

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 75th Ave 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.
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.

Is this distinction necessary? Could the average gpd be reported by pressure zone in Table 2.8 instead of aggregated to general rural/urban categories?

10. 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 age than system distribution needs. Yet, after that, the replacement of piping soars for 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 this planning cycle, especially from 2028 through 2037 installing roughly 75,000 lineal 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?
11. Some additional discussion may be necessary to clarify that 36mgd water right that was purchased tied to the Weyerhaeuser Mill site usage was an untreated water right and that prior to use in Woodinville Water District, 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 11mgd of that right was set aside for the Woodinville Water District 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.
12. 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 the various capital facilities plans and adjoining water system comprehensive plans.
13. Page 35, Figure ES.5 should identify in the legend that TT means Tolt Tap.
14. It appears that both fire flows and pressures are fairly low in the 420 zone at 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 infrastructure. The correction to these areas with less than 20 psi flow currently does not appear to be rectified until 2023. These deficient nodes are shown on Page 71, Figure ES.23 of the plan.
15. 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.
16. On Page 330 of 1094 in the Appendices it appears that the authors were going to put in a different photo.

From: [Amanda Almgren](#)
To: [Alena Thurman](#)
Cc: "Ken McDowell"; [Lara Kammereck](#); [Kelsey Loch](#); [Robert Grumbach](#)
Subject: RE: Consistency Statement for Woodinville Water District 2018 Comprehensive Water System Plan
Date: Thursday, August 9, 2018 4:00:29 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[Future Land Use.png](#)

Hello Alena,

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.

Thank you,

Amanda Almgren | Planning Manager | [City of Woodinville](#)
d: (425) 877-2285 | e: amandaa@ci.woodinville.wa.us

Woodinville City Hall, 17301 133rd Ave NE, Woodinville WA 98072
Please note that this email is considered public record and may be subject to public disclosure.

From: Alena Thurman <ATHurman@carollo.com>
Sent: Monday, July 9, 2018 12:45 PM
To: Amanda Almgren <AmandaA@ci.woodinville.wa.us>
Cc: 'Ken McDowell' <kmcdowell@woodinvillewater.com>; Lara Kammereck <LKammereck@carollo.com>
Subject: Consistency Statement for Woodinville Water District 2018 Comprehensive Water System Plan

Hello Amanda,

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
Portland, OR 97205
P: 503-290-2835
www.carollo.com



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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/5kJxjYmd50aAKDqaZY7etD>

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

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

Message ID: 5kJxjYmd50aAKDqaZY7etD

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 <kmcdowell@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.
Licensed in California
Environmental Engineer
Carollo Engineers, Inc.
1218 Third Avenue, Suite 1600
Seattle, WA 98101
P: 206-684-6532
www.carollo.com



WATER IS OUR FOCUS, OUR BUSINESS, AND OUR PASSION



December 17, 2018

Patrick Sorensen
General Manager
Woodinville Water District
P.O. Box 1390
Woodinville, WA 98072

Subject: Comments to Woodinville Water District's 2018 Water System Plan

Dear Mr. Sorensen:

Thank you for the opportunity to review and comment on the 2018 Water System Plan (WSP) for Woodinville Water 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. In Figure ES.5 and 2.5, 2015 WATER PURCHASE BY TAP, 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.
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.
3. 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.
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.

5. 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.
6. General Comment: 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.
7. 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".
8. 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.
9. 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:
<http://www.seattle.gov/util/Documents/Plans/Water/WaterShortagePlan/index.htm>
10. 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.
11. 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.
- 12. Section 7.7.4: Disinfection Byproducts Rule: Indicate in the text that SPU collects DBPs (TTHMs and HAA5s) for Woodinville.
- 13. 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?
- 14. 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.

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, Interim Wholesale Contracts Manager, Seattle Public Utilities
Lara Kammereck, Carollo Engineers



September 6, 2018

Mr. Ken McDowell, P.E.
District Engineer
Woodinville Water District
P.O. Box 1390
Woodinville, Washington 98072

SUBJECT: COMMENTS ON WOODINVILLE WATER DISTRICT'S DRAFT
2018 COMPREHENSIVE WATER SYSTEM PLAN UPDATE
NORTHSHORE UTILITY DISTRICT, KING COUNTY,
WASHINGTON
G&O #18549.00

Dear Mr. McDowell:

The Northshore Utility District (NUD) has requested that Gray & Osborne review the Woodinville Water District's (WWD's) draft Water System Plan (WSP) on their behalf. We have reviewed the draft and have several questions and comments regarding the WSP. We have divided our questions and comments into sections; issues that directly impact NUD, and general comments regarding the WSP.

