Appendix B AGENCY / ADJACENT PURVEYOR COMMENTS AND APPROVAL



Documentation of Request for Local Government Consistency Statements

A complete draft of the Comprehensive Water System Plan Update was sent to Thurston County and the cities of Olympia and Lacey. Each jurisdiction was asked to fill out and sign the consistency statement form provided to them. Thurston County and the City of Olympia filled out the consistency statements, which are included in this appendix. The City of Lacey did not provide a consistency statement. A copy of the letter sent to the City of Lacey on July 6, 2020 is included in this appendix.

The City of Tumwater's Community Development Department also filled out the consistency statement form, which is also included in this appendix.



John Hutchings District One

Gary Edwards District Two

Bud Blake District Three

PUBLIC HEALTH AND SOCIAL SERVICES DEPARTMENT

MEMORANDUM

Schelli Slaughter, Director Rachel C. Wood, MD, MPH Health Officer

December 24, 2020

TO: Ron Buckholt, Thurston County Planner

FROM: Stephanie Kenny, Thurston County Environmental Health

SUBJECT: Project 2020104245, City of Tumwater Group A Public Water System Plan Review

The above referenced application has been routed to this agency for review and comment. The applicant has prepared an update of the water system plan for City of Tumwater (ID# 89700Q) to fulfill a requirement by Washington State Department of Health Office of Drinking Water (DOH ODW) for periodic updates. As a condition to grant approval of the updated water system plan by DOH ODW, the applicant is required to route a copy to Thurston County for Local Government Consistency Review.

Environmental Health has completed our review of the plan. It does not appear to be in conflict with Thurston County Coordinated Water System and Groundwater Area Management plans based on the following:

1. The system does not propose to expand the service area.

It is worth noting:

- There is a discrepancy in service area between the Mottman Maintenance Facility water system and the City. The water system is an exempt Group B so the discrepancy isn't significant, an exempt Group B has little scope for expansion.
- The service area border between Olympia and Tumwater has become more convoluted over time. The updated plan notes that service is worked out on a case by case basis between the two providers, which is acceptable within the Thurston County coordinated water system plan.

If you or the applicant has any questions regarding Environmental Health's review of this application, I can be reached at (360) 867-2630.

Sincerely,

Stephanie Kenny

Environmental Health Specialist

Stephanie Kenny

Thurston County Environmental Health



Project 2020104245

Local Government Consistency Determination Form

Water System Name:	City of Tumwater	PWS ID: <u>89700Q</u>	
Planning/Engineering 2020	Document Title: <u>Comprehensi</u>	ve Water System Plan Update	Plan Date:
Local Government wit	h Jurisdiction Conducting Revie	ew: Thurston County	

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.

-		For use by water system	For use by local government	_
	Local Government Consistency Statement	Identify the page(s) in submittal	Yes or Not Applicable	leave the second
a)	The water system service area is consistent with the adopted <u>land use</u> and <u>zoning</u> within the service area.	Pg 3-2, Fig. 3.1, Fig. 3.2	yes	PLN
b)	The growth projection used to forecast water demand is consistent with the adopted city or county's population growth projections. If a different growth projection is used, provide an explanation of the alternative growth projection and methodology.	Pgs 3-17 to 3-19	495	PW
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> .	Pgs 2-1 to 2- 4, App. G	ys	,
d)	Service area policies for new service connections conform to the adopted local plans and adopted development regulations of all cities and counties with jurisdiction over the service area.	Pgs 2-1 to 2-4, App. G	1/45,] SM*
e)	Other relevant elements related to water supply are addressed in the water system plan, if applicable. This may include Coordinated Water System Plans, Regional Wastewater Plans, Reclaimed Water Plans, Groundwater Management Area Plans, and the Capital Facilities Element of local comprehensive plans.	Pgs 1-1 to 1-2, Pgs 2-1 to 2-3, Pg 3- 24, App. D, App. G	No conflict. There is a disagreement of boundaries mother mother was	5M

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. - EHS, Thurston County

Signature



City of Olympia | Capital of Washington State

P.O. Box 1967, Olympia, WA 98507-1967

olympiawa.gov

July 28, 2020

Dan Smith City of Tumwater 555 Israel Rd SW Tumwater WA 98501-6515

Subject: City of Tumwater Water System Plan - Consistency Statement

Dear Dan:

Attached, please find a signed consistency statement from the City of Olympia which confirms that the Tumwater Water System Plan is consistent with City of Olympia plans and development regulations for the limited area of the Tumwater water service area that falls within the city limits of Olympia.

While Tumwater's depiction of our mutual service area, including Olympia's zoning where applicable, is consistent with our records, it would be helpful if the maps more clearly showed the portions of the Tumwater water service area located within Olympia city limits – and that portion of the City of Tumwater that falls within Olympia's water service area. For example, in Figure 3.2 zoning, it appears as if the entire northeast section of Tumwater's water service area in the vicinity of the Capitol Boulevard intertie is located within Tumwater city limits, with Tumwater having zoning and land use authority within the entire area.

Finally, at this time we have limited our review of the Tumwater Water System Plan to issues of consistency with our water service area and development regulations. Additional comments may be provided in the near future.

Sincerely,

ERIC CHRISTENSEN

Water Resources Director Olympia Public Works 360.570.3741 echriste@ci.olympia.wa.us

Tric Christensen

EC/js

Enclosure



Local Government Consistency Determination Form

Water System Name: <u>City of Tumwater</u>	PWS ID: <u>89700Q</u>	
Planning/Engineering Document Title: <u>Comprehensive Water</u> 2020	System Plan Update	Plan Date:
Local Government with Jurisdiction Conducting Reviews City of	of Olympia Public Works Wate	er Resources

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.

For use by water For use by local

		system	government
	Local Government Consistency Statement	Identify the page(s) in submittal	Yes or Not Applicable
a)	The water system service area is consistent with the adopted <u>land use</u> <u>and zoning</u> within the service area.	Pg 3-2, Fig. 3.1, Fig. 3.2	Yes
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.	Pgs 3-17 to 3-19	Yes
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> .	Pgs 2-1 to 2- 4, App. G	Yes
d)	Service area policies for new service connections conform to the adopted local plans and adopted development regulations of all cities and counties with jurisdiction over the service area.	Pgs 2-1 to 2-4, App. G	Yes
e)	Other relevant elements related to water supply are addressed in the water system plan, if applicable. This may include Coordinated Water System Plans, Regional Wastewater Plans, Reclaimed Water Plans, Groundwater Management Area Plans, and the Capital Facilities Element of local comprehensive plans.	Pgs 1-1 to 1-2, Pgs 2-1 to 2-3, Pg 3- 24, App. D, App. G	Yes

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.

Eric Christensen, Water Resources Director	7/24/2020

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 <u>municipal water supplier</u> 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 <u>municipal water supplier</u> 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 <u>municipal water supplier</u> 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 <u>not</u> 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 of formats. To submit a request, please call 1-800-525-0127 (TTY 1-800-833-6388).	n request in other

Natalie Reilly

From: Brad Medrud < BMedrud@ci.tumwater.wa.us>
Sent: Thursday, September 17, 2020 6:19 PM

To: Marina Magana

Subject: RE: Water System Plan consistency checklist

Attachments: Tumwater_Zoning_Map22x34.pdf; Consistency Statement City of Tumwater - Brad's

Comments.docx

Marina:

I have gone through the local government consistency checklist and made my changes.

Concerning the Local Government Consistency Statement:

- a. It looks like the area covered by Figure 3.1 covers the City, its urban growth area, and a portion of Thurston County outside of the City and its UGA (areas south of 93rd and west of the I-5/93rd interchange). I have attached a zoning map showing our boundaries. On page 23-24 of the Lands For Public Purposes Element of the City's Comprehensive Plan addresses Water Systems and Facilities and notes that "The Comprehensive Water System Plan and the Wellhead Protection Plan are hereby incorporated by reference."
- b. The numbers appears to be consistent with the information in *Table 8. Tumwater and Urban Growth Area 20-Year Population Projection* on page 70 of the Land Use Element of the City's Comprehensive Plan. The 2035 Population is 42,883 in the City and urban growth area is based on a 2015 estimate from TRPC. The Water Plan estimate is about 1,000 people higher, but that is probably because of the portion of the water service area that is outside of the City and UGA.
- c. The language on pages 2-1 to 2-4 looks appropriate to me. You may want to confirm the details of the utility service extension ordinances with engineering staff, as this is not my area. There is the issue of confirming consistency with the County for those areas outside the City.
- d. Similar to c), the language on pages 2-1 to 2-4 looks appropriate to me. You may want to confirm the details of the utility service extension ordinances with engineering staff, as this is not my area. There is the issue of confirming consistency with the County for those areas outside the City.
- e. Similar to c)

The form would not allow me to add a picture of my signature and print my name, title, and jurisdiction.

