

Appendix B  
AGENCY / ADJACENT PURVEYOR  
COMMENTS AND APPROVAL



## Documentation of Request for Consistency Statements

On November 8, 2016 local jurisdictions including King County and the cities of Woodinville, Bothell, Kirkland and Redmond were provided a copy of TM 1 – Demographic Analysis for their consistency review during development of the Comprehensive Water System Plan. A copy of the email sent out to the jurisdictions is included in this appendix. No comments indicating inconsistency were received at that time.

On July 9, 2018, a complete draft of the Comprehensive Water System Plan was sent to each local jurisdiction including King County, Snohomish County, and the cities of Woodinville, Bothell, Kirkland and Redmond. Each jurisdiction was asked to fill out and sign the consistency statement form provided to them. A copy of this email is included in this appendix. King County, Snohomish County, and the City of Woodinville provided comments to the Plan that are documented in the record of comment included in this appendix. No consistency statements were provided at this time.

In March of 2019, the Final Comprehensive Water System Plan was sent to each local jurisdiction including King County, Snohomish County, and the cities of Woodinville, Bothell, Kirkland and Redmond. Each jurisdiction was asked to fill out and sign the consistency statement form provided to them.



# Local Government Consistency Determination Form

Water System Name: \_\_\_\_\_ PWS ID: \_\_\_\_\_

Planning/Engineering Document Title: \_\_\_\_\_ Plan Date: \_\_\_\_\_

Local Government with Jurisdiction Conducting Review: \_\_\_\_\_

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
	Identify the page(s) in submittal	Yes or Not Applicable
a) The water system service area is consistent with the adopted <u>land use and zoning</u> within the service area.		
b) The <u>growth projection</u> 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.		
c) For <u>cities and towns that provide water service</u> : All water service area policies of the city or town described in the plan conform to all relevant <u>utility service extension ordinances</u> .		
d) <u>Service area policies</u> 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.		
e) <u>Other relevant elements</u> 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.		

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

\_\_\_\_\_  
Printed Name, Title, & Jurisdiction

## 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).

**From:** [Alena Thurman](#)  
**To:** [Jenny Ngo \(jennyn@ci.woodinville.wa.us\)](mailto:jennyn@ci.woodinville.wa.us); "Jason Rogers"; "Eric Shields"; "Tom Burdett"; "Hirschey, Steve"  
**Cc:** "Ken McDowell"; [Lara Kammereck](#)  
**Subject:** Woodinville Water District Demographic Analysis - For Your Review  
**Date:** Tuesday, November 08, 2016 4:09:00 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)  
[image005.png](#)  
[image006.png](#)  
[Consistency Statement.docx](#)  
[TM1\\_Demographic\\_Analysis.pdf](#)

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Hello,

As a representative of a land use authority within the Woodinville Water District's (WWD) retail water service area, we are providing for your review a technical memorandum describing the results of the demographic analysis that was performed for WWD's 2017 Water System Plan Update. This analysis is based on Puget Sound Regional Council data as well as the demographic and land use data that we received from each jurisdiction that WWD serves. The Demographic Analysis is critical for projecting realistic future water demands and performing an accurate system analysis.

Once the full Water System Plan Update is developed, a draft Plan will be sent to each agency for review and comment as part of the SEPA process. The Department of Health requires a Consistency Statement be provided by each jurisdiction served to ensure that the Water Utility has coordinated with each land use authority during the Plan development. Using the attached Consistency Statement document as a guide, please review TM 1 – Demographic Analysis for consistency with your jurisdiction's land use and growth projections. Any comments or corrections need to be provided to Carollo by **Wednesday, November 30th** in order to be incorporated into WWD's Water System Plan. WWD will ask that you provide the signed Consistency Statement after your jurisdiction has a chance to review the complete draft Plan in 2017.

Thank you for your contribution to ensuring that WWD's demographic analysis is consistent with the growth assumptions of your jurisdiction. ***Please don't hesitate to call or email if you have any questions.***

Thank you,

Alena Thurman, P.E.  
Licensed in California  
Environmental Engineer  
Carollo Engineers, Inc.  
1218 Third Avenue, Suite 1600  
Seattle, WA 98101  
P: 206-684-6532  
[www.carollo.com](http://www.carollo.com)



From: [Alena Thurman](#)  
To: "[barb.mock@snoco.org](mailto:barb.mock@snoco.org)"  
Cc: [Ken McDowell \(kmcDowell@woodinvillewater.com\)](mailto:KmcDowell@woodinvillewater.com); [Lara Kammereck](#)  
Subject: Woodinville Water District 2018 Comprehensive Water System Plan for your review  
Date: Monday, July 9, 2018 12:40:00 PM  
Attachments: [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)  
[image005.png](#)  
[image006.png](#)

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Hello Barb,

On behalf of the Woodinville Water District (District), we are pleased to provide to you an electronic copy of their Draft 2018 Water System Plan (Plan) for your review prior to adoption by the District. We have provided this draft of the Plan to the Department of Health for their review as well. Follow the link below to download the Plan, Appendices, a shapefile of the District's water service area, and a Consistency Statement.

As you can see on Figure 1.2 in the Plan, the District serves a handful of parcels within Snohomish County. The District's interlocal agreement with Snohomish County for service of these customers is included in Appendix E. As a jurisdiction with residents served by the District, we are requesting that you review the Plan and sign and return the attached **Consistency Statement** along with any comments you have by **August 3, 2018**.

Please Cc Ken McDowell and Lara Kammereck on any communication regarding this Plan.

Thank you,

Alena M. Thurman, P.E.  
Licensed in California  
Lead Engineer  
Carollo Engineers, Inc.  
720 SW Washington St, Suite 550  
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#### Files attached to this message

Filename	Size	Checksum (SHA256)
WWD Consistency Statement.docx	48.9 KB	463021ae255257d033b4ee5d1342950a581f9aed223e0a8aa0e1a0028095c733
WWD CWSP 20180702_ARD.pdf	86 MB	3ed382274e58a6d8a7ef03750ad8f6bded8c94aa7baaf3c82c3bc8a54860817e
WWD CWSP Appendices_201807021_ARD.pdf	278 MB	05efa5825d75b8b2b4820e7db0fbb10d16ae20c9cd09fc68893a9d4614795620
WWD_RWSA.zip	14.3 KB	f98cb181f2e68b90946241a7ec4569aecfda674966603756e4d3b0c9b74fad37

Please click on the following link to download the attachments: <https://files.carollo.com/message/6ZivFD9nNMNN3Dri66Tq81>

This email or download link can not be forwarded to anyone else.

The attachments are available until: **Wednesday, 8 August**.

Message ID: 6ZivFD9nNMNN3Dri66Tq81

**From:** [Alena Thurman](#)  
**To:** [Jenny Ngo \(jennyn@ci.woodinville.wa.us\)](#); "Eric Shields"; "michael.kattermann@bothellwa.gov"; "jfani@redmond.gov"  
**Cc:** "Ken McDowell"; Lara Kammereck  
**Subject:** Consistency Statement for Woodinville Water District 2018 Comprehensive Water System Plan  
**Date:** Monday, July 9, 2018 12:13:00 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)  
[image005.png](#)  
[image006.png](#)

Hello Jenny, Eric, Michael and Judy,

On behalf of the Woodinville Water District (District), we are pleased to provide to you an electronic copy of their Draft 2018 Water System Plan (Plan) for your review prior to adoption by the District. We have provided this draft of the Plan to the Department of Health for their review as well. Follow the link below to download the Plan, Appendices, a shapefile of the District's water service area, and a Consistency Statement.

In November of 2016 (see email below) your agency was provided a draft of the technical memorandum describing the demographic analysis used in the development of this Plan in order to give you an opportunity to ensure that the assumptions used in the Plan are consistent with your jurisdiction's growth assumptions. This memo is included in Appendix F of the Plan.

Now that you have a chance to review the complete Plan, please sign and return the attached **Consistency Statement** along with any comments you have by **August 3, 2018**. Please Cc Ken McDowell and Lara Kammereck on any communication regarding this Plan.

Thank you,

Alena M. Thurman, P.E.  
 Licensed in California  
 Lead Engineer  
 Carollo Engineers, Inc.  
 720 SW Washington St, Suite 550  
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**Files attached to this message**

Filename	Size	Checksum (SHA256)
WWD CWSP 20180702_ARD.pdf	86 MB	3ed382274e58a6d8a7ef03750ad8f6bde8c94aa7baaf3c82c3bc8a54860817e
WWD CWSP Appendices_201807021_ARD.pdf	278 MB	05efa5825d75b8b2b4820e7db0fbb10d16ae20c9cd09fc68893a9d4614795620
WWD_RWSA.zip	14.3 KB	f98cb181f2e68b90946241a7ec4569aecfda674966603756e4d3b0c9b74fad37
WWD Consistency Statement.docx	48.9 KB	463021ae255257d033b4ee5d1342950a581f9aed223e0a8aa0e1a0028095c733

Please click on the following link to download the attachments: <https://files.carollo.com/message/uCLh6zLYxG49RchLrjXVX4>

This email or download link can not be forwarded to anyone else.

The attachments are available until: **Wednesday, 8 August.**

Message ID: uCLh6zLYxG49RchLrjXVX4

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**From:** Alena Thurman

**Sent:** Tuesday, November 08, 2016 4:10 PM

**To:** Jenny Ngo (jennyn@ci.woodinville.wa.us) <jennyn@ci.woodinville.wa.us>; Jason Rogers <jrogers@redmond.gov>; Eric Shields <EShields@kirklandwa.gov>; Tom Burdett <Tom.Burdett@bothellwa.gov>; Hirschey, Steve <Steve.Hirschey@kingcounty.gov>

**Cc:** Ken McDowell <kmcowell@woodinvillewater.com>; Lara Kammereck <Lkammereck@carollo.com>

**Subject:** Woodinville Water District Demographic Analysis - For Your Review

Hello,

As a representative of a land use authority within the Woodinville Water District's (WWD) retail water service area, we are providing for your review a technical memorandum describing the results of the demographic analysis that was performed for WWD's 2017 Water System Plan Update. This analysis is based on Puget Sound Regional Council data as well as the demographic and land use data that we received from each jurisdiction that WWD serves. The Demographic Analysis is critical for projecting realistic future water demands and performing an accurate system analysis.

Once the full Water System Plan Update is developed, a draft Plan will be sent to each agency for review and comment as part of the SEPA process. The Department of Health requires a Consistency Statement be provided by each jurisdiction served to ensure that the Water Utility has coordinated with each land use authority during the Plan development. Using the attached Consistency Statement document as a guide, please review TM 1 – Demographic Analysis for consistency with your jurisdiction's land use and growth projections. Any comments or corrections need to be provided to Carollo by **Wednesday, November 30th** in order to be incorporated into WWD's Water System Plan. WWD will ask that you provide the signed Consistency Statement after your jurisdiction has a chance to review the complete draft Plan in 2017.

Thank you for your contribution to ensuring that WWD's demographic analysis is consistent with the growth assumptions of your jurisdiction. ***Please don't hesitate to call or email if you have any questions.***

Thank you,

Alena Thurman, P.E.  
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State of Washington

DEPARTMENT OF HEALTH

NORTHWEST DRINKING WATER REGIONAL OPERATIONS  
20425 72nd Avenue South, Suite 310 • Kent Washington 98032-2388

July 10, 2018

DARCIE MCALISTER  
WOODINVILLE WATER DISTRICT  
PO BOX 1390  
WOODINVILLE WA 98072

RE: WOODINVILLE WATER DISTRICT ID# 41600  
KING COUNTY  
WATER SYSTEM PLAN  
SUBMITTAL #18-0703

Dear Darcie Mcalister:

On July 10, 2018, our office received your documents and assigned them the submittal number 18-0703. Please use this number on all correspondence or additional submittals about this project.

When we have completed the review you will receive either an approval letter or a comment letter listing items that need to be addressed prior to an approval. We expect to review the submittal within 90 days.

There is a fee for our review; we will send you an invoice for payment. The base fee includes our initial review and the review of one resubmittal if needed. If additional reviews are needed, you will receive additional invoices. Payment of the fee does not guarantee or imply approval of your submittal. There is a link to our fee schedule on our website [www.doh.wa.gov/ehp/dw](http://www.doh.wa.gov/ehp/dw) under rules, WAC 246-290-990.

Thank you for giving us the opportunity to serve you. We look forward to working with you to ensure your community has safe and reliable drinking water at the tap. Please call me at (253) 395-6750 if you have any questions.

Sincerely,

Mary Rucksdashel  
Northwest Drinking Water Operations

cc: **KEN MCDOWELL, P.E.**

*Notice: Any purveyor who begins construction on a drinking water project without all required approvals may be subject to penalty of up to \$5,000 per service connection (Chapter 70.119A RCW). The Department is under no obligation to accept or approve any component installed or constructed prior to approval. You may be required to expose system components for inspection and rebuild/replace if necessary to meet Department requirements.*

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## RECORD OF COMMENT LOG - GENERAL COMMENTS

