

**CITY OF SAMMAMISH  
WASHINGTON**

**ORDINANCE NO. O2011 - 304**

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**AN ORDINANCE OF THE CITY OF SAMMAMISH, WASHINGTON, REPEALING  
CHAPTER 5 OF TITLE 15 OF THE SAMMAMISH MUNICIPAL CODE AND  
ADOPTING A NEW TITLE 13 OF THE SAMMAMISH MUNICIPAL CODE  
IDENTIFIED AS SURFACE WATER MANAGEMENT**

WHEREAS, the City incorporated in August of 1999;

WHEREAS, the City Council adopted the City's Comprehensive Plan on September 16, 2003, and the City has enacted zoning consistent with the comprehensive plan; and

WHEREAS, the City Council adopted the Sammamish Municipal Code on October 7, 2003 and subsequent revisions have been made since that time; and

WHEREAS, the City of Sammamish is subject to the National Pollutant Discharge Elimination System (NPDES) Phase 2 permitting requirements, which requires in part that the City adopt an updated Surface Water Design Manual; and

WHEREAS, the Surface Water Design Manual is adopted by reference to King County Code Title 9, which does not reflect the policies of the City of Sammamish; and

WHEREAS, the adoption of a new Title 13 of the Sammamish Municipal Code will ensure that the Surface Water Design Manual policies of the City of Sammamish are implemented; and

WHEREAS, the City Council has identified an opportunity to provide increased flexibility from property owners of lots less than one acre, through the adoption of a "bifurcated" Surface Water Design Manual; and

WHEREAS, a State Environmental Policy Act (SEPA) Determination of Non Significance for the proposed Surface Water Design Manual regulations was issued on April 11, 2011; and

WHEREAS, in accordance with RCW 36.70A, a request for expedited review was received by the State of Washington Department of Commerce on March 2, 2011 and was granted expedited review on March 31, 2011; and

WHEREAS, the public process for the proposed amendments has provided for public participation opportunities at public meetings and hearings before the Planning Commission and City Council between January and May of 2011; and

WHEREAS, the Planning Commission held public meetings and public hearings in November of 2010 and forwarded recommended Surface Water Design Manual regulations to the City Council on February 3, 2011; and

WHEREAS, the City Council considered the proposed Surface Water Design Manual regulations at a City Council public hearing on April 18, 2011, which was continued on May 16, 2011; and

WHEREAS, the City Council considered the Planning Commission's recommendation, public comment, and other available information.

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SAMMAMISH, WASHINGTON, DO ORDAIN AS FOLLOWS:**

**Section 1. Adoption of the Surface Water Design Manual regulations.** Title 13, Surface Water Management as set forth in Attachment "A" to this ordinance is hereby adopted.

**Section 2. Adoption of the Surface Water Design Manual addendum.** The addendum to the Surface Water Design Manual as set forth in Attachment "B" to this ordinance is hereby adopted.

**Section 3. Codification of the Surface Water Design Manual regulations.** The City Council authorizes the Community Development Director and City Clerk to codify the regulatory provisions of the Surface Water Design Manual ordinance into Title 13 of the Sammamish Municipal Code for ease of use and reference.

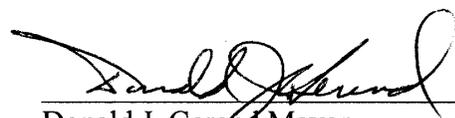
**Section 4. Interpretation.** The City Council authorizes the City Manager or designee to administratively interpret these provisions as necessary to implement the intent of the Council.

**Section 5. Severability.** Should any section, paragraph, sentence, clause or phrase of this Ordinance, or its application to any person or circumstance, be declared unconstitutional or otherwise invalid for any reason, or should any portion of this Ordinance be pre-empted by state or federal law or regulation, such decision or pre-emption shall not affect the validity of the remaining portions of this Ordinance or its application to other persons or circumstances.

**Section 6. Effective Date.** This ordinance shall be published in the official newspaper of the City, and shall take effect and be in full force five (5) days after the date of publication.

**ADOPTED BY THE CITY COUNCIL AT A REGULAR MEETING THEREOF ON THE 16TH DAY OF MAY 2011.**

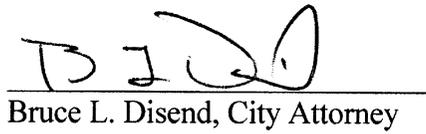
CITY OF SAMMAMISH

  
Donald J. Gerend Mayor

ATTEST/AUTHENTICATED:

  
Melonie Anderson, City Clerk

Approved as to form:

  
Bruce L. Disend, City Attorney

Filed with the City Clerk:	April 13, 2011
Public Hearing:	April 18, 2011
First Reading:	April 18, 2011
Public Hearing:	May 16, 2011
Passed by the City Council:	May 16, 2011
Date of Publication:	May 19, 2011
Effective Date:	May 24, 2011

**Title 13**  
**Surface Water Management**

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**Chapters:**

- 13.05 Authority, Purpose, General Provisions, and Administration**
- 13.10 Definitions**
- 13.15 Surface Water Development Charge**
- 13.20 Surface Water Runoff Regulations**
- 13.25 Surface Water Management Program**
- 13.30 Water Quality**
- 13.35 Fertilizers**

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Chapter 13.05  
Authority, Purpose, General Provisions, and Administration

Sections:

- 13.05.010 Authority
- 13.05.020 General Provisions
- 13.05.030 Administration

**13.05.010 Authority.**

Pursuant to RCW 35.21.180, 35A.11.020, and 35A.21.160, the City adopts Title 13, Surface Water Management.

**13.05.020 General Provisions.**

This Title is hereby enacted to be consistent with and implement the comprehensive plan in accordance with RCW 36.70A.

**13.05.030 Administration.**

Applicable departments within the City are authorized to adopt, pursuant to Chapter 2.55 SMC, such administrative rules and regulations as are necessary and appropriate to implement this Title 13 and to prepare and require the use of such forms as are necessary to its administration.

Chapter 13.10  
Definitions

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5	Sections:	
6	13.10.010	Scope of Chapter
7	13.10.020	Adjustment
8	13.10.030	AKART
9	13.10.040	Applicant
10	13.10.050	Basin
11	13.10.060	Basin Plan
12	13.10.070	Best management practices
13	13.10.080	City
14	13.10.090	Closed Depression
15	13.10.100	Clean Water Act
16	13.10.110	Construct or Modify
17	13.10.120	Conveyance System
18	13.10.130	Department
19	13.10.140	Development
20	13.10.150	Developed parcel
21	13.10.160	Director
22	13.10.170	Division
23	13.10.180	Discharge
24	13.10.190	Drainage
25	13.10.200	Drainage facility
26	13.10.210	Drainage review
27	13.10.220	Effective impervious surface
28	13.10.230	Erosion and sediment control
29	13.10.240	Farm management plan
30	13.10.250	Financial guarantee
31	13.10.260	Flood hazard reduction plan
32	13.10.270	Flow control best management practice
33	13.10.280	Flow control facility
34	13.10.290	Forest practices
35	13.10.300	Full drainage review
36	13.10.310	Ground water
37	13.10.320	High-use site
38	13.10.330	Hydraulically connected
39	13.10.340	Impervious surface
40	13.10.350	Improvement
41	13.10.360	Land disturbing activity
42	13.10.370	Land use code
43	13.10.380	Lake management plan
44	13.10.390	Large project drainage review
45	13.10.400	Licensed civil engineer
46	13.10.410	Maintenance
47	13.10.420	Master drainage plan

ATTACHMENT "A"

1	13.10.430	National Pollutant Discharge Elimination System
2	13.10.440	National Pollutant Discharge Elimination System Permit
3	13.10.450	Native vegetated surface
4	13.10.460	Natural discharge location
5	13.10.470	Natural surface water drainage system
6	13.10.480	New impervious surface
7	13.10.490	New pervious surface
8	13.10.500	Open space
9	13.10.510	Parcel
10	13.10.520	Person
11	13.10.530	Pollution-generating impervious surface
12	13.10.540	Pollution-generating pervious surface
13	13.10.550	Project
14	13.10.560	Project site
15	13.10.570	Rate category
16	13.10.580	Redevelopment project
17	13.10.590	Replaced impervious surface
18	13.10.600	Residence
19	13.10.610	Residential parcel
20	13.10.620	Runoff
21	13.10.630	Salmon conservation plan
22	13.10.640	Shared facility
23	13.10.650	Service area
24	13.10.660	Site
25	13.10.670	Small project drainage review
26	13.10.680	Source control BMP
27	13.10.690	State Waste Discharge Permit
28	13.10.700	Stormwater compliance plan
29	13.10.710	Storm water plan
30	13.10.720	Stormwater Pollution Prevention Manual
31	13.10.730	Subbasin
32	13.10.740	Surface and storm water
33	13.10.750	Surface and storm water management services
34	13.10.760	Surface and storm water management system
35	13.10.770	Surface Water Design Manual
36	13.10.780	Surface water management fee protocols
37	13.10.790	Treatment BMP
38	13.10.800	Targeted drainage review
39	13.10.810	Undeveloped parcel
40	13.10.820	Water quality treatment facility
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43	<b>13.10.010</b>	<b>Scope of Chapter.</b>
44		This chapter contains definitions of technical and procedural terms used throughout Title 13 – Surface
45		Water Management.
46		

ATTACHMENT "A"

1 13.10.020 "Adjustment" means a department-approved variation in the application of the  
2 requirements of this SMC 13.20 and the Surface Water Design Manual to a particular project in  
3 accordance with SMC 13.10.020 "Adjustment" replaces "variance," which was used in prior editions of  
4 the Surface Water Design Manual.

5  
6 13.10.030 "AKART" means "all known, available and reasonable methods of prevention, control  
7 and treatment." "AKART" represents the most current methodology that can be reasonably required for  
8 preventing, controlling or abating the pollutants associated with a discharge. "AKART" applies to both  
9 point and nonpoint sources of pollution.

10  
11 13.10.040 "Applicant" means a property owner or a public agency or public or private utility that  
12 owns a right-of-way or other easement or has been adjudicated the right to such an easement under  
13 RCW 8.12.090, or any person or entity designated or named in writing by the property or easement  
14 owner to be the applicant, in an application for a development proposal, permit or approval.

15  
16 13.10.050 "Basin" means a geographic area that contains and drains to a stream or river named  
17 and noted on common maps, such as the Cedar river, Sammamish river, Green river, Snoqualmie river,  
18 Skykomish river or White river, or a geographic area that drains to a nonflowing water body named and  
19 noted on common maps, such as Lake Washington or Puget Sound.

20  
21 13.10.060 "Basin plan" means a plan and all implementing regulations and procedures including,  
22 but not limited to, capital projects, public education activities and land use management regulations  
23 adopted by ordinance for managing surface and storm water within the basin.

24  
25 13.10.070 "Best management practices" or "BMPs" mean the best available and reasonable  
26 physical, structural, managerial or behavioral activities, that, when used singly or in combination,  
27 eliminate or reduce the contamination of both surface and ground waters.

28  
29 13.10.080 "City" means City of Sammamish.

30  
31 13.10.090 "Closed depression" means an area greater than five thousand square feet at overflow  
32 elevation that is low-lying and that has no or such a limited surface water outlet that the area acts as a  
33 stormwater retention facility.

34  
35 13.10.100 "Clean Water Act" means 33 U.S.C. 1251 et. seq., as amended.

36  
37 13.10.110 "Construct or modify" means to install a new drainage pipe or ditch or make  
38 improvements to an existing drainage pipe or ditch, for purposes other than maintenance, that either  
39 serves to concentrate previously unconcentrated surface and storm water runoff or serves to increase,  
40 decrease or redirect the conveyance of surface and storm water runoff. "Construct or modify" does not  
41 include installation or maintenance of a driveway culvert installed as part of a single-family residential  
42 building permit.

43  
44 13.10.120 "Conveyance system" means the drainage facilities and features, both natural and  
45 constructed, that collect, contain and provide for the flow of surface and storm water from the highest  
46 points on the land down to a receiving water. The natural elements of the conveyance system include  
47 swales and small drainage courses, streams, rivers, lakes and wetlands. The constructed elements of the

ATTACHMENT "A"

1 conveyance system include gutters, ditches, pipes, channels and most flow control and water quality  
2 treatment facilities.

3  
4 13.10.130 "Department" means the Department of Public Works or its successor.

5  
6 13.10.140 "Development" means any activity that requires a permit or approval, including, but not  
7 limited to, a building permit, grading permit, shoreline substantial development permit, conditional use  
8 permit, special use permit, zoning variance or reclassification, subdivision, short subdivision, urban  
9 planned development, binding site plan, site development permit or right-of-way use permit.

10 "Development" does not include a Class I, II, III or IV-S forest practice conducted in accordance with  
11 chapter 76.09 RCW and Title 222 WAC or a class IV-G nonconversion forest practice, as defined in SMC  
12 chapter 21A.15, conducted in accordance with chapter 76.09 RCW and Title 222 WAC and a county-  
13 approved forest management plan.

14  
15 13.10.150 "Developed parcel" means any parcel altered from the natural state by the  
16 construction, creation or addition of impervious surfaces.

17  
18 13.10.160 "Director" means the director of the City of Sammamish Department of Public Works,  
19 other department directors specified in enforcement procedures established in accordance with the  
20 Sammamish Municipal Code, or any designee of those directors.

21  
22 13.10.170 "Division" means the Department of Public Works, engineering division or its successor  
23 agency.

24  
25 13.10.180 "Discharge" means throw, drain, release, dump, spill, empty, emit, or pour forth any  
26 matter or to cause or allow matter to flow, run or seep from land or be thrown, drained, released,  
27 dumped, spilled, emptied, emitted or poured into water.

28  
29 13.10.190 "Drainage" means the collection, conveyance, containment or discharge, or any  
30 combination thereof, of surface and storm water runoff.

31  
32 13.10.200 "Drainage facility" means a constructed or engineered feature that collects, conveys,  
33 stores or treats surface and storm water runoff. "Drainage facility" includes, but is not limited to, a  
34 constructed or engineered stream, pipelines, channels, ditches, swamps, lakes, wetlands, closed  
35 depressions, infiltration facilities, flow control facilities, erosion/sedimentation control facilities and  
36 other drainage structures and appurtenances, both natural and constructed.

37  
38 13.10.210 "Drainage review" means an evaluation by City staff of a proposed project's compliance  
39 with the drainage requirements in the Surface Water Design Manual. The types of drainage review  
40 include: Small project drainage review, targeted drainage review, full drainage review and large project  
41 drainage review.

42  
43 13.10.220 "Effective impervious area" means the portion of actual impervious area that is  
44 connected, or has the effect of being connected as defined in the Surface Water Design Manual, directly  
45 to the storm water drainage system via surface flow or discrete conveyances such as pipes, gutters or  
46 ditches.

1 13.10.230 "Erosion and sediment control" means any temporary or permanent measures taken to  
2 reduce erosion, control siltation and sedimentation and ensure that sediment-laden water does not  
3 leave the site or enter into wetlands or aquatic areas.

4  
5 13.10.240 "Farm management plan" means a comprehensive site-specific plan developed by the  
6 farm owner in cooperation with the King Conservation District taking into consideration the land owners  
7 objectives while protecting water quality and related natural resources.

8  
9 13.10.250 "Financial guarantee" means a form of financial security posted to do one or more of  
10 the following: ensure timely and proper completion of improvements; ensure compliance with the  
11 Sammamish Municipal Code; or provide secured warranty of materials, workmanship of improvements  
12 and design. "Financial guarantees" include assignments of funds, cash deposit, surety bonds or other  
13 forms of financial security acceptable to the director. "Performance guarantee," "maintenance  
14 guarantee" and "defect guarantee" are considered sub categories of financial guarantee.

15  
16 13.10.260 "Flood hazard reduction plan" means a plan and all implementing programs,  
17 regulations and procedures including, but not limited to, capital projects, public education activities and  
18 enforcement programs for reduction of flood hazards and prepared in accordance with RCW 86.12.200.

19  
20 13.10.270 "Flow control best management practice" means a method or design for dispersing,  
21 infiltrating or otherwise reducing or preventing development-related increases in surface and storm  
22 water runoff at, or near, the sources of those increases. "Flow control best management practice"  
23 includes the methods and designs specified in the Surface Water Design Manual.

24  
25 13.10.280 "Flow control facility" means a drainage facility designed to mitigate the impacts of  
26 increased surface and storm water runoff generated by site development in accordance with the  
27 drainage requirements in this chapter. A flow control facility is designed either to hold water for a  
28 considerable length of time and then release it by any combination of evaporation, plant transpiration  
29 or infiltration into the ground or to hold runoff for a short period of time and then release it to the  
30 conveyance system.

31 13.10.290 "Forest practices" means any activity conducted on or directly pertaining to forest land  
32 and relating to growing, harvesting, or processing timber, as defined in chapter 222-16 WAC.

33  
34 13.10.300 "Full drainage review" means the evaluation required by SMC 13.20 for any proposed  
35 project, unless the project is subject to small project drainage review, targeted drainage review or large  
36 project drainage review, that:

- 37 1. Would result in two thousand square feet or more of new impervious surface;  
38 2. Would result in thirty-five thousand square feet or more of new pervious surface: or  
39 3. Is a redevelopment project on one or more parcels where the total of new and replaced  
40 impervious surface is five thousand square feet or more and when the valuation of proposed  
41 improvements exceeds fifty percent of the assessed value of the existing site improvements, including  
42 interior improvements and excluding required mitigation and frontage improvements.

43  
44 13.10.310 "Ground water" means all waters that exist beneath the land surface or beneath the  
45 bed of any stream, lake or reservoir or other body of surface water, whatever may be the geological  
46 formation or structure in which such water stands or flows, percolates or otherwise moves.