Thanks.

Brad Medrud, AICP | Long Range Planning Manager City of Tumwater Community Development 555 Israel Road SW | Tumwater, WA 98501 (360) 754-4180 | bmedrud@ci.tumwater.wa.us www.ci.tumwater.wa.us

From: Marina Magana < MMagana@ci.tumwater.wa.us>

Sent: Monday, September 14, 2020 3:27 PM **To:** Brad Medrud <BMedrud@ci.tumwater.wa.us> **Subject:** Water System Plan consistency checklist

Hi Brad,

Please see the attached local government consistency checklist for your review. Please let Dan know if you have any questions.

You can find the Water System Plan here:

https://cloud.ci.tumwater.wa.us/nextcloud/s/6F3bx93dataGWTg

Thank you,

Marina Magaña | Water Resources Specialist City of Tumwater | Water Resources & Sustainability Department 555 Israel Road SW |Tumwater, WA 98501 (360)754-4140 mmagana@ci.tumwater.wa.us



Local Government Consistency Determination Form

Water System Name: <u>City of Tumwater</u>	PWS ID: <u>89700Q</u>	
Planning/Engineering Document Title: <u>Comprehensive V</u> 2020	Vater System Plan Update	Plan Date:
Local Government with Jurisdiction Conducting Review:	City of Tumwater Community Develor	<u>oment</u>

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.

		For use by water system	For use by local government
	Local Government Consistency Statement	Identify the page(s) in submittal	Yes or Not Applicable
a)	The water system service area is consistent with the adopted <u>land use</u> <u>and zoning</u> within the service area.	Pg 3-2, Fig. 3.1, Fig. 3.2	Yes
b)	The growth projection used to forecast water demand is consistent with the adopted city or county's population growth projections. If a different growth projection is used, provide an explanation of the alternative growth projection and methodology.	Pgs 3-17 to 3-19	Yes
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> .	Pgs 2-1 to 2- 4, App. G	Yes
d)	Service area policies for new service connections conform to the adopted local plans and adopted development regulations of all cities and counties with jurisdiction over the service area.	Pgs 2-1 to 2-4, App. G	Yes
e)	Other relevant elements related to water supply are addressed in the water system plan, if applicable. This may include Coordinated Water System Plans, Regional Wastewater Plans, Reclaimed Water Plans, Groundwater Management Area Plans, and the Capital Facilities Element of local comprehensive plans.	Pgs 1-1 to 1-2, Pgs 2-1 to 2-3, Pg 3- 24, App. D, App. G	Yes

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.

9/17/2020

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.

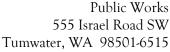
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For **engineering documents**, a consistency review is required for areas where a <u>municipal water supplier</u> wants to expand its water right's place-of-use (water system plan amendment is required). For noncommunity water systems, a consistency 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.
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 - 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 <u>not</u> 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 formats. To submit a request, please call 1-800-525-0127 (TTY	persons with disabilities, this document is available on request in other 1-800-833-6388).



Phone: 360-754-5855

none: 360-754-5855 Fax: 360-754-4142



July 6, 2020

Julie Rector 420 College St SE Lacey, WA 98503

Re: City of Tumwater's 2020 Water System Plan Update

Dear Julie:

The City of Tumwater has recently completed a major update to its Water System Plan, the guiding document for the operation and management of the Tumwater Water System. As required by the Washington Department of Health (DOH), we are providing notice that a full draft of the Water System Plan Update is available for your review.

A draft copy of the 2020 Water System Plan is available for review and download here:

https://www.ci.tumwater.wa.us/departments/public-works/utilities/drinking-water/water-system-plan

If you have any questions or comments, please contact me at (360) 754-4149 or email to desmith@ci.tumwater.wa.us. Please return any written comments at your earliest convenience.

We are also providing the "Local Government Consistency Review Checklist" as required by WAC 246-290-108. Please return the enclosed form to me no later than July 24, 2020 indicating concurrence with adopted policies, plans and ordinances. If you determine that there is an issue of inconsistency, please cite the issue and direction for resolution.

Thank you for your assistance and review of the City's Water System Plan Update.

Regards,

Dan Smith

Dan Smith Water Resources Program Manager



Record of Comment Log

Project Name: Comprehensive Water System Plan

Client: City of Tumwater Date of Comments: 11/12/2020

Date Last Updated: 6/14/2021

Comment No.	Section/Page	Comment By	Comment	Response	Change to Plan
1	Chapter 1 - General	DOH	Appendix A and Appendix B both contain placeholders. Please provide the missing documents as they become available.	Appendix A (Adopting Resolution and Ordinance) and Appendix B (Agency / Adjacent Purveyor Comments and Approval) will be included in the final plan.	Appendix A and Appendix B will be included in the final plan.
2	Chapter 1 - General	DOH	For your information, please see the enclosed comments from Charese Gainor, our Coliform Program Manager & WFI Coordinator.	Noted. Comments from Charese Gainor will be reviewed.	No changes.
3	Chapter 1 - General	DOH	Ensure all references to Well #24, S26, are consistent with its inactivation in 2019. Well #24 cannot be used as an emergency source.		The Plan will be updated to show that well 24 is not considered an emergency source. The supply analysis will also be updated as needed.
4	Chapter 1 - Page 1-17, Section 1.6.2 Wells	DOH	It appears the Airport Water Treatment Plant was not included in the discussion of well treatment facilities. Please explain.	The City has installed sodium hypochlorite chemical feed systems at each system entry point including the Airport wells. Wells 9 and 10 jointly enter the distribution system.	No changes.
5	Chapter 1 - Page 1-19, Section 1.6.4 Pressure Reducing Valve Stations.	ДОН	There is a discrepancy between table 1.4 and the text in this subsection. The text refers to a PRV at Johnson Blvd, but the Table lists Crosby Blvd. Also, at this same location the text states an 8 inch and 3 inch PRV, but the table only lists the 8 inch. Please update as appropriate. In Addition, Figure 1-4 shows a PRV at Lakeland Manner. However, that PRV is not listed in Table 1-4. Please update as appropriate.	The Johnson Blvd valve station was eliminated and a new PRV station was installed at Crosby Blvd (8-inch). The text will be updated to reflect the correct PRVs shown in Table 1.4.	Text in Section 1.6.4 will be updated to match information in Table 1.4 Footnote will be added to Table 1.4 for Lakeland Manor PRV.
6	Chapter 2 - Page 2-1, Section 2.2.1.2 New Customer Connection Process	DOH	The WSP includes the term "preferred service provider", which is not defined in Municipal Water Law. The WSP then lists the four elements the City of Tumwater (City) can invoke to avoid the Duty to Serve. Please ensure the City's "Duty to Serve" is consistent with the provisions of Municipal Water Law. Please use the following link for the DOH Fact Sheet on Duty to Serve.	The "New Customer Connection Process" section will be reviewed for consistency with the	Section 2.2.1.2 will be updated.
7	Chapter 2 - Page 2-9, Section 2.5.2 Velocities	DOH	The performance criteria for velocities in Section 2.5.2 does not match the criteria described in ES.5. Please clarify.	The velocity criteria under emergency conditions will be added to ES.5 "Maximum allowed velocity is 8 fps under emergency conditions, such as fire."	Section ES.5 will be updated.
8	Chapter 3 - Page 3-7, Section 3.3.1.1 Average Day Demand	DOH	Table 3.3 has a row entitled Date of Maximum Day Demand, but the data within the row does not represent days of the year.	Row will be updated with correct days of the year.	Table 3.3 will be updated.
9	Chapter 3 - Page 3-14, Section 3.3.3.1 Large Consumers	DOH	Figure 3.8 appears to be missing a reference to Pepsi NW Beverages LLC in the Legend. Please update.	Pepsi NW Beverage LLC will be added to legend.	Figure 3.8 will be updated.
10	Chapter 3 - Page 3-24, Section 3.5.3 Water Use Efficiency Goals	DOH	Please provide the notices, minutes, and comments from the WUE public forum.	Documentation of the WUE Public Forum will be added to Appendix H. This will include the meeting agenda and meeting minutes. No comments were received. Announcements are generally set to the public at least 7 days prior to the meeting. The City placed the goals on the DOH website that is intended to help with public outreach.	Documentation of the WUE Public Forum will be added to Appendix H.
11	Chapter 3 - Page 3-16, Section 3.3.4.1 Equivalent Residential Units	ДОН	Discuss how the increase in ADD per ERU between 2013 and 2016 is accounted for in the projection since it is not consistent with the 3 percent annual average decrease for the 10 year period.	The planning projection assumes a 1% reduction, which is not as dramatic as the last 10 years, but with water conservation City expects ERU value to continue to decrease. The starting ADD ERU value is historical average value, which includes the years 2013 through 2016 We looked at range of projections, and the conservative projection assumes no ERU reduction, which is where the 2013 to 2016 increase is captured.	
12	Chapter 3 - Page 3-20, Section 3.4 Demographics Analysis	DOH	Ensure that the total projected number of connections for 2038 in Table 3.12 matches the sum of the connections from all the pressure zones.	Totals in Table 3.12 will be updated.	Table 3.12 will be updated.
13	Chapter 3 - Page 3-27, Section 3.6.2.4 Impact of Climate Change on Demand Projections	DOH	Please note, in Table 3.16, the warmer climate change scenario has less of an impact on demand than the warm scenario in 2010 and 2020, and the same impact in 2030. In our experience, water demands tend to increase as summers get warmer.	The fact that water demands increase as summers get warmer is consistent with the demand projections.	No changes.

Comment No.	Section/Page	Comment By	Comment	Response	Change to Plan
14	Chapter 3 - Page 3-29, Section 3.6.3 ERU Projections	DOH	In Table 3.18 there are fewer projected ERUs for the 454 and 549 zones in the conservative projection than in the planning projection. Please explain.	This appears to be a minor calculation/rounding error for the conservative projections. The table will be updated with the correct projected ERUs for the 454 and 549 zones.	Table 3.18 will be updated.
15	Chapter 4 - Page 4-2, Table 4.1 Existing Water Rights Summary	DOH	Please check the significant figures and calculations.	Water Right G2-GWC2924@1 Qa primary should be: 6.32 ac-ft/yr Water Right G2-GWC2723@1 Qa primary should be: 20.4 ac-ft/yr Subtotal Rights for Airport Wells Qa primary should be 2,541.72 ac-ft/yr Subtotal Rights for Bush Wellfield Qa primary should be 990.5 ac-ft/yr. Water Right 453-A Qa primary should be: 76 ac-ft/yr Water Right G2-26058C Qa primary should be: 201 ac-ft/yr. Brewery Wellfield Subtotal Rights Qi primary should be 2172 gpm. Total Potable Water Rights Qa will be updated to 7,376.22 ac-ft/yr. Total Water Rights QA will be updated to 7,776.22 ac-ft/yr.	Table 4.1 will be updated.
16	Chapter 4 - Page 4-7, Table 4.3 Potable Water rights Analysis Summary	DOH	This table includes the Tumwater Golf Course irrigation in the 20-year Planning Period. The note states that it was not included in the totals. Please clarify.	Qi for water rights will be updated to 10,006 gpm so it does not include the Tumwater Golf Course.	Table 4.3 will be updated.
17	Chapter 4 - Page 4-8, Table 4.4 MDD Ability to Supply	DOH	The water rights values in Table 4.4 do not match those in Table 4.1. Please clarify.	Water Rights shown in Table 4.4 will be updated to match Water Rights shown in Table 4.1 for the Palermo Wellfield and the combined Airport Wells/Bush Wellfield. The total Water Rights value is correct, but the split between the two values is inconsistent with Table 4.1. This change does not impact the ability to supply analysis.	Table 4.4 will be updated.
18	Chapter 4 - Page 4-17, Section 4.5.1 Wellhead Protection Program	DOH	Please provide the names and addresses of potential sources of groundwater contamination to the City's groundwater supply. Any septic systems within the 10-year time of travel (ToT) is considered a potential source of groundwater contamination. Please provide a copy of the letter sent to the landowners of potential sources of groundwater contamination within the 10-yesr ToT for the City's sources of groundwater and confirm that all property owners were sent a copy of the letter. Please provide a copy of the letter sent to first responders and local governments notifying them of the location of the City's 10-year time of travel for its supply of drinking water and confirm these letters were also sent.	The Contaminant Source Inventory was inadvertently missing from the Draft Plan. This Report will be included in the Final Plan.	Contaminant Source Inventory will be included in the Final Plan.
19	Chapter 5 - Page 5-12, Section 5.3.1.1 Operational Storage	DOH	Consider revising the equalizing storage calculations by referring to Equation 7-1 in the Washington State Department of Health's Water System Design Manual (2019). Update Chapter 5 and the rest of the plan as needed.	Equation 7-1 is already used to calculate equalizing storage.	No changes.
20	Chapter 5 - Page 5-14, Section 5.3.3. Required Storage	DOH	Revise Table 5.9 to accurately reflect storage surpluses and deficiencies in the 350 zone.	Storage requirements and storage surpluses and deficiencies for the 350 Zone will be updated.	Table 5.9 will be updated.
21	Chapter 5 - Page 5-15, Section 5.4 Limiting Capacity Analysis	DOH	Based on the information provided in table 5.10 and 5.11, the City will exceed its limiting capacity before 2028-the 10-year planning horizon. As it stands, ODW would not be able to approve this plan for the unspecified designation for a 10-year approval period. It might be helpful to include a year by year breakdown of ERU demands from 2018 to 2028. Please note the City has the option to modify the growth projection to a lower percent growth rate, in line with the existing growth rate for the past 6 years. This could reduce the 10-year projected ERU demand value and keep it in pace to not exceed the City's existing limiting factor. ODW has other options, such as approving the WSP as unspecified for less than 10 years for determining a specific connection limit.	The limiting capacity shown in Table 5.11 does not include the change of purpose from irrigation to municipal supply for the Golf Course well which was recently approved under to Water Right Change Application No. CG2-01071, adding 2,000 gpm and 378 acre-feet per year to the City's available potable water supply total. With this change, the capacity of the sources, treatment, and pumping capacity are no longer limiting through 2028. The City is planning to construct a new 2.5 million gallon reservoir south of 93rd Avenue on property that has been previously acquired for this purpose. Per the City's Capital Facilities Plan and the CIP, the project is planned to be completed in the next 6 years. With this new reservoir, the standby storage is no longer limiting through 2028.	Table 5.11 will be updated to include the recently approved Golf Course Well Water Right Change and the planned new storage reservoir (design to start in 2021).
22	Chapter 5 - Page 5-33, Section 5.6.3 Recommended Distribution System Improvements	DOH	This is a general comment and does not require a specific response or change to the WSP at this time. We conducted a pre-plan with Tumwater in August of 2017. Since that time, ODW has incorporated Asset Management into its water system planning and State Revolving Fund (SRF) programs. In accordance with asset management principles, the infrastructure inventory now required evaluation of existing infrastructure, install date, end of life date, and replacement cost at end of life. These costs are then to be incorporated into the Capital Improvement Plan and budgeting process. We encourage the City to complete this analysis as part of this planning effort.	See comment 24	No changes.

Comment No.	Section/Page	Comment By	Comment	Response	Change to Plan
23	Chapter 6 - Page 6-2, Section 6.4 Operator Certification	DOH	Please contact ODW Operator Certification Program to ensure that Michael Thomas and Forrest Bailey are listed as operators for the system.	Michael Thomas is a certified operator, and the City has been in contact with ODW to update. Michael Thomas recently stepped down as Maintenance Lead. The O&M plan will be updated to show that Michael Erickson is the temporary Lead Maintenance Worker. Forrest Bailey is the City's certified Cross Connection Control Specialist and is not a certified operator. CCS's are not displayed in ODW's Sentry Net database.	No change to Chapter 6; O&M Plan will be updated to reflect current personnel.
24	Chapter 6 - Page 6-4, Section 6.7 Repair & Replacement Program	DOH	The Watermain Replacement Program meets the intent of an Asset Management Plan, as described above in the Chapter 5 comments with regard to the analysis of the water mains. Please include a copy of the latest version of this program Also, the reference to COP project D-23 appears to be labeled as project D-32. Please clarify.	City does not have a copy of the project. The City does have a process of evaluating the system and making repairs (especially in conjunction with other projects, as feasible). The City's goal is to enhance this program in the next 10 years.	
25	Chapter 7 - Page 7-5, Table 7.8 CIP Project Summary	DOH	This table is very difficult to read due to the small font size. Please enlarge this table and provide this data on an 11" x 17" sheet or larger. In addition, the City's CIP is largely driven by increased capacity and system expansion. Maybe the City could prioritize replacement of existing aging infrastructure to a higher degree. For example, there is a huge cluster of projects with the sole purpose of fire flow. If these projects are also intended as replacement of aging infrastructure, this is good asset management. Fire flow is an expansion. Upsizing aging infrastructure to meet current fire codes as part of the infrastructure replacement program is good planning. Furthermore, SFR cannot fund fire flow projects but can fund the replacement of aging/failing infrastructure.	Table is on 11" x 17" sheet. Comment noted.	No changes.
26	Chapter 8 - Page 802, Section 8.2.1.3 Lifeline Rates	DOH	The City is to be commended for having a lifeline rate for seniors and disabled. However, due to the extensive financial hardships that have occurred as a result of Covid-19, the City should expand its Customer Assistance Program (CAP) to include all customers suffering due to financial hardships. Please expand the City's CAP to be consistent with the Governor's Proclamation 20-23.7, Ratepayer Assistance and Preservation of Essential Services and subsequent amendments. Please visit our website at the following link for more information on CAP programs. https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemAssistance/CustomerAssistanceProgram	Comment noted. The City is working with customers and following the Governor's orders to not shut off water and work with customers on payments during COVID-19.	No changes.
27	Chapter 8 - Page 8-10, Table 8.8 Summary Projected Cash Flow (short-term)	DOH	Total operating expenses dropped from \$6.8 million to \$4.7 million between 2019 and 2020. Please explain the basis for this drop.	The drop on the graph related to ending fund balance, not revenues. This is/was due to the proposed undertaking of large projects for the water system.	No changes.
28	Chapter 8 - Page 8-11, figure 8.1 Financial Forecast	DOH	Revenues are barely keeping pace with the combination of Operational Costs, Debt Services, and Funding the CIP. As existing infrastructure ages, it will need to be replaced and upgraded. Please explain how the City is budgeting to meet these future expenses that could be exponentially higher than they are today.	Comment Noted. The City actively evaluates the system and makes repairs (especially in conjunction with other projects, as feasible). The City's goal is to enhance this program in the next 10 years.	No changes.
29	Miscellaneous Documents	DOH	Please include the Notices, meeting minutes, and City council resolutions or motions regarding the following public meetings: a. Please provide the City Council's action approving the WSP and minutes from that meeting and the minutes from the meeting with the consumers, see WAC 246-290-100(8). b. Please provide the City's notice of public forum and minutes from the forum as required under the WUE Goal Setting, see WAC 246-290-830(4). c. Please provide a Local Government Consistency (LGC) determination signed by the Thurston County Planning Department and City's Planning Department. The LGC can be found at http://www.doh.wa.gov/Portals/1/Documents/Pubs/331-568.docx.	land the Council has approved the WSP.	Appendices A, B, and H will be updated with the required documentation.
30	Appendix F, Table 1 Lakeland Manor Water System Components	DOH	The table of Lakeland Manor Water System components list pressure tanks as storage for the system. Pressure tanks are not considered storage facilities.	pressure tanks and the storage section will be removed.	Appendix F Table 1 will be updated.
31	Appendix F	DOH	Please provide page numbers for pages 1-14 of the Proposed Satellite System Management Program.	Noted. Page numbers will be added to Proposed Satellite System Management Program in App G.	Page numbers will be added to pages 1-14 in Appendix G.

Comment No.	Section/Page	Comment By	Comment	Response	Change to Plan
32	Appendix F	DOH	Please include a service area map showing the area that the City intends to provide Satellite Management Services. Also please include a written description of the service area.	The City does not intend to provide Satellite Management Services besides the Lakeland and Lathrop systems already mentioned, unless service is requested from the City and the City accepts. The City is not actively seeing new satellite systems to own/operate.	No changes.
33	Appendix F, Page 12, Short- Term Opportunities for Satellite Management or Tie In.	рон	This list of potential systems to manage or consolidate into the City's water system is a start on qualifying for SRF funding for future consolidations. The more specific system that can be named in the WSP, the better. Also, ODW has developed a catch-all phrase that captures the process by which PUDs acquire older systems and include them in their SMA program. It could be advantageous for the City to include this phrase in order to be eligible for SRF funding for future consolidation projects. Please see the attached catch-all language.	The City will include the catch-all language as provided by DOH in Chapter 2: Policies and	Updated Section 2.2.1.4 Satellite Management to include the catch-all language from DOH.
34	Appendix G	DOH	The Appendix section does not include a cover page identifying it as Appendix G.	Appendix G does include a cover page.	No changes.
35	Appendix G	DOH	It is recommended that drawing number 6-9 be updated with a noncorrodible 242-mesh screened gooseneck vent, instead of the beehive strainer.	The City will consider this recommendation.	No changes.
36	General	рон	On July 8, 2020, a copy of this WSP was sent to the Department of Ecology (Ecology). On September 28, 2020, ODW received the attached comment letter from Marie Peter, Water Resources Program. Please incorporate Ecology's comments into your re-submittal.	r Noted. Comments from Ecology were reviewed and addressed as needed.	No changes.
37	Coliform Monitoring Plan	Charese Gainor, Ecology	The Coliform Monitoring Plan includes a list of sources. This list conflicts the with the current WFI last updated August 2, 2019. Please clarify the status of the sources. ODW Source Numbers Coliform Monitoring Plan Current WFI	Well #3 (S17) is no longer active. WFI needs to be updated. S26 seems to relate to the inactivation of Well #3. Well 17 is active in our system, and is reflected as an active source on the WFI. We can update the source (S26> S28) in the coliform plan. WFI appears accurate.	Source (S26> S28) will be updated in the coliform plan.
38	WFI	Charese Gainor, Ecology	The storage capacities included in the CMP (6M gal) does not match the value provided on the WFI (6.25M gal). Please clarify the storage capacity.	The storage capacities in the CMP (6M gal) is correct. The WFI needs to be updated. The remaining storage capacity for the system is currently inactive. The City will work to update the WFI.	No changes.
39	Coliform Monitoring Plan	Charese Gainor, Ecology	The Airport Treatment Plan is not included on the CMP Section A and Section E states "sources 09, 15, 23, and 28 enter the system directly without treatment. Please confirm the status of the Airport Wellfield (S09 - S21&S22) Treatment Plant.	Sources 9, 15 & 23 do enter the system individually; however, they are all treated with sodium hypochlorite like all the other City sources. Source 28 is Well 17, sited at the Palermo WF (S02) and is also treated with sodium hypochlorite.	No changes.
40	Coliform Monitoring Plan	Charese Gainor, Ecology	The number of routine samples required monthly by regulations has changed from 50 to 70 per month. Please describe how the plan will change in response to a sampling requirement change.	When new coliform sampling requirements come on line, the City will increase the number of weekly samples collected and will expand its monitoring network to outlying areas that would be supported by monitoring. City staff would update the plan when the requirements are announced.	No changes.
41	Coliform Monitoring Plan	Charese Gainor, Ecology	The Reduced Triggered Source Monitoring Justification is an approved derivation of the Groundwater Rule under Department approval, as long as each wellfield has a blended untreated sample tap. By collecting a single blended sample you are indicating the single sample is representative of all the wells in the wellfield. If the blended sample returns unsatisfactory, the entire wellfield will be subject to the groundwater rule. Please confirm you'd like to continue with this approach.	The City would like to continue with this approach.	No changes.

