

Washington Department of Ecology

Electronic Submission Cover Letter



WQWebSubmittal - Submittal Submission Id: 1721891 - 5/11/2020 12:13:14 PM

Company Name	Signer Name	System Name
City of Snoqualmie	Tom Holmes	WQWebPortal

Attachments:

Document Name Or Description	Document Name
Submitted Copy of Record for City of Snoqualmie	Copy of Record CityofSnoqualmie Monday May 11 2020
WAR045718_30a_05112020084738	2019 Discharge Points_30a_05112020084738
WAR045718_21_05112020084221	2019 NDPES Phase II Permit Ann_21_05112020084221
WAR045718_26a_05112020084221	2019 NDPES Phase II Permit Ann_26a_05112020084221
WAR045718_4a_05112020072215	Internal Coordination Mechanism_4a_05112020072215
WAR045718_2_03232020093627	Snoqualmie_2020_SWMP_Plan Fina_2_03232020093627
WAR045718_77_02212020071505	Source control requirements_77_02212020071505
WAR045718-2019-ImportedIDDEs_05112020095647	WAR045718-2019-ImportedIDDEs_05112020095647

Attestation Agreed to at Signing:

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

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

For Ecology Use Only



v43bFr7PwyLeEEO
+Qr3jPIdEofroAzDtMgJ1hATulf6DGEpQb5mYOP4HvILPoKhMYwJOh0VMvSH6yGZldA34wG/yym4S977yTmmm5lgEFh
E=



DEPARTMENT OF
ECOLOGY
State of Washington

Water Quality Program

Permit Submittal Electronic Certification

Permittee: Snoqualmie City of

Permit Number: WAR045718

Site Address: 38624 SE River Street
Snoqualmie, WA 98065

Submittal Name: MS4 Annual Report Phase II Western

Version: 2

Due Date: 3/31/2020

Questionnaire

Number	Permit Section	Question	Answer
1	S5.A	Attach a copy of any annexations, incorporations or boundary changes resulting in an increase or decrease in the Permittee's geographic area of permit coverage during the reporting period per S9.D.6.	Not Applicable
2	S5.A	Attach updated annual Stormwater Management Program Plan (SWMP Plan). (S5.A.2)	Snoqualmie_2020_SW MP_Plan Fina_2_0323202009362 7
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	Coordinated 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).	Internal Coordination Mechanism_4a_051120 20072215
15	S5.C.1.c	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
16	S5.C.1.c	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
20	S5.C.2	Did you choose to adopt one or more elements of a regional program? (S5.C.2)	Yes
20a	S5.C.2	If yes, list the elements, and the regional program.	We promoted "Puget Sound Starts Here" and Orca Hero, "don't drip and Drive"
21	S5.C.2	Attach a description of general awareness efforts conducted, including your target audiences and subject areas, per S5.C.2.a.i.	2019 NDPES Phase II Permit Ann_21_051120200842 21

22	S5.C.2	Conducted an evaluation of the effectiveness of the ongoing behavior change program and documented recommendations as outlined in S.5.C.2.a.ii(b). (Required no later than July 1, 2020)	Not Applicable
26	S5.C.2	Promoted stewardship opportunities (or partnered with others) to encourage resident participation in activities such as those described in S5.C.2.a.iii.	Yes
26a	S5.C.2	Attach a list of stewardship opportunities provided.	2019 NDPES Phase II Permit Ann_26a_05112020084221
27	S5.C.3.	Describe in Comments field the opportunities created for the public, including overburdened communities, to participate in the decision-making processes involving the development, implementation, and updates of the Permittee's SWMP and the SMAP. (S5.C.3.a)	We provide opportunities for the public to participate in the update of the SWMP through our City publications, electronic newsletters, social media, and on the City website.
28	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
28a	S5.C.3.	List the website address in Comments field.	https://www.ci.snoqualmie.wa.us/474/Stormwater-Management-Program
29	S5.C.4.	Maintained a map of the MS4 including the requirements listed in S5.C.4.a.i-vii?	Yes
30	S5.C.4.	Started mapping outfall size and material in accordance with S5.C.4.b.i? (Required no later than January 1, 2020)	Yes
30a	S5.C.4.	Attach a spreadsheet that lists the known outfalls' size and material(s).	2019 Discharge Points_30a_05112020084738
31	S5.C.4.	Completed mapping connections to private storm sewers in accordance with S5.C.4.b.ii? (Required no later than August 1, 2023)	Yes
32	S5.C.4.	Developed an electronic format for map, with fully described mapping standards in accordance with S5.C.4.c? (Required no later than August 1, 2021)	Yes
33	S5.C.5	Informed public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste. Describe actions in Comments field. (S5.C.5.b)	Yes
34	S5.C.5	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	Implemented procedures for conducting illicit discharge investigations in accordance with S5.C.5.d.i.	Yes

35a	S5.C.5	Cite field screening methodology in Comments field.	The City methodology follows the Herrera ICID Field Screening and Source Tracing Manual and reports are made on the report form developed by Herrera specifically for the City.
36	S5.C.5	Percentage of MS4 coverage area screened in the reporting year per S5.C.5.d.i. (Required to screen 12% on average each year.)	15
36a	S5.C.5	Cite field screening techniques used to determine percent of MS4 screened.	We conduct catch basin inspections to meet our field screening requirement and we use a GIS system to track the percentage of the system we have screened.
37	S5.C.5	Percentage of total MS4 screened from permit effective date through the end of the reporting year. (S5.C.5.d.i.)	6
38	S5.C.5	Describe how you publicized a hotline telephone number for public reporting of spills and other illicit discharges in the Comments field. (S5.C.5.d.ii)	Posted on city web site, posted on banners on the side of storm equipment, and passed out on flyers and City events, and posted in news letter.
39	S5.C.5	Implemented an ongoing illicit discharge training program for all municipal field staff per S5.C.5.d.iii.	Yes
40	S5.C.5	Implemented an ongoing program to characterize, trace, and eliminate illicit discharges into the MS4 per S5.C.5.e.	Yes
41	S5.C.5	Municipal illicit discharge detection staff are trained to conduct illicit discharge detection and elimination activities as described in S5.C.5.f.	Yes
42	S5.C.5	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 12.	WAR045718-2019-ImportedIDDEs_05112020095647
43	S5.C.6.	Implemented 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	S5.C.6.	Revised 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. (Required no later than June 30, 2022)	Yes
44a	S5.C.6.	Cite code reference in Comments field.	ordinance 1198

45	S5.C.6.	Number of adjustments granted to the minimum requirements in Appendix 1. (S5.C.6.b.i. and Section 5 of Appendix 1)	0
46	S5.C.6.	Number of exceptions/variances granted to the minimum requirements in Appendix 1. (S5.C.6.b.i., and Section 6 of Appendix 1)	0
47	S5.C.6.	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.	Number of site plans reviewed during the reporting period.	4
48	S5.C.6.	Inspected, prior to clearing and construction, permitted development sites per S5.C.6.c.ii, that have a high potential for sediment transport as determined through plan review based on definitions and requirements in Appendix 7 – Determining Construction Site Sediment Damage Potential?	No
48a	S5.C.6.	If no, inspected, prior to clearing and construction, all construction sites meeting the minimum thresholds (S5.C.6.c.ii)?	Yes
49	S5.C.6.	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.	Number of construction sites inspected per S5.C.6.c.iii.	11
49b	S5.C.6.	Inspected stormwater treatment and flow control BMPs/facilities and catch basins in new residential developments every 6 months 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.	Number of enforcement actions taken during the reporting period (based on construction phase inspections at new development and redevelopment projects). (S5.C.6.c.ii-iv) (S5.C.7.c.viii)	16
53	S5.C.6.	Achieved at least 80% of scheduled construction-related inspections. (S5.C.6.c.vi)	Yes
54	S5.C.6.	Made Ecology's Notice of Intent for Construction Activity and Notice of Intent for Industrial Activity available to representatives of proposed new development and redevelopment? (S5.C.6.d)	Yes

55	S5.C.6.	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.	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.7.a.?	Yes
57	S5.C.7.	Updated maintenance standards specified in Stormwater Management Manual for Western Washington per S5.C.7.a? (Required no later than June 30, 2022)	Not Applicable
58	S5.C.7.	Applied a maintenance standard for a facility or facilities which do not have maintenance standards specified in the Stormwater Management Manual for Western Washington? If so, note in the Comments field what kinds of facilities are covered by this alternative standard. (S5.C.7.a)	No
59	S5.C.7.	Verified that maintenance was performed per the schedule in S5.C.7.a.ii when an inspection identified an exceedance of the maintenance standard.	Yes
59a	S5.C.7.	Attach documentation of maintenance time frame exceedances that were beyond the Permittee's control.	Not Applicable
60	S5.C.7.	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 (S5.C.7.b.i (a))?	Yes
61	S5.C.7.	Annually inspected stormwater treatment and flow control BMPs/facilities regulated by the Permittee per S5.C.7.b.i(b)	Yes
61a	S5.C.7.	If using reduced inspection frequency for the first time during this permit cycle, attach documentation per S5.C.7.b.i (b)	Not Applicable
62	S5.C.7.	Achieved at least 80% of scheduled inspections to verify adequate long-term O&M. (S5.C.7.b.ii)	Yes
63	S5.C.7.	Annually inspected all municipally owned or operated permanent stormwater treatment and flow control BMPs/facilities. (S5.C.7.c.i)	Yes
63a	S5.C.7.	Number of known municipally owned or operated stormwater treatment and flow control BMPs/facilities. (S5.C.7.c.i)	62
63b	S5.C.7.	Number of facilities inspected during the reporting period.	62
63c	S5.C.7.	Number of facilities for which maintenance was performed during the reporting period.	24
64	S5.C.7.	If using reduced inspection frequency for the first time during this permit cycle, attach documentation per S5.C.7.c.i	Not Applicable

65	S5.C.7.	Conducted spot checks and inspections (if necessary) of potentially damaged stormwater facilities after major storms as per S5.C.7.c.ii.	Yes
66	S5.C.7.	Inspected municipally owned or operated catch basins and inlets every two years or used an alternative approach? Cleaned as needed? (S.5.C.7.c.iii)	Yes
66a	S5.C.7.	Number of known catch basins?	2867
66b	S5.C.7.	Number of catch basins inspected during the reporting period?	2867
66c	S5.C.7.	Number of catch basins cleaned during the reporting period?	2506
67	S5.C.7.	Attach documentation of alternative catch basin cleaning approach, if used. (S5.C.7.c.iii.(a)-(c))	Not Applicable
68	S5.C.7.	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.7.d)	Yes
69	S5.C.7.	Documented 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.7.d – Required by December 31, 2022)	Yes
69a	S5.C.7.	Cite documentation in Comments.	City of Snoqualmie SOP manual
70	S5.C.7.	Implemented an ongoing training program for Permittee employees whose primary construction, operations or maintenance job functions may impact stormwater quality. (S5.C.7.e)	Yes
71	S5.C.7.	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.7.f)	Yes
72	S5.C.7.	Updated, if needed, SWPPPs according to S5.C.7.f no later than December 31, 2022.	Not Applicable
73	S5.C.8	Adopted ordinance(s), or other enforceable documents, requiring the application of source control BMPs for pollutant generating sources associated with existing land uses and activities per S.5.C.8.b.i. (Required by August 1, 2022)	Yes

73a	S5.C.8	Cite ordinance. (Required by August 1, 2022)	15.18.200 Enforcement, 15.18.120, 15.18.150, 15.18.160 The director is authorized to enforce the provisions of this chapter, the ordinances and resolutions codified in it, and any rules and regulations promulgated thereunder pursuant to the enforcement and penalty provisions. The remedies in this chapter are in addition to any other remedy provided by law. (Ord. 1198 § 19 (Exh. B), 2017; Ord. 1081 § 2, 2011).
74	S5.C.8	Established an inventory per S5.C.8.b.ii. (Required by August 1, 2022.)	Not Applicable
75	S5.C.8	Implemented an inspection program S5.C.8.b.iii (Required by January 1, 2023).	Not Applicable
76	S5.C.8	Implemented a progressive enforcement policy per S5.C.8.b.iv (Required by January 1, 2023).	Not Applicable
77	S5.C.8	Attach a summary of actions taken to implement the source control program per S5.C.8.b.iii and S5.C.8.b.iv.	Not Applicable
78	S5.C.8	Attach a list of inspections, per S5.C.8.b.iii, organized by the business category, noting the amount of times each business was inspected, and if enforcement actions were taken.	Not Applicable
79	S5.C.8	Implemented an ongoing source control training program per S5.C.8.b.v?	Not Applicable
80	S7	Complied with the Total Maximum Daily Load (TMDL)-specific requirements identified in Appendix 2. (S7.A)	Not Applicable
81	S7	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
82	S8	Submitted payment for cost-sharing for Stormwater Action Monitoring (SAM) status and trends monitoring no later than December 1, 2019 (S8.A.1); and no later than August 15 of each subsequent year? (S8.A.2.a.)	Not Applicable
83	S8	Notified Ecology by December 1, 2019 which option you selected: S8.A.2.a, or S8.A.2.b.	Yes
84	S8	Submitted payment for cost-sharing for SAM effectiveness and source identification studies no later than December 1, 2019 (S8.B.1); and no later than August 15 of each subsequent year (S8.B.2.a or S8.B.2.c)?	Not Applicable
85	S8	Notified Ecology by December 1, 2019 which option you selected: S8.B.2.a, or S8.B.2.b?	Yes

86	S8	If conducting stormwater discharge monitoring in accordance with S8.C.1, submitted a QAPP to Ecology no later than February 1, 2020? (S8.C.1.b and Appendix 9)	Not Applicable
88	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
89	G3	Took appropriate action to correct or minimize the threat to human health, welfare, and/or the environment per G3.A.	Yes
90	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)	Not Applicable
91	Compliance with standards	If requested, submitted an Adaptive Management Response report in accordance with S4.F.3.a.	Not Applicable
92	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
93	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
94	G20	Number of non-compliance notifications (G20) provided in reporting year. List permit conditions described in non-compliance notification(s) in Comments field.	0

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.

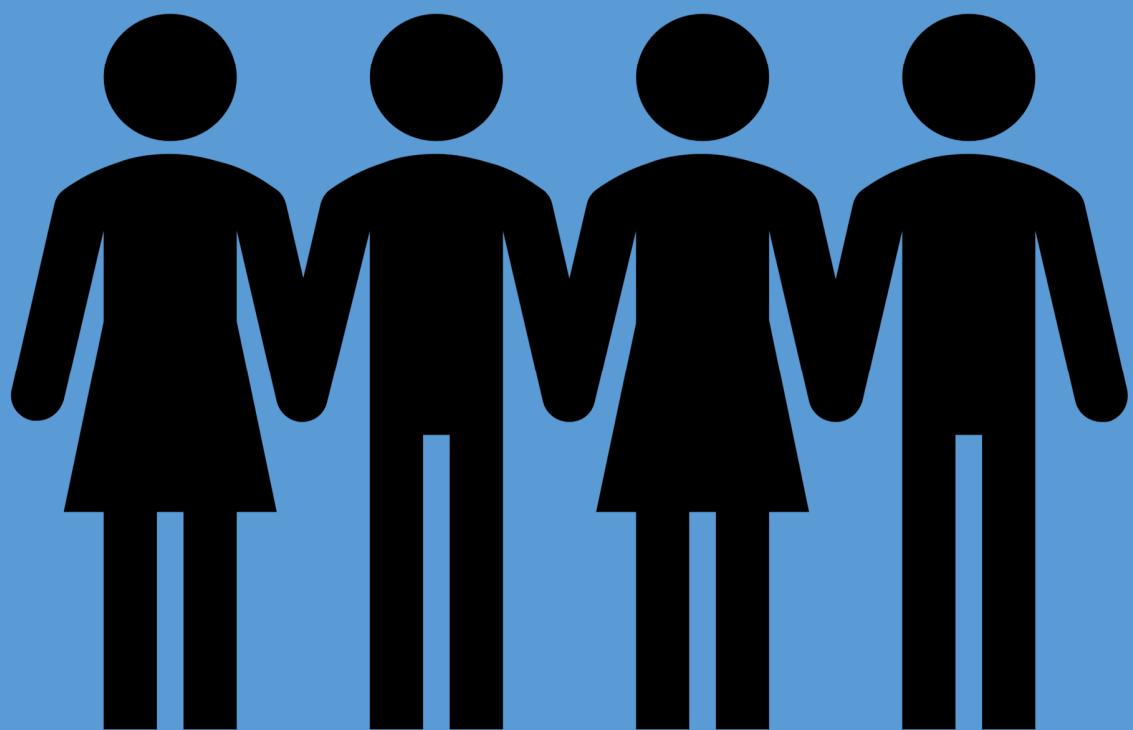
Tom Holmes

Signature

5/11/2020 12:13:13 PM

Date

APPENDIX A



Snoqualmie Stormwater Internal Coordination Mechanisms 2019



DEFINITIONS

DEPARTMENT

Department means the community development department of the city of Snoqualmie

DIRECTOR

Director means the director of the community development department of the city of Snoqualmie.

ADMINISTRATION

1. The community development department director and the director of the parks and public works department are authorized to promulgate and adopt administrative rules under the procedures specified in Chapter 2.05 SMC for the purpose of implementing and enforcing the provisions of the stormwater program municipal code.
2. The community development department director is authorized to develop procedures for applying adopted rules and regulations during the review of permit applications for the development of land.

INSPECTIONS

The director or designee and/or the director of the parks and public works department is authorized to make such inspections and take such actions as may be required to enforce the provisions of this chapter.

RIGHT OF ENTRY

Whenever necessary to make an inspection to enforce any of the provisions of this chapter, monitor for proper function of drainage facilities or whenever the community development department or parks and public works department director or designee has reasonable cause to believe that violations of this chapter are present or operating on a subject property or portion thereof, the director or designee may enter such premises at all reasonable times to inspect the same or perform any duty imposed upon the director by this chapter; provided, that if such premises or portion thereof is occupied, the director or designee shall first make a reasonable effort to locate the owner or other person having charge or control of the premises or portion thereof and demand entry.

ACCESS

Proper ingress and egress shall be provided to the community development department or parks and public works department director or designee to inspect, monitor or perform any duty imposed upon

the director by this chapter. The director or designee shall notify the responsible party in writing of failure to comply with this access requirement. Failing to obtain a response within seven days from the receipt of notification, the director or designee may order the work required completed or otherwise address the cause of improper access. The obligation for the payment of all costs that may be incurred or expended by the city in causing such work to be done shall thereby be imposed on the person holding title to the subject property. (Ord. 1198 § 19 (Exh. B), 2017; Ord. 1081 § 2, 2011).

ENFORCEMENT

15.18.200 The Director of Community Development is responsible for enforcing the stormwater code and the ordinances and resolutions codified in it.

LINES OF AUTHORITY

CITY ADMINISTRATOR

On behalf of the Mayor sees that laws and ordinances are faithfully performed. The City Administrator has signing authority for the City, on behalf of the Mayor. The CA on behalf of the Mayor has ultimate responsibility for supervision of all City departments, maintaining harmony among departments and resolving interdepartmental grievances, at the discretion of the Mayor may appoint and or remove all department heads, officers and or employees of the City, except members of the Council.

DELEGATED SUPERVISORY OVERSIGHT OF CITY STORMWATER PROGRAM

The City Administrator on behalf of the Mayor has delegated the supervisory oversight of the City's stormwater management program for the Washington State Department of Ecology issued Phase II Municipal Stormwater Permit (Permit) to the Parks & Public Works Director. The Parks & Public Works Director on behalf of the CA and Mayor may assign roles and responsibilities to other department heads to fulfill any of the program elements required of the City to satisfy the conditions of the permit.

INTERNAL DISPUTES

Where discrepancies may occur with roles or work responsibility assignments that create internal interdepartmental barriers to permit compliance, the Director of Parks & Public Works and other Director of the Department has the responsibility to present solutions to the CA for expeditious and final resolution on behalf of the Mayor.

SUMMARY CHART OF ROLES AND RESPONSIBILITIES

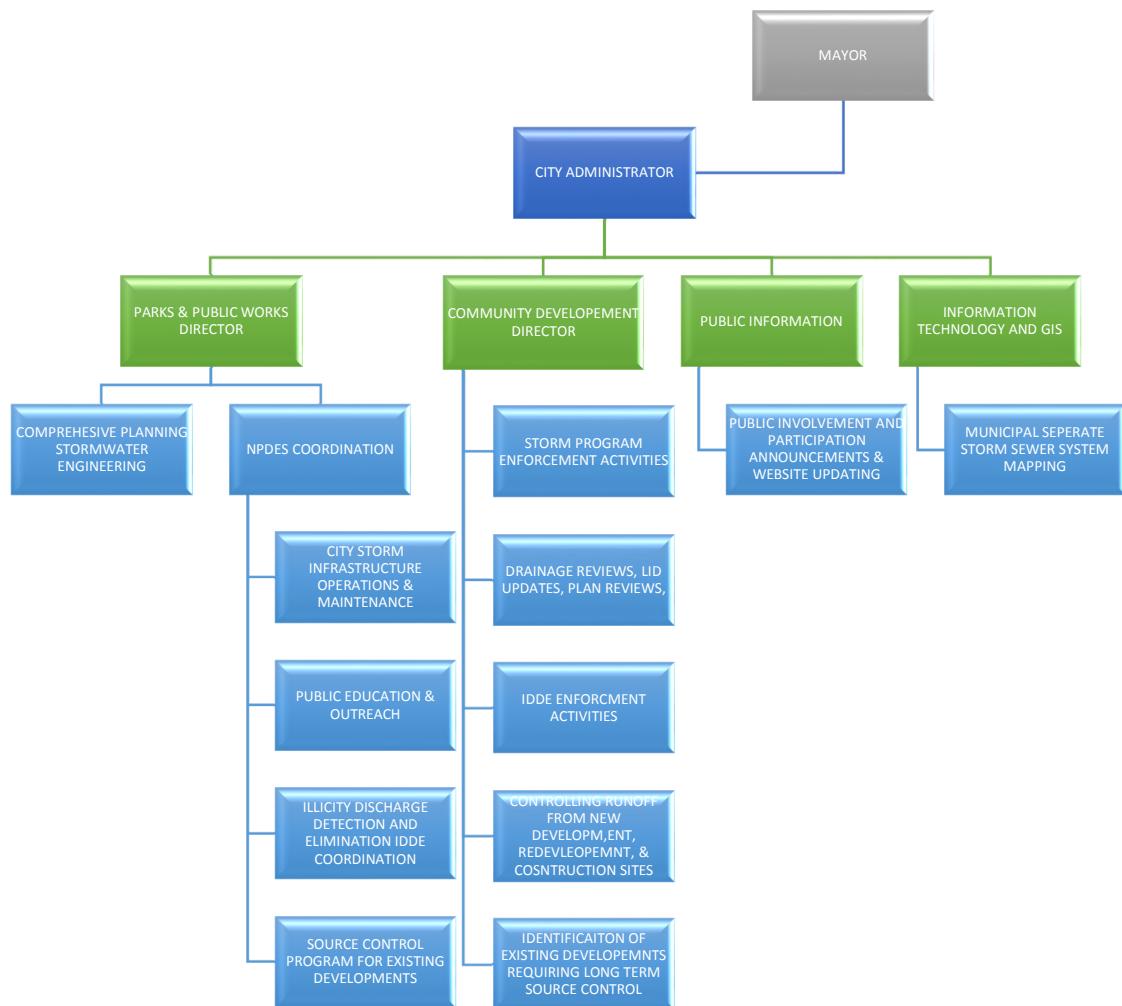
Department	Rule Making Authority	Signatory Authority	Inspection & Right of Entry Authority	Enforcement Authority	MS4 Mapping Responsibility	Education & Outreach Responsibility	Municipal Operations and Maintenance Responsivities	Source Control Program Long-term Facilities	Controlling runoff from development, redevelopment, and construction sites
Executive		✓							
Administration		✓							
Parks & Public Works	✓	✓	✓	✓		✓	✓	✓	
Community Development	✓		✓	✓				✓	✓
IT & GIS					✓				

**Summary of Roles and Responsibilities- for a more detailed description please see the current years roles and responsibility matrix and the SWMP.

ORGANIZATIONAL CHART

Executive- Mayor serves as Chief Executive of the City and provides leadership and oversight over all executive branch functions. Serves as City representative in legislative affairs and intergovernmental relations.

Administration- City Administrator provide administration and operational management to all City functions.



COMMUNICATION & COLLABORATION

WASTEWATER/STORMWATER TEAM MEETINGS

Weekly staff meetings are scheduled to work through ongoing issues and work. These staff meetings are attended by the joint wastewater/stormwater staff. This helps to facilitate conversations regarding permit requirements. Tail-gate meetings are typically prior to daily work commencing. This provides opportunities for training, and to receive input on how implementation of permit requirements is proceeding and identify any needed improvements.

PARKS & PUBLIC WORKS ALL STAFF MEETINGS

Regularly held department meetings help coordinate efforts to meet ongoing Permit requirements within the overall department.

SENIOR STAFF MEETINGS

The City Administrator conducts a weekly meeting with the City's Sr. Management Team, which is attended by Department Directors, City Clerk, City Attorney, Human Resources Manager. Permit requirements affecting the entire City can be coordinated and addressed, if needed.

PARKS & PUBLIC WORKS MANAGEMENT TEAM MEETINGS

This meeting occurs in the Public Works conference room and is attended by the Director, Supervisors, Engineering, and administrative assistant. Compliance issues can be discussed if needed.

INTERDEPARTMENTAL COORDINATION MEETINGS

Scheduled as needed to coordinate elements of the storm program work between departments.



2020 STORMWATER MANAGEMENT PROGRAM (SWMP) PLAN



March 15, 2020
Prepared by
City of Snoqualmie
Parks and Public Works Department
P.O. Box 987
Snoqualmie, Washington 98065

CONTENTS

Executive Summary	1
The Goal.....	2
Summary of 2019-2024 Phase II Permit Requirements.....	2
2019 summary highlights.....	5
Public Education	5
Public Participation.....	5
Illicit Discharge Detection and Elimination (IDDE)	5
Controlling Runoff from Development and Construction.....	6
Municipal Operations and Maintenance.....	6
Introduction.....	7
Purpose	7
The NPDES Program	7
Phase II Permit.....	7
Phase II Permit Reporting	8
Department Responsibilities.....	9
Public Comments	10
1. Comprehensive planning & stormwater management.....	11
Watershed-scale Stormwater Planning	11
2. Public Education and Outreach	14
Overview.....	14
Planned Activities.....	15
Measurement and Tracking	18
Past Activities.....	18
3. Public Involvement and Participation.....	21
Overview.....	21
Planned Activities.....	21
Past Activities.....	22
4. MS4 Mapping and Documentation.....	23
Overview	23
Mapping	23
5. Illicit Discharge Detection and Elimination (IDDE)	24

Overview.....	24
Mapping	24
Illicit Discharge Ordinance.....	24
IDDE Program.....	25
Planned Activities.....	28
Past Activities.....	29
6. Runoff Program: New Development, Redevelopment, and Construction Sites.....	30
Overview.....	30
Runoff Ordinance.....	31
Stormwater Site Plan Review.....	31
Construction Site Inspections and Enforcement.....	32
Private Facility Inspections for Permanent Long-Term Flow Control	
BMP/facilities	35
Notice of Intent.....	35
Trainings.....	35
LID Code and Enforceable Document Review	35
Planned Activities.....	35
Past Activities.....	36
7. Municipal Operations and Maintenance.....	38
Overview.....	38
Planned Activities.....	40
Past Activities.....	41
8. Source Control Program for Existing Development.....	42
Overview.....	42
Planned Activities.....	43
Past Activities.....	43
TMDL Requirements	44
Overview.....	44
Planned Activities.....	44
Past Activities.....	44
Monitoring And Assessment	45
Overview	45
Planned Activities.....	45
Past Activities.....	45
Reporting Requirements	47

Overview.....	47
Planned Activities.....	47
Past Activities.....	48

APPENDICES

Appendix A Supplemental Information

TABLES

Table 1. Planned Education and Outreach Programs and Activities for 2020.....	16
Table 2. Previous Education and Outreach Programs and Activities.....	19
Table 3. Planned Public Involvement Activities for 2020.....	21
Table 4. Previous Public Involvement Activities.....	22
Table 5. Planned IDDE Activities for 2020.....	28
Table 6. Previous IDDE Actions and Activities.....	29
Table 7. Planned Runoff Program: New Development, Redevelopment, and Construction Site Activities for 2020.....	36
Table 8. Previous Runoff Program: New Development, Redevelopment, and Construction Site Activities.....	37
Table 9. Planned Municipal Operations and Maintenance Activities for 2020.....	40
Table 10. Previous Municipal Operations and Maintenance Activities.....	41
Table 11. Planned Comprehensive Stormwater Planning Activities for 2020 ... Error! Bookmark not defined.	
Table 12. Planned Reporting Activities for 2020.....	47
Table 13. Previous Reporting Activities.....	48
Table A-1. Staff Training Summary.....	A-3

FIGURES

Figure A-1. Stormwater Hotline Report Form.....	A-4
---	-----

EXECUTIVE SUMMARY

The City of Snoqualmie (City) has obtained coverage under the National Pollution Discharge Elimination System (NPDES) Phase II Municipal Stormwater Permit (Phase II permit) issued by the Washington State Department of Ecology (Ecology). The Phase II permit is a federal requirement under the Clean Water Act that regulates the discharge of stormwater to surface waters and to ground waters of the State.

The permit authorizes the discharge of Stormwater runoff from municipal drainage systems into the state's surface waters (i.e., streams, rivers, lakes, wetlands, etc.) and groundwater, as long as the City implements permit-specified "best management practices" (BMPs). These BMPs are intended to protect water quality and reduce the discharge of "non-point source" pollutants to the "maximum extent practicable" (MEP). In addition, BMPs are intended to meet state AKART (all known, available, and reasonable methods of prevention, control, and treatment) waste discharge requirements.

The BMPs specified in the Permit are collectively referred to as the Stormwater Management Program (SWMP or Program) and grouped under the following Program components:

The 2019-2024 Phase II permit, which became effective on August 1, 2019, requires all permitted municipalities to create and implement a SWMP, which address **eight** required program elements. These elements include:

1. Comprehensive Planning for Stormwater Management
2. Public Education and Outreach
3. Public Involvement and Participation
4. Municipal Separate Storm Sewer System Mapping and Documentation
5. Illicit Discharge Detection and Elimination (IDDE)
6. Controlling Runoff from New Development, Redevelopment and Construction Sites
7. Municipal Operations and Maintenance
8. Source Control Program for Existing Development

This is a required plan that's purpose is to simplify and educate staff and the public about the City's Phase II permit requirement in eight required program categories for the 2019-2024 Phase II permit. In addition, this SWMP Plan also addresses requirements in S7, S8, and S9 of the Phase II permit which cover:

- Compliance with Total Maximum Daily Load Requirements (Section S7)
- Monitoring and Assessment (Section S8)
- Reporting Requirements (Section S9)

Permit conditions are phased in over a 5-year permit term. The current permit term is from August 2019 through July 2024. The permit requires the City to report annually (March 31 of each year) on the City of Snoqualmie's progress toward program implementation and compliance for the prior year. Ecology revises and reissues the permit at the end of the permit term.

Ultimately, this SWMP Plan outlines all the requirements of the Phase II permit and provides a summary of the City's progress towards meeting those requirements.

THE GOAL

The goal of this SWMP Plan is to reduce the discharge of pollutants from the City's Municipal Separate Storm Sewer System (MS4) to the maximum extent practicable to protect water quality.

