

3628 South 35th Street

Tacoma, Washington 98409-3192

### TACOMA PUBLIC UTILITIES

April 2, 2018

Ms. Jennifer Kropack Washington State Department of Health NW Drinking Water Operations 20425 72<sup>nd</sup> Ave S Building 2, Suite 310 Kent, WA 98032-2358

Re: Tacoma Water 2018 Water System Plan Available for Review

Dear Ms. Kropack:

Tacoma Water has completed a draft of the water system's 2018 Water System Plan (WSP) update and is pleased to summit the WSP for review by the Office of Drinking Water (ODW). Included in this submittal are:

- DOH Water System Plan Submittal Form
- DOH Water System Plan Checklist
- Three hard copies of the 2018 WSP and CD with 2018 WSP and appendices

This 2018 WSP is an update to the last plan adopted by Tacoma Water in 2006. Tacoma Water's 2018 WSP update includes (but is not limited to): an updated demand forecast for the system out to 2037, analysis of distribution system deficiencies and necessary improvements, description of changes made to the system since the last WSP such as adding the Green River Filtration Facility, review of watershed conditions in relation to water quality, overview of the system's asset management program, and a capital improvement program and financial plan through 2026.

As noted on the enclosed Submittal Form, concurrent to this submittal to ODW, the City will provide copies of the draft WSP to adjacent utilities and jurisdictions for review.

Should you have any questions regarding this submittal, please contact me at (253) 396-3383 or jmoline@ci.tacoma.wa.us.

Tacoma Water plans to finalize the 2018 WSP in July after incorporating comments from DOH, counties, public, local agency, and adjacent water systems, as appropriate. Tacoma Water looks forward to receiving your review comments and appreciates your input and interest in its water system plan.

Sincerely,

Jason Moline, PE Water Supply Section

Tacoma Water/Tacoma Public Utilities

Jason Molina



### Water System Plan Submittal Form

This form must be completed and submitted along with the Water System Plan (WSP). It will expedite review and approval of your WSP. All water systems

should contact their regional planner before developing any planning document for submittal. City of Tacoma/Water Division City of Tacoma 1. Water System Name PWS ID# or Owner ID# Water Systems Owner's Name Heather Pennington 253-502-8199 Deputy Superintendent Contact Name for Utility Title Phone Number PO Box 11007 Tacoma WA 98411-0007 Contact Address City State Zip Jason Moline 253-396-3383 Professional Engineer 2. Project Engineer Phone Number Title PO Box 11007 Tacoma WA 98411-0007 Project Engineer Address City State Zip Same as above 253-502-8694 3. Billing Contact Name (required if not the same as #1) Billing Phone Number Billing Fax Number Billing Address State City Zip How many services are presently connected to your system? 101,595 Is your system expanding (seeking to extend service area or increase number of approved connections)? ☐ No If the number of services is expected to increase, how many new connections are proposed in the next six years? 6. ~2000 7. If your system is private-for-profit, is it regulated by the State Utilities and Transportation Commission? N/A ☐ Yes ☐ No Is the system located in a Critical Water Supply Service Area (i.e., have a Coordinated Water System Plan)? Yes No Is your system a customer of a wholesale water system? Yes  $\boxtimes$ No Will your system be pursuing additional water rights from the Department of Ecology in the next 20 years? ☐ Yes  $\boxtimes$ No 11. Is your system proposing a new intertie? No 12. Do you have projects currently under review by us? ☐ Yes  $\boxtimes$ No 13. Are you requesting distribution main project report and construction document submittal exception and if so, does the WSP contain standard construction specifications for distribution mains? Yes П No 14. The water system is responsible for sending a copy of the WSP to adjacent utilities for review or a letter notifying them that a copy of the WSP is available for their review and where the review copy is located. Has this been completed? Yes No 15. The purveyor is responsible for sending a copy of the WSP to all local governments within the service area (county and city planning departments, etc.). Has this been completed? 図 Yes No 16. Are you proposing a change in the place of use of your water right? ☐ Yes  $\boxtimes$ No If answer to questions 7,8, 11, 14 and/or 15 is "yes," list who you sent the WSP to: See attached list Is this plan: an Initial Submittal a Revised Submittal Please enclose the following number of copies of the WSP: 3 copies for Northwest and Southwest Regional Offices OR 2 copies for Eastern Regional Office (We will send one copy to Ecology) 1 additional copy if you answered "yes" to question 7. Total copies attached Please return completed form to the Office of Drinking Water regional office checked below. Northwest Drinking Water Operations ☐ Southwest Drinking Water Operations ☐ Eastern Drinking Water Operations Department of Health Department of Health Department of Health 20425 72<sup>nd</sup> Avenue South, Suite 310 PO Box 47823 16201 East Indiana Avenue Suite 1500 Kent, WA 98032-2358 Olympia, WA 98504-7823 Spokane Valley, WA 99216 253-395-6750 360-236-3030 509-329-2100

For people with disabilities, this document is available on request in other formats. To submit a request, please call 1-800-525-0127 (TDD/TTY call 711).