Comment No.	Section/Page	Comment By	Comment	Response	Change to Plan
42	Coliform Monitoring Plan	Charese Gainor, Ecology	Section F of the CMP states that most of the 24 routine sites are sampled twice per month but some are only once per month. Please describe how the sites that are duplicated in a month are chosen versus those sampled once.	The existing sampling stations are dispersed into four groups of 18, with duplicate stations each group, one group is sampled each week on a revolving schedule, ensuring sufficient samples are collected to meet requirements each month. The former Lathrop Sampling Stations are not listed in the current Coliform Monitoring Plan and need to be added, now that Lathrop has been integrated with the Tumwater system. See station detail below. WQ25 9702 Lathrop Industrial Dr SW Upstream 9628 Lathrop Industrial Dr SW Downstream 9730 Lathrop Industrial Dr SW WQ26 9809 Blomberg St SW Upstream 9746 Blomberg St SW Downstream 9803 Blomberg St SW	Added Lathrop Sampling Stations to Coliform Monitoring Plan.
43	Coliform Monitoring Plan	Charese Gainor, Ecology	Section G lists Chris Hartman as a participant of the Level 1 Assessment. To our knowledge, Chris no longer works for the City of Tumwater. Please update Section G as needed.	Noted. Section G has been updated.	Section G in Appendix A has been updated.
44	Table 4.1	Ecology	Table 4.1 accurately summarizes the City's existing water rights and pending water right application requests. A change of purpose from irrigation to municipal supply was recently approved for the Golf Course Well under Water Right Change Application No. CG2-01071, adding 2,000 gpm and 378 acre-feet per year to the City's available potable water supply total. Water right applications for new appropriations from the proposed Northeast Wellfield and Southwest Wellfield remain pending. The City appears to have sufficient source redundancy and alternative strategies to compensate for delays that may be encountered in obtaining new water rights. No changes are requested to this water system plan. A Watershed Plan "not-inconsistent" determination under RCM 90.03.386(2) is not required for this plan update.	Noted.	No changes.
45	General comment	Dan Smith, Director of Water Resources & Sustainability for City of Tumwater	Update all "Public Works Department" references to "Water Resources & Sustainability Department"	All references to "Public Works Department" will be updated to "Water Resources & Sustainability Department"	Text was updated to capture department name change.
46	Chapter 1, Section 1.2.3 Environmental Assessment	Dan Smith, Director of Water Resources & Sustainability for City of Tumwater	Per comment from the City Attorney, Section 1.2.3 (and if this is repeated elsewhere) needs to be updated to make the language be more active. Example, instead of "According to the City, this Plan does not have adverse" To "The City determined this Plan does not"	Text of Section 1.2.3 was updated per comment.	Section 1.2.3 was updated.
47	General comment	Eric Christensen, City of Olympia	While Tumwater's depiction of our mutual service area, including Olympia's zoning where applicable, is consistent with our records, it would be helpful if the maps more clearly showed the portions of the Tumwater Water service area located within Olympia city limits - and that portion of the City of Tumwater that falls within Olympia's water service area. For example, in Figure 3.2 zoning, it appears as if the entire northeast section of Tumwater's water service area in the vicinity of the Capitol Boulevard intertie is located within Tumwater city limits, with Tumwater having zoning and land use authority within the entire area.	The intention of Figures 3.1 and 3.2 is to show existing land use and zoning regardless of the government authority. Figure 1.1 (Water Service Area and City Limits) shows that the NE part of Tumwater's water service area is not within the Tumwater City Limits.	No changes.
48	Figure 1.3	Stephanie Kenny, Thurston County Environmental Health	There is a discrepancy in service area between the Mottman Maintenance Facility water system and the City. The water system is an exempt Group B so the discrepancy isn't significant, an exempt Group B has little scope for expansion.	Noted. Mottman Maintenance Facility water system will be added to Figure 1.3.	Figure 1.3 was updated to include Mottman Maintenance Facility.
49	General comment	Stephanie Kenny, Thurston County Environmental Health	The service area border between Olympia and Tumwater has become more convoluted over time. The updated plan notes that service is worked out on a case by case basis between the two providers, which is acceptable within the Thurston County coordinated water system plan.	Noted.	No changes.

Comment No.	Section/Page	Comment By	Comment	Response	Change to Plan
50	Figure 3.1	Brad Medrud, City of Tumwater Community Development	It looks like the area covered by Figure 3.1 covers the City, its urban growth area, and a portion of Thurston County outside of the City and its UGA (areas south of 93rd and west of the I-5/93rd interchange). I have attached a zoning map showing our boundaries. On page 23-24 of the Lands For Public Purposes Element of the City's Comprehensive Plan addresses Water Systems and Facilities and notes that "The Comprehensive Water System Plan and the Wellhead Protection Plan are hereby incorporated by reference."	The area noted includes the Lathrop Water System, which is a City-owned Satellite Water System. It is included in the boundary of the Water Service Area, but not included in the Tumwater City Limits or the Urban Growth Area, as shown in Figure 1.2.	No changes.
51	Chapter 2, Section 2.5.1	Pete Kmet, City of Tumwater Mayor	There is an assumption here that the reader knows why maximum and minimum pressures are important. Might want to add a sentence or two of explanation.	s This plan is primarily intended for a technical audience; however, explanation of why maximum and minimum pressures are important can be added to the text.	Added descriptions of why maximum and minimum pressures are important to bullet points in Section 2.5.1.
52	Chapter 2, Section 2.2.2.1	Pete Kmet, City of Tumwater Mayor	2.2.2.1 Water Quality policy, should we mention our long term goal of getting homes and businesses off septics?	A broad policy statement can be included to recognize the connectivity to the water system	Added the following policy statement: "The City recognizes the importance of protecting groundwater quality for potable purposes. Conversions to public sewer of medium and high risk systems, as outlined by the 2015 Urban Septic Assessment is a high priority."
53	Chapter 2, Section 2.3	Pete Kmet, City of Tumwater Mayor	The emergency reserve of \$100 K seems low.	This policy is outdated and superseded by the City's Comprehensive Financial Policies, adopted 4/2018. The current policy is reflected on page 8-6, 8.4.1.3.	The "working capital reserve" policy on page 2-5 will be updated to reflect current City policy.
54	Chapter 2, Section 2.3	Pete Kmet, City of Tumwater Mayor	Do we need a policy on use of our water tanks for cell facilities and other communication equipment? Something just reflecting current practice and the fact that the revenue generated goes into the water fund.	Yes, this should be added to reflect current operations.	Added the following to the Financial Policies section: "The City is open to leases of water facilities for mobile communication and data purposes. Revenues generated from the lease of water facilities shall be dedicated to the Water Fund."
55	Chapter 3, Table 3.3	Pete Kmet, City of Tumwater Mayor	Page 3-7, Table 3.3 The line labeled "date of MDD" has numbers that are not dates.	Noted. Table will be updated.	Table 3.3 will be updated.
56	Chapter 3, page 3-8	Pete Kmet, City of Tumwater Mayor	Page 3-8 Somewhere in this chapter it would be helpful for reference to show the location of the wells, even though I believe they are shown in an earlier chapter. Perhaps a small map could be inserted at the bottom of this page (3-8).	Figure 1.4 was updated to include which wells are at the Palermo Wellfield, the Airport Wells, and the Bush Middle School Wells. Figure 3.4, which is a new figure that is a duplicate of Figure 1.4, was added to Chapter 3.	Figure 1.4 was updated, and Figure 3.4 was added to Chapter 3.
57	Chapter 4, Section 4.5	Pete Kmet, City of Tumwater Mayor	Speaking of the Palermo wellfield, should a brief synopsis of the historic contamination of that wellfield be added, along with maps and references to relevant reports? I have not seen an update of what's been going on for several years. Even if we don't add anything to the plan, it would be good to brief the PW Committee on this incident and what's transpired since. It's a great example of why we need to be vigilant.	Language from the EPA will be added.	The following will be added as a new section, Section 4.5.3 Palermo Wellfield: "The Palermo Wellfield Superfund Site has two primary contaminants of concern, trichloroethylene (TCE) and tetrachloroethylene (PCE). Several early action and long-term remedies have been taken at the site. Located in a light commercial and residential area, the site is surrounded by single-family dwellings, private businesses and recreation facilities. Currently, the Environmental Protection Agency is evaluating whether there are additional remedies that should be employed at the site. In 1993, the City of Tumwater detected TCE in three of the city's drinking water supply wells. The city initially removed the impacted wells from service. The Environmental Protection Agency constructed a treatment system that removes these contaminants from the water at the Palermo Wellfield. The source of the TCE was determined to be from industrial operations from former and current Washington Department of Transportation facilities. In addition, a dry cleaning facility contaminated groundwater with tetrachloroethylene (PCE). The EPA installed a subdrain system and conducted source remediation at the drycleaners. The EPA currently re-evaluating the remedy and will determine if additional actions should be taken at this site."