47

1           13.10.320       "High-use site" means a commercial, industrial or road intersection site that  
2 generates a higher than average number of vehicle turnovers or has other characteristics that generate  
3 the potential for chronic oil accumulation. "High use site" includes:

4           1. A commercial or industrial site subject to:

5           a. an expected daily traffic count greater than one hundred vehicles per one thousand square  
6 feet of gross building area;

7           b. petroleum storage or transfer in excess of one thousand gallons per year, not including  
8 routine fuel oil storage or transfer; or

9           c. use, storage or maintenance of a fleet of twenty-five or more diesel vehicles each weighing  
10 over ten tons; or

11          2. A road intersection with average daily traffic counts of twenty-five thousand vehicles or more  
12 on the main roadway and fifteen thousand or more vehicles on any intersecting roadway, excluding  
13 pedestrian or bicycle use improvement projects.

14  
15       13.10.330       "Hydraulically connected" means connected through surface flow or water features  
16 such as wetlands or lakes.

17  
18       13.10.340       "Impervious surface" means a hard surface area which either prevents or retards the  
19 entry of water into the soil mantle as it entered under natural conditions prior to development, and/or a  
20 hard surface area which causes water to run off the surface in greater quantities or at an increased rate  
21 of flow from the flow present under natural conditions prior to development. Common impervious  
22 surfaces include, but are not limited to, roofs, walkways, patios, driveways, parking lots, storage areas,  
23 areas which are paved, graveled or made of packed or oiled earthen materials or other surfaces which  
24 similarly impede the natural infiltration of surface and storm water. Open, uncovered flow control  
25 facilities shall not be considered as impervious surfaces for the purpose of this chapter.

26  
27       13.10.350       "Improvement" means a permanent, human-made, physical change to land or real  
28 property including, but not limited to, buildings, streets, driveways, sidewalks, crosswalks, parking lots,  
29 water mains, sanitary and storm sewers, drainage facilities and landscaping.

30  
31       13.10.360       "Land disturbing activity" means an activity that results in a change in the existing soil  
32 cover, both vegetative and nonvegetative, or to the existing soil topography. "Land disturbing activity"  
33 includes, but is not limited to, demolition, construction, clearing, grading, filling, excavation and  
34 compaction. "Land disturbing activity" does not include tilling conducted as part of agricultural  
35 practices, landscape maintenance or gardening.

36  
37       13.10.370       "Land use code" means restrictions on the type of development for a specific parcel of  
38 land as identified by records maintained by the City of Sammamish as modified or supplemented by  
39 information resulting from investigation by the division. Land use codes are preliminary indicators of  
40 the extent of impervious surface and are used in the initial analysis to assign an appropriate rate  
41 category for a specific parcel.

42  
43       13.10.380       "Lake management plan" means a plan describing the lake management  
44 recommendations and requirements adopted by public rule for managing water quality within individual  
45 lake basins. Adopted lake management plans are available from the department.

46

- 1 13.10.390 "Large project drainage review" means the evaluation required by SMC 13.20 for any  
2 proposed project that:
- 3 1. Has an urban plan development land use designation in the Sammamish Comprehensive Plan  
4 land use map;
  - 5 2. Would, at full buildout of the project site, result in fifty acres or more of new impervious  
6 surface within a drainage subbasin or a number of subbasins hydraulically connected across subbasin  
7 boundaries; or
  - 8 3. Has a project site of fifty acres or more within a critical aquifer recharge area, as defined in  
9 SMC Title 21A.
- 10
- 11 13.10.400 "Licensed civil engineer" means a person registered with the State of Washington as a  
12 professional engineer in civil engineering.
- 13
- 14 13.10.410 "Maintenance" means those usual activities taken to prevent a decline, lapse or  
15 cessation in the use of currently serviceable structures, facilities, equipment or systems, if there is no  
16 expansion of the structure, facilities, equipment or system and there are no significant hydrologic  
17 impacts. "Maintenance" includes the repair or replacement of nonfunctional facilities or the  
18 replacement of existing structures with different types of structures, if the repair or replacement is  
19 required by one or more environmental permits or to meet current engineering standards and the  
20 functioning characteristics of the original facility or structure are not changed.
- 21
- 22 13.10.420 "Master drainage plan" means a comprehensive drainage control plan intended to  
23 prevent significant adverse impacts to the natural and constructed drainage system, both on- and off-  
24 site.
- 25
- 26 13.10.430 "National Pollutant Discharge Elimination System" or "NPDES" means the national  
27 program for controlling pollutants from point source discharges directly into waters of the United States  
28 under the Clean Water Act.
- 29
- 30 13.10.440 "National Pollutant Discharge Elimination System permit" means an authorization,  
31 license or equivalent control document issued by the Environmental Protection Agency or the  
32 Washington state Department of Ecology to implement the requirements of the NPDES program.
- 33
- 34 13.10.450 "Native vegetated surface" means a surface in which the soil conditions, ground cover  
35 and species of vegetation are like those of the original native condition for the site, as more specifically  
36 set forth in the Surface Water Design Manual.
- 37
- 38 13.10.460 "Natural discharge location" means the location where runoff leaves the project site  
39 under existing site conditions as defined in the Surface Water Design Manual.
- 40
- 41 13.10.470 "Natural surface water drainage system" means such landscape features as rivers,  
42 streams, lakes and wetlands. This system circulates water in a complex hydrological cycle.
- 43
- 44 13.10.480 "New impervious surface" means the creation of a hard or compacted surface such as  
45 roofs, pavement, gravel or dirt or the addition of a more compacted surface such as the paving of  
46 existing dirt or gravel.
- 47

ATTACHMENT "A"

1 13.10.490 "New pervious surface" means the conversion of a native vegetated surface or other  
2 native surface to a nonnative pervious surface, including, but not limited to, pasture land, grassland,  
3 cultivated land, lawn, landscaping or bare soil or any alteration of existing nonnative pervious surface  
4 that results in increased surface and storm water runoff as defined in the Surface Water Design Manual.  
5

6 13.10.500 "Open space" means any parcel, property or portion thereof classified for current use  
7 taxation under K.C.C. chapter 20.36 and chapter 84.34 RCW, or for which the development rights have  
8 been sold to King County under K.C.C. chapter 26.04. This definition includes lands which have been  
9 classified as open space, agricultural or timber lands under criteria contained in K.C.C. chapter 20.36 and  
10 chapter 84.34 RCW.  
11

12 13.10.510 "Parcel" means the smallest separately segregated unit or plot of land having an  
13 identified owner, boundaries and surface area which is documented for property tax purposes and given  
14 a tax lot number by the King County assessor.  
15

16 13.10.520 "Person" means an individual and his or her agent or assign, municipality, political  
17 subdivision, government agency, partnership, corporation, business or any other entity.  
18

19 13.10.530 "Pollution-generating impervious surface" means an impervious surface considered to  
20 be a significant source of pollutants in surface and storm water runoff. "Pollution-generating impervious  
21 surface includes those surfaces subject to vehicular use or storage of erodible or leachable materials,  
22 wastes or chemicals and that receive direct rainfall or the run-on or blow-in of rainfall. A covered  
23 parking area would be included if runoff from uphill could regularly run through it or if rainfall could  
24 regularly blow in and wet the pavement surface. Metal roofs are also considered pollution-generating  
25 impervious surface unless they are treated to prevent leaching.  
26

27 13.10.540 "Pollution-generating pervious surface" means a nonimpervious surface considered to  
28 be a significant source of pollutants in surface and storm water runoff. "Pollution-generating pervious  
29 surfaces" include surfaces subject to the use of pesticides and fertilizers, to the use or storage of  
30 erodible or leachable materials, wastes or chemicals or to the loss of soil. "Pollution-generating pervious  
31 surface" includes, but is not limited to, the lawn and landscaped areas of a residential or commercial  
32 site, golf course, park sports field and City-standard grassed modular grid pavement.  
33

34 13.10.550 "Project" means any proposed action to alter or develop a site that may also require  
35 drainage review.  
36

37 13.10.560 "Project site" means the portion of a site and any offsite areas subject to proposed  
38 project activities, alterations and improvements including those required by this chapter.  
39

40 13.10.570 "Rate category" means the classification in this chapter given to a parcel in the service  
41 area based upon the type of land use on the parcel and the percentage of impervious surface area  
42 contained on the parcel.  
43

44 13.10.580 "Redevelopment project" means a project that proposes to add, replace or modify  
45 impervious surface for purposes other than a residential subdivision or maintenance on a site that:  
46 1. Is already substantially developed in a manner that is consistent with its current zoning or  
47 with a legal nonconforming use; or

2. Has an existing impervious surface coverage of thirty-five percent or more.

13.10.590 "Replaced impervious surface" means an existing impervious surface proposed to be removed and reestablished as impervious surface, excluding impervious surface removed for the sole purpose of installing utilities or performing maintenance. For purposes of this definition, "removed" includes the removal of buildings down to bare soil or the removal of Portland cement concrete slabs or pavement or asphaltic concrete pavement.

13.10.600 "Residence" means a building or structure or portion thereof, designed for and used to provide a place of abode for human beings. The term residence includes the term "residential" or "residential unit" as referring to the type of or intended use of a building or structure.

13.10.610 "Residential parcel" means any parcel which contains no more than three residences or three residential units which are within a single structure and is used primarily for residential purposes.

13.10.620 "Runoff" means that portion of water originating from rainfall and other precipitation that flows over the surface or just below the surface from where it fell and is found in drainage facilities, rivers, streams, springs, seeps, ponds, lakes, wetlands and shallow groundwater as well as on ground surfaces. For the purpose of this definition, groundwater means all waters that exist beneath the land surface or beneath the bed of any stream, lake or reservoir, or other body surface water, whatever may be the geological formation or structure in which such water stands or flows, percolates or otherwise moves.

13.10.630 "Salmon conservation plan" means a plan and all implementing regulations and procedures including, but not limited to, land use management adopted by ordinance, capital projects, public education activities and enforcement programs for conservation and recovery of salmon within a water resource inventory area designated by the state under WAC 173-500-040.

13.10.640 "Shared facility" means a drainage facility designed to meet one or more of the requirements of SMC 13.20 for two or more separate projects contained within a basin. Shared facilities usually include shared financial commitments for those drainage facilities.

13.10.650 "Service area" means the incorporated City of Sammamish.

13.10.660 "Site" means a single parcel, or two or more contiguous parcels that are under common ownership or documented legal control, used as a single parcel for a proposed project for purposes of applying for authority from the City of Sammamish to carry out a proposed project. For projects located primarily within dedicated rights-of-way, "site" includes the entire width of right-of-way subject to improvements proposed by the project.

13.10.670 "Small project drainage review" means the drainage review for a proposed single-family residential project or agricultural project that:

1. Would result in:

a. ten thousand square feet or less of total impervious surface added on or after January 8, 2001; or

b. four percent or less of total impervious surface on a site as specified in the Surface Water Design Manual; and

1           2. Meets the small project drainage requirements specified in the Surface Water Design Manual,  
2 including flow control best management practices, erosion and sediment control measures and drainage  
3 plan submittal requirement; and

4           3. Limits new pervious surface as specified in the Surface Water Design Manual.  
5

6 13.10.680       "Source control BMP" means a BMP intended to prevent contaminants from entering  
7 surface and storm water or ground water including the modification of processes to eliminate the  
8 production or use of contaminants. "Source control BMPs" can be either structural or nonstructural.  
9 Structural source control BMPs involve the construction of a physical structure on site, or other type of  
10 physical modification to a site. An example of a structural source control BMP is building a covered  
11 storage area. A nonstructural source control BMP involves the modification or addition of managerial or  
12 behavioral practices. An example of a nonstructural source control BMP is using less toxic alternatives to  
13 current products or sweeping parking lots.  
14

15 13.10.690       "State Waste Discharge Permit" means an authorization, license, or equivalent control  
16 document issued by the Washington state Department of Ecology in accordance with chapter 173-216  
17 WAC.  
18

19 13.10.700       "Stormwater compliance plan" means a plan or study and all regulations and procedures  
20 that have been adopted by the City to implement the plan or study, including, but not limited to, capital  
21 projects, public education activities and enforcement programs for managing stormwater quantity and  
22 quality discharged from the City's municipal separate storm sewer system in compliance with the  
23 National Pollutant Discharge Elimination System permit program under the Clean Water Act.  
24

25 13.10.710       "Storm water plan" means a City of Sammamish ordinance specifying the storm water  
26 control facilities that will be funded by a bond issue.  
27

28 13.10.720       "Stormwater Pollution Prevention Manual" means the manual adopted in accordance  
29 with SMC 2.55, and supporting documentation referenced or incorporated in the manual, describing  
30 best management practices and procedures for existing facilities and existing and new activities not  
31 covered by the Surface Water Design Manual.  
32

33 13.10.730       "Subbasin" means a geographic area that:  
34           1. Drains to a stream or water body named and noted on common maps; and  
35           2. Is contained within the basin of the stream or water body.  
36

37 13.10.740       "Surface and storm water" means water originating from rainfall and other precipitation  
38 that is found on ground surfaces and in drainage facilities, rivers, streams, springs, seeps, ponds, lakes,  
39 wetlands as well as and shallow ground water.  
40

41 13.10.750       "Surface and storm water management services" means the services provided by the  
42 surface water management program, including but not limited to basin planning, facilities maintenance,  
43 regulation, financial administration, public involvement, drainage investigation and enforcement,  
44 aquatic resource restoration, surface and storm water quality and environmental monitoring, natural  
45 surface water drainage system planning, intergovernmental relations and facility design and  
46 construction.  
47

- 1 13.10.760 "Surface and storm water management system" means constructed drainage facilities  
2 and any natural surface water drainage features that do any combination of collection, storing,  
3 controlling, treating or conveying surface and storm water.  
4
- 5 13.10.770 "Surface Water Design Manual" means the manual, and supporting documentation  
6 referenced or incorporated in the manual, describing surface and storm water design and analysis  
7 requirements, procedures and guidance that has been formally adopted by rule under the procedures in  
8 SMC chapter 2.55. The Surface Water Design Manual is available from the Department of Public Works,  
9 or their successor agencies.  
10
- 11 13.10.780 "Surface water management fee protocols" or "SWM fee protocols" means the surface  
12 water management fee standards and procedures that have been formally adopted by rule under the  
13 procedures specified in SMC chapter 2.55. The SWM fee protocols are available from the Department of  
14 Public Works or its successor agency.  
15
- 16 13.10.790 "Treatment BMP" means a BMP intended to remove contaminants once they are  
17 already contained in storm water. Examples of treatment BMPs include oil/water separators,  
18 biofiltration swales and wetponds.  
19
- 20 13.10.800 "Targeted drainage review" means an abbreviated evaluation required by SMC 13.20 for  
21 certain types of proposed projects that are not subject to full or large project drainage review. Targeted  
22 drainage review may be required for some projects in small project drainage review.  
23
- 24 13.10.810 "Undeveloped parcel" means any parcel which has not been altered from its natural  
25 state by the construction, creation or addition of impervious surface.  
26
- 27 13.10.820 "Water quality treatment facility" means a drainage facility designed to reduce  
28 pollutants once they are already contained in surface and storm water runoff. Water quality treatment  
29 facilities are the structural component of best management practices. When used singly or in  
30 combination, water quality treatment facilities reduce the potential for contamination of either surface  
31 or ground waters, or both.  
32  
33

Chapter 13.15  
Surface Water Development Charge

Section:

13.15.010 Surface water system development charge authorized

**13.15.010 Surface water system development charge authorized.**

A. City Authorized to Collect Charge. The City is authorized to collect a surface water system development charge as follows:

Development	Fee
New residential dwelling unit or commercial building with up to 2,500 square feet of impervious coverage	\$570.00
Each additional 250 square feet of impervious coverage over 2,500 square feet	\$57.00
Other structures or additions of up to 250 square feet of impervious coverage requiring a building permit	\$57.00, plus \$57.00 for each additional 250 square feet

All impervious surface areas shall be rounded to the nearest 250-square-foot increment. The fee shall not apply to rockeries or retaining walls.

B. Charges Shall Be Liens. All charges made under this section shall constitute a lien upon the property from which such charges are due, superior to all other liens and encumbrances whatsoever, except for general taxes and local special assessments. Enforcement of such lien shall be in the manner provided by law. All properties assessed a surface water system development charge shall have a notation on their plats stating that the property may be subject to a lien for the final costs of any necessary off-site surface water drainage improvements.

Chapter 13.20  
Surface Water Runoff Regulations

Sections:

- 13.20.010 Purpose.
- 13.20.020 Drainage review - when required - type.
- 13.20.030 Drainage review - requirements.
- 13.20.040 Critical drainage and/or erosion areas.
- 13.20.050 Engineering plans for the purposes of drainage review.
- 13.20.060 Construction timing and final approval.
- 13.20.070 Liability insurance required.
- 13.20.080 Financial guarantees authorized.
- 13.20.090 Drainage facilities accepted by Sammamish for maintenance.
- 13.20.100 Drainage facilities not accepted by Sammamish for maintenance.
- 13.20.110 Hazards.
- 13.20.120 Administration.
- 13.20.130 Enforcement.
- 13.20.140 Implementation, review and revision.
- 13.20.150 Severability.

**13.20.010 Purpose**

The purpose of this chapter is to promote the public health, safety and welfare by providing for the comprehensive management of surface and storm waters and erosion control, especially that which preserves and utilizes the many values of the City's natural drainage system including open space, fish and wildlife habitat, recreation, and education. By conducting programs to reduce flooding, erosion, and sedimentation; prevent and mitigate habitat loss; enhance groundwater recharge; and prevent water quality degradation through the implementation of comprehensive and thorough permit review, construction inspection, enforcement, and maintenance, the effectiveness of the requirements contained in this chapter will be promoted.