## **Adjacent Water Purveyors**

Company	Pre-fix	Last Name	First Name	Address	City	State	Zip Code	Date Review Letter Submitted
Lakewood Water District	Mr.	Black	Randy	PO Box 99729	Lakewood	WA	98499-0729	253-588-4423
Parkland Light and Water	M.	Johnson	Mark	PO Box 44426	Tacoma	WA	98448	253-531-5666
Spanaway Water System	Mr.	Johnson	Jeff	PO Box 1000	Spanaway	WA	98387	253-531-9024
Bethel Ranchettes Mutual Water Co.	Mr.	Langley	Bill	PO Box 61	Graham	WA	98338	253-847-1143
Bethel Water Company	Mr.	Langley	Bill	PO Box 61	Graham	WA	98338	253-847-1143
Country Acres Water Company	Mr.	Langley	Bill	PO Box 61	Graham	WA	98338	253-405-5221
Spanaway Ranchettes Water System	Mr.	Blackman	Robert	PO Box 44427	Tacoma	WA	98448	253-537-6634
Nelson Ridge Water System	Mr.	Blackman	Robert	PO Box 44427	Тасота	WA	98448	253-537-6634
Rainier View Water Company	Mr.	Blackman	Robert	PO Box 44427	Tacoma	WA	98448	253-537-6634
Thurston County PUD #1	Mr.	Brian	Wilson	1230 Ruddell Rd SE	Lacey	WA	98503	253-357-8783
Firgrove Mutual	Mr.	Jones	Larry	10408 144th St. E.	Puyallup	WA	98374	253-845-1542
Valley Water System	Ms.	Thompson	Brian	14515 Pioneer Way E.	Puyallup	WA	98372	253-841-9698
City of Orting	Mr.	Kaelin	Dean	PO Box 489	Orting	WA	98360	360-893-2219
South Prairie	Mr.	Harter	Larry	PO Box 870	South Prairie	WA	98385	360-897-8969
City of Buckley	Mr.	Dansby	John	PO Box 1960	Buckley	WA	98321	360-829-1631 x7885
Marion Water Company	Mr.	Breault	Jennifer	PO Box 2043	Buckley	WA	98321	253-320-0079
City of Sumner	Mr.	Clerget	Pat	1104 Maple Street Ste 260	Sumner	WA	98390	253-299-5740
Fruitland Mutual Water Company	Mr.	Hardiman	Ted	PO Box 73759	Puyallup	WA	98373-0759	253-848-5519
Summit Water	Mr.	Scott	Darryl	9701 50th Ave. E.	Тасота	WA	98446	253-537-7781
City of Fife	Mr.	Blount	Russ	3725 Pacific Highway E.	Fife	WA	98424	253-922-9315
City of Milton	Mr.	Baker	Glen	1000 Laurel St.	Milton	WA	98354	253-922-8738
S&W Marina Holdings, Inc.	Mr.	Wadsworth	Verne	PO Box 6181	Bellevue	WA	98008-0181	253-272-2827
Sunrise Terrace Community LLC	Δľ.	Black	Steve	7415 Chambers Creek Rd. W.	University Place	WA	98467	253-565-7047
Laurel Land Mobile Home Park	Mr.	Black	Steve	7415 Chambers Creek Rd. W.	University Place	WA	98467	253-565-7047
Tacoma Sportsman's Club, Inc.	Ms.	Jay	Debbie	16409 Canyon Rd. E.	Puyallup	WA	98373	253-537-6151
Uncle John's Water System	Manager	Priddy	Bruce	26306 Hwy 410 E.	Buckley	WA	98321	360-529-4599
City of Enumclaw	Mr.	Close	Clark	1309 Myrtle Ave.	Enumclaw	WA	98022	360-825-3593 x5726
City of Enumclaw	Mr.	Woodbury	Scott	1309 Myrtle Ave.	Enumclaw	WA	98022	360-825-3591
City of Auburn		Fenhaus	Susan	25 West Main	AUBURN	WA	98002	253-804-5062
City of Black Diamond				PO BOX 599	Black Diamond	WA	98010-0599	The second of the last the second of the sec
Cascade Water Alliance	Mr.	Clarke	Chuck	520 112th Avenue NE, Ste 400	Bellevue	WA	98004	425-453-0930
Coal Creek Water Society		Major	Ruth	PO BOX 983	Enumclaw	WA	98022-0983	
Mt. Terrace Homeowners Association		Scott	Karen	PO BOX 123	Port Orchard	WA	98366-0123	253-230-7290
RSN Enterprises				4616 25th Avenue NE	Seattle	WA	98105	425-741-8085
Water District #111	Mr.	Hall	Chris	27224 144th Ave SE	Kent	WA	98042	253-631-3770
City of Covington				16720 SE 271st Street, Ste 100	Covington	WA	98042-4964	253-480-2400

# **Direct Service Area - Planners**

										Date Review
Company	Pre-fix	Pre-fix Last Name	First Name Title	Title	Address	City	State	Zip Code	Phone	Letter Submitted
City of Tacoma	Mr.	Wung	Lihuang	Senior Planner	747 Market Street, Room 345	Tacoma	WA	98402	253-591-5682	2
City of Fircrest	Mr.	Boers	Jeff		115 Ramsdell Street	Tacoma	WA	98466	253-564-8901	_
Town of Ruston	Mr.	White	Rob	Town Planner	5117 North Winnifred Street	Ruston	WA	98407	253-307-5739	6
City of Lakewood	Mr.	Brunell	Courtney	Planning Manager	6000 Main Street SW	Lakewood	WA	98499-5027	253-983-7839	6
City of Puyallup	Mr.	Utