Appendix V

Agency Approvals
&
Draft Plan Comments and Responses
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April 23, 2020

SCOTT JONAS
SAMMAMISH PLATEAU WATER & SEWER DISTRICT
1510 228TH AVE SE
SAMMAMISH WA 98075

RE: Sammamish Plateau Water & Sewer District, ID#40900
    King County
    Water System Plan – APPROVAL
    Submittal #19-0208

Dear Mr. Jonas:

The Sammamish Plateau Water & Sewer District (the District) water system plan (WSP), received in this office on February 28, 2019, with a subsequent submittal on October 14, 2019 has been reviewed and in accordance with the provisions of WAC 246-290-100, is hereby APPROVED.

Approval of this WSP is valid as it relates to current standards outlined in Washington Administrative Code (WAC) 246-290 revised January 2017, WAC 246-293 revised September 1997, RCW 70.116, and is subject to the qualifications herein. Future revisions in the rules and statutes may be more stringent and require facility modification or corrective action. An approved update of this WSP is required on or before July 24, 2030, unless ODW requests an update or plan amendment pursuant to WAC 246-290-100(9).

APPROVED NUMBER OF CONNECTIONS

The analysis provided in this WSP shows the water system has sufficient capacity to meet the growth projections during this planning period. The District water system can support an “unspecified” designation for its approved number of connections. A specific number of approved connections will not be applied at this time. Development may occur in compliance with the schedule and information provided in this WSP. This designation may be rescinded (and replaced with a specified number of approved connections) if ODW determines that the WSP is no longer representative of system activities.

LOCAL GOVERNMENT CONSISTENCY

This document meets local government consistency requirements for WSP approval pursuant to RCW 90.03.386 and RCW 43.40.

SERVICE AREA AND DUTY TO SERVE

Pursuant to RCW 90.03.386(2), the service area identified in this WSP service area map may now represent an expanded “place of use” for this system’s water rights. Changes in service area should be made through a WSP amendment.
The District has a duty to provide new water service within its retail service area. This WSP includes service policies to describe how your system plans to provide new service within your retail service area.

CONSTRUCTION WAIVERS

Standard Construction Specifications for distribution main extensions in this WSP are approved. Consistent with WAC 246-290-125(2), this system may proceed with the installation of distribution main extensions provided this system completes and keeps on file the enclosed construction completion report form in accordance with WAC 246-290-125(2) and WAC 246-290-120(5) and makes it available for review upon request by ODW.

WATER RESOURCES

Below is the general regulatory language that applies to all water system approvals:

The department's review of your water system plan will not confer or guarantee any right to a specific quantity of water. The approved number of service connections is based on your representation of available water quantity. If the Washington Department of Ecology, a local planning agency, or other authority responsible for determining water rights and water system adequacy determines that you have use of less water than you represented, the number of approved connections may be reduced commensurate with the actual amount of water and your legal right to use it.

Thank you for your cooperation. King County is being notified of the terms and requirements of this approval and the determination of the approved number of connections. If you have any questions or wish to check our records, you may contact either of us at the numbers listed below.

Sincerely,

Richard Rodriguez
Regional Planner
(253) 395-6771

Brietta Carter, P.E.
Regional Engineer
(253) 395-6770

Encl: Construction Completion Report

cc: Jae Hill, King County UTRC
    Seattle/King County Health
    Ria Berns, Dept. of Ecology, NWRO
    Jay Regenstreif, P.E., Sammamish Plateau
    Rodney Langer, P.E., CHS Engineers
AN ORDINANCE approving the Sammamish Plateau
Water 2018 Water Comprehensive Plan Revised October
2019.

STATEMENT OF FACTS:

1. King County has adopted K.C.C. chapter 13.24, which requires
approval of comprehensive plans for water utilities that distribute or obtain
water in unincorporated King County as a prerequisite for operating in
unincorporated King County, receiving approval for annexation proposals,
being granted right-of-way franchises, and being given approval for right-
of-way construction permits. K.C.C. 13.24.060 prescribes the
requirements for approval of such plans, including consistency with state
and local planning requirements.

2. RCW 57.16.010 requires that general comprehensive plans by special
purpose districts be submitted to, and be approved by, the legislative
authority within whose boundaries all or a portion of a utility lies.

3. The Sammamish Plateau Water and Sewer District's service area is
within King County and the district has adopted a comprehensive water
system plan ("the plan"). The district's previous water system plan was
prepared in 2010 and extended in 2012.
4. King County has adopted a comprehensive plan that includes water supply policies in its provisions for facilities and services (policies F-101 through F-254) that call for consistency with other adopted plans, support for regional water supply planning, pursuit of reclaimed water, water conservation and protection of water resources.

5. K.C.C. chapter 13.24 requires the utilities technical review committee to review and make a recommendation to the King County executive and council on the plan and the requirements under K.C.C. chapter 13.24 and consistency with the King County Comprehensive Plan. The utilities technical review committee has reviewed the planning data and district's operations and has found:

   a. The plan uses population and employment forecasts developed by the Puget Sound Regional Council for the district's service area;

   b. The district's service area is in both incorporated and unincorporated King County;

   c. The capital facility plan is adequate to meet anticipated facility and service needs;

   d. The plan is consistent with applicable Washington state water quality laws; and

   e. The plan is consistent with other pertinent county adopted plans and policies.

6. The Washington state Department of Health approval is pending upon King County's approval of the plan.
7. Under the state Environmental Policy Act, the district issued a determination of nonsignificance for the plan on February 19, 2018. There were no appeals.

8. The district's operations and facilities meet multiple existing statutory, administrative and planning standards. As the district's operations, facilities and planning meet the requirements of the King County Code and are consistent with the King County Comprehensive Plan, the utilities technical review committee has recommended approval of the plan.

BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

SECTION 1. The Sammamish Plateau Water and Sewer District 2018 Water
Ordinance 19069 was introduced on 2/11/2020 and passed by the Metropolitan King County Council on 3/24/2020, by the following vote:

Yes: 9 - Mr. von Reichbauer, Ms. Lambert, Mr. Dunn, Mr. McDermott, Mr. Dembowski, Mr. Upthegrove, Ms. Kohl-Welles, Ms. Balducci and Mr. Zahilay

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON

Claudia Balducci, Chair

ATTEST:

Melani Pedroza, Clerk of the Council

APPROVED this 25th day of MARCH, 2020

Dow Constantine, County Executive

Attachments: A. Sammamish Plateau Water and Sewer District 2018 Water Comprehensive Plan Revised October 2019
CITY OF SAMMAMISH
WASHINGTON
RESOLUTION NO. R2020-864

A RESOLUTION OF THE CITY OF SAMMAMISH,
WASHINGTON, APPROVING THE SAMMAMISH
PLATEAU WATER AND SEWER DISTRICT 2018 WATER
COMPREHENSIVE PLAN

WHEREAS, on October 7, 2019, the Sammamish Plateau Water and Sewer District
("SPWSD") Board of Commissioners ("Board") adopted its 2018 Water Comprehensive Plan
("Water Plan") through Resolution No. 490; and

WHEREAS, pursuant to RCW 57.16.010(7), the final Water Plan must also be approved
by resolution of the Sammamish City Council within ninety (90) days of the Board’s action before
taking effect; and

WHEREAS, City Staff worked collaboratively with SPWSD in reviewing, drafting and
revising the Water Plan prior to the SPWSD Board’s adoption of same;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SAMMAMISH,
WASHINGTON, DOES RESOLVE AS FOLLOWS:

Section 1. The Sammamish Plateau Water and Sewer District 2018 Water Comprehensive
Plan, a complete copy of which is available at https://spwater.org/316/Water-Comprehensive-Plan,
is hereby approved.

PASSED BY THE CITY COUNCIL AT A REGULAR MEETING THEREOF ON

CITY OF SAMMAMISH

[Signature]
Mayor Karen Moran

ATTEST.AUTHENTICATED:

[Signature]
Melanie Anderson, City Clerk
Approved as to form:

[Signature]

Michael R. Kenyon, City Attorney

Filed with the City Clerk: December 27, 2019
Passed by the City Council: January 7, 2020
Resolution No.: R2020-864
Local Government Consistency Determination Form

Water System Name: Sammamish Plateau Water & Sewer District  PWS ID: 409009
Planning/Engineering Document Title: Water Comprehensive Plan  Plan Date: December 2018
Local Government with Jurisdiction Conducting Review: City of Issaquah

Before the Department of Health (DOH) approves a planning or engineering submittal under Section 100 or Section 110, the local government must review the documentation the municipal water supplier provides to prove the submittal is consistent with local comprehensive plans, land use plans and development regulations (WAC 246-290-108). Submittals under Section 105 require a local consistency determination if the municipal water supplier requests a water right place-of-use expansion. The review must address the elements identified below as they relate to water service.

By signing this form, the local government reviewer confirms the document under review is consistent with applicable local plans and regulations. If the local government reviewer identifies an inconsistency, he or she should include the citation from the applicable comprehensive plan or development regulation and explain how to resolve the inconsistency, or confirm that the inconsistency is not applicable by marking N/A. See more instructions on reverse.

Local Government Consistency Statement

For use by water system  For use by local government

<table>
<thead>
<tr>
<th>Local Government Consistency Statement</th>
<th>Identify the page(s) in submittal</th>
<th>Yes or Not Applicable</th>
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<tbody>
<tr>
<td>a) The water system service area is consistent with the adopted land use and zoning within the service area.</td>
<td>See Note A</td>
<td>Yes</td>
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<tr>
<td>b) The growth projection used to forecast water demand is consistent with the adopted city or county's population growth projections. If a different growth projection is used, provide an explanation of the alternative growth projection and methodology.</td>
<td>See Note B</td>
<td>Yes</td>
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<td>c) For cities and towns that provide water service: All water service area policies of the city or town described in the plan conform to all relevant utility service extension ordinances.</td>
<td>N/A</td>
<td>Yes</td>
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<td>d) Service area policies for new service connections conform to the adopted local plans and adopted development regulations of all cities and counties with jurisdiction over the service area.</td>
<td>See Note C</td>
<td>Yes</td>
</tr>
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<td>e) Other relevant elements related to water supply are addressed in the water system plan, if applicable. This may include Coordinated Water System Plans, Regional Wastewater Plans, Reclaimed Water Plans, Groundwater Management Area Plans, and the Capital Facilities Element of local comprehensive plans.</td>
<td>See Note D</td>
<td>Yes</td>
</tr>
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</table>

I certify that the above statements are true to the best of my knowledge and that these specific elements are consistent with adopted local plans and development regulations.

[Signature]

Robert J. York, Eng. Manager, Public Works

[Date] 6/11/2019

Printed Name, Title, & Jurisdiction City of Issaquah
Consistency Review Guidance
For Use by Local Governments and Municipal Water Suppliers

This checklist may be used to meet the requirements of WAC 246-290-108. When using an alternative format, it must describe all of the elements; 1a), b), c), d), and e), when they apply.

For water system plans (WSP), a consistency review is required for the service area and any additional areas where a municipal water supplier wants to expand its water right’s place of use.

For small water system management programs, a consistency review is only required for areas where a municipal water supplier wants to expand its water right’s place-of-use. If no water right place-of-use expansion is requested, a consistency review is not required.

For engineering documents, a consistency review is required for areas where a municipal water supplier wants to expand its water right’s place-of-use (water system plan amendment is required). For noncommunity water systems, a consistency review is required when requesting a place-of-use expansion. All engineering documents must be submitted with a service area map (WAC 246-290-110(4)(b)(ii)).

A) Documenting Consistency: The planning or engineering document must include the following when applicable.

a) A copy of the adopted land use/zoning map corresponding to the service area. The uses provided in the WSP should be consistent with the adopted land use/zoning map. Include any other portions of comprehensive plans or development regulations that relate to water supply planning.

b) A copy of the growth projections that correspond to the service area. If the local population growth projections are not used, explain in detail why the chosen projections more accurately describe the expected growth rate. Explain how it is consistent with the adopted land use.

c) Include water service area policies and show that they are consistent with the utility service extension ordinances within the city or town boundaries. This applies to cities and towns only.

d) All service area policies for how new water service will be provided to new customers.

e) Other relevant elements the Department of Health determines are related to water supply planning. See Local Government Consistency – Other Relevant Elements, Policy B.07, September 2009.

B) Documenting an Inconsistency: Please document the inconsistency, include the citation from the comprehensive plan or development regulation, and explain how to resolve the inconsistency.

C) Documenting a Lack of Local Review for Consistency: Where the local government with jurisdiction did not provide a consistency review, document efforts made and the amount of time provided to the local government for review. Please include: name of contact, date, and efforts made (letters, phone calls, and emails). To self-certify, please contact the DOH Planner.

The Department of Health is an equal opportunity agency. For persons with disabilities, this document is available on request in other formats. To submit a request, please call 1-800-525-0127 (TTY 1-800-833-6388).

February 2016
Page 2 of 2
April 30, 2019

Jay Regenstreif
Sammamish Plateau Water
1510 228th Avenue SE
Sammamish, WA 98075

Re. Sammamish Plateau Water and Sewer District - 2018 Comprehensive Plan Draft Review

Dear Ms. Regenstreif,

The City of Sammamish has reviewed the Sammamish Plateau Water & Sewer District’s 2018 draft Water Comprehensive Plan, received by our office on February 26, 2019. This Plan was reviewed by comparison to the Sammamish Comprehensive Plan, Land Use Plan and Zoning Map, and Development Regulations pursuant to WAC 246-290-108. We discussed our review of the 2018 Draft Water Comprehensive Plan with David Pyle, Deputy Director of the Community Development; Andrew Zagars, City Engineer; Kellye Hilde, Planning Manager; Tawni Dalziel, Senior Stormwater Program Manager; Miryam Laytner, Sr. Management Analyst; Sara Estiri, Management Analyst on April 17, 2019.

As a result of our review, we have 18 comments that have been identified in the enclosure. Please note that we signed the Local Government Consistency Determination Form under the condition that Sammamish Plateau Water & Sewer District revises and incorporates our comments and without other significant changes.

We request that when the Sammamish Plateau Water and Sewer District revises the 2018 Draft Comprehensive Plan, a copy of the draft be provided to us for our final review.

Please let us know if you note any inaccuracies or have any questions regarding the comments provided in the Local Government Consistency Determination Form. Please contact Kellye Hilde, Planning Manager at 425-295-0582 or khilde@sammamish.us.

Kellye Hilde
Planning Manager, ASLA
Department of Community Development

Enclosure:
Local Government Consistency Determination Form
City of Sammamish Staff Comments
Local Government Consistency Determination Form

Water System Name: Sammamish Plateau Water & Sewer District  PWS ID: 409009
Planning/Engineering Document Title: Water Comprehensive Plan  Plan Date: December 2018
Local Government with Jurisdiction Conducting Review: City of Sammamish

Before the Department of Health (DOH) approves a planning or engineering submittal under Section 100 or Section 110, the local government must review the documentation the municipal water supplier provides to prove the submittal is consistent with **local comprehensive plans, land use plans and development regulations** (WAC 246-290-108). Submittals under Section 105 require a local consistency determination if the municipal water supplier requests a water right place-of-use expansion. The review must address the elements identified below as they relate to water service.

By signing this form, the local government reviewer confirms the document under review is consistent with applicable local plans and regulations. If the local government reviewer identifies an inconsistency, he or she should include the citation from the applicable comprehensive plan or development regulation and explain how to resolve the inconsistency, or confirm that the inconsistency is not applicable by marking N/A. See more instructions on reverse.

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I certify that the above statements are true to the best of my knowledge and that these specific elements are consistent with adopted local plans and development regulations.

Signature 

Date 4:30.19

Printed Name, Title, & Jurisdiction
Consistency Review Guidance

For Use by Local Governments and Municipal Water Suppliers

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February 2016
Page 2 of 2
Water System Name: Sammamish Plateau Water & Sewer
PWS ID: 40900 9
Planning Document: Water Comprehensive Plan
Plan Date: December 2018
Local Governments: City of Sammamish, City of Issaquah, King County

Notes:
A. Service Area and Land Use and Zoning:
   b. Chapter 1 pages 1-14, 1-26, 1-38,
   c. Chapter 2 pages: 2-19 through 2-24
B. Growth Projection:
   a. Chapter 2 pages: 2-14 through 2-24
C. Service Area Policies
   a. Chapter 1 pages: 1-34 through 1-46 and referenced appendices
D. Other Elements:
   a. Coordinated Water System Plan: Pages 1-14, 1-28, 1-31, 1-33
   b. Reclaimed Water Plans: Page 4-48 and Appendix N
d) Service area policies for new service connections conform to the adopted local plans and adopted development regulations of all cities and counties with jurisdiction over the service area.

Staff Comments
1. Chapter 1, Page 1-37: A map identifying Group B wells locations should be included in this plan as well as a description of how they are managed.
2. Chapter 1, Page 1-38: Urban Growth Area.
3. Chapter 1, Page 1-38: Please integrate language around plans to sign a Franchise Agreement with the City of Sammamish.
4. Chapter 1, Page 1-38: Drinking Water Quality;
   a. Describe the District’s water quality monitoring program and/or plan for drinking water.
   b. Describe how the District addresses Department of Ecology mandates for low impact development and the impacts on groundwater. Reference or provide studies that demonstrate any negative impacts.
   c. Describe the District’s long-term sustainability plan for aquifer recharge areas.
5. Chapter 1, Page 1-39: Oversizing;
   a. Provide a reference to a facility plan that shows where oversizing might be necessary.
   b. Describe the method for determining and identifying mainlines that may need to be oversized.

e) Other relevant elements related to water supply are addressed in the water system plan, if applicable. This may include Coordinated Water System Plans, Regional Wastewater Plans, Reclaimed Water Plans, Groundwater Management Area Plans, and the Capital Facilities Element of local comprehensive plans.

Staff Comments
1. Please indicate how you determine when to bring in or tap into the Cascade Water Alliance source. Are there any additional costs to do this?
2. CARA Map:
   a. Please provide your timeline for updating the CARA map.
   b. What is the scope of work?
   c. Please provide any updated policy to the City of Sammamish that may require review and updates to our development regulations.
   d. The City would like that District take ownership of the CARA maps.
3. Table 5-3 page 5-20, Agencies and First Responders: Please add City of Sammamish to the list.
4. Chapter 1, Section 1.7: Is there a need to include a section for the City of Sammamish? While the area is within the Plateau Zone, we do coordinate interlocal agreements (ILA) and are currently drafting up a Franchise Agreement between the City and SPIWS.
City of Sammamish
Staff Comments

a) The water system service area is consistent with the adopted land use and zoning within the service area.

Staff Comments
1. Chapter 1, Page 1-2, Figure 1-1: Overlapping adjacent service providers needs to be noted on this map or a new map added. A narrative describing the method of resolving conflicts in these overlapping areas also needs to be added.
2. Chapter 1, Page 1-2, Figure 1-1: Show the UGA and City boundary on this map.
3. Chapter 1, Page 1-26: Describe the PAAs (Evans Creek Preserve Trail, Swan Ridge neighborhood, 30-Acres Park, Aldarra Golf Club), Urban Growth Boundary, and Town Center sub-area.
4. Chapter 1, Page 1-26: The moratorium has been repealed, refer to Ordinance O2018-479.
5. Chapter 1, Page 1-26: Sammamish Plans that should be referenced include the following:
   b. Ordinance O2016-424.
   c. City of Sammamish Town Center Sub-Area.
   d. Capital Improvement Plans as adopted by the City, Resolution R2016-2022.
6. Chapter 1, Page 1-30, Figure 1-13: The R-4 Interim and R-6 interim zones are not shown.
7. Chapter 1, Page 1-32, Figure 1-14: The City Boundary and UGA line are not shown. The current Water Service District Boundary in south-west Sammamish is not shown. (near MacDonald area)

b) The growth projection used to forecast water demand is consistent with the adopted city or county’s population growth projections. If a different growth project is used, provide an explanation of the alternative growth project and methodology.

Staff Comments
1. Chapter 2, Page 2-19: Why are the multifamily numbers for Sammamish decreasing starting in 2023?
2. Chapter 2, Page 2-19, Table 2-11: Use one source of data and sort in ascending order. Move year 2040 to the end of the table.
3. Chapter 2, Page 2-21: Stating that population in our area is declining contradicts PSRC current projections that the region needs a plan for 1.8 million additional people and 1.2 million new jobs by 2050. Refer to the Vision 2050 Executive Summary, page ES-1 and the Draft SEIS.
2018 WATER COMPREHENSIVE PLAN
PUBLIC MEETING RECORD

1. SPWSD Board of Commissioner Minutes setting Public Meeting Date and Time
2. Public Meeting Announcement – posted at District Headquarters
3. Public Meeting Website Notice
4. Newspaper Display Ad – Issaquah Reporter and Redmond Reporter
5. Newspaper Legal Notice – Seattle Times
6. Public Meeting Sign-in Sheet
7. Public Meeting Executive Summary Handout
8. Public Meeting Presentation Outline
9. SPWSD Board of Commissioner Minutes of Public Meeting
2018 WATER COMPREHENSIVE PLAN
PUBLIC MEETING RECORD

1. SPWSD Board of Commissioner February 25, 2019 Minutes

    Setting Public Meeting Date and Time for March 11, 2019 at 5:30 PM
There was Board consensus to consider the outreach experiment for the customer portal rather than the Program.

**D. 2018 WATER COMPREHENSIVE PLAN – ADOPT FOR PUBLIC DISTRIBUTION**

Regenstreif requested the Board adopt the 2018 Water Comprehensive Plan (Plan) for public distribution and set a public information meeting date to present the Plan to the public. Regenstreif noted that minor edits had been made to the proposed resolution.

- **Motion:** Commissioner Hooshangi made a motion to adopt Resolution No. 4851 to approve the Plan for public distribution. Commissioner Shustov seconded the motion. 
  ***The motion carried unanimously.***

- **Motion:** Commissioner Hooshangi made a motion to set the public information meeting date for the Plan for March 11, 2019 at 6:00 p.m. as part of the regular Board meeting scheduled for that date. Commissioner Harman seconded the motion. 
  ***The motion carried unanimously.***

**E. DRAFT CITY OF ISSAQUAH INTERLOCAL AGREEMENT**

- **Motion:** Commissioner Hooshangi made a motion authorizing the General Manager and the Board President to provide the draft interlocal agreement regarding governance discussions with the City of Issaquah. Commissioner Harman seconded the motion. 
  ***The motion carried unanimously.***

**ATTORNEY/MANAGER/COMMISSIONER REPORTS**

**Attorney**
- Provided a handout to the Board that compliments the Board’s discussion earlier in today’s meeting about the proposed low-income rebate program outreach experiment. The handout was a copy of outreach material, containing multiple languages relevant to the diverse customer base of the service area, provided to customers regarding another water district’s merger. He reported that having multiple languages may have contributed to having a greater voter response.

**General Manager**
- No report.

**Commissioners**

- **Motion:** Commissioner Hooshangi made a motion to excuse Commissioner Mahbubul Islam’s absence from today’s regular meeting. Commissioner Harman seconded the motion. 
  ***The motion carried unanimously.***
2. Public Meeting Announcement – posted at District Headquarters

February 26, 2019 through March 11, 2019
Public Meeting Announcement

The Board of Commissioners of Sammamish Plateau Water is holding a Public Meeting on the following item:

2018 Water Comprehensive Plan

March 11, 2019 – 6:00 pm

District Headquarters
1510 228th Avenue SE
Sammamish, WA 98075

The purpose of the Public Meeting is to present highlights of the 2018 Water Comprehensive Plan. The plan considers all aspects of water service delivery, and describes long-term strategies to maintain water quality, meet present and future infrastructure needs, and comply with state and federal regulations.

We welcome public comment. Information and instructions on how to submit comments to the District is available on our website at spwater.org or by calling (425) 392-6256. Deadline for public comment is June 11, 2019.
3. Public Meeting Sammamish Plateau Website Notice

February 25, 2019 through March 11, 2019

Home > News and Events

News and Events

Posted on: February 25, 2019

2018 Water Comprehensive Plan - Public Meeting 3/11 at 6pm

The District's Board of Commissioners has scheduled a Public Meeting for **Monday, March 11, 2019 at 6:00 pm** at the District offices located at 1510 228th Ave SE. The purpose of the Public Meeting is to present highlights of the 2018 Water Comprehensive Plan. The plan considers all aspects of water service delivery, and describes long-term strategies to maintain water quality, meet present and future infrastructure needs, and comply with state and federal regulations.

We welcome public comment. The 2018 Water Comprehensive Plan with instructions on how to submit comments to the District is available by [following this link](#).

Deadline for public comment is June 11, 2019.
Water Comprehensive Plan

2018 Water Comprehensive Plan

On February 25, 2019 the Sammamish Plateau Water & Sewer District Board of Commissioners adopted the 2018 Water Comprehensive Plan for Public Distribution (2018 Plan). The 2016 Plan is comprehensive, considering all aspects of provision of water service, and describes the strategies that the District plans to implement over the next 20 years to continue to supply high quality water to its customers, meet its present and future supply and infrastructure needs and continue to comply with complex federal and state water quality regulations.

The 2018 Plan is now being provided for comment, with comments requested by June 11, 2019. Pursuant to the Washington Public Disclosure Act, written comments constitute a public record, subject to public release. Comments on the 2018 Plan can be provided to the District by:

US Mail: Sammamish Plateau Water Attn: Jay Regenstreif 1510 228th Ave SE Sammamish, WA 98075
Via Email: jay.regenstreif@spwater.org

A Public Meeting will be held at the District office on March 11, 2019, starting at 6 PM. The meeting will include a presentation of a highlights from the 2018 Plan.

The 2018 Plan is available here for review:

PLEASE NOTE: Some of these files are large and may take several minutes to download. We appreciate your patience!

2016 WCP Table of Contents and Executive Summary
2016 Chapter 1 – Description of Water System
2016 Chapter 2 – Basic Planning Data and Water Demand Forecast
2016 Chapter 3 – System Analysis
2016 Chapter 4 – Conservation, Supply Analysis, Water Rights, System Reliability and Interferences
2016 Chapter 5 – Source Water Protection
2016 Chapter 6 – Operation and Maintenance Program
2016 Chapter 7 – Distribution Facilities Design and Construction Standards
2016 Chapter 8 – Capital Plan
2016 Chapter 9 – Financial Summary
2016 Chapter 10 – Implementation
2016 Appendix A – Water Facilities Inventory
2016 Appendix B – History of Moratoriums and Allocations, and Group B Water Systems in Future RWISA
2016 Appendix C – Well Data Sheets, 2008-2016 Water Production
2016 Appendix D – Interlocal and Intergency Agreements
2016 Appendix E – Future Water Connection Agreement
2016 Appendix F – Design Standards
2016 Appendix G – District Resolutions (GFCs, LFCs, ULIDs)
2016 Appendix H – Reimbursement Agreement
2016 Appendix I – Developer Extension Agreement
2016 Appendix J – Water Quality Monitoring
2016 Appendix K – Application for Water Service
2016 Appendix L – Cross-Connection Control Program
2016 Appendix M – Hydraulic Model Development and Calibration
2016 Appendix N – Cascade WUE Goal and Reclaimed Water Analysis
2016 Appendix O – Well Susceptibility Forms
2016 Appendix P – Wellhead Protection Area Delineation Update
2016 Appendix Q – Soil Incident Response Plan
2016 Appendix R – Operation and Maintenance Program Details
2016 Appendix S – Water Shortage Response Plan
2016 Appendix T – Financial Summary Appendix
2016 Appendix U – SEPA Checklist
2016 Appendix V – Draft Plan Comments and Responses: Comments must be received by June 11, 2019 and will be posted after that deadline.
4. Newspaper Display Ad – Issaquah Reporter and Redmond Reporter

Published March 1, 2019
Water Comprehensive Plan Public Meeting
Monday, March 11 — 6:00pm

The Sammamish Plateau Water Board of Commissioners is holding a Public Meeting to present highlights of its 2018 Water Comprehensive Plan.

The plan considers all aspects of water service delivery, and describes long-term strategies to maintain water quality, meet present and future infrastructure needs, and comply with state and federal regulations.

For more information, and instructions on how to submit comments to the District, visit spwater.org.

Deadline for public comment is June, 11, 2019.
5. Newspaper Legal Notice – Seattle Times

Published in newspaper on February 28, 2019
Published on the digital Seattle Times site on February 28, 2019 through March 6, 2019
Sammamish Plateau Water Dist  
1510 228th Ave SE  
Sammamish, WA 98075  
Re: Advertiser Account # 102401  
Ad #: 870916  
Agency Account #: 0  
Agency Name:  

Affidavit of Publication  

STATE OF WASHINGTON  
Counties of King and Snohomish  

The undersigned, on oath states that he/she is an authorized representative of The Seattle Times Company, publisher of The Seattle Times of general circulation published daily in King and Snohomish Counties, State of Washington. The Seattle Times has been approved as a legal newspaper by others of the Superior Court of King and Snohomish Counties.  

The notice, in the exact form annexed, was published in the regular and entire issue of said paper or papers and distributed to its subscribers during all of the said period.  

<table>
<thead>
<tr>
<th>Newspaper and Publication Date(s)</th>
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<tbody>
<tr>
<td>Seattle Times</td>
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<tr>
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</tr>
</tbody>
</table>

Agent  
Sharon Seligman  
Signature  

Subscribed and sworn to before me on 02/28/19  
DATE  
Debbie Collantes  
(Notary Signature) Notary Public in and for the State of Washington, residing at Seattle
SAMMAMISH PLATEAU WATER AND SEWER DISTRICT
PUBLIC MEETING NOTICE
March 11, 2019
District Office
1519 228th Avenue SE
Sammamish, WA 98075

Notice is hereby given by the Board of Commissioners of Sammamish Plateau Water and Sewer District that a Public Hearing will be held on Monday March 11, 2019 at 6:00 PM, at the District office, 1519 228th Avenue SE, Sammamish, WA 98075. The purpose of the Public Meeting is to present the 2019 Water Comprehensive Plan to the public.

Mary Shuster
Secretary, Board of Commissioners
Prepayment Information

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Account Information

| Account #: | 102401 |
| Advertiser Name: | Sammamish Plateau Water Dist |
| Agency Name: | |
| Contact: | |
| Address: | 1510 228th Ave SE |
| | Sammamish, WA 98075 |
| Telephone: | (425) 392-6256 |

Notice Placement Information

| Notice ID: | 870916 |
| Purchase Order #: | Public meeting |
| # of lines: | 21 |
| Total NET Cost: | $46.83 |
| Class Name: | Public Notices |

Run Date(s)

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<td>03/06/19</td>
</tr>
</tbody>
</table>

Legals Desk Contact Information

| Phone #: | (206) 652-6018 |
| Email: | legals@seattletimes.com |
2018 WATER COMPREHENSIVE PLAN
PUBLIC MEETING RECORD

6. Public Meeting Sign-in Sheet
<table>
<thead>
<tr>
<th>NAME</th>
<th>MAILING ADDRESS</th>
<th>E-MAIL ADDRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARY WICTOR</td>
<td>408 208th Ave NE 98071</td>
<td><a href="mailto:wvictormaly@gmail.com">wvictormaly@gmail.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>425-283-7253</td>
</tr>
</tbody>
</table>
7. Public Meeting Executive Summary Handout
Sammamish Plateau Water and Sewer District
2018 Water Comprehensive Plan
Draft Plan
December 2018
Executive Summary

The Sammamish Plateau Water and Sewer District (District) has prepared this Water Comprehensive Plan (Plan) as a road map to guide the District into the future and ensure that it continues to provide high-quality water service to the customers in its water service area. The Plan has been prepared in accordance with the Washington State Department of Health regulations as presented in WAC 246-290-100.

The District, governed by a five-person Board of Commissioners, has been supplying drinking water to its customers on the Sammamish Plateau since 1948. The District’s water service area is composed of two distinct areas, designated as the Plateau Zone and the Cascade View Zone. The system includes a total of 12 wells, two connections to the Cascade Water Alliance’s regional supply, eight storage tanks, and more than 295 miles of transmission and distribution pipelines, and currently serves more than 60,000 people. The District’s service area boundary has evolved as a function of growth and reflects hydraulic and topographical constraints. It is not coincident with political boundaries.

There have been several changes from the federal to the local level regulations since the District’s last Water Comprehensive Plan was prepared in 2010 (with an amendment in 2012) that impact the comprehensive planning process. The District has completed several programmatic initiatives in support of actively improving its management, planning, customer service and operations missions. Notable changes and new programs and achievements are highlighted in the following sections and detailed in the following chapters.

Two particularly notable advances include the implementation of Advanced Metering Infrastructure, discussed further under Water Use Efficiency, and development and adoption of an Asset Management Plan, discussed further under Capital Plan.
Policies

In accordance with the guidance provided in the Growth Management Act, this Plan is designed to be consistent with other applicable City and County plans. The District has policies that outline its approach to provision of service within its Retail Service Area, consistent with “duty-to-serve” requirements established by the State. The District’s service area boundary is independent of political boundaries.

Since adoption of the last Plan, the District has modified its policies for meter requirements for certain public-institutional developments. In addition policies were changed to allow new Group B systems in areas of the District’s future service area where direct District service is not readily available. This would be particularly applicable outside of the Retail Service Area.

The Board also adopted a formal Drinking Water Quality Policy statement addressing drinking water standards and groundwater and aquifer protection.

Demand Forecast

A primary element of developing an effective water system plan is the ability to forecast future demands on the system. The District is not a land use agency, and therefore must plan to meet the water demands that will result from land use and zoning designations established by King County and the Cities of Issaquah and Sammamish. Long-term (20-year and buildout) forecasts were prepared using District data, zoning designations, current development activity, population and housing unit growth projections developed by the PSRC and estimated future water conservation savings.

Recent updates used in this Plan include the 2015 update of the Puget Sound Regional Council (PSRC) long-range population and housing growth forecast for the region, the 2015 update to the City of Sammamish Comprehensive Plan, and the 2017 City of Issaquah update to its Comprehensive Plan. The updated growth forecasts have been prepared following a significant recession and reset the long-range growth forecast.
Average day water demands in the District’s service area are projected to reach 5.99 million gallons per day (mgd) by 2027, and 6.1 mgd by 2037. Maximum day demand is forecast to reach 12.7 mgd by 2027 and 13.0 mgd by 2037.

As evident in the growth trend line, PSRC growth forecasts anticipate a period of very slow population and housing growth beginning in about 10 years, with increasing growth rates late in the 20-year planning period. However, since several variables influence growth and water use, the population and water demand forecasts will be periodically reassessed by the District.

Transmission, Distribution, and Storage Analyses

Transmission, distribution, and storage analyses were conducted through the development of an extensive hydraulic model and supporting calculations of capacity versus forecast demand. In 2016 the District completed a project to comprehensively update and calibrate the distribution system hydraulic model. The update included inputs from the District’s geographic information system (GIS) asset inventory, updated pump curves, well production data and customer consumption from billing records. Preliminary model results were compared to data collected during field tests conducted in June, July and October 2016. Forty-five locations were used for field data collection. Field testing focused on measurement of static pressure, time and date at a hydrant followed by opening a nearby hydrant for testing under demand conditions. The model was then calibrated to achieve a high level of accuracy for nearly all conditions.

The hydraulic model evaluated current and future water requirements, analyzed present facilities, and anticipated the impact of future demand increases. The analysis indicated that existing source and storage facilities are sufficient to meet needs through the 20-year planning period (i.e. to 2037).

While most of the District’s transmission and distribution systems are adequate, projects were identified for some areas, including increases in size or enhancement with looping to meet fire flow requirements and for provision of service to all portions of the District’s service area.

In addition to system requirements for normal operations, the District also completed a redundancy analysis to identify the criticality of system facilities, and identified solutions to improve the overall redundancy of the system. Additionally, a Seismic Vulnerability
Assessment Report, completed in 2014, and a follow-up 2017 Seismic Pipeline Study recommended an additional project to enhance the District’s system resiliency.

**Water Use Efficiency**

The District understands how important it is to conserve water and to make the best use of water resources. In 2013 the Cascade Water Alliance (CWA) adopted a Water Use Efficiency (WUE) program for the period 2014-2019 on behalf of its members. This included an aggregated goal for its seven members of a “…cumulative drinking water savings of 0.6 million gallons per day on an annual basis, and 1.0 million gallons per day on a peak season (June-September) basis by 2020.” Conservation within the District’s system will be achieved by implementation of activities provided by CWA and additional measures administered directly by the District. Presently planned efforts are forecast to reduce District water use forecast for year 2037 by 0.26 mgd or 4.3 percent for the average day and 0.5 mgd or 3.8 percent for the maximum day.

Service meters are an essential component of conservation programs as they provide feedback to customers on their water use, and provide the basis for financial incentives for individual customers. Starting in 2016 the District significantly improved the potential for customers to monitor and manage their water consumption with implementation of an Advanced Metering Infrastructure (AMI) system. The District continues to identify ways to utilize the additional information available for the District and for each customer. The additional detail available, rather than water use readings bimonthly, will support future planning efforts, water use efficiency evaluations and programs, hydraulic modeling, and timelier leak detection for customers.

**Water Resources**

The District’s intends to continue using its existing groundwater wells as the primary source of supply into the future. These sources are supplemented by water obtained from two connections to the CWA regional supply.

The District has a long-term interest to develop aquifer storage and recovery (ASR) as an element of its water supply strategy, The District’s efforts to secure permits to implement ASR have stalled due to reluctance by the State Department of Ecology (DOE) to issue the necessary approvals and recovery rights, in context of comments by third-parties and the very complex analysis desired to address all stakeholders’ concerns and interests.

Water quality in the aquifer continues to be an area where the District must be vigilant. The District successfully worked with the City of Issaquah to avoid risk of contamination of District groundwater supply in the Issaquah Valley aquifer near the District’s Well 9. The District provided funding to allow the City to abandon the Lower Reid Infiltration Gallery in 2014 and manage the stormwater discharge in an area outside a wellhead protection area. More recently, detection of minute amounts of per- and polyfluorinated
substances (PFASs), well below the US EPA Health Advisory Limits, in two wells and uncertainty over changes in level of contamination and further development of the understanding of health impacts and potential regulations has prompted more specific review of use of those wells for supply. To assist in the understanding of this situation, the District updated its Issaquah Valley groundwater model in 2016. The District then developed a monitoring and response plan. Alternatives to address this new constraint include addition of treatment, if necessary, and/or increased reliance on the regional water supply system.

**Water Operations Regulatory Requirements**

The District’s water supply and monitoring programs comply with current drinking water regulations. The District has complied with new regulations since the last Plan, and continually looks to the future to anticipate upcoming regulations and how they might affect the utility and its operations, and most importantly, the quality of water provided to its customers. New and updated District programs include the following.

- The Revised Total Coliform Rule/Distribution System Rule took effect in 2016. The revised rule placed increased emphasis on evaluation of water samples for presence of total coliform, fecal coliform and *E. coli*, and consideration of how to respond following detection of the presence of each. In 2017 the District updated its Coliform Monitoring Plan and developed the associated Triggered Groundwater Monitoring Plan. The Coliform Monitoring Plan includes two tiers of assessment in response to potential unsatisfactory quality results, and an *E. coli* response plan.