**13.20.020 Drainage review - when required - type.**

A. Drainage review is required when any proposed project is subject to a City of Sammamish development permit or approval and:

- 1. Would result in two thousand square feet or more of new impervious surface, replaced impervious surface or new plus replaced impervious surface; or,
- 2. Would involve seven thousand square feet or more of land disturbing activity; or,
- 3. Would construct or modify a drainage pipe or ditch that is twelve inches or more in size or depth or receives surface and storm water runoff from a drainage pipe or ditch that is twelve inches or more in size or depth; or,
- 4. Contains or is adjacent to a flood hazard area as defined in SMC Title 15 or 21A; or,
- 5. Is located within a critical drainage area; or,
- 6. Is a redevelopment project proposing one hundred thousand dollars or more of improvements to an existing high-use site; or,
- 7. Is a redevelopment project on a site in which the total of new plus replaced impervious surface is five thousand square feet or more and whose valuation of proposed improvements, including

1 interior improvements and excluding required mitigation and frontage improvements, exceeds fifty  
2 percent of the assessed value of the existing site improvements.

3  
4 B. The drainage review for any proposed project shall be scaled to the scope of the project's size,  
5 type of development and potential for impacts to the regional surface water system to facilitate  
6 preparation and review of project applications. If drainage review for a proposed project is required  
7 under subsection A. of this section, the City shall determine which of the following drainage reviews  
8 apply as specified in the Surface Water Design Manual:

- 9 1. Small project drainage review;
- 10 2. Targeted drainage review;
- 11 3. Full drainage review; or
- 12 4. Large project drainage review.

13  
14 **13.20.030 Drainage review - requirements.**

15 A. A proposed project required to have drainage review by this chapter must meet each of the  
16 following core requirements which are described in detail in the Surface Water Design Manual. Projects  
17 subject only to small project drainage review that meet the small project drainage requirements  
18 specified in the Surface Water Design Manual, including flow control best management practices,  
19 erosion and sediment control measures and drainage plan submittal requirements are deemed to  
20 comply with the following core requirements:

- 21 1. Core requirement 1: Discharge at the natural location. All surface and storm water  
22 runoff from a project shall be discharged at the natural location so as not to be diverted onto, or away  
23 from, downstream properties. The manner in which runoff is discharged from the project site shall not  
24 create a significant adverse impact to downhill properties or drainage systems as specified in the  
25 discharge requirements of the Surface Water Design Manual;
- 26 2. Core requirement 2: Offsite analysis. The initial application submittal for proposed  
27 projects shall include an offsite analysis report that assesses potential offsite drainage and water quality  
28 impacts associated with development of the proposed site and proposes appropriate mitigations to  
29 those impacts. This initial submittal shall include, at minimum, a Level One downstream analysis as  
30 described in the Surface Water Design Manual. If impacts are identified, the proposed projects shall  
31 meet any applicable problem-specific requirements as specified in the Surface Water Design Manual;
- 32 3. Core Requirement 3: Flow control. Proposed projects that would result in two thousand  
33 square feet or more of new impervious surface or thirty-five thousand square feet or more of new  
34 pervious surface, or that are redevelopment projects that would result in a total of five thousand square  
35 feet or more of new and replaced impervious surface, shall provide flow control facilities or flow control  
36 BMPs, or both, to control surface and storm water runoff generated by new impervious surface, new  
37 pervious surface, replaced impervious surface and any existing impervious surface added on or after  
38 January 8, 2001, as specified in the Surface Water Design Manual. Flow control facilities shall meet the  
39 area-specific flow control facility requirements and the flow control facility implementation  
40 requirements applicable to the project site as specified in the Surface Water Design Manual. Flow  
41 control BMPs shall also be applied as specified in the Surface Water Design Manual. Projects subject to  
42 area-specific flow control facility requirements shall meet one of the flow control facility performance  
43 criteria listed in a. and b. of this subsection A.3., as directed by the Surface Water Design Manual. The  
44 Inglewood, Thompson and Pine Lake Creek basins, and areas draining to the Beaver Lake basin require  
45 Level Three flow control. The remainder of the City requires Level Two flow control unless downstream  
46 problems as determined by the City of Sammamish, dictate the higher level of protection of Level Three  
47 flow control.

1 a. Level Two shall meet Level One criteria and also match the predeveloped site's  
2 discharge durations for the predeveloped peak discharge rates between the fifty  
3 percent of the two-year peak flow through the fifty-year peak flow; or

4 b. Level Three shall meet Level Two criteria and also match the predeveloped site's  
5 peak discharge rate for the one hundred-year return period;

6 4. Core requirement 4: Conveyance system. All engineered conveyance system elements  
7 for proposed projects shall be analyzed, designed and constructed to provide the minimum level of  
8 protection against overtopping, flooding, erosion and structural failure as specified by the conveyance  
9 requirements for new and existing systems and conveyance implementation requirements described in  
10 the Surface Water Design Manual;

11 5. Core requirement 5: Erosion and sediment control. All proposed projects that will clear,  
12 grade or otherwise disturb the site shall provide erosion and sediment control that prevents, to the  
13 maximum extent practicable, the transport of sediment from the site to drainage facilities, water  
14 resources and adjacent properties. Erosion and sediment controls shall be applied in accordance with  
15 SMC Title 16 as specified by the temporary erosion and sediment control measures and performance  
16 criteria and implementation requirements in the City of Sammamish Surface Water Design Manual;

17 6. Core requirement 6: Maintenance and operation. Maintenance of all drainage facilities  
18 in compliance with Sammamish maintenance standards is the responsibility of the applicant or property  
19 owner as described in the Surface Water Design Manual, except those facilities for which Sammamish  
20 assumes maintenance and operation as described in this chapter and the Surface Water Design Manual;

21 7. Core requirement 7: Financial guarantees and liability. All drainage facilities constructed  
22 or modified for projects, except downspout infiltration and dispersion systems for single family  
23 residential lots, must comply with the liability requirements of this chapter and the financial guarantee  
24 requirements of SMC Title 27A;

25 8. Core requirement 8: Water quality. Proposed projects that would result in five thousand  
26 square feet or more of new pollution generating impervious surface or thirty-five thousand square feet  
27 or more of new pollution-generating pervious surface, or that are redevelopment projects that would  
28 result in a total of five thousand square feet or more of new and replaced pollution-generating  
29 impervious surface, shall provide water quality treatment facilities to treat polluted surface and storm  
30 water runoff generated by new or replaced pollution-generating impervious surface, new pollution-  
31 generating pervious surface and any existing pollution-generating impervious surface added on or after  
32 January 8, 2001, as specified in the Surface Water Design Manual. However, pervious surfaces are  
33 specifically excluded if there is a good faith agreement with the King Conservation District to implement  
34 a farm management plan for agricultural uses, and pervious areas for other uses are specifically  
35 excluded if the City of Sammamish approves a landscape management plan that controls pesticides and  
36 fertilizers leaving the site. Water quality treatment facilities shall meet the area-specific water quality  
37 treatment requirements and the water quality implementation requirements applicable to the project  
38 site as specified in the Surface Water Design Manual. The facilities specified by these requirements are  
39 designed to reduce pollutant loads according to the applicable annual average performance goals listed  
40 in a. through d. of this subsection A.8. for ninety-five percent of the annual average runoff volume:

41 a. for basic water quality: remove eighty percent of the total suspended solids;

42 b. for enhanced basic water quality: remove fifty percent of the total zinc;

43 c. for sensitive lake protection: remove fifty percent of the total phosphorus; and

44 d. for sphagnum bog protection: remove fifty percent of the total phosphorus and  
45 forty percent of the total nitrate plus nitrite. The discharge shall maintain a pH of less  
46 than 6.5 and an alkalinity of less than ten milligrams per liter.

47

1 B. A proposed project required by this chapter to have drainage review shall meet any of the  
2 following special requirements which apply to the site and which are described in detail in the Surface  
3 Water Design Manual. The City shall verify if a proposed project is subject to and must meet any of the  
4 following special requirements.

5 1. Special Requirement 1: Other adopted area-specific requirements. If a proposed project  
6 is in a designated critical drainage area, or is in an area included in an adopted master drainage plan,  
7 basin plan, salmon conservation plan, stormwater compliance plan, flood hazard reduction plan, lake  
8 management plan or shared facility plan, then the proposed project shall meet the applicable drainage  
9 requirements of the critical drainage area, master drainage plan, basin plan, salmon conservation plan,  
10 stormwater compliance plan, flood hazard reduction plan, lake management plan or shared facility plan;

11 2. Special Requirement 2: Floodplain/floodway delineation. If a proposed project contains  
12 or is adjacent to a stream, lake, wetland or closed depression, or if other City regulations require study  
13 of flood hazards relating to the proposed project, the one hundred year floodplain boundaries and  
14 floodway shall be determined and delineated on the site improvement plans and profiles and any final  
15 maps prepared for the proposed project. The flood hazard study shall be prepared for as specified in the  
16 Surface Water Design Manual;

17 3. Special Requirement 3: Flood protection facilities. If a proposed project contains or is  
18 adjacent to a stream that has an existing flood protection facility, such as a levee, revetment or berm, or  
19 proposes to either construct a new or modify an existing flood protection facility, then the flood  
20 protection facilities shall be analyzed and designed as specified in the Surface Water Design Manual to  
21 conform with the Federal Emergency Management Agency regulations as found in 44 C.F.R.;

22 4. Special Requirement 4: Source Control. If a proposed project requires a commercial  
23 building or commercial site development permit, then water quality source controls shall be applied to  
24 prevent rainfall and runoff from coming into contact with pollutants to the maximum extent practicable.  
25 Water quality source controls shall be applied in accordance with this chapter, the stormwater pollution  
26 prevention manual and the Surface Water Design Manual. All structural source controls shall be  
27 identified on the site improvement plans and profiles or final maps prepared for the proposed project;  
28 and

29 5. Special Requirement 5: Oil control. If a proposed project is a high-use site or is a  
30 redevelopment project proposing one hundred thousand dollars or more of improvements to an existing  
31 high-use site, then oil control shall be applied to all runoff from the high-use portion of the site as  
32 specified in the Surface Water Design Manual.  
33

34 C.

35 1. An adjustment to the requirements contained in this section or other requirements in  
36 the Surface Water Design Manual may be proposed. The resulting development shall be subject to all of  
37 the remaining terms and conditions of this chapter and the adjustment shall:

- 38 | a. produce a compensating or comparable result in the public interest; and
- 39 | b. meet this chapter's objectives of safety, function, appearance, environmental  
40 | protection and maintainability based upon sound engineering judgment.

41 2. If complying with subsection C.1.a. of this section will deny all reasonable use of a  
42 property, the best practicable alternative shall be obtained as determined by the director according to  
43 the adjustment process defined in the Surface Water Design Manual.

44 3. Requests for adjustments that may conflict with any other City requirement shall  
45 require review and concurrence by the applicable City department.

46 4. A request for an adjustment is a Type 1 land use decision as provided for in SMC Title 20  
47 and shall be processed in accordance with the procedures specified in the Surface Water Design Manual.

1           5.       The City may require monitoring of experimental designs and technology or untested  
2 applications proposed by the applicant in order to determine compliance with subsection C.1. of this  
3 section and the approved plans and conditions.

4           6.       An adjustment decision may be appealed by following the appeal procedures as  
5 specified in the Surface Water Design Manual.

6  
7 **13.20.040       Critical drainage and/or critical erosion areas.**

8 Development in areas where the department has determined that the existing flooding, drainage and/or  
9 erosion conditions present an imminent likelihood of harm to the welfare and safety of the surrounding  
10 community shall meet special drainage requirements set by the director until such time as the  
11 community hazard is alleviated. Such conditions may include the limitation of the volume of discharge  
12 from the subject property to predevelopment levels, preservation of wetlands or other natural drainage  
13 features or other controls necessary to protect against community hazard. Where alternate facility  
14 designs or methods will produce a compensating or comparable result in the public interest and which  
15 will meet this section's objectives of safety, function, appearance, environmental protection and  
16 maintainability, based upon sound engineering judgment, an adjustment to the special drainage  
17 requirements promulgated under this section may be proposed, provided that the resulting  
18 development shall be subject to all of the remaining terms and conditions of this chapter. Where  
19 application of this section will deny all reasonable use of a property and a facility or design that  
20 produces a compensating or comparable result cannot be obtained, then a best practicable alternative  
21 may be approved by the director according to the adjustment process defined in the Surface Water  
22 Design Manual. These standards are in addition to the applicable standards of SMC 21A.50.

23  
24 **13.20.050       Engineering plans for the purposes of drainage review.**

25 A.       These requirements are in addition to the submittal requirements established by SMC 20.05.

26       1.       All engineering plans shall be submitted to the City for review in accordance with the  
27 Surface Water Design Manual except those drainage plans developed by, or under the review of, the  
28 City of Sammamish Department of Public Works for either surface and storm water capital  
29 improvement, repair, maintenance or restoration projects or other linear government agency projects,  
30 such as roadways, railways, pipelines, utility lines and trails.

31       2.       If engineering plans are returned for any reason, they shall be returned to the applicant.

32       3.       All master drainage plans, if required, shall be submitted to the City for review in  
33 accordance with the specifications in the Surface Water Design Manual. The master drainage plan  
34 process should commence at the same time as the state Environmental Policy Act (SEPA) process.

35       4.       Drainage plans not subject to review by the City under subsection A.1. of this section  
36 shall be reviewed by the Department of Public Works in accordance with this chapter. Project  
37 applicability and compliance with this chapter shall be documented in writing and available for review.

38  
39 B.       The expiration time frames as specified in the Surface Water Design Manual shall apply to all  
40 permit and approval applications.

41  
42 C.       All plans shall be processed in accordance with the review procedures specified in the Surface  
43 Water Design Manual.

44  
45 D.       Submittal procedures, definitions and specifications for the required contents of engineering  
46 plans are presented in the Surface Water Design Manual.

47

1 **13.20.060 Construction timing and final approval.**

2 A. No work related to permanent or temporary storm drainage control for a permitted  
3 development may proceed without the approval of the director.

4  
5 B. Erosion and sediment control measures associated with both the interim and permanent  
6 drainage systems shall be:

7 1. Constructed in accordance with the approved plan prior to any grading or land clearing  
8 other than that associated with an approved erosion and sediment control plan; and

9 2. Satisfactorily sequenced and maintained until all improvements, restoration, and  
10 landscaping associated with the permit and approvals for the project are completed and the potential  
11 for onsite erosion has passed.

12  
13 C. The applicant shall have constructed and have in operation those portions of the drainage  
14 facilities necessary to accommodate the control of surface and storm water runoff discharging from the  
15 site before the construction of any other improvements or buildings on the site, or in accordance with  
16 SMC Title 19A.

17  
18 **13.20.070 Liability insurance required.**

19 The applicant required to construct the drainage facility pursuant to this chapter shall maintain a  
20 combined single limit per occurrence liability policy in the amount established annually by the City,  
21 which shall name City as an additional insured and protect the City from liability relating to the  
22 construction or maintenance of the facility until construction approval or acceptance for maintenance,  
23 whichever is last. Proof of this required liability policy shall be provided to the director prior to  
24 commencing construction of any drainage facility. If this liability insurance is not kept in effect as  
25 required, the City may initiate enforcement action pursuant to SMC Title 23.

26  
27 **13.20.080 Financial guarantees authorized.**

28 The City is authorized to require all applicants issued permits or approvals under the provisions of the  
29 title to post financial guarantees consistent with the provisions of Title 27A.

30  
31  
32 **13.20.090 Drainage facilities accepted by Sammamish for maintenance.**

33 A. The City is responsible for the maintenance, including performance and operation, of drainage  
34 facilities which have formally been accepted for maintenance by the director.

35  
36 B. The City may assume maintenance of privately maintained drainage facilities only if the  
37 following conditions have been met:

38 1. All necessary easements or dedications entitling the City to properly maintain the  
39 drainage facility have been conveyed to the City;

40 2. The director has determined that the facility is in the dedicated public road right-of-way  
41 or that maintenance of the facility will contribute to protecting or improving the health, safety and  
42 welfare of the community based upon review of the existence of or potential for:

- 43 a. flooding,  
44 b. downstream erosion,  
45 c. property damage due to improper function of the facility,  
46 d. safety hazard associated with the facility,  
47 e. degradation of water quality or in-stream resources, or

1 | f. degradation to the general welfare of the community; and  
2 | 3. The director has declared in writing acceptance of maintenance responsibility by the  
3 | City. Copies of this document will be kept on file in the Department of Public Works.  
4 |

5 | C. The director may terminate the department's assumption of maintenance responsibilities in  
6 | writing after determining that continued maintenance will not significantly contribute to protecting or  
7 | improving the health, safety and welfare of the community based upon review of the existence of or  
8 | potential for:

- 9 | 1. Flooding,
- 10 | 2. Downstream erosion,
- 11 | 3. Property damage due to improper function of the facility,
- 12 | 4. Safety hazard associated with the facility,
- 13 | 5. Degradation of water quality or in-stream resources, or
- 14 | 6. Degradation to the general welfare of the community.

15 | Copies of this document will be kept on file in the Department of Public Works.  
16 |

17 | D. A drainage facility which does not meet the criteria of this section shall remain the responsibility  
18 | of the applicant required to construct the facility and persons holding title to the property for which the  
19 | facility was required.  
20 |

21 | **13.20.100 Drainage facilities not accepted by Sammamish for maintenance.**

22 | A. The person or persons holding title to the property and the applicant required to construct a  
23 | drainage facility shall remain responsible for the facility's continual performance, operation and  
24 | maintenance in accordance with the standards and requirements of the department and remain  
25 | responsible for any liability as a result of these duties. This responsibility includes maintenance of a  
26 | drainage facility which is:

- 27 | 1. Under a maintenance guarantee or defect guarantee;
- 28 | 2. A private road conveyance system;
- 29 | 3. Released from all required financial guarantees prior to July 7, 1980;
- 30 | 4. Located within and serving only one single family residential lot;
- 31 | 5. Located within and serving a multifamily or commercial site unless the facility is part of  
32 | an approved shared facility plan;
- 33 | 6. Located within or associated with an short subdivision or subdivision which handles  
34 | runoff from an area of which less than two-thirds is designated for detached or townhouse dwelling  
35 | units located on individual lots unless the facility is part of an approved shared facility plan;
- 36 | 7. Previously terminated for assumption of maintenance responsibilities by the  
37 | department in accordance with this chapter; or
- 38 | 8. Not otherwise accepted by the City for maintenance.  
39 |

40 | B. Prior to the issuance of any of the permits for any multifamily or commercial project required to  
41 | have a flow control or water quality treatment facility, the applicant shall record a declaration of  
42 | covenant as specified in the Surface Water Design Manual. The restrictions set forth in such covenant  
43 | shall include, but not be limited to, provisions for notice to the persons holding title to the property of a  
44 | City determination that maintenance and/or repairs are necessary to the facility and a reasonable time  
45 | limit in which such work is to be completed.

46 | 1. In the event that the titleholders do not effect such maintenance and/or repairs, the  
47 | City may perform such work upon due notice. The titleholders are required to reimburse the City for any

1 such work. The restrictions set forth in such covenant shall be included in any instrument of conveyance  
2 of the subject property and shall be recorded with the records and licensing services division of King  
3 County.

4 2. The City may enforce the restrictions set forth in the declaration of covenant provided in  
5 the Surface Water Design Manual.

6  
7 C. Prior to the issuance of any of the permits and/or approvals for the project or the release of  
8 financial guarantees posted to guarantee satisfactory completion, the person or persons holding title to  
9 the subject property for which a drainage facility was required shall pay a fee established by the director  
10 as set forth in the City resolution to reasonably compensate the City for costs relating to inspection of  
11 the facility to ensure that it has been constructed according to plan and applicable specifications and  
12 standards.

13  
14 D. The duties specified in this section with regard to payment of inspection fees and  
15 reimbursement of maintenance costs shall be enforced against the person or persons holding title to the  
16 property for which the drainage facility was required.

17  
18 E. Where not specifically defined in this section, the responsibility for performance, operation and  
19 maintenance of drainage facilities and conveyance systems, both natural and constructed, shall be  
20 determined on a case-by-case basis.

21  
22 **13.20.110 Hazards.**

23 Whenever the director determines that any existing construction site, erosion and sedimentation  
24 problem and/or drainage facility poses a hazard to life and limb, endangers any property, and/or  
25 adversely affects the condition or capacity of other drainage facilities, the safety and operation of City  
26 right-of-way, utilities, and/or other property owned or maintained by the City, the applicant/person to  
27 whom the permit was issued pursuant to this chapter, the owner of the property within which the  
28 drainage facility is located, the applicant/person responsible for maintenance of the facility, and/or  
29 other person or agent in control of said property, upon receipt of notice in writing from the director  
30 shall within the period specified therein repair or otherwise address the cause of the hazardous  
31 situation in conformance with the requirements of this chapter.

32 Should the director have reasonable cause to believe that the situation is so adverse as to preclude  
33 written notice, the director may take the measures necessary to eliminate the hazardous situation;  
34 provided that the director shall first make a reasonable effort to locate the owner before acting. In such  
35 instances the applicant of whom a drainage plan was required pursuant to this chapter, the owner of  
36 the property and/or the person responsible for the maintenance of the facility shall be obligated for the  
37 payment of all costs incurred. If costs are incurred and a financial guarantee pursuant to this chapter or  
38 other City requirement has been posted, the director shall have the authority to collect against the  
39 financial guarantee to cover costs incurred.

40  
41 **13.20.120 Administration.**

42 A. Administration.

43 1. The director is authorized to promulgate and adopt administrative rules under the  
44 procedures specified in SMC 2.55, for the purpose of implementing and enforcing the provisions of this  
45 chapter. Adopted administrative rules are available to the public from the Department of Public Works.  
46 This includes, but is not limited to, the Surface Water Design Manual.

1           2.       The director is authorized to develop procedures for applying adopted rules and  
2 regulations during the review of permit applications for the development of land. These procedures may  
3 also be contained in the Surface Water Design Manual.  
4

5 B.       Inspections. The director is authorized to make such inspections and take such actions as may be  
6 required to enforce the provisions of this chapter.  
7

8 C.       Right of entry. Whenever necessary to make an inspection to enforce any of the provisions of  
9 this chapter, monitor for proper function of drainage facilities or whenever the director has reasonable  
10 cause to believe that violations of this chapter are present or operating on a subject property or portion  
11 thereof, the director may enter such premises at all reasonable times to inspect the same or perform  
12 any duty imposed upon the director by this chapter; provided that, if such premises or portion thereof is  
13 occupied, the director shall first make a reasonable effort to locate the owner or other person having  
14 charge or control of the premises or portion thereof and demand entry.  
15

16 D.       Access. Proper ingress and egress shall be provided to the director to inspect, monitor or  
17 perform any duty imposed upon the director by this chapter. The director shall notify the responsible  
18 party in writing of failure to comply with this access requirement. Failing to obtain a response within  
19 seven days from the receipt of notification the director may order the work required completed or  
20 otherwise address the cause of improper access. The obligation for the payment of all costs that may be  
21 incurred or expended by the City in causing such work to be done shall thereby be imposed on the  
22 person holding title to the subject property.  
23

24 **13.20.130       Enforcement.**

25 The City is authorized to enforce the provisions of this chapter, the ordinances and resolutions codified  
26 in it, and any rules and regulations promulgated thereunder pursuant to the enforcement and penalty  
27 provisions of SMC Title 23.  
28

29 **13.20.140       Implementation, review and revision.**

30 The department may administer a training program for users of the Surface Water Design Manual. The  
31 department may also conduct an on-going research program to evaluate the effectiveness of the  
32 requirements in meeting the purpose of this chapter. This research program may examine, but not be  
33 limited to, hydrologic and hydraulic analysis methods, stream geomorphologic analysis methods, water  
34 quality, best management practices and erosion and sediment control measures.  
35

36 **13.20.150       Severability.**

37 If any provision of this chapter or its application to any person or property is held invalid, the remainder  
38 of the chapter or the application of the provision to other persons or property shall not be affected.  
39  
40  
41

Chapter 13.25  
Surface Water Management Program

Sections:

- 13.25.010 Authority.
- 13.25.020 Purpose.
- 13.25.030 Applicability.
- 13.25.040 Policy.
- 13.25.050 Rate adjustments and appeals.
- 13.25.060 Billing procedure.
- 13.25.070 Delinquencies and foreclosures.
- 13.25.080 Surface water management fund.
- 13.25.090 Administrative standards and procedures.
- 13.25.100 Severability.

**13.25.010 Authority.**

A. There is hereby created and established the surface water management program of Sammamish under which the provisions of this chapter shall be carried out.

B. The program created in this section shall be administered by the department.

C. Whenever necessary to examine the property characteristics of a particular parcel for the purposes of implementing this chapter, the director may enter any property or portion thereof at reasonable times in compliance with the following procedures:

1. If the property or portion thereof is occupied, the director shall present identification credentials, state the reason for entry and request entry;
2. If the property or portion thereof is unoccupied, the director shall first make a reasonable effort to locate the owner or other persons having charge or control of the property or portion thereof and request entry; and
3. Unless entry is consented to by the owner or person in control of any property or portion thereof, the director, before entry, shall obtain a search warrant as authorized by the laws of the state of Washington.

D. The director is authorized to enforce this chapter, the ordinances and resolutions codified in it and any rules and regulations promulgated thereunder pursuant to the enforcement and penalty provisions of SMCTitle 23.

E. The program may provide services related to surface and storm water management, including but not limited to basin planning, facilities maintenance, regulation, financial administration, public involvement, drainage investigation and enforcement, aquatic resource restoration, surface and storm water quality and environmental monitoring, natural surface water drainage system planning, intergovernmental relations, and facility design and construction. The program may contract for services with interested municipalities or special districts including but not limited to sewer and water districts, school districts, or other governmental agencies.

1 **13.25.020 Purpose.**

2 The purpose is to promote public health, safety and welfare by establishing and operating a  
3 comprehensive approach to surface and storm water problems which would reduce flooding, erosion  
4 and sedimentation, prevent and mitigate habitat loss, enhance groundwater recharge and prevent  
5 water quality degradation. This comprehensive approach includes the following elements: basin  
6 planning, land use regulation, construction of facilities, maintenance, public education, and provision of  
7 surface and storm water management services. The most cost effective and beneficial approach to  
8 surface and storm water management is through preventative actions and protection of the natural  
9 drainage system. In approaching surface and storm water problems the Surface Water Management  
10 Program shall give priority to methods which provide protection or enhancement of the natural surface  
11 water drainage system over means which primarily involve construction of new drainage facilities or  
12 systems. The purpose of the rates and charges established herein is to provide a method for payment of  
13 all or any part of the cost and expense of surface and storm water management services or to pay or  
14 secure the payment of all or any portion of any issue of general obligation or revenue bonds issued for  
15 such services. These rates and charges are necessary in order to promote the public health, safety and  
16 welfare by minimizing uncontrolled surface and storm water, erosion, and water pollution; to preserve  
17 and utilize the many values of the City's natural drainage system including water quality, open space,  
18 fish and wildlife habitat, recreation, education, urban separation and drainage facilities; and to provide  
19 for the comprehensive management and administration of surface and storm water.  
20

21 **13.25.030 Applicability.**

22 A. Developed parcels within the service area shall be billed each year for surface and storm water  
23 management services pursuant to RCW 36.89.080. Surface and storm water management services or  
24 service charges, or both shall be imposed on developed parcels lying within cities and towns when the  
25 services or charges, or both, have been provided for by interlocal agreements between the City and the  
26 cities or towns. That portion of the rates or charges allocated to payment of debt service on revenue or  
27 general obligation bonds issued to finance storm water control facilities in areas annexed or  
28 incorporated subsequent to the issuance of the bonds shall be imposed as set forth in this chapter.  
29

30 B. The service area shall be the corporate city limits of the City of Sammamish.  
31

32 **13.25.040 Policy.**

33 A. It is the finding of the City that a number of the basins in the service area are shared with other  
34 incorporated cities or unincorporated areas. In order to achieve a comprehensive approach to surface  
35 and storm water management, the City should coordinate surface and storm water, management  
36 services with neighboring jurisdictions. In addition, the program may contract for services with  
37 interested municipalities or special districts including but not limited to sewer and water districts, school  
38 districts, port districts or other governmental agencies.  
39

40 B. It is the finding of the City that technical assistance and community education have been shown  
41 to be a cost-effective means of improving the management of the impacts of surface and storm water  
42 runoff. Technical assistance and community education regarding stewardship enables the City, its  
43 residents and businesses to comply with federal, state and local mandates and enables the City to  
44 protect its quality of life and its natural resources. The promotion of stewardship is an integral part of a  
45 comprehensive surface and storm water management program.  
46

1 C. It is the finding of the City that developed parcels contribute to an increase in surface and storm  
2 water runoff to the surface and storm water management system. This increase in surface and storm  
3 water runoff results in the need to establish rates and charges to finance the City's activities in surface  
4 and storm water management. Developed parcels shall be subject to the rates and charges of the  
5 surface water management program based on their contribution to increased runoff. The factors to be  
6 used to determine the degree of increased surface and storm water runoff to the surface and storm  
7 water management system from a particular parcel shall be the percentage of impervious surface  
8 coverage on the parcel, the total acreage of the parcel and any mitigating factors as determined by the  
9 City.

10  
11 D. It is the finding of the City that undeveloped parcels do not contribute as much as developed  
12 parcels to an increase in surface and storm water runoff into the surface and storm water management  
13 system. Undeveloped properties shall be exempt from the rates and charges of the surface water  
14 management program.

15  
16 E. It is the finding of the City that maintained drainage facilities mitigate the increased runoff  
17 contribution of developed parcels by providing on-site drainage control. Parcels served by flow control  
18 facilities which were required for development of the parcel pursuant to SMC 13.20 and approved by  
19 Sammamish or can be demonstrated as required in this chapter by the property owner to provide flow  
20 control of surface and storm water to the standards in SMC 13.20 shall receive a discount as provided in  
21 the rates and charges of the surface water management program, if the facility is maintained at the  
22 parcel owner's expense to the standard established by the department.

23  
24 F. It is the finding of the City that improvements to the quality of storm water runoff can decrease  
25 the impact of that runoff on the environment. Parcels served by water quality treatment facilities that  
26 were required for development of the parcel pursuant to SMC 13.20 and approved by the City or that  
27 can be demonstrated as required in this chapter by the property owner to provide treatment of surface  
28 and storm water to the standards in SMC 13.20 shall receive a discount as provided in the rates and  
29 charges of the surface water management program, if the facility is maintained at the parcel owner's  
30 expense to the standard established by the department.

31  
32 G. It is a finding of the City that open space properties provide a benefit to the surface and storm  
33 water management system by the retention of property in an undeveloped state. Open space properties  
34 shall receive a discount from the rates and charges to encourage the retention of property as open  
35 space.

36  
37 H. It is a finding of the City that the majority of the parcels in the service area are residential. The  
38 variance between residential parcels in impervious surface coverage is found to be minor and to reflect  
39 only minor differences in increased runoff contributions. The administrative cost of calculating the  
40 service charge individually for each residential parcel and maintaining accurate information would be  
41 very high. A flat charge for residential parcels is less costly to administer than calculating a separate  
42 charge for each parcel and is equitable because of the similarities in impervious surface coverage  
43 between residential parcels. Therefore, residential parcels shall be charged a flat charge based upon an  
44 average amount of impervious surface.

45  
46 I. It is the finding of the City that lightly to very heavily developed nonresidential parcels which  
47 have an impervious surface coverage of more than ten percent have a substantial impact on the surface

1 and storm water management system. The impact of these parcels on the surface and storm water  
2 management system increases with the size of the parcels. Therefore, lightly to very heavily developed  
3 properties shall be charged a rate determined by the percent of impervious surface coverage multiplied  
4 by the parcel acreage.

5  
6 J. It is the finding of the City that comprehensive management of surface and storm water runoff  
7 must include anticipation of future growth and development in the design and improvement of the  
8 surface and storm water management system. Service charge revenue needs shall be based upon the  
9 present and future requirements of the surface and storm water management system, and these needs  
10 shall be considered when determining the rates and charges of the program.

11  
12 K. It is the finding of the City that basin plans are essential to establishing a comprehensive  
13 approach to a capital improvement program, maintenance of facilities and regulation of new  
14 developments. A plan should analyze the measures needed to control surface and storm water runoff  
15 which results from existing and anticipated development within the basin. The measures investigated to  
16 control runoff should include land use regulation such as setback requirements or community plan  
17 revisions which revise land use densities as well as the use of drainage facilities. A plan also should  
18 recommend the quantity and water quality runoff control measures required to further the purposes set  
19 forth in this chapter, and community goals. The institutional requirements and regulations, including but  
20 not limited to land use management, funding needs, and incentives for preserving the natural surface  
21 water drainage system should be identified in the plan. The proposed ordinances and regulations  
22 necessary to implement the plan shall be transmitted to the council simultaneously with the plan.

23  
24 L. It is a finding of the City that the federal government has increased requirements concerning  
25 surface water quantity and control. The federal Clean Water Act, implemented through municipal storm  
26 water NPDES permits, mandates a wide variety of local programs to manage surface water and improve  
27 water quality. Compliance will increasingly be measured by the effectiveness of the City's surface water  
28 and water quality programs. The NPDES permit impacts operations in the Parks and Public Works  
29 departments.

30  
31 M. It is a finding of the City that Chinook salmon were listed as a threatened species in March 1999,  
32 and bull trout were listed as a threatened species in November 1999, under the federal Endangered  
33 Species Act. These listings focus the need for higher standards in managing surface water including new,  
34 expanded and more intensive programs to control the quantity of runoff as well as its quality. Programs  
35 responding to these imperatives have included the design, permitting and construction of facilities,  
36 facility retrofitting and maintenance, habitat acquisition and restoration, monitoring, regulation  
37 development and coordination with other agencies on transboundary issues.

38  
39 N. It is the finding of the City that areas with development related surface and storm water  
40 problems require comprehensive management of surface and storm water.

41  
42 O. It is the finding of the City that additional surface and storm water runoff problems may be  
43 caused by new land use development if not properly mitigated both through protection of natural  
44 systems and through constructed improvements. The Surface Water Design Manual and SMC Titles 13,  
45 16, 20 and 21A have been adopted by the City to mitigate the impact of land use development. Further  
46 mitigation of these impacts is based on expertise which continues to evolve as new information on our  
47 natural systems is obtained and new techniques are discovered. The surface water management

1 program, through reconnaissance studies, basin plans, and other special studies, will continuously  
2 provide valuable information on the existing problems and areas of the natural drainage system that  
3 need special protection. The City is researching and developing methods to protect the natural drainage  
4 system through zoning, buffering and setbacks to alleviate existing problems. Setback and buffering  
5 measures allow natural preservation of wetlands and stream corridors to occur, alleviate erosion and  
6 water pollution and provide a safe environment for the small mammals and fish which inhabit sensitive  
7 areas. Based upon the findings in this subsection, and as information and methods become available,  
8 the executive, as appropriate shall draft and submit to the council, regulations and development  
9 standards to allow protection of the surface and storm water management system including natural  
10 drainage systems.

11  
12 P. The program will maintain long term fiscal viability and fund solvency for all of its related funds.  
13 All required capital and operating expenditures will be covered by service charges and other revenues  
14 generated or garnered by the program. The program will pay all current operating expenses from  
15 current revenues and will maintain an operating reserve to minimize service impacts due to revenue or  
16 expenditure variances from plan during a fiscal year. This reserve will be calculated based on the historic  
17 variability of revenue and expenditures. The program will adopt a strategic financial planning approach  
18 which recognizes the dynamic nature of the program's fiscal operating environment. Long term  
19 projections will be updated in the program's adopted strategic plan. One-time revenues will be  
20 dedicated to one-time-only expenditures and will not be used to support ongoing requirements. The  
21 program's approach to financial reporting and disclosure will be comprehensive, open and accessible.

22  
23 Q. The program shall prepare an annual, multiyear capital improvement program which  
24 encompasses all of the program's activities related to the acquisition, construction, replacement, or  
25 renovation of capital facilities or equipment. All proposed new facilities will be subject to a consistent  
26 and rigorous needs analysis. The program's capital facilities will be planned and financed to ensure that  
27 the benefits of the facilities and the costs for them are balanced over time.

28  
29 R. The program will manage its debt to ensure continued high credit quality, access to credit  
30 markets, and financial flexibility. All of the program's debt management activities will be conducted to  
31 maintain at least the current credit ratings assigned to the City's debt by the major credit rating agencies  
32 and to maintain an adequate debt service coverage ratio. Long term debt will not be used to support  
33 operating expenses. The program will develop and maintain a central system for all debt-related records  
34 which will include all official statements, bid documents, ordinances indentures, leases, etc., for all of  
35 the program's debt and will accurately account for all interested earnings in debt-related funds. These  
36 records will be designed to ensure that the program is in compliance with all debt covenants and with  
37 state and federal laws.

38  
39 **13.25.050 Rate adjustments and appeals.**

40 A. Any person billed for service charges may file a request for rate adjustment with the division  
41 within three years of the date from which the bill was sent. However, filing of such a request does not  
42 extend the period for payment of the charge.

43  
44 B. Requests for rate adjustment may be granted or approved by the director only when one of the  
45 following conditions exists:

46 1. The parcel is owned and is the personal residence of a person or persons determined by  
47 the City as qualified for a low income senior citizen property tax exemption authorized under RCW

1 84.36.381. Parcels qualifying under this subsection B.1. shall be exempt from all charges imposed in this  
2 chapter;

3 2. The acreage of the parcel charged is in error;

4 3. The parcel is nonresidential and the actual impervious surface coverage of the parcel  
5 charged places it in a different rate category than the rate category assigned by the division;

6 4. The parcel is nonresidential and the parcel meets the definition of open space in this  
7 title. Parcels qualifying under this subsection B.4. will be charged only for the area of impervious surface  
8 and at the rate which the parcel is classified under using the total parcel acreage;

9 5. The parcel is served by one or more flow control or water quality treatment facilities  
10 required under SMC 13.20, or can be demonstrated by the property owner to provide flow control or  
11 water quality treatment of surface and storm water to the standards in SMC 13.20, and any such facility  
12 is maintained at the expense of the parcel owner to the standards required by the department. In  
13 addition to the previous requirement, any source control best management practices applicable to the  
14 facilities or activities occurring on the parcel must be implemented pursuant to the standards in SMC  
15 13.30 to prevent contaminants from entering surface water, storm water, or ground water.

16 Nonresidential parcels except in the light category qualifying under this subsection shall be charged at  
17 the rate of one lower rate category than as classified by its percentage of impervious surface coverage;

18 6. The parcel is owned or leased by a public school district which provides activities which  
19 directly benefit the surface water management program. The activities may include: curriculum specific  
20 to the issues and problems of surface and storm water management, and student activities in the  
21 community to expose students to the efforts required to restore, monitor or enhance the surface and  
22 storm water management system. Pursuant to RCW 36.89.085, the amount of the rate adjustment shall  
23 be determined by the director based upon the cost of the activities to the school district but not to  
24 exceed the value of the activity to the surface water management program. Determination of which  
25 activities qualify for the surface water management service charge reduction will be made by the  
26 division. Reductions in surface water management service charges will only be granted to school  
27 districts which provide programs that have been evaluated by the division. The rate adjustment for the  
28 school district activity may be applied to any parcel in the service area which is owned or operated by  
29 the school district;

30 7. The parcel is owned by a federally recognized tribe or member of such tribe and is  
31 located within the historical boundaries of a reservation and thus is not subject to the charges provided  
32 for in this chapter; or

33 8. The service charge bill was otherwise not calculated in accordance with this chapter.

34  
35 C. The dollar amount of debt service on revenue or general obligation bonds issued to finance  
36 storm water control facilities shall not be reduced by the rate adjustments referred to in subsection B.4.,  
37 and 5. of this section.

38  
39 D. The property owner shall have the burden of proving that the rate adjustment sought should be  
40 granted.

41  
42 E. Decisions on requests for rate adjustments shall be made by the director based on information  
43 submitted by the applicant and by the division within thirty days of the adjustment request except when  
44 additional information is needed. The applicant shall be notified in writing of the director's decision. If  
45 an adjustment is granted which reduces the charge for the current year or two prior years, the applicant  
46 shall be refunded the amount overpaid in the current and two prior years.

1 F. If the director finds that a service charge bill has been undercharged, then either an amended  
2 bill shall be issued which reflects the increase in the service charge or the undercharged amount will be  
3 added to the next year's bill. This amended bill shall be due and payable under this chapter. The director  
4 may include in the bill the amount undercharged for two previous billing years in addition to the current  
5 bill.

6  
7 G. Decisions of the director on requests for rate adjustments shall be final unless within thirty days  
8 of the date the decision was mailed, the applicant submits in writing to the director a notice of appeal  
9 setting forth a brief statement of the grounds for appeal and requesting a hearing before the City  
10 hearing examiner. The examiner's decision shall be a final decision pursuant to SMC 20.10.

11  
12 **13.25.060 Billing Procedure**

13 A. All property subject to charges of the program shall be billed based on the property  
14 characteristics existing on November 1, of the year prior to the billing year and at the rate as set forth in  
15 this chapter. Billing year is the year that the bills are sent. The service charge shall be displayed and  
16 billed on the annual property tax statement for the parcel and shall be mailed to the name and address  
17 shown on the real property tax roll at the time annual property tax bills are prepared. Parcels which are  
18 exempt from property taxes and do not receive an annual property tax statement will receive a bill only  
19 for the service charge. If a payment less than the sum of the total property tax plus service charge or less  
20 than the sum of one-half of the property tax plus one-half of the service charge is received for a  
21 combined property tax and service charge, and the parcel owner has not otherwise specified, the  
22 director of the office of finance shall first apply the payment to the annual property tax of the parcel  
23 pursuant to the provisions of RCW 84.56 and then apply any remaining amount to the service charge.

24  
25 B. The total amount of the service charge shall be due and payable to the director of the office of  
26 finance on or before the 30th day of April and shall be delinquent after that date; however, if one-half of  
27 such service charge is paid on or before the said 30th day of April, the remainder shall be due and  
28 payable on or before the 31st day of October and shall be delinquent after that date.

29  
30 C. Parcel characteristics affecting the service charge which are altered after November 1 of any  
31 year shall not be a basis for calculation of the service charge until after December 31 of the following  
32 year.

33  
34 **13.25.070 Delinquencies and foreclosures.**

35 A. Delinquent service charges shall bear interest as provided in RCW 36.89.090 and 36.89.092 at  
36 the rate of 12 percent per annum, or such rate as may hereafter be authorized by law, computed on a  
37 monthly basis from the date of delinquency until paid. Interest shall be calculated at the rate in effect at  
38 the time of payment of the charges regardless of when the charges were first delinquent.

39  
40 B. Pursuant to RCW 36.89.090, the City shall have a lien for delinquent service charges, including  
41 interest thereon, against any property subject to service charges. The lien shall be superior to all other  
42 liens and encumbrances except general taxes and local and special assessments. Pursuant to RCW  
43 36.89.090, such lien shall be effective and shall be enforced and foreclosed in the same manner as the  
44 foreclosure of real property tax liens as provided in RCW 36.94.150. The City may commence to  
45 foreclose a surface water management service charge lien after three years from the date surface water  
46 management charges become delinquent. Pursuant to RCW 36.94.150 collections shall include costs of  
47 foreclosure in addition to service charges and interest.

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**13.25.080 Surface water management fund.**

All service charges shall be deposited in the surface water management fund, which fund is hereby created to be used only for the purpose of paying all or any part of the cost and expense of providing surface water management services, or to pay or secure the payment of all or any portion of any issue of general obligation or revenue bond issued for that purpose. Moneys in the fund not needed for immediate expenditure shall be invested for the benefit of the surface water management fund pursuant to the first paragraph of RCW 36.29.020 and such procedures and limitations as are contained in City ordinance, but sufficient funds shall be transferred no later than the end of the fiscal year in which they were first appropriated. The program's funds balances and other financial resources will be invested conservatively to match strong security of principal with market rates of return. For investment purposes the City Manager or designee is hereby designated the fund manager.

**13.25.090 Administrative standards and procedures.**

Pursuant to SMC 2.55 and SMC 13.05 the director shall develop administrative standards and procedures relating to the implementation of this chapter. This includes but is not limited to:

- A. Procedures for the imposition and collection of service charges and/or for filing of liens and initiation of foreclosure on delinquent accounts and the collection of the debt service portion of the service charge in areas that annex or incorporate;
- B. Lake management plans for Beaver Lake and Pine Lake.
- C. Standards and procedures for granting discounts to the surface water management fee;
- D. Procedures for a grant program to help citizens in reducing the impact of excess storm and surface water runoff by removing impervious surface from their property.

**13.25.100 Severability.**

If any provision of this chapter, or its application to any person or circumstance is held invalid, the remainder of this chapter and the application of the provisions to other persons or circumstances shall not be affected.

Chapter 13.30  
Water Quality

Sections:

- 13.30.010 Purpose.
- 13.30.020 Discharges into waters.
- 13.30.030 Stormwater Pollution Prevention Manual.
- 13.30.040 Enforcement.
- 13.30.050 Hazards.
- 13.30.060 Criminal penalty.
- 13.30.070 Civil penalties for water quality.
- 13.30.080 Construction - intent.

**13.30.010 Purpose.**

The purpose of this chapter is to protect the City's surface and ground water quality by providing minimum requirements for reducing and controlling the discharge of contaminants. The City council recognizes that water quality degradation can result either directly from one discharge or through the collective impact of many small discharges. Therefore, this chapter prohibits the discharge of contaminants into surface and storm water and ground water, and outlines preventive measures to restrict contaminants from entering such waters. These measures include the implementation of best management practices (BMPs) by the residents of the City of Sammamish.

The City council finds this chapter is necessary to protect the health, safety and welfare of the residents of Sammamish and the integrity of the City's resources for the benefit of all by: minimizing or eliminating water quality degradation; preserving and enhancing the suitability of waters for recreation, fishing, and other beneficial uses; and preserving and enhancing the aesthetic quality and biotic integrity of the water. The City council recognizes that implementation of this chapter is required under the federal Clean Water Act, 33 U.S.C. 1251 et. seq. In meeting the intent of the Clean Water Act the City council also recognizes the importance of maintaining economic viability while providing necessary environmental protection and believes this chapter helps achieve both goals.

**13.30.020 Discharges into waters.**

A.

1. It is unlawful for any person to discharge any contaminants into surface and storm water, ground water or Puget Sound. Contaminants include, but are not limited, to the following:

- a. trash or debris;
- b. construction materials;
- c. petroleum products including but not limited to oil, gasoline, grease, fuel oil, heating oil;
- d. antifreeze and other automotive products;
- e. metals in either particulate or dissolved form;
- f. flammable or explosive materials;
- g. radioactive material;
- h. batteries;
- i. acids, alkalis, or bases;
- j. paints, stains, resins, lacquers or varnishes;

- 1 k. degreasers and solvents;
- 2 l. drain cleaners;
- 3 m. pesticides, herbicides or fertilizers;
- 4 n. steam cleaning wastes;
- 5 o. soaps, detergents or ammonia;
- 6 p. swimming pool backwash;
- 7 q. chlorine, bromine and other disinfectants;
- 8 r. heated water;
- 9 s. domestic animal wastes;
- 10 t. sewage;
- 11 u. recreational vehicle waste;
- 12 v. animal carcasses;
- 13 w. food wastes;
- 14 x. bark and other fibrous materials;
- 15 y. collected lawn clippings, leaves or branches;
- 16 z. silt, sediment or gravel;
- 17 aa. dyes, except as stated in subsection C.1. of this section;
- 18 bb. chemicals not normally found in uncontaminated water;
- 19 cc. any hazardous material or waste not listed above.

20 2. Illicit connections. Any connection identified by the director that could convey anything  
21 not composed entirely of surface and storm water directly to surface and storm water or ground water  
22 is considered an illicit connection and is prohibited with the following exceptions:

- 23 a. connections conveying allowable discharges;
- 24 b. connections conveying discharges pursuant to an NPDES permit, other than an  
25 NPDES storm water permit, or a State Waste Discharge Permit; and
- 26 c. connections conveying effluent from onsite sewage disposal systems to  
27 subsurface soils.

28  
29 B. BMPs shall be applied to any business or residential activity that might result in prohibited  
30 discharges as specified in the Stormwater Pollution Prevention Manual or as determined necessary by  
31 the director. Activities that might result in prohibited discharges include but are not limited to following:

- 32 1. Potable water line flushing;
- 33 2. Lawn watering with potable water;
- 34 3. Dust control with potable water;
- 35 3. Automobile and boat washing;
- 36 4. Pavement and building washing;
- 37 5. Swimming pool and hot tub maintenance;
- 38 6. Auto repair and maintenance;
- 39 7. Building repair and maintenance;
- 40 8. Landscape maintenance;
- 41 9. Hazardous waste handling;
- 42 10. Solid and food waste handling; and
- 43 11. Application of pesticides.

44  
45 C. The following types of discharges shall not be considered prohibited discharges for the purpose  
46 of this chapter unless the director determines that the type of discharge, whether singly or in

1 combination with other discharges, is causing significant contamination of surface and storm water or  
2 ground water:

- 3 1. Spring water;
- 4 2. Diverted stream flows;
- 5 3. Uncontaminated water from crawl space pumps, foundation drains or footing drains;
- 6 4. Lawn watering with potable water or collected rainwater;
- 7 5. Pumped groundwater flows that are uncontaminated;
- 8 6. Materials placed as part of an approved habitat restoration or bank stabilization project;
- 9 7. Natural uncontaminated surface water or ground water;
- 10 8. Flows from riparian habitats and wetlands;
- 11 9. The following discharges from boats: engine exhaust; cooling waters; effluent from  
12 sinks; showers and laundry facilities; and treated sewage from Type I and Type II marine  
13 sanitation devices;
- 14 10. Collected rainwater that is uncontaminated;
- 15 11. Uncontaminated groundwater that seeps into or otherwise enters stormwater  
16 conveyance systems;
- 17 12. Air conditioning condensation;
- 18 13. Irrigation water from agricultural sources that is commingled with stormwater runoff;
- 19 and
- 20 14. Other types of discharges as determined by the director.

21  
22 |D.

- 23 1. Dye testing is allowable but requires verbal notification to the City at least one day prior  
24 to the date of test. The City is exempt from this requirement.
- 25 2. A person does not violate subsection A. of this section if:
  - 26 a. That person has properly designed, constructed, implemented and is  
27 maintaining BMPs and is carrying out AKART as required by this chapter, but  
28 contaminants continue to enter surface and storm water or ground water; or
  - 29 b. That person can demonstrate that there are no additional contaminants being  
30 discharged from the site above the background conditions of the water entering the  
31 site.
- 32 3. A person who, under subsection D.2. of this section, is not in violation of subsection A.  
33 of this section is liable for any prohibited discharges through illicit connections, dumping, spills,  
34 improper maintenance of BMPs or other discharges that allow contaminants to enter surface  
35 and storm water or ground water.
- 36 4. Emergency response activities or other actions that must be undertaken immediately or  
37 within a time too short to allow full compliance with this chapter in order to avoid an imminent  
38 threat to public health or safety, shall be exempt from this section. The director by public rule  
39 may specify actions that qualify for this exception in City procedures. A person undertaking  
40 emergency response activities shall take steps to ensure that the discharges resulting from such  
41 activities are minimized. In addition, this person shall evaluate BMPs and the site plan, where  
42 applicable, to restrict recurrence.

43  
44 **13.30.030 Stormwater Pollution Prevention Manual.**

45 A. Compliance with this chapter shall be achieved through the use of the best management  
46 practices described in the Stormwater Pollution Prevention Manual in effect on May 24, 2011 (Effective  
47 Date of Ordinance). In applying the Stormwater Pollution Prevention Manual, the director shall first

1 require the implementation of source control BMPs. If these are not sufficient to prevent contaminants  
2 from entering surface and storm water or ground water, the director may require implementation of  
3 treatment BMPs as set forth in AKART. The City will provide, upon reasonable request, available  
4 technical assistance materials and information, and information on outside financial assistance options  
5 to persons required to comply with this chapter.  
6

7 B. In applying the Stormwater Pollution Prevention Manual to prohibited discharges from normal  
8 single family residential activities, the director shall use public education and warnings as primary  
9 method of gaining compliance with this chapter and shall not use citations, notice and orders,  
10 assessment of civil penalties and fines, or other compliance actions as authorized in SMC Title 23, unless  
11 the director determines:

- 12 1. The discharge from a normal single family residential activity, whether singly or  
13 combination with other discharges, is causing a significant contribution of contaminants to  
14 surface and storm water or ground water; or
- 15 2. The discharge from a normal single family residential activity poses a hazard to the  
16 public health, safety or welfare, endangers any property or adversely affects the safety and  
17 operation of City right-of-way, utilities or other City-owned or maintained property.

18  
19 C. Persons implementing BMPs through another federal, state or local program will not be  
20 required to implement the BMPs prescribed in the City's Stormwater Pollution Prevention Manual,  
21 unless the director determines the alternative BMPs are ineffective at reducing the discharge of  
22 contaminants. If the other program requires the development of a stormwater pollution prevention plan  
23 or other best management practices plan, the person shall make the plan available to the City upon  
24 request. Persons who qualify for exemptions include, but are not limited to, persons:

- 25 1. Required to obtain a general or individual NPDES permit from the Washington state  
26 Department of Ecology;
- 27 2. Implementing and maintaining, as scheduled, a King Conservation District-approved  
28 farm management plan;
- 29 3. Implementing BMPs in compliance with the management program of the City's  
30 municipal NPDES permit;
- 31 4. Engaged in forest practices, with the exception of forest practices occurring on lands  
32 platted after January 1, 1960, or on lands being converted to another use or when regulatory  
33 authority is otherwise provided to local government by RCW 76.09.240; or
- 34 5. Identified by the director as being exempt from this section.

35  
36 **13.30.040 Enforcement.**

37 A. The director is authorized to carry out enforcement actions pursuant to the enforcement and  
38 penalty provisions of SMC Title 23 and other enforcement provisions adopted by rule under the  
39 procedures of SMC 2.55.  
40

41 B. The director shall gain compliance with this chapter by requiring the implementation of BMPs  
42 and, when necessary, AKART. The director shall initially rely on education and informational assistance  
43 as much as possible to gain compliance with this chapter, unless the director determines a violation is a  
44 result of a flagrant act that should be addressed through immediate penalties or poses a hazard as  
45 defined in the Hazards section.  
46

1 C. The director, in consultation with other departments of the City government, shall develop and  
2 implement additional enforcement procedures. These procedures shall indicate how the City will  
3 investigate and respond to reports or instances of noncompliance with this chapter and shall identify by  
4 title the official(s) responsible for implementing the enforcement procedures.

5  
6 D. The director is authorized to make such inspections and take such actions as may be required to  
7 enforce the provisions of this chapter. Such inspections shall be made in accordance with SMC Title 23.

8 1. The director may observe best management practices or examine or sample surface and  
9 storm water or ground water as often as may be necessary to determine compliance with this chapter.  
10 Whenever an inspection of a property is made, the findings shall be recorded and a copy of the  
11 inspection findings shall be furnished to the owner or the person in charge of the property after the  
12 conclusion of the investigation and completion of the inspection findings.

13 2. When the director has made a determination under subsection 1. of this section that  
14 any person is violating this chapter, the director may require the violator to sample and analyze any  
15 discharge, surface and storm water, ground water, and/or sediment, in accordance with sampling and  
16 analytical procedures or requirements determined by the director. If the violator is required to complete  
17 this sampling and analysis, a copy of the analysis shall be provided to the City of Sammamish  
18 Department of Public Works.

19  
20 E. In addition to any other penalty or method of enforcement, the prosecuting attorney may bring  
21 actions for injunctive or other relief to enforce this chapter.

22  
23 **13.30.050 Hazards.**

24 Whenever the director determines that any violation of this chapter poses a hazard to public health,  
25 safety, or welfare; endangers any property; or adversely affects the safety and operation of City right-of-  
26 way, utilities, and/or other property owned or maintained by the City; the person holding title to the  
27 subject property, and/or other person or agent in control of said property, upon receipt of notice in  
28 writing from the director shall within the period specified therein address the cause of the hazardous  
29 situation in conformance with the requirements of this chapter.

30 Notwithstanding any other provisions of this chapter, whenever it appears to the director that  
31 conditions covered by this chapter exist requiring immediate action to protect the public health and/or  
32 safety, the director is authorized to enter at all times in or upon any such property, public or private, for  
33 the purpose of inspecting and investigating such emergency conditions. The director may without prior  
34 notice order the immediate discontinuance of any activity leading to the emergency condition. Failure to  
35 comply with such order shall constitute a misdemeanor as specified in SMC Title 23.

36  
37 **13.30.060 Criminal Penalty.**

38 Any willful violation of an order issued pursuant to Section 13.30.040 or Section 13.30.050 of this  
39 chapter for which a criminal penalty is not prescribed by state law is a misdemeanor

40  
41 **13.30.070 Civil penalties for water quality.**

42 The enforcement provisions for water quality are intended to encourage compliance with this chapter.  
43 To achieve this, violators will be required to take corrective action and comply with the requirements of  
44 this chapter, and may be required to pay a civil penalty for the redress of ecological, recreational, and  
45 economic values lost or damaged due to their unlawful action.

46 A. The provisions in this section are in addition to and not in lieu of any other penalty, sanction or  
47 right of action provided by law.

1  
2 B. Any person in violation of this chapter shall be subject to civil penalties assessed as follows:

- 3 1. An amount reasonably determined by the director to be equivalent to the economic  
4 benefit the violator derives from the violation as measured by: the greater of the resulting increase in  
5 market value of the property or business value received by the violator, or savings of construction or  
6 retrofitting costs realized by the violator performing any act in violation of this chapter; and  
7 2. An amount, not to exceed \$25,000, that is reasonably based upon the nature and  
8 gravity of the violation and the cost to the City of enforcing this chapter against the violator.  
9

10 C. Any person who, through an act of commission or omission, aids or abets in a violation shall be  
11 considered to have committed the violation for the purposes of the civil penalty.  
12

13 D. Each violator is jointly and severally liable for a violation of this chapter. The director may take  
14 enforcement action, in whole or in part, against any violator. The decisions whether to take  
15 enforcement action, what type of action to take, and which person to take action against, are all entirely  
16 within the director's discretion. Factors to be used in taking such enforcement actions shall be:

- 17 1. Awareness of the violation;  
18 2. Ability to correct the violation;  
19 3. Cooperation with government agencies;  
20 4. Degree of impact or potential threat to water or sediment quality, human health, or the  
21 environment.

22 In the event more than one person is determined to have violated the provisions of this chapter, all  
23 applicable civil penalties may be imposed against each person, and recoverable damages, costs, and  
24 expenses may be allocated among the persons on any equitable basis. Factors that may be considered in  
25 determining an equitable allocation include:

- 26 a. Awareness of the violation;  
27 b. Ability to correct the violation;  
28 c. Ability to pay damages, costs, and expenses;  
29 d. Cooperation with government agencies;  
30 e. Degree of impact or potential threat to water or sediment quality, human health, or the  
31 environment.

32  
33 E. The director or the director's designee may engage in mitigation discussions with the violator.  
34 The director or the director's designee may reduce the penalties based upon one or more of the  
35 following mitigating factors:

- 36 1. The person responded to City attempts to contact the person and cooperated with  
37 efforts to correct the violation;  
38 2. The person showed due diligence and/or substantial progress in correcting the violation;  
39 or  
40 3. An unknown person was the primary cause of the violation.

41 Payment of a monetary penalty pursuant to this chapter does not relieve the person of the duty to  
42 correct the violation.  
43

44 **13.30.080 Construction – Intent.**

45 This chapter is enacted as an exercise of the City's power to protect and preserve the public health,  
46 safety and welfare. Its provision shall be exempted from the rule of strict construction and shall be  
47 liberally construed to give full effect to the objectives and purposes for which it was enacted. This

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1 | chapter is not enacted to create or otherwise establish or designate any particular class or group of  
2 | persons who will or should be especially protected or benefited by the terms of this chapter.  
3 | The primary obligation of compliance with this chapter is placed upon the person holding title to the  
4 | property. Nothing contained in this chapter is intended to be or shall be construed to create or form a  
5 | basis for liability for the City, the department, its officers, employees or agents for any injury or damage  
6 | resulting from the failure of the person holding title to the property to comply with the provisions of this  
7 | chapter, or by reason or in consequence of any act or omission in connection with the implementation  
8 | or enforcement of this chapter by the City, department, its officers, employees or agents.  
9 |  
10 |

Chapter 13.35  
Fertilizers

Sections:

- 13.35.010 Fertilizers containing phosphorous - application - prohibited - exceptions - Department of Public Works to adopt standards and procedures.
- 13.35.020 Fertilizers on impervious surfaces - application prohibited - containment and disposition if release.
- 13.35.030 Consumer education and outreach by department of Public Works

**13.35.010 Fertilizers containing phosphorous - application - prohibited - exceptions - Department of Public Works to adopt standards and procedures.**

A. Except as provided in subsection B. of this section, a person may not apply to turf a fertilizer containing the plant nutrient phosphorus.

B. Subsection A. of this section does not apply when:

1. Soil test results or other certification by a turf specialist performed within the three years previous to the application indicates that the level of available phosphorus in the soil is insufficient to support healthy turf growth, and the test results or certification, and the application rate, are consistent with best practice standards approved by the City Department of Public Works. In developing the best practice standards, the department shall seek input from the Washington State University turfgrass specialists;
2. The property owner or an agent of the property owner is first establishing turf via seed or sod procedures and only during the first calendar year;
3. The fertilizer containing the plant nutrient phosphorus is applied to a golf course consistent with golf course management practices intended to minimize potential for fertilizer runoff; or
4. Applying turf fertilizer for agricultural or horticultural uses.

C. The Department of Public Works shall adopt appropriate standards and procedures for the purposes of this section.

**13.35.020 Fertilizers on impervious surfaces - application prohibited - containment and disposition if release.**

A person may not apply a fertilizer to an impervious surface. Fertilizer released on an impervious surface must be immediately contained and either legally applied to turf or another legal site or returned to the original container or another appropriate container.

**13.35.030 Consumer education and outreach by department of Public Works.**

The Department of Public Works shall seek to identify opportunities for grant funding and partnerships to support a consumer education and outreach effort, making use of existing outreach materials produced by other entities to the extent possible. If the state Department of Agriculture produces consumer information on application restrictions of fertilizer containing the plant nutrient phosphorus or on the impacts of phosphorus on the waters of the region, and on recommended best practices for turf fertilizer and other residential landscaping uses, the Department of Public Works shall cooperate in the distribution of the information, including making recommendations for appropriate locations or

ATTACHMENT "A"

- 1 | parties to receive such information, as well as accommodating electronic links on its agency website for
- 2 | any electronic information produced.

## CITY OF SAMMAMISH SURFACE WATER DESIGN MANUAL ADDENDUM

### PREFACE – How to Use this Document

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#### **General Introduction**

This document was prepared for the City of Sammamish to meet the requirements of the NPDES Phase 2 permit to develop, implement, and enforce a program to reduce pollutants in stormwater runoff from new development, redevelopment and construction site activities. Per the NPDES permit, this program applies to all sites that disturb a land area 1 acre or greater (the NPDES regulatory threshold), including projects less than one acre that are part of a larger common plan of the development or sale. The program applies to private and public development, including roads.

The City of Sammamish has adopted the 2009 King County Surface Water Design Manual (2009 KCSWDM) in order to be in compliance with its Phase II Municipal Stormwater permit. This Addendum to the 2009 KCSWDM defines how the requirements of the KCSWDM are to be implemented within the City of Sammamish. The Addendum specifies all changes, additions, and deletions to the 2009 KCSWDM to make it appropriate for use within the City of Sammamish. The 2009 KCSWDM along with this Addendum define the drainage requirements for development and redevelopment projects within the City.

Ecology has allowed local jurisdictions to follow previous stormwater requirements for projects disturbing less than one acre. The City has elected to continue their previous practice of applying the requirements of the 1998 King County Surface Water Design Manual (1998 KCSWDM) to those projects disturbing less than the required threshold (1 acre).

#### **Which Manual should be used**

If your project will disturb less than acre and is not part of a larger common plan or sale, then use the 1998 KCSWDM in conjunction with the applicable sections of this addendum. If your project proposes to disturb more than 40,000 sq ft but less than an acre, then a pre-construction on-site inspection is required to review the proposed clearing limits, and a post construction survey is required to certify that less than an acre was disturbed.

Projects that propose to disturb over an acre shall use the 2009 KCSWDM in conjunction with this addendum.

#### **Purpose of and Need for the Addendum**

The City has been issued a Phase II Municipal Stormwater Permit (Permit) effective February 16, 2007. The Permit was issued under the National Pollutant Discharge

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Elimination System (NPDES), as administered by the Washington State Department of Ecology (Ecology) within Washington State. The Permit specifies minimum requirements and technical thresholds for stormwater mitigation needed for construction sites, new developments, and redevelopments.

Ecology prepared the 2005 Stormwater Management Manual for Western Washington to provide technical guidance to control the quantity and quality of stormwater runoff from new developments and redevelopments. The measures included in the Ecology manual are considered necessary to comply with state water quality standards and protect beneficial uses. If a jurisdiction adopts the 2005 Ecology manual or equivalent manual as approved by Ecology, they will meet one of the requirements of their NPDES permit.

The City of Sammamish has previously relied upon the earlier versions of the KCSWDM to guide stormwater mitigation within the City. King County recently updated its manual to be consistent with the 2005 Ecology manual. Ecology has deemed the 2009 KCSWDM and associated requirements to be equivalent to the 2005 Ecology Manual. By adopting the 2009 KCSWDM and addressing the associated requirements, the City will be in compliance with the NPDES requirements that rely on the Ecology manual or approved equivalent.

The purpose of this Addendum is to tailor the KCSWDM to meet the unique conditions within the City, and be consistent with the City codes, organization and processes. No substantive changes have been made to the KCSWDM in order to maintain equivalency in requirements and the level of protection provided by the KCSWDM.

### **Relationship of the KCSWDM and the City of Sammamish Low Impact Development (LID) Code**

The City of Sammamish recently adopted low impact development code amendments. The 2009 KCSWDM encourages LID through careful site planning to limit disturbance of native vegetation and it also requires consideration of specific LID techniques to reduce runoff from developed sites. The KCSWDM provides specific design guidance for implementation of the measures encouraged in the City's LID code. As a result, the 2009 KCSWDM and the City of Sammamish LID ordinance complement each other.

### **How to Use this Document**

This Addendum shall be used in coordination with the 2009 KCSWDM for the following:

- To translate specific wording or reference from King County to the City.
- To cross-reference City ordinances and City maps in lieu of King County ordinances and maps.
- To provide a linkage or reference to other City requirements such as more restrictive requirements outlined in basin plans and the City's Critical Areas Ordinances.
- To provide exceptions and additions to the KCSWDM.

The 2009 KCSWDM shall be used in its entirety except as directed in this Addendum. Exceptions and additions to the 2009 KCSWDM are organized and referenced by chapter and section in the same manner as the 2009 KCSWDM. Some global changes are provided in this preface, which shall be applied throughout the entire 2009 KCSWDM. The user shall override the maps and references to other documents as indicated within this Addendum.

## Addendum Organization

The information presented in this Addendum is organized as follows:

- **Preface – How to use this Document:** This preface provides instructions for using the City of Sammamish’s Addendum to the 2009 KCSWDM. It also defines terms in the KCSWDM that are used differently for the City of Sammamish; City departments that are equivalent to county departments referred to in the KCSWDM; and designations from the KCSWDM that do not apply to proposals in the City of Sammamish.
- **Chapter 1 – Drainage Review Requirements:** The City of Sammamish has made several minor changes to Chapter 1 of the 2009 KCSWDM. This Addendum provides replacement and supplemental text for specific sections of Chapter 1. Apart from these changes, the King County version of Chapter 1 applies for proposals in the City of Sammamish.
- **Chapter 2 – Drainage Plan Submittal:** The City of Sammamish has made minor changes to Chapter 2 of the 2009 KCSWDM. The King County version of Chapter 2 applies for proposals in the City of Sammamish, except that the applicant shall refer to the City of Sammamish documents for technical submittal requirements, project plan requirements, and as-built requirements.
- **Chapter 3 – Hydrologic Analysis and Design:** The City of Sammamish has made no changes to Chapter 3 of the 2009 KCSWDM. The King County version of Chapter 3 applies for proposals in the City of Sammamish. This Addendum to Chapter 3 provides guidance on the application of the various flow control standards specified in the 2009 KCSWDM.
- **Chapter 4 – Conveyance System Analysis and Design:** The City of Sammamish has made no changes to Chapter 4 of the 2009 KCSWDM. The King County version of Chapter 4 applies for proposals in the City of Sammamish.
- **Chapter 5 – Flow Control Design:** The City of Sammamish has made very minor changes to Chapter 5 of the 2009 KCSWDM. This addendum to Chapter 5 provides replacement text for the sections that are changed. Apart from these changes, the King County version of Chapter 5 applies for proposals in the City of Sammamish.

The City of Sammamish has adopted a Low Impact Development Ordinance that encourages the use of LID techniques within the City. LID applications can be used to reduce the size of flow control facilities following the credits specified in the 2009 KCSWDM.

- **Chapter 6 – Water Quality Design:** The City of Sammamish has made minor changes to Chapter 6 of the 2009 KCSWDM. This addendum to Chapter 6 provides replacement text for the sections that are changed. Apart from these changes, the King County version of Chapter 6 applies for proposals in the City of Sammamish.

The City of Sammamish requires higher levels of phosphorus removal for some lakes based on specific studies. The 2009 KCSWDM Addendum identifies the procedures to follow and the areas that are involved in higher levels of phosphorus removals.

