521	47.68665939	-122.1934023	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
8658	WAR045521	47.68230703	-122.1932749	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
8660	WAR045521	47.68222252	-122.1932706	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Reinforced Concrete
8661	WAR045521	47.68322433	-122.1932981	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
8687	WAR045521	47.68071766	-122.1931396	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
8749	WAR045521	47.6797712	-122.192707	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Plain Concrete
8771	WAR045521	47.6874558	-122.1928384	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
8781	WAR045521	47.70651867	-122.1933118	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
8800	WAR045521	47.68483895	-122.1926504	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
8827	WAR045521	47.67687959	-122.192255	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
8843	WAR045521	47.68741911	-122.1924159	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
8849	WAR045521	47.67684303	-122.1921138	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
8851	WAR045521	47.67676064	-122.1921021	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
8857	WAR045521	47.67317436	-122.1919029	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
8866	WAR045521	47.67615057	-122.1919947	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
8870	WAR045521	47.68229804	-122.1921551	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
8885	WAR045521	47.67534235	-122.191826	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
8902	WAR045521	47.70049663	-122.1923385	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Ductile Iron
8918	WAR045521	47.69087805	-122.1920078	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
8927	WAR045521	47.67547381	-122.1915678	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Reinforced Concrete
8939	WAR045521	47.68889972	-122.1918635	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
9000	WAR045521	47.68628885	-122.1915938	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
9007	WAR045521	47.69498424	-122.1917936	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
9036	WAR045521	47.67859485	-122.1912311	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Corrugated Aluminum
9042	WAR045521	47.69497455	-122.1916337	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
9067	WAR045521	47.67622333	-122.1910176	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Reinforced Concrete
9073	WAR045521	47.6779492	-122.1910293	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
9074	WAR045521	47.68070783	-122.1911013	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
9084	WAR045521	47.67741737	-122.1909988	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
9086	WAR045521	47.67455341	-122.1909187	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Lined Corrugated Polyethylene
9090	WAR045521	47.67471086	-122.1908904	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
9093	WAR045521	47.6752731	-122.1908993	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
9096	WAR045521	47.67421239	-122.1908625	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Solid Wall Polyethylene
9100	WAR045521	47.6753817	-122.1908766	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Solid Wall Polyethylene
9157	WAR045521	47.68326726	-122.1906964	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Ductile Iron
9195	WAR045521	47.68364534	-122.1905246	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
9232	WAR045521	47.66720814	-122.1900166	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
9265	WAR045521	47.67980032	-122.1901302	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Solid Wall Polyethylene
9267	WAR045521	47.67873026	-122.1900938	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Ductile Iron
9284	WAR045521	47.6766507	-122.1899692	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Reinforced Concrete
9291	WAR045521	47.68401333	-122.1901559	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete

9293	WAR045521	47.68417327	-122.1901478	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
9295	WAR045521	47.69457892	-122.1904113	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
9350	WAR045521	47.67962362	-122.1898284	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Corrugated Aluminum
9368	WAR045521	47.66848018	-122.1894233	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
9400	WAR045521	47.6774213	-122.1895296	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
9413	WAR045521	47.67219032	-122.1893479	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Ductile Iron
9488	WAR045521	47.67734548	-122.1891595	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
9516	WAR045521	47.66693691	-122.1887173	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Reinforced Concrete
9621	WAR045521	47.6793936	-122.1884655	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
9643	WAR045521	47.67096214	-122.1881389	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
9651	WAR045521	47.67150494	-122.1881404	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
9677	WAR045521	47.67644185	-122.1881145	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Solid Wall Polyethylene
9724	WAR045521	47.67504118	-122.1879415	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
9765	WAR045521	47.69240711	-122.1882409	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
9774	WAR045521	47.67951551	-122.1878649	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
9779	WAR045521	47.69261139	-122.1881859	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
9802	WAR045521	47.69405725	-122.1881408	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
9841	WAR045521	47.69323835	-122.1879517	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
9861	WAR045521	47.6960261	-122.1879256	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
9878	WAR045521	47.71856122	-122.1884264	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
9882	WAR045521	47.67588052	-122.187279	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Solid Wall Polyethylene
9909	WAR045521	47.71832131	-122.1882254	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Solid Wall Polyethylene
10028	WAR045521	47.64738387	-122.1856254	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
10084	WAR045521	47.65190394	-122.1855203	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
10108	WAR045521	47.64920915	-122.1853987	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
10109	WAR045521	47.69618484	-122.1866193	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
10157	WAR045521	47.65272013	-122.1853281	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
10350	WAR045521	47.71291571	-122.1862958	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Reinforced Concrete
10385	WAR045521	47.71766582	-122.186154	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Corrugated Aluminum
10394	WAR045521	47.71751508	-122.1861339	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
10482	WAR045521	47.67449143	-122.1844285	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
10484	WAR045521	47.67452794	-122.1844258	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
10635	WAR045521	47.69486835	-122.183712	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
10698	WAR045521	47.67539925	-122.1829257	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	10	inches	Polyvinyl Chloride
10706	WAR045521	47.67541909	-122.1828772	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
10790	WAR045521	47.69868094	-122.1827473	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
10884	WAR045521	47.68520284	-122.1812869	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Solid Wall Polyethylene
10933	WAR045521	47.6867626	-122.1808407	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Solid Wall Polyethylene
10937	WAR045521	47.69843566	-122.1813551	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Reinforced Concrete
10957	WAR045521	47.68253868	-122.180784	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
10959	WAR045521	47.68252781	-122.1807697	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
10965	WAR045521	47.68234149	-122.1807426	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
10968	WAR045521	47.6815778	-122.1807144	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
10975	WAR045521	47.68111062	-122.1806755	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
10977	WAR045521	47.68011835	-122.1806449	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
10994	WAR045521	47.69854357	-122.1810531	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum

11028	WAR045521	47.68251512	-122.1805519	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
11044	WAR045521	47.67981837	-122.1804701	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
11085	WAR045521	47.68772552	-122.180439	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
11117	WAR045521	47.71719966	-122.1811263	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
11120	WAR045521	47.68759046	-122.1802276	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
11136	WAR045521	47.6877505	-122.1801947	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
11190	WAR045521	47.6901041	-122.1798888	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
11215	WAR045521	47.69005233	-122.179677	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
11218	WAR045521	47.68254291	-122.1794744	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
11269	WAR045521	47.69123061	-122.1793502	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
11275	WAR045521	47.71826072	-122.179979	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
11283	WAR045521	47.6912025	-122.1791754	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
11285	WAR045521	47.69119832	-122.1791478	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
11322	WAR045521	47.66994633	-122.1783375	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
11352	WAR045521	47.67975765	-122.1784031	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
11370	WAR045521	47.68256762	-122.1784192	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
11394	WAR045521	47.68053409	-122.1782493	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
11420	WAR045521	47.67869995	-122.1781524	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Reinforced Concrete
11421	WAR045521	47.67907955	-122.1781503	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
11424	WAR045521	47.69826817	-122.1786323	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
11433	WAR045521	47.69988749	-122.1785772	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Solid Wall Polyethylene
11457	WAR045521	47.6930566	-122.1782757	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
11498	WAR045521	47.69340736	-122.1781497	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Solid Wall Polyethylene
11507	WAR045521	47.69347816	-122.1781217	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Solid Wall Polyethylene
11519	WAR045521	47.69353636	-122.1780952	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Solid Wall Polyethylene
11531	WAR045521	47.69358572	-122.1780704	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
11547	WAR045521	47.71030218	-122.1784538	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Ductile Iron
11566	WAR045521	47.69367616	-122.1779777	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
11620	WAR045521	47.7010654	-122.1779959	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
11642	WAR045521	47.71142791	-122.1781607	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Corrugated Aluminum
11653	WAR045521	47.70103042	-122.1777906	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
11655	WAR045521	47.67913321	-122.1772342	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Corrugated Aluminum
11747	WAR045521	47.70126723	-122.1770824	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
11843	WAR045521	47.67845747	-122.175881	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Solid Wall Polyethylene
11861	WAR045521	47.68649701	-122.1760229	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
11888	WAR045521	47.68871035	-122.17591	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
11905	WAR045521	47.69074438	-122.1758719	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
11913	WAR045521	47.69329899	-122.1759085	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
11919	WAR045521	47.69328484	-122.1758863	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Ductile Iron
11921	WAR045521	47.69330008	-122.1758897	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Ductile Iron
11950	WAR045521	47.6902832	-122.1756295	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
11982	WAR045521	47.69080648	-122.1755858	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
12029	WAR045521	47.70930855	-122.1759492	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
12126	WAR045521	47.68251418	-122.1749516	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Ductile Iron
12218	WAR045521	47.68052191	-122.174463	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
12236	WAR045521	47.69022319	-122.1745411	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride

12237	WAR045521	47.68957581	-122.1744973	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Solid Wall Polyethylene
12299	WAR045521	47.68957275	-122.1741105	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Solid Wall Polyethylene
12301	WAR045521	47.67763016	-122.1737539	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
12365	WAR045521	47.68956946	-122.1735117	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
12400	WAR045521	47.68956572	-122.1733251	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Solid Wall Polyethylene
12427	WAR045521	47.68624996	-122.1730612	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Solid Wall Polyethylene
12472	WAR045521	47.69105782	-122.1732035	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
12501	WAR045521	47.6860353	-122.1728802	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
12503	WAR045521	47.68579021	-122.1728705	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Solid Wall Polyethylene
12509	WAR045521	47.68624867	-122.1728496	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Ductile Iron
12662	WAR045521	47.68623883	-122.172419	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
12825	WAR045521	47.68817165	-122.1716732	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
12873	WAR045521	47.68256966	-122.1712395	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
12887	WAR045521	47.67930838	-122.1710644	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
12892	WAR045521	47.67946779	-122.1710253	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
12900	WAR045521	47.68470156	-122.1710837	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
12927	WAR045521	47.68255523	-122.1708477	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
12941	WAR045521	47.68937418	-122.1709283	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
12945	WAR045521	47.68123379	-122.170698	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
12976	WAR045521	47.68041071	-122.1703538	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
13117	WAR045521	47.68323076	-122.1698147	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Ductile Iron
13148	WAR045521	47.68200866	-122.1696521	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
13163	WAR045521	47.6796901	-122.16954	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
13195	WAR045521	47.68301769	-122.1695745	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
13238	WAR045521	47.68195591	-122.1694604	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Solid Wall Polyethylene
13239	WAR045521	47.68078187	-122.1694301	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
13274	WAR045521	47.6807532	-122.1693418	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
13315	WAR045521	47.71224142	-122.1698869	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
13351	WAR045521	47.71227287	-122.1697359	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
13521	WAR045521	47.68016	-122.1674592	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
13857	WAR045521	47.71251748	-122.1662058	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
13916	WAR045521	47.71251889	-122.1657479	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Ductile Iron
14487	WAR045521	47.68526285	-122.1726082	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
14582	WAR045521	47.68174619	-122.1705324	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
14628	WAR045521	47.71118245	-122.2102943	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
14629	WAR045521	47.71116735	-122.2102049	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
14735	WAR045521	47.67706466	-122.2049182	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	48	inches	Ductile Iron
14791	WAR045521	47.67547066	-122.1872867	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Solid Wall Polyethylene
14794	WAR045521	47.67545005	-122.1868441	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
14797	WAR045521	47.67545616	-122.1865246	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
14933	WAR045521	47.67599709	-122.1872022	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Solid Wall Polyethylene
15088	WAR045521	47.71496339	-122.1701657	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
15180	WAR045521	47.68870851	-122.1759204	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
15894	WAR045521	47.69496553	-122.2006751	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
15999	WAR045521	47.71103524	-122.1972223	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
16179	WAR045521	47.67630057	-122.1929671	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene

16210	WAR045521	47.69050971	-122.1756282	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Solid Wall Polyethylene
16330	WAR045521	47.6809213	-122.1682158	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
16392	WAR045521	47.67703885	-122.1742748	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Solid Wall Polyethylene
17125	WAR045521	47.71302882	-122.206786	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
17443	WAR045521	47.71141376	-122.1779998	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Ductile Iron
18152	WAR045521	47.64356767	-122.2052841	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
18676	WAR045521	47.67538623	-122.1910182	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
18900	WAR045521	47.68266333	-122.1694753	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Ductile Iron
19512	WAR045521	47.67603381	-122.1968428	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
19525	WAR045521	47.69105917	-122.1732013	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
20465	WAR045521	47.65364515	-122.1854971	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
20501	WAR045521	47.67551664	-122.2063571	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Reinforced Concrete
20666	WAR045521	47.64615008	-122.2016741	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
20802	WAR045521	47.67072914	-122.1880866	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
21063	WAR045521	47.70505538	-122.219747	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
21130	WAR045521	47.72299393	-122.171075	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
21142	WAR045521	47.72364227	-122.1708738	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Plain Concrete
21267	WAR045521	47.73088553	-122.223516	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	36	inches	Corrugated Aluminum
21345	WAR045521	47.72091264	-122.1753287	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
21539	WAR045521	47.73662198	-122.1825911	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
21543	WAR045521	47.73692539	-122.1832634	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
21552	WAR045521	47.72438603	-122.2101127	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Corrugated Aluminum
21593	WAR045521	47.72583832	-122.2078532	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
21686	WAR045521	47.72516624	-122.2078472	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Plain Concrete
21687	WAR045521	47.72545515	-122.2078513	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Corrugated Aluminum
21991	WAR045521	47.70527267	-122.2205335	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
21999	WAR045521	47.7057377	-122.2195619	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
22047	WAR045521	47.73756833	-122.1835901	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
22103	WAR045521	47.7234154	-122.1729264	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
22108	WAR045521	47.72353489	-122.1732026	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
22116	WAR045521	47.72438399	-122.1735915	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Plain Concrete
22125	WAR045521	47.72497007	-122.1709475	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
22169	WAR045521	47.72440941	-122.1706217	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
22175	WAR045521	47.72585911	-122.174436	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
22238	WAR045521	47.73507259	-122.1816225	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
22241	WAR045521	47.73507235	-122.182246	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Plain Concrete
22256	WAR045521	47.73616855	-122.1825988	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
22258	WAR045521	47.73635279	-122.1825966	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Plain Concrete
22345	WAR045521	47.73484879	-122.1825034	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
22347	WAR045521	47.73515373	-122.1826217	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
22348	WAR045521	47.73560563	-122.1826341	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
22350	WAR045521	47.7354833	-122.1826254	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Plain Concrete
22447	WAR045521	47.72117747	-122.1750814	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Solid Wall Polyethylene
22447.1	WAR045521	47.72117747	-122.1750814	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
23683	WAR045521	47.73096563	-122.1946078	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
23687	WAR045521	47.72972188	-122.1954498	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete

23753	WAR045521	47.73160407	-122.1955314	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
23786	WAR045521	47.72572616	-122.1912968	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
24063	WAR045521	47.73319362	-122.2240562	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
24072	WAR045521	47.73248931	-122.2241051	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
24073	WAR045521	47.73207934	-122.224023	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
24114	WAR045521	47.73140599	-122.2238171	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
24190	WAR045521	47.73086539	-122.2236697	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
24233	WAR045521	47.72770675	-122.2293056	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
24288	WAR045521	47.72000336	-122.209933	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
24289	WAR045521	47.72023599	-122.2101423	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
24292	WAR045521	47.72023814	-122.2109954	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Plain Concrete
24316	WAR045521	47.72308077	-122.2088554	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
24319	WAR045521	47.72305567	-122.2078785	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Corrugated Aluminum
24325	WAR045521	47.72371939	-122.2078944	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Plain Concrete
24328	WAR045521	47.72325604	-122.2078978	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Plain Concrete
24336	WAR045521	47.72155754	-122.2078382	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
24338	WAR045521	47.72037349	-122.2078221	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
24341	WAR045521	47.71985125	-122.2078214	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
24342	WAR045521	47.71980638	-122.2078213	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
24811	WAR045521	47.70688483	-122.2206257	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
24873	WAR045521	47.71920394	-122.1887171	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
25011	WAR045521	47.72796912	-122.231452	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
25029	WAR045521	47.73022431	-122.2333785	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Plain Concrete
25033	WAR045521	47.73005118	-122.2332749	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Plain Concrete
25038	WAR045521	47.72797062	-122.2319943	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
25046	WAR045521	47.72796941	-122.2332481	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
25063	WAR045521	47.73147339	-122.2339501	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
25064	WAR045521	47.73147063	-122.2341588	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
25079	WAR045521	47.73158727	-122.2342035	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
25840	WAR045521	47.72434784	-122.2318819	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
25841	WAR045521	47.72432815	-122.2319022	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
26620	WAR045521	47.7268619	-122.1608937	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Solid Wall Polyethylene
26842	WAR045521	47.70470961	-122.2399251	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
27036	WAR045521	47.71215408	-122.2542366	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
27527	WAR045521	47.70831276	-122.2372457	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
27558	WAR045521	47.70306304	-122.2240958	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
27686	WAR045521	47.72084422	-122.1754422	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
28318	WAR045521	47.72431683	-122.1735686	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28399	WAR045521	47.71511141	-122.16726	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28404	WAR045521	47.73302953	-122.1861467	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28410	WAR045521	47.73605797	-122.1781194	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	36	inches	Plain Concrete
28413	WAR045521	47.72635984	-122.175301	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
28421	WAR045521	47.72829141	-122.2045296	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28422	WAR045521	47.72851217	-122.205185	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
28425	WAR045521	47.72856008	-122.2054639	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28426	WAR045521	47.72534925	-122.2031789	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete

28428	WAR045521	47.72619291	-122.2028045	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28429	WAR045521	47.72616571	-122.202804	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
28431	WAR045521	47.72428591	-122.1735559	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28432	WAR045521	47.72485422	-122.1735698	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28434	WAR045521	47.72493826	-122.1735521	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28435	WAR045521	47.72543093	-122.1718097	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28436	WAR045521	47.72542986	-122.1718124	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28440	WAR045521	47.72635754	-122.1744929	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
28441	WAR045521	47.72692584	-122.1745308	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28445	WAR045521	47.73551893	-122.179383	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28446	WAR045521	47.7353207	-122.1792995	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Plain Concrete
28447	WAR045521	47.73522121	-122.1798307	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28448	WAR045521	47.73515086	-122.1805594	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Plain Concrete
28453	WAR045521	47.73704163	-122.1776764	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28463	WAR045521	47.72224462	-122.1733286	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28464	WAR045521	47.72717564	-122.1747976	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Plain Concrete
28466	WAR045521	47.71976918	-122.2212657	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
28467	WAR045521	47.72377534	-122.212154	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28469	WAR045521	47.7245081	-122.2158806	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28471	WAR045521	47.71142022	-122.2201969	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
28473	WAR045521	47.72004504	-122.223501	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
28475	WAR045521	47.72049937	-122.2215893	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28476	WAR045521	47.72072029	-122.2217723	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28480	WAR045521	47.72038052	-122.2234874	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
28486	WAR045521	47.71815088	-122.2229577	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28487	WAR045521	47.71860794	-122.2219071	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28493	WAR045521	47.71982616	-122.1927075	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28494	WAR045521	47.71999423	-122.1940552	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28495	WAR045521	47.72021148	-122.1939553	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28497	WAR045521	47.72231535	-122.1969562	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
28501	WAR045521	47.71860479	-122.1801592	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
28505	WAR045521	47.71910259	-122.1793367	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28507	WAR045521	47.72091612	-122.1954427	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
28511	WAR045521	47.72005456	-122.178132	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
28513	WAR045521	47.72304282	-122.2007903	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28514	WAR045521	47.72112769	-122.2000601	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28516	WAR045521	47.72216015	-122.1991611	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28517	WAR045521	47.7217534	-122.1968988	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28520	WAR045521	47.72201341	-122.1971596	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
28521	WAR045521	47.72179334	-122.1969096	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28523	WAR045521	47.72624811	-122.186434	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28524	WAR045521	47.72619657	-122.1864019	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28525	WAR045521	47.7219483	-122.1971954	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
28531	WAR045521	47.73606839	-122.1865952	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
28544	WAR045521	47.70773884	-122.2192359	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
28546	WAR045521	47.70695291	-122.2211727	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride

28550	WAR045521	47.72584417	-122.1927833	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28569	WAR045521	47.73039832	-122.2263884	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
28580	WAR045521	47.73293796	-122.2241451	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28582	WAR045521	47.73244354	-122.2190832	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
28583	WAR045521	47.72966764	-122.2221705	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
28589	WAR045521	47.73310868	-122.2242044	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28604	WAR045521	47.73077029	-122.225145	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
28606	WAR045521	47.7319225	-122.2191203	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
28609	WAR045521	47.73067035	-122.2254685	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
28610	WAR045521	47.7304536	-122.2211068	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
28613	WAR045521	47.73119881	-122.2223819	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
28614	WAR045521	47.72889403	-122.2143627	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28615	WAR045521	47.73032456	-122.2142128	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28616	WAR045521	47.72062554	-122.2129506	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28628	WAR045521	47.72209259	-122.1697587	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28629	WAR045521	47.72069409	-122.1757654	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
28632	WAR045521	47.73330923	-122.2240713	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
28633	WAR045521	47.73177911	-122.191675	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
28684	WAR045521	47.73264205	-122.2185168	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
28685	WAR045521	47.73055364	-122.1940264	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28686	WAR045521	47.72948108	-122.1943186	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28724	WAR045521	47.71650617	-122.2203289	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28731	WAR045521	47.71912286	-122.1889854	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
28738	WAR045521	47.71681271	-122.2241171	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28750	WAR045521	47.73047464	-122.2124296	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
28780	WAR045521	47.7325041	-122.1954493	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Solid Wall Polyethylene
28785	WAR045521	47.73096782	-122.1928513	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28786	WAR045521	47.72896905	-122.1943816	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28787	WAR045521	47.72773392	-122.1938836	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28789	WAR045521	47.72716835	-122.1927544	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
28790	WAR045521	47.72716745	-122.1927487	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	21	inches	Plain Concrete
28792	WAR045521	47.72462481	-122.2030341	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Solid Wall Polyethylene
28796	WAR045521	47.72869794	-122.1955884	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
28798	WAR045521	47.72585785	-122.1928588	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
28808	WAR045521	47.73101558	-122.1924045	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
28972	WAR045521	47.72831706	-122.2276403	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
29078	WAR045521	47.72056907	-122.2236713	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
29343	WAR045521	47.72705971	-122.2302327	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	36	inches	Corrugated Aluminum
29344	WAR045521	47.72703441	-122.2302614	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
29346	WAR045521	47.72803701	-122.2363994	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
29349	WAR045521	47.72788209	-122.2363689	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
29359	WAR045521	47.72702515	-122.2366908	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Solid Wall Polyethylene
29363	WAR045521	47.72702866	-122.2366457	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
29371	WAR045521	47.72972889	-122.2379558	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Polyvinyl Chloride
29375	WAR045521	47.72304769	-122.2294291	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
29467	WAR045521	47.72997584	-122.1636838	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum

29486	WAR045521	47.72061723	-122.1586428	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
29619	WAR045521	47.7137922	-122.1618673	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
29645	WAR045521	47.72190078	-122.2294658	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
29660	WAR045521	47.72695212	-122.2293726	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
29680	WAR045521	47.72409278	-122.2293803	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
29684	WAR045521	47.7212519	-122.2294559	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
29764	WAR045521	47.71929297	-122.2374752	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
29766	WAR045521	47.72029645	-122.2377139	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
29767	WAR045521	47.72176037	-122.2366783	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	15	inches	Corrugated Aluminum
29857	WAR045521	47.71030778	-122.234616	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
29861	WAR045521	47.71899755	-122.2338922	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
29865	WAR045521	47.71024163	-122.2337732	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
29915	WAR045521	47.71626125	-122.154513	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
30035	WAR045521	47.71542765	-122.1640333	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
30072	WAR045521	47.71957686	-122.2516353	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
30215	WAR045521	47.71563732	-122.2423094	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
30228	WAR045521	47.71566251	-122.2450721	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
30324	WAR045521	47.70675658	-122.2404174	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
30335	WAR045521	47.7112243	-122.2442428	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
30348	WAR045521	47.70608539	-122.2385322	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
30363	WAR045521	47.69910873	-122.2374183	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
30365	WAR045521	47.69910345	-122.237351	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Ductile Iron
30366	WAR045521	47.6990448	-122.2360301	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	10	inches	Polyvinyl Chloride
30367	WAR045521	47.6983598	-122.235097	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
30369	WAR045521	47.70405278	-122.2455026	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
30372	WAR045521	47.70237606	-122.2445681	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
30377	WAR045521	47.70708734	-122.2489921	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
30391	WAR045521	47.71125523	-122.2536929	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
30392	WAR045521	47.70851079	-122.250657	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Corrugated Aluminum
30398	WAR045521	47.71284075	-122.2557567	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
30399	WAR045521	47.71330921	-122.2561919	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
30412	WAR045521	47.72392269	-122.252284	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
30424	WAR045521	47.72214584	-122.2566857	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
30442	WAR045521	47.7191416	-122.2591365	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
30492	WAR045521	47.71061623	-122.2515301	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
30568	WAR045521	47.70556514	-122.2254019	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
30570	WAR045521	47.70594963	-122.2252158	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
30574	WAR045521	47.72944689	-122.2222515	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
30579	WAR045521	47.71040751	-122.2319557	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
30602	WAR045521	47.71692695	-122.2368905	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Plain Concrete
30603	WAR045521	47.71549225	-122.2364322	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Plain Concrete
30612	WAR045521	47.70477941	-122.2372452	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
30624	WAR045521	47.70236019	-122.2264621	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
30632	WAR045521	47.72246248	-122.2576343	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Corrugated Aluminum
30644	WAR045521	47.72345962	-122.2588275	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
30646	WAR045521	47.72536909	-122.2610212	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum

30650	WAR045521	47.72564036	-122.2613595	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
30651	WAR045521	47.72134583	-122.2610045	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
30697	WAR045521	47.71039762	-122.232772	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
30698	WAR045521	47.71039284	-122.2323681	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
30714	WAR045521	47.72104335	-122.238222	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
30820	WAR045521	47.71592117	-122.2567647	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
30922	WAR045521	47.72015989	-122.1779102	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
30927	WAR045521	47.73310013	-122.203205	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Corrugated Aluminum
30928	WAR045521	47.73313118	-122.204242	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Solid Wall Polyethylene
30929	WAR045521	47.73314755	-122.2046071	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Reinforced Concrete
30930	WAR045521	47.73311986	-122.2050632	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
30931	WAR045521	47.70669232	-122.2374049	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	16	inches	Solid Wall Polyethylene
30932	WAR045521	47.69819763	-122.2344773	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Ductile Iron
30933	WAR045521	47.69732497	-122.2297997	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
30934	WAR045521	47.69828405	-122.2272915	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
30935	WAR045521	47.70002644	-122.2263567	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
30937	WAR045521	47.70063121	-122.2260009	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
30950	WAR045521	47.70407295	-122.2198291	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Solid Wall Polyethylene
30951	WAR045521	47.70352751	-122.2214448	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	16	inches	Corrugated Aluminum
30966	WAR045521	47.72055442	-122.1989965	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Solid Wall Polyethylene
30968	WAR045521	47.72393396	-122.1917671	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
30983	WAR045521	47.70588314	-122.221632	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
31035	WAR045521	47.70598618	-122.2215316	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	4	inches	Polyvinyl Chloride
31036	WAR045521	47.70607196	-122.2218731	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
31046	WAR045521	47.70597	-122.2214708	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
31168	WAR045521	47.71651684	-122.2401509	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	6	inches	Polyvinyl Chloride
31187	WAR045521	47.70464366	-122.2400933	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
31189	WAR045521	47.70783844	-122.2377361	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
31244	WAR045521	47.71602153	-122.1538028	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
31360	WAR045521	47.72031201	-122.2008235	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
31395	WAR045521	47.71840895	-122.2490135	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
31491	WAR045521	47.71855978	-122.2487654	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
31637	WAR045521	47.67742559	-122.1754765	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
31638	WAR045521	47.67749656	-122.1756075	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
32169	WAR045521	47.73159744	-122.190086	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
32344	WAR045521	47.69680803	-122.1942978	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
32413	WAR045521	47.67551184	-122.2054849	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Reinforced Concrete
32744	WAR045521	47.68458696	-122.1815542	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
33184	WAR045521	47.7173342	-122.2584824	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
33610	WAR045521	47.65616276	-122.2022538	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other
33672	WAR045521	47.67634861	-122.2105792	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
35289	WAR045521	47.73747258	-122.177665	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
35290	WAR045521	47.73748152	-122.1777249	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Plain Concrete
35502	WAR045521	47.69662673	-122.1981785	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
35509	WAR045521	47.7013393	-122.2386388	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	30	inches	Corrugated Aluminum
35702	WAR045521	47.68253691	-122.1802439	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Ductile Iron

35708	WAR045521	47.67335822	-122.1891691	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Ductile Iron
35802	WAR045521	47.73021964	-122.2080787	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
36628	WAR045521	47.71940306	-122.1532098	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Solid Wall Polyethylene
36647	WAR045521	47.71769964	-122.1586757	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Solid Wall Polyethylene
37258	WAR045521	47.69672966	-122.1990345	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	8	inches	Polyvinyl Chloride
37272	WAR045521	47.68859036	-122.1756121	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Galvanized Steel Spiral Rib
37622	WAR045521	47.7104951	-122.1796952	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
37623	WAR045521	47.71043224	-122.1794479	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Polyvinyl Chloride
37655	WAR045521	47.65171218	-122.2018512	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Corrugated Aluminum
37704	WAR045521	47.71958731	-122.2214641	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	24	inches	Corrugated Aluminum
37818	WAR045521	47.72499716	-122.1590153	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Corrugated Aluminum
38043	WAR045521	47.70264733	-122.2081249	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	18	inches	Polyvinyl Chloride
44435	WAR045521	47.70960099	-122.1763314	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	36	inches	Polyvinyl Chloride
46499	WAR045521	47.73053795	-122.2114289	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)	12	inches	Solid Wall Polyethylene
47400	WAR045521	47.70244893	-122.2257661	NAD83	± 1 ft (0.3 m)	Computer map (GIS-based)			Other

City of Kirkland Stormwater Management for Existing Development Table

Project Name	Project type (SMAP, opportunistic)	Project Type (stormwater facility or non-structural)	Transportation Related Projects	Status	Latitude	Longitude	Receiving Waterbody Name	Cost Est	Basin Area (ac)	LID Equivalent Area	Runoff Treatment Equivalent Area	Flow Control Equivalent Area	Non-Strucutral or Regional Collaboration Project Area	Tribal Benefits	Overburdened Communities	Total Equivalent Acres	Opportunistic Non-structural projects in Addition to 25% (acreage, and project type)	Completed Stormwater Retrofit Acreage in excess to be applied to next permit term	Stormwater Facility Retrofit Planning and Projections	Comments (add description of local road classification and funding from other sources and amount)
100th Ave NE WQ Treatment	Opportunistic facility	stormwater facility	Yes- high traffic. This project treats stormwater from Principal Arterial intersection.	Completed (started construction in 2024)	47.73024	122.20797	Juanita Creek	$342,689	9.66	0	9.66	0	0	Improved water quality for stormwater entering Juanita Creek and Lake Washington and the fish that use these waters.	N/A	9.66	N/A	0	0	>This is a principal arterial. Streets and expected traffic volumes in Kirkland are as follows: Local Streets: Under 3000 AADT Collector: 3,000 to less than 8,000 AADT Minor Arterials: 8,000 to less than 15,000 AADT Principal Arterials: Greater than 15,000 AADT >Funding from other sources: King County Sub-regional Opportunity Fund (secured): 100% funded -
North Rose Hill Retrofit - NE 111th Filterra	Opportunistic facility	stormwater facility	Yes- low traffic. This project treats stormwater from neighborhood access road.	Completed - (Started construction 12/2023)	47.70048	122.17335	Forbes Creek	$172,000	0.26	0	0.26	0	0	Improved water quality for stormwater entering Forbes Creek and Lake Washington and the fish that use these waters.	N/A	0.46	N/A	0		>Local Road Classification: Neighborhood Access (Collector) >Project is under an acre of upstream area, so used tributary area of 0.46 acres as Runoff Treatment Equivalent Area >Funding from other Sources (secured): King County Waterworks Program- Council Allocated: $86,500
North Rose Hill Retrofit Site 2 - WQ Treatment and Infiltration	Opportunistic facility	stormwater facility	Yes- low traffic. This project treats and infiltrates stormwater from neighborhood access road.	Completed (Started construction in 2024)	47.69975	122.17151	Forbes Creek	$2,067,000	10.48	10.48	9.98	0.94	0	Improved water quality and hydrology for stormwater entering Forbes Creek and Lake Washington and the fish that use those waters.	N/A	21.4	N/A	16.52		>Local Road Classification: Neighborhood Access (Collector) >Funding from other Sources - 1. King County Flood Control District Flood Reduction Grant (secured) : $353,375. 2. King County Subregional Opportunity Fund (secured): $115,000 3. Department of Ecology Stormwater Financial Assistance Program (secured): $1,060,125

City of Kirkland: 2025 Source Control Program Highlight

Summary of actions taken to implement the source control program per S5.C.8.a-d

Permit language shown in italics. Kirkland's actions not italicized

S5.C.8.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).

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.

> Kirkland Municipal Code (KMC) 15.52.100 requires businesses that might discharge contaminants to a public drainage facility, natural drainage system, surface and storm water, or ground water to implement source control BMPs, as described in the 2021 King County Stormwater Pollution Prevention Manual. If an activity is not addressed in the King County manual, the BMP shall be reviewed and accepted by the city. If a violation of KMC 15.52.100 occurs, enforcement shall be conducted per KMC 1.12.

S5.C.8.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. 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.

> The Kirkland business list was originally generated in 2023 from the Washington State Department of Revenue's Business Licensing List, where businesses register for conducting activity in Kirkland. Businesses that did not match the pollution generating NAICS list from the

NPDES Appendix 8 list were then removed. Home-based businesses were then identified and removed. Finally, businesses identified as potentially pollution generating from complaints were added to the list. The final list includes 847 businesses. The list will be updated in 2028, if not sooner.

S5.C.8.c

Permittees shall implement an inspection program, performed by qualified personnel, for sites identified pursuant to S5.C.8.a.i., above.

(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.

Kirkland has included pollution prevention information in the February, July, August, and September 2025 Business Resources & Informational Newsletters, as well was highlighted on the June 26, 2025, This Week in Kirkland podcast. Pollution prevention is also provided to all businesses inspected in person through this program. The City of Kirkland participated in a regional workgroup to create a Stormwater education video, which is translated into six languages: English, Cantonese, Mandarin, Vietnamese, Ukrainian, and Spanish. Kirkland also installed Stormwater educational "Rainworks" messages at Peter Kirk Park, Kirkland Middle School, and John Muir Elementary. Information on preventing pollution at your business can be found on this city website: https://www.kirklandwa.gov/Government/Departments/Public-Works-Department/Storm-Surface-Water/What-You-Can-Do-For-Clean-Water/Business-Pollution-Prevention

(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.

Kirkland conducted 178 site visits in 2025, which meets our minimum inspection requirement of 170 Inspection (20% of 847) annually. Visits in 2025 continued to focus in the Totem Lake area, a sub-basin of Juanita Creek Watershed and our SMAP sub-basin, with some inspections in the Moss Bay basin.

(iii) Each Permittee shall inspect 100% of sites identified through credible complaints.

Sites identified through credible complaints were inspected. Credible complaints can be received through a variety of sources (spill hotline, staff referral, agency referral, OurKirkland Customer Service portal, email or phone call). Complaints are referred to program coordinator and delegated to inspectors.

(v) Permittees may count inspections conducted based on complaints, or when the property owner denies entry, to the 20% inspection rate.

Kirkland tracks inspections conducted based on complaints and when the property owner denies entry (which is very rare).

S5.C.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:

(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.

Kirkland provides follow up to all sites that have BMPs identified as required to implement. Most often, sites are provided an initial 30-day window to implement BMPs. This window can be extended as needed. As appropriate, follow-up technical assistance and support include follow-up letters, phone calls, emails, and/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.

Kirkland Municipal Code 15.52.100 "Source Control Best Management Practices" requires the implementation of BMPs to prevent pollution from properties and activities within Kirkland. Failure to implement such practices constitutes a violation of that chapter and enforcement action can be pursued. Kirkland's program coordinator supports code enforcement action for the program, as necessary.

(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.

Kirkland developed a Source Control database within their existing assessment management system, Lucity. This database contains all required records and is updated regularly with on-going site inspection and follow up information.

(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.

Kirkland has developed relationships with the Department of Ecology and may refer certain cases or request support through joint inspections. Kirkland inspectors shall conduct appropriate technical assistance and enforcement effort before referring to the Department of Ecology.

(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.

All sites identified by the NAICS codes in appendix 8 as potentially pollution generating are included in the business inspection list, including those sites with discharges authorized by a separate NPDES permit.

Number of Inspections	OrganizationName	SiteAddress	City	Business Type Code	NAICS	Enforcement Action Taken?
1	QFC #828	11224 NE 124th St	Kirkland	445	445110	N
1	QFC	425 Central Plz #100	Kirkland	445	445110	N
1	2 Wheel Dynoworks	13209 NE 126th Pl #460	Kirkland	811	811111	N
1	76 Gas Station	11848 NE 85th St	Kirkland	447	447110	N
1	Acropolis Pizza & Pasta Company	500 Central Way	Kirkland	722	722513	N
2	Kami Teriyaki	11613 124th Ave NE D	Kirkland	722	722513	N
2	Mezcal Grill	9739 NE 119th Way	Kirkland	722	722511	N
1	Muffler King	11902 124th Ave NE	Kirkland	811	811112	N
2	Al Watan Halal Meat & Market LLC	1421 Market St	Kirkland	445	445110	N
1	Sitar Indian Cuisine	12541 116th Ave NE	Kirkland	722	722511	N
3	The Market on Central	255 Central Way	Kirkland	445	445110	N
2	ARTH - THE INDIAN BISTRO LLC	238 CENTRAL WAY	Kirkland	722	722511	N
2	AutoZone #4118	12660 TOTEM LAKE BLVD NE	Kirkland	441	441310	N
2	BELLA BRASIL MARKET PLUS LLC	12545 116TH AVE NE	Kirkland	445	445110	N
2	Zeeks Pizza	124 Park Ln	Kirkland	722	722513	N
2	Teriyaki Plus	11512 124th Ave NE	Kirkland	722	722513	N
1	Brazil Marketplace LLC	12069 124th Ave NE	Kirkland	722	722515	N
2	Oasis Brazilian Steak House	14338 124th Ave NE	Kirkland	722	722513	N
1	Firestone Complete Auto Care	11520 124th Ave.	Kirkland	811	811111	N
1	Buddha Bruddah LLC	14312 124th Ave NE	Kirkland	722	722513	N
1	Taco Del Mar	210 Main St	Kirkland	722	722513	N
2	Buttera Motors, INC.	14235 100th Ave NE	Kirkland	811	811114	N
2	ARCO AM/PM #82832	11600 124TH AVE NE	Kirkland	457	457110	N
1	Cactus Restaurant	121 Park Ln	Kirkland	722	722511	N
1	Cafe Sabah Kirkland LLC	456 Central Way	Kirkland	722	722511	N
1	Cafe Veloce	12514 120th Ave NE	Kirkland	722	722511	N
2	Mcleod Autobody	1015 7th Ave	Kirkland	811	811121	N
1	Carburetor Connection, Inc.	13611 NE 126th Pl #240	Kirkland	336	336310	N
1	Carvalho Box LLC	13500 100th Ave NE	Kirkland	811	811111	N
1	CHICKO CHICKEN	6531 132ND AVE NE	Kirkland	722	722513	N
1	The H Shop	13205 NE 124th St. Ste B	Kirkland	811	811111	N
1	Crash Champions, LLC.	13511 100TH AVE NE	Kirkland	811	811121	N

1	Cyclpath	12232 NE 116TH ST	Kirkland	811	811490	N
1	Ezell's Famous Chicken	12559 116th Ave NE	Kirkland	722	722513	N
1	C & D Automotive Machine	12417 NE 124th St	Kirkland	332	332710	N
1	Cafe 79 Vietnamese Kitchen	13108 NE 70TH PL	Kirkland	722	722513	N
1	Pizza Hut	14330 124 th Ave NE	Kirkland	722	722513	N
1	Ewing Irrigation Products, Inc.	815 8th Ave	Kirkland	423	423720	N
1	Kirkland Fireplace	11613 124thAve NE Suite B	Kirkland	423	423720	N
2	Fortunato Chocolate INC.	105 Central Way # 107	Kirkland	445	445298	N
2	The Olive Garden	11325 NE 124TH ST	Kirkland	722	722511	N
1	Goodwill Industries of Seattle	9826 NE 132 St	Kirkland	624	624310	N
1	Kirkland Autoworks	11919 120th Ave NE #C	Kirkland	811	811111	N
1	Hanuman Thai LLC	115 Central Way	Kirkland	722	722511	N
1	Harvey's Auto Service	1015 7TH AVE STE 120	Kirkland	811	811111	N
1	Hello Banh Mi	14304 124 th Ave NE	Kirkland	722	722513	N
2	The Turmeric Kitchen	11701 124th Ave NE	Kirkland	722	722511	N
2	Spicy Talk Bistro	12305 120TH AVE NE STE H	Kirkland	722	722511	N
1	Nothing Bundt Cakes	213 3rd St	Kirkland	311	311811	N
1	Imperial Auto Salon	13209 NE 126th Pl Suite 190	Kirkland	811	811192	N
2	Ivar's, INC. #61	5910 Lake Washington Blvd NE	Kirkland	722	722513	N
1	Honda of Kirkland	12420 NE 85th St	Kirkland	441	441110	N
2	Jacksons Food Stores, Inc. #621	10801 NE 68th St	Kirkland	457	457110	N
2	Emerald Garden Restaurant	11842 98th Ave NE	Kirkland	722	722511	N
1	Jay's Kirkland Autocare	817 7th Ave	Kirkland	811	811111	N
1	Jiffy Lube	12309 NE 85th St	Kirkland	811	811191	N
2	Josh Auto Detail	672 7th Ave	Kirkland	811	811192	N
2	Mia Cafe Wine & Bar	9714 NE Juanita Dr	Kirkland	722	722511	N
1	Jing Jing Go	226 Main St	Kirkland	445	445298	N
1	Sanotirni Greek Grill	106 Central Way	Kirkland	722	722513	N
1	Kirkland 76	12235 NE 116th	Kirkland	447	447110	N
1	Kirkland Auto Repair INC	639 9th Ave Suite B	Kirkland	811	811111	N
1	Kirkland Autoworks	11919 120th Ave NE #C	Kirkland	811	811111	N
1	Tire Factory	602 6th St	Kirkland	441	441320	N
1	Baymont Inn & Suites	12223 NE 116th St	Kirkland	237	237210	N
1	Jimmy John's	3525 210th Pl SE	Kirkland	722	722513	N