- The District collected the required Unregulated Contaminant Monitoring Rule 3 (UCMR3) data from 2013 to 2015. As part of the UCMR 3 monitoring program the District detected PFASs in the supply from District Wells 7 and 8 in 2015. Minute quantities of the contaminants were detected below the survey’s minimum reporting level and well below the health advisory level. The City of Issaquah detected these compounds at levels above the health advisory levels in their wells about 1,600 feet away from District wells 7 and 8. The presence of this class of contaminants in the District’s water supply has prompted more detailed evaluation and consideration of measures to assure delivery of a safe water supply. Emergence of PFASs as contaminants of concern, including refinement of the health advisory impacts indicates there is potential for associated future water quality regulations.

- In 2017 the fourth Unregulated Contaminants Monitoring Rule (UCMR 4) identified 30 additional chemical and biological contaminant parameters to be included in the District’s water quality monitoring program. The District will conduct that monitoring beginning in 2019. There is anticipated continued participation in the UCMR monitoring program including phases anticipated beyond UCMR 4.

- The City of Flint changed its source of water supply and, with insufficient treatment, lead leached from lead water pipes into the local drinking water supply. This exposed
customers to lead contamination. EPA is considering long-term revisions to the federal Lead and Copper Rule, with a final rule anticipated in 2020. The District also anticipates designation of a national primary drinking water regulation for Perchlorate in the near future.

Capital Plan

Starting in 2016, the District established the practice of preparing a biennial Capital Plan, as a programmatic approach for near-term implementation of capital improvement projects, in the context of operational needs, the most recent Water Comprehensive Plan and Wastewater Comprehensive Plan, collaboration opportunities with local governments, development and system extension activity and the Asset Management (AM) Plan.

Also in 2016, through an intensive effort by all District staff and management, with support of the Commissioners, the District developed an AM Plan for its water and sewer system assets. The AM Plan addresses:

- The current state or condition of the District’s assets.
- Asset performance needed to deliver our desired level of service.
- Which assets are critical to sustained performance and service delivery.
- The minimum life-cycle costs for the assets relied on to provide service.
- The best long-term funding strategy to operate and renew assets.

The AM Plan identified 45,000 water system assets with a then-current replacement value estimated to be $584 million. Eighty-nine percent of the water system assets were determined to be in “good” to “very good” condition. This is due to the District’s historic and ongoing efforts to maintain the system and due to the relatively young age of many of the assets. The findings of the AM Plan support long-range financial planning for maintenance and eventual replacement of assets as they reach the end of their life cycle. Prudent planning for future needs will avoid the need for significant unforeseen increases in rates and connection charges.

The current biennial District Capital Plan was completed for 2018-2019, with consideration of projects through 2023. That plan was a significant resource for identification of projects for the early years of the 10-year capital plan presented in this Plan. The Plan contains the District’s Capital Plan (CP) that has been developed to guide the growth of the utility’s water system through the year 2037 and beyond. Included in the ten-year CP are:

- Water system share of combined water and sewer system general projects (e.g. office and administration facilities and programs, shared equipment, etc.)
- General water system projects or programs (e.g. completion of AMI project, Smart Water programs, vehicles and equipment, studies, etc.)
- Water supply and treatment improvement projects
- Booster pump station upgrade projects
• Storage safety and coating improvements, and a booster pump station project to utilize more existing capacity
• Transmission main upgrades or extensions
• Fire flow improvements in the transmission and distribution system
• Redundancy piping and pressure reducing valve projects

The CP also includes identification of several projects in progress.

**Capital Plan Summary (Ten-Year)**

<table>
<thead>
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<th>Description</th>
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<tr>
<td>Water Share of Combined Projects</td>
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<tr>
<td>General Water System</td>
<td>$2,382,143</td>
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<tr>
<td>Supply</td>
<td>$5,833,000</td>
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<tr>
<td>Booster Pumping</td>
<td>$41,781</td>
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<tr>
<td>Storage</td>
<td>$9,656,386</td>
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<tr>
<td>Mains – Transmission and General</td>
<td>$3,875,175</td>
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<tr>
<td>Mains – Fire Flow Deficiency</td>
<td>$7,027,320</td>
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<td>Mains - Redundancy</td>
<td>$13,882,620</td>
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<td>Mains – Projects in Progress</td>
<td>$10,962,230</td>
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<td><strong>Total</strong></td>
<td><strong>$56,807,560</strong></td>
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**Financial Evaluation**

The District is in excellent financial health, and the financial plan presented herein verifies that the District can continue meeting all financial requirements. Revenue adjustments will be necessary to fund capital improvement projects outlined in the CP. Through this planning process the District has determined that the District's Water General Facility Charges (GFCs) are adequate to recover an equitable share of system costs from growth. The financial plan review is based on assumptions that may change over time. The District reviews financial needs as part of an annual budget process, with annual rate analyses that provide the basis for actual revenue adjustments.
8. Public Meeting Presentation Outline

The presentation was provided in a Storymap format.

The attached is an outline used to guide the presentation.
2018 Water Comprehensive Plan

2018 WATER COMPREHENSIVE PLAN

- A Guide
- Reference
- Required

**Our Mission Statement**
Sammamish Plateau Water will provide safe, efficient, and reliable water and sewer services by being a leader in the planning and the practice of fiscal and environmental stewardship.

**Management and Personnel**

The 5 Board of Commissioners are elected by voters who reside within the District’s corporate limits. The Board is responsible for setting District policy, and hiring the General Manager to run the District.

The District is structured into 5 Departments

- **Administration Department**: Led by the General Manager
- **Information Services Department**: Provides all District departments with technology support and Geographical Information Services (GIS)
- **Customer Service and Finance**: Responsible for customer service including inquiry response, billing, cross-connection program, and all District accounting functions.
- **Engineering**: Develops and reviews designs, and inspects infrastructure improvements.
- **Operations**: Responsible for management of the water, sewer systems and other District facilities.
The District

Current service area covers 29 Square Miles. Separated into the Plateau Zone and the Cascade View Zone, separated by SR 202.

The District started as 3 separate Districts:

- Water District 82 in 1948 - near Pine Lake
- Water District 121 in 1967 - near Beaver Lake
- Water District 122 in 1967 - north of SR 202

The boundary of the District evolved over time, and continues to expand through annexations. Growth has accompanied these expansions as well.

The District is part of the East King County Coordinated Water Supply Plan, which plays a part in setting boundaries between adjacent water purveyors.

- The Future Service Area boundary is set through the Coordinated Water Supply Plan
- The Existing District boundary is the Corporate Boundary, set through Annexations. Additional Annexations will eventually expand the boundary to match the Future Service Area.

- The Retail Service Area represents areas that can obtain water service from the District using standard main extension methods in less than 3 years
Service Policies - Getting the Water to you

Determine Whether Water Service is Available

- Existing Water Main at the Property
- Existing Water Main near the property access
- New Water Main Required

If Water Service is Not Readily Available

- Remote System - Private Ownership
  - Private Well
  - Class B System: Certified Operator+Metered
- Agreement for Future Connection to the District
Service Policies - Requirements for Connection

Conditions of Service include:

- Written Application by the Property Owner
- Payment of Connection Charges
  - Meter size based
  - Property based
- All use is Metered

### Meter Requirements

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<th>Meter Requirements</th>
<th>Domestic Use</th>
<th>Fire Flow</th>
<th>Irrigation</th>
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<td>Single-Family</td>
<td>Minimum 1 per property</td>
<td>May use Domestic Meter</td>
<td>May use Domestic Meter</td>
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<td></td>
<td>Maximum 1 per structure</td>
<td>If &gt;1” separate fire meter may be required</td>
<td>Separate Meter Allowed</td>
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<tr>
<td>Multi-Family</td>
<td>1 per structure</td>
<td>Separate Meter Required</td>
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<td></td>
<td>Or</td>
<td>if per Structure &amp; &gt;1-inch</td>
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<tr>
<td></td>
<td>1 per Unit Allowed</td>
<td>May use Domestic Meter</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>if Per Unit Domestic meter</td>
<td></td>
</tr>
<tr>
<td>Commercial/Industrial</td>
<td>1 per structure</td>
<td>Separate Meter Required</td>
<td>Separate Meter Required</td>
</tr>
<tr>
<td>Mixed Use</td>
<td>1 per use type per structure</td>
<td>Separate Meter Required</td>
<td>Separate Meter Required</td>
</tr>
<tr>
<td>Public-Institutional</td>
<td>Minimum 1 per property</td>
<td>Separate Meter Required</td>
<td>Separate Meter Required</td>
</tr>
<tr>
<td></td>
<td>Maximum 1 per structure</td>
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</tbody>
</table>

Minimum Meter Size set by Plumbing Code
Backflow Prevention as required per Cross-Connection Program

- Pressure Control (Property Owner's Responsibility)
- Easements may be required for existing or future mains
- Auxiliary Water Supply limitations
  - No Private Well Connection Allowed
  - Grey water and Rainwater Systems must have
    - Air Gap
    - Backflow Prevention
    - Metered (if it flows to sewer)
Planning - Understanding your Existing Customers

Utilize information about existing customers to help predict future demands.

**Customer Classifications**

- Residential
  - Single and Multi-Family
- Non-Residential
  - Commercial, Industrial, Public-Institutional (Government) and Irrigation

**Distribution of Customers** in each Customer Class

Equate the different Customer Classes to each other

<table>
<thead>
<tr>
<th>Equivalent Residential Units (ERUs) and Meter Size</th>
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</thead>
<tbody>
<tr>
<td>Meter Size (inches)</td>
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<tr>
<td>Number of ERUs</td>
</tr>
</tbody>
</table>

Look at the **Water Use Patterns** for each Customer Class

Calculate an Average Day Demand **Water Use Factor** for each Customer Class (Average for 2014-2016 Use). Non-Residential Classes are combined for use with demand forecast.

The previously described Customer Classes make up the District's Retail Customers. There is also authorized water use by others collectively referred to as **Other Consumption**, which includes:

- Hydrant use, both metered and honor reported
- Flushing and Jetting activities
- Firefighting reported water
- Other non-revenue authorized use

Other Consumption does not have a Water Use Factor, Projections assume the highest use measured in the past 3 years (2014-2016)

2015 = 0.04 Million Gallons per Day (MGD).
Planning - Historical Water Production Vs Consumption

Production and Consumption over 3 years (2014-2016) are used to develop factors to use in the future water demand forecast.

One Factor

- **Distribution System Leakage (DSL)**
  Total Production - (Retail + Other Consumption) as a percentage of Total Production : 6.33 % used

Other Factors used for projections

- Average Day Demand (ADD)
  \((\text{Water Use Factor x Projected ERUs}) + \text{DSL}\)
  Average Water Use Factor per ERU for the District = 204

- MDD:ADD Factor
  \[
  \frac{\text{Maximum Day Production}}{\text{Retail + Other Consumption}} = 2.20
  \]

- Maximum Daily Demand (MDD)
  \((\text{ADD} - \text{DSL}) \times \text{MDD:ADD Factor}\)

- Peak Hourly Demand (PHD)
  \[((\text{MDD per ERU} / 1440) \times (C \times N + F)) + 18\]
  \(N = \text{ERUs}, C = 1.6, F = 225\)

- PHD Ratio
  \[
  \frac{\text{PHD}}{\text{MDD}}
  \]

Water Use Factors
Planning - Demand Forecast
Send keyboard focus to media

CUSTOMER FORECAST:

- Existing Customers
  o District records
- **Near Term Expected Growth**
  o Developer Extension Agreements
  o Town Center
- Longer Term Expected Growth
  o Census Information
  o Puget Sound Regional Council Growth Rates
  o **People Per Household Changes over time**
- Buildout
  o **Zoning** (current zoning is used)
  o Maximum allowed by zoning is then modified to consider existing use and critical areas

CUSTOMER GROWTH METHODOLOGY

- All areas of "Analysis" have some subjectivity
- **ERU Forecast** is completed:
  o by Customer Class
  o within each Jurisdiction

WATER DEMAND FORECAST

- Separately for Plateau Zone & Cascade View Zone and as Total System
- Apply the factors to the ERU Forecast to calculate
  o **ADD - BY CUST CLASS**
  o **MDD SUMMARIZED**
  o PHD

Use the Demand Forecast results to analyze the Water System
ANALYSIS

Analysis of the Water System applies water system demands to the District facilities, considering:

- Source
- Storage
- Distribution System

SOURCE ANALYSIS

The District source is analyzed for the ability to meet Maximum Day Demand (MDD).

District sources include:

- District Groundwater Wells
- Cascade Water Alliance Regional Surface Water Supply

Plateau and Cascade View Zones are analyzed separately.

The Plateau Zone includes analysis of 3 separate zone groups;

- 700 Zone Group
- 650 Zone Group
- 297 Zone Group

Cascade View is analyzed as one zone.
The District has 22,521,454 gallons of storage.

Storage is considered to have different components:

- Operating Volume: Normal operations range
- Equalizing Volume: Moderates normal daily fluctuations, maintains system pressure above 30 psi
- Fire Flow Volume: Fire fighting, maintains system pressure above 20 psi
- Standby Volume: For system emergencies and outages (Not for major emergencies, such as a large earthquake)
- Dead Volume: Cannot be used due to insufficient pressure

Plateau and Cascade View Zones are analyzed separately.

The Plateau Zone includes analysis of 3 separate zone groups; Facilities, Tanks, Results

- 700 Zone Group NOTE NEGATIVE
- 650 Zone Group
- 297 Zone Group

Cascade View is analyzed as one zone.
The District has over 250 miles of pipelines.

Distribution analysis is completed using a hydraulic model. *Infowater by Innovyze*

The analysis considers:

- **Peak Hour Demand** *minimum of 30 psi in the system*
- **Maximum Day Demand + Fire Flow** *minimum of 20 psi in the system*
- **Velocity constraints** *maximum 5 feet per second normally, maximum 8 feet per second during fire flows*

**Peak Hour Demand** Results
*Identified 6 areas with low service pressures*

**Fire Flow targets** are based on zoning:

- 1,000 gpm: Single Family
- 2,500 gpm: Medium Density Multi-Family
- 3,000 gpm: High Density Multi-Family
- 3,000 gpm: Commercial other non-residential uses
- 4,000 gpm: Town Center & Lake Sammamish Center

**Fire Flow Analysis** Results
*Identified 10 areas with fire flow issues*

Improvements necessary to rectify the pressure and fire flow issues are identified. They include:

- Modifying pressure zone boundaries with additional piping and/or pressure reducing valves
- Increasing water main size
- Looping water mains
- Individual home booster pumps

**Pressure and/or Fire Flow Improvement Areas**
- **Broadmoore 400 Pressure Zone** ← sample
- 475 Pressure Zone in Inglewood
- 475 Pressure Zone in Tamarack
- Town Center
- 297 Zone at SE 16th/SE 17th
- 550 Pressure Zone near Section 36 Tanks
- Waverly Hills
- Overdale 700 Pressure Zone
- Cascade View Well 13 and North
Redundancy Analysis
The District also recently conducted a study to identify the criticality of system facilities. The analysis included:

- Pipeline Criticality: Required for adequate system pressure
- Pipeline Isolation: 5 or more valves required to isolate
- Valve Criticality: 6 or more valves required to isolate
- Dead-ends: Identified sole source of supply pipelines to areas with MDD customer demands between 10 and 50 gpm, and > 50 gpm MDD

Results of the hydraulic analyses, redundancy study, a seismic vulnerability assessment, additional potential system loops, and provision of service to un-served and under-served areas are combined to create the basis for future distribution improvements.
Conservation Program

District participates in Conservation programs provided through the Cascade Water Alliance, and also implements stand alone District programs.

The Water Use Efficiency (WUE) Rule requires that a conservation goal be set. While the District previously set its own goal, in 2013, Cascade Water Alliance adopted a 2014-2019 goal on behalf of its members.

Cascade Water Alliance will dedicate resources necessary to achieve a cumulative drinking water savings of 0.6 million gallons per day on an annual basis, and 1.0 million gallons per day on a peak season (June-September) basis by 2020.

Cascade will be updating the goal this year, for the next 6-year period.

The District has had an official Conservation Program since 1994. The effectiveness can be seen by comparing:

- **Annual Consumption** per Customer
- **Peak Season Consumption** per Customer

The conservation programs are grouped as Behavioral, Hardware or Operational.

Conservation efforts can also be compared between **Annual or Peak Season**

- Customer Type (Sector)
- Indoor vs Outdoor Use
- Hardware vs Behavior

The District has **two programs** that are worth noting for their water conservation potential.

- Irrigation Audit Rate Program
- Automated Metering Infrastructure
SUPPLY STRATEGY

The District's supply strategy includes multiple elements that provide reliability in meeting demands.

- **Groundwater Supplies**: 12 District wells - Approximately 80% of Supply
- **Aquifer Water Level Monitoring Program**: Over 25 years of monitoring records
  - 37 wells and 5 surface water locations
- **Aquifer Storage and Recovery Potential**: 10 years of operational testing, Waiting for full program extension, including recoverable quantities
- **Regional (Cascade Water Alliance) Supplies**: 2 Connections
- **Conservation**: 1994 Annual Average Consumption = 271 gpd/ERU
  - 2017 Peak Season Consumption = 274 gpd/ERU
- **Reclaimed Water**: Not viable for the District at this time

WATER RIGHTS EVALUATION

Each District well has associated water rights

- **Qi** = Instantaneous Water Right
  - The maximum flow rate allowed for each well
- **Qa** = Annual Water Right
  - The maximum annual volume allowed to be withdrawn

The District varies the use of individual wells throughout the year and over time. Factors that influence these choices include:

- **Customer Water Demand - Seasonal Variations**
- **Water Rights**
- **Aquifer Water Levels**
- **Individual Well Water Quality**
- **Regional Water Supply Use - Take or Pay Quantity**
SOURCE WATER PROTECTION

The District maintains protection of its groundwater source water quality through implementation of a robust wellhead protection program and actively engages in understanding and reducing potential risks of degradation to its source water quality.

Protection of the District's groundwater sources series of steps:

- Susceptibility Assessment
- Wellhead Protection Areas
- Contaminant Source Inventory
- Investigating and Managing Threats to Source Water Quality Degradation

Wellhead Protection Areas (WHPA) have been developed for all District wells.

- 1995 - Issaquah Valley Aquifer Wells
- 1998 - Plateau Aquifer Wells
- 1998 - Cascade View Zone Wells
- 2017 - Update Issaquah Valley Aquifer Wells

**Contaminant Source Inventory** Development
119 sites identified

- Department of Ecology’s Facility/Site Identification System (F/SID)
  - State Cleanup Sites
  - Federal Superfund Sites
  - Hazardous Waste Generators
  - Solid Waste Facilities
  - Underground Storage Tanks
  - Enforcement Locations
- Underground Injection Control (UIC) database
- Field reconnaissance (Windshield Survey)
- Contacting owners of identified properties to inform them of their property location in a WHPA, and educate them on how their activities and actions could impact groundwater quality
Current Water Quality Threat Investigation for Per- and Polyfluorinated (PFAS) Compound Plume

- PFAS Plume discovered in Issaquah Valley in 2015
- Developed numerical model to understand fate/transport of plume in 2016-2017
- Monitoring situation through sampling of District production wells, monitoring wells, and surface water locations
- Sharing information with City of Issaquah and Eastside Fire & Rescue

In response the District has obtained temporary water right changes and modified the short term water supply strategy.

A Sand Aquifer Simulated PFOS Contours, Present Day

- Values shown are maximum observed PFOS groundwater concentrations in A Sand wells (ppt)
- Simulated contours are PFOS with a 2,200 ppt source in place at MW-6
  - 1 – 10 ppt
  - 10 – 100 ppt
  - 100 – 500 ppt
  - 500 – 1,000 ppt
  - > 1,000 ppt
OPERATION AND MAINTENANCE PROGRAM

Send keyboard focus to media

DISTRICT FACILITY MAINTENANCE

Operation and Maintenance Program is the engine that keeps the District running.

The department is responsible for managing all District facilities.