- **Definitions:** The City of Sammamish has made changes to the definitions section of the 2009 KCSWDM. This Addendum to the Definitions section provides replacement text for the definitions that are changed. Apart from these changes, the King County version of the Definitions Section applies for proposals in the City of Sammamish.
- **Appendices:** Appendix B does not apply to the City of Sammamish. Appendices A, C, and D apply to proposals in the City of Sammamish.
- **References:** King County Reference sections 2, 3, 4B, 7C, 8M through 8Q, 9, and 10 do not apply to the City of Sammamish. King County Reference sections 7b, 8G, 8J, 8K, 8L have been replaced by a City of Sammamish reference. The King County version of Reference section 1, 4A, 4C, 5, 6, 7A and 8A through 8F, 8G, 8I apply to proposals in the City of Sammamish. New reference number 11 has been added.

### City Equivalents for County Agencies

Unless the context requires otherwise, any reference to “County”, “King County”, or county department, shall refer to the City of Sammamish and any reference to county staff shall refer to the City Manager or designee, unless specifically referring to the Department of Community Development (DCD).

### City Equivalents for County Ordinances

For proposals in the City of Sammamish, all reference in the KCSWDM to the following ordinances or municipal codes shall be replaced by reference as indicated in the following table.

**City of Sammamish Surface Water Design Manual Addendum**

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King County Code (KCC)	Description	Sammamish Municipal Code (SMC)	Description
KCC 16.82	BUILDING AND CONSTRUCTION STANDARDS-Clearing and Grading	SMC 16.15	Clearing and Grading
KCC 21A.14	Development Standards Design Requirements	SMC 21A.25	Development Standards – Density and Dimensions
KCC 21A.24	Critical Areas	SMC 21A.50	Development Code – Environmentally Critical Areas
KCC 21A.06	Technical Terms and Land Use Definitions	SMC 21A.15.254	Definitions
KCC 20.14	Basin Plans	SMC 24.200	Interim Comprehensive Plan – Basin Plans
KCC 25	Shoreline Management	SMC 25	Shoreline Management
KCC 9*	Surface Water Management	SMC 13	Surface Water Management
		SMC 15.10	Flood Damage Prevention

\*Title 9 still applies to the City of Sammamish per Ordinance 099-17, and is supplemented with SMC 15.

In general, references to the King County Critical Areas Ordinance (KCC 21A) are to be replaced by reference to the Sammamish Municipal Code (SMC 21A), particularly, chapter SMC 21A.50, Environmentally Critical Areas. Definitions for critical areas terminology may be found in SMC 21A.15. The following table provides additional detail on critical areas.

## City of Sammamish Surface Water Design Manual Addendum

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King County Code (KCC)	Description	Sammamish Municipal Code (SMC)	Description
Title 2	Administration	20	Administrative Procedures, Environmental Policy
21A.24.230	Flood hazard area	21A.50.230 15.10	Frequently flooded areas Flood Damage prevention
21A.24.311 – 21A.24.314	Critical Aquifer recharge area	21A.50.280  21A.15.253	Critical aquifer recharge areas – Development standards and permitted alterations  Definition
21A.24.230	Erosion hazard area	21A.50.220  21A.50.225  21A.15.415	Erosion hazard areas – Development standards and permitted alterations.  Erosion hazards near sensitive water bodies – Special district overlay.  Definition
21A.24.280	Landslide hazard area / Landslide hazard drainage area	21A.50.260  21A.15.680	Landslide hazard area – Development standards and permitted alterations  Definition
21A.24.290	Seismic hazard areas	21A.50.270  21A.15.1045	Seismic hazard area – Development standards and permitted alterations  Definition
21A.24.310	Steep slope hazard areas	21A.15.1230 21A.15.1230	Definition. Steep slope hazard areas now included as part of landslide hazard areas.  Definition
21A.24.318 – 21A.24.345	Wetlands areas	21A.50.290 – 21A.50.320  21A.15.1415	Wetlands - Development standards and permitted alterations  Definition
21A.24.355 – 21A.24.381	Aquatic Areas	21A.50.330 – 21A.50.350	Streams
21A.24.383 - 21A.24.388	Wildlife habitat conservation areas	21A.15.468 21A.50	Wildlife habitat conservation areas

## City Equivalents for County Maps

For proposals in the City of Sammamish, all reference in the KCSWDM to the following maps shall be replaced by reference as indicated in the following table.

King County Map or Designation	City of Sammamish Map*
<b>Flow Control Applications Map</b>	<b>Flow Control Applications Map</b> <b>Map to be provided by the City</b>
<b>Landslide Hazard Drainage Areas Map</b>	<b>Landslide Hazard Drainage Area Map</b> <b>Map to be provided by the City</b>
<b>Water Quality Applications Map</b>	<b>Water Quality Applications Map</b> <b>Map to be provided by the City</b>
Flood Hazard Area as defined in KCC 21A.06	<b>Environmentally Sensitive Areas Map</b> Frequently flooded areas include all areas of special flood hazards within the jurisdiction of the City of Sammamish as defined in SMC 21A.50.230 and as shown on the Environmentally Sensitive Areas Map.
Erosion Hazard Area*	Definition provided in SMC 21A.50.220
Landslide Hazard Area*	Definition provided in SMC 21A.50.260
Critical Aquifer Recharge Area*	Definition provided in SMC 21A.50.280

\* Maps are on the City's web site at <http://www.ci.sammamish.wa.us/Maps.aspx>.

## City Equivalents for County Plans or Studies

In general, references to county-approved plans or studies in the KCSWDM are to be replaced by reference to appropriate City-approved plans or studies. If comparable City-approved plans or studies do not exist, then references to County-approved plans or studies shall be retained for proposals in the City of Sammamish.

## County Designations that do not Apply in the City

The following designations are used in the 2009 KCSWDM but are not currently used in the City of Sammamish; any reference in the KCSWDM to the existence of areas with these designation or thresholds or requirements for such areas is to be disregarded for proposals in the City of Sammamish:

- **Agricultural Project**
- **Coal Mine Hazard Area**
- **Forest Production Zone Area**
- **Master Drainage Plans (MDPs)**
- **Rural Residential Development**
- **Sensitive Area Folio** - refer to City of Sammamish Sensitive Areas Maps at <http://www.ci.sammamish.wa.us/Maps.aspx>
- **Stormwater Compliance Plans (SWCPs)**
- **Urban Planned Development**
- **Zoning Classifications:** The KCSWDM references to Agricultural (A) Zoning, Forest (F) Zoning, or Rural (R) Zoning are intended for areas outside of the Urban Growth Boundary; therefore, the City of Sammamish contains no equivalent zoning. Project proponents should refer to City zoning maps to determine which zoning classifications apply to their projects.

## Equivalency of the KCSWDM Relevant to the City of Sammamish

Note that King County Code (KCC) Chapter 9.04 (Surface Water Runoff Policy) and the KCSWDM alone are not equivalent with the Ecology manual. In a letter to King County dated February 19, 2008, Ecology identified additional requirements that a Phase II community needs to incorporate in order to be able to adopt the KCSWDM as an equivalent to the Ecology Manual. These other adopted requirements and the aspects of the Ecology manual or permit requirements that they address are listed in the following table. The table also identifies the equivalent City of Sammamish code or the requirement that needs be followed to obtain equivalency and be in compliance with the Permit.

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Ecology Requirement	King County Code (KCC)	Sammamish Municipal Code (SMC) or Requirement
<p>Construction erosion and sediment controls are required for all new and redevelopment projects, regardless of project size.</p>	<p>To meet this requirement, King County relies on KCC 16.82.095 Clearing and Grading to require erosion and sediment controls at all sites where a site is disturbed, regardless of whether a permit is required.</p>	<p>The City of Sammamish meets this requirement in SMC 16.15.090 Clearing and Grading.</p>
<p>The application of construction erosion and sediment control requirements and the soil quality and depth best management practice (BMP) for flow control are not currently located in the KCSWDM.</p>	<p>These requirements are located in KCC 16.82 Clearing and Grading.</p>	<p>To meet this requirement, follow “BMP T5.13: Post- Construction Soil Quality and Depth” in the Ecology Manual, and provided herein as Reference 11.</p>
<p>The wetlands protection requirement (Minimum Requirement #8) is not contained in the KCSWDM,</p>	<p>Wetland protection requirements are located in KCC 21A.24 Critical Areas.</p>	<p>The City of Sammamish meets this requirement in SMC 21A.50.290 through 21A.50.632.</p> <p>Wetland management area- Special district overlay is provided in 21A.50.322.</p> <p>Wetland definitions are proved in SMC 21A.15.1395 through 21A.15.1415.</p>
<p>Exemptions for treatment and flow control in rural areas (allowed for up to 4% total impervious area and 15% new pervious area).</p>	<p>Ecology approves the exemptions based on the County’s rural area clearing restrictions in KCC 16.82 Clearing and Grading.</p> <p>Buffer requirements are contained in KCC 21A.24 Critical Areas.</p>	<p>The City of Sammamish meets these requirements in SMC 16.15 and SMC 21A.50.</p>



## CHAPTER 1 – Drainage Review and Requirements

The City of Sammamish has made several minor changes to Chapter 1 of the 2009 KCSWDM. This chapter provides replacement and supplemental text for specific sections of Chapter 1. Apart from these changes, the King County version of Chapter 1 applies for proposals in the City of Sammamish. The City’s changes to the County document are as follows:

- **Key Terms and Definitions (page 1-1 of the 2009 KCSWDM)** — Replace all references to KCC 21A with SMC 21A. In addition, the following changes to specific terms apply:

Term (page)	Action
Critical aquifer recharge area (p 1-2)	<p><i>Replace as follows per SMC 21A.15.253:</i>                      “Critical aquifer recharge areas” is the critical area designation that is applied to areas where extra protection of groundwater quantity and quality is needed because of known susceptibility to contamination and importance to drinking water supply. Such areas are delineated on maps provided by the City. See the “Definitions” section for more details.</p> <p>Critical aquifer recharge areas are regulated in SMC 21A.50.280 Critical aquifer recharge areas – Development standards.</p> <p>Also mapped. See City’s website</p>
Critical Drainage Area (p 1-2)	<p><i>Replace as follows per SMC 21A.15.255:</i>                      “Critical drainage area” means an area that has been formally determined by the King County surface water management department to require more restrictive regulation than countywide standards afford in order to mitigate severe flooding, drainage, erosion, or sedimentation problems that result from the cumulative impacts of development and urbanization. (Ord. O2003-132 § 10).</p> <p>Critical drainage areas are defined in SMC 21A.15.255 and are regulated in SMC 21A.50.355 Lake management areas – Special District overlay.</p>
Erosion hazard area (p 1-2)	<p><i>Replace as follows per SMC 21A.15.415:</i>                      “Erosion hazard area” is the critical area designation that is applied to areas underlain by soils that are subject to severe erosion when disturbed. See the “Definitions” section for more details.</p> <p>Erosion hazard areas are regulated in SMC 21A.50.220 Erosion hazard areas – Development standards and permitted alterations.</p>

Term (page)	Action
Flood Hazard Area (p 1-3)	<i>Replace as follows per SMC 15 Flood Damage Prevention:</i> SMC 15 shall be the basis for establishing the areas of special flood hazard.
Landslide Hazard Area (p 1-3)	<i>Replace as follows per SMC 21A 15.680:</i> “Landslide hazard area” is the critical designation that is applied to areas potentially subject to severe risk of landslide due to topography, soil conditions, and geology.

- **Section 1.1.1 PROJECTS REQUIRING DRAINAGE REVIEW (page 1-9 of the 2009 KCSWDM)** — Replace the “King County Permits and Approvals” table with the following table:

City of Sammamish Permits and Approvals
Construction Permits Right of Way Permit Site Development Permits Conditional Use Permits Clear and Grade Permit Shoreline Management Substantial Development Permits Short Subdivision Developments (Short Plat) Subdivision Developments (Plats) Commercial Site Development Permit (CSDP) Unified Zone Development Permit (UZDP) Plat Alterations
Notes: See SMC 20.05 - PROCEDURES FOR LAND USE PERMIT APPLICATIONS, PUBLIC NOTICE, HEARINGS, AND APPEALS for additional information.

- **Section 1.2 CORE REQUIREMENTS, Downstream Water Quality Problems Requiring Special Attention (page 1-26 of the 2009 KCSWDM)** — The following supplemental information is added to this section:

The 2009 KCSWDM recognizes water quality problems requiring special mitigation measures to protect receiving waters. A water quality problem is defined as a problem documented by the state to exceed the state’s numeric water quality standard. The 2009 KCSWDM references Category 2, 4, and 5 water quality problems as requiring special attention. Within the City of

Sammamish, the following water quality problems are currently listed by the Department of Ecology, based on the 2008 Water Quality Assessment, approved by the U.S. Environmental Protection Agency on January 29, 2009. The latest designated impaired waterbodies can be viewed at <http://apps.ecy.wa.gov/wqawa/viewer.htm>.

Impaired Water Body	Parameter	Category*
Lake Sammamish	Dissolved oxygen, fecal coliform	5
Lake Sammamish	Total phosphorus	2
Pine Lake Creek	Fecal coliform, dissolved oxygen, total phosphorus	5
Laughing Jacobs Creek	Fecal coliform, dissolved oxygen	5
Ebright Creek	Fecal coliform	5
Ebright Creek	Dissolved oxygen	2
Evans Creek	Fecal coliform, dissolved oxygen, temperature	4a
Evans Creek	pH	2
Beaver Lake No. 2	Total phosphorus	2

\* Definition of Categories for impaired waterbodies:

- Category 2: Waters of concern, some evidence of water quality problem.
- Category 4 (a and b): Polluted waters with a plan (TMDL) or pollution control program in place to address the problem.
- Category 5: Polluted waters, a TMDL plan is required.

Projects that discharge to the impaired waterbodies identified above may be required to implement special treatment to address the water quality problem in accordance with the requirements outlined in Section 1.2.2.3, Water Quality Problem Impact Mitigation.

Studies and lake management plans have determined that Beaver and Pine Lakes within the City of Sammamish require a higher level of total phosphorus reduction than that currently required by the 2009 KCSWDM. For projects that drain to Beaver Lake or Pine Lake, the project proponent shall contact the City for specific requirements necessary to attain the desired level of total phosphorus reduction.

The federal Clean Water Act requires that a Total Maximum Daily Load (TMDL) cleanup plan be developed for each of the waterbodies on the state's list of impaired waterbodies, known as the "303(d) list." The TMDL study

identifies pollution problems in the watershed, and specifies how much pollution needs to be reduced or eliminated to achieve clean water. Ecology has prepared TMDLs for fecal coliform bacteria, temperature and dissolved oxygen for the Bear-Evans watershed. Strategies identified in the TMDLs to address the water quality impairment in the Bear-Evans watershed are listed below. Development or redevelopment projects within the City of Sammamish that ultimately drain to Evans Creek should incorporate these actions as appropriate.

### **TMDL - Implementation Strategy for Fecal Coliform Bacteria in the Evans Creek Watershed**

- Implement structural (as appropriate) and non-structural stormwater source control best management practices (BMPs).
- Restore riparian vegetation to help filter out stormwater pollutants.
- Properly manage domestic animal and livestock wastes.

### **TMDL - Implementation Strategy for Temperature and Dissolved Oxygen in the Evans Creek watershed**

- Plant new and preserve existing trees in the riparian zone along lengths of the creeks.
- Investigate opportunities to enhance groundwater recharge.
- Restore and protect wetlands in areas that will benefit the stream and enhance habitat.
- Consider a water management strategy that recognizes the benefits of maintaining summer baseflows.
- Minimize human-caused sources of nutrients in the watershed.

### **■ Soil Amendment Requirement**

All projects that propose 7,000 square feet of land disturbing activity, or more, are required to amend the soils as specified below. This requirement is intended to apply to all projects independent of what surface water design manual is used.

- Except as otherwise provided below, areas that have been cleared and graded shall have the soil moisture holding capacity restored to that of the original undisturbed soil native to the site to the maximum extent practicable. The soil in any area that has been compacted or that has had some or all of the duff layer or underlying topsoil removed shall be amended to mitigate for lost moisture-holding capacity. The amendment shall take place between May 1 and October 1. The topsoil layer shall be a minimum of eight inches thick, unless the applicant demonstrates that a different thickness will provide conditions equivalent to the soil moisture-holding capacity native to the site. The topsoil layer shall have an organic matter content of between five to ten percent dry weight and a pH suitable

for the proposed landscape plants. When feasible, subsoils below the topsoil layer should be scarified at least four inches with some incorporation of the upper material to avoid stratified layers. Compost used to achieve the required soil organic matter content must meet the definition of "composted materials" in WAC 173-350-220.

- This subsection does not apply to areas that: a. Are subject to a state surface mine reclamation permit; or b. At project completion are covered by an impervious surface, incorporated into a drainage facility or engineered as structural fill or slope.
- **Section 1.3.1 SPECIAL REQUIREMENT #1: OTHER ADOPTED AREA-SPECIFIC REQUIREMENTS (page 1-77 of the 2009 KCSWDM)** — Replace the table in Section 1.3.1 on page 1-78 with the following:

Threshold	Requirement
IF a proposed project is in a basin plan or lake management plan...	THEN the proposed project shall comply as codified by the City of Sammamish Municipal Code.



## CHAPTER 2 – Drainage Plan Submittal

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The City of Sammamish has added supplemental information and made minor changes to Chapter 2 of the 2009 KCSWDM, as described below. Apart from this information, project proponents should refer to the county document for guidance on drainage plan submittal. All submittal reviews shall be conducted by the Department of Community Development (DCD).

### Supplemental Information

As part of our Surface Water Design Manual the applicant shall refer to the following documents for Project Plans and As-Builts.

- 1) Site Development Permit – Technical Submittal Requirements (Pages 3-5 relate to Stormwater). This document is provided on the city website at: <http://www.ci.sammamish.wa.us/files/document/7089.pdf>
- 2) The applicant shall use the *City of Sammamish Standard Development Project Close-out (M/D Period) PW Administration Items Requirements/Checklist* form (available from the City of Sammamish Department of Community Development as a guide to assembling a *First Submittal Intake* package.

### Section 2.4.2 FINAL CORRECTED PLAN SUBMITTAL (page 2-35 of the 2009 KCSWDM) — Replace Section 2.4.2 in entirety as follows:

The applicant shall use the *City of Sammamish Standard Development Project Close-out (M/D Period) PW Administration Items Requirements/Checklist* form (available from DCD ) as a guide to assembling a *Second Submittal Intake* package for project closeout.



## CHAPTER 3 – Hydrologic Analysis and Design

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The City of Sammamish has made no changes to Chapter 3 of the 2009 KCSWDM. Project proponents should refer to the county document for guidance on hydrologic analysis and design.

The City of Sammamish has identified specific areas requiring Level 2 or Level 3 flow control as defined within the KCSWDM. Flow control areas are identified in the flow control maps accompanying this Addendum.

The City of Sammamish accepts continuous models that have been approved by Ecology. Included among these are:

- **King County Runoff Time Series (KCRTS):** This is the hydrologic model that accompanies the 2009 KCSWDM. Ecology has deemed this model to be equivalent to the requirements of the Ecology manual provided that compliance for the flow-duration curves are consistent with the method Ecology uses. The model includes hourly and 15-minute rainfall. The 15-minute rainfall is used to determine peak flows used for conveyance design.
- **Western Washington Hydrologic Model (WWHM):** This is the hydrologic model that accompanies the Ecology manual. WWHM incorporates routines to evaluate LID techniques. WWHM was initially developed for detention and water quality design and did not focus on peak flow predictions for conveyance design. The standard model does not include rainfall data that would be suitable for determining peak flows for conveyance design.
- **MGSFlood:** This is the hydrologic model originally developed for Washington State Department of Transportation (WSDOT) for use in transportation projects. MGSFlood incorporates an extended rainfall database of 158 years in length created by combining rainfall records from different locations in the Pacific Northwest. It has recently incorporated a rainfall that is disaggregated to a 5-minute timestep to assist in the design of conveyance. MGSFlood also incorporates routines to evaluate LID techniques

The approved models are all derivatives of the Hydrologic Simulation Program-FORTRAN (HSPF) model. The City also accepts use of the HSPF model, provided suitable documentation is provided and approved concerning the runoff parameters used for the analyses. Approved regional parameters or basin-specific parameters developed during a basin plan can be used. Alternative parameters can be used following the protocols described in the 2009 KCSWDM.

Hydrologic analysis methods must follow “Table 3.2 Acceptable Uses of Runoff Computation Methods” found on page 3-10 of the 2009 KCSWDM. Derivatives of HSPF (e.g., KCRTS, MGSFlood, and WWHM) can be applied as indicated under the “KCRTS” column. As noted above, there are differences the rainfall data used for these derivative models. These differences are most noticeable in the generation of peak flows

used for conveyance design. The City of Sammamish currently accepts both KCRTS and MGSFlood for conveyance design.

## CHAPTER 4 – Conveyance System Analysis and Design

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The City of Sammamish has made no changes to Chapter 4 of the 2009 KCSWDM. Project proponents should refer to the county document for guidance on conveyance system analysis and design.



## CHAPTER 5 – Flow Control Design

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The City of Sammamish has added supplemental information and made several minor changes to Chapter 5 of the 2009 KCSWDM, as described below. Apart from this information, project proponents should refer to the county document for guidance on flow control design.

### Supplemental Information

The City of Sammamish has identified specific areas where the Conservation Flow Control (Level 2) and Flood Problem Flow Control (Level 3) flow control standards described in the 2009 KCSWDM are to be applied within the City. Locations are shown on the City of Sammamish Flow Control Applications map accompanying this Addendum.

Generally, the King County Basic Flow Control (Level 1) standard does not apply within the City. There may, however, be circumstances where the Basic Flow Control standard can be applied. The 2009 KCSWDM defines the Basic Flow Control Standard as being appropriate for areas that drain to a closed conveyance system that discharges to a waterbody designated as a major receiving water. Lake Sammamish is designated a major receiving water. Developments that drain to closed drainage systems discharging directly to Lake Sammamish could, by definition, be eligible for the Basic Flow Control Standard. This would be the case where runoff from a new or redevelopment project area discharges to an existing system downstream drainage system where downstream capacity issues are likely with an increase in runoff to the system.

Chapter 5 describes various LID techniques. These should be used as the technical guidance for implementing the BMPs specified in the LID Ordinance.

### Changes to 2009 KCSWDM

- **Section 5.3.1.1 DESIGN CRITERIA, Detention Ponds in Open Space (page 5-25 of the 2009 KCSWDM)** — This section does not apply. City of Sammamish does not require this signage.
- **Section 5.3.1.1 DESIGN CRITERIA, Figure 5.3.1.D Permanent Surface Water Control Pond Signs (page 5-29 of the 2009 KCSWDM)** — Replace references to King County and the King County logo with City of Sammamish and the City of Sammamish logo, respectively. Also, delete the last sentence and replace with the following:

For more information or to report littering, vandalism or other problems, call City Hall at 425-295-0500. For emergencies after-hours, holidays, and weekends call the public works emergency dispatch number at 206- 296-8100.



## CHAPTER 6 – Water Quality Design

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The City of Sammamish has added supplemental information and made one minor change to Chapter 6 of the 2009 KCSWDM, as described below. Apart from this information, project proponents should refer to the county document for guidance on water quality design.

### **Supplemental Information**

The City of Sammamish adopts the BMPs and water quality treatment menus in the 2009 KCSWDM. Special treatment requirements for runoff draining to impaired waterbodies are addressed in Chapter 1. An exception to the KCSWDM is the treatment requirement for runoff discharging to lakes designated to receive a higher level of total phosphorus removal. The Sensitive Lake Protection Menu in the 2009 KCSWDM has a treatment goal of 50 percent reduction of annual average total phosphorus (TP), assuming typical pollutant concentrations in urban runoff. Lake management plans and studies have determined that Beaver Lake and Pine Lake require higher levels of phosphorus removal to protect the lakes from eutrophication brought about by development. Within these areas, a treatment goal of 80 percent reduction of TP is required. Areas requiring the higher level of TP reduction are shown on the Water Quality Treatment Application map accompanying this Addendum. Proponents for projects within these areas shall work with the City to determine the appropriate measures to be taken to achieve the 80 percent TP reduction goal.

### **Change to 2009 KCSWDM**

- **Section 6.4.1.2 BASIC DESIGN CRITERIA, Figure 6.4.1.C Waterfowl Sign (page 6-82 of the 2009 KCSWDM)** — This section does not apply. City of Sammamish does not require this signage.



## DEFINITIONS

The City of Sammamish has made the following changes to the Definitions Section of the 2009 KCSWDM. Project proponents should refer to the county document for other definitions.

Term (page)	Action
<p><b>Critical aquifer recharge area</b> (p 1-2)</p>	<p><i>Replace as follows (from SMC 21A.15.253):</i></p> <p><b>Critical aquifer recharge areas</b> (CARAs) means those areas in the City of Sammamish with a critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2). CARAs have prevailing geologic conditions associated with infiltration rates that create a high potential for contamination of groundwater resources or contribute significantly to the replenishment of groundwater. CARAs shall be classified based on the following criteria:</p> <ol style="list-style-type: none"> <li>(1) Class 1 CARAs include those areas located within the mapped one- or five-year capture zone of a wellhead protection area.</li> <li>(2) Class 2 CARAs include those areas located within the mapped 10-year capture zone of a wellhead protection area.</li> <li>(3) Class 3 CARAs include those areas outside wellhead protection areas that are identified as high aquifer recharge potential areas based on characteristics of surficial geology and soil types. (Ord. O2005-193 § 2)</li> </ol>
<p><b>Erosion hazard area</b> (p 1-2)</p>	<p><i>Replace as follows (from SMC 21A.15.415):</i></p> <p><b>Erosion hazard areas</b> mean those areas in the City underlain by soils that are subject to severe erosion when disturbed. Such soils include, but are not limited to, those classified as having a severe or very severe erosion hazard according to the USDA Soil Conservation Service, the 1973 King County Soils Survey or any subsequent revisions or addition by or to these sources. These soils include the following when they occur on slopes 15 percent or steeper:</p> <ol style="list-style-type: none"> <li>(1) The Alderwood gravely sandy loam (AgD);</li> <li>(2) The Alderwood and Kitsap soils (AkF);</li> <li>(3) The Beausite gravely sandy loam (BeD and BeF);</li> <li>(4) The Everett gravely sandy loam (EvD);</li> <li>(5) The Kitsap silt loam (KpD);</li> <li>(6) The Ovall gravely loam (OvD and OvF);</li> <li>(7) The Ragnar fine sandy loam (RaD); and</li> <li>(8) The Ragnar-Indianola Association (RdE). (Ord. O2005-193 § 2; Ord. O2003-132 § 10)</li> </ol>

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Term (page)	Action
<p><b>Flood hazard area</b> (p 1-3)</p>	<p><i>Replace as follows (per SMC 21A.15.680):</i></p> <p><b>Flood hazard areas</b> means those areas in the City of Sammamish subject to inundation by the base flood and those areas subject to risk from channel relocation or stream meander including, but not limited to, streams, lakes, wetlands, and closed depressions. (Ord. O2003-132 § 10)</p>
<p><b>Frequently Flooded Area</b> SMC 21A.50.230</p>	<p><i>Add new definition as follows (from SMC 21A.50.230):</i></p> <p>(1) Frequently flooded areas include all areas of special flood hazards within the jurisdiction of the City of Sammamish.(a) The areas of special flood hazard are identified by the Federal Insurance Administration in a scientific and engineering report entitled "the Flood Insurance Study for King County," as amended, as stated in SMC 15.10.060. The flood insurance study is on file at Sammamish City Hall. The best available information for flood hazard area identification as outlined in SMC 15.10.130(2) shall be the basis for regulation until a new FIRM is issued that incorporates the data utilized under SMC 15.10.130(2).</p> <p>(b) The director may use additional flood information that is more restrictive or detailed than that provided in the Flood Insurance Study conducted by the Federal Emergency Management Agency (FEMA) to designate frequently flooded areas, including data on channel migration, historical data, high water marks, photographs of past flooding, location of restrictive floodways, maps showing future build-out conditions, maps that show riparian habitat areas, or similar information.</p> <p>(2) Development in frequently flooded areas shall be subject to the provisions in Chapter 15.10 SMC. (Ord. O2005-193 § 1; Ord. O99-29 § 1)</p>

Term (page)	Action
<p><b><i>Landslide Hazard Area (Steep slope)</i></b> (page 1-3 of KCSWDM)</p>	<p><i>Replace as follows (per SMC 21A.15.680):</i></p> <p><b><i>Landslide hazard areas</i></b> mean those areas in the City of Sammamish potentially subject to risk of mass movement due to a combination of geologic, topographic, and hydrologic factors. These areas are typically susceptible to landslides because of a combination of factors including: bedrock, soil, slope gradient, slope aspect, geologic structure, groundwater, or other factors. Landslide hazard areas include the following:</p> <p>(1) Areas of historic failures, such as:(a) Those areas delineated by the U.S. Department of Agriculture's Natural Resources Conservation Service as having a "severe" limitation for building site development;</p> <p>(b) Areas designated as quaternary slumps, earthflows, mudflows, or landslides on maps published by the U.S. Geological Survey or Department of Natural Resources;</p> <p>(2) Areas that have shown movement during the Holocene epoch, from 10,000 years ago to the present, or which are underlain by mass wastage debris from that epoch;</p> <p>(3) Any area with all three of the following characteristics:</p> <p>(a) Slopes steeper than 15 percent; and</p> <p>(b) Hillside intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and</p> <p>(c) Springs or groundwater seepage;</p> <p>(4) Areas with a slope of 40 percent or steeper and with a vertical relief of 10 or more feet except areas composed of consolidated rock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least 10 feet of vertical relief;</p> <p>(5) Slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;</p> <p>(6) Slopes having gradients steeper than 80 percent subject to rock fall during seismic shaking;</p> <p>(7) Areas potentially unstable because of rapid stream incision, stream bank erosion or undercutting by wave action; and</p> <p>(8) Landslide hazard areas do not include those areas composed of slopes greater than 40 percent that were created from a previously non-landslide hazard area through legal grading activity and that are confirmed to be stable by a qualified professional. (Ord. O2005-193 § 2; Ord. O2003-132 § 10)</p>



## APPENDICES

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The City of Sammamish has made the following changes to the Appendices section of the 2009 KCSWDM. Project proponents should refer to the county appendices where referenced below.

**Appendix A: Maintenance Requirements for Flow Control, Conveyance, and WQ Facilities** – The City of Sammamish has made no changes, and Appendix A applies in its entirety to the City of Sammamish.

**Appendix B: Master Drainage Plan Objective, Criteria and Components, and Review Process** – This appendix does not apply within the City of Sammamish.

**Appendix C: Small Drainage Requirements** – This is a separately bound document included with the KCSWDM and this appendix applies in its entirety to the City of Sammamish. Appendix C provides guidance for many of the low impact development (LID) techniques referenced in the City of Sammamish LID Ordinance.

**Appendix D: Erosion and Sediment Control Standards** – This is a separately bound document included with the KCSWDM and this appendix applies in its entirety to the City of Sammamish.



## REFERENCE

Table Ref-1 identifies which reference sections in the KCSWDM apply and those that do not apply to the City of Sammamish. Table Ref-2 lists additional City of Sammamish references that apply.

**Table Ref-1. Applicability of KCSWDM References to City of Sammamish Projects**

No.	Description	Action
1	<b>KCC 9.04 Surface Water Runoff Policy</b>	This reference document applies. The King County surface water runoff policy, as adopted by reference in Chapter 9.04 KCC as adopted by SMC 15.05 (Ordinance 099-17 § 1)
2	<b>Adopted Critical Drainage Areas</b>	This reference document shall be deleted in entirety. Project proponents should refer to City codes, ordinances, and sensitive areas maps for description and requirements within sensitive areas.
3	<b>Other Adopted Area Specific Drainage Requirements</b>	This reference document shall be deleted in entirety. Project proponents should refer to City codes, ordinances, and sensitive areas maps for description and requirements within sensitive areas. The project proponent shall also work with the City on additional requirements that may apply to their project.
4	<b>Other Drainage Related Regulations and Guidelines</b> A. Grading Code Soil Amendment Standard B. Clearing & Grading Seasonal Limitations C. Landscape Management Plan Guidelines D. Shared Facility Maintenance Responsibility and Guidance	A. This standard is applicable. B. Not applicable. See SMC 16.15 C. Applicable. D. Applicable.
5	<b>Wetland Hydrology Protection Guidelines</b>	These guidelines apply.
6	<b>Hydrologic/Hydraulic Design Methods</b> A Infiltration Rate Test B Pond Geometry Equations	This reference section is applicable.

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No.	Description	Action
<b>7</b>	<b>Engineering Plan Support</b> A. King County Standard Map Symbols B. Standard Plan Notes and Example Construction Sequence C. Stormfilter Access & Cartridge Configuration	A. Applicable. B. Replace with City's standard plan notes. Contact City for most current version of notes. C. Not applicable. Delete this reference subsection in entirety.
<b>8</b>	<b>Forms and Worksheets</b>	
	A. TIR Worksheet B. Clearing and Grading Seasonal Limitations C. Offsite Analysis Drainage System Table D. Flow Control and Water Quality Facility E. CSWPPP Worksheet Forms F. Adjustment Application Form and Process Guidelines G. Dedication and Indemnification Clause H. Bond Quantity Worksheet I. Maintenance and Defect Agreement J. Declaration of Covenant K. Drainage Release Covenant L. Drainage Easement M. Flow Control BMP Covenant (see replacement form name below).  N. Impervious Surface Limit Covenant O. Clearing Limit Covenant P. River Protection Easement Q. Leachable Metals Covenant	A. Applicable. B. Applicable. C. Applicable. D. Applicable. E. Applicable. F. Applicable. G. Applicable, replace with COS updated form. H. Applicable. I. Applicable. J. Applicable, replace with COS updated form. K. Applicable, replace with COS updated form. L. Applicable, replace with COS updated form. M. Applicable, replace with COS updated form.  N. Delete in entirety; not applicable. O. Delete in entirety; not applicable. P. Delete in entirety; not applicable. Q. Delete in entirety; not applicable.
<b>9</b>	<b>Interim Changes to Requirements</b>	Delete in entirety
<b>10</b>	<b>King County Identified Water Quality Problems</b>	Delete in entirety

No.	Description	Action
11	<b>BMP T5.13 Post-Construction Soil Quality and Depth</b>	<p>New section added. Excerpt from 2005 Stormwater Manual for Western Washington, Ecology. Excerpt applies in entirety except final section, <b><i>Flow Reduction Credits</i></b>, does not apply.</p> <p>The most current version of <i>Guidelines and Resources for Implementing Soil Quality and Dept BMP T5.13</i> is available at:</p> <p><a href="http://www.soilsforsalmon.org/pdf/Soil_BMP_Manual.pdf">http://www.soilsforsalmon.org/pdf/Soil_BMP_Manual.pdf</a></p>

***Table Ref-2. City of Sammamish References***

No.	Description
1	<p><b>Area-Specific Drainage Requirements</b></p> <p>A Flow Control Applications Map</p> <p>B Water Quality Applications Map</p> <p>C Landslide Hazard Drainage Areas Map</p> <p>[Others to be determined]</p>