**PROJECT : Woodinville Water District Water System Plan Update**

General Comments

**JOB # :** 10773A.00

**DATE UPDATED:** 2/6/2019

**UPDATED BY:** Alena Thurman

COMMENT NO.	COMMENT SOURCE	PAGE #	SECTION	COMMENT	RESPONSE	CHANGE TO PLAN
G-1	<a href="#">King County UTRC Comments</a>	N/A	All	Please provide consistency statements by local jurisdictions, or documentation for self-certification of consistency, as described in WAC 246-290-108.	Letters will be included in Appendix B.	Include letters in Appendix B.
G-2	<a href="#">King County UTRC Comments</a>	N/A	N/A	Include a complete King County Water Reclamation Evaluation Checklist that can be found at, <a href="https://www.kingcounty.gov/~media/environment/dnrcp/documents/WaterReclamationChecklist12_2011.aspx?la=en">https://www.kingcounty.gov/~media/environment/dnrcp/documents/WaterReclamationChecklist12_2011.aspx?la=en</a> .	Completed Checklist is included in Appendix N.	No change.
G-3	<a href="#">King County UTRC Comments</a>	N/A	N/A	Confirm the District will continue to issue or use certificates of water availability for service of water to parcels located in unincorporated King County.	The District will continue to issue certificates of water availability.	No change.
G-4	<a href="#">King County UTRC Comments</a>	N/A	N/A	Include the District's wellhead protection program as described in WAC 246-290-135(3) for the two wells identified for emergency use in the Plan.	The District is in the process of developing the wellhead protection plan. It will be provided to King County when it is complete.	No change.
G-5	<a href="#">King County UTRC Comments</a>	N/A	Section 4	There are approximately 54 Group A and B public water systems are within the District's service area. Please describe how the District is planning for future service to those systems in the event they choose to or need to become part of the water service customer base. Attached is a map of the Group A and B systems that are within the District's service area.	A policy will be added to Section 4.2.6 to address District management of Group A and B water systems within the District's service area	Add Group A and B policy.
G-6	<a href="#">DOH Comments</a>	N/A	N/A	The WSP must bear the seal of a professional engineer licensed in the State of Washington.	Seal will be included on Final Plan.	No Change
G-7	<a href="#">DOH Comments</a>	N/A	N/A	The District must meet the customer 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.	Agenda and Minutes from the public consumer meeting will be included in Appendix B.	Include consumer meeting agenda and minutes in Appendix B. The are saved in Appendices folder on PW.
G-8	<a href="#">DOH Comments</a>	N/A	N/A	Respond to any comments provided by adjacent water purveyors. Has Seattle Public Utilities reviewed and commented on you WSP?	Yes. All comments are included in Appendix B.	No change.
G-9	<a href="#">DOH Comments</a>	N/A	N/A	Is the District a member of WAWARN (The Washington State Water/Wastewater Agency Response Network)?	Yes.	No change.
G-10	<a href="#">Snohomish County Comments.pdf</a>	N/A	N/A	The maps in the water system plan do not match the data in the GIS shapefiles provided with respect to the small portions of the service area extending into Snohomish County.	The RWSA boundary shown in the Plan is correct.	No change.
G-11	<a href="#">Snohomish County Comments.pdf</a>	N/A	N/A	The boundary of Cross Valley Water District service area does not match the information provided to Snohomish County by Cross Valley in their comprehensive plan.	We will check boundary with CVWD to ensure it is shown correctly.	Ask CVWD to review boundary.
G-12	<a href="#">Snohomish County Comments.pdf</a>	N/A	N/A	Discussion in the draft should include something about making sure staff are trained on the location of their emergency interties, especially as staff turnover occurs on a regular basis.	Yes, staff are trained.	No change.
G-13	<a href="#">Snohomish County Comments.pdf</a>	55	N/A	On Page 55 it appears that there will be almost a 20 year lag between 2055 and 2075 with little or no replacement of pipe proposed within the District. It appears that this replacement schedule is more a function of pipe than system distribution needs. Yet, after that, the replacement of piping soars to a period to over 700,000 feet of pipe over the next 15 years from 2075 to 2090. Similarly, but on a smaller scale it appears that the District is deferring critical infrastructure replacement during tis planning cycle, especially from 2028 through 2037 installing roughly 75,000 linear feet of pipe after a 10 year hiatus. From a cash flow and financial status standpoint, can the District plan a more regular annual or semi-annual replacement schedule of water piping based on their critical pipe flows and pressure and fire flow requirements within the District?	This chart simply shows when pipe will reach the end of its remaining useful life based on material and age. The District will use this information as a tool to schedule pipe replacement, but this chart does not reflect the District's actual pipe replacement program schedule.	No change.
G-14	<a href="#">Snohomish County Comments.pdf</a>	N/A	N/A	Some additional discussion may be necessary to clarify that 36 mgd water right that was purchased tied to the Weyerhaeuser Mill site usage was an untreated water right and that prior to use in the WWD, unless for industrial purposes, the water would need to be treated and tested prior to use as a potable water source to supplement the Tolt system currently providing water to the District. It appears that 11 mgd of that right was set aside for the WWD from Northshore Utility District and the City of Everett based on the information in Appendix E. To date, to our knowledge the District has not perfected or used this water right in King County. This is also explained on page 91 of 298.	Page 1-9 of the Plan explains that "the SRRWA agreement assigns 11 mgd of the available 36 mgd to the District" and "the water quality [of the Weyerhaeuser water right] requires treatment for domestic use."	No change.

COMMENT NO.	COMMENT SOURCE	PAGE #	SECTION	COMMENT	RESPONSE	CHANGE TO PLAN
G-15	<a href="#">SPU comment letter</a>	N/A	N/A	The typical used name for the SPU pipeline running east-west through the District is Tolt Pipeline No. 1, typically abbreviated as TPL1. For consistency and to avoid confusion with other SPU pipelines, we suggest using this name throughout when referring to that SPU pipeline.	All instances of Tolt River Supply Line will be replaced with Tolt Pipeline Number 1.	Change all instances of "Tolt River Supply Line" to "Tolt Pipeline No. 1 (TPL1)"
G-16	<a href="#">SPU comment letter</a>	N/A	Section 6	General Comment For Section 6: Several aspects of the chapter seem to relate more to DOH's 1994 conservation planning requirements than to the 2006 Water Use Efficiency (WUE) Rule. For example, the footnote to Table 6.1 states, "Planning requirements taken from "Conservation Planning Requirements" DOH Guidebook, 1994." and in Section 6.4 Water Use Efficiency Measures there is the statement, "For current planning requirements, the District is classified as a medium Municipal Water System because it has between 1,000 and 25,000 service connections." Since the 1994 planning requirements were replaced by the 2006 WUE Rule, it would be useful if the conservation section of the District's next WSP were modified to better reflect the 2006 WUE Rule.	Noted.	No change.
G-17	<a href="#">SPU comment letter</a>	N/A	N/A	Water Shortage Contingency Plan (WSCP): The District's 2015 WSCP is consistent with SPU's 2006 WSCP. However, we recommend that the District's update their WSCP to be consistent with the SPU's new, 2018 WSCP. A key difference between SPU's 2006 and 2018 WSCPs is that in the newer version, the Advisory Stage is an internal planning phase only and does not have a public facing component. SPU's 2018 WSCP can be found here: <a href="http://www.seattle.gov/util/Documents/Plans/Water/WaterShortagePlan/index.htm">http://www.seattle.gov/util/Documents/Plans/Water/WaterShortagePlan/index.htm</a>	Noted. When the District next updates their WSCP, it will be made consistent with SPU's 2018 WSCP.	No change.

## RECORD OF COMMENT LOG - EXECUTIVE SUMMARY

**PROJECT : Woodinville Water District Water System Plan Update**  
Executive Summary  
**JOB # : 10219A00**  
**DATE UPDATED: 2/6/2019**

**UPDATED BY: Alena Thurman**

COMMENT NO.	COMMENT SOURCE	PAGE #	SECTION	COMMENT	RESPONSE	CHANGE TO PLAN
ES-1	<a href="#">North Shore Utility Comments</a>	Figure ES.0	Figure ES.1	Figure ES.1 - The urban growth boundaries for the Cities of Redmond and Woodinville are not clearly shown on the figure.	The line type used to show the urban growth boundaries will be changed so that it is easier to identify.	Update the line type used to show the urban growth boundaries on Figures ES.1 and 1.2.
ES-2	<a href="#">North Shore Utility Comments</a>	Figure ES.0	Figure ES.1	Figure ES.1 - The WWD RWSA and Major Highways appear to have the same coloring and thickness. We recommend changing colors to distinguish these two items more easily. This applies to all figures with the WWD RWSA layer.	Figure will be updated to use a thicker line weight for the RWSA.	For all maps showing the RWSA, make the line weight thicker so it is clearly distinguishable from Highways.
ES-3	<a href="#">North Shore Utility Comments</a>	Figure ES.1	Figure ES.2	Figure ES.2 - The NUD Retail Water Service Area is not portrayed correctly on the figure. There is a small area between I-405, Brickyard Road, and the Riverside Drive that is served by NUD but is shown within the City of Bothell's service area.	Will be updated with shapefile provided by NUD.	Update NUD service area on all relevant maps.
ES-4	<a href="#">North Shore Utility Comments</a>	ES-7	ES.2 Planing Data and Water Demands	"Planning period" should be plural since there are three planning periods being discussed.	Text will be updated.	Update "planning period" to "planning periods" in second paragraph of ES-7.
ES-5	<a href="#">North Shore Utility Comments</a>	Figure ES.3 and 3	Figure ES.3 and 4	The zoning classifications are not necessarily consistent between all of the jurisdictions (Unincorporated King and Snohomish Counties as well as the Cities of Bothell, Kirkland, Redmond, and Woodinville). Consider incorporating relevant zoning classifications for all land use jurisdictions involved.	The various zoning classifications from each jurisdiction were simplified into one compiled set of zoning classifications for use in this water system plan. Maps showing the original zoning classifications for each jurisdiction will be included in Appendix F.	Create one map or a map for each jurisdiction showing the jurisdictions' zoning classifications for each parcel in the RWSA. Include in Appendix F. This will be Figure F.1, F.2, etc. and titled something like City of Woodinville Zoning within RWSA, City of Bothell Zoning within RWSA.
ES-6	<a href="#">Snohomish County Comments.pdf</a>	Figure ES.9	Figure ES.9	Figure ES.9 shows existing customers and consumers at the parcel level, none of which are shown in Snohomish County. Is it true that while the service area extends into Snohomish County there are no parcels/customers in Snohomish County?	Map will be updated to show customers within Snohomish County.	Update Figure ES.9 and 2.7. All Snohomish County parcels shown to be within RWSA are WWD Served Parcels.
ES-7	<a href="#">North Shore Utility Comments</a>	Figure ES.11	Figure ES.12	Color gradations for zones are difficult to tell apart. It is also difficult to discern 8- to 12-inch mains from mains larger than 14 inches.	Noted. This is how the District prefers the map to look.	No change.

ES-8	<a href="#">North Shore Utility Comments</a>	ES-37	ES.4 Policy and Criteria	The zoning classifications are not necessarily consistent between all of the jurisdictions (Unincorporated King and Snohomish Counties as well as the Cities of Bothell, Kirkland, Redmond, and Woodinville). Consider incorporating relevant zoning classifications.	See comment ES-5.	
ES-9	<a href="#">Snohomish County Comments.pdf</a>	35	Figure ES.5	Figure ES.5 should identify in the legend that TT means Tolt Tap.	Notes. Figures will be revised.	Add note to ES.5 and Figure 2.5 that TT means Tolt Tap.
ES-10	<a href="#">Snohomish County Comments.pdf</a>	71	Figure ES.23	It appears that both fire flows and pressures are fairly low in the 420 zone a the NE corner of the District and this should be prioritized to be addressed as an early capital improvement project by the District to bolster this portion of the water infastructure. The correction to these area with less than 20 psi flow currently does not appear to be reflected until 2023. These deficient nodes are shown on Page 71, Figure ES.23 of the plan.	Addressing the low pressures in this area is a high priority for the District. However, other projects have a slightly higher priority and are scheduled to be completed first.	No change.
ES-11	<a href="#">SPU comment letter</a>	35	Figures ES.5 and 2.5	Please update the chart to reflect that Station 123 has not been used since before 2005. There is a new Station 195 that has altered the use of other stations nearby, and the chart does not reflect 2015 usage.	The chart should show supply from TT-167 rather than TT-123. It will be updated. TT-195 was not in used in 2015.	On figures ES.5 and 2.5, change TT-123 to TT-167.
ES-12	<a href="#">SPU comment letter</a>	75	ES.6	ES.6 Water Use Efficiency and Reuse: For the regional conservation goal, the text only references the 2013-2018 goal. It might be helpful to add the following statement which is used in Section 6.4.5 Regional Conservation Program, "The District plans to participate in the next Saving Water Partnership regional Water Use Efficiency Goal and Program, which will cover 2019— 2028".	Text in Executive Summary will be updated per suggestion.	In Section ES.6 add to end of third paragraph: "The District plans to participate in the next Saving Water Partnership regional Water Use Efficiency Goal and Program, which will cover 2019— 2028".
ES-13	<a href="#">City of Woodinville</a>	33	Figure ES.4	After reviewing the Water District Plan, it looks like the future land use map on page 33 of your plan does not match the City's future land use map in our comprehensive plan. Is this supposed to be based on currently land uses or the City's future land use map? I have attached the City's future land use map for reference.	The maps were compared to confirm the future land use shown on Figure ES.4 is consistent with the Woodinville Comprehensive Plan future land use. We believe that it is.  In order to be conservative in our demand projections, any parcel with an existing land use type that has higher water consumption per acre than a future land use type remained as its existing land use type on map ES.4. Here are the land use types from highest to lowest typical water consumption per acre: -Industrial -Multifamily -Commercial -Single family  Therefore, any parcels with an existing land use of multi-family and a future land use of commercial was kept as multi-family to represent the highest water demand scenario that the parcel does not redevelop.	Explain in Section 2.3 how the future land use map was developed.



## RECORD OF COMMENT LOG - SECTION 1

**PROJECT : Woodinville Water District Water System Plan Update**  
 Section 1 - Introduction  
**JOB # : 10219A.00**  
**DATE UPDATED: 2/6/2019**

**UPDATED BY:** Alena Thurman

COMMENT NO.	COMMENT SOURCE	PAGE #	SECTION	COMMENT	RESPONSE	CHANGE TO PLAN
1-1	<a href="#">DOH Comments</a>	N/A	N/A	Provide a determination of local government consistency (LGC) from the following cities: Woodinville; Bothell; Kirkland; Redmond.	Consistency statements will be included in Appendix B.	Add consistency statements to Appendix B.
1-2	<a href="#">DOH Comments</a>	N/A	N/A	Provide a LGC from Snohomish County and King County.	Consistency statements will be included in Appendix B.	Add consistency statements to Appendix B.
1-3	<a href="#">DOH Comments</a>	N/A	N/A	King County provided comments on your WSP on August 14, 2018. Please respond to their issues. Adequate responses to their issues will be necessary in order to receive a WSP Adoption Ordinance from King County.	Yes, comments from King County are considered.	No change.
1-4	<a href="#">Snohomish County Comments.pdf</a>	App F	Table 1.1	The household projections in 5-year increments to the year 2040 by pressure zone, shown in Table 1.1 on page 1-7 of Appendix F - Demand Projections are missing.	Table 1.1 of TM 1 in Appendix F will be corrected.	Missing data of Table 1.1 is there in the Word document, but it is not visible because it is one line below the cell. DP to correct formatting of Table 1.1 and update TM 1 pdf. <a href="#">TM1_Demographic Analysis.docx</a>
1-5	<a href="#">Snohomish County Comments.pdf</a>	1-7	Table 1.1	In table 1.1, recommend modifying to include Snohomish County as Utility Franchise Authority similar to King County.	The District does not currently have a franchise agreement with Snohomish County. They will work with the County to develop a utility franchise agreement.	No change.
1-6	<a href="#">Snohomish County Comments.pdf</a>	1-9	1.5	"The District serves a small number of parcels within Snohomish County. Resolution 2388 defines the District's policy regarding extension into Snohomish County. Table 1.1 lists these agreements, which are included in Appendix E." - Currently WWD does not have a franchise agreement with Snohomish County for their facilities installed within County Right-of-Way. Recommend including language that a utility franchise agreement with Snohomish County will be required (per Snohomish County Code 13.80.010) - WWD facilities potentially within Snohomish County Right-of-Way along 75th Ae SE, 83rd Ave SE, 85th Ave SE, and 107th Dr. SE north of King/Snohomish County line. Additionally portions of facilities along 244th St SE (west of SR522) may also be within Snohomish County jurisdiction.	The District will work with the County to develop a utility franchise agreement.	No change.
1-7	<a href="#">Snohomish County Comments.pdf</a>	1-10	1.6	Was Snohomish County comprehensive plan reviewed as pertaining to the small areas included in WWD's service area?	Yes the Snohomish County Comprehensive Plan future land use was reviewed and the Plan is consistent. The Snohomish County Comprehensive Plan will be added to this list.	Add Snohomish County Comprehensive Plan to the list of related plans.



## RECORD OF COMMENT LOG - SECTION 2

**PROJECT :** Woodinville Water District Water System Plan Update  
 Section 2 - Planning Data and Water Demand Projections  
**JOB # :** 10219A.00  
**DATE UPDATED:** 2/6/2019

**UPDATED BY:** Alena Thurman

COMMENT NO.	COMMENT SOURCE	PAGE #	SECTION	COMMENT	RESPONSE	CHANGE TO PLAN
2-1	<a href="#">North Shore Utility Comments</a>	2-26	Table 2.5	Item 7 appears to have a typographic error. Redhook appears to have two accounts; assuming it is the same location, it may make sense to combine these into one account. Our understanding is that Redhook has closed its operation in Woodinville. It might be worth footnoting this fact.	Yes, Redhook had two accounts, one for their restaurant and one for their brewery. Redhook is no longer operating in Woodinville. A foot note will be added to Table 2.5.	Add a footnote to Table 2.5 indicating that Redhook Brewery no longer operates within the Woodinville RWSA.
2-2	<a href="#">King County UTRC Comments</a>	2-29	Section 2.5	Clarify the rationale and methodology for the Reduced Growth Scenario described in Section 2.5 and used for the medium and low demand projections.	The rationale and methodology for determining the growth rates for the Reduced Growth Scenario is described in Section 2.5 in the last paragraph of page 2-29.	No change.
2-3	<a href="#">North Shore Utility Comments</a>	2-33	2.6.2 Demand Projection Parameters	For the "Medium growth scenario discussed in the text and Table 2.13, there is conflicting information. The table states the "Medium" growth scenario I based on the "PSRC Growth Scenario." Please clarify which is used for the "Medium" growth scenario, or if it is a modified version of either the "PSRC Growth Scenario" or the "Reduced Growth Scenario"	The "Reduced Growth Scenario" was used for the Medium Demand Projection Scenario. Table 2.13 will be corrected.	Correct Table 2.13 to indicate Reduced Growth Scenario for the Medium Scenario.
2-4	<a href="#">DOH to Sorensen 20181009L.pdf</a>	N/A	N/A	Please provide demand forecast on an annual basis for the duration of the planning period.	Demand forecasts on an annual basis will be provided in Appendix F.	Include a table of annual demand projections for the RWSA in Appendix F. Show Low, Med, and High ADD and MDD for years 2015 through 2037.
2-5	<a href="#">DOH to Sorensen 20181009L.pdf</a>	N/A	N/A	You have identified discrepancies between the Seattle Public Utilities and the District meters prior to 2015. Regional demand was high in 2015 due to the hot and dry summer. How do actual 2016 and 2017 average day and maximum day purchased water compare to forecast values?	Purchased water in 2016 and 2017 were 3.6 mgd and 3.9 mgd, respectively. The low forecast for 2017 is 3.9 mgd, meduim forcast 4.0 mgd, and high forecast 4.6 mgd.	No change.
2-6	<a href="#">Snohomish County Comments.pdf</a>	2-25	2.4.3.5	This discussion is confusing. Does the 170 average gpd for the City of Woodinville include the values from the "rural pressure zones" included inside city limits shown in figure 2.10? This use of the terms "rural" and "urban" is not consistent with county and city comprehensive land use plans. Is this distinction necessary? Could the average gpd be reported by prssure zone in Table 2.8 instead of aggregated to genera; rural/urban categories?	Pressure zones were divided into the two categories of Urban and Rural based on their average single family water usage. Zones with lower usage were considered Urban and zones with higher usage were considered Rural. For planning purposes, different demand projection parameters were applied to Urban and Rural pressure zones. Figure 2.10 shows how each zone was designated.  The 170 gpd/SFR account does include residents in the "Rural" pressure zones that are within the City limits.	No change.

## RECORD OF COMMENT LOG - SECTION 3

**PROJECT :** Woodinville Water District Water System Plan Update

Section 3 - Existing Water System

**JOB # :** 10219A.00

**DATE UPDATED:** 2/6/2019

**UPDATED BY:** Alena Thurman

COMMENT NO.	COMMENT SOURCE	PAGE #	SECTION	COMMENT	RESPONSE	CHANGE TO PLAN
3-1	<a href="#">North Shore Utility Comments</a>	3-14	3.2.3	It is stated the NUD intertie is rarely used. Does the WWD know when it was last exercised?	The NUD intertie has never been used. The District performs maintenance on the intertie every 7 years. The NUD intertie agreement is included in Appendix	No change.
3-2	<a href="#">North Shore Utility Comments</a>	3-30	Table 3.9	The legend of the table has a classification for "Before 2017." This category is not actually shown in the table itself and should therefore be removed.	Table will be updated.	Remove "Before 2017" classification in legend of Table 3.9.
3-3	<a href="#">SPU comment letter</a>	3-13	Table 3.1	2. On page 3-13, Table 3.1 is not consistent with Exhibit II in Woodinville's 2004 Full Requirements Contract with SPU. Discrepancies are as follows: a. Table 3.1 lists Station 123 as an emergency backup, which is consistent with Exhibit II in Woodinville's Contract, except Exhibit II also cites the minimum hydraulic gradient (570), which is not noted on Table 3.1. b. Table 3.1 lists Station 195, which does not appear on the most recently revised Exhibit II associated with Woodinville's Full Requirements Contract with SPU. It appears that a revision to Exhibit II to include Station 195 may have been initiated, but it was not finalized. Woodinville should work with SPU to complete the revision of Exhibit II to include Station 195. Section III., A., 3. in Woodinville's Contract describes how additional service connections between Woodinville's and Seattle's water systems or adjusted minimum gradients may be established from time to time by mutual agreement between Seattle and Woodinville subject to approval by the Operating Board with Exhibit II amended to reflect such approved additions or adjustments.	The District will work with SPU to finalize ammendment of Exhibit II of the supply contract. The latest correspondance between the District and SPU regarding Exhibit II is included in Appendix D.	Add minimum HGL of 570 for TT-123 to Table 3.1.
3-4	<a href="#">SPU comment letter</a>	3-3	3.2.1	Section 3.2.1 on the top of page 3-3 states "SPU has a contractual obligation to provide water supply to the District at adequate hydraulic head to operate the system in an efficient manner and further describes that each Tap from the TRSL has a minimum hydraulic head contract agreement." To clarify, Seattle is to provide the minimum hydraulic gradients up to the maximum flow rates and at the locations as listed in the contract, except in emergencies.	Text will be updated to clarify.	Update text on Page 3-3.
3-5	<a href="#">SPU comment letter</a>	3-14	3.2.4	Section 3.2, Section 3.2.4 and Table 3.2 describe Woodinville's nine emergency interties and reflect two interties that are not included on Exhibit I in Woodinville's Full Requirements Contract, including one added intertie with Bothell and one added intertie with Woodin Elementary in Bothell. Section III., C., 1. in Woodinville's Contract states that interconnections with other water systems require prior written approval of the Operating Board, as well as approval from the Washington State Department of Health and the installation of a meter. Woodinville will need to work with SPU to formally revise Exhibit I to include these two added interties.	The Bothell interties were coordinated with SPU's contract Manager on the 2009 intertie form. The District will work with SPU to update Exhibit I of the supply contract. The latest correspondance between the District and SPU regarding Exhibit II is included in Appendix D.	No change.
3-6	<a href="#">SPU comment letter</a>	3-2	3.2	On page 3-2, 3.2 Sources of Water Supply, there is a statement that Station 123 is not metered. SPU has an old but functional meter at Station 123, and the meter's accuracy is uncertain due to the inability to test it. SPU has informed the District that active use of Station 123 will require meter replacement.	The SPU meter on TT-123 will be mentioned in the text.	On page 3-2, mention that TT-123 has an SPU meter of uncertain accuracy.



**RECORD OF COMMENT LOG - SECTION 4**

**PROJECT :** Woodinville Water District Water System Plan Update  
 Section 4 - Policies and Criteria  
**JOB # :** 10219A.00  
**DATE UPDATED:** 2/6/2019

**UPDATED BY:** Alena Thurman

COMMENT NO.	COMMENT SOURCE	PAGE #	SECTION	COMMENT	RESPONSE	CHANGE TO PLAN
4-1	<a href="#">DOH Comments</a>	N/A	N/A	Thank you for including the standard design policies and criteria in section 4. If the District intends to request approval for the distribution project submittal exception, please provide standard design details and the specification for pressure and leakage and disinfection testing for our review.	<p>A URL to the District's website where the standard design details and specifications can be accessed is included in Section 4.4.15. It is:  <a href="https://www.woodinvillewater.com/for-developers/standard-specifications-for-developer-extensions.html">https://www.woodinvillewater.com/for-developers/standard-specifications-for-developer-extensions.html</a></p> <p>The water construction specifications and plans will also be included as Appendix O.</p>	Update text in Section 4.4.15 to reference Appendix O.