- **12 Groundwater Wells**
- 2 Regional Supply Connections
- 8 Storage Tanks
- 8 Treatment Facilities
  - Corrosion Control
  - Manganese Control
  - Fluoridation
  - Chlorination
- **Water Mains**
  - > 250 miles
  - 2-inch to 30-inch diameter
- 47 Pressure Reducing Stations
- 8 Booster Pump Stations

Standard Operating Procedures are utilized to guide operations including work load management.
REGULATORY REQUIREMENTS

Source and Treatment Regulations

- Regional Supply Monitoring
  - Surface Water Treatment Rule - 1990
  - Interim Enhanced Rule - 2002
  - Long Term 2 Enhanced Rule - 2006

- District Wells
  - Groundwater Rule - 2009

- Volatile Organic Compounds (VOC), Synthetic Organic Compounds (SOC), & Inorganic Compounds (IOC)
  - Phase I Regulations - 1989
  - Phase II Regulations - 1992
  - Phase IIB Regulations - 1993
  - Phase V Regulations - 1994
  - Radionuclides Rule - 2003
  - Arsenic Rule - 2006

- Unregulated Contaminant Monitoring Rules
  - UCMR - 2001-2005
  - UCMR 2 - 2007-2011
  - UCMR 3 - 2012-2016 Identified PFAS
  - UCMR 4 - 2017-2021

Distribution System Regulations

- Total and Fecal Coliform – Bacteriological Monitoring
  - Total Coliform Rule - 1990
  - Revised Total Coliform Rule/Distribution Rule - 2016

- Trihalomethanes, Haloacetic Acids, Total Organic Carbon
  - Stage 1 Disinfectants and Disinfection Byproduct Rule (D/DBP) - 1999
  - Stage 2 Disinfection Byproducts Rule - 2016

- Lead and Copper
  - Lead & Copper Rule - 1992
  - Lead & Copper Rule Revisions - 2007

Other Regulations

- Consumer Confidence Reports (CCR) Annual → Biennial (AWIA)

- Operators Certification
CROSS-CONNECTION CONTROL PROGRAM
Cross-Connection Control protects the public water system from contamination via a cross-connection.

In 2017 the District had identified over 6,900 backflow assemblies in the District. The District continues to identify additional assemblies and locations where existing service connections are required to add backflow assemblies.

CUSTOMER INQUIRIES
Inquiries are addressed by a number of District personnel, depending on the nature of the request.

The addition of AMI is changing the nature of customer communication. Identification of certain potential customer leaks occurs more quickly, without waiting for the normal billing cycle. The District then proactively contacts customers.
DESIGN AND CONSTRUCTION STANDARDS

Operation and maintenance of the District’s water system is more efficient when built to consistent standards. The District's design standards are reviewed on a regular basis to ensure installation of high-quality materials and incorporate new technology and products.

The **process** to install new facilities requires:

- Policies and Procedures
- Design Standards
- Construction Standards
- Construction Certification

Design standards provide requirements for:

- Pipeline Size
- Pipeline Velocity
- Fire Hydrant Locations
- Valve and Valve Clusters
- Water Service Pressures
- Pressure Reducing Valves
- Booster Pump Stations

**Construction Standards** cover:

- Materials
- Installation
- Testing
CAPITAL PLAN

The Capital Plan included in the Water Comprehensive Plan is based on prior elements of the Comprehensive Plan, and also consistent with the District adopted budget.

Capital Plan elements come from:

- Analysis of Source, Storage and Distribution System
- Redundancy and Seismic Resiliency Studies
- Operation and Maintenance Program

Cost estimates for each identified project are based on:

Projects are grouped in the following categories:

- Combined: District wide programs, that may have both a water and sewer component.
- General: Plans, studies, hydraulic model and equipment
- Supply: Projects at well. Includes consideration of additional treatment at Well 9 for PFAS.
- Booster Pumps: Projects to improve service to the 650 Zone
- Storage: Seismic resiliency, coatings, and 1 new tank
- Distribution System: Mains and Pressure Reducing Valves
  - Transmission - 9 projects
  - Fire Flow - 18 projects
  - Redundancy - 77 projects
  - Projects in Process - 5 Capital Improvement Projects and 24 Developer Extension Projects currently under construction (or completed)

The funding source and likely funding type are identified for each project. Some projects may have funding from multiple sources.

The Capital Plan funding summary is used to develop the Financial Plan 10 yr, 20 yr, Future years
The Financial Summary considers a plan for financing the operating and capital needs of the water system.

The District's financial status is reviewed regularly and water rates are adjusted as needed to cover costs.

The Water Comprehensive Plan Financial Study

- Evaluates the sufficiency of revenues to fund projected operating and capital needs.
- Develops a strategy of rate adjustments needed to cover costs in excess of available revenues
- Reevaluates the Water General Facility Charges

**Financial Plan Overview** shows the interrelationships of the District's financial elements

**Operating Expense Forecast** is based on a series of assumptions

**Water Revenue** is required to fund Operating Expenses plus the proposed $56.5 Million in Water Capital Projects from 2018-2027

*Estimated to require annual rate increases of 3.75% per year*

Adoption of the Plan does not adopt the rate increase

Rates are considered each year by the Board
Water General Facility Charge (GFC) Evaluation

GFCs are a connection charge that is imposed as a condition of service on new customers connecting to the water system.

The GFC is based on existing and planned capital infrastructure investment. The GFC includes costs for:

- Supply
- Storage
- Treatment
- Booster pump stations
- Pressure reducing stations
- Distribution system transmission mains
- General system assets

GFC Calculation uses an Average Cost Methodology

<table>
<thead>
<tr>
<th>Water GFC Calculation</th>
<th>Supply</th>
<th>Storage</th>
<th>Treatment</th>
<th>Mains</th>
<th>Pumping</th>
<th>Hydrants</th>
<th>General</th>
<th>Total</th>
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<tbody>
<tr>
<td>Total Cost Basis</td>
<td>$21,632</td>
<td>$37,190</td>
<td>$6,009</td>
<td>$58,899</td>
<td>$5,517</td>
<td>$3,069</td>
<td>$25,061</td>
<td>$160,777</td>
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<tr>
<td>Total Customer Basis in ERUs</td>
<td>27,717</td>
<td>33,006</td>
<td>29,318</td>
<td>32,415</td>
<td>29,318</td>
<td>31,668</td>
<td>27,225</td>
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<tr>
<td>Total GFC per ERU</td>
<td>$780</td>
<td>$1,127</td>
<td>$307</td>
<td>$1,789</td>
<td>$188</td>
<td>$97</td>
<td>$943</td>
<td>$6,231</td>
</tr>
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</table>

Comparing the updated GFC calculation to prior calculation:

- Calculated in 2014 = $4,729 per ERU
- Adjusted by Construction Cost Index from 2014-2018
  2018 GFC = $5,342 per ERU
- Updated Calculation = $5,231 per ERU ← Board will consider in July 2019
The 2018 Water Comprehensive Plan is now in the review and comment phase.

- SEPA
  - 2/19/2019 Determination of Non-Significance
  - 3/11/2019 SEPA Comments due
- 2018 Water Comprehensive Plan
  - 2/25/2019 Adopted for Public Distribution
  - 2/26/2019 Posted on District Website
  - 3/11/2019 Public Meeting
  - 4/30/2019 Land Use Agency Consistency Comments Requested
    (Sammamish, Issaquah, King County)
  - 6/11/2019 Comments to Plan Due
2018 WATER COMPREHENSIVE PLAN
PUBLIC MEETING RECORD

9. SPWSD Board of Commissioner Minutes for March 11, 2019

Public Meeting providing overview of the 2018 Plan
• Reported on the City of Federal Way excise tax litigation. The districts’ appellants in that litigation must file their opening brief by April 5, 2019. The Supreme Court will then determine whether to grant direct review of the districts’ appeal. If so, the matter will probably be argued before the Supreme Court this fall.

General Manager
• Reported Cascade Water Alliance (CWA) is hosting their 20th Anniversary Lunch on Monday, March 25, 2019. Reported on an upcoming CWA meeting where discussion could include items which have the potential to impact the wheeling water charge the District pays monthly.
• Reported the Washington Association of Sewer and Water Districts (WASWD) has scheduled a meeting with agencies involved in the Stormwater Injection Group for Tuesday, March 26, 2019.
• Reported the City of Sammamish is hosting a reception for City Manager candidates this Friday, March 15, 2019 at 6:30 p.m.
• Reported Marissa Huntley will be starting next Monday, March 18, 2019, as the new Executive Assistant.

Commissioners
Commissioner Harman
• Reported on his attendance at the Sno-King Water District Coalition meeting today.
• Reported on his attendance at a recent Regional Water Quality Committee meeting.

Commissioner Shustov
• Reported on her attendance at a recent Metropolitan Water Pollution Abatement Advisory Committee (MWPAAC) meeting.

Commissioner Warren
• Provided an update on the efforts of the King County Wastewater Treatment Contract Group that CWA has been facilitating.

RECESS
At 4:51 p.m. the Board recessed until reconvening for the public information meeting scheduled at 6:00 p.m.

PUBLIC INFORMATION MEETING REGARDING 2018 WATER COMPREHENSIVE PLAN
President Warren opened the public information meeting to discuss the 2018 Water Comprehensive Plan (2018 Plan) at 6:00 p.m. The Board, along with District staff Regenstreif, Krauss, Wong, Barton, Tuchscherer, and Anderson were in attendance to address comments and questions. In addition, Rodney Langer, lead consultant with CHS Engineers, and David Stangel, hydraulic analysis consultant with Murraysmith, were in attendance to address comments and questions as well. Following introductions, Regenstreif provided an overview presentation of the 2018 Plan. There were no questions regarding the 2018 Plan from the public in attendance.
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SAMMAMISH PLATEAU WATER & SEWER DISTRICT  
KING COUNTY, WASHINGTON  

RESOLUTION NO. 4851  

RESOLUTION OF THE BOARD OF COMMISSIONERS OF SAMMAMISH PLATEAU WATER AND SEWER DISTRICT, KING COUNTY, WASHINGTON, ADOPTING THE 2018 WATER COMPREHENSIVE PLAN AND APPROVING THE PLAN FOR PUBLIC DISTRIBUTION IN ACCORDANCE WITH WAC 246-290-100. 

WHEREAS, the Sammamish Plateau Water and Sewer District ("District") is a municipal corporation providing water and sewer utility services pursuant to Title 57 RCW; and 

WHEREAS, Chapter 57.16.010 authorizes the District to adopt a general comprehensive water system plan and the District has previously done so by the adoption of the 2010 Final Comprehensive Water System Plan with Final Revisions and the 2012 Amendment to Such Plan on April 2, 2012 by Resolution No. 4143 (collectively referred to as “the Water Comprehensive Plans”); and 

WHEREAS, the District Board of Commissioners ("Board") now deems it desirable to adopt an updated and revised Water Comprehensive Plan and Appendices dated December 2018 ("the 2018 Water Comprehensive Plan") which is incorporated herein in full by this reference; and 

WHEREAS, the Board has considered the proposed 2018 Water Comprehensive Plan which was prepared for the District by CHS Engineers, consulting engineers, CDM Smith, consulting hydrogeologists, Murraysmith (previously Murray Smith & Associates,) Inc, consulting engineers with the hydraulic model, and FCS Group for the financial analysis; and 

WHEREAS, the District acknowledges that, pursuant to RCW 57.16.010, the Washington State Department of Health, King County, City of Sammamish ("Sammamish") and City of Issaquah ("Issaquah") must approve the 2018 Water Comprehensive Plan; and 

WHEREAS, based on a SEPA checklist prepared regarding the proposed adoption of the 2018 Water Comprehensive Plan as a non-project action, a SEPA Determination of Non-Significance ("DNS") was issued by John Krauss, District Manager and District Responsible SEPA Official, on February 19, 2018, in conformance with the District’s SEPA Resolution No. 3209; now, therefore, 

BE IT RESOLVED by the Board of Commissioners of Sammamish Plateau Water & Sewer District, King County, Washington, as follows: 

1. The 2018 Water Comprehensive Plan is hereby approved and adopted as the District's Water Comprehensive Plan effective the date set forth below, and is further approved for public distribution in accordance with WAC 246-290-100. 

Resolution No. 4851
2. The 2018 Water Comprehensive Plan shall be submitted to the legislative authorities of King County, Sammamish and Issaquah and to appropriate state agencies, including the Washington State Department of Health, for approval by those jurisdictions and agencies as provided by law.

ADOPTED by the Board of Commissioners of Sammamish Plateau Water and Sewer District, King County, Washington, at a regular open public meeting held on the 25th day of February 2019.

**Individual Commissioner's Vote on this Resolution:**

<table>
<thead>
<tr>
<th>Approved:</th>
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<th>Lloyd Warren, President and Commissioner</th>
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<tr>
<td>Opposed:</td>
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<td>Ryika Hooshangi, Vice President and Commissioner</td>
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<td>Abstained:</td>
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<td>Mary Shustov, Secretary and Commissioner</td>
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<td>Absent:</td>
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<td>Tom Harman, Commissioner</td>
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<tr>
<td>Approved:</td>
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<td>Mahbubul Islam, Commissioner</td>
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</tbody>
</table>

Resolution No. 4851
May 21, 2019

SCOTT JONAS
SAMMAMISH PLATEAU WATER & SEWER DISTRICT
1510 228TH AVE SE
SAMMAMISH WA 98075

RE: Sammamish Plateau Water & Sewer District, ID#40900
King County
Water System Plan – 2019 - Comments
Submittal #19-0208

Dear Mr. Jonas:

Thank you for submitting the Water System Plan (WSP) for Sammamish Plateau Water & Sewer District (the District) received in this office on February 28, 2019. We have reviewed the plan and offer the following comments. These comments must be adequately addressed prior to approval of the WSP.

System Description
1. Provide a determinations of local government consistency from the Cities of Issaquah and Sammamish.

2. Please respond to review comments from King County. Adequate responses to their issues will be necessary in order to receive a WSP Adoption Ordinance from King County.

3. Section 1.8.4 Direct Connection and Remote Systems, page 1-35, implies that the District will not allow new Group B public water systems within the retail service area. Please clarify the intent.

Basic Planning Data
The District appears to have a unique method of understanding system demand based on customer class and meter size. We find it a little difficult to understand, but believe it serves the District in determining water availability for new services. Responses to the following questions aim to help us better understand this approach and ensure the approach is comparable to a typical equivalent residential unit (ERU) analysis.

4. The column headings for ERU throughout the chapter do not appear to represent what we define as ERU. For example, Table 2-1 Sizes and Types of Meters by Customer Class, the ERU’s appear to be based on meter size. This representation does account for larger demands through larger meters. Would it be more appropriate to label the ERU column as “weighted number of connections”?

5. Table 2-2, Multi-Family Units per Connection, shows 198 units for 174 connections on the ¾ inch meter size. How is it that the number of units for the multi-family connection is not at least twice the number of connections? Could these be single homes with one service meter and an accessary dwelling unit? Please discuss.

6. Distribution system leakage (DSL) exerts a real demand on system. Did the District evaluate the DSL ERU value? How was the consumptive volume from DSL incorporated into the demand forecast?

Public Health - Always Working for a Safer and Healthier Washington
7. Table 2-9, Historical Equivalent Residential Unit (ERU) Analysis (2014-2016), again refers to ERUs.

   a. Were the ERUs listed here determined in the same manner as with Table 2-1?

   b. ERU$_{ADD}$ represents the average day demand in gallons per day per full-time residential connection (gpdpc). We recommend representing full-time as connections that show more than the 50 gallons per day per person consumptive use. Has this analysis applied full-time status to all single-family residential connections with nonzero meter values? Is the District confident that the majority of the single-family residential connections are full-time?

   c. Is the column heading ‘ERU Water Use Factor (gpd/ERU)’ intended to represent what we refer to as ERU$_{ADD}$ in the Draft Water System Design Manual (https://www.doh.wa.gov/Portals/1/Documents/4200/DRAFT%20WSDM.pdf)?

   d. What happens in this analysis if multi-family residential, non-residential, and DSL ERUs are calculated using ERU$_{ADD}$ equal to 213gpdpc and the actual annual consumption for each customer class? Are the total number of ERUs comparable to the number of ERUs used in chapter 3 system analysis?

**System Analysis**

Nice work summarizing the hydraulic model results in chapter 3. We especially appreciate the reference to the related capital improvement projects that address the shortfall identified in the model.

8. Section 3.1.1 Design Criteria refers to the evaluation uses the assumption that the sources will operate 24 hours per day. We recommend assuming the sources will operate for 20 hours per day for added safety factor.

9. Section 3.3.6 refers to Plateau Zone hydraulic analysis results.

   a. Regarding system pressure greater than 100psi or 120psi, in our experience customers are not always aware of their responsibility to maintain individual pressure reducing valves. When pressure reducing valves fail, appliances break or property floods, understandably some people get upset. Consider how the District might provide customer education.

   b. Please note that individual booster pumps are not an acceptable long-term solution when minimum system pressure requirements are not met at the distribution main.

**Water Use Efficiency Program (WUE) and Water Rights Assessment**


**Source Protection**

No comment

**Operations & Maintenance**

Very nice tabular form summarizing major system components.

12. Is the District reporting distribution system disinfectant residuals? As a system that purchases surface water, the District is required to report the distribution system disinfectant residuals. The report should include distribution system disinfectant residuals for every calendar day and include the disinfectant residuals collected at the same time and place as the routine coliform samples.

13. Section 6.3.1.1 Plateau Zone Components, page 6-26 refers to occasional grab sample verification of the pH analyzer. Please consider implementing EPA Method 150.3: Determination of pH in Drinking Water. It provides guidance and outlines best practices for measuring pH.


   a. 6.4.11.2; Table 6-25. Please specify whether each routine (coliform) sample site location is a dedicated sample stand or a customer's tap or other site characteristic. We assume that all coliform ‘repeat” sites are not sample stands however, please clarify.

   b. Appendix J, Water Quality Monitoring. PDF p. 77 of 167 Table 4 GWR Triggered Monitoring Details, PDF 35 of 167 Triggered sample sites table, WSP page 6-70, Table 6-25 Monthly Bacteriological Monitoring Locations. We suggest adding a separate column for the interties source of supply that the District intends to monitor. The intertie source feed location is not required to be monitored per the groundwater rule (GWR).

   c. Appendix J, Water Quality Monitoring. PDF p. 10 of 167. The District recently updated its Water Facilities Inventory with the Department of Health such that for the population served, 70 monthly routine coliform samples are now required. The District has been collecting 70 such samples. No response needed.

   d. Appendix J, Water Quality Monitoring. PDF p. 11 of 167. With the Revised Total Coliform Rule (RTCR) there has been a nomenclature change.

      i. A non-acute MCL violation is now called Treatment Technique Trigger that triggers a RTCR assessment (Level 1 or Level 2 assessment). An acute MCL violation is an *E. coli* MCL violation, which triggers a Level 2 assessment.

      ii. A major repeat violation is now called a treatment technique trigger that triggers a RTCR assessment (Level 1 or Level 2 assessment).

   e. Appendix J, Water Quality Monitoring. PDF p. 12 of 167. For systems taking forty or more routine samples per month, if the system exceeds 5.0 percent total coliform-positive samples for the month it will have a treatment technique trigger that requires performing an assessment (Level 1 or Level 2). Please update.

   f. Appendix J, Water Quality Monitoring. PDF p.13 of 167. Note that if a sanitary defect identified in an assessment is not corrected within 30 days of learning about the treatment technique trigger, then a purveyor is allowed to provide the Department a corrective action plan that extends the time period to fix the sanitary defect.
   i. Please note that if NE Sammamish S&W has a total coliform positive sample in their
distribution system, they will need to notify the District to sample any and all of the
District’s groundwater sources that were in use on the date of the total coliform positive
sample. This is consistent with the groundwater rule.

   ii. If NE Sammamish S&W has an E.coli positive source sample in any groundwater source,
that situation accords with the GWR. This scenario requires NE Sammamish S&W to
shut off that groundwater source or install disinfection treatment that meets 4-log viral
inactivation level treatment. NE Sammamish S&W would also have a public notice
obligation to its customers including to Sammamish Plateau. Similarly, if Sammamish
Plateau has an E.coli positive source sample in any groundwater source, the same
conditions apply.

h. The District reports non-residential connections however, does not yet report a transient non-
community population (visitor, travelers, patients, customers) or non-transient non-community
population (students, employees, daycare children).

**Standard Plans & Specifications**
No comment

**Capital Improvement Program**
We commend the District for their implementation of the Asset Management program. No response
needed.

**Financial Program**
No comment

**Implementation**
The implementation chapter is an excellent summary of how the District will continue to provide safe and
reliable drinking water. No response needed.

**Other Documentation**
15. The water system must meet the consumer input process outlined in WAC 246-290-100(8). Please
include documentation of a consumer meeting discussing the WSP, prior to DOH approval of the WSP.

16. Prior to DOH approval, the District’s governing body must approve and adopt the WSP.

17. A signed SEPA checklist is a part of the WSP submittal. Provide a signed SEPA Threshold
Determination.

18. Include any comments from adjacent purveyors and the District’s response to those comments.

19. Is the District a member of the Washington State Water/Wastewater Agency Response Network
(WAWARN)? Federal Emergency Management Agency states prior to reimbursement, they will ask
for mutual aid documentation. Becoming a member of WAWARN demonstrates both managerial and
financial capacity.
May 21, 2019
Sammamish Plateau Water & Sewer District
Page 5

We hope that you have found these comments to be clear, constructive and helpful in the development of your final draft WSP. We ask that you submit the revised WSP on or before **August 28, 2019**. In order to expedite the review of your revised submittal, please include a cover letter summarizing how each of the above comments was addressed in the revised WSP and where each response is located (i.e., page numbers, Appendices, etc.)

Regulations establishing a schedule of fees for review of planning, engineering, and construction documents were adopted August 3, 2007 (WAC 246-290-990). The total cost is $5,484.00. An itemized invoice is enclosed. Please note that this fee covers our current review and one more submittal for this project. If additional submittals are required, then an invoice for additional fees will be included with our final approval letter. Please remit your complete payment in the form of a check or money order within thirty days of the date of this letter to: **WSDOH, Revenue Section, PO Box 1099, Olympia WA 99507-1099**.

Thank you again for submitting your draft Water System Plan for our review. If you have any comments or questions concerning our review, please contact me.

Sincerely,

Richard Rodriguez
Regional Planner
Northwest Drinking Water Operations
(253) 395-6771

cc: Brietta Carter, DOH
    Ria Berns, WSDOE – NWRO
    Steve Hirschey, King County UTRC
    Rodney Langer, P.E., CHS Engineering, Inc
    **Jay Regenstreif, P.E., Sammamish Plateau**
    Jay Krauss, General Manager, Sammamish Plateau
March 21, 2019

Richard Rodriguez
Department of Health – Drinking Water Division
20425 72nd Ave South, Suite 310
Kent, WA 98035-2388

Re: Sammamish Platea Water and Sewer District (SPWSD), ID #40900, Draft Water System Plan (DWSP) review (Submittal #19-02088)

Dear Richard Rodriguez:

The following comments regarding the SPWSD DWSP are submitted as provided in the 2007 Memorandum of Understanding.

In tables 4.14 and 4.15 of the DWSP, SPWSD has not followed standard protocol in presenting the interrelationship between and among their water rights. There are also errors in the naming conventions for water rights numbers.

Examples of the first error type include the relationship between additive and non-additive being shown based on how portions of water right quantities are split between sources rather than on how they are split within and among different water rights. While the former may be informative regarding how the district operates its sources, this is not the purpose of the Water Right Self-Assessment and makes the assessment appear to contain more water rights than have been issued by the Department Ecology (Ecology). The district has previously been presented with the enclosed table which shows Ecology’s evaluation of its water rights.

Ecology water rights have been numbered by the agency during the 102 years it has been issuing water rights. Water rights issued prior to the 1970s were numbered based on a separate number being issued for each stage of development with Certificates having a unique number with respect to applications and permits.

Beginning in the 1970s, a new water naming protocol was introduced which is based on a single number being assigned to an application. These numbers are modified to reflect the stage of development by adding an “A”, “P”, “C” or “CL” to the end of the number to indicate whether the water right document is an “Application,” “Permit,” “Certificate” or “Claim.” Examples relevant to this comment are G1-22861C for a certificate and G1-26572P for a permit. As of the time this comment is being prepared, only one groundwater right held by the district (G1-26572P) remains in permit status (water right being developed), all others are certificated.
Other naming errors in table 4.14 and 4.15 involve the use of asterisks. Asterisks indicate that the water right document was originally issued prior to 1970 and that a new number, using the post 1970 protocol has been issued based on the original application number for the water right. An asterisk always follows after the source type and region codes and is separated by a dash. An example of the correct placement of an asterisk is G1-*09533C, indicates that this water right was initiated through the filing of application 9533 for a groundwater right (“G”) in the NW region of Washington (“1”). The original water right number for pre-1970 issued certificates is often provided as a convenience by Ecology, but agency databases are primarily based on the post 1970s number with the asterisk to signify a converted number. Ecology’s database can be queried for either number so the use of the older number in the Water Right Self-Assessment table is satisfactory. The original certificates commonly have “-A” at the end of the number, which is not needed in reporting or database queries.

If you have any questions regarding my comments, please contact me at (425) 649-7077 or by email at doug.wood@ecy.wa.gov.

Sincerely,

Douglas H. Wood, LHG
Hydrogeologist/Permitting Specialist

Enclosure: Ecology’s Evaluation of Water Rights
<table>
<thead>
<tr>
<th>Well No</th>
<th>Control No</th>
<th>Certificate</th>
<th>Priority</th>
<th>( Q_{IA} )</th>
<th>( Q_{BA} )</th>
<th>( Q_{IN} )</th>
<th>( Q_{AN} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well 1R</td>
<td>G1-00342C</td>
<td></td>
<td>7/7/1954</td>
<td>300.00</td>
<td>448.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well 1R</td>
<td>G1-25438C</td>
<td></td>
<td>5/10/1989</td>
<td>200.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well 2 + 2R</td>
<td>G1-*09533C</td>
<td>6802</td>
<td>6/21/1968</td>
<td>500.00</td>
<td>800.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well 2 + 2R</td>
<td>G1-00749C</td>
<td></td>
<td>5/12/1971</td>
<td>20.00</td>
<td>10.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well 4R</td>
<td>G1-*10373C</td>
<td>7147</td>
<td>8/25/1969</td>
<td>200.00</td>
<td>224.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well 4R</td>
<td>G1-23022C</td>
<td></td>
<td>12/9/1977</td>
<td>550.00</td>
<td></td>
<td></td>
<td>880.00</td>
</tr>
<tr>
<td>Well 7/8</td>
<td>G1-00289C</td>
<td></td>
<td>1/20/1972</td>
<td>3,200.00</td>
<td>936.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well 7/8</td>
<td>G1-25428C*</td>
<td></td>
<td>4/24/1989</td>
<td>2,300.00</td>
<td>1,288.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well 9</td>
<td>G1-26014C*</td>
<td></td>
<td>12/24/1990</td>
<td></td>
<td>2,000.00</td>
<td>1,608.00</td>
<td></td>
</tr>
<tr>
<td>Well 11.1 + 4R</td>
<td>G1-*07653C</td>
<td>6395</td>
<td>6/4/1965</td>
<td>100.00</td>
<td>160.00</td>
<td></td>
<td></td>
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<tr>
<td>Well 11.1 + 11.2 + 4R</td>
<td>G1-23897C*</td>
<td></td>
<td>7/31/1981</td>
<td>600.00</td>
<td>768.00</td>
<td></td>
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<tr>
<td>Well 11.2</td>
<td>G1-22861C</td>
<td></td>
<td>5/2/1977</td>
<td>1,000.00</td>
<td>1,600.00</td>
<td></td>
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<tr>
<td>Well 11.2</td>
<td>G1-26572P*</td>
<td></td>
<td>4/30/1992</td>
<td>580.00</td>
<td>568.45</td>
<td></td>
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<tr>
<td>Well 10</td>
<td>G1-06228C</td>
<td>5140</td>
<td>3/23/1962</td>
<td>100.00</td>
<td>22.50</td>
<td></td>
<td></td>
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<tr>
<td>Well 10</td>
<td>G1-27166C</td>
<td></td>
<td>6/4/1993</td>
<td>500.00</td>
<td>378.50</td>
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<td>186.50</td>
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<tr>
<td>Well 12R</td>
<td>G1-00027C</td>
<td></td>
<td>6/19/1970</td>
<td>100.00</td>
<td>108.00</td>
<td></td>
<td></td>
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<tr>
<td>Well 12R</td>
<td>G1-24363C</td>
<td></td>
<td>7/25/1983</td>
<td>100.00</td>
<td>12.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well 13R</td>
<td>G1-25963C</td>
<td></td>
<td>11/7/1990</td>
<td>200.00</td>
<td>224.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well 13R</td>
<td>G1-25831C(A)</td>
<td></td>
<td>6/26/1990</td>
<td>62.48</td>
<td>86.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>\textbf{Totals}</td>
<td>\textbf{10,612.48}</td>
<td>\textbf{7,634.63}</td>
<td>\textbf{2,000.00}</td>
</tr>
</tbody>
</table>

\( Q_{IA} \) = Instantaneous Quantity (Pumping Rate) in gpm; \( Q_{BA} \) = Annual Quantity in ac-ft/yr; \( Q_{BA}^\* \) = Non-Additive \( Q_{BA} \); \( ^\* \) = Winter Only; \( ^\dagger \) = Qa split 300 gpm each well and Qi split 468 ac-ft/yr to Well 11.1 and 300 ac-ft/yr to Well 11.2; \( ^\dagger \) includes amounts transferred from exempt wells

<table>
<thead>
<tr>
<th>SPWSD Zone</th>
<th>Water Rights</th>
<th>( Q_{IA} )</th>
<th>( Q_{BA} )</th>
<th>( Q_{IN} )</th>
<th>( Q_{AN} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plateau</td>
<td>14 Cert, 1 Permit</td>
<td>10,150.00</td>
<td>7,203.95</td>
<td>2,000.00</td>
<td>3,122.50</td>
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<tr>
<td>Cascade View</td>
<td>4 Certificates</td>
<td>462.48</td>
<td>430.68</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Mr. Regnstreit,

Thank you for providing a copy of the draft Sammamish water comprehensive plan for review. It appears to be very thoroughly prepared. I’m hoping that you can answer a few questions about the growth assumptions you included in the plan.

The plan estimates demand using population forecasts for 2037 and “buildout.” King County cities have growth targets out to 2031 and their local comprehensive plans may contemplate growth beyond that. I saw that the plan references the cities’ comprehensive plans, but it wasn’t clear to me if the forecasts you included directly relate to the growth planned by Issaquah and Sammamish. Do they?

King County will update growth targets in 2021 and the cities will update their plans in 2023. Under GMA they need to plan for a twenty year period, so presumably, their plans will be from 2023-2043. Will this water comprehensive plan be updated again prior to that to include the 2043 time period so that the cities can know if future growth can be served?

Often the term “buildout” is avoided in planning because cities are regularly making planning and zoning changes, just like the Sammamish town center plan that is referenced in the plan. King County’s buildable lands report identifies zoning “capacity,” rather than buildout, although, even then it is likely that zoning in both cities will continue to be updated over time to support more growth. I believe some utilities use a very long time period, 50 or 75 years, to identify long-term needs, including replacement, even if growth projections aren’t as precise for that time period. Have you completed a long term (more than 20-year) analysis? I didn’t see one.

We are in the process of updating the regional long range plan to 2050 and would welcome your feedback, especially any utility impacts that future growth might have. More information is at psrc.org/vision.

Thanks again for the draft plan and information about the district.

Paul Inghram, AICP | Growth Management Director | Puget Sound Regional Council
1011 Western Ave Ste 500 | Seattle, WA 98104
206-464-7549 office | 206-790-0182 mobile | pinghram@psrc.org

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June 5, 2019

Jay Regenstreif, P.E.
Sammamish Plateau Water & Sewer District
1510 228th Avenue SE
Sammamish, WA 98075

Dear Ms. Regenstreif,

Thank you for submitting the draft Sammamish Plateau Water and Sewer District’s (District) 2018 Water Comprehensive Plan (Plan) December 2018 for King County approval. The Plan was received on March 14, 2019. In accordance with King County Code 13.24, King County’s Utilities Technical Review Committee (UTRC) has reviewed the Plan for consistency with the King County Comprehensive Plan and the King County Code (KCC).

In reviewing the Plan, the UTRC noted the Plan is well written, easy to follow, and is largely consistent with the County’s comprehensive plan and code. We have identified three points of clarification that are necessary before we can make a recommendation to the King County Council for approval of the District’s final plan. We request you include the following information in your final plan:

- Details regarding when the time-period starts for measuring timely and reasonable service when a request for service is received;
- Consistency statements from the Cities of Sammamish and Issaquah that affirm the water system plan is consistent with their respective planning efforts; and
- Statements clarifying whether the District is seeking to be a satellite management agency outside of the existing future service area of the District.

Often, the construction and/or maintenance of utility lines require work within the road right of way (ROW) for roads in unincorporated King County. We strongly recommend that all utilities that have proposed project within unincorporated King County, contact the King County Department of Local Services, Road Services, Engineering Services Section for coordination with the County’s annual overlay program. Failure to do so may result in the denial of the permit to work within the ROW once an overlay of the road section has been completed. Although each utility has a set of construction standards and specifications for their projects, the current edition of the King County Road Design and Construction standards apply to any installation or work in these ROWs. Not adhering to
these standards could result in the installation of non-specified and approved methods and/or materials that are out of the specifications for King County and could potentially add additional costs to the purveyor for future repairs or adversely affect acceptance of those repairs/installations. The 2016 and 2007 King County Road Design and Construction Standards can be found on the World Wide Web at: http://www.kingcounty.gov/transportation/kcdot/Roads/EngineeringServices/RoadStandards2007.aspx

Finally, one of the issues not addressed in the plan is expired King County franchises held by the District. We are aware of the work you have initiated with King County’s real estate management staff to update the franchises and the County will work expeditiously with you to finalize that work. We are not expecting any change to the plan for the franchise issue.

We look forward to seeing the final Plan and working with you to secure the King County Council’s approval. The Council’s action will represent King County’s final action on the Plan. If you have any questions or concerns about any of the information in this letter, please do not hesitate to call me at 206-477-5387.

Sincerely,

[Signature]
Stephen Hirschey
Chair, Utilities Technical Review Committee

cc: Richard Rodriguez, Regional Planner, Washington State Department of Health
June 7, 2019

Jay Regenstreif, P.E.
Sammamish Plateau Water & Sewer District
1510 228th Ave SE
Sammamish, WA 98075

Subject: Comments to Sammamish Plateau Water & Sewer District’s 2018 Water System Plan

Dear Mr. Regenstreif:

Thank you for the opportunity to review and comment on the 2018 Water System Plan (WSP) for Sammamish Plateau Water & Sewer District (District). Our comments below include general comments and more specific comments on data gaps and corrections to the information presented in the WSP, particularly as related to Seattle Public Utilities (SPU) and its services to the District.

1. Water Quality:
   a. Referring to Tables 6-15, 6-16 and 6-17 – please explain why some parameters are listed but not analyzed. Also, please confirm that the parameters listed in these three tables are the most current. We recommend that an update be made to Table 6-15 to match the current list of primary and secondary parameters as shown in WAC 245-290-310 and in Tables 6-16 and 6-17 to match the most current federal regulations.
   b. The results described and presented in Section 6.4 appear to include only sampling conducted at the District’s groundwater sources. While wells provide most of the water for the Districts customers, the WSP states approximately 20% of water supply is provided through regional connections, which is water provided by Seattle Public Utilities. Because customers drink this water as well, a summary of SPU water quality and SPU’s compliance with federal and state drinking water regulations should be included in the WSP.
   c. The District participated in sampling for parameters under UCMR 1, 2 and 3. What parameters were sampled for and were any detections observed?
   d. In Section 6.4.5.1, please clarify the different numbers shown for acceptable detectable chlorine residuals (chlorine residual should be greater than 0.2 mg/L versus 0.01 mg/L). Also clarify which level is used by the District to determine compliance.
   e. On page 6-49, please correct the reference to optimal fluoride level per WAC 246-290-460. The current optimal fluoride level is 0.7 mg/L, not 0.9 mg/L.

2. Water Shortage Contingency Plan (WSCP):
   a. SPU updated its WSCP through our most recent WSP. A key change in our newest version is that the Advisory Stage is an internal planning phase only and does not have a public facing component. SPU’s March 2018 WSCP can be found here: http://www.seattle.gov/util/Documents/Plans/Water/WaterShortagePlan/index.htm
If you have any questions on our comments or need additional information, please contact me at joan.kersnar@seattle.gov or (206) 684-0839.

Sincerely,

Joan M. Kersnar, P.E.
Drinking Water Planning Manager

cc: Kathy Curry, Wholesale Contracts Manager, Seattle Public Utilities
April 30, 2019

Jay Regenstreif
Sammamish Plateau Water
1510 228th Avenue SE
Sammamish, WA 98075

Re. Sammamish Plateau Water and Sewer District - 2018 Comprehensive Plan Draft Review

Dear Ms. Regenstreif,

The City of Sammamish has reviewed the Sammamish Plateau Water & Sewer District’s 2018 draft Water Comprehensive Plan, received by our office on February 26, 2019. This Plan was reviewed by comparison to the Sammamish Comprehensive Plan, Land Use Plan and Zoning Map, and Development Regulations pursuant to WAC 246-290-108. We discussed our review of the 2018 Draft Water Comprehensive Plan with David Pyle, Deputy Director of the Community Development; Andrew Zagars, City Engineer; Kellye Hilde, Planning Manager; Tawni Dalziel, Senior Stormwater Program Manager; Miryam Laytner, Sr. Management Analyst; Sara Estiri, Management Analyst on April 17, 2019.

As a result of our review, we have 18 comments that have been identified in the enclosure. Please note that we signed the Local Government Consistency Determination Form under the condition that Sammamish Plateau Water & Sewer District revises and incorporates our comments and without other significant changes.

We request that when the Sammamish Plateau Water and Sewer District revises the 2018 Draft Comprehensive Plan, a copy of the draft be provided to us for our final review.

Please let us know if you note any inaccuracies or have any questions regarding the comments provided in the Local Government Consistency Determination Form. Please contact Kellye Hilde, Planning Manager at 425-295-0582 or khilde@sammamish.us.

Kellye Hilde
Planning Manager, ASLA
Department of Community Development

Enclosure:
Local Government Consistency Determination Form
City of Sammamish Staff Comments
Local Government Consistency Determination Form

Water System Name:  Sammamish Plateau Water & Sewer District  
PWS ID:  409009  
Planning/Engineering Document Title:  Water Comprehensive Plan  
Plan Date:  December 2018  
Local Government with Jurisdiction Conducting Review:  City of Sammamish  

Before the Department of Health (DOH) approves a planning or engineering submittal under Section 100 or Section 110, the local government must review the documentation the municipal water supplier provides to prove the submittal is consistent with **local comprehensive plans, land use plans and development regulations** (WAC 246-290-108). Submittals under Section 105 require a local consistency determination if the municipal water supplier requests a water right place-of-use expansion. The review must address the elements identified below as they relate to water service.

By signing this form, the local government reviewer confirms the document under review is consistent with applicable local plans and regulations. If the local government reviewer identifies an inconsistency, he or she should include the citation from the applicable comprehensive plan or development regulation and explain how to resolve the inconsistency, or confirm that the inconsistency is not applicable by marking N/A. See more instructions on reverse.

<table>
<thead>
<tr>
<th>Local Government Consistency Statement</th>
<th>For use by water system</th>
<th>Identify the page(s) in submittal</th>
<th>For use by local government</th>
<th>Yes or Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) The water system service area is consistent with the adopted land use and zoning within the service area.</td>
<td>See Note A</td>
<td>Yes</td>
<td>Please see staff comments</td>
<td></td>
</tr>
<tr>
<td>b) The growth projection used to forecast water demand is consistent with the adopted city or county's population growth projections. If a different growth projection is used, provide an explanation of the alternative growth projection and methodology.</td>
<td>See Note B</td>
<td>Yes</td>
<td>Please see staff comments</td>
<td></td>
</tr>
<tr>
<td>c) For cities and towns that provide water service: All water service area policies of the city or town described in the plan conform to all relevant utility service extension ordinances.</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Service area policies for new service connections conform to the adopted local plans and adopted development regulations of all cities and counties with jurisdiction over the service area.</td>
<td>See Note C</td>
<td>Yes</td>
<td>Please see staff comments</td>
<td></td>
</tr>
<tr>
<td>e) Other relevant elements related to water supply are addressed in the water system plan, if applicable. This may include Coordinated Water System Plans, Regional Wastewater Plans, Reclaimed Water Plans, Groundwater Management Area Plans, and the Capital Facilities Element of local comprehensive plans.</td>
<td>See Note D</td>
<td>Yes</td>
<td>Please see staff comments</td>
<td></td>
</tr>
</tbody>
</table>

I certify that the above statements are true to the best of my knowledge and that these specific elements are consistent with adopted local plans and development regulations.

Signature

Printed Name, Title, & Jurisdiction

Date  
4:30.19
Consistency Review Guidance

For Use by Local Governments and Municipal Water Suppliers

This checklist may be used to meet the requirements of WAC 246-290-108. When using an alternative format, it must describe all of the elements: 1a), b), c), d), and e), when they apply.

For water system plans (WSP), a consistency review is required for the service area and any additional areas where a municipal water supplier wants to expand its water right’s place of use.

For small water system management programs, a consistency review is only required for areas where a municipal water supplier wants to expand its water right’s place-of-use. If no water right place-of-use expansion is requested, a consistency review is not required.

For engineering documents, a consistency review is required for areas where a municipal water supplier wants to expand its water right’s place-of-use (water system plan amendment is required). For noncommunity water systems, a consistency review is required when requesting a place-of-use expansion. All engineering documents must be submitted with a service area map (WAC 246-290-110(4)(b)(ii)).

A) Documenting Consistency: The planning or engineering document must include the following when applicable.

  a) A copy of the adopted land use/zoning map corresponding to the service area. The uses provided in the WSP should be consistent with the adopted land use/zoning map. Include any other portions of comprehensive plans or development regulations that relate to water supply planning.

  b) A copy of the growth projections that correspond to the service area. If the local population growth projections are not used, explain in detail why the chosen projections more accurately describe the expected growth rate. Explain how it is consistent with the adopted land use.

  c) Include water service area policies and show that they are consistent with the utility service extension ordinances within the city or town boundaries. This applies to cities and towns only.

  d) All service area policies for how new water service will be provided to new customers.

  e) Other relevant elements the Department of Health determines are related to water supply planning. See Local Government Consistency – Other Relevant Elements, Policy 8.07, September 2009.

B) Documenting an Inconsistency: Please document the inconsistency, include the citation from the comprehensive plan or development regulation, and explain how to resolve the inconsistency.

C) Documenting a Lack of Local Review for Consistency: Where the local government with jurisdiction did not provide a consistency review, document efforts made and the amount of time provided to the local government for review. Please include: name of contact, date, and efforts made (letters, phone calls, and emails). To self-certify, please contact the DOH Planner.

The Department of Health is an equal opportunity agency. For persons with disabilities, this document is available on request in other formats. To submit a request, please call 1-800-525-0127 (TTY 1-800-833-6388).
Notes for
Department of Health Local Government Consistency Determination Forms

Water System Name: Sammamish Plateau Water & Sewer
PWS ID: 40900 9
Planning Document: Water Comprehensive Plan
Plan Date: December 2018
Local Governments: City of Sammamish, City of Issaquah, King County

Notes:
A. Service Area and Land Use and Zoning:
   b. Chapter 1 pages 1-14, 1-26, 1-38,
   c. Chapter 2 pages: 2-19 through 2-24
B. Growth Projection:
   a. Chapter 2 pages: 2-14 through 2-24
C. Service Area Policies
   a. Chapter 1 pages: 1-34 through 1-46 and referenced appendices
D. Other Elements:
   a. Coordinated Water System Plan: Pages 1-14, 1-28, 1-31, 1-33
   b. Reclaimed Water Plans: Page 4-48 and Appendix N
d) Service area policies for new service connections conform to the adopted local plans and adopted development regulations of all cities and counties with jurisdiction over the service area.

Staff Comments
1. Chapter 1, Page 1-37: A map identifying Group B wells locations should be included in this Plan as well as a description of how they are managed.
2. Chapter 1, Page 1-38: Urban Growth Area.
3. Chapter 1, Page 1-38: Please integrate language around plans to sign a Franchise Agreement with the City of Sammamish.
4. Chapter 1, Page 1-38: Drinking Water Quality;
   a. Describe the District’s water quality monitoring program and/or plan for drinking water.
   b. Describe how the District addresses Department of Ecology mandates for low impact development and the impacts on groundwater. Reference or provide studies that demonstrate any negative impacts.
   c. Describe the District’s long-term sustainability plan for aquifer recharge areas.
5. Chapter 1, Page 1-39: Oversizing;
   a. Provide a reference to a facility plan that shows where oversizing might be necessary.
   b. Describe the method for determining and identifying mainlines that may need to be oversized.

...
City of Sammamish
Staff Comments

a) The water system service area is consistent with the adopted land use and zoning within the service area.

Staff Comments
1. Chapter 1, Page 1-2, Figure 1-1: Overlapping adjacent service providers needs to be noted on this map or a new map added. A narrative describing the method of resolving conflicts in these overlapping areas also needs to be added.
2. Chapter 1, Page 1-2, Figure 1-1: Show the UGA and City boundary on this map.
3. Chapter 1, Page 1-26: Describe the PAAs (Evans Creek Preserve Trail, Swan Ridge neighborhood, 30-Acres Park, Aldarra Golf Club), Urban Growth Boundary, and Town Center sub-area.
4. Chapter 1, Page 1-26: The moratorium has been repealed, refer to Ordinance O2018-479.
5. Chapter 1, Page 1-26: Sammamish Plans that should be referenced include the following:
   b. Ordinance O2016-424.
   c. City of Sammamish Town Center Sub-Area.
   d. Capital Improvement Plans as adopted by the City, Resolution R2016-2022.
6. Chapter 1, Page 1-30, Figure 1-13: The R-4 Interim and R-6 interim zones are not shown.
7. Chapter 1, Page 1-32, Figure 1-14: The City Boundary and UGA line are not shown. The current Water Service District Boundary in south-west Sammamish is not shown. (near MacDonald area)

b) The growth projection used to forecast water demand is consistent with the adopted city or county's population growth projections. If a different growth project is used, provide an explanation of the alternative growth project and methodology.

Staff Comments
1. Chapter 2, Page 2-19: Why are the multifamily numbers for Sammamish decreasing starting in 2023?
2. Chapter 2, Page 2-19, Table 2-11: Use one source of data and sort in ascending order. Move year 2040 to the end of the table.
3. Chapter 2, Page 2-21: Stating that population in our area is declining contradicts PSRC current projections that the region needs a plan for 1.8 million additional people and 1.2 million new jobs by 2050. Refer to the Vision 2050 Executive Summary, page ES-1 and the Draft SEIS.
Hi Jay,

My apologies but please see Issaquah updated populations (Issaquah Comprehensive Plan, update 2018, Page LU-26) to replace data on Page 2.20, Table 2-12

2020- 39,319
2025- 42,971
2031- 46,739

Thank you for contacting me. I will typically respond to your inquiry within 24 hours.

Emily Arteche
Senior Planner | Development Services Department | City of Issaquah
PO Box 1307 (mail)
1775 12th Avenue NW
Issaquah, WA 98027
425| 837-3086 (direct)
425 | 837-3080 (fax)

Hi Jay,

Thanks for chatting on the phone today. I’ve made some comments regarding Issaquah’s Comp Plan and one comment regarding the new water system plan, Pages 1-26 and 1-27. Please see below.

The City of Issaquah’s Comprehensive Plan includes policies for land use, including setting land use zoning, and also has policies for utilities and public services such as water and sewer service. All of the Providence Point and most of the North Issaquah sub-areas are within the Sammamish Plateau Water and Sewer District Retail Water Service Area. In addition, the City annexed the Lake Sammamish State Park and Highlands Drive Area, both of which include District service areas. The Highlands Drive Area was annexed to the City of Issaquah in 2008. Only a portion of the Lake Sammamish State Park is in the District’s service area.

Issaquah’s plan does indicate two one PAA: East Cougar Mountain and King County Island. Both of these PAs are south of the District’s Future Water Service Area. The City of Issaquah currently has a had partial development moratorium in the City of Issaquah Central
Issaquah, initiated in 2016 but was lifted in 2018. Public utilities, such as the District, are required to support the projected growth as identified by the City’s Comprehensive Plan, for the portion of the District within the City boundaries.

Additionally, the City’s Water System Plan was adopted this year and the language on P.1-27 could be updated to reflect the planning horizon:

The City of Issaquah (City) 2018 Water System Plan (Plan) has been prepared according to Washington State Department of Health (DOH) requirements as described in Washington Administrative Code (WAC) 246-290. These regulations require the City to update and submit to DOH a water system plan for approval every 10 years. This plan updates and supersedes the 2012 Water System Plan Update.

The planning period includes a short-term horizon (10 years, through 2027) and long-term horizon (20 years, through 2037).

Thank you for contacting me. I will typically respond to your inquiry within 24 hours.

Emily Arteche
Senior Planner | Development Services Department | City of Issaquah
PO Box 1307 (mail)
1775 12th Avenue NW
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425 | 837-3080 (fax)

From: Robert York
Sent: Wednesday, May 22, 2019 12:11 PM
To: Emily Arteche <emilya@issaquahwa.gov>
Cc: Jay Regenstreif <jay.regenstreif@spwater.org>
Subject: FW: Sammamish Plateau Water Comprehensive Plan Consistency Checklist

Thanks, Jay.

Emily, here is the form with some fields already completed.

Bob

From: Jay Regenstreif <jay.regenstreif@spwater.org>
Sent: Wednesday, May 22, 2019 11:59 AM
To: Robert York <roberty@issaquahwa.gov>
Subject: Sammamish Plateau Water Comprehensive Plan Consistency Checklist

Bob,
Here is the pre-filled in form for our ID and contact information.
The pdf is the notes referenced on the table for the Consistency Checklist – directing you to the sections in the Plan that are for those questions.
If you have any further questions, please let me know.

Jay Regenstreif, P.E.
Planning Engineer
direct 425.295.3215 e-mail
website facebook twitter youtube

Clean water is always there because we’re always here.™
1510 228th Avenue SE; Sammamish, WA 98075; main 425.392.6256 fax 425.391.5389

NOTICE OF PUBLIC DISCLOSURE: Public documents and records are available to the public as required under the Washington State Public Records Act (Chapter 42.56 RCW). Accordingly, this e-mail, in whole or in part, may be subject to disclosure pursuant to the Public Records Act, regardless of any claim of confidentiality, privilege or exemption asserted by a third party.
May 30, 2019

Jay Regenstreif, P.E.
Sammamish Plateau Water & Sewer District
1510 – 228th Ave SE
Sammamish, WA 98075

RE: Sammamish Plateau Water & Sewer District
2018 Water Comprehensive Plan – Draft Plan Review

Dear Ms. Regenstreif:

Thank you for the opportunity to review the District’s 2018 Water Comprehensive Plan. The City of Redmond has reviewed the document and offer the following minor comments:

1. Based on the source adequacy evaluation summarized in Table 3-3, the 200 gpm normal operating capacity provided in the Agreement, the Cascade regional supply is sufficient in meeting current and future needs for the Cascade View Zone. If in the future the District has a need for additional water supply or changes need to be made in the provisions of the Interlocal Agreement due to the operational changes of the intertie, an amended agreement should be pursued between the City, Cascade Water Alliance, and the District.

2. On Table 4.15 Water Right Self-Assessment, the Maximum Qi for the 10 and 20-year Forecasted Purchase shows 0 gpm. It appears the District will stop using the CWA Northern Regional connection in the future.

Is this information accurately shown or is it due to the annual water production strategy noted in footnote 3 of Table 4.15? In 2017 and 2018, the District purchased more than 34 acre-ft/year through the CWA connection. If the District is anticipating not using the Intertie in the future and terminating the Interlocal Agreement, the termination provisions in 11.2 of the Interlocal Agreement would govern.
3. On pages 4-61-62, 4.6 Interties:
   The locations of the regional connections are shown on Figure 1-7.
   The figure reference should be 1-8 and 1-11.

4. On page 6-9, Table 6-5 (cont.) Major System Components – Supply Sources
   CWA – North Regional Connection 400 gpm (DOH report) 780 gpm (8" diameter at 5
   fps)
   200 gpm is the normal operating capacity. Maximum capacity of 400 gpm as needed
   when the District’s two production wells are out of service. (2.4 of Agreement for Water
   System Intertie between the City of Redmond and Sammamish Plateau Water and Sewer
   District (“Agreement”) dated February 11, 2005.)

   If you are just listing the pumping capacity and not what the allowable supply is, then the
   information is acceptable.

5. If in the future Sammamish Plateau would like to transfer the ownership of the intertie
   meter to CWA, the Interlocal Agreement with Redmond would need to be updated.

Please review the comments and contact the City if you have any questions or concerns. Thank
you again for the opportunity to provide comments.

Sincerely,

[Signature]

Lynn Arakaki
Senior Engineer
City of Redmond
Public Works
Environmental and Utility Services Division
larakaki@redmond.gov
425.556.2841
Hi Jay. Thanks for allowing the District the opportunity to review and comment on the Sammamish Plateau Water 2018 Comprehensive Plan. The District has no comments.

Laura Keough
General Manager
NE Sammamish Sewer and Water District
425-868-1144
Sammamish Plateau Water
1510 228th Ave SE
Sammamish, WA 98075

April 2, 2019

1111 – 207th Place NE
Sammamish, WA 98074

I am writing as a consumer of Plateau Water and resident of Sammamish. I note the massive amount of construction taking place all over our community, with the obvious considerable increase of population, and am concerned that the supply of water, especially of our high quality water, will be inadequate to meet that increasing need. Will we have the capability to meet the future needs, with this increase of population? Do we have contingency plans to meet this increase? Let me know.

Thank you,

Carl Schwartz
April 8, 2019

Carl Schwartz
1111 207th Pl NE
Sammamish, WA 98074

Re: Water Supply Planning

Dear Mr. Schwartz:

Thank you for your letter requesting information on the status of water supply planning by Sammamish Plateau Water. The District does plan for growth within our service area. This planning discussion is included in the District’s Water Comprehensive Plan. The District Board of Commissioners adopted the most recent version of the Water Comprehensive Plan on February 25, 2019.


The 2018 Plan is provided by chapter. The Executive Summary provides a high-level overview, Chapter 2 addresses the growth planning aspect, and Chapter 4 addresses the source of supply strategy. If you have difficulty with the on-line version, please contact our office for alternatives.

The expected growth for the next 5 years is estimated by looking at currently proposed developments, the construction you are seeing now and in the next few years. Beyond the first 5 years, growth is estimated by using the growth rates provided by the Puget Sound Regional Council. The projected population discussion starts on page 2-14 in Chapter 2.

The District’s water supply consists of both groundwater wells and surface water from the regional supply. The District’s regional supply is provided through the District’s membership in the Cascade Water Alliance. Between those two sources, the District does have supply to meet the anticipated growth in the District’s service area. The source of supply strategy discussion starts on page 4-46 in Chapter 4.

If you have further questions or comments after you have had a chance to review the available information, please let me know.

Sincerely

[Signature]

Jay Regenstreif, P.E.
Planning Engineer

19-04-20/Schwartz WCP.docx
## KING COUNTY

### KC1:
Provide details regarding when the time period starts for measuring timely and reasonable service when a request for service is received.

*Per Section 1.6, 3 years is the length of time to obtain water service that is considered timely and reasonable. This would allow for extension of a water main through the Developer Extension Agreement (DEA) process or a Utility Local Improvement District (ULID). The does assume the service requestor is diligently pursuing service, and the time expectation would start from application for a DEA or petitioning for a ULID. This more specific description information has now been included in Section 1.6.*

### KC2:
Provide Consistency statements from the Cities of Sammamish and Issaquah that affirm the water system plan is consistent with their respective planning efforts.

*The Consistency statements have been received and are included in Appendix V. This is the appendix that includes Agency comments.*

### KC3:
Provide statements clarifying whether the District is seeking to be a satellite management agency outside of the existing future service area of the District.

*The District is not seeking to be a satellite management agency inside or outside of the Future Service Area of the District. This is indicated in Section 1.8.4, and a clarifying statement has been added to the introductory paragraph of Section 1.8.4.*

### KC4:
Road standards statement.

*Noted.*

### KC5:
Expired King County Franchise situation is noted, as well as an understanding that work is underway between the District and County regarding the franchise.

*Appendix F, Design Standards, notes the preferred location of water mains is in the right-of-way. The District applied for King County Franchise in 2011, immediately after completing the District’s 2010 Water Comprehensive Plan. The District also applied for a King County Franchise*
in 2018. The District continues to negotiate a franchise with King County. The negotiation of a franchise is noted in Section 1.2.4 Federal, State and Local Regulations.

PUGET SOUND REGIONAL COUNCIL

PSRC1: The plan estimates demand using population forecasts for 2037 and “buildout.” King County cities have growth targets out to 2031 and their local comprehensive plans may contemplate growth beyond that. I saw that the plan references the cities’ comprehensive plans, but it wasn’t clear to me if the forecasts you included directly relate to the growth planned by Issaquah and Sammamish. Do they?

The Plan uses the PSRC growth rates for estimates of growth rates beyond 2022. As noted in Section 2.2.2.2 Projected Population – Long Term ERU Forecast, this is to have consistency between the three different land use jurisdictions served by the District. Growth rates prior through 2022 are based on projects currently in the pipeline. The one exception is the Sammamish Town Center, where the growth was included prior to 2027 at the direction of City of Sammamish staff.

PSRC2: King County will update growth targets in 2021 and the cities will update their plans in 2023. Under GMA they need to plan for a twenty year period, so presumably, their plans will be from 2023-2043. Will this water comprehensive plan be updated again prior to that to include the 2043 time period so that the cities can know if future growth can be served?

The District’s Water Comprehensive Plan will likely be approved for a period of 10-years. This is the approval period used by the Washington Department of Health, and the District is going to request that King County also approves the plan for a 10-year period. The District does continually track the growth and near-term growth rates for operational purposes, and also reviews all proposed zoning changes as they are proposed for potential effects on water and sewer service.

PSRC3: Often the term “buildout” is avoided in planning because cities are regularly making planning and zoning changes, just like the Sammamish town center plan that is referenced in the plan. King County’s buildable lands report identifies zoning “capacity,” rather than buildout, although, even then it is likely that zoning in both cities will continue to be updated over time to support more growth. I believe some utilities use a very long time period, 50 or 75 years, to identify long-term needs, including replacement, even if growth projections aren’t as precise for that time period. Have you completed a long term (more than 20-year) analysis?