Comment No.	Section/Page	Comment By	Comment	Response	Change to Plan
58	Chapter 7, Section 7.3.3.	Pete Kmet, City of Tumwater Mayor	(D-7) I do not understand the reason for the upsize to pipes in Deschutes Parkway. The justification is to provide industrial/commercial fire flow and fire flow for historical park. There is no planned industrial/commercial development in this area. If something catches fire at Historical Park, the fire department can draw water from the river, like they did when the brew tower caught fire. Unless I'm missing something, this seems like a large unnecessary expense.	The pipe on Deschutes Parkway is a long 6-inch/4-inch dead-end pipe. Per Figure 5.8, the required fire flow at the end on this pipe is 3,000 gpm to 3,500 gpm based on zoning. A larger pipe than the existing pipe is recommended to serve this large fire flow requirement. The model evaluation did not consider drawing water from the river to fight fires, but we could note in the project description that the City can pull water from the river for firefighting efforts instead of completing this CIP project.	Project note will be added to reflect alternative emergency fire flow source, as noted in Chapter 7 and the CIP Project sheet
59	Chapter 7, Section 7.3.3.	Pete Kmet, City of Tumwater Mayor	(D-12) As an alternative to upsizing of the pipe in 48th street, could we do a loop project to Lambskin? I realize we would need to acquire ROW but the distance seems shorter and thus the cost may be less.	Due to ROW issues, upsizing the pipe on 48 th Ave SW was recommended instead of looping the pipe. Since this is a low-priority, long-term project, more detailed analysis is recommended for alternatives once this project goes to design. A note could be added to the CIP description that looping to Lambskin could be reviewed as an alternative to upsizing the pipe on 48 th Ave.	
60	Chapter 7, Section 7.3.3.	Pete Kmet, City of Tumwater Mayor	(D-19) We've had fires in this area and I don't recall a fire flow issue. If this is real, would it be less expensive to connect a loop to Linderson Way instead of upsizing the pipe in Pinehurst?	The pipe on Pinehurst St SW is a long 6-inch dead end pipe. Per Figure 5.8, the required fire flow is 2,500 gpm based on zoning. Due to ROW issues, upsizing the pipe on Pinehurst St SW was recommended instead of looping the pipe. Since this is a low-priority, long-term project, more detailed analysis is recommended for alternatives once this project goes to design. A note could be added to the CIP description that looping to Linderson Way could be reviewed as an alternative to upsizing the pipe on Pinehurst.	Project note will be added as described in Chapter 7 and the CIP Project sheet.
61	Chapter 8, Table 8.6	Pete Kmet, City of Tumwater Mayor	It would be helpful to have the tables breakdown how much revenue is coming from connection fees vs. rates vs. other.	Table 8.6 notes "Other Revenue" in the forecast, which includes connection fees. We can update the table to better represent connection fees.	Table 8.6 was updated to show connection charges separate from "other revenue". Water sales are shown separately as well.

SOUTHWEST DRINKING WATER OPERATIONS P.O. Box 47823 Olympia, Washington 98504-7823 PHONE (360) 236-3030 FAX (360) 236-3029

November 12, 2020

Steven Craig
City of Tumwater
555 Israel Road Southwest
Tumwater, Washington 98501

Subject: Tumwater City of Water System, ID #89700, SMA #158, Thurston County; Water

System Plan Part A/Satellite Management Plan, ODW Project #20-0705,

Dear Steven Craig:

Thank you for submitting the Water System Plan Part A/SMA Plan (WSP) for the water system listed above. The Office of Drinking Water (ODW) received the complete project submittal on July 7, 2020. Please address each of the following comments.

CHAPTER 1 – DESCRIPTION OF WATER SYSTEM

- 1. General. Appendix A and Appendix B both contain placeholders. Please provide the missing documents as they become available.
- 2. General. For your information, please see the enclosed comments from Charese Gainor, our Coliform Program Manager & WFI Coordinator.
- 3. General. Ensure all references to Well #24, S26, are consistent with its inactivation in 2019. Well #24 cannot be used as an emergency source.
- 4. Page 1-17, Section 1.6.2 Wells. It appears the Airport Water Treatment Plant was not included in the discussion of well treatment facilities. Please explain.
- 5. Page 1-19, Section 1.6.4 Pressure Reducing Valve Stations. There is a discrepancy between Table 1.4 and the text in this subsection. The text refers to a PRV at Johnson Blvd, but the Table lists Crosby Blvd. Also, at this same location the text states an 8 inch and 3 inch PRV, but the table only lists the 8 inch. Please update as appropriate.

 In Addition, Figure 1-4 shows a PRV at Lakeland Manner. However, that PRV is not listed in Table 1-4. Please update as appropriate.

CHAPTER 2 – POLICIES AND CRITERIA

- 6. Page 2-1, Section 2.2.1.2 New Customer Connection Process. The WSP includes the term "preferred service provider", which is not defined in Municipal Water Law. The WSP then lists the four elements the City of Tumwater (City) can invoke to avoid the Duty to Serve. Please ensure the City's "Duty to Serve" is consistent with the provisions of Municipal Water Law. Please use the following link for the DOH Fact Sheet on Duty to Serve.
- 7. Page 2-9, Section 2.5.2 Velocities. The performance criteria for velocities in Section 2.5.2 does not match the criteria described in ES.5. Please clarify.

CHAPTER 3 – DEMAND PROJECTIONS

- 8. Page 3-7, Section 3.3.1.1 Average Day Demand. Table 3.3 has a row entitled Date of Maximum Day Demand, but the data within that row does not represent days of the year.
- 9. Page 3-14, Section 3.3.3.1 Large Consumers. Figure 3.8 appears to be missing a reference to Pepsi NW Beverages LLC in the Legend. Please update.
- 10. Page 3-24, Section 3.5.3 Water Use Efficiency Goals. Please provide the notice, minutes, and comments from the WUE public forum.
- 11. Page 3- 16, Section 3.3.4.1 Equivalent Residential Units. Discuss how the increase in ADD per ERU between 2013 and 2016 is accounted for in the projection since it is not consistent with the 3 percent annual average decrease of the 10 year period.
- 12. Page 3- 20, Section 3.4 Demographics Analysis. Ensure that the total projected number of connections for 2038 in Table 3.12 matches the sum of the connections from all the pressure zones.
- 13. Page 3-27, Section 3.6.2.4 Impact of Climate Change on Demand Projections. Please note, in Table 3.16, the warmer climate change scenario has less of an impact on demand than the warm scenario in 2010 and 2020, and the same impact in 2030. In our experience, water demands tend to increase as summers get warmer.
- 14. Page 3-29, Section 3.6.3 ERU Projections. In Table 3.18 there are fewer projected ERUs for the 454 and 549 zones in the conservative projection than in the planning projection. Please explain.

CHAPTER 4 – WATER RESOURCE ANALYSIS

- 15. Page 4-2, Table 4.1 Existing Water Rights Summary. Please check the significant figures and calculations.
- 16. Page 4-7, Table 4.3 Potable Water rights Analysis Summary. This table includes the Tumwater Golf Course irrigation in the 20-year Planning Period. The note states that it was not included in the totals. Please clarify.
- 17. Page 4-8, Table 4.4 MDD Ability to Supply. The water right values in Table 4.4 do not match those in Table 4.1. Please clarify.
- 18. Page 4-17, Section 4.5.1 Wellhead Protection Program. Please provide the names and addresses of potential sources of groundwater contamination to the City's groundwater supply. Any septic systems within the 10-year time of travel (ToT) is considered a potential source of groundwater contamination. Please provide a copy of the letter sent to the landowners of potential sources of groundwater contamination within the 10-year ToT for the City's sources of groundwater and confirm that all property owners were sent a copy of the letter. Please provide a copy of the letter sent to first responders and local governments notifying them of the location of the City's 10-year time of travel for its supply of drinking water and confirm these letters were also sent.

CHAPTER 5 – SYSTEM ANALYSIS

- 19. Page 5-12, Section 5.3.1.1 Operational Storage. Consider revising the equalizing storage calculations by referring to Equation 7-1 in the Washington State Department of Health's Water System Design Manual (2019). Update Chapter 5 and the rest of the plan as needed.
- 20. Page 5-14, Section 5.3.3 Required Storage. Revise Table 5.9 to accurately reflect storage surpluses and deficiencies in the 350 zone.