1	Scruff to Fluff	222 Central Way	Kirkland	812	812910	N
1	LA CORONA, INC.	13520 100TH AVE NE STE 10	Kirkland	722	722511	N
1	Leatherback Publishing INC.	681 7th Ave	Kirkland	323	323111	N
2	Little Grandma's Kitchen	12551 116th Ave NE	Kirkland	722	722511	N
1	L-M BODY SHOP, INC	13209 NE 126th Pl	Kirkland	811	811121	N
1	DIY Tea Lab Cafe	12561 116th Ave NE	Kirkland	722	722515	N
1	Mallory Paint Store	12620 NE 85th St #100	Kirkland	444	444120	N
3	MARV'S PROWASH, INC.	9720 NE 120th Pl	Kirkland	561	561790	N
1	McDonald's #5773	13636 100th Ave NE	Kirkland	722	722211	N
1	Toyota of Kirkland	13210 NE 124th St	Kirkland	441	441110	N
1	Kirkland Bakery	219 Kirkland Ave	Kirkland	722	722515	N
1	Moss Bay Shell Inc.	406 Central Way	Kirkland	447	447110	N
1	M Shop	13209 NE 126th Pl Suite B-270	Kirkland	811	811111	N
1	Mucho Mas Tienda y Carniceria Inc.	14318 124th Ave NE	Kirkland	445	445240	N
2	Countryside Donut House	11613 124TH AVE NE STE F	Kirkland	722	722515	N
2	Kirkland 76	12235 NE 116th	Kirkland	457	457110	N
1	Taco Bandits	12412 116TH AVE NE	Kirkland	722	722330	N
1	NOON CAFE	12095 124TH AVE NE	Kirkland	722	722511	N
1	Jack in the Box	12409 NE 116th st	Kirkland	722	722513	N
2	Taco Bell #35308	11624 124TH AVE NE	Kirkland	722	722511	N
2	Super 24 Convenient Store & Deli	6402 Lake Washington Blvd NE	Kirkland	445	445131	N
1	Omni Alignment	11908 NE 124th St	Kirkland	811	811118	N
3	O'REILLY AUTO ENTERPRISES, LLC	12510 120TH AVE NE	Kirkland	441	441330	N
1	Pacific Power Batteries	13205 NE 124th St Unit A	Kirkland	441	441310	N
1	Menya Musashi Tsukemem & Ramen	14308 124th Ave NE	Kirkland	722	722513	N
2	Pho Mignon, Corp	12557 116th Ave	Kirkland	722	722511	N
1	Pho Young Brothers, LLC	14322 124 th NE	Kirkland	722	722513	N
1	Pizzaiolo Wood Fired Pizza LLC	11836 98th Ave NE	Kirkland	722	722511	N
1	Plaza Garcia	12108 Juanita Dr NE	Kirkland	722	722511	N
2	Azteca Mexican Restaurant	11431 NE 124th St	Kirkland	722	722511	N
1	Dorel's Automotive	639 9th Ave Suite A	Kirkland	811	811111	N
1	Rain City Wheel Repairs & Coating	13209 NE 126TH PL STE B200	Kirkland	441	441320	N
1	Little Caesars	12620 NE 85Th ST STE 110	Kirkland	722	722513	N
2	Aceituno's Mexican Food	11747 124th Ave NE	Kirkland	722	722513	N

2	RJB WHOLESALE, INC.	12418 NE 124th St	Kirkland	326	326122	N
2	The Roll Pod Food Truck	12040 98th Ave NE	Kirkland	722	722330	N
1	7-Eleven	13335 100TH AVE NE	Kirkland	445	445131	N
2	Jasmine Mediterranean Kitchen	11613 124th Ave NE # F	Kirkland	722	722513	N
2	Kitchen & Market	10426 Northup Way	Kirkland	445	445110	N
2	SALT & STRAW LLC	12620 120TH AVE NE	Kirkland	722	722515	N
1	Santa Fe Mexican Grill	12709 NE 124th St	Kirkland	722	722110	N
1	Saagar Groceries	12445 116TH AVE NE	Kirkland	445	445110	N
2	Finn Hill Gas Station - Shell	12206 Juanita Dr NE	Kirkland	457	457110	N
1	See's Candies, Inc	11900 NE Village Plaza #156	Kirkland	445	445292	N
1	Shake Shack	300 Peter Kirk Way	Kirkland	722	722513	N
2	Shawarmaniac LLC	11510 124th Ave Ne	Kirkland	722	722513	N
2	Starbucks Coffee #3333	6733 108th Ave NE	Kirkland	722	722515	N
2	STARBUCKS COFFEE #3414	12209 NE 85TH ST	Kirkland	722	722513	N
1	Stonecreek Marble & Granite Inc./Stonewood Desing Inc.	825 7th Ave	Kirkland	423	423320	N
1	Subway	10615 NE 68th St	Kirkland	722	722513	N
2	SUPER GYROS LLC	12412 116TH AVE NE	Kirkland	722	722513	N
2	Tacos El Viejon LLC	6402 Lake Washington Blvd NE	Kirkland	722	722330	N
2	Taco Time	12430 116TH NE	Kirkland	722	722513	N
2	Philly Ya Belly	214 Central Way	Kirkland	722	722511	N
2	The Coffee Stand Kirkland	13510 100th Ave NE	Kirkland	722	722515	N
1	The H Shop	13205 NE 124th St. Ste B	Kirkland	811	811111	N
1	The Market on Central	255 Central Way	Kirkland	445	445110	N
1	Toshi's Teriyaki	959 6TH ST S	Kirkland	722	722513	N
1	Five Guys Burgers and Fries	11220 NE 124th St	Kirkland	722	722511	N
2	U-Haul of Kirkland	12000 NE 85th	Kirkland	532	532120	N
1	United Rentals	12500 132nd Ave NE	Kirkland	532	532310	N
1	Vinason Pho Kitchen	499 Urban Plz	Kirkland	722	722511	N

TOTAL 2025 SC VISITS: 178

Site ID	Inspected Date	Inspected Year	Maintenance Required	Maintenance Year	Consecutive Years of No Maintenance Required	Inspection Frequency (Years)
LID_C4.001	11/12/2024	2024	No			
LID_C4.001	10/12/2023	2023	No			
LID_C4.001	11/28/2022	2022	No			
LID_C4.001	12/9/2021	2021	No			
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LID_C4.001	11/26/2019	2019	No		6	3
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LID_D1.002	10/17/2023	2023	No			
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LID_D1.002	10/25/2021	2021	No			
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LID_D1.003	11/5/2019	2019	No		6	3
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LID_D1.004	11/22/2022	2022	No			
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LID_D1.004	10/19/2020	2020	No			
LID_D1.004	11/26/2019	2019	No		6	3
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LID_D1.005	11/22/2022	2022	No			
LID_D1.005	10/25/2021	2021	No			
LID_D1.005	10/19/2020	2020	No			
LID_D1.005	11/26/2019	2019	No		6	3
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LID_E1.004	11/8/2019	2019	No	6	3
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LID_G2.009	11/12/2021	2021	No		
LID_G2.009	11/5/2020	2020	No		
LID_G2.009	11/8/2019	2019	No	6	3
LID_G2.010	11/21/2024	2024	No		
LID_G2.010	10/26/2023	2023	No		
LID_G2.010	12/1/2022	2022	No		
LID_G2.010	11/12/2021	2021	No		