The suggested terminology change is noted, and will be considered for future Comprehensive Plans and related reports. The District has several plans that consider different longer horizons. The Comprehensive Plans identify major facility improvements that may extend beyond the 20-year planning horizon, and show as “Future Projects” in Table 8.1 – Capital Plan. In addition, the Asset Management Plan, discussed in Section 8.1 Development of the CP, is used to predict a potential replacement schedule for District assets, ranging from 20 years for assets such as pumps to over 100 years for many pipelines. Information developed through the Asset Management Plan feeds the District’s Rate Model. The District’s rates include a “Rehabilitation and Replacement” component to fund the future replacement of assets. The Asset Management Plan and Rate Model are updated regularly to refine asset life assumptions and their rate impact.
DEPARTMENT OF HEALTH

DOH1: Provide Consistency statements from the Cities of Sammamish and Issaquah that affirm the water system plan is consistent with their respective planning efforts.

_The Consistency statements have been received and are included in Appendix V._

DOH2: Please respond to review comments from King County

_See previous responses to comments KC1 through KC5._

DOH3: Clarify whether the District will or will not allow new Group B public water systems within the retail service area. Section 1.8.4 Direct Connection and Remote Systems, page 1-35.

_The District’s intent is to provide direct service wherever possible to properties within the Retail Service Area. However, this must be tempered with the requirements of provision of direct water service through a water main extension on a case by case basis. The District anticipates that most developments within the Retail Service Area would not be allowed to create a new Group B system. However, there may be cases where the District would allow those due to the limited nature of the proposed service compared to the cost of provision of direct water service._

DOH4: In Chapter 2, Table 2-1, the District method of determining Equivalent Residential Units (ERUs) appear to be based on meter size. This representation does account for larger demands through larger meters. Would it be more appropriate to label the ERU column as “weighted number of connections?”

_The District does assign ERUs based on meter size, in all cases. This meter based size definition is used for connection charges and the basis for billing rates, and allows for equitable comparison and application of rates and charges between the different customer classes. The use of the term ERU, in this context, is independent of the DOH definition of an ERU (i.e. ADD per system single-family residence). The ERU Water Use Factor (see Table 2-9) is developed separately for single-family, multi-family and non-residential customer classes. Demand forecasts are made based on the type of customer anticipated (zoning based) and the Water Use Factor for that customer type. See DOH7.c. for additional discussion regarding Table 2-9._

DOH5: Table 2-2, Multi-Family Units per Connection, shows 198 units for 174 connections on the 3/4-inch meter size. How is it that the number of units for the multi-family connection is not at least twice the number of connections? Could these be single homes with one service meter and an accessory dwelling unit? Please discuss.

_The multi-family units served with 3/4-inch meters include two primary types of units. 1) Attached townhomes and duplexes where each unit has its own 3/4-inch meter. 2) Detached single condominium units in a development that includes both the detached units and multi-unit buildings. In both of these situations, the zoning is multi-family, and the units do not have their own tax parcel._

_The billing rate for each of these units is a multi-family rate. The multi-family water billing rate differs from the single-family rate because it does not anticipate any irrigation use through the_
Irrigation is provided to these multi-family properties through separate irrigation meters that are billed at an irrigation rate.

DOH6: Did the District evaluate the Distribution System Leakage (DSL) ERU value? How was the consumptive volume from DSL incorporated into the demand forecast?

The DSL was not provided an ERU value. The consumptive volume was evaluated as shown in Table 2-3 for 8 years of data. The DSL was incorporated into the demand forecast by using a value just below the average level of DSL over the past 3 years. A slightly lower value was used as the trend was going down. This was discussed in Section 2.2.3, noted in the footnote to Section 2.2.3 on page 2-24, and presented in Table 2-16.

DOH7: Questions on the ERUs included in Table 2-9, Historical ERUs Analysis (2014-2016)

DOH7.a. Were the ERUs listed here determined in the same manner as with Table 2-1?

Yes.

DOH7.b. ERU ADD represents the average day demand in gallons per day per full-time residential connection (gpdpc). We recommend representing full-time as connections that show more than the 50 gallons per day per person consumptive use. Has this analysis applied full-time status to all single-family residential connections with nonzero meter values? Is the District confident that the majority of single-family residential connections are full time?

Note the footnote 1 to Table 2-9 indicates this is for meters with use greater than zero. The District is fairly confident of full-time status, once the dwelling has been occupied. The data does include meters for single-family dwellings that are at their initial occupancy, and may include less than normal monthly use during the move-in period.

The figure of 50 gpd/person may be high for identifying a representative full-time single-family residential connection. At an average of 2.8 persons per household, this would be 140 gpd per account, and 51,100 gallons per year or 6,831 cfs per year per account. An overview analysis of 2016 single-family data for accounts that received 6 bills, and had use greater than zero, indicates that only 70 percent of the accounts would meet the criteria. Future review of the use per single family account using the automated metering infrastructure (AMI) data may lend insight into future calculations of the ERU ADD. The AMI data will allow monthly readings for all accounts, and a better indication of when full-time use actually begins.

DOH7.c. Is the column heading ‘ERU Water Use Factor (gpd/ERU)’ intended to represent what we refer to as ERU ADD in the Draft Water System Design Manual.

Yes, for the single-family row. The multi-family and non-residential customer classes use the same approach as used for single-family, limited to their customer class.

DOH7.d. What happens in this analysis if multi-family residential, non-residential, and DSL ERUs are calculated using ERU ADD equal to 213 gpdpc and the actual annual consumption
for each customer class? Are the total number of ERUs comparable to the number of ERUs used in chapter 3 system analysis?

In Table 2-9, the Column titled 3-year Average ERU Water Use Factor does present the DOH ADD/ERU for the single family customer class. This is simply annual consumption divided by the “SPW ERUs” – that term meaning the ERUs as counted based on meter size for this customer class. As indicated in Table 2-1, most single family customers are counted as one ERU. Only 204 connections out of 16,241 (1.3%) have more than one ERU in this customer class.

In Table 2-9, ERUs and not connections were used to calculate ADD/ERU. The factors listed in that column for Multi-Family and Non-Residential are simply total water consumption divided by “SPW ERUs” Given the water use history and significant share of demand for these two customer classes, a class-specific approach was used, all based on SPW ERUs.

The current and forecast ERUs as presented in Table 2-15 uses the same definition of ERUs. The demand forecast in Table 2-16 uses the class-specific factors from Table 2-9 and the SPW ERUs forecast in Table 2-15 to develop the demand forecast.

The SF ADD/ERU is 48% higher than the MF ADD/ERU and 9% lower than the Non-Res ADD/ERU. We have analyzed the data from Tables 2-9 and adjusted the outcome of Tables 2-15 and 2-16 to understand the impact of using 213 gpd/ERU and annual water consumption as the basis for defining MF and Non-Res ERUs. The impact is summarized as follows and ultimately no changes to the Demand Forecast have been made.

For MF, the historical three-year average drops by a count of 1,151. This decrease was applied to the ERU count for 2017 in Table 2-15 and ERUs increased annually thereafter by the same annual percent change as currently presented, through 2027. The demand was then calculated annually using the revised ERU count and 213 gpd/ERU. The impact of this change would be to increase MF customer class demand by 7%. This increase is the same each year, but not compounded.

The same approach was used for the Non-Res class. For Non-Res, the historical three-year increases by a count of 11. This increase was applied to the ERU count for 2017 in Table 2-15 and ERUs increased annually thereafter by the same annual percent change as currently presented, through 2027. The demand was then calculated annually using the revised ERU count and 213 gpd/ERU. The impact of this change would be to decrease Non-Res customer class demand by 8%. This increase is the same each year, but not compounded. (Mixed use was included in the analysis of Non-Res, as it is calculated using the same factor as Non-Res, as noted in the footnotes to Table 2-16.).

The net result of these two adjustments is essentially no change early in the 10 year period, and up to 30,000 gallons in 2027 (0.5%).

In the course of this review, we found that the total annual consumption for the Non-residential customer class is incorrect and overstated. The correct values for 2014, 2015 and 2016 are 223.80, 272.36, and 257.38, respectively. Table 2.9 has been updated. This resulted in a change of 1 gpd in the three-year average use per ERU (i.e. <0.5%). No changes to the forecast are warranted, and such is noted in a revised footnote 4 for Table 2.9.
DOH8: Section 3.1.1 Design Criteria refers to the evaluation uses the assumption that the sources will operate 24 hours per day. We recommend assuming the sources will operate for 20 hours per day for added safety factor.

The analysis presented in the Plan demonstrates adequacy of source of supply assuming all normally operated sources are available for use 24 hours a day, to meet MDD. The analysis assumed that well sources in a zone were used first, followed by booster pump supply from a lower zone, and ultimately the interties as needed to meet the 2037 forecast MDD. The capacity of the system to meet MDD with all sources only operating 20 hours a day has been evaluated and the conclusion was that the system would still have surplus source capacity. The following changes have been made to the Plan:

3.1.1 – add sentence to end of paragraph: As discussed following Tables 3-2 and 3-3 below, the system was also evaluated under the condition that all sources were operated only 20 hours a day.

3.1.2.1 – add paragraph following Table 3-2: The analysis summarized in Table 3-2 assumes that well sources within a pressure zone are fully utilized first, then supplemented as necessary from booster pump station supply from a lower zone, and for the 297 Pressure Zone Group, the interties were the last source to be utilized. The analysis was repeated (but not presented in the Plan) assuming all sources were limited to 20 hours of operation. The same conclusion was reached, although the surplus decreases from 8.2 mgd to 4.8 mgd, for the 297 Pressure Zone Group.

3.1.2.2 – add paragraph following Table 3-3: The analysis summarized in Table 3-3 assumes that well sources are fully utilized first. They are adequate for the planning period as noted, but the available capacity for the North Regional Connection is added as surplus capacity. The analysis was repeated (but not presented in the Plan) assuming all sources were limited to 20 hours of operation. The same conclusion was reached, although the surplus for District Source decreases from 0.24 mgd to 0.13 mgd and for Total Source from 0.52 mgd to 0.37 mgd.

DOH9: Section 3.3.6 Plateau Zone hydraulic analysis results

DOH9.a. Regarding system pressure greater than 100 psi or 120 psi, in our experience customers are not always aware of their responsibility to maintain individual pressure reducing valves. When pressure reducing valves fail, appliances break or property floods, understandably some people get upset. Consider how the District might provide customer education.

New account customers must sign the original Water Application, which does provide information regarding the pressure, however, they may not fully understand what they are reading. District customer service and field service representatives do provide information on individual pressure reducing valves in response to customer inquiries regarding pressure, banging pipes, changes in their pressure, and leaks. The District does also has brochures that are mailed and handed out or can picked up at the District office.
The District previously had a welcome packet that included information about pressure reducing valves. An updated welcome packet is being developed in conjunction with the deployment of the AMI system customer portal.

DOH9.b. Please note that individual booster pumps are not an acceptable long-term solution when minimum system pressure requirements are not met at the distribution main.

There are two locations where there is not a specific improvement identified that would alleviate the low pressure situation. For these two locations the District may explore non-standard service options with the customers, to provide the opportunity for service at a higher pressure, involving connections to a higher pressure zone, to mains that are not adjacent to the property.

DOH10: Water Use Efficiency Program (WUE) and Water Rights Assessment. Respond to Department of Ecology’s letter dated March 21, 2019

See responses under DOE Comments in the following.

DOH11: Have you adopted the Water Main Break Protocol for Chlorinated System? (DOH Publication 331-583 – 1/1/2017)

The District is currently working with a Seattle Public Utilities (SPU)/King County Water Quality Group to develop a Standard Operating Procedure (SOP). This will be added to District SOPs when completed.

The District’s current SOP is to keep positive pressure in the system and water flowing until the main can be isolated and repaired.

DOH12: Is the District reporting distribution system disinfectant residuals? As a system that purchases surface water, the District is required to report the distribution system disinfectant residuals. The report should include distribution system disinfectant residuals for every calendar day and include the disinfectant residuals collected at the same time and place as the routine coliform samples.

Yes, monthly reporting for disinfectant residuals. The reporting includes:

- Daily, every calendar day, disinfectant residuals are taken at the 297 Storage Tank and monitored through SCADA
- Monthly taken with routine coliform sampling from each bacteriological sample station.

DOH13: Section 6.3.1.1 Plateau Zone Components, page 6-26, refers to occasional grab sample verification of the pH analyzer. Please consider implementing EPA Method 150.3: Determination of pH in Drinking Water. It provides guidance and outlines best practices for measuring pH.

The District will modify the pH sampling SOP to implement the EPA Method 150.3, including reporting methods.

DOH14.a. 6.4.11.2 Table 6-25. Please specify whether each routine (coliform) sample site location is a dedicated sample stand or a customer’s tap or other site characteristic. We assume that all coliform ‘repeat’ sites are not sample stands however, please clarify.

All routine sample sites are dedicated sample stands. Repeat sites are hose bibs at customer locations in close proximity to the sample stand. This information has been added to Section 6.4.11.2

DOH14.b. We suggest adding a separate column for the interties source of supply that the District intends to monitor. The intertie source-feed location is not required to be monitored per the groundwater rule (GWR)
Appendix J, Water Quality Monitoring PDF p. 77 of 167 Table 4
GWR Triggered Monitoring Details, PDF 35 of 167 Triggered sample sites table,
WSP page 6-70, Table 6-25 Monthly Bacteriological Monitoring Locations

While the District is not required to get a triggered sample at the interties listed in these tables, the District chooses to sample for completeness of information in determine a potential source of the bad sample. Additional text has been added prior to Table 6-25 indicating that the interties are listed for completeness of water supply, but sampling the interties is not required.

DOH14.c. Appendix J, Water Quality Monitoring PDF p. 10 of 167. The District recently updated its Water Facilities Inventory with the DOH such that the population served, 70 monthly routine coliform samples are now required. The District has been collecting 70 such samples. No response needed

Comment noted.

DOH14.d. Appendix J, Water Quality Monitoring PDF p. 11 of 167. With the Revised Total Coliform Rule (RTCR) there has been a nomenclature change.
  i. A non-acute MCL violation is now called Treatment Technique Trigger that triggers a RTCR assessment (Level 1 or Level 2 assessment). An acute MCL violation is an *E.coli* MCL violation, which triggers a Level 2 assessment.
  ii. A major repeat violation is now called a Treatment Technique Trigger that triggers a RTCR assessment (Level 1 or Level 2 assessment).

The District is in the process of updating the Coliform Monitoring Plan to match the updated terminology and format. This update is anticipated to be completed within 6 months, by February 2020. The required update is noted in Section 6.4.6.1.

DOH14.e. Appendix J, Water Quality Monitoring PDF p. 12 of 167. For systems taking forty or more routine samples per month, if the system exceeds 5.0 percent total coliform-positive samples for the month it will have a treatment technique trigger that requires performing an assessment (Level 1 or Level 2). Please update.

The District is in the process of updating the Coliform Monitoring Plan to match the updated terminology and format. This update is anticipated to be completed within 6 months, by February 2020.
DOH14.f. Appendix J, Water Quality Monitoring PDF p. 13 of 167. Note that if a sanitary defect identified in an assessment is not corrected within 30 days of learning of the treatment technique trigger, then a purveyor is allowed to provide the Department (DOH) a corrective action plan that extends the time period to fix the sanitary defect.

The District is the in the process of updating the Coliform Monitoring Plan to match the updated terminology and format. This update is anticipated to be completed within 6 months, by February 2020. The allowance of the corrective action plan to extend the time period will be included in the update.


i. Please note that if NESSWD has a total coliform sample in their distribution system, they will need to notify the District to sample any and all of the District’s groundwater sources that were in use on the date of the total coliform positive sample. This is consistent with the groundwater rule.

ii. If NESSWD has an *E.coli* positive source sample in any groundwater source, that situation accords with the GWR. This scenario requires NESSWD to shut off that groundwater source or install disinfection treatment that meets 4-log viral inactivation level treatment. NEWWSD would also have a public notice obligation to its customers including to SPWSD. Similarly, if SPWSD has an *E.coli* positive source sample in any groundwater source, the same conditions apply.

The District is the in the process of updating the Coliform Monitoring Plan. This update is anticipated to be completed within 6 months, by February 2020. Additional and clarifying language will be added to the section addressing Interaction with Wholesale Suppliers to include the similar actions required by the District if NESSWD has a total coliform distribution sample or *E.coli* positive groundwater source sample.

DOH14.h. The District reports non-residential connections however, does not yet report a transient non-community population (visitor, travelers, patients, customers) or non-transient non-community population (students, employees, daycare children).

The District has not historically reported these figures. This is a holdover from the period when there was almost all residential customers, with little commercial. In response to this comment District staff are gathering information on the non-community population, and will include figures on the 2020 WFI.

DOH15: The water system must meet the consumer input process outlined in WAC 246-290-100(8). Please include documentation of a consumer meeting discussing the WSP, prior to DOH approval of the WSP.

The District held a public meeting on the Comprehensive Plan on March 11, 2019. The meeting was advertised through local newspaper display ads, regional newspaper notices, District’s website notices, and posting in the District Headquarters lobby. The meeting notice was also posted on the District’s Facebook page and through Twitter. In addition, cover letters sent to agencies requesting their review of the 2018 Plan, included an invitation to attend the Public Meeting. The Public Meeting information is included in Appendix V.
DOH16: Prior to DOH Approval, the District’s governing body must approve and adopt the WSP

*The Draft Plan was adopted for public distribution on February 25, 2019 by Resolution No. 4851, which is included in Appendix V.*

*The Plan will subsequently be adopted by resolution for submittal for approval by King County and DOH.*

DOH17: A signed SEPA checklist is a part of the WSP submittal. Provide a signed SEPA Threshold Determination

*The SEPA documents are provided in Appendix U including:*
- SEPA checklist, dated January 27, 2019
- DNS dated February 19, 2019
- Notice of Action dated April 1, 2019

DOH18: Include any comments from adjacent purveyors and the District’s response to those comments.

*All comments received on the 2018 Water Comprehensive Plan and District comments are included in Appendix V.*

DOH19: Is the District a member of the Washington State Water/Wastewater Agency Response Network (WAWARN)? Federal Emergency Management Agency states prior to reimbursement, they will ask for mutual aid documentation. Becoming a member of WAWARN demonstrates both managerial and financial capacity.

*The District is a member of WAWARN, and joined WAWARN per Resolution No. 3798 adopted on May 4, 2009. This is mentioned in Section 6.5.5.*

**DEPARTMENT OF ECOLOGY**

DOE1: Tables 4.14 and 4.15 do not follow standard protocol in presenting the interrelationship between and among the water rights. The relationship between additive and non-additive being shown based on how portions of water right quantities are split between sources rather than on how they are split within and among different water rights. While the former may be informative regarding how the District operates its sources, this is not the purpose of the Water Right Self-Assessment, and makes the assessment appear to contain more water rights than have been issued by DOE. The enclosed table shows Ecology’s evaluation of its water rights.

*You are correct that the District’s organization of information was developed based on operations. It is noted that the non-additive water right for G1-23897C should only be included with Well 11.1 and 11.2, and not with Well 4R to clarify the non-additive rights are not double counted. Table 4.14 and 4.15 have been updated to be based on each individual water right.*

DOE2: Tables 4.14 and 4.15 have errors in the naming convention for water rights numbers. Beginning in the 1970s, a new water naming protocol was introduced which is based on a single
number being assigned to an application. These numbers are modified to reflect the stage of development by adding an “A”, “P”, “C” or “CL” to the end of the number.

As of the time this comment is being prepared, only one groundwater right held by the District (G1-26572P) remains in permit status (water right being developed), all others are certificated.

The water right naming convention has been corrected in Tables 4.14 and 4.15.

DOE3: Tables 4.14 and 4.15 have errors involving the use of asterisks. Asterisks indicate that the water right document was originally issued prior to 1970 and that a new number, using the post 1970 protocol has been issued based on the original application number for the water right. An asterisk always follows after the source type and region codes and is separated by a dash.

An example of the correct placement of an asterisk is G1-*09533C, indicates that this water right was initiated through the filing of application 9533 for a groundwater right (“G”) in the NW region of Washington (“1”). The original water right number for pre-1970 issued certificates is often provided as a convenience by DOE, but agency databases are primarily based on the post 1970s number with the asterisk to signify a converted number. DOE’s database can be queried for either number so the use of the older number in the Water Right Self-Assessment table is satisfactory. The original certificates commonly have “-A” at the end of the number, which is not needed in reporting or database queries.

Very informative comment. The District has updated District information in Tables 4.14 and 4.15 to be consistent with the post 1970 numbering.

CITY OF SAMMAMISH

SAM1: (d) Service Area Polices Question 1

Chapter 1, Page 1-37: A map identifying Group B wells locations should be included in this Plan as well as a description of how they are managed.

A map of the Group B wells is provided in Figure 1-7 on page 1-13. Text in the section on Existing Group A and Group B Systems, currently on page 1-37, has been added to direct readers to the map’s location. The District does not have jurisdiction over existing Group B systems.

SAM2: (d) Service Area Polices Question 2

Chapter 1, Page 1-38: Urban Growth Area.

A map showing the District boundary, the boundaries of the Cities of Sammamish, Issaquah and Redmond, and the Urban Growth Area (UGA) Boundary is provided on Figure 1-13, currently on page 1-30. In locations where the city boundaries are coincident with the UGA, the UGA boundary is not visible.
SAM3: (d) Service Area Polices Question 3
Chapter 1, Page 1-38: Please integrate language around plans to sign a Franchise Agreement with the City of Sammamish.

Appendix F, Design Standards, notes the preferred location of water mains is in the right-of-way. The District initiated discussion with Sammamish to negotiate a franchise agreement in March 2017. The District is willing to continue these negotiations. The negotiation of a franchise is noted in Section 1.2.4 Federal, State and Local Regulations.

No changes were made to the Section 1.8 Service Area Policies as this appeared to be better addressed under regulations.

SAM4: (d) Service Area Polices Question 4
Chapter 1, Page 1-38: Drinking Water Quality.

SAM4.a. Describe the District’s water quality monitoring program and/or plan for drinking water.

Section 6.4 Comprehensive Monitoring Plan provides a description of the District’s water quality monitoring requirements and results. Appendix J includes the District’s Drinking Water Quality Policy Statement, Coliform Monitoring Plan, Triggered Ground Water Monitoring Plan, and the Stage 1 Disinfectants and Disinfection Byproducts Rule Identified Treatment Plans and Monitoring Plan. Additionally, the Annual Drinking Water Reports for the last several years are available on the District website.

SAM4.b. Describe how the District addresses DOE mandates for low impact development and the impacts on groundwater. Reference or provide studies that demonstrate any negative impact.

The District is not a land use agency, and as such does not have direct jurisdiction over implementation of LID efforts. However, Chapter 5 identifies the Wellhead Protection Area (WHPA) which is an area within which the District does work to track proposed developments and initiatives that include infiltration and injection to the groundwater. When the District is reviews proposed stormwater injection/infiltration plans, the District may request technical analyses which demonstrate the plan will not pose a risk to degrade the aquifers, which are the District’s primary source of drinking water. With respect to studies that District consultants have utilized in the past, one source of data is the International Stormwater Best Management Practices (BMP) Database.

SAM4.c. Describe the District’s long-term sustainability plan for aquifer recharge.

Aquifer recharge is just one of the source of supply strategies used by the District. Please refer to Section 4.4 regarding the District’s Aquifer Storage and Recovery (ASR) Program for aquifer recharge information. Note that use of ASR requires permits from the Department of Ecology. In addition, Chapter 5, Source Water Protection, provides information on how the District works to protect the groundwater resource.
SAM5: (d) Service Area Polices Question 5
Chapter 1, Page 1-39: Oversizing.

SAM5.a. Provide a reference to a facility plan that shows where oversizing might be necessary.

This information is provided in Chapter 8, Capital Plan. The District considers a main to be “oversized” when transmission of water from source and supply through an area uses a main that is larger than the size required for distribution and fire flow to that same area. There is no single map that indicates where oversizing may be necessary. Information on the size main included for individual projects is listed in Table 8-1, and the location of the projects is provided on Figures 8-1 through 8-4. Descriptions of the individual distribution projects are included in Sections 8.2.6.

SAM5.b. Describe the method for determining and identifying mainlines that may need to be oversized.

The analysis of the water system is described in Chapter 3, System Analysis, with the Distribution System Analysis contained in Section 3.3. The analysis considers the demands on the system during maximum day with fire flow and peak hour conditions.

SAM6: (e) Other relevant elements Question 1

Please indicate how you determine when to bring in or tap into the Cascade Water Alliance (CWA) source. Are there additional costs to do this?

The decision to tap into the CWA source was made in January 1999 when, by Resolution No. 2414, the District made application for membership to the Cascade Water Alliance to assure a continued supply of water. The first time regional water was used in the District’s system was 2005. The decision to connect to the CWA source was due, in part, to the difficulty of obtaining additional groundwater water rights to support anticipated customer growth.

There are costs associated with using the CWA source. The District pays annual membership fees and for water supplied from the regional source. In general, water purchased from CWA costs more than water provided from the District’s groundwater source. And in addition, per the current agreement for CWA water, the District pays for a certain amount of water whether it is used or not. These annual, ongoing costs for membership and supply are supported by District water rates.

There is also a connection charge called the Regional Capital Facility Charge that the District pays to CWA for each new water meter connected to the District’s water system. This charge is collected by the District from each new customer, and passed on to CWA.

SAM7: (e) Other relevant elements Question 2

Questions regarding the CARA Map (Critical Aquifer Recharge Area):

SAM7.a. Please provide your timeline for updating the CARA map.

The Wellhead Protection Areas (CARA 1 and 2) were developed in 1993-1995 for the Issaquah Valley Aquifer, and 1998 for the Plateau and Cascade View Aquifers as noted in Chapter 5.
The District updated the CARA map for the Lower Issaquah Valley Aquifer in 2016. The District reviewed the CARA 1 and 2 boundaries for the Plateau Aquifers most recently in 2007.

SAM7.b. What is the Scope of Work?

There is no current project to update the Wellhead Protection Areas that are reflected in the CARA maps. There is an ongoing modelling effort in the Issaquah Valley Aquifer in conjunction with monitoring of Per- and Polyfluoroalkyl Substances (PFAS) contaminants.

SAM7.c. Please provide any updated policy to the City of Sammamish that may require review and updates to our development regulations.

The District is currently working with City of Sammamish staff to provide a process and policy to support the process for consistent water purveyor review of projects that are proposing to utilize injection/infiltration of storm water. The District’s preference is to be notified of any Underground Injection Control (UIC) wells, and any UIC wells that the District identifies that may have a potential impact on the drinking water aquifers will be required to meet a demonstrative approach to ensure the non-endangerment standard for groundwater is met.

SAM7.d. The City would like that the District take ownership of the CARA maps.

The District is the source of the current CARA Zone 1 and Zone 2 areas associated with the District wells, representing the 1, 5 and 10 year Time of Travel in the Wellhead Protection Areas (WHPAs). These are provided to King County, the City of Issaquah and City of Sammamish for inclusion with their CARA mapping. The District does not have information on WHPAs of wells that are not owned and operated by the District, for other Group A systems or for Group B systems. Nor does the District have information or responsibility for development of the CARA Zone 3 area mapping.

SAM8: (e) Other relevant elements Question 3
Table 5-3 page 5-20, Agencies and First Responders: Please add City of Sammamish to the list.

The City of Sammamish has been added to the list of Agencies in Table 5-3. Thank you for bringing this oversight to our attention.

SAM9: (e) Other relevant elements Question 4
Chapter 1, Section 1.7: Is there a need to include a section for the City of Sammamish? While the area is within the Plateau Zone, we do coordinate interlocal agreements (ILA) and we are currently drafting up a Franchise Agreement between the City and SPWSD.

See answer to Comment SAM3. No changes were made to the Section 1.7 Service Area Agreements as those were intended to address specific existing agreements with Water Purveyors.

SAM10: (a) Land Use and Zoning elements Question 1
Chapter 1, Page 1-2, Figure 1-1: Overlapping adjacent services providers needs to be noted on this map or a new map added. A narrative describing the method of resolving conflicts in these overlapping areas also needs to be added.
Figure 1-1 only provides the District’s Service Area boundaries. Figure 1-6 provides District and adjacent purveyor boundaries. There are no overlapping water service areas within the City of Sammamish. However, there are areas where the Northeast Sammamish Sewer and Water District provides sewer service within Sammamish Plateau Water’s water service area. This not considered a conflict. There is an area where the City of Issaquah provides water service within the District’s Current Water Service District Boundary. This area is intended to be de-annexed from the District, as reflected by the District’s Future Water Service District Boundary.

SAM11: (a) Land Use and Zoning elements Question 2
Chapter 1, Page 1-2, Figure 1-1: Show the UGA and City boundaries on this map.

A map showing the District boundary, the boundaries of the Cities of Sammamish, Issaquah and Redmond, and the Urban Growth Area (UGA) Boundary is provided on Figure 1-13, currently on page 1-30. In locations where the city boundaries are coincident with the UGA, the UGA boundary is not visible.

SAM12: (a) Land Use and Zoning elements Question 3
Chapter 1, Page 1-26: Describe the PAAs (Evans Creek Preserve Trail, Swan Ridge neighborhood 30-Acres Park, Aldarra Golf Club), Urban Growth Boundary and Town Center sub-area.

Language has been added to Section 1.4 noting three of the four City of Sammamish PAAs are in the District’s service area.

SAM13: (a) Land Use and Zoning elements Question 4
Chapter 1, Page 1-26: The moratorium has been repealed, refer to Ordinance O2018-479.

Noted. The text in Section 1.4 has been modified to reflect this update.

SAM14: (a) Land Use and Zoning elements Question 5
Chapter 1, Page 1-26: Sammamish Plans that should be referenced include the following:
- a. Sammamish Storm and Surface Water Management Comprehensive Plan
- b. Ordinance O2016-424
- c. City of Sammamish Town Center Sub-Area
- d. Capital Improvement Plans as adopted by the City, Resolution R2016-2022

The plan list on Page 1-26 under Section 1.4 Related Plans, are those Plans that apply to the provision of water service, and is limited to Comprehensive Plans and Water Plans. Information on these supporting plans has been added to Section 1.4.

SAM15: (a) Land Use and Zoning elements Question 6
Chapter 1, Page 1-30, Figure 1-13: The R-4 and R-6 Interim zones are not shown.

Figure 1-13 has been updated to include the interim zone designation for certain R-4 and R-6 zoned properties.
SAM16: (a) Land Use and Zoning elements Question 7
Chapter 1, Page 1-32, Figure 1-14: The City Boundary and UGA line are not shown. The current Water Service District Boundary in south-west Sammamish is not shown (near MacDonald area).

Figure 1-14 is limited to District annexation areas, between the Current Water Service and Future Water Service Boundaries. It is kept limited to allow for clarity purposes. The City Boundary and UGA lines are shown on Figure 1-13.

SAM17: (b) Growth projection elements Question 1
Chapter 2, Page 2-23: Why are the multi-family numbers for Sammamish decreasing starting in 2023?

The multi-family units after 2023 are all included in the Town Center area and are in Mixed Use ERUs. However, these multi-family units were not included in the population figures reported in the draft Plan, and the Population Forecast in Table 2-15 has been updated to include the mixed use residential units. To clarify the multi-family and mixed use average units per ERU, footnote 3 to Table 2-15 has been updated. In addition, Table 2-2, Multi-Family Units Per Connection, has an added column indicating the units per ERU for each meter size, and the average for non-Mixed Use Multi-Family customers.

SAM18: (b) Growth projection elements Question 2
Chapter 2, Page 2-19, Table 2-11: Use one source of data and sort in ascending order. Move year 2040 to the end of the table.

Different sources are provided to indicate that estimates vary, and in particular that the Sammamish Comprehensive Plan 2040 value was almost the same as other’s estimates for 2017. The table has been reformatted to put 2040 at the end.

SAM19: (b) Growth projection elements Question 3
Chapter 2, Page 2-21: Stating that population in our area is declining contradicts PSRC current projections that the region needs a plan for 1.8 million additional people and 1.2 million new jobs by 2050. Refer to the Vision 2050 Executive Summary, page ES-1 and the Draft SEIS.

This statement is not meant to imply the population is decreasing, only the population per household. This reduction in PPPH is as provided from the PSRC. The PPPH does decline, and when the new rate is applied, it may appear that the population declines. See table 2-13 for details.

CITY OF ISSAQUAH
ISS1: Provided text modifications to Section 1.4 City of Issaquah’s Comprehensive Plan description to reflect updates since the section was originally drafted. (Pages 1-26 and 1-27 in Plan)

Issaquah provided modifications to the text under City of Issaquah Comprehensive Plan in Section 1.4 Related Plans. These modifications have been made.

ISS2: The City’s Water System Plan was adopted this year and the language on Page 1-27 could be updated to reflect the planning horizon in the City of Issaquah Plan, 10-years through 2027 and 20-years through 2037.
The text has been updated to reflect completion and adoption of the City of Issaquah’s Water System Plan, and planning year horizons.


City of Issaquah population data presented in Table 2-12 and supporting text has been updated to reflect the Issaquah Comprehensive Plan 2019 update.

SEATTLE PUBLIC UTILITIES

SPU1: Water Quality 1.a.: Referring to Tables 6-15, 6-16 and 6-17 – please explain why some parameters are listed but not analyzed. Also, please confirm that the parameters listed in these three tables are the most current. We recommend that an update be made to Table 6-15 to match the current list of primary and secondary parameters as shown in WAC 245-290-310 and in Tables 6-16 and 6-17 to match the most current federal regulations.

The tables 6-15, 6-16 and 6-17 are intended to provide information on water quality test results obtained by the District from 2009 through 2016. To clarify the table includes only results obtained, the parameters include in Table 6-16 that were not analyzed have been removed. No changes were made to Tables 6-15 or 6-17.

SPU2: Water Quality 1.b.: The results described and presented in Section 6.4 appear to include only sampling conducted at the District’s groundwater sources. While wells provide most of the water for the District’s customers, the WSP states approximately 20% of water supply is provided through regional connections, which is water provided by SPU. Because customers drink this water as well, a summary of SPU water quality and SPU’s compliance with federal and state drinking water regulations should be included in the WSP.

The District does provide customers with a summary of SPU’s water quality results in the annual District Water Quality Reports. Additional text has been added to Section 6.4.4 Effective Drinking Water Regulations to clarify that SPU must also meet the water quality regulations, and directing readers to the Annual Water Quality Reports for that summarized information.

SPU3: Water Quality 1.c.: The District participated in sampling for parameters under UCMR1, 2 and 3. What parameters were sampled for and were any detections observed?

In UCMR1 the District sampled for 12 parameters at 3 source locations. The results were all “not-detected.” In UCMR2 the District sampled for 10 parameters at 7 locations. The results were all “not detected.” These results are noted in text additions of Section 6.4.5.6 relating to UCMR1 and UCMR2.

In UCMR3 the District sampled for 28 parameters at 7 source locations and 7 parameters at 5 distribution system locations. There were detections at certain sites for Chromium, Molybdenum, Strontium, Vanadium, Hexavalent Chromium and Chlorate. In addition, there were detections of 2 of the 5 Perfluorinated Compounds (PFAS) in the sources tested located in the Issaquah Valley Aquifer. As noted in Section 6.4.5.6 the PFAS detections were below the minimum reporting level.
Text has been added to Section 6.4.5.6 on the results of the UCMR testing, and a summary of the District results from UCMR3 have been included in Appendix J.

SPU4: Water Quality 1.d.: In Section 6.4.5.1, please clarify the different numbers shown for acceptable detectable chlorine residuals (chlorine residual should be greater than 0.2 mg/L versus 0.01 mg/L). Also clarify which level is used by the District to determine compliance.

For compliance, the District is required to maintain a chlorine residual of 0.2 at each entry point, but only detectable (0.01) in the distribution system. These are the levels used by the District to determine compliance. Please note there are also areas of the District, identified as the Segregated Plateau North End on Figure 1-10, that only receive groundwater.

SPU5: Water Quality 1.e.: On page 6-49, please correct the reference to optimal fluoride level per WAC 246-290-460. The current optimal fluoride level is 0.7 mg/L, not 0.9 mg/L.

Noted. This correction has been made.

SPU6: Water Shortage Contingency Plan (WSCP) 2.a.: SPU updated its WSCP through our most recent WSP. A key change in our newest version is that the Advisory Stage is an internal planning phase only and does not have a public facing component. SPU’s March 2018 WSCP can be found here: http://www.seattle.gov/util/Documents/Plans/Water/WaterShortagePlan/index.htm

The change to the SPU WSCP is noted.

CITY OF REDMOND

RED1: Based on the source adequacy evaluation summarized in Table 3-3, the 200 gpm normal operating capacity provided in the Agreement, the Cascade regional supply is sufficient in meeting current and future needs for the Cascade View Zone. If in the future the District has a need for additional water supply or changes need to be made in the provisions of the Interlocal Agreement due to the operational changes of the intertie, an amended agreement should be pursued between the City, Cascade Water Alliance and the District.

The pump pumps at 400 gpm, fixed rate. The Agreement may need to be modified to reflect this usage, but this has been the operating situation since the intertie was installed.

RED2: On Table 4.15 Water Right Self-Assessment, the Maximum Qi for the 10 and 20-year Forecasted Purchase shows 0 gpm. It appears the District will stop using the CWA Northern Regional connection in the future. Is this information accurately shown or is it due to the annual water production strategy noted in footnote 3 of Table 4.15? In 2017 and 2018, the District purchased more than 34 acre-ft/year through the CWA connection. If the District is anticipating not using the Intertie in the future and terminating the Interlocal Agreement, the termination provisions in 11.2 of the Interlocal Agreement would govern.

The District is not anticipating reducing or terminating use of the intertie. Table 4-15 is an exercise reviewing source adequacy and water rights only, and does not reflect the District’s operational strategy.
RED3: On pages 4-61-62, 4.6 Interties: The text indicates the locations of the regional connections are shown on Figure 1-7, which should be referenced as Figures 1-8 and 1-11.

Thank you for noting this correction. The text in Section 4.6 Interties has been updated to reference the correct figures.

RED4: On page 6-9, Table 6-5 (cont.) Major System Components – Supply Sources it states, “CWA – North Regional Connection 400 gpm (DOH report) 780 gpm (8” diameter at 5 fps) 200 gpm is the normal operating capacity. Maximum capacity of 400 gpm as needed when the District’s two production wells are out of service. (2.4 of Agreement for Water System Intertie between the City of Redmond and SPWSD (“Agreement”) dated February 11, 2005.) If you are just listing the pumping capacity and not what the allowable supply is, then the information is acceptable.

The rate of 780 gpm is the maximum rate that would meet the District’s normal operating capacity of an 8-inch main at 5 fps. This is a check whether the rate allowed by the Intertie Agreement, and as reported to DOH, is within the normal operating rate.

RED5: If in the future SPWSD would like to transfer the ownership of the intertie meter to CWA, the Interlocal Agreement with Redmond would need to be updated.

Noted.

NORTHEAST SAMMAMISH SEWER AND WATER DISTRICT
NESSWD1: Thanks for allowing the District (NESSWD) the opportunity to review and comment on the SPWSD 2018 Comprehensive Plan. The District has no comments.

Noted.

CARL SCHWARTZ
SCHWARTZ1: Letter received April 15, 2019 requesting information on the status of water supply planning by SPWSD with respect to growth and the increase in population.

Provided a letter in response with information on how to locate the 2018 Water Comprehensive Plan for his review and comment, and specifically directing him to Chapter 2 for growth projections and Chapter 4 for source of supply information.
No further comments were received.