- 21. Page 5-15, Section 5.4 Limiting Capacity Analysis. Based on the information provided in table 5.10 and 5.11, the City will exceed its limiting capacity before 2028-the 10-year planning horizon. As it stands, ODW would not be able to approve this plan for the unspecified designation for a 10-year approval period. It might be helpful to include a year by year breakdown of ERU demands from 2018 to 2028.
 - Please note the City has the option to modify the growth projection to a lower percent growth rate, in line with the existing growth rate for the past 6 years. This could reduce the 10-year projected ERU demand value and keep it in pace to not exceed the City's existing limiting factor. ODW has other options, such as approving the WSP as unspecified for less than 10 years or determining a specific connection limit.
- 22. Page 5-33, Section 5.6.3 Recommended Distribution System Improvements. This is a general comment and does not require a specific response or change to the WSP at this time. We conducted the pre-plan with Tumwater in August of 2017. Since that time, ODW has incorporated Asset Management into its water system planning and State Revolving Fund (SRF) programs. In accordance with asset management principles, the infrastructure inventory now requires evaluation of existing infrastructure, install date, end of life date, and replacement cost at end of life. These costs are then to be incorporated into the Capital Improvement Plan and budgeting process. We encourage the City to complete this analysis as part of this planning effort.

CHAPTER 6 – OPERATION AND MAINTENANCE

- 23. Page 6-2, Section 6.4 Operator Certification. Please contact ODW Operator Certification Program to ensure that Michael Thomas and Forrest Bailey are listed as operators for the system.
- 24. Page 6-4, Section 6.7 Repair & Replacement Program. The Watermain Replacement Program meets the intent of an Asset Management Plan, described above in the Chapter 5 comments with regard to the analysis of water mains. Please include a copy of the latest version of this program.
 - Also, the reference to CIP project D-23 appears to be labeled as project D-32. Please clarify.

CHAPTER 7 – CAPITAL IMPROVEMENT PROGRAM

25. Page 7-5, Table 7.8 CIP Project Summary. This table is very difficult to read due to the small font size. Please enlarge this table and provide this data on an 11" x 17" sheet or larger. In addition, the City's CIP is largely driven by increased capacity and system expansion. Maybe the City could prioritize replacement of existing aging infrastructure to a higher degree. For example, there is a huge cluster of projects with the sole purpose of fire flow. If these projects are also intended as replacement of aging infrastructure, that is good asset management. Fire flow is an expansion. Upsizing aging infrastructure to meet current fire codes as part of the infrastructure replacement program is good planning. Furthermore, SRF cannot fund fire flow projects but can fund the replacement of aging/failing infrastructure.

CHAPTER 8 – FINANCIAL PLAN

26. Page 8-2, Section 8.2.1.3 Lifeline Rates. The City is to be commended for having a lifeline rate for seniors and disabled. However, due to the extensive financial hardships that have occurred as a result of Covid-19, the City should expand its Customer Assistance Program (CAP) to include all customers suffering due to financial hardships. Please expand the City's CAP to be consistent with the Governor's Proclamation 20-23.7, Ratepayer Assistance and Preservation of Essential Services and subsequent amendments. Please visit our website at the following link for more information on CAP programs.

- https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemAssistance/CustomerAssistanceProgram
- 27. Page 8-10, Table 8.8 Summary Projected Cash Flow (short-term). Total operating expenses dropped from \$6.8 million to \$4.7 million between 2019 and 2020. Please explain the basis for this drop.
- 28. Page 8-11, figure 8.1, Financial Forecast. Revenues are barely keeping pace with the combination of Operational Costs, Debt Service, and Funding the CIP. As existing infrastructure ages, it will need to be replaced and upgraded. Please explain how the City is budgeting to meet these future expenses that could be exponentially higher than they are today.

MISCELLANEOUS DOCUMENTS

- 29. Please include the Notices, meeting minutes, and City council resolutions or motions regarding the following public meetings:
 - a. Please provide the City Council's action approving the WSP and minutes from that meeting and the minutes from the meeting with the consumers, see WAC 246-290-100(8).
 - b. Please provide the City's notice of public forum and minutes from the forum as required under the WUE Goal Setting, see WAC 246-290-830(4).
 - c. Please provide a Local Government Consistency (LGC) determination signed by the Thurston County Planning Department and City's Planning Department. The LGC can be found at http://www.doh.wa.gov/Portals/1/Documents/Pubs/331-568.docx.

APPENDIX F – SATELLITE WATER SYSTEMS

- 30. Table 1, Lakeland Manor Water System Components. The table of Lakeland Manor Water System components list pressure tanks as storage for the system. Pressure tanks are not considered storage facilities.
- 31. Please provide page numbers for pages 1-14 of the Proposed Satellite System Management Program.
- 32. Please include a service area map showing the area that the City intends to provide Satellite Management Services. Also please include a written description of the service area.
- 33. Page 12, Short-Term Opportunities for Satellite Management or Tie-In. This list of potential systems to manage or consolidate into the City's water system is a start on qualifying for SRF funding for future consolidations. The more specific systems that can be named in the WSP, the better. Also, ODW has developed a catch-all phrase that captures the process by which PUDs acquire older systems and include them in their SMA program. It could be advantageous for the City to include this phrase in order to be eligible for SRF funding for future consolidation projects. Please see the attached catch-all language.

APPENDIX G – DESIGN AND CONSTURCTION STANDARDS

- 34. The Appendix section does not include a cover page identifying it as Appendix G.
- 35. It is recommended that drawing number 6-9 be updated with a noncorrodible 24-mesh screened gooseneck vent, instead of the beehive strainer.

Steven Craig November 12, 2020 Page 5

DEPARTMENT OF ECOLOGY

On July 8, 2020, a copy of this WSP was sent to the Department of Ecology (Ecology). On September 28, 2020, ODW received the attached comment letter from Marie Peter, Water Resources Program. Please incorporate Ecology's comments into your re-submittal.

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

CLOSING

Please respond to all comments in this letter. To expedite the review of the revised WSP, please summarize the response to the comments and where each response is located (for example, page numbers, appendices, and so on). Please submit your response electronically to swro.admin@doh.wa.gov.

Regulations establishing a schedule of fees for review of planning, engineering, and construction documents were adopted March 18, 2012 (WAC 246-290-990). An invoice for \$5,484.00 is enclosed.

If you have any questions, please contact Mark Mazeski at (360) 236-3038 or by e-mail at mark.mazeski@doh.wa.gov, or Andy Anderson at (360) 236-3025 or by e-mail at andy.anderson@doh.wa.gov.

Sincerely,

Mark J. Mazeski

Office of Drinking Water, Regional Planner

Andy Anderson, P.E.

Office of Drinking Water, Regional Manager

Enclosures

cc: Dan Smith, City of Tumwater

Lara R. Kammereck, Carollo

Brett Bures, Thurston County Planning Department Stephanie Kenny, Thurston, County Health Department

Stephanie Kenny, Inurston, County Health Departmen

Marie Peter, Ecology Tammy Hall, Ecology



Office of Drinking Water **INVOICE**

Engineering, Planning, and Sanitary Survey Review Form

ACCOUNTS RECEIVABLE
TO: STEVEN CRAIG

TUMWATER CITY OF 555 ISRAEL RD SW TUMWATER WA 98501

Invoice Number	SW2887	
Invoice Date	November 12, 2020	
Billing Period	30 days	SW

DATE	DESCRIPTION	QTY	COST	AMOUNT
7/7/20	REVIEW AND/OR APPROVAL OF PROJECT REPORT TUMWATER CITY OF THURSTON COUNTY WATER SYSTEM PLAN UPDATE SUBMITTAL #: 20-0705	1	1	\$5484.00
	Total			\$5484.00
	Payment due within 30 days. Interest shall accrue at 1% per month after 30 days.			

Make Checks Payable to Department of Health Return Lower Portion to:

Department of Health PO Box 1099 Olympia, WA 98507-1099

Office of Drinking Water

Engineering, Planning, and Sanitary Survey Review Form

TUMWATER CITY OF					
INVOICE NUMBER SW2887					
11/12/2020	20-0705 SW				
AMOUNT #5.40.4.00					
\$5484.00					

Return to:

Department of Health Revenue Section PO Box 1099 Olympia, WA 98507-1099

DOH Form #331-332

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).