LID_G2.010	11/6/2020	2020	No		
LID_G2.010	11/8/2019	2019	No	6	3
LID_H1.001	11/25/2024	2024	No		
LID_H1.001	10/26/2023	2023	No		
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LID_H1.001	11/15/2021	2021	No		
LID_H1.001	11/12/2020	2020	No		
LID_H1.001	11/15/2019	2019	No	6	3
LID_H1.002	11/25/2024	2024	No		
LID_H1.002	10/26/2023	2023	No		
LID_H1.002	12/7/2022	2022	No		
LID_H1.002	11/15/2021	2021	No		
LID_H1.002	11/12/2020	2020	No		
LID_H1.002	11/15/2019	2019	No	6	3
LID_H1.003	11/25/2024	2024	No		
LID_H1.003	10/26/2023	2023	No		
LID_H1.003	12/7/2022	2022	No		
LID_H1.003	11/15/2021	2021	No		
LID_H1.003	11/12/2020	2020	No		
LID_H1.003	11/15/2019	2019	No	6	3
LID_H1.004	11/25/2024	2024	No		
LID_H1.004	10/26/2023	2023	No		
LID_H1.004	12/7/2022	2022	No		
LID_H1.004	11/15/2021	2021	No		
LID_H1.004	11/12/2020	2020	No		
LID_H1.004	11/15/2019	2019	No	6	3
LID_H1.005	11/26/2024	2024	No		
LID_H1.005	11/2/2023	2023	No		
LID_H1.005	12/7/2022	2022	No		
LID_H1.005	11/15/2021	2021	No		
LID_H1.005	11/12/2020	2020	No		
LID_H1.005	11/18/2019	2019	No	6	3
LID_H1.006	11/26/2024	2024	No		

LID_H1.006	11/2/2023	2023	No		
LID_H1.006	12/7/2022	2022	No		
LID_H1.006	11/15/2021	2021	No		
LID_H1.006	11/12/2020	2020	No		
LID_H1.006	11/18/2019	2019	No	6	3
LID_H1.007	11/26/2024	2024	No		
LID_H1.007	11/2/2023	2023	No		
LID_H1.007	12/7/2022	2022	No		
LID_H1.007	11/15/2021	2021	No		
LID_H1.007	11/12/2020	2020	No		
LID_H1.007	11/15/2019	2019	No	6	3
LID_H2.002	11/26/2024	2024	No		
LID_H2.002	11/2/2023	2023	No		
LID_H2.002	12/13/2022	2022	No		
LID_H2.002	11/17/2021	2021	No		
LID_H2.002	11/12/2020	2020	No		
LID_H2.002	11/19/2019	2019	No	6	3
LID_H2.003	11/26/2024	2024	No		
LID_H2.003	11/2/2023	2023	No		
LID_H2.003	12/13/2022	2022	No		
LID_H2.003	11/17/2021	2021	No		
LID_H2.003	11/12/2020	2020	No		
LID_H2.003	11/19/2019	2019	No	6	3
LID_H2.004	11/26/2024	2024	No		
LID_H2.004	11/2/2023	2023	No		
LID_H2.004	12/13/2022	2022	No		
LID_H2.004	11/17/2021	2021	No		
LID_H2.004	11/12/2020	2020	No		
LID_H2.004	11/19/2019	2019	No	6	3
LID_H2.006	11/26/2024	2024	No		
LID_H2.006	11/2/2023	2023	No		
LID_H2.006	12/13/2022	2022	No		
LID_H2.006	11/17/2021	2021	No		

LID_H2.006	11/12/2020	2020	No		
LID_H2.006	11/19/2019	2019	No	6	3
LID_H2.007	11/26/2024	2024	No		
LID_H2.007	11/2/2023	2023	No		
LID_H2.007	12/13/2022	2022	No		
LID_H2.007	11/17/2021	2021	No		
LID_H2.007	11/12/2020	2020	No		
LID_H2.007	11/19/2019	2019	No	6	3
LID_H2.008	11/26/2024	2024	No		
LID_H2.008	11/2/2023	2023	No		
LID_H2.008	12/13/2022	2022	No		
LID_H2.008	11/17/2021	2021	No		
LID_H2.008	11/12/2020	2020	No		
LID_H2.008	11/19/2019	2019	No	6	3
LID_H2.009	11/26/2024	2024	No		
LID_H2.009	11/2/2023	2023	No		
LID_H2.009	12/13/2022	2022	No		
LID_H2.009	11/17/2021	2021	No		
LID_H2.009	11/12/2020	2020	No		
LID_H2.009	11/19/2019	2019	No	6	3
LID_H2.010	11/26/2024	2024	No		
LID_H2.010	11/2/2023	2023	No		
LID_H2.010	12/13/2022	2022	No		
LID_H2.010	11/17/2021	2021	No		
LID_H2.010	11/12/2020	2020	No		
LID_H2.010	11/19/2019	2019	No	6	3
LID_H2.011	11/26/2024	2024	No		
LID_H2.011	11/2/2023	2023	No		
LID_H2.011	12/13/2022	2022	No		
LID_H2.011	11/17/2021	2021	No		
LID_H2.011	11/12/2020	2020	No		
LID_H2.011	11/19/2019	2019	No	6	3
LID_H2.012	11/26/2024	2024	No		

LID_H2.012	11/2/2023	2023	No		
LID_H2.012	12/13/2022	2022	No		
LID_H2.012	11/17/2021	2021	No		
LID_H2.012	11/12/2020	2020	No		
LID_H2.012	11/19/2019	2019	No	6	3
LID_H2.013	11/26/2024	2024	No		
LID_H2.013	11/2/2023	2023	No		
LID_H2.013	12/13/2022	2022	No		
LID_H2.013	11/17/2021	2021	No		
LID_H2.013	11/12/2020	2020	No		
LID_H2.013	11/19/2019	2019	No	6	3
LID_H2.014	11/26/2024	2024	No		
LID_H2.014	11/2/2023	2023	No		
LID_H2.014	12/13/2022	2022	No		
LID_H2.014	11/17/2021	2021	No		
LID_H2.014	11/12/2020	2020	No		
LID_H2.014	11/19/2019	2019	No	6	3
LID_H2.015	11/26/2024	2024	No		
LID_H2.015	11/2/2023	2023	No		
LID_H2.015	12/13/2022	2022	No		
LID_H2.015	11/17/2021	2021	No		
LID_H2.015	11/12/2020	2020	No		
LID_H2.015	11/19/2019	2019	No	6	3
LID_H2.016	11/26/2024	2024	No		
LID_H2.016	11/2/2023	2023	No		
LID_H2.016	12/13/2022	2022	No		
LID_H2.016	11/17/2021	2021	No		
LID_H2.016	11/12/2020	2020	No		
LID_H2.016	11/19/2019	2019	No	6	3
LID_H2.017	11/26/2024	2024	No		
LID_H2.017	11/2/2023	2023	No		
LID_H2.017	12/13/2022	2022	No		
LID_H2.017	11/17/2021	2021	No		

LID_H2.017	11/12/2020	2020	No		
LID_H2.017	11/19/2019	2019	No	6	3
LID_H2.018	11/26/2024	2024	No		
LID_H2.018	11/2/2023	2023	No		
LID_H2.018	12/13/2022	2022	No		
LID_H2.018	11/17/2021	2021	No		
LID_H2.018	11/12/2020	2020	No		
LID_H2.018	11/19/2019	2019	No	6	3
LID_H2.019	11/26/2024	2024	No		
LID_H2.019	11/2/2023	2023	No		
LID_H2.019	12/13/2022	2022	No		
LID_H2.019	11/17/2021	2021	No		
LID_H2.019	11/12/2020	2020	No		
LID_H2.019	11/19/2019	2019	No	6	3
LID_H2.020	11/21/2024	2024	No		
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LID_H2.020	11/13/2020	2020	No		
LID_H2.020	11/21/2019	2019	No	6	3
LID_H2.022	11/21/2024	2024	No		
LID_H2.022	10/27/2023	2023	No		
LID_H2.022	12/13/2022	2022	No		
LID_H2.022	11/17/2021	2021	No		
LID_H2.022	11/13/2020	2020	No		
LID_H2.022	11/21/2019	2019	No	6	3
LID_H2.023	11/21/2024	2024	No		
LID_H2.023	10/27/2023	2023	No		
LID_H2.023	12/13/2022	2022	No		
LID_H2.023	11/17/2021	2021	No		
LID_H2.023	11/13/2020	2020	No		
LID_H2.023	11/21/2019	2019	No	6	3
LID_H2.028	11/21/2024	2024	No		