SUMMARY OF 2019-2024 PHASE II PERMIT REQUIREMENTS

- **January 1, 2020** S5.C.4.b.i Begin to collect pipe size and material type for all known MS4 Outfalls during normal course of business and update records.
- **March 31st, 2020** submit annual report electronically using Ecology's Water Quality Permitting Portal (WQWebPortal).
- **July 1, 2020** Public Education and Outreach S5.C.2.a.ii.(b) each Permittee shall conduct a new evaluation of the effectiveness of an ongoing behavior change campaign. Permittee shall document lessons learned and recommendations for which option to select.
- **August 1, 2020** Stormwater Planning S5.C.1.a Each Permittee shall convene an interdisciplinary team to inform and assist in the development, progress and influence of this program.
- **August 15th, 2020** make payments to meet the requirement for Regional Status and Trends Monitoring (S8.A) by paying into the state's collective fund and meet the SWMP Effectiveness and Source Identification Studies (S8.B) requirements by paying into the state's collective fund.
- **February 1, 2021** Public Education and Outreach S5.C.2.a.ii.(c) Based on recommendation from S5.C.2.a.ii.(b), each Permittee shall follow social marketing practices and methods, similar to community-based social marketing and develop a

campaign that is tailored to the community, including development of a program evaluation plan.

- **March 31, 2021** Coordination & Stormwater Planning
 - S5.A.5.b. Permittees shall include a written description of internal coordination mechanisms in the Annual Report.
 - S5.C.1.b.(a) the Permittee shall respond to the series of Stormwater Planning annual Report questions to describe how anticipated stormwater impacts on water quality were addressed.
- **April 1, 2021** Public Education & Outreach S5.C.2.a.ii(d) begin to implement the strategy developed in S5.C.2.a.ii.(c) Social Marketing.
- **August 1, 2021** MS4 Mapping and Documentation S5.C.4.c. Permittee needs a written standard published that identifies the required electronic format for mapping to include fully described mapping standards.
- **January 1, 2022** Controlling Runoff from New Development- Each Permittee shall adopt and make effective a local program, that meets the requirements of S5.C.6.b(ii). Shall apply to all applications submitted but not approved prior to the above date.
- **March 31, 2022** Stormwater Planning S5.C.1.d.i. Permittees shall submit a watershed inventory and include a brief description of the relative conditions of the receiving waters and the contributing areas.
- **June 30, 2022** Receiving Water Prioritization S5.C.1.ii The Permittee shall document the priority ranking process used to identify high priority receiving waters.
- **June 30, 2022** Controlling Runoff from New Development each Permittee shall adopt and make effective a local program, that meets the requirements of S5.C.6.b(i) through (iii).
- **July 1, 2022** Controlling Runoff from New Development
 - Each Permittee shall adopt and make effective a local program, that meets the requirements of S5.C.6.b(i). Shall apply on or after above date.
 - Each Permittee shall adopt and make effective a local program, that meets the requirements of S5.C.6.b(iii). Shall apply prior to above date, that have not started construction by July 1st, 2027.
- **August 1, 2022** Source Control Program for Existing Development

- S5.C.8.b(i) Permittees shall adopt and make effective an ordinance(s), or other enforceable document(s), requiring the application of source control BMP's
- S5.C.8.b(ii) Permittees shall establish an inventory that identifies publicly and privately owned institutional, commercial and industrial sites which have potential to generate pollutants to the MS4.
- **December 31, 2022** Operations and Maintenance S5.C.7.f I implement a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the Permittee.
- **January 1, 2023** -Source Control Program for Existing Development
 - S5.C.8.b(iii) Permittees shall implement an inspection program for sites identified pursuant to S5.C.8.b(ii).
 - S5.C.8.b(iv) Permittees shall implement a progressive enforcement policy that requires sites to comply with stormwater requirements within a reasonable time period.
- **January 1, 2023** -Stormwater planning S5.C.1.b.i.(b) The Permittee shall submit a report responding to the same questions included in S5.C.1.b.i.(a) to describe how water quality is being addressed.
- **March 31, 2023** Stormwater Management Action Plan (SMAP) S5.C.1.d.iii Permittees shall develop a SMAP for at least one high priority catchment area from S5.C.1.d.ii that identifies a description of stormwater facility retrofits, land management development strategies and targeted, enhanced or customized implementation of stormwater management actions.
- **August 1, 2023** MS4 Mapping and Documentation S5.C.4.b.ii Complete mapping of all known connections from the MS4 to a privately-owned stormwater system.
- **March 31, 2024** Public Education and Outreach S5.C.2.a.ii.(e) Evaluate and report on the changes in understanding and adoption of targeted behaviors resulting from the implementation of the strategy and any planned or recommended changes to the campaign in order to be more effective; describe the strategies and process to achieve the results.
- **General On-Going Requirements**
 - Continue mapping and categorizing all known MS4 outfalls, known MS4 discharge points, receiving waters, stormwater treatment best management practices (BMPs)/facilities, flow control BMPs/facilities, and tributary conveyances with a 24-inch nominal diameter or larger.

- Continue an ongoing program designed to detect and identify non-stormwater discharges and illicit connections into the MS4.
- Continue an ongoing program designed to address illicit discharges, including spills and illicit connections, into the MS4.
- Inspect and, if needed, clean all catch basins and inlets owned or operated by the City (once during the Phase II permit term).
- Ongoing staff training for IDDE.
- Ongoing response to spill and illicit discharge hotline calls.
- Track additional information related to illicit discharges and report this information to Ecology through the WQWebIDDE system.

2019 SUMMARY HIGHLIGHTS

Public Education

- Offered 21 planting events in 2019 through the Green Snoqualmie Partnership. Approximately 421 participants volunteered in planting events in 2019.
- Evaluated the City's pet waste program. Approximately 190,000 pet waste bags were purchased and used in 2014; 190,000 in 2015; 200,000 in 2016; 220,000 in 2017; 208,000 in 2018; 215,000 in 2019 at pet waste bag dispensers.
- Participated in Railroad Days, Recycle Event, and the Citizens Academy to promote 24-hour spill hotline, pet waste clean-up, IDDE prevention and promotion of regional websites (Puget Sound Starts Here.org, etc.)

Public Participation

- Promoting best stormwater management practices on the updated City website throughout 2019. Updates to the City's website included a new, more user-friendly look and additional resources for residents and businesses.

Illicit Discharge Detection and Elimination (IDDE)

- Ongoing mapping and map updating.
- Ongoing field screening of catch basins for illicit discharges.
- The spill reporting hotline received 12 calls in 2019.

- Presented an Illicit Discharge Awareness Training to City staff in June and December 2019.
- Presented an Illicit Discharge Response/Reporting Training to City staff in June and December 2019
- Trained responsible personnel on usage of illicit discharge identification, inspection , and reporting procedures.

Controlling Runoff from Development and Construction

- Finalized the City's Addendum to the 2016 King County Surface Water Design Manual (KCSWDM) in (final version is dated January 2, 2019).
- Conducted permitting and plan review for new development and redevelopment projects.
- Continued progress on the enforceable document review to facilitate implementation of low impact development (LID) principles and LID best management practices (BMPs).
- Prepared summary report that summarized the review of the City's municipal code to facilitate implementation of LID principles and LID BMPs.

Municipal Operations and Maintenance

- Conducted annual inspections of 40 stormwater ponds, 15 swales, 3 Stormceptors, 4 filter cartridge vaults. 2 ponds receiving cells and all swale structures and Stormceptors were cleaned. Debris in filter vaults was removed, leaving condition of installed filters as fully functioning as designed.
- A total of 2867 catch basins were inspected in and 2506 catch basins were cleaned in 2019. The City has cleaned 5,610 catch basins since the Phase II permit began in 2013.
- Reviewed the Stormwater Pollution Prevention Plan (SWPPP) for the City's Public Works Operations Facility (City Shop).
- Updated catch basin inspection procedures at each city facility and city parks, to include IDDE inspection and reporting.

INTRODUCTION

PURPOSE

This document was prepared to meet the City of Snoqualmie's (City) requirement for development of a Stormwater Management Program (SWMP) Plan as required under condition S5 of the National Pollution Discharge Elimination System (NPDES) Phase II Municipal Stormwater Permit (Phase II permit).

This SWMP Plan outlines the requirements in the Phase II permit and summarizes the City's work program for the upcoming calendar year, January 1, 2020, through December 31, 2020.

The SWMP Plan must include a written description of department coordination mechanisms to eliminate permit barriers, and opportunities for public participation in the SWMP Plan development and decision-making process, which were required starting August 1, 2014.

The City must post the SWMP Plan to its website, and the annual report required under S9.A.c, no later than May 31 each year.

THE NPDES PROGRAM

The National Pollutant Discharge Elimination System (NPDES) program was created under the Federal Clean Water Act with the intent of protecting and restoring water quality in lakes and streams so that 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.

In Washington State, the United States Environmental Protection Agency has delegated the authority over NPDES permits to the Washington State Department of Ecology (Ecology). Ecology has issued several general permits for stormwater system discharges that apply to municipalities with different population sizes. The Phase II permit refers to those municipalities with a population of less than 100,000 according to the 1990 census.

PHASE II PERMIT

The City has a current population nearing 13,500 and must comply with the Phase II permit as issued by Ecology under a 5-year term starting August 1, 2012, to the current updated version. The current permit is set to expire on July 31, 2024. This permit allows cities, counties, and

secondary permittees to discharge stormwater from municipal systems into "waters of the state" such as rivers, lakes and streams, as long as they implement programs to reduce stormwater pollutants to the "maximum extent possible" by conducting activities in the following program areas:

- S5.C.1- Comprehensive Planning for Stormwater Management
- S5.C.2- Public Education and Outreach
- S5.C.3- Public Involvement and Participation
- S5.C.4- Municipal Separate Storm Sewer System Mapping and Documentation
- S5.C.5- Illicit Discharge Detection and Elimination (IDDE)
- S5.C.6- Controlling Runoff from New Development, Redevelopment, and Construction Sites
- S5.C.7- Municipal Operations and Maintenance
- S5.C.8- Source Control Program for Existing Development
- S8- Monitoring and Assessment

PHASE II PERMIT REPORTING

Specific Phase II permit requirements are summarized in the following sections along with planned activities and previously conducted activities for each specific element of the SWMP.

The permit requires the City to submit to Ecology an Annual Report by March 31 of each year of the Permit term. The NPDES Annual Report consists of the following documents:

- **STORM WATER MANAGEMENT PROGRAM (SWMP)**, WHICH IS DEVELOPED BY THE CITY AND SUMMARIZES THE CONTINUING/CURRENT AND PLANNED CITY-WIDE PERMIT IMPLEMENTATION ACTIVITIES TO ASSURE CONTINUED PERMIT COMPLIANCE FOR THE COMING YEAR (2020)
- **Compliance Report** is a web-based interface on Ecology's site with specific "fill in the blanks" data entry to document the City's Permit compliance activities for the preceding calendar year (2019). The Compliance Report is not flexible in that you must answer the questions in the form provided by Ecology. The information for the report is completed administratively by City-wide staff in Community Development (CD), Information Technology (IT), and Parks & Public Works (P/PW) at the end of the calendar year.

DEPARTMENT RESPONSIBILITIES

The Phase II permit broadly applies to many city activities, including maintenance and operations of city facilities, permitting and inspections of new development and redevelopment, and other activities conducted in different City departments and divisions, including:

- The Parks and Public Works (P/PW) Department.
- The Community Development (CD) Department.
- The IT/GIS Department

P/PW acts as the coordinator between City departments to verify that all Phase II permit requirements are being implemented and as the permit coordinator has the authority to assign permit task components to the Departments identified above. These tasks will be further refined each year in accordance with specific Phase II permit conditions.

S5.A - SWMP Administration – 2019-2024 Planned Activities		
Activity	Due Date	Status/Notes
SWMP preparation, updates and annual submittal with the Annual Report.	Annually - March 31st	
Submit the annual report electronically using Ecology's Water Quality Permitting Portal (WQWebPortal).	Annually - March 31st	
Permittees shall include a written description of internal coordination mechanisms in the Annual Report due no later than March 31, 2021.	March 31, 2021	

PUBLIC COMMENTS

The City appreciates public input in the ongoing development and implementation of this document. Comments or concerns regarding this SWMP Plan may be sent to the following address:

City of Snoqualmie
Parks and Public Works Department
Attention: Tom Holmes, Stormwater Program & Wastewater Superintendent
38624 SE River Street
P.O. Box 987
Snoqualmie, WA 98065

The Permit (Section S5.C.3) requires the City to:

- Provide ongoing opportunities for public involvement and participation through advisory councils, public hearings, watershed committees, participation in developing rate-structures or other similar activities.
- Permittees shall create opportunities for the public, including overburdened communities, to participate in the decision-making processes involving the development, implementation and update of the Permittee's SMAP and SWMP. This condition of the permit will be met by asking City Council to approve the SWMP annually by resolution at a public hearing.

The City shall post on their website their SWMP Plan and the annual report no later than May 31st each year.

1. COMPREHENSIVE PLANNING & STORMWATER MANAGEMENT

OVERVIEW

The 2019-2024 Phase II permit (Section S5.C.2) requires the City to provide a stormwater education and outreach program that will:

Prioritize and address Phase II permit target audiences and subject areas most relevant to current City stormwater issues and practices.

Section S5.C.1 in the 2019-2024 Phase II permit describes requirements for comprehensive stormwater planning:

- **Coordination with long-range plan updates:** Report how water quality and watershed protection will be addressed during the 2019-2024 Phase II permit cycle.
- **Low impact development code-related updates:** Continue the code and enforceable document review process required by section S5.C.1.c. of the 2019-2024 Phase II permit to minimize impervious surfaces, native vegetation loss, and stormwater runoff from development. In addition to integrating LID principles into new documents and code, existing documents and code should be reviewed on an annual basis for barriers to LID.
- **Stormwater Management Action Planning:** This requirement includes documenting and assessing existing information related to local receiving waters and contributing areas, prioritizing receiving waters (no later than June 30, 2022), and developing a Stormwater Management Action Plan (SMAP) for at least one high-priority basin (no later than December 31, 2022).

Watershed-scale Stormwater Planning

The Phase II permit requirements for watershed-scale stormwater planning only applies to jurisdictions with all or part of their coverage area in a watershed selected under condition S5.C.5.c in the 2013-2018 Phase II permit. The City is not located in a selected watershed, so the watershed-scale requirements listed in the 2013-2018 Phase II permit do not apply. A new section on Comprehensive Stormwater Planning has been added to the 2019-2024 Phase II permit; requirements are summarized in the Comprehensive Stormwater Planning section of this plan below.

The Permit (Section S5.C.1) requires the City to:

- Implement a Stormwater Planning program to inform and assist in the development of policies and strategies as water quality management tools.
- Convene an inter-disciplinary team to inform and assist in the development, progress and influence of this program. The interdisciplinary team is to be established by August 1, 2020.
- Coordinate long-range plan updates. Describe how stormwater management needs and protection/improvement of receiving water health are (or are not) informing the planning update processes and influencing policies and implementation strategies in Snoqualmie.
- On or before March 31, 2021, the Permittee shall respond to the series of Stormwater Planning Annual Report Questions to describe how anticipated stormwater impacts on water quality were addressed, if at all, during the 2013-2019 permit term.
- On or before January 1, 2023, the Permittee shall respond to the series of Stormwater Planning Annual Report Questions to describe how anticipated stormwater impacts on water quality are currently being addressed.
- Continue Low Impact Development code-related requirements to make LID the preferred and commonly used approach to site development.
- The City has made LID the preferred and commonly used approach to site development by adopting the King County Surface Water Design Manual and all future amendments to the standards. Local development-related codes, rules, standards or other enforceable documents are designed to minimize impervious surfaces, native vegetation and stormwater runoff in all types of development situations, where feasible.
- Complete a Receiving Water Assessment - Permittees shall document and assess existing information related to their local receiving waters and contributing area conditions to identify which receiving waters are most likely to benefit from stormwater management.
- By March 31, 2022, submit a watershed inventory and include a brief description of the relative conditions of the receiving waters and the contributing areas.
- Establish an inventory of its drainage basins.
- Develop and implement a prioritization method and process to determine which receiving waters will receive the most benefit from implementation of stormwater facility retrofits, tailored implementation of SWMP actions and other land/development management actions.
- No later than June 30, 2022, document the prioritized and ranked list of receiving waters. This is an identified task within the Watershed Management Planning efforts that are currently underway.
- Stormwater Management Action Plan (SMAP) - No later than March 31, 2023, Permittees shall develop a SMAP for at least one high priority catchment area that identifies:
 - A description of the stormwater facility retrofits needed for the area, including BMP types and preferred locations.
 - Land management/development strategies and/or actions identified for water quality management.
 - Targeted, enhanced, or customized implementation of stormwater management actions.

- This is an identified task within the Watershed Management Planning efforts that are currently underway. More details will be provided as the planning efforts continue.

S5.C.1 – Stormwater Planning – 2019-2024 Planned Activities		
Activity	Due Date	Status/Notes
Convene an interdisciplinary team to inform and assist in the development, progress and influence of this program.	August 1, 2020	
On or before March 31, 2021, the Permittee shall respond to the series of Stormwater Planning Annual Report Questions to describe how anticipated stormwater impacts on water quality were addressed, if at all, during the 2013-2019 permit term.	March 31, 2021	
On or before January 1, 2023, the Permittee shall respond to the series of Stormwater Planning Annual Report Questions to describe how anticipated stormwater impacts on water quality are currently being addressed.	January 1, 2023	
By March 31, 2022, submit a watershed inventory and include a brief description of the relative conditions of the receiving waters and the contributing areas.	March 31, 2022	
No later than June 30, 2022, document the prioritized and ranked list of receiving waters.	June 30, 2022	
Stormwater Management Action Plan (SMAP) - No later than March 31, 2023, Permittees shall develop a SMAP for at least one high priority catchment area.	March 31, 2023	
Planned Comprehensive Stormwater Planning Activities for 2020.		
Item	Department/ Public Involvement	Timeline Notes
Describe how water quality and watershed protection were addressed during the 2013-2018 Phase II permit cycle in updates to the City's Comprehensive Plan.	P/PW	Due by March 31, 2020
Annual LID code review: assess previously identified barriers and report newly identified administrative or regulatory barriers to implementation of LID principles or LID BMPs	P/PW and CD	Ongoing

2. PUBLIC EDUCATION AND OUTREACH

OVERVIEW

The 2019-2024 Phase II permit (Section S5.C.2) requires the City to provide a stormwater education and outreach program that will:

- Prioritize and address Phase II permit target audiences and subject areas most relevant to current City stormwater issues and practices.
- Develop education and outreach programs designed to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts.
- Create opportunities for, and/or partner with organizations encouraging residents to participate in, stewardship activities such as stream teams, storm drain marking, volunteer monitoring, riparian plantings and education activities.
- Measure the understanding and adoption of the targeted behaviors for at least one target audience in at least one subject area. As a New Permittee, the City must begin using resulting measurements to direct education and outreach resources most effectively, as well as evaluate changes in targeted behaviors.

According to S5.C.2 in the 2019-2024 Phase II permit, the City is required to implement its public education and outreach program for the area served by the MS4. The Phase II permit lists target audiences and subject areas for education, and target audiences and Best Management Practices (BMPs) with a goal of behavior change.

The 2019-2024 Phase II permit (Section S5.C.2) requires the City to provide a stormwater education and outreach program that will:

- Build general awareness about methods to address and reduce impacts from stormwater runoff.
- Effect behavior change to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts.
- Create stewardship opportunities that encourages community engagement in addressing the impacts from stormwater runoff.
- Select at least one target audience and one subject area for an annual general awareness program.
- Select one target audience and one BMP for a behavior change program.

- The behavior change program must be re-evaluated no later than July 1, 2020.
- The City shall implement social marketing practices and methods to develop a program evaluation plan and tailor the behavior changes program by February 1, 2021.
- Each Permittee shall implement an education and outreach program for the area served by the MS4. The City has contracted with EnviroIssues to help create a targeted education program.
- Behavior Change – Permittees shall select, at a minimum, one target audience and one BMP from a defined list within the Permit.
- No later than July 1, 2020, each Permittee shall conduct a new evaluation of the effectiveness of an ongoing behavior change campaign and document lessons learned.
- By February 1, 2021, each Permittee shall follow social marketing practices and methods, like community based social marketing and develop a campaign tailored to the community.
- No later than April 1, 2021, begin to implement the strategy developed.
- No later than March 31, 2024, evaluate and report on changes in understanding and adoption of targeted behaviors and any planned or recommended changes to the campaign in order to be more effective.
- Stewardship – Each Permittee shall provide and advertise stewardship opportunities and/or partner with existing organizations to encourage residents to participate in activities or events planned and organized within the community, such as: stream teams, storm drain marking, volunteer monitoring, riparian plantings, and education activities.
 - The City of Snoqualmie is planning to sponsor an active Storm Drain Marking Program funded through Utilities Department, Riparian planting efforts utilizing volunteers and City staff throughout the year through its Parks and Public Works Arborist, and various education opportunities focused on stormwater and stream health that target schools and community events.

PLANNED ACTIVITIES

The City currently implements and participates in stormwater outreach and environmental education programs. The education program to date has consisted of activities such as providing on-line and print material, classroom education, direct target audience outreach, and coordination with regional agencies. Past stormwater education activities are summarized in the following section. The Phase II permit public education program is developed jointly between the Parks and Public Works, and Community Development Departments. Outreach activities,

funding sources, and implementation schedule are planned annually for future years. Highlights of the planned activities for 2020 include:

- Continued publication and promotion of spill reporting hotline. Offer “don’t pollute” puck labels on nearby catch basins to interested residents
- Continued coordination with Ecology staff and other NPDES jurisdictions.
- Continued stewardship activities through partnerships with Green Snoqualmie, Mountains to Sound Greenway, and King County.
- Work with local Public Relations firm on work centered around community awareness and assessment of community priorities with stormwater.

Ongoing public education activities include:

- Publication and promotion of spill reporting hotline
- Volunteer stewardship projects
- Participation in regional stormwater education campaigns

Table 1 summarizes the planned 2020 City programming, with target audiences, activities and behaviors.

Table 1. Planned Education and Outreach Programs and Activities for 2020.

Item	Target Audience	Goal/Behavior/Activity	Cost (estimate)
City Website	General Public	The City's website has been used to promote community activities and educational opportunities.	N/A
Spill Response	General Public	Continue to monitor water quality complaints, spill reporting and illicit discharge reporting hotline, and publicize it via news releases and the City website. Businesses and citizens who are found to be causing illicit discharges receive education, and potentially enforcement actions, if they refuse to voluntarily correct the problem.	N/A
Newsletter E-Notices	General Public	The City will continue to e-notice in the City Newsletter to promote classes, stewardship opportunities, and water-related best management practices. The Newsletter reaches ~700 persons in the City e-mail list, ~1,200 in the Yahoo group, and ~1,900 Facebook followers.	N/A
Promotional Material	General Public and Homeowners	Continue to distribute promotional material on Public Outreach topics developed at; Earth Day, Snoqualmie Railroad Days, Snoqualmie citizens academy, and other events. These activities will continue at various events scheduled for 2020.	\$1,000

Volunteer Stewardship Projects	General Public	The City will partner with the Green Snoqualmie Partnership, Mountains to Sound Greenway, and King County on several planting events in 2020. Green Snoqualmie Partnership is currently scheduled for 24 events at Three Forks Natural Area, Cottonwood Forest, etc.	N/A
Hazardous Waste Collection	General Public and Homeowners	The City collects fluorescent light bulbs, batteries and prescription medications at various City buildings. The annual hazardous waste collection and recycle event sponsored by King County is scheduled for September of 2020.	N/A
Organic Gardening and Natural Yard Care Program	General Public and Homeowners	The City plans to assess current available outreach material and/or contract with trained entities (i.e., Tilth Alliance, King County) to provide public education classes related to Organic Gardening and Natural Yard Care.	\$2,500
Pet Waste Stations	General Public	The City plans on continuing to provide pet waste disposal bags at the pet waste stations that have been installed in local parks.	\$5,100

Table 1 (continued). Planned Education and Outreach Programs and Activities for 2020.

Item	Target Audience	Goal/Behavior/Activity	Cost (estimate)
Household Hazardous Waste Education	General Public and Homeowners	The City will continue the partnership with Waste Management to provide education on hazardous waste via bill insert notices.	N/A
Stormwater Outreach for Regional Municipalities (STORM)	General Public	The City is a member of Stormwater Outreach for Regional Municipalities (STORM), an organization of jurisdictions that have joined to address non-point pollution in the Puget Sound. The City will continue to promote approved regional stormwater awareness campaign activities.	N/A
Stormwater Comprehensive Plan	General public, City staff, and Businesses	The City is in the process of updating its Stormwater Comprehensive Plan to better identify projects and programs that protect water resources and water quality.	\$230,000

S5.C.2 – Education and Outreach – 2019-2024 Planned Activities

Activity	Due Date	Status/Notes
Permittees shall annually select at a minimum one target audience and one subject area as defined in the permit, to provide subject area information to the target audience on an ongoing or strategic schedule.	Ongoing - Annually	Outreach will continue in the form of school programs, tabling at community events, and information in the city's newsletter and utilities bill inserts.

No later than July 1, 2020, each Permittee shall conduct a new evaluation of the effectiveness of an ongoing behavior change campaign and document lessons learned.	July 1, 2020	City has opted to develop a new approach based on the evaluation of the previous pet waste program. The City has contracted with EnviroIssues to assist the City meeting the requirements of Education and Outreach through 2021
By February 1, 2021, each Permittee shall follow social marketing practices and methods, similar to community based social marketing and develop a campaign tailored to the community.	February 1, 2021	The City has contracted with EnviroIssues to assist the City meeting the requirements of Education and Outreach through 2021
No later than April 1, 2021, begin to implement the strategy developed.	April 1, 2021	
No later than March 31, 2024, evaluate and report on changes in understanding and adoption of targeted behaviors and any planned or recommended changes to the campaign in order to be more effective.	March 31, 2024	

Measurement and Tracking

The annual public education and outreach program is developed based on local water quality needs, staff experience and feedback from previous programs. Measurement tools utilized for various programs thus far include the number of educational events, actual or estimated number of target audience reached, total amount of site visits, e-mail newsletter counts, number and type of materials distributed, and anecdotal information from program participants. Programs have not yet utilized post-program surveys, preprogram assessments and social media marketing, but the City has contracted with EnviroIssues to assist with these required elements of the program. Tracking records on public education and outreach are maintained in independent project files and compiled annually for reporting purposes.

PAST ACTIVITIES

Table 2 summarizes the target audiences and behaviors addressed through public education activities conducted throughout 2019. Some educational programs occur regularly or are static, providing a resource that requires moderate renewed effort once established (e.g., continued

webpage content; passive hazardous waste collection sites). Other efforts occur intermittently; for instance, restoration planning continues to inform regular grant applications, but restoration grant awards are more sporadic by nature, and sometimes reflect one-time opportunities. As such, programs are influenced by funding, collaborative opportunities (regional efforts, grants, etc.), and staff time.

Table 2. Education and Outreach Programs and Activities.

Item	Target Audience	Goal/Behavior/Activity
City Website	General Public	The City's website has been used to promote community activities and educational opportunities. Major updates, including a new, more user-friendly look and additional resources for residents and businesses were launched as part of the City's website redesign in late 2017. The Street and Storm Division Page was separated, a new hotline was generated to Operations-Utilities staff, and information targeted to help developers navigate the City's updated municipal stormwater regulations was added.
Spill Response	General Public	The City continued a water quality complaint, spill reporting, and illicit discharge reporting hotline in 2019 publicized via the City website, and in print form.
Quarterly Newsletter E-Notices	General Public	The City e-noticed quarterly in the City Newsletter to promote classes, stewardship opportunities, and water-related best management practices. The e-notices reached ~700 persons in the City e-mail list, ~1,200 in the Yahoo group, and ~1,900 Facebook followers. This information was also shared with the Snoqualmie Ridge Residential Owners Association (ROA) with its weekly publications that reached ~4,000 persons.
Promotional Material (print)	General Public and Homeowners	Stormwater staff distributed promotional materials on car washes, car leaks, the spill hotline number and pet waste hazards at Arbor Day/Earth Day, Snoqualmie Railroad Days, Ridge Block Party, and other City events.
Volunteer Stewardship Projects	General Public	The Green Snoqualmie Partnership was formed in 2016. The City partnered with the Green Snoqualmie Partnership, Mountains to Sound Greenway, and King County on several planting events since 2016. Green Snoqualmie Partnership events in 2019 results: 45.6 Acres in restoration, 427 volunteer sign-ins, 917 hours volunteered, 6211 plantings.

Table 2 (continued). Previous Education and Outreach Programs and Activities.

Item	Target Audience	Goal/Behavior/Activity
Pet Waste Stations	General Public	The City installed pet waste bag stations and signs in local parks. Bag purchase and use tallies include the following: <ul style="list-style-type: none">• 2015 = 190,000 bags• 2016 = 200,000 bags• 2017 = 220,000 bags• 2018 = 208,000 bags• 2019 = 201,000 bags
Hazardous Waste Collection	General Public and Homeowners	The City collects fluorescent light bulbs, batteries and prescription medications at various City buildings. A hazardous waste collection event sponsored by King County was held from July 6-8, 2018 and July 7–9, 2017, at Mount Si High School's freshman campus in Snoqualmie. Items accepted for disposal free of charge included pesticides, oil-based paints, automotive products (e.g., oil, antifreeze, lamps, etc.), and fluorescent bulbs/tubes.
Stormwater Utility Rate Structure	General Public and Businesses	The City adopted new Stormwater Utility rates for 2017 through 2020 in February 2017. The approval processes included discussion of Stormwater and water quality with the public and businesses.
Stormwater Comprehensive Plan	General public, City staff, and Businesses	The City embarked upon the process of updating its Stormwater Comprehensive Plan to better identify projects and programs that protect water resources and water quality.
Stormwater CIP	General public, City staff, and Businesses	The Stormwater Capital Improvement Program (CIP) is included in the City's CIP, providing public comment opportunity. In addition, a more user-friendly, publicly available format for each project was implemented by creating the CIP storybook format for council and public presentation.
Stormwater Outreach for Regional Municipalities (STORM)	General Public	The City is a member of Stormwater Outreach for Regional Municipalities (STORM), an organization of jurisdictions that have joined to address non-point pollution in the Puget Sound. The City supports and promotes regional stormwater awareness campaign activities. The City has retained a consultant to provide education and outreach tailored to the community.

3. PUBLIC INVOLVEMENT AND PARTICIPATION

OVERVIEW

The 2019-2024 Phase II permit (Section S5.C.3) requires the City to:

- Create opportunities for the public to participate in the decision-making processes involving the development, implementation and updates of the SWMP Plan. The City Plan includes consideration of public comment in the SWMP Plan's development and implementation.
- Make the available SWMP Plan and Annual Report available to the public, including posting on the City's website, no later than May 31 each year.
- The City shall create opportunities for the public, including overburdened communities, to participate in the decision-making processes involving the development, implementation and update of the Permittee's SMAP and SWMP. City Stormwater management staff will present a summary of the SWMP to City Council the second week of March each year and post the document to the City's website with an email contact to solicit comments throughout the year.

Ongoing public involvement activities include:

- Posting the SWMP Plan and Annual Report on the City's website

PLANNED ACTIVITIES

Table 3 summarizes the public involvement activities planned for 2020.

Table 3. Planned Public Involvement Activities for 2020. S5.C.3

Item	Department/ Public Involvement	Cost (estimate)	Timeline Notes
The City maintains a web page for the Stormwater Division located under the Public Works and Utilities Division home pages. The web page is updated with the latest Annual Report and SWMP Plan each year.	P/PW	\$0	Ongoing
Work on water quality and watershed issues; includes Snoqualmie Tribe, King County, Snoqualmie Valley cities, and citizen members.	Snoqualmie Watershed Forum	\$0	Established in 2005; ongoing

Activity	Due Date	Status/Notes
<ul style="list-style-type: none"> Each Permittee shall post on their website their SWMP Plan and the annual report no later than May 31st each year. Request Council approval of plan at public meeting. 	Annually – May 31	

PAST ACTIVITIES

Table 4 summarizes the public involvement activities that occurred from 2013 through 2019.

Table 4. Previous Public Involvement Activities.			
Item	Department/ Public Involvement	Cost (estimate)	Timeline Notes
Any studies, projects, proposed rate changes or actions requiring City Council input or approval include a public participation process with public notice, discussion at council committee meetings, and public input at City Council and Council Committee meetings.	P/PW; CD; Parks and Public Works (P/PW) and Community Development (CDC) Committees	\$112,000 equally split by the Water, Sewer and Stormwater Utilities	2015-2017
The Shoreline Hearings Board created under SMC19.08.210 in 1986, serves to help protect the shorelines of Snoqualmie through updates to the Shoreline Master Program (SMP). The SMP incorporates State Policy RCW 90.58.020 by reference, which states that shoreline "uses shall be preferred which are consistent with control of pollution and prevention of damage to the natural environment."	P/PW, CD, and Shoreline Hearings Board	\$0	Established in 1986; meets for Plan Updates
The City maintains a web page for the Stormwater Division located under the Public Works and Utilities Division home pages. The web page is updated with the latest Annual Report and SWMP Plan each year.	P/PW	\$0	Ongoing
Work on water quality and watershed issues; includes Snoqualmie Tribe, King County, Snoqualmie Valley cities, and citizen members.	Snoqualmie Watershed Forum	\$0	Established in 2005; ongoing

4. MS4 MAPPING AND DOCUMENTATION

OVERVIEW

Mapping is a required element of the stormwater permit because it is not possible to perform proper long-term maintenance or inspection requirements of the permit without having adequate maps. Additionally, to respond to IDDE or other water quality requirements of the permit, maps provide critical information to emergency response personnel allowing staff to be able to assess, classify, contain, repair, stop, report, and take appropriate and efficient steps to protect the waters of the state from pollutant discharges under the City of Snoqualmie's jurisdictional authority.

Mapping

The 2019-2024 Phase II permit requires an ongoing program for mapping and documenting the MS4 (Section S5.C.4). At a minimum, maps are required to include or depict:

- All known municipal separate storm sewer outfalls and MS4 discharge points, receiving waters, and stormwater treatment and flow control BMPs/ facilities owned, operated or maintained by the City.
- Tributary conveyances to all known outfalls and discharge points with a 24-inch nominal diameter or larger (or equivalent cross-sectional area for non-pipe systems), showing all tributary conveyance types, materials and size where known; associated drainage areas; and land uses.
- All authorized or allowed MS4 connections since August 1, 2013.
- Connections between the City's MS4 and MS4s of other municipalities or public entities.
- Geographic areas served by the MS4 that do not discharge stormwater to surface waters.
- Size and material of outfalls (beginning on January 1, 2020)
- Connections to privately owned stormwater systems (no later than August 1, 2023)
- The required format for maps will be electronic beginning August 1, 2021.
- MS4 MAPPING and Documentation

Ongoing GIS activities include:

- Municipal stormwater system map updates

S5.C.4 – MS4 Mapping & Documentation – 2019-2024 Planned

Activity	Due Date	Status/Notes
No later than January 1, 2020, begin to collect size and material for all known MS4 outfalls during normal course of business.	January 1, 2020	Ongoing
No later than August 1, 2023, complete mapping of all known connections from the MS4 to a privately-owned stormwater system.	August 1, 2023	
No later than August 1, 2021, the required format for mapping is electronic with fully described mapping standards.	August 1, 2021	Ongoing

5. ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

OVERVIEW

The Illicit Discharge Detection and Elimination (IDDE) program refers to the process of detecting and removing illicit connections and discharges – including spills not under the purview of another responding authority – into the municipal separate storm sewer system (MS4) owned or operated by the City.

Mapping

The above mapping and documentation requirements assist with this required element of the program.

Ongoing IDDE activities include:

- Municipal stormwater system Inspections

Illicit Discharge Ordinance

The 2019-2024 Phase II permit requires the City to implement an ordinance or other regulatory action necessary to effectively prohibit non-stormwater, illicit discharges into the stormwater system. Ordinance requirements are outlined in section S5.C.5.c in the 2019-2024 Phase II permit.

IDDE Program

The Phase II permit requires the City to implement an ongoing IDDE program to detect and remove illicit connections, discharges, and improper disposals including spills into the MS4. IDDE program components listed under S5.C.5.d in the 2019-2024 Phase II permit include field screening, a hotline, staff training, communication of hazard information, and other requirements.

Field Screening and Discharge Elimination

This section addresses MS4 field screening investigation procedures for illicit connections (S5.C5.d.i), and developing procedures to characterize, trace and eliminate illicit discharges, including spills and illicit connections, to the MS4.

The City's IDDE program must:

- Implement a field screening methodology appropriate to the City's MS4 characteristics and water quality concerns, to be documented in the annual report.
- As a New Permittee, the City will continue to field screen at least 12 percent of its MS4, annually.

Ongoing IDDE activities include:

- Annual field screening of 12% of the MS4.

Starting in August 2019, the City is required to track the total percentage of the MS4 screened

IDDE Timelines

Immediately respond to all illicit discharges, including spills, determined to constitute a threat to human health, welfare, or the environment, consistent with General Condition G3.

Within 7 days on average, investigate or refer to an agency with appropriate authority complaints, reports or monitoring data indicating a potential discharge.

Within 21 days of a report or discovery of a suspected illicit connection, commence an investigation to determine a connection's source, nature and discharge volume, and the party responsible for the connection.

Within 6 months, use the compliance strategy in a documented effort to eliminate the illicit connection upon an illicit connection confirmation. All known illicit MS4 connections shall be eliminated.

The City must also implement procedures for the following per S5.C.5.e.i-iv in the 2019-2024 Phase II permit:

- Characterizing the nature of, and potential public or environmental threat posed by, any illicit discharges found by or reported to the City. Procedures shall address evaluating whether the discharge must be immediately contained, and the steps to be taken for discharge containment.
- Tracing the source of an illicit discharge, including visual inspections and, when necessary: opening manholes; using mobile cameras; collecting and analyzing water samples; and/or other detailed inspection procedures.
- Eliminating the discharge and its source, including: notifying appropriate authorities; notifying the property owner; technical assistance to eliminate the discharge; follow-up inspections; and use of the compliance strategy developed pursuant to S5.C.5.c.iv in the draft 2019-2024 Phase II permit including escalating enforcement and legal actions if the discharge is not eliminated.
- Compliance with IDDE program procedures shall be achieved by meeting the timelines under S5.C.5.e.iv in the 2019-2024 Phase II permit; these are listed in the IDDE Timelines callout box above.

Public Information and Hotline

Publicize a hotline or other telephone number for public reporting of spills and other illicit discharges per S5.C.5.d.ii in the 2019-2024 Phase II permit. **24 Hour IDDE Hotline number: 425-888-8011**

Training

This SWMP Plan section addresses two Phase II permit sections on staff training, namely training for all field staff who might come into contact with illicit discharge per S5.C.5.d.iii in the 2019-2024 Phase II permit and training staff specifically designated to address illicit discharges per S5.C.5.f in the 2019-2024 Phase II permit.

Ongoing IDDE activities include:

- Responding to calls to the illicit discharge hotline
- Training
- Recordkeeping

- **All Field Staff:** Implement an ongoing training program for all municipal field staff on identifying illicit discharge/connection, and on the proper procedures for reporting and responding to the illicit discharge/connection. This training should be provided to all field staff, who might come into contact with or otherwise observe an illicit discharge or illicit storm system connection as part of their normal job responsibilities (S5.C.5.d.iii in the 2019-2024 Phase II permit).
- **Designated Field Staff:** Municipal field staff responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges, including spills, and illicit connections are required to be trained to conduct these activities (S5.C.5.f in the 2019-2024 Phase II permit).

- **Both Training Program Components:** Provide follow-up training as needed to address changes in procedures, techniques, requirements or staffing. Document the trainings provided, including the staff trained, the number of trainings, names of staff trained and training topics.

Hazard Information

- Inform public employees, businesses, and the general public of the hazards associated with illegal discharges and improper waste disposal per S5.C.5.b in the 2019-2024 Phase II permit.

Recordkeeping

According to S5.C.5.g in the 2019-2024 Phase II permit, the City should track and maintain records of activities conducted to meet the requirements of the Phase II permit. Per Sections S5.C.5.b-f of the 2019-2024 Phase II permit, the City tracks and retains records of the following:

- Connections to the MS4 authorized or allowed by the City after August 1, 2013.
- Number inspections made for illicit connections, including field screenings.
- Number of illicit discharges, including spills, identified and/or eliminated.
- Number of trainings provided, training subjects, and the staff trained.

The 2019-2024 Phase II permit also requires the City to track specific information to submit to Ecology through the WQWebIDDE system. This information includes the following:

1. City name and permit number
2. Incident ID assigned by the City
3. Date of incident
4. Date incident was reported to the City
5. Date of beginning of response
6. Date of end of response
7. Discharge to MS4?
8. How was the incident discovered or reported to the City?

Starting in 2019, the City was required to track additional information related to illicit discharges and report this information to Ecology through the WQWebIDDE system

If the illicit discharge enters the MS4, the City must also provide the following information:

9. G3 notification?
10. Incident location
11. Pollutants identified
12. Source or cause
13. Source tracing approach used
14. Correction/elimination methods used
15. Field notes, explanations, and/or other comments

PLANNED ACTIVITIES

The City currently conducts a variety of IDDE program activities; major items for continued compliance include:

- Update draft procedures to comply with IDDE program requirements.
- Maintain and continue to publicize a spill hotline.
- Track the number of illicit discharges and illicit connections, including spills.
- Field screening of at least 12 percent of the MS4 annually.

The IDDE activities for 2020 are summarized in Table 5.

Table 5. IDDE Activities for 2020. S5.C.4

Item	Departments	Timeline Notes
Mapping. Map known MS4 outfalls, known MS4 discharge points, receiving waters, stormwater treatment and flow control BMPs/facilities owned or operated by the City, tributary conveyances for 24-inch nominal diameter or larger outfalls and discharges points, connections between the MS4 and other municipalities or public entities, and geographic areas that do not discharge stormwater to surface waters. Continue to track and map all new MS4 connections.	P/PW, CD, GIS	Ongoing
Ordinances. Continued enforcement of SMC 15.18.150 (Illicit Discharges to storm water system or water prohibited).	P/PW and CD	Ongoing
Field Screening. Implement ongoing field screening of the City's MS4.	P/PW	Screen 12% of the MS4 per year.
Hotline. Maintain spill reporting hotline number; continue to publicize via press releases and the City website. 24 Hour IDDE Hotline number: 425-888-8011	P/PW	Hotline established; maintenance ongoing.

City Staff Trainings. Encourage City staff to attend the 2020 trainings on illicit connection and illicit discharge field screening and source tracing that will be part of the IC/ID Field Screening and Source Tracing Manual update.	City Staff	Trainings will be offered in the spring and fall of 2020.
IDDE Procedures. Implement procedures to comply with IDDE characterization, tracing, and elimination requirements.	P/PW	Ongoing
Spills. Implement spill reporting forms. Investigate spill sources and follow up, including code enforcement as necessary.	P/PW	Ongoing
Recordkeeping. Implement an asset management system to assist with recordkeeping, permit tracking and ongoing field screening and system maintenance needs. Update spill reporting form and/or develop a spreadsheet to track the information required in Appendix 12 of the draft 2019-2024 Phase II permit that needs to be reported to WQWebIDDE.	P/PW and IT	Ongoing; deadline for starting to track the WQWebIDDE information is listed in the 2019-2024 Phase II permit
Activity	Due Date	Status/Notes
No later than January 1, 2020, begin to collect size and material for all known MS4 outfalls during normal course of business.	January 1, 2020	Ongoing
No later than August 1, 2023, complete mapping of all known connections from the MS4 to a privately-owned stormwater system.	August 1, 2023	Ongoing
No later than August 1, 2021, the required format for mapping is electronic with fully described mapping standards.	August 1, 2021	Ongoing

PAST ACTIVITIES

The City has been working towards IDDE program compliance. Major items completed since 2015 are summarized in Table 6.

Table 6. Previous IDDE Actions and Activities.		
Item	Departments	Timeline Notes
Mapping. The City has been recording all connections to the MS4 as they are received since August 1, 2013. In 2013 the City hired Tetra Tech to develop the Snoqualmie Ridge Stormwater System Operations Manual, which included additional, limited stormwater map data development.	P/PW, CD, and IT	All new authorized MS4 connections have been mapped since August 1, 2013.

Ordinances. In 2011, the City adopted Ordinances 1198, 1081 and 1082. Ordinance 1081 addressed Chapter 15.18 Surface and Stormwater Management and Ordinance 1082 addressed Chapter 15.20 Clearing and Grading. In 2014, the Street & Storm Division webpage was updated to provide additional information and guidance regarding the updated City Stormwater Regulations.	P/PW and CD	Ordinance implemented in 2011. Website updated in 2014.
Field Screening. The City developed a methodology and work plan for a field screening program and tracks the percentage of the MS4 screened annually.	P/PW	Screen at minimum 12% of the MS4 per year.
Hotline. The City established a spill reporting hotline number which it publicized via press releases and the City website. In 2015, 2016, and 2017, the hotline received zero calls and 1 call in 2018. In 2019, the hotline received 12 calls. The spill hotline reporting form is provided in Appendix A of this plan.	P/PW, CD, IT, and Communications	Operational as of February 20, 2015
City Staff Trainings. In 2015, 2018 and 2019, City staff attended staff trainings on illicit discharge awareness, and response and reporting. Training topics and a list of participating staff are included in Appendix A of this plan.	P/PW, CD, Police, and Fire	Recently conducted in Jun. 2019 and Dec. 2019.
IDDE Procedures. In 2018, the City developed draft procedures to comply with IDDE characterization, tracing, and elimination requirements and updated to include reporting in 2019.	P/PW	Operational as of February 2, 2018, updated 2019
Spills. In 2014, staff established ERTS notice designees, and began tracking spills according to Ecology guidelines. The City developed an internal spill reporting form, investigates spill sources, and conducts follow up, including code enforcement as necessary.	P/PW	Tracking began in 2014. Added WQWebIDDE tracking in 2019
Recordkeeping. Implemented an asset management system to assist with recordkeeping, permit tracking and ongoing field screening and system maintenance needs.		Ongoing, currently working on digital version.

6. RUNOFF PROGRAM: NEW DEVELOPMENT, REDEVELOPMENT, AND CONSTRUCTION SITES

OVERVIEW

The City is required to develop, implement, and enforce a runoff program to reduce stormwater runoff pollutants to its MS4 from new development, redevelopment and construction site activities. This program applies to private and public development, including roads; it must include the following:

- Runoff ordinance
- Stormwater site plan review

March 2020

- Construction site inspections
- Private facility inspections
- Notice of Intent (NOI)
- Staff training
- LID code review

Runoff Ordinance

The City must implement an ordinance or other enforceable mechanism that addresses runoff from new development, redevelopment and construction sites. The City has done this in ordinance 1198 and codified in chapter 15 of the municipal code.

- The ordinance/mechanism shall apply to all applications as stated in S5.C.6.b of the 2019-2024 Phase II permit.
- The ordinance/mechanism should include the minimum requirements, technical thresholds, and definitions in Appendix 1 (or an Ecology-approved equivalent); see S5.C.6.b.i in the 2019-2024 Phase II permit, local requirements listed under S5.C.6.b.ii in the 2019-2024 Phase II permit, and legal authority to inspect and enforce maintenance standards for private stormwater facilities approved under this section's provisions per S5.C.6.b.iii in the 2019-2024 Phase II permit.
- The Ordinance shall provide a review for 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)
- The Ordinance shall require Community Development to inspect, prior to clearing and construction, permitted development sites per S5.C.6.c.ii, projects that have a high potential for sediment transport as determined through plan review based on the definitions and requirements in Appendix 7 – Determining Construction Site Sediment Damage Potential?