## RECORD OF COMMENT LOG - SECTION 5

**PROJECT :** Woodinville Water District Water System Plan Update  
 Section 5 - Water System Analysis  
**JOB # :** 10219A.00  
**DATE UPDATED:** 2/6/2019

**UPDATED BY:** Alena Thurman

COMMENT NO.	COMMENT SOURCE	PAGE #	SECTION	COMMENT	RESPONSE	CHANGE TO PLAN
5-1	<a href="#">DOH Comments</a>	N/A	N/A	Our experience tells us that customers expect the system pressure at average day demand not to exceed a pressure that would require them to install a pressure reducing valve at the service connection. Page 4-10 identifies that the uniform plumbing code recommends installing individual pressure reducing valves where pressure exceeds 80psi. Figure 5.6 <i>High Pressure Nodes During 2023 ADD Without Improvements</i> identifies hundreds of nodes where pressure exceeding 100psi, yet page 5-23 indicates no improvements are planned. Does the District have any intention of addressing the areas with high system pressure? If so, how would the District approach the issue?	The District does not intend to address high system pressures at this time. The District is prioritizing addressing low pressure, water quality, and emergency storage.	No change.
5-2	<a href="#">DOH Comments</a>	N/A	N/A	It is not clear from Figure 5.9. <i>Recommended Distribution System Improvements</i> , if the improvements adequately address the 2023 nodes with pressure below 20psi during maximum day demand and fire flow. Please clarify how the District plans to meet minimum system pressure requirements.	The recommended improvements shown on Figure 5.9 address all of the low pressure nodes shown in the figure.	Add clarification to legend of Figure 5.9 that the low pressures shown are before improvements.
5-3	<a href="#">DOH Comments</a>	N/A	N/A	The hydraulic model results shown in Appendix J show some area currently not meeting minimum fire flow conditions (Figure 4, <i>Percentage of Required Fire Flow</i> ). Which projects address this deficiency?	The results shown in Appendix J were preliminary results done by RH2 before final updates to the model were made by Carollo. As explained in RH2's letter found in Appendix J, the model had some challenges converging on solutions for all nodes. Carollo fine-tuned the model to correct the convergence problem and created the future scenarios for the analysis in this Plan. Refer to the maps in Section 5 for the most accurate fire flow conditions.	An explanation of the model update process will be added to Section 5.6.
5-4	<a href="#">DOH Comments</a>	N/A	N/A	The hydraulic analysis for peak hour demand (10 years for the 10 year planning period). Ten year demand scenarios should incorporate planned projects. Please demonstrate that planned projects help the District meet minimum system pressure requirements for future demand.	Some high elevation nodes do not receive 30 psi during PHD. The District will evaluate these customers on a case by case basis and work with customers to receive service from higher pressure zones or install private booster pumps. This clarification will be added to Section 5.	Need to add text about how low pressures under 30 psi need to be evaluated by District on case by case basis. Individual booster pumps are recommended.



**RECORD OF COMMENT LOG - SECTION 6**

**PROJECT : Woodinville Water District Water System Plan Update**  
 Section 6 - Water Use Efficiency and Reuse  
**JOB # : 10219A.00**  
**DATE UPDATED: 2/6/2019** **UPDATED BY: Alena Thurman**

COMMENT NO.	COMMENT SOURCE	PAGE #	SECTION	COMMENT	RESPONSE	CHANGE TO PLAN
6-1	<a href="#">North Shore Utility Comments</a>	6-1	6.1	The WSP discusses the conservation goal for 2013 to 2018. WWD should state what the current progress is for this goal - especially since it is nearing the end of 2018	Progress as of SWP 2017 Annual Report will be included in Section 6.	Add to Section 6.3.1 paragraph 2: "As of the end of 2017, the SWP met its goal using 96.6 mgd in 2017."
6-2	<a href="#">DOH Comments</a>	N/A	N/A	The District has two Emergency groundwater wells. Have you prepared a wellhead protection plan for these sources?	See Comment ES-4.	



## RECORD OF COMMENT LOG - SECTION 7

**PROJECT : Woodinville Water District Water System Plan Update**  
 Section 7 - Operations and Maintenance  
**JOB # : 10219A.00**  
**DATE UPDATED: 2/6/2019**

**UPDATED BY:** Alena Thurman

COMMENT NO.	COMMENT SOURCE	PAGE #	SECTION	COMMENT	RESPONSE	CHANGE TO PLAN
7-1	<a href="#">DOH Comments</a>	7-19	Table 7.7	Table 7.7 <i>Tolt Supply Water Quality Testing</i> refers to the distribution system daily chlorine residuals. Consider modifying Table 7.7. The applicable regulations are the Revised Total Coliform Rule and the Surface Water treatment Rule. All systems that use surface water must maintain detectable residual in 95 percent of the samples taken each calendar month.	Table will be updated.	See SPU comments below.
7-2	<a href="#">DOH Comments</a>	7-20	7.7.2	Section 7.7.2 refers to low chlorine residuals found in the eastern pressure zones. Does the water age analysis described in Appendix J, <i>Model Update and Calibration</i> , help to explain this? Is it possible to describe any projects or operational changes that could mitigate the low chlorine residuals?	The District is closely monitoring chlorine residuals throughout its distribution system and evaluating options for maintaining adequate chlorine residuals.	No change.
7-3	<a href="#">SPU comment letter</a>	7-19	Table 7-7	Table 7-7: For the second entry, the following changes/edits are recommended: a. Change the governing regulation to Surface Water Treatment Rule. b. For schedule, include text describing how the District also collects daily samples at representative location(s) in the system. SPU may not collect a coliform sample (which includes a chlorine residual) every day of the month. Therefore, the District is responsible for collecting a representative sample on a daily basis (at least 5 days per week) or use an online analyzer to comply with this portion of the rule. Please update the text accordingly. c. Change the text included in the comments column, as compliance is not determined on an RAA basis. Please update with text stating that a detectable residual is required for compliance. d. Delete the footnote for this entry and at the bottom of the table.	Table will be updated.	Update Table 7.7.
7-4	<a href="#">SPU comment letter</a>	7-19	Table 7-7	Table 7-7: For the Stage 1 and Stage 2 DBP Rule entry, the following changes/edits are recommended: a. In the text or table, clarify that SPU collects DBP samples (TTHMs and HAA5s) from sample stands in Woodinville's distribution system. SPU also collects treated water bromate samples at the treatment plant; Woodinville does not collect bromate samples. b. Delete the text 'based on RAA of quarterly averages' in the schedule column. Include in the table that compliance is based on a running annual average at each DBP sample location, otherwise known as an LRAA. c. Delete the footnote for this entry and at the bottom of the table.	Table will be updated.	Update Table 7.7.
7-5	<a href="#">SPU comment letter</a>	7-21	7.7.4	Section 7.7.4: Disinfection Byproducts Rule: Indicate in the text that SPU collects DBPs (TTHMs and HAA5s) for Woodinville.	Text will be updated.	Update text.
7-6	<a href="#">SPU comment letter</a>	7-20	Table 7-8	Table 7-8: Please clarify what results are shown for lead and copper in table with a footnote or a change to the column header. Is the value shown an average of the 11 samples collected in Woodinville? Or is the value shown the highest result observed for both lead and copper?	The results shown are 90th percentile. Clarification will be added to the table in a footnote.	Update table.