The following comments address issues concerning NUD:

1. 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 Riverside Drive that is served by NUD but is shown within the City of Bothell's service area.
2. Page 3-14, Paragraph 7 – It is stated the NUD intertie is rarely used. Does the WWD know when it was last exercised?
3. Appendices were not included in the draft WSP for review. We are not able to verify if the relevant appendices to NUD (Appendices B, D, and E) are included.



Mr. Ken McDowell, P.E.
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The following comments are for your use in completing the WSP.

EXECUTIVE SUMMARY

To avoid repetition, all comments for the Executive Summary apply to the respective text and figures described throughout the entire WSP.

4. Figure ES.1 – The urban growth boundaries for the Cities of Redmond and Woodinville are not clearly shown on the figure.
5. 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.
6. Page ES-7, Paragraph 2, Sentence 2 – “Planning period” should be plural since there are three planning periods being discussed.
7. 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.
8. 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.
9. Page ES-37, Paragraph 4: Are the District’s supply and pumping criteria consistent with WSDOH Water System Design Manual criteria?

SECTION 1 – INTRODUCTION

10. No comment beyond those mentioned in the Executive Summary section.

SECTION 2 – PLANNING DATA AND WATER DEMAND PROJECTIONS

11. 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.



Mr. Ken McDowell, P.E.
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12. Page 2-33 – For the “Medium” growth scenario discussed in the text and Table 2.13, there is conflicting information. The table states the “Medium” growth scenario is based on the “PSRC Growth Scenario” and the text below says it is based on the “Reduced 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.”

SECTION 3 – EXISTING WATER SYSTEM

13. 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.

SECTION 4 – POLICIES AND CRITERIA

14. No comment beyond those mentioned in the Executive Summary section.

SECTION 5 – WATER SYSTEM ANALYSIS

15. No comment beyond those mentioned in the Executive Summary section.

SECTION 6 – WATER USE EFFICIENCY AND REUSE

16. Page 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.

SECTION 7 – OPERATIONS AND MAINTENANCE

17. No comment beyond those mentioned in the Executive Summary section.

SECTION 8 – CAPITAL IMPROVEMENT PLAN

18. No comment beyond those mentioned in the Executive Summary section.

SECTION 9 – FINANCING AND IMPLEMENTATION

19. No comment beyond those mentioned in the Executive Summary section.



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APPENDICES

20. Appendices were not included in the draft WSP for review.

Please contact me at (206) 284-0860 or via email at edelfel@g-o.com if you have any additional questions.

Sincerely,

GRAY & OSBORNE, INC.

Eric Delfel, P.E.

ED/hh
Encl.

cc: Mr. Dave Kaiser, P.E., Engineering Director, Northshore Utility District
Mr. Al Nelson, General Manager, Northshore Utility District

NOTICE OF PUBLIC MEETING

TO: All owners of personal property and improvements to real property located within the geographical boundaries of Woodinville Water District.

NOTICE IS HEREBY GIVEN that the Board of Commissioners of the Woodinville Water District will hold a public meeting at the date, time and place specified below to accept comments on the update to the 2018 Comprehensive Water Supply Plan. The draft copy of this document can be found at the District website www.woodinvillewater.com under **Customer Service; Draft 2018 Comprehensive Water Supply Plan**. A hard copy of the document can also be reviewed at the front counter of the Woodinville Water District Office and at the Woodinville Public Library. If you have any questions, please call (425) 487-4104.

DATE OF PUBLIC MEETING: Tuesday, March 19, 2019

TIME OF PUBLIC MEETING: 5:00 p.m. or as soon thereafter as may be heard

PLACE OF PUBLIC MEETING: Woodinville Water District
Building A
17238 NE Woodinville-Duvall Rd
Woodinville, WA 98072

DATED this 5th day of March, 2019

Ken McDowell
District Engineer
Woodinville Water District