Stormwater Site Plan Review

The City must implement a permitting process to review all stormwater site plans for proposed development activity per S5.C.6.c.i in the 2019-2024 Phase II permit.

- Annually tally of the number of adjustments granted to the minimum requirements in Appendix 1

- Annually Identify the number of exceptions/variances granted to the minimum requirements in Appendix 1 section 6

Construction Site Inspections and Enforcement

The City must inspect construction sites and take enforcement action against those failing to follow approved guidelines per S5.C.6.c.ii–vi and S5.C.7.b.i(c) in the 2019-2024 Phase II permit:

- Community Development shall confirm annually that they inspect, prior to clearing and construction, all permitted sites that have a high potential for sediment transport. As an alternative to evaluating each site, the City may choose to inspect all construction sites that meet the minimum thresholds specified in the Phase II permit.
- Community Development shall annually inspect all permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls.
 - Annually report the number of construction sites inspected to P/PW
- Community Development shall confirm they inspect all permitted development sites upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater facilities.
 - Annually confirm, report, and provide copy of maintenance plan to P/PW that CD has verified a maintenance plan is completed and that responsibility for maintenance is assigned to the property owner. Prior to final approval and occupancy, a list of the stormwater treatment and flow control BMPs/facilities that fall into this category will be provided to P/PW.
- Community Development shall confirm annually that inspections of all permanent stormwater treatment and flow control BMPs/facilities and catch basins in new residential developments are completed every six months until 90% of the lots are constructed (or when construction is stopped, and the site is fully stabilized) to identify maintenance needs and enforce compliance with maintenance standards as needed.
 - Annually report the number and confirm to P/PW that CD inspected or caused to be inspected stormwater treatment and flow control BMPs/facilities and catch basins in new residential developments every 6 months per S5.C.6.c.iv
- Community Development shall report annually the 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.7.c.Viii) to P/PW.
- Community Development must confirm annually to P/PW that they achieved at least 80% of scheduled construction-related inspections relating to runoff control.

S5C6 Annual Reporting to P/PW – 2019-2024 Planned		
Activity	Due Date	Status/Notes
Community Development shall confirm annually that they inspect, prior to clearing and construction, all permitted sites that have a high potential for sediment transport. As an alternative to evaluating each site, the City may choose to inspect all construction sites that meet the minimum thresholds specified in the Phase II permit	Annually in February	Ongoing
Community Development shall confirm annually that all permitted development sites have been inspected during construction to verify proper installation and maintenance of required erosion and sediment controls	Annually in February	Ongoing
Report the number of construction sites inspected to P/PW from above	Annually in February	Ongoing
Community Development shall confirm inspection of all permitted development sites upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater facilities.	Annually in February	Ongoing
Confirm by providing a copy of the maintenance plan to P/PW that Community Development has verified a maintenance plan is completed and that responsibility for maintenance is assigned to the property owner prior to final approval and occupancy being granted, and attach a list of the stormwater treatment and flow control BMPs/facilities that fall into this category.	Annually in February	Ongoing

<p>Community Development shall confirm that inspections of all permanent stormwater treatment and flow control BMPs/facilities and catch basins in new residential developments have been completed every six months until 90% of the lots are constructed (or when construction is stopped, and the site is fully stabilized) to identify maintenance needs and enforce compliance with maintenance standards as needed.</p>	<p>Annually in February</p>	<p>Ongoing</p>
<p>Annually report the number of inspected stormwater treatment and flow control BMPs/facilities and catch basins in new residential developments every 6 months per S5.C.6.c.iv</p>	<p>Annually in February</p>	<p>Ongoing</p>
<p>Community Development shall report the 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.C7.c.Viii) to P/PW.</p>	<p>Annually in February</p>	<p>Ongoing</p>
<p>Confirm that all maintenance plans have been verified and are complete and that responsibility for maintenance is assigned for projects to property owner prior to final approval and occupancy being granted and attach a list of the stormwater treatment and flow control BMPs/facilities that fall into this category.</p>	<p>Annually in February</p>	<p>Ongoing</p>
<p>CD must confirm to P/PW that they achieved at least 80% of scheduled construction-related inspections relating to runoff control.</p>	<p>Annually in February</p>	<p>Ongoing</p>

Private Facility Inspections for Permanent Long-Term Flow Control BMP/facilities

The City is required to conduct annual inspections of all stormwater treatment and flow control BMPs/facilities that discharge to the MS4 and were permitted by the City on or after January 1, 2018, as well as prior applications which have not started construction by January 1, 2023 per S5.C.7.b.i(b) in the 2019-2024 Phase II permit. The private facility inspection program should include a procedure to retain inspection and enforcement action records, including reports, maintenance activities, warnings, violation notices, and other records. This program will either be required to be completed by the private facility owner at the owner's expense and reported to the City Parks & Public Works Department or conducted by staff for a set fee.

Notice of Intent

The program shall make both Construction and Industrial Activities Notices of Intent (NOI) copies available for re/development representatives, beginning no later than August 1, 2019 (S5.C.6.d in the 2019-2024 Phase II permit). The City shall continue to enforce local runoff ordinances for sites also covered by Ecology stormwater permits.

Trainings

The City Community Development Department must report and confirm annually that all staff whose primary job duties are implementing the program to control stormwater runoff from new development, redevelopment, and construction sites including permitting, plan review, construction site inspections, and enforcement are trained to conduct these activities. The intent of the permit is to ensure that those charged with program implementation are properly trained; provide staff trainings on new/revised regulations, standards, processes and procedures, and document the training topics and staff attending per S5.C.6.e in the 2019-2024 Phase II permit.

LID Code and Enforceable Document Review

Review, revise and adopt codes, standards and rules to incorporate and require LID principles and BMPs; revisions should be designed to minimize impervious surface, native vegetation loss, and stormwater runoff. Future code review related to this topic has shifted to S5.C.1.c in the 2019-2024 Phase II permit and is described in the Stormwater Planning section of this plan.

PLANNED ACTIVITIES

Planned runoff program activities for 2020 are listed in Table 7.

Table 7. Planned Runoff Program: New Development, Redevelopment, and Construction Site Activities for 2020.

Item	Department/ Public Involvement	Timeline Notes
Ordinances. Implement and enforce ordinance 1198 and Chapter 15.18 SMC (Surface and Stormwater Management) and Chapter 15.20 SMC (Clearing and Grading).	CD	Ongoing
Notices of Intent. The City posted links to the Construction and Industrial NOIs in 2013, on its Storm and Street facilities webpage. Links to these NOIs are always retained.	CD	Ongoing
Recordkeeping. Records on plan review and inspection reports are, to date, maintained in individual project files by Community Development. Annual reporting of data related to the control of runoff from these sites will be reported on a single report to Parks & Public Works by February 1 of each year.	CD	Ongoing
Stormwater Site Plan Review. The City currently conducts development review, permitting, and inspections during the construction process. Drainage and Temporary Erosion and Sediment Control (TESC) plans are reviewed by a consultant and approved by the Community Development Department.	CD	Ongoing
Construction Site Inspections. The City contracts with consultants to conduct inspections of facilities during construction and at final construction.	CD	Ongoing
Private Facility Inspections. The City will develop its private facility inspection program in 2020 to ensure that all known private stormwater facilities that meet the Phase II permit timelines (flow control BMPs/facilities that discharge to the MS4 and were permitted by the City on or after January 1, 2018) are inspected before the end of 2020.	P/PW	Ongoing
LID Code and Enforceable Document Review. The City will complete the LID review process and provide recommendations for enforceable documents including the City's Comprehensive Plan, the Parks, Recreation, and Open Space Plan; Snoqualmie Ridge Development Standards; and Development Standards for Snoqualmie Ridge II.	CD	Ongoing

PAST ACTIVITIES

Table 8 summarizes the runoff program activities that occurred from 2013 through 2019.

Table 8. Previous Runoff Program: New Development, Redevelopment, and Construction Site Activities.

Item	Department/ Public Involvement	Timeline Notes
<p>Ordinances. In 2011, the City adopted Ordinances 1081 and 1082 in advance of Phase II permit deadlines; Ordinance 1081 addresses Chapter 15.18 Surface and Stormwater Management, and Ordinance 1082 addresses Chapter 15.20 Clearing and Grading. Both require drainage review; Chapter 15.18 SMC incorporates the Phase II permit Appendix I by reference. SMC 15.18.100 (c) requires developers to grant the City "an easement permitting access for inspection and performance of any required maintenance..."; such easements are included for new plats.</p> <p>In 2017, the City revised Chapter 15.18 SMC to adopt the 2016 King County Surface Water Design Manual.</p>	P/PW and CD	Ordinances adopted in 2011 and 2017
<p>Surface Water Design Manual Addendum:</p> <p>The City developed a City-specific addendum to the 2009 King County Surface Water Design Manual (KCSWDM) in 2011 and revised it in 2013.</p> <p>The City developed an updated City-specific addendum to the 2016 KCSWDM that became effective on January 2, 2019.</p>	CD	Addendum to the 2009 KCSWDM in July 2011; revised in July 2013
<p>Notices of Intent. The City posted links to the Construction and Industrial NOIs in 2013, on its Storm and Street facilities webpage. Links to these NOIs are always retained.</p>	CD	Ongoing
<p>Recordkeeping. Records on plan review and inspection reports are, to date, maintained in individual project files.</p>	P/PW and CD	Ongoing
<p>Stormwater Site Plan Review. The City currently conducts development review, permitting, and inspections during the construction process. Drainage and TESC plans are reviewed by a consultant and approved by the Community Development Department.</p>	P/PW and CD	Ongoing
<p>Construction Site Inspections. The City contracts with consultants to conduct inspections of facilities during construction and at final construction.</p>	P/PW and CD	Ongoing
<p>LID Code and Enforceable Document Review. The City went through a detailed code review and revision process in 2017. Revisions to allow LID principles and LID BMPs were integrated into Title 12, Title 13, Title 15, Title 16, and Title 17 of the Snoqualmie Municipal Code. Ordinance 1198 was adopted on December 11, 2017.</p> <p>Enforceable documents (City's Comprehensive Plan, the Parks, Recreation, and Open Space Plan; Snoqualmie Ridge Development Standards; and Development Standards for Snoqualmie Ridge II) were also reviewed in 2017-2018 and proposed revisions were developed; however, the minor recommendations provided will not be integrated into those documents until the next update cycle.</p>	P/PW and CD	Adopted December 11, 2017; Effective December 28, 2017 April 2019

7. MUNICIPAL OPERATIONS AND MAINTENANCE

OVERVIEW

The City must develop and implement an operations and maintenance (O&M) program for public facilities that includes a training component, with the goal of preventing or reducing pollutant runoff from municipal operations. The program shall be fully implemented by December 31, 2017. This section primarily affects the Parks and Public Works (P/PW) Department (including Facilities); see S5.C.7 in the 2019-2024 Phase II permit.

The 2019-2024 Phase II permit (S5.C.7) requires City O&M to include:

- **Maintenance Standards.** Implement maintenance standards as protective as those in the Stormwater Management Manual for Western Washington, Chapter 4, Volume V; standards should meet the O&M timelines summarized on the following page, and be updated or created as necessary to meet the Phase II permit requirements, per S5.C.7.a in the 2019-2024 Phase II permit.
- **Annual Inspections.** Annually inspect all City-owned or operated stormwater treatment and flow control BMPs/facilities and take appropriate maintenance actions per adopted maintenance standards (previous bullet and O&M timelines summarized on the following page). Options to annual inspections are listed in S5.C.7.b.i.(b) in the 2019-2024 Phase II permit.
- **Spot Checks.** Spot check potentially damaged stormwater treatment and flow control facilities after a major storm event (24-hour storm event within a 10-year-plus interval). If spot checks indicate widespread damage/maintenance needs, inspect all such facilities and conduct repairs per the O&M timelines summarized on the following page and per S5.C.7.c.ii in the 2019-2024 Phase II permit.
- **Catch Basins.** Annually inspect and, if needed clean, all catch basins and inlets owned and operated by the City once every 2 years. The Phase II permit provides some alternatives to this requirement; see S5.C.7.c.iii(a) in the 2019-2024 Phase II permit.

Ongoing Municipal O&M activities include:

- Annual inspections of stormwater treatment and flow control facilities
- Spot checks
- Catch basin inspections and cleaning
- Updating SOPs

Note: Required inspection compliance for S5.C.7.b and c in the 2019-2024 Phase II permit is determined by the presence of an inspection program designed to inspect all sites, achieving 95%+ of inspections per S5.C.7.d in the 2019-2024 Phase II permit.

- **Practices, Policies, and Procedures.** Implement practices, policies and procedures to reduce runoff pollutants from all lands owned or maintained by the City, including streets, parking lots, roads or highways, buildings, parks, open space, road rights-of-way, maintenance yards, and stormwater treatment and flow control BMPs/facilities; for the full list of activities that must be addressed, written documentation is specified in S5.C.7.e in the 2019-2024 Phase II permit.
- **Staff Training.** Hold an ongoing staff training program addressing water quality, O&M standards, inspection procedures, selecting appropriate BMPs, job performance to minimize water quality impacts, and procedures to report water quality concerns. Document and maintain records of training provided and the staff trained, S5.C.7.f in the 2019-2024 Phase II permit.
- **Stormwater Pollution Prevention Plan (SWPPP).** Implement a Phase II permit-compliant SWPPP for all heavy equipment maintenance/storage, and material storage, yards and facilities, owned or operated by the City, including structural BMPs per S5.C.7.g in the 2019-2024 Phase II permit. The 2019-2024 Phase II permit requires annual inspections of the facility.

O&M Timelines

See S5.C.7.a.ii in the 2019-2024 Phase II permit

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

- 6 months for catch basins.
- 1 year for typical maintenance of facilities (except catch basins).
- 2 years for maintenance that requires capital construction of less than \$25,000.

These timelines apply except for circumstances beyond City control such as property access denial, permit delays or reallocations of staff for unexpected emergency work.

PLANNED ACTIVITIES

The City plans to implement the activities listed in Table 9 in 2020.

Table 9. Planned Municipal Operations and Maintenance Activities for 2020.

Item	Department/ Public Involvement	Timeline Notes
O&M. The City has had a longstanding program to maintain public Stormwater facilities. The City updated its Stormwater System Operations and Maintenance Manual in 2019.	P/PW	Ongoing
Inspections. Facility inspection records are currently retained, though the City will assess whether it is feasible to reduce required annual inspection frequency where possible.	P/PW	Ongoing
Spot Checks. Spot checks of potentially damaged permanent treatment and flow control facilities are conducted after major storms. Staff to check all the City's stormwater ponds and structures annually.	P/PW	Ongoing
Catch Basins. The City stormwater maintenance program includes catch basin inspections and maintenance with documentation in written reports. The City will continue to explore documentation of maintenance activities through an asset management system in 2018.	P/PW	Ongoing
SOPs. The City is planning on preparing an updated and consolidated set of SOPs in 2020.	P/PW	Ongoing
Staff Training. Identify and attend relevant O&M trainings.	P/PW	Ongoing
Stormwater Pollution Prevention Plan (SWPPP). The Public Works Operations Facility (City Shop) SWPPP should be reviewed annually and updated as needed. The 2019-2024 Phase II permit requires a minimum of one annual inspection of the facility that should be documented in an inspection report or checklist.	P/PW	Ongoing

S5.C.7 – Operations & Maintenance - 2019-2024 Planned

Activity	Due Date	Status/Notes
No later than June 30, 2022, Permittees shall update their maintenance standards as necessary to meet the requirements of the Permit.	June 30, 2022	The City has administratively adopted the 2016 <i>King County Surface Water Design Manual</i> as our maintenance standards.

No later than December 31, 2022, document the practices, policies and procedures to reduce stormwater impacts associated with runoff from all lands owned or operated by the Permittee, and road maintenance activities under the functional control of the Permittee.	December 31, 2022	
As necessary, update SWPPPs no later than December 21, 2022 per Permit requirements.	December 21, 2022	

PAST ACTIVITIES

Table 10 summarizes the municipal O&M activities that occurred from 2013 to present.

Table 10. Previous Municipal Operations and Maintenance Activities.		
Item	Department/ Public Involvement	Timeline Notes
O&M. The City has had a longstanding program to maintain public stormwater facilities. The City developed a Stormwater System Operations and Maintenance Manual that was adopted in 2015.	P/PW	Ongoing; City O&M manual updated in 2018
In 2016, the City began exploring improving permit tracking via asset management software. After the software is implemented in 2017/2018, a gap analysis of O&M procedures against Phase II permit requirements will be performed.		
Inspections. Facility inspection records are currently retained.	P/PW	Ongoing

Table 10 (continued). Previous Municipal Operations and Maintenance Activities.		
Item	Department/ Public Involvement	Timeline Notes
Spot Checks. Spot checks of potentially damaged permanent treatment and flow control facilities are conducted after major storms. Staff check all the City's stormwater ponds and structures annually.	P/PW	Ongoing
Catch Basins. The City stormwater maintenance program includes catch basin inspections and maintenance with documentation in written reports. In 2016, the City began exploring improving permit tracking via asset management software. The City implemented a new asset management system in 2017, but it has not yet been fully integrated into City operations.	P/PW	Ongoing

<p>SOPs. In 2018, the City adapted the City of Sammamish's City Facility Maintenance Manual which includes many of the SOPs required by the 2013-2018 Phase II permit. SOPs for land disturbing construction projects are addressed through a Public Works Permit, which addresses temporary erosion and sediment control (TESC), and pollution prevention. The City also developed a Drainage System Maintenance SOP for inspecting and maintaining storm and drainage facilities.</p> <p>The City in 2019 wrote a manual specific to the City of Snoqualmie as its official SOP manual.</p> <p>Staff Training occurred in both November and December of 2019</p>	P/PW Planning	Ongoing
<p>Staff Training. City staff attended a LID O&M and General O&M training in January 2015. Training topics and a list of participating staff by department are included in Appendix A.</p>	P/PW	Training conducted in January 2015
<p>Stormwater Pollution Prevention Plan (SWPPP). A SWPPP was developed for the Public Works Operations Facility (City Shop) in 2017 and was updated in 2018.</p>	P/PW	SWPPP prepared in 2017, updated in 2018
<p>Staff Training occurred in both November and December of 2019</p>		

8. SOURCE CONTROL PROGRAM FOR EXISTING DEVELOPMENT

OVERVIEW

Section S5.C.8 in the 2019-2024 Phase II permit describes requirements for establishing a source control program to prevent and reduce pollutants in runoff from existing development. The program will include the following phases:

- **Source Control Ordinance:** The City will develop and adopt an ordinance requiring the application of source control BMPs for pollutant generating sources (no later than August 1, 2022). Section S5.C.8.b.i
- **Source Control Inventory:** The City will develop an inventory of all publicly and privately-owned commercial and industrial properties with the potential to generate pollutants (no later than August 1, 2022). Section S5.C.8.b.ii
- **Source Control Inspection Program:** In addition to providing education materials related to pollution generating activities to businesses, the City will inspect 20% of all businesses on an annual basis to ensure compliance with source control requirements (no later than January 1, 2023). Section S5.C.8.b.iii.b

- **Source Control Enforcement:** The City will develop an enforcement policy that requires businesses to comply with stormwater requirements (no later than January 1, 2023). Section S5.C.8.b.iv
- **Source Control Training:** The City will provide training for staff responsible for implementing the source control program. Section S5.C.8.b.v

PLANNED ACTIVITIES

S5.C.8 – Source Control Program for Existing Development - 2019-2024		
Activity	Due Date	Status/Notes
No later than August 1, 2022, Permittees shall adopt and make effective an ordinance(s), or other enforceable document, requiring the application of source control BMPs for pollutant generating sources associated with existing land uses and activities.	August 1, 2022	
No later than August 1, 2022, Permittees shall establish an inventory that identifies publicly and privately owned institutional, commercial and industrial sites which have the potential to generate pollutants to the MS4.	August 1, 2022	
No later than January 1, 2023, Permittees shall implement an inspection program for identified sites.	January 1, 2023	
No later than January 1, 2023, Permittees shall implement a progressive enforcement policy that requires sites to comply with stormwater requirements within a reasonable timeframe as specified in the Permit.	January 1, 2023	

PAST ACTIVITIES

None to report.

TMDL REQUIREMENTS

OVERVIEW

Additional requirements apply if there is an applicable, approved Total Maximum Daily Load (TMDL) for stormwater discharges from MS4s owned or operated by the City listed in Phase II Permit Appendix 2; see Section S7 2019-2024 Phase II permit.

- The City is not listed for TMDLs listed in Appendix 2 under the 2013-2018 Phase II permit or the 2019-2024 Phase II permit.
- If the City has actions associated with TMDLs under future Phase II permit terms, it should incorporate requirements as pertinent at that time.

PLANNED ACTIVITIES

None to report.

PAST ACTIVITIES

None to report.

MONITORING AND ASSESSMENT

OVERVIEW

Section 8 of the 2013-2018 Phase II permit requires all permittees to "provide, in each annual report, a description of any stormwater monitoring or stormwater-related studies" conducted by the City, on behalf of the City, or reported to the City. The annual report should briefly provide a description of the type of information gathered or received. This summary description is not currently required by the draft 2019-2024 Phase II permit.

Permittees with TMDLs have other monitoring requirements; these do not apply to the City.

Since the City is a new permittee, they were not required to pay into the collective fund to implement the Regional Stormwater Monitoring Program (RSMP) for the 2013-2018 Phase II permit; however, they will be required to pay into the collective fund to implement the Regional Stormwater Action Monitoring (SAM) program starting on December 1, 2019. The SAM program includes the following areas:

- Regional Status and Trends Monitoring (S8.A)
- Stormwater Management Program Effectiveness and Source Identification Studies (S8.B)

PLANNED ACTIVITIES

Starting in August of 2020, the City will be paying into the collective fund to implement the SAM program Regional Status and Trends.

Starting in August of 2020, the City will be paying into the SWMP Effectiveness and Source Identification Studies.

PAST ACTIVITIES

None to report.

Starting in December 2019, the City will be paying the following amounts annually to support regional monitoring studies:

- Status and Trends = \$2,185
- Effectiveness and Source Identification Studies = \$3,993

REPORTING REQUIREMENTS

OVERVIEW

Section 9 of the 2014-2024 Phase II permit describes reporting and recordkeeping requirements. The Annual Report and SWMP Plan are prepared and submitted each year to Ecology.

As part of the implementation of the SWMP, the City gathers, tracks, maintains, and uses information on an ongoing basis to evaluate the SWMP development and implementation.

- The City strives to submit an annual report on the Phase II permit no later than March 31 each year for activities the previous year.
- Records related to the Phase II permit and SWMP shall be retained for at least 5 years.
- Records related to the Phase II permit and SWMP shall be reasonably available to the public.
- Administration items, such as annexations, must be included in the Annual Report.

Ongoing Reporting activities include:

- Submitting Annual Report and SWMP Plan to Ecology

The requirements for public involvement and participation have not changed in the 2019-2024 Phase II permit.

PLANNED ACTIVITIES

Table 12 summarizes planned reporting activities for 2020.

Table 12. Planned Reporting Activities for 2020.		
Item	Department/ Public Involvement	Timeline Notes
Submit Annual Report and SWMP Plan to Ecology.	P/PW/CD	March 31, 2020
Retain all records related to the Phase II permit and the SWMP for at least 5 years.	P/PW	Ongoing

PAST ACTIVITIES

Table 13 summarizes reporting activities conducted from 2016 through 2019.

Table 13. Previous Reporting Activities.		
Item	Department/ Public Involvement	Timeline Notes
Submitted Annual Report and SWMP Plan to Ecology.	P/PW	March 31, 2016 March 31, 2017 March 31, 2018 March 31, 2019 March 31, 2020
Retain all records related to the Phase II permit and the SWMP for at least 5 years.	P/PW	Ongoing

APPENDIX A

Supplemental Information



Snoqualmie Stormwater Internal
Coordination Mechanisms
2019

TABLE OF CONTENTS

DEFINITIONS	3
Department	3
Director	3
Director means the director of the community development department of the city of Snoqualmie.....	3
Administration.....	3
Inspections.....	3
Right of Entry	3
Access.....	4
Lines of Authority.....	4
City Administrator.....	4
Delegated Supervisory Oversight of City Stormwater Program.....	4
Internal Disputes.....	5
Summary Chart of Roles and Responsibilities.....	1
ORganizational Chart 1	
Communication & collaboration 2	
Wastewater/Stormwater Team Meetings	2
Parks & Public Works All Staff Meetings.....	2
Regularly held department meetings help coordinate efforts to meet ongoing Permit requirements within the overall department.....	2
Senior Staff Meetings	2
Parks & Public Works Management Team Meetings.....	2
Interdepartmental Coordination Meetings	2

DEFINITIONS

DEPARTMENT

Department means the community development department of the city of Snoqualmie

DIRECTOR

DIRECTOR MEANS THE DIRECTOR OF THE COMMUNITY DEVELOPMENT DEPARTMENT OF THE CITY OF SNOQUALMIE.

ADMINISTRATION

1. The community development department director and the director of the parks and public works department are authorized to promulgate and adopt administrative rules under the procedures specified in Chapter 2.05 SMC for the purpose of implementing and enforcing the provisions of the stormwater program municipal code.
2. The community development department director is authorized to develop procedures for applying adopted rules and regulations during the review of permit applications for the development of land.

INSPECTIONS

The director or designee and/or the director of the parks and public works department is authorized to make such inspections and take such actions as may be required to enforce the provisions of this chapter.

RIGHT OF ENTRY

Whenever necessary to make an inspection to enforce any of the provisions of this chapter, monitor for proper function of drainage facilities or whenever the community development department or parks and public works department director or designee has reasonable cause to believe that violations of this chapter are present or operating on a subject property or portion thereof, the director or designee may enter such premises at all reasonable times to inspect the same or perform any duty imposed upon the director by this chapter; provided, that if such premises or portion thereof is occupied, the director or designee shall first make a reasonable effort to locate the owner or other person having charge or control of the premises or portion thereof and demand entry.

ACCESS

Proper ingress and egress shall be provided to the community development department or parks and public works department director or designee to inspect, monitor or perform any duty imposed upon the director by this chapter. The director or designee shall notify the responsible party in writing of

failure to comply with this access requirement. Failing to obtain a response within seven days from the receipt of notification, the director or designee may order the work required completed or otherwise address the cause of improper access. The obligation for the payment of all costs that may be incurred or expended by the city in causing such work to be done shall thereby be imposed on the person holding title to the subject property. (Ord. 1198 § 19 (Exh. B), 2017; Ord. 1081 § 2, 2011).

ENFORCEMENT

15.18.200 The Director of Community Development is responsible for enforcing the stormwater code and the ordinances and resolutions codified in it.

LINES OF AUTHORITY

CITY ADMINISTRATOR

On behalf of the Mayor sees that laws and ordinances are faithfully performed. The City Administrator has signing authority for the City, on behalf of the Mayor. The CA on behalf of the Mayor has ultimate responsibility for supervision of all City departments, maintaining harmony among departments and resolving interdepartmental grievances, at the discretion of the Mayor may appoint and or remove all department heads, officers and or employees of the City, except members of the Council.

DELEGATED SUPERVISORY OVERSIGHT OF CITY STORMWATER PROGRAM

The City Administrator on behalf of the Mayor has delegated the supervisory oversight of the City's stormwater management program for the Washington State Department of Ecology issued Phase II Municipal Stormwater Permit (Permit) to the Parks & Public Works Director. The Parks & Public Works Director on behalf of the CA and Mayor may assign roles and responsibilities to other department heads to fulfill the any of the program elements required of the City to satisfy the conditions of the permit.

INTERNAL DISPUTES

Where discrepancies may occur with roles or work responsibility assignments that create internal interdepartmental barriers to permit compliance, the Director of Parks & Public Works and other Director of the Department has the responsibility to present solutions to the CA for expeditious and final resolution on behalf of the Mayor.

SUMMARY CHART OF ROLES AND RESPONSIBILITIES

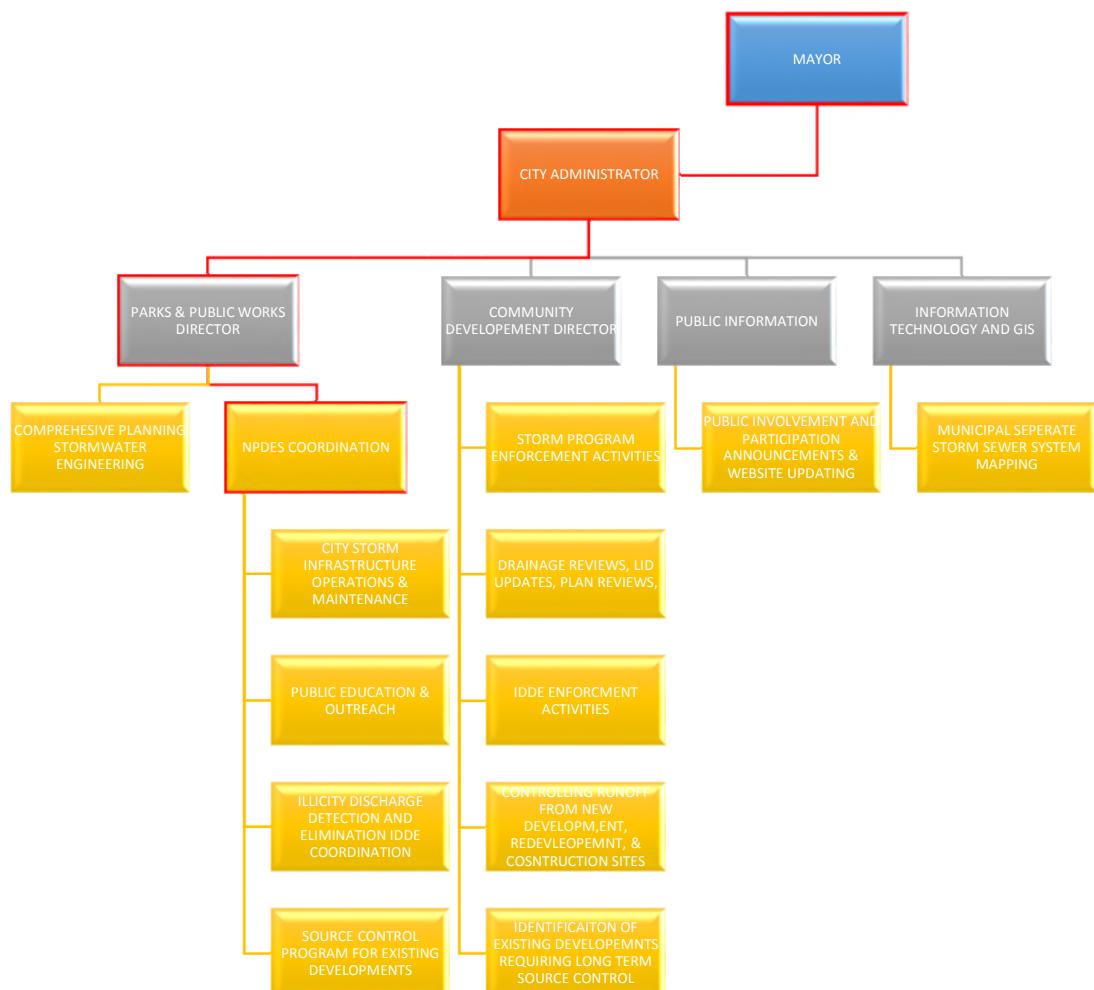
Department	Rule Making Authority	Signatory Authority	Inspection & Right of Entry Authority	Enforcement Authority	MS4 Mapping Responsibility	Education & Outreach Responsibility	Municipal Operations and Maintenance Responsivities	Source Control Program Long-term Facilities	Controlling runoff from development, redevelopment, and construction sites
Executive		✓							
Administration		✓							
Parks & Public Works	✓	✓	✓	✓		✓	✓	✓	
Community Development	✓		✓	✓				✓	✓
IT & GIS					✓				

**Summary of Roles and Responsibilities- for a more detailed description please see the current years roles and responsibility matrix and the SWMP.