COMMENT NO.	COMMENT SOURCE	PAGE #	SECTION	COMMENT	RESPONSE	CHANGE TO PLAN
7-7	<a href="#">SPU comment letter</a>	7-21	Table 7-9	Table 7.9: Please clarify what the values in this table show regarding compliance for Woodinville's DBP program. Compliance for the Stage 2 DBP Rule (which replaced the Stage 1 DBP Rule) is calculated by looking at the running annual average for each DBP sample location, otherwise known as an LRAA. Recommend showing DBP results by location and show the most recent calculation of the LRAA for each site. This table could be included in the Appendix.	Table will be updated to show 2017 LRAA by sample site.	Update table.



## RECORD OF COMMENT LOG - SECTION 8

**PROJECT :** Woodinville Water District Water System Plan Update  
 Section 8 - Capital Improvement Plan

**JOB # :** 10219A.00

**DATE UPDATED:** 2/6/2019

**UPDATED BY:** Alena Thurman

COMMENT NO.	COMMENT SOURCE	PAGE #	SECTION	COMMENT	RESPONSE	CHANGE TO PLAN
8-1	<a href="#">DOH Comments</a>	N/A	N/A	Has the District implemented an asset management program, which includes at a minimum, a remaining useful life assessment of major water system facilities, and estimated costs to replace those facilities?	The District does not have a formal asset management program. The District manages its assets by tracking remaining useful life and implementing upgrades recommended in manufacturers TIC reports for the storage tanks.	No change.
8-2	<a href="#">DOH Comments</a>	N/A	N/A	Please describe some of the reservoir improvements and reservoir upgrades. Will these projects include retrofit of the air vents to provide better sanitary protection?	The reservoir projects are listed in Section 8.4.4 and each project is described in detail in Appendix K. Reservoir upgrades include air vent replacement.	No change.



**RECORD OF COMMENT LOG - SECTION 9**

**PROJECT :** Woodinville Water District Water System Plan Update  
Section 9 - Financing and Implementation  
**JOB # :** 10219A.00  
**DATE UPDATED:** 2/6/2019  
**UPDATED BY:** Alena Thurman

COMMENT NO.	COMMENT SOURCE	PAGE #	SECTION	COMMENT	RESPONSE	CHANGE TO PLAN
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## RECORD OF COMMENT LOG - APPENDICES

**PROJECT :** Woodinville Water District Water System Plan Update  
 Appenidces  
**JOB # :** 10773A.00  
**DATE UPDATED:** 2/6/2019

**UPDATED BY:** Alena Thurman

COMMENT NO.	COMMENT SOURCE	PAGE #	SECTION	COMMENT	RESPONSE	CHANGE TO PLAN
A-1	<a href="#">Snohomish County Comments.pdf</a>	N/A	Appendix K	Capital Improvement Plan, Project D-2 may be within Snohomish County R/W and Type B5 Permit from Snohomish County would likely be required for Traffic Control associated with this project. Recommended identifying if within Snohomish County Right of Way, adding language identifying jurisdiction, similar to "unincorporated KC" language on Project D-1	Noted.	No change.
A-2	<a href="#">Snohomish County Comments.pdf</a>	N/A	Appendix E	Appendix E also has language that allows a fair amount of flexibility to modify service area boundaries when necessary based on ILA's with Bothell, Redmond, Cross Valley Water District and Northshore Utility District. Normally, both King County and Snohomish County should also be notified to update both our GIS maps and to make sure these boundaries are consistent with various capital facilities plans and adjoining water system comprehensive plans.	Noted.	No change.
A-3	<a href="#">Snohomish County Comments.pdf</a>	330	N/A	On page 330 of 1094 in the Appendices it appears that the authors were going to put in a different photo.	Noted.	No change.



State of Washington

## DEPARTMENT OF HEALTH

NORTHWEST DRINKING WATER REGIONAL OPERATIONS  
20425 72nd Avenue South, Suite 310 • Kent Washington 98032-2388

October 9, 2018

PATRICK SORENSEN  
GENERAL MANAGER  
WOODINVILLE WATER DISTRICT  
PO BOX 1390  
WOODINVILLE WA 98072

RE: Woodinville Water District, ID#41600  
King County  
Water System Plan – 2018  
Submittal #18-0703

Dear Mr. Sorensen:

Thank you for submitting the Water System Plan (WSP) for the Woodinville Water District (the District) received in this office on July 10, 2018. 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 determination of local government consistency (LGC) from the following cities: Woodinville; Bothell; Kirkland; Redmond.
2. Provide a LGC from Snohomish County and King County.
3. King County provided comments on your WSP on August 14, 2018. Please respond to their issues. Adequate responses to their issues will be necessary in order to receive a WSP Adoption Ordinance from King County.

### **Basic Planning Data**

4. Please provide demand forecast on an annual basis for the duration of the planning period.
5. You have identified discrepancies between the Seattle Public Utilities and the District meters prior to 2015. Regional demand was high in 2015 due to the hot and dry summer. How do



actual 2016 and 2017 average day and maximum day purchased water compare to forecast values?

### **System Analysis**

6. Our experience tells us that customers expect the system pressure at average day demand not to exceed a pressure that would require them to install a pressure reducing valve at the service connection. Page 4-10 identifies the District's criteria to "maintain system pressure below 100psi at all times, and page 4-11 identifies that the uniform plumbing code recommends installing individual pressure reducing valves where pressure exceeds 80psi. Figure 5.6 *High Pressure Nodes During 2023 ADD Without Improvements* identifies hundreds of nodes with pressure exceeding 100psi, yet page 5-23 indicates no improvements are planned. Does the District have any intention of addressing the areas with high system pressure? If so, how would the District approach the issue?
7. It is not clear from Figure 5.9. *Recommended Distribution System Improvements*, if the improvements adequately address the 2023 nodes with pressure below 20psi during maximum day demand and fire flow. Please clarify how the District plans to meet the minimum system pressure requirements.
8. The hydraulic model results shown in Appendix J show some areas currently not meeting minimum fire flow conditions (Figure 4, *Percentage of Required Fire Flow*). Which projects address this deficiency?
9. The hydraulic analysis for peak hour demand and maximum day demand plus fire flow scenarios must be completed for future demand (10 years for the 10 year planning period). Ten year demand scenarios should incorporate planned projects. Please demonstrate that planned projects help the District meet minimum system pressure requirements for future demand.

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

*No comment*

### **Source Protection**

10. The District has two Emergency groundwater wells. Have you prepared a wellhead protection plan for these sources?

### **Operations & Maintenance**

11. Table 7.7 *Tolt Supply Water Quality Testing* refers to the distribution system daily chlorine residuals. Consider modifying the Table 7.7. The applicable regulations are the Revised Total

Coliform Rule and the Surface Water Treatment Rule. All systems that use surface water must maintain detectable residual in 95 percent of the samples taken each calendar month.

12. Section 7.7.2 refers to low chlorine residuals found in the eastern pressure zones. Does the water age analysis described in Appendix J, *Model Update and Calibration*, help to explain this? Is it possible to describe any projects or operational changes that could mitigate the low chlorine residuals?

#### **Standard Plans & Specifications**

13. Thank you for including the standard design policies and criteria in section 4. If the District intends to request approval for the distribution project submittal exception, please provide standard design details and the specification for pressure and leakage and disinfection testing for our review.

#### **Capital Improvement Program**

14. Has the District implemented an asset management program, which includes at a minimum, a remaining useful life assessment of major water system facilities, and estimated costs to replace those facilities?
15. Please describe some of the reservoir improvements and reservoir upgrades. Will these projects include retrofit of the air vents to provide better sanitary protection?

#### **Financial Program**

No comment

#### **Other Documentation**

16. The WSP must bear the seal of a professional engineer licensed in the State of Washington.
17. The District 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.
18. Respond to any comments provided by adjacent water purveyors. Has Seattle Public Utilities reviewed and commented on your WSP?
19. Is the District a member of WAWARN (The Washington State Water/Wastewater Agency Response Network)?

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 **January 9, 2019**. In order to expedite the review of your revised submittal, please include a

Woodinville Water District

October 9, 2018

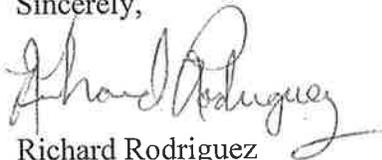
Page 4

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 **\$5484.00**. 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  
Steve Hirschey, King County UTRC  
Lara Kammereck, P.E., Carolla Engineers, Inc.  
Ken McDowell, P.E., Woodinville Water District  
Joan Kersnar P.E., Seattle Public Utilities



## King County

**Utilities Technical Review Committee**  
Department of Natural Resources and Parks  
King Street Center  
201 South Jackson Street, Suite 512  
Seattle, WA 98104-3855  
www.kingcounty.gov

RECEIVED

OCT 05 2018

WOODINVILLE WATER DIST

October 1, 2018

Ken McDowell, P.E.  
Woodinville Water District  
PO Box 1390  
Woodinville, WA 98072-1390

Dear Mr. <sup>Ken</sup> McDowell:

Thank you for submitting the Woodinville Water District (District) Comprehensive Water System Plan Update (Plan) for King County approval. The Plan was received on July 9, 2018. In accordance with chapter 57.16 Revised Code of Washington (RCW) and King County Code 13.24, the King County Utilities Technical Review Committee (UTRC) has reviewed the Plan for consistency with the King County Comprehensive Plan and the King County Code.

In reviewing the Plan, the UTRC found that it is largely consistent with the County's comprehensive plan and code. However, six additions or clarifications are necessary before we can make a recommendation to the King County Council for approval of the District's final Plan. The items are:

- Please provide consistency statements by local jurisdictions, or documentation for self-certification of consistency, as described in WAC 246-290-108;
- Clarify the rationale and methodology for the Reduced Growth Scenario described in Section 2.5 and used for the medium and low demand projections;
- Include a complete King County Water Reclamation Evaluation Checklist that can be found at, [https://www.kingcounty.gov/~media/environment/dnrp/documents/WaterReclamationChecklist12\\_2011.ashx?la=en](https://www.kingcounty.gov/~media/environment/dnrp/documents/WaterReclamationChecklist12_2011.ashx?la=en);
- Confirm the City will continue to issue or use certificates of water availability for service of water to parcels located in unincorporated King County;
- Include the District's wellhead protection program as described in WAC 246-290-135(3) for the two wells identified for emergency use in the Plan; and
- There are approximately 54 Group A and B public water systems are within the District's service area. Please describe how the District is planning for future service to those systems in the event they choose to or need to become part of the water service customer base. Attached is a map of the Group A and B systems that are within the District's service area.

Often, the construction and/or maintenance of utility lines require work within the road right of way (ROW) for roads in unincorporated King County. When a utility has a proposed project

within unincorporated King County, please contact the King County Department of Transportation (KCDOT), Road Services Division, 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, when construction and or maintenance of utilities requires work within the road ROW for roads in unincorporated King County, please be aware that 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 KCDOT 2007 and 2016 King County Road Design and Construction Standards can be found on the World Wide Web at:  
<https://kingcounty.gov/depts/transportation/roads/road-standards.aspx>

Finally, we take this opportunity to ensure a common understanding between the County and District on the franchise held by the District. King County notes that the District Franchise 9353 will expire on August 8, 2019. If your understanding of current franchise agreements is different, please clarify in your final Plan or in a separate response to the County. You may contact Michael Kulish ([Michael.Kulish@kingcounty.gov](mailto:Michael.Kulish@kingcounty.gov)) at King County Department of Executive Services, Facilities Management Division to initiate the franchise process.

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,



Stephen Hirschey  
Chair, Utilities Technical Review Committee

cc: Richard Rodriguez, Regional Planner, Washington State Department of Health  
Michael Kulish, Supervisor, Real Estate Services, Facilities Management Division, King County



**Snohomish County**  
**Planning and Development Services**

Barb Mock  
Director

(425) 388-3311  
FAX (425) 388-3872

M/S #604  
3000 Rockefeller Avenue  
Everett, WA 98201-4046

August 3, 2018

Alena M. Thurman, P.E.  
Carollo Engineers, Inc.  
720 SW Washington St., Suite 550  
Sultan, WA 98293

Subject: Woodinville Water District  
Comprehensive Water System Plan Update, July 2018

Dear Ms. Thurman:

Thank you for the opportunity to comment on Woodinville Water District's draft comprehensive water system plan. Planning and Development Services (PDS) staff has reviewed the draft plan and evaluated it relative to the criteria of the "Local Government Consistency Review Checklist" (consistency statement) pursuant to RCW 57.02 and WAC 246-290.

Please complete the column "For use by the water system" on the consistency statement form so that we may verify that the issues have been addressed and provide you with a signed form.

Our comments are attached. If you have any questions, please contact Randy Sleight, Chief Engineering Officer, at 425-262-2014.

Sincerely,

Terri Strandberg, Principal Planner  
Snohomish County Planning and Development Services

CC: Ken McDowell, Woodinville Water District

**Comments from Snohomish County – 8/3/18**  
**Woodinville Water District (WWD)**  
**Draft Comprehensive Water System Plan, July 2018**

1. The maps in the water system plan do not match the data in the GIS shapefiles provided with respect to the small portions of the service area extending into Snohomish County.
2. The boundary of Cross Valley Water District service area does not match the information provided to Snohomish County by Cross Valley in their comprehensive plan.
3. Figure ES.9 shows existing customers and consumers at the parcel level, none of which are shown in Snohomish County. Is it true that while the service area extends into Snohomish County there are no parcels/customers in Snohomish County?
4. Page 1-10: Was Snohomish County's comprehensive plan reviewed as pertaining to the small areas included in WWD's service area?
5. The household projections in 5-year increments to the year 2040 by pressure zone, shown in Table 1.1 on page 1-7 of Appendix F – Demand Projections are missing.
6. Section 1.5 on Page 1-9 states "The District serves a small number of parcels within Snohomish County. Resolution 2388 defines the District's policy regarding extension into Snohomish County. Table 1.1 lists these agreements, which are included in Appendix E."
  - o Currently WWD does not have a utility franchise agreement with Snohomish County for their facilities installed within County Right-of-Way. Recommend including language that a utility franchise agreement with Snohomish County will be required (per Snohomish County Code 13.80.010).
  - o WWD facilities potentially within Snohomish County Right-of-Way along 75<sup>th</sup> Ave SE, 83<sup>rd</sup> Ave SE, 85<sup>th</sup> Ave SE, and 107<sup>th</sup> Dr. SE north of King/Snohomish County line. Additionally portions of facilities along 244<sup>th</sup> St SE (west of SR522) may also be within Snohomish County jurisdiction.
7. In Table 1.1, recommend modifying to include Snohomish County as Utility Franchise Authority similar to King County.
8. In Appendix K – Capital Improvement Plan, Project D-2 may be within Snohomish County R/W and Type B5 Permit from Snohomish County would likely be required for Traffic Control associated with this project. Recommend identifying if within Snohomish County Right of Way, adding language identifying jurisdiction, similar to "unincorporated KC" language on Project D-1.
9. Section 2.4.3.5 Urban Versus Rural Water Consumption. This discussion is confusing. Does the 170 average gpd for the City of Woodinville include the values from the "rural pressure zones" included inside city limits shown in figure 2.10? This use of the terms "rural" and "urban" is not consistent with county and city comprehensive land use plans.