DOH Staff Name:	Mark J. Mazeski	System Name: Tumwater, City of			
Sublog Number:	20-0705	County:	Thurston		
Water System ID:	89700				
Fixed Fee for Ser	vice				
WATER SYSTEM	PLANS			Approved?	
Project Type		Fee 1st Review	Fee 2nd Review	Number Hr 1st Review	Number Hr 2nd Review
(a)(1) Water system	plan (new and updated plans) 10,000 or more Sevices	\$5,484	Review	Review	Keview
(w)(1) water system	print (new una upantea prints) 10,000 et more sevices	Ψ2,101			
Total Water system 1	plans	\$5,484	\$0	0	0
SATELLITE MAN	NAGEMENT AGENCY (SMA) PLANS			Approved?	
Project Type		Fee 1st Review	Fee 2nd Review	Number Hr 1st Review	Number Hr 2nd Review
T . 103.64		0.0	0.0		
Total SMA		\$0	\$0	0	0
PROJECT REPOR	RTS		Fee 2nd	Approved? Number Hr 1st	Number Hr 2nd
Project Type		Fee 1st Review	Review	Review	Review
Total Project Report	'S	\$0	\$0	0	0
CONSTRUCTION	DOCUMENTS			Approved?	
Project Type		Fee 1st Review	Fee 2nd Review	Number Hr 1st Review	Number Hr 2nd Review
Total Construction d	locuments	\$0	\$0	0	0
EXISTING SYSTE	CM APPROVAL	-		Approved? Number Hr 1st	
Project Type		Fee 1st Review	Fee 2nd Review	Number Hr 1st Review	Number Hr 2nd Review
Total of Existing Sys	stem approval	\$0	\$0	0	0
GROUP B AND O	THER EVALUATIONS AND APPROVALS			Approved?	No
Project Type		Fee 1st Review	Fee 2nd Review	Number Hr 1st Review	Number Hr 2nd Review
Total of Other evalu	ations and approvals	\$0	\$0	0	0
Total Fixed Fee for	Service	\$5,484	\$0	0	0
Hourly fee for ser	rvice	Fee	# Hr	System	Size
	Pay This Invoice Amount For This Review	\$5,484	0.0	0	0
				Total for All Project Invoices	Total for All Project Hours
	Summary			\$5,484	0

Mazeski, Mark J (DOH)

From: Gainor, Charese L (DOH)

Sent: Tuesday, November 3, 2020 9:37 AM

To: Mazeski, Mark J (DOH)

Cc: Lockwood, Connor G (DOH); Gainor, Charese L (DOH)

Subject: Tumwater, ID 89700, CMP Comments 11-3-20

Mark,

Here are my comments for Tumwater's CMP.

The Coliform Monitoring Plan includes a list of sources. The list conflicts the with the current WFI last updated August 2, 2019. Please clarify the status of the sources.

ODW Source Numbers	Coliform Monitoring Plan	Current WFI
S17	Well 3, 96, 290 (inactive)	Part of Palermo WF, active,
		Well Tag AAA953
S26	Well 17, 96, 350	From 63455, Well #24,
	Listed as active in Palermo WF	Not a part of WF & inactive

- The storage capacities included in the CMP (6M gal) does not match value provided on the WFI (6.25M gal). Please clarify the storage capacity.
- The Airport Treatment Plant is not included on the CMP Section A and Section E states "sources 09, 15, 23, and 28 enter the system directly without treatment. Please confirm the status of the Airport Wellfield (\$09 -S21&S22) Treatment Plant.
- The number of routine samples required monthly by regulations has changed from 50 to 70 per month. Please describe how the plan will change in response to the sampling requirement change.
- The Reduced Triggered Source Monitoring Justification is an approved derivation of the Groundwater Rule under Department approval, as long as each wellfield has a blended untreated sample tap. By collecting a single blended sample you are indicating the single sample is representative of all the wells in the wellfield. If the blended sample returns unsatisfactory, the entire wellfield will be subject to the groundwater rule. Please confirm you'd like to continue with this approach.
- Section F of the CMP states that most of the 24 routine sites are sampled twice per month but some are only once per month. Please describe how the sites that are duplicated in a month are chosen versus those sampled once.
- Section G lists Chris Hartman as a participant of the Level 1 Assessment. To our knowledge, Chris no longer works for the City of Tumwater. Please update Section G as needed.

Sincerely,

CHARESE GAINOR

Coliform Program Manager & WFI Coordinator Southwest Regional Office of Drinking Water Environmental Public Health Washington State Department of Health charese.gainor@doh.wa.gov 360-236-3045 | <u>www.doh.wa.gov</u>

360-236-3029 (fax)

Gender Pronouns: she/her



Due to the Department of Health's increased need to respond to the pandemic many ODW staff have been pulled away from their typical duties to help in the response. You may see a decrease in our level of service. During this time, emails are preferred to phone calls.



PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300 711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

September 28, 2020

City of Tumwater Attn: Steven Craig 555 Israel Rd Tumwater, WA 98501

Washington State Department of Health Southwest Drinking Water Operations Attn: Mark Mazeski PO Box 47823 Olympia, WA 98504-7823

Re: City of Tumwater (ID#89700) Water System Plan Update, Submittal #20-0705

Thank you for the opportunity to review the Comprehensive Water System Plan Update for City of Tumwater. Consistent with the Memorandum of Understanding between the Departments of Health and Ecology, I reviewed the relevant portions of the plan and have the following comments:

Table 4.1 accurately summarizes the City's existing water rights and pending water right application requests.

A change of purpose from irrigation to municipal supply was recently approved for the Golf Course Well under Water Right Change Application No. CG2-01071, adding 2,000 gpm and 378 acre-feet per year to the City's available potable water supply total.

Water right applications for new appropriations from the proposed Northeast Wellfield and Southwest Wellfield remain pending. The City appears to have sufficient source redundancy and alternative strategies to compensate for delays that may be encountered in obtaining new water rights. No changes are requested to this water system plan.

A Watershed Plan "not-inconsistent" determination under RCW 90.03.386(2) is not required for this plan update.

If you have any questions regarding this letter, please contact me at (360) 480-2979 or marie.peter@ecy.wa.gov.

Sincerely,

Marie CPater

Marie Peter SWRO Water Resources Program

cc: Kay Rottell, P.E.

Attachment 1 – Example policy catch-all language for consolidation / restructuring

"We are committed to providing safe and reliable drinking water within approved service area and are willing to consider consolidating any Group A and Group B water systems within our service area. At times this may require us to obtain funding to upgrade the facility to our standards. All consolidations would need to meet our connection policies, ordinances, and/or resolutions."

Or

"Subject to financial and operational capabilities, and approval of its Board of Commissioners, the PUD is willing to consider the acquisition of water systems at any time. Although new water systems must come into the PUD "whole" and "up to standard", the PUD may try to find funding that may need to be completed to help the system meet the PUD's standards. It will be the restructured water system's customer's responsibility to pay back any loan the PUD has signed for the improvements to their water system, in accordance with the PUD policies, as may be hereafter amended.

Once the PUD acquires water systems then the major upgrades will be added to the PUD's Capital Improvement Plan. The PUD intends to and may submit loan requests and packages to the State of Washington Department of Health, Office of Drinking Water for Drinking Water State Revolving Fund loans and Drinking Water System Repair and Consolidation (DWSRC) grants for water system upgrades the PUD is considering acquiring as part of the transition into the PUD ownership and management."

DWSRF Readiness to Proceed Checklist for Consolidation Projects

Applica	nt	
Project	: Name _	
Applica	ation	
1.	Does a	pplicant have other DWSRF projects in progress (WAC 246-296-140(3))?
		If so, how many Are the projects proceeding on schedule?
2.	Have ti	ime extensions been requested on current or previous DWSRF projects?
3.	 Does p	roposed project schedule indicate 18-month notice-to-proceed can be met?
4.	Does p	roposed project schedule indicate project can be completed in 4 years?
5.	Does a	pplicant have adequate staff to oversee the proposed project and meet deadlines?
6.		pplicant have adequate certified operators to oversee the acquired system? Consult Deni n number of certified operators
7.	Is a WS	SP amendment required for inclusion of the project into the WSP?
	If yes:	
	a.	When does the WSP expire?
	b.	When does the project need to be completed per the funding agreement?
	C.	What is the schedule and process for the WSP amendment?

	d.	Can WSP amendment occur prior to WSP expiration and project completion date as shown in the funding agreement?
8.	Does th	ne project require new or amended water rights?
	a.	If so, are adequate water rights secured for the project as approved by Ecology (WAC 246-296-100 (8))?
9.		LID, ULID, or SID need to be formed? If so, what is the process and timeframe for ion of the LID, ULID, or SID?
10.	Does a	nnexation need to occur? If so, what is the process and timeframe for annexation?
11.		wer service need to be provided to the acquired system? If so, what is the schedule for sewer service to be provided?
12	Doos th	an acquired system need to formally yets on the acquisition? If so, when is the yets
12.		ne acquired system need to formally vote on the acquisition? If so, when is the vote led to occur?
Review	er name	e, date, and decision