ORGANIZATIONAL CHART

Executive- Mayor serves as Chief Executive of the City and provides leadership and oversight over all executive branch functions. Serves as City representative in legislative affairs and intergovernmental relations.

Administration- City Administrator provide administration and operational management to all City functions Overall stormwater program NPDES signature delegation and program management follows the red connecting lines.



COMMUNICATION & COLLABORATION

WASTEWATER/STORMWATER TEAM MEETINGS

Weekly staff meetings are scheduled to work through ongoing issues and work. These staff meetings are attended by the joint wastewater/stormwater staff. This helps to facilitate conversations regarding permit requirements. Tail-gate meetings are typically prior to daily work commencing. This provides opportunities for training, and to receive input on how implementation of permit requirements is proceeding and identify any needed improvements.

PARKS & PUBLIC WORKS ALL STAFF MEETINGS

REGULARLY HELD DEPARTMENT MEETINGS HELP COORDINATE EFFORTS TO MEET ONGOING PERMIT REQUIREMENTS WITHIN THE OVERALL DEPARTMENT.

SENIOR STAFF MEETINGS

The City Administrator conducts a weekly meeting with the City's Sr. Management Team, which is attended by Department Directors, City Clerk, City Attorney, Human Resources Manager. Permit requirements affecting the entire City can be coordinated and addressed, if needed.

PARKS & PUBLIC WORKS MANAGEMENT TEAM MEETINGS

This meeting occurs in the Public Works conference room and is attended by the Director, Supervisors, Engineering, and administrative assistant. Compliance issues can be discussed if needed.

INTERDEPARTMENTAL COORDINATION MEETINGS

Scheduled as needed to coordinate elements of the storm program work between departments.

Table A-1 lists the staff trainings conducted in 2018 and 2019, including the date held, the topics covered, and the number of total attendees.

Table A-1. Staff Training Summary.		
Date	Topics	Attendees
December 2019	<ul style="list-style-type: none"> • Preventing illicit discharges • Illicit discharge indicators • SWPP PW Training • Sop Manual Training • Identifying an IDDE • Spill Hotline number • Reporting illicit discharges • Work Area IDDE prevention 	<ul style="list-style-type: none"> • Parks and Public Works: 24 • Total: 24
June 11, 2019	<ul style="list-style-type: none"> • Preventing illicit discharges • SOP Manual Training • SWPP PW Training • Illicit discharge indicators • Identifying an IDDE • Spill Hotline number • Reporting illicit discharges • Work Area IDDE prevention 	<ul style="list-style-type: none"> • Parks and Public Works: 26 • Total: 26
March 19, 2018	<ul style="list-style-type: none"> • LID O&M overview • BMP specifics • Administrative tools • Field exercise 	<ul style="list-style-type: none"> • Parks and Public Works: 25 • Total: 25

Figure A-1 showcases an example form for recording stormwater hotline calls. This form will be included as part of the larger program to track public involvement activities and IDDE activities, including follow-up actions taken to characterize, trace and eliminate illicit discharge according to the timeline set out in S5.C.5.e.iv in the 2019-2024 Phase II permit.



City of Snoqualmie

Stormwater Hotline Report Form

Call Information

Date: _____ Caller Name: _____
Location of Incident: _____ Phone Number: _____

Type of Incident

Spill Illicit Connection Other Illicit Discharge

Physical Indicators

Color: _____ Surface scum Debris
 Odor: _____ Outfall damage Stains or deposits
 Other: _____

Details

Description of Spill/ Illicit Discharge:

Follow-up Action(s):

(Eg: Discharge containment and investigation; compliance strategy implementation)

City Employee Signatures

By signing this form, you attest that the above information is accurate and complete

Street/Storm Supervisor Signature

Date

Operations Manager Signature

Date

Figure A-1. Stormwater Hotline Report Form.

March 2020

City of Snoqualmie – 2019 Annual NPDES Report

Annual Report Question 21:

Attach a description of general awareness efforts conducted, including your target audiences and subject areas per S5.C.2.a.i.

Answer:

Over the course of 2019 the City of Snoqualmie has continued existing programs for public education and outreach. The City has continued to develop and expand on the ways that general public awareness can be reached and how additional behavior changes can be affected. The following list describes the city's efforts that were conducted throughout the 2019 year.

Railroad Days, Recycle Event, and Arbor Day

Target Audience: General Public

Subject Areas: General impacts of stormwater and low impact development

Materials List:

1. *Flyers*
2. *Storm Booth with Banners*
3. *Storm Pond Boat*
4. *Treats*

These three events have the same general format in terms of how we provide general awareness to the community. Each venue is a little different, but our plan is the same. Railroad Days is a 3-day community event with food, entertainment, parade, and exhibitor booths. At our exhibition booth we have a stormwater professional available to talk about the types of activities that we do at home that impact stormwater. We have stacks of flyers to support our discussion, but we try to focus more on one on one communication with people that come to the booth. Every situation is different, and the conversation could touch any topic in stormwater from pet waste to questions about how the water quality ponds work. We specifically promote through visual presentations our support of OrcaHero Puget Sound Starts here.org campaign, and the stormwater drainage hotline.



All efforts are made to create an inclusive free form education experience where participants can engage a stormwater professional about any stormwater topic that interests them, after

addressing the questions or comments we provide them with a flyer than hopefully is meaningful to the conversation.

Citizen's Academy

Target Audience: Snoqualmie Residents

Subject Areas: General impacts of stormwater

The Snoqualmie Citizens Academy is a seven-week course offered to Snoqualmie residents, each year, so they can get a first-hand look at how city government works. There is no charge for the sessions, which are led by Snoqualmie city leadership and department directors and City Staff. Sessions are informal, interactive, and a lot of fun!

Participants are taken on a bus and tour of water quality elements of the storm water system. They are given a lecture about the storm system and participate in an interactive question and answer session as a part of the seven-week course.

City of Snoqualmie – 2019 Annual NPDES Report

Annual Report Question 26:

Promoted stewardship opportunities (or partnered with others) to encourage resident participation in activities such as those described in S5.C.2.a.iii Attach list of stewardship opportunities promoted.

Over the course of 2019 the City of Snoqualmie has continued existing programs for stewardship. The City has increased the number of participants in stewardship programs. The following describes the city's efforts that were conducted throughout the 2019 year.

The city promoted stewardship opportunities and partnered through Green Snoqualmie Partnership by offering 21 planting events in 2019 through the Green Snoqualmie Partnership. Approximately 421 participants volunteered in planting events in 2019.

The Green Snoqualmie Partnership is the most recent addition to the [Green City Partnerships](#). Formed in 2016, the Green Snoqualmie Partnership is a coordinated effort to restore and care for over 900 acres of Snoqualmie's forested parks and natural areas. The Partnership is building a sustainable network of healthy natural open spaces for the benefit and enjoyment of current and future generations.

geometry	OBJECTID	FacilityID	InstallYear
X: 1388905.99670981, Y: 195270.773953974, Z: NaN	1	WC_swOT_10001	
X: 1385199.56219356, Y: 195371.025065809, Z: NaN	3	FW_swOT_10001	
X: 1381871.51143497, Y: 198793.840070561, Z: NaN	4	SC_swOT_10001	
X: 1383743.00080222, Y: 198563.64433673, Z: NaN	5	DH_swOT_10001	
X: 1390442.0448188, Y: 195837.329579398, Z: NaN	6	KR_swOT_10001	
X: 1387327.50741272, Y: 195775.225372896, Z: NaN	7	IR_swOT_10001	
X: 1387527.73404638, Y: 195736.847496897, Z: NaN	8	IR_swOT_10002	
X: 1387432.53837064, Y: 195610.263432473, Z: NaN	9	IR_swOT_10003	
X: 1388689.01125139, Y: 196014.398450971, Z: NaN	10	IR_swOT_10004	
X: 1381393.24894005, Y: 201064.394912645, Z: NaN	11	AZ1_swOT_10001	
X: 1381458.03982097, Y: 197793.21477522, Z: NaN	15	CO_swOT_10001	
X: 1381495.2064133, Y: 197732.740814805, Z: NaN	16	CO_swOT_10002	
X: 1383050.35028464, Y: 191022.629891232, Z: NaN	19	CR1_swOT_10001	
X: 1383210.94182697, Y: 190576.193120062, Z: NaN	20	AC1_swOT_10001	
X: 1384579.53587456, Y: 190016.802178472, Z: NaN	21	AC_swOT_10001	
X: 1382554.07207772, Y: 191404.532014564, Z: NaN	22	CR1_swOT_10002	
X: 1385203.25772423, Y: 191912.370565817, Z: NaN	23	BP_swOT_10001	
X: 1384527.76169989, Y: 192107.562104553, Z: NaN	24	DP_swOT_10001	
X: 1383883.12617815, Y: 192207.027128726, Z: NaN	25	DP_swOT_10002	
X: 1384713.63993706, Y: 192176.34149456, Z: NaN	26	BP_swOT_10002	
X: 1383222.08353697, Y: 192302.312699303, Z: NaN	27	DP_swOT_10003	
X: 1382235.88865897, Y: 193428.338662475, Z: NaN	28	DP_swOT_10004	
X: 1382509.81724498, Y: 193085.020779565, Z: NaN	29	DP_swOT_10005	
X: 1381757.12321231, Y: 190137.485992223, Z: NaN	31	EP_swOT_10001	
X: 1381207.88448139, Y: 189354.080078721, Z: NaN	33	EP_swOT_10003	
X: 1380137.5299948, Y: 189229.404475063, Z: NaN	34	EP_swOT_10004	
X: 1395409.63987046, Y: 190737.82796739, Z: NaN	36	KC_swOT_10001	
X: 1395502.27190305, Y: 190723.219072729, Z: NaN	37	KC_swOT_10002	
X: 1397459.26208356, Y: 191160.529877886, Z: NaN	38	MC_swOT_10001	
X: 1395948.66602339, Y: 193115.439025804, Z: NaN	39	DT_swOT_10001	
X: 1394862.55730322, Y: 191123.8134159, Z: NaN	40	KC_swOT_10003	
X: 1394627.73789097, Y: 195669.715741396, Z: NaN	41	NC_swOT_10002	
X: 1395094.79010648, Y: 193446.31172365, Z: NaN	42	RW_swOT_10001	
X: 1399423.56425731, Y: 192516.560630396, Z: NaN	43	MB_swOT_10001	
X: 1394999.59246223, Y: 195102.578752309, Z: NaN	44	DT_swOT_10002	
X: 1385968.29293956, Y: 199197.395365804, Z: NaN	2	CT_swOT_10001	2006
X: 1379132.4020838, Y: 199267.12390089, Z: NaN	12	TH_swOT_10001	2011
X: 1379335.60049631, Y: 197917.732898891, Z: NaN	13	TH_swOT_10002	2011
X: 1380655.40199055, Y: 199475.938771978, Z: NaN	14	TH_swOT_10003	2011
X: 1390558.22273606, Y: 194632.410401314, Z: NaN	30	BR_swOT_10001	2007
X: 1381261.58417714, Y: 189310.071636558, Z: NaN	32	EP_swOT_10002	
X: 1394141.35402122, Y: 194693.594662145, Z: NaN	35	NC_swOT_10001	
X: 1382084.73541798, Y: 189680.344846144, Z: NaN	46	RI_swOT_10001	2016
X: 1381878.48156539, Y: 189479.885273308, Z: NaN	445	RI_swOT_10002	2016
X: 1380916.09700722, Y: 188721.97602798, Z: NaN	845		
X: 1381226.37164913, Y: 188936.005783647, Z: NaN	846		
X: 1381066.8214433, Y: 188479.727168649, Z: NaN	847		
X: 1381922.19342022, Y: 192318.412404642, Z: NaN	848		

OperationalArea	LifecycleSt	SurveyedBy	SurveyDate	Accuracy	UpdateBy	DateUp
Woody Creek	Active					
Fairway	Active					
Silent Creek	Active					
Douglas Hill	Active					
Koinonia Ridge	Active					
Ironwood	Active					
Ironwood	Active					
Ironwood	Active					
Ironwood	Active					
Azalea 1	Active					
Cottonwood	Active					
Cottonwood	Active					
Cascade Ridge 1	Active					
Aster Creek 1	Active					
Aster Creek	Active					
Cascade Ridge 1	Active					
Ridge Business Park	Active					
Deer Park	Active					
Deer Park	Active					
Ridge Business Park	Active					
Deer Park	Active					
Deer Park	Active					
Deer Park	Active					
Eagle Pointe	Active					
Eagle Pointe	Active					
Eagle Pointe	Active					
Kimball Creek Area	Active	Tetra Tech	39624	Captured u		
Kimball Creek Area	Active	Tetra Tech	39624	Captured u		
Maskrods Corner	Active	Tetra Tech	39624	Captured u		
Downtown	Active	Tetra Tech	39624	Captured u		
Kimball Creek Area	Active	Tetra Tech	39624	Captured u		
Northern Cedar	Active	SNOQUALM	39624	Created in		
Railroad West	Active	SNOQUALM	39624	Created in		
Meadowbrook	Active	SNOQUALM	39624	Created in		
Downtown	Active	SNOQUALM	39624	Created in		
Crestview	Active			Converted	Brendon Ec	42439
The Heights	Active				Brendon Ec	42438
The Heights	Active				Brendon Ec	42438
The Heights	Active				Brendon Ec	42438
Braeburn	Active				Brendon Ec	42439
Eagle Pointe	Active					
Northern Cedar	Active	Tetra Tech	39624	Captured u		
Ridgestone					Brendon Ec	43550
Ridgestone					Brendon Ec	43550

OutletType	OutletInveI	Material	LegacyID
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	286
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	849
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	1149
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	1462
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	2431
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	3820
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	3844
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	3845
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	3847
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	4266
Add to Outlets - CVE		Corrugated Plastic Pipe	5154
Add to Outlets - CVE		Corrugated Plastic Pipe	5155
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	5791
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	5854
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	5856
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	5857
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	6561
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	6562
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	6563
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	6564
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	6565
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	6567
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	6569
Add to Outlets - BEEHIVE		Corrugated Plastic Pipe	0
Add to Outlets - BEEHIVE		Corrugated Plastic Pipe	0
Add to Outlets - BEEHIVE		Corrugated Plastic Pipe	0
2	399.2966	HDPE Smooth	213
2	399.2966	HDPE Smooth	214
2	422.312	Concrete	322
2	0	Corrugated Metal Pipe	412
2	417.946	HDPE Smooth	561
2	0	Corrugated Metal Pipe	999
2	0	HDPE Smooth	997
2	0	HDPE Smooth	968
2	0	Corrugated Metal Pipe	951
BIRDCAGE BUBBLE-UP - BEEHIVE	HDPE Smooth		434
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	4422
BIRDCAGE BUBBLE-UP - CB-TAC		Corrugated Plastic Pipe	4484
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	4485
BIRDCAGE BUBBLE-UP - BEEHIVE		Corrugated Plastic Pipe	7497
Add to Outlets - BEEHIVE		Corrugated Metal Pipe	0
2		HDPE Corrugated	192

Source control requirements have been updated for the City of Snoqualmie by revisions to City Code as outline above in 73a; by adoption of the 2016 King County Surface Water Design Manual (KCSWDM); by updates to the City of Snoqualmie Addendum to the 2016 KCSWDM; and by updates to the City of Snoqualmie Development Standards.