LID_H2.028	11/2/2023	2023	No		
LID_H2.028	12/13/2022	2022	No		
LID_H2.028	12/16/2021	2021	No		
LID_H2.028	11/16/2020	2020	No		
LID_H2.028	11/21/2019	2019	No	6	3
LID_H5.001	12/4/2024	2024	No		
LID_H5.001	11/2/2023	2023	No		
LID_H5.001	12/16/2022	2022	No		
LID_H5.001	12/9/2021	2021	No		
LID_H5.001	11/16/2020	2020	No		
LID_H5.001	11/22/2019	2019	No	6	3
LID_H5.002	12/4/2024	2024	No		
LID_H5.002	11/2/2023	2023	No		
LID_H5.002	12/16/2022	2022	No		
LID_H5.002	12/9/2021	2021	No		
LID_H5.002	11/16/2020	2020	No		
LID_H5.002	12/5/2019	2019	No	6	3
LID_I2.001	12/4/2024	2024	No		
LID_I2.001	11/2/2023	2023	No		
LID_I2.001	12/29/2022	2022	No		
LID_I2.001	11/18/2021	2021	No		
LID_I2.001	11/16/2020	2020	No		
LID_I2.001	11/22/2019	2019	No	6	3
LID_I2.002	12/4/2024	2024	No		
LID_I2.002	11/2/2023	2023	No		
LID_I2.002	12/29/2022	2022	No		
LID_I2.002	11/18/2021	2021	No		
LID_I2.002	11/16/2020	2020	No		
LID_I2.002	11/22/2019	2019	No	6	3
LID_I2.003	12/4/2024	2024	No		
LID_I2.003	11/2/2023	2023	No		
LID_I2.003	12/29/2022	2022	No		
LID_I2.003	11/18/2021	2021	No		

LID_I2.003	11/16/2020	2020	No		
LID_I2.003	11/22/2019	2019	No	6	3
LID_I2.004	12/4/2024	2024	No		
LID_I2.004	11/2/2023	2023	No		
LID_I2.004	12/29/2022	2022	No		
LID_I2.004	11/18/2021	2021	No		
LID_I2.004	11/16/2020	2020	No		
LID_I2.004	11/22/2019	2019	No	6	3
LID_I3.001	12/4/2024	2024	No		
LID_I3.001	11/8/2023	2023	No		
LID_I3.001	12/14/2022	2022	No		
LID_I3.001	11/18/2021	2021	No		
LID_I3.001	11/19/2020	2020	No		
LID_I3.001	11/25/2019	2019	No	6	3
LID_I3.002	12/4/2024	2024	No		
LID_I3.002	11/8/2023	2023	No		
LID_I3.002	12/14/2022	2022	No		
LID_I3.002	11/18/2021	2021	No		
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LID_I3.002	11/25/2019	2019	No	6	3
LID_J5.001	12/4/2024	2024	No		
LID_J5.001	11/8/2023	2023	No		
LID_J5.001	12/29/2022	2022	No		
LID_J5.001	11/22/2021	2021	No		
LID_J5.001	11/20/2020	2020	No		
LID_J5.001	11/25/2019	2019	No	6	3
LID_J5.003	12/4/2024	2024	No		
LID_J5.003	11/8/2023	2023	No		
LID_J5.003	12/29/2022	2022	No		
LID_J5.003	11/22/2021	2021	No		
LID_J5.003	11/20/2020	2020	No		
LID_J5.003	11/25/2019	2019	No	6	3
LID_J5.004	12/4/2024	2024	No		

LID_J5.004	11/8/2023	2023	No		
LID_J5.004	12/29/2022	2022	No		
LID_J5.004	11/22/2021	2021	No		
LID_J5.004	11/20/2020	2020	No		
LID_J5.004	11/25/2019	2019	No	6	3
LID_J5.005	12/4/2024	2024	No		
LID_J5.005	11/8/2023	2023	No		
LID_J5.005	12/29/2022	2022	No		
LID_J5.005	11/22/2021	2021	No		
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LID_J5.005	11/25/2019	2019	No	6	3
LID_J6.001	12/4/2024	2024	No		
LID_J6.001	11/8/2023	2023	No		
LID_J6.001	12/29/2022	2022	No		
LID_J6.001	12/6/2021	2021	No		
LID_J6.001	11/20/2020	2020	No		
LID_J6.001	12/2/2019	2019	No	6	3
LID_J6.002	12/4/2024	2024	No		
LID_J6.002	11/8/2023	2023	No		
LID_J6.002	12/29/2022	2022	No		
LID_J6.002	12/6/2021	2021	No		
LID_J6.002	11/20/2020	2020	No		
LID_J6.002	12/2/2019	2019	No	6	3
LID_J6.003	12/4/2024	2024	No		
LID_J6.003	11/8/2023	2023	No		
LID_J6.003	12/29/2022	2022	No		
LID_J6.003	12/6/2021	2021	No		
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LID_J6.003	12/2/2019	2019	No	6	3
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LID_J6.005	11/8/2023	2023	No		
LID_J6.005	12/29/2022	2022	No		
LID_J6.005	12/6/2021	2021	No		

LID_J6.005	11/20/2020	2020	No		
LID_J6.005	12/2/2019	2019	No	6	3
LID_K0.001	12/3/2024	2024	No		
LID_K0.001	11/15/2023	2023	No		
LID_K0.001	12/28/2022	2022	No		
LID_K0.001	11/22/2021	2021	No		
LID_K0.001	11/20/2020	2020	No		
LID_K0.001	12/2/2019	2019	No	6	3
LID_K0.002	12/3/2024	2024	No		
LID_K0.002	11/15/2023	2023	No		
LID_K0.002	12/28/2022	2022	No		
LID_K0.002	11/22/2021	2021	No		
LID_K0.002	11/20/2020	2020	No		
LID_K0.002	12/2/2019	2019	No	6	3
LID_K8.001	12/5/2024	2024	No		
LID_K8.001	11/9/2023	2023	No		
LID_K8.001	12/28/2022	2022	No		
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LID_K8.001	11/23/2020	2020	No		
LID_K8.001	11/21/2019	2019	No	6	3
LID_K8.002	12/5/2024	2024	No		
LID_K8.002	11/9/2023	2023	No		
LID_K8.002	12/28/2022	2022	No		
LID_K8.002	11/22/2021	2021	No		
LID_K8.002	11/23/2020	2020	No		
LID_K8.002	11/21/2019	2019	No	6	3
LID_K8.003	12/5/2024	2024	No		
LID_K8.003	11/9/2023	2023	No		
LID_K8.003	12/28/2022	2022	No		
LID_K8.003	11/22/2021	2021	No		
LID_K8.003	11/23/2020	2020	No		
LID_K8.003	11/21/2019	2019	No	6	3
LID_M7.002	12/13/2024	2024	No		

LID_M7.002	11/3/2023	2023	No		
LID_M7.002	12/28/2022	2022	No		
LID_M7.002	11/30/2021	2021	No		
LID_M7.002	11/25/2020	2020	No		
LID_M7.002	11/18/2019	2019	No	6	3
LID_M7.003	11/13/2024	2024	No		
LID_M7.003	11/3/2023	2023	No		
LID_M7.003	12/28/2022	2022	No		
LID_M7.003	11/30/2021	2021	No		
LID_M7.003	11/25/2020	2020	No		
LID_M7.003	11/18/2019	2019	No	6	3
LID_M7.004	11/13/2024	2024	No		
LID_M7.004	11/3/2023	2023	No		
LID_M7.004	12/28/2022	2022	No		
LID_M7.004	11/30/2021	2021	No		
LID_M7.004	11/25/2020	2020	No		
LID_M7.004	11/18/2019	2019	No	6	3
LID_M7.005	11/13/2024	2024	No		
LID_M7.005	11/3/2023	2023	No		
LID_M7.005	12/28/2022	2022	No		
LID_M7.005	11/30/2021	2021	No		
LID_M7.005	11/25/2020	2020	No		
LID_M7.005	11/18/2019	2019	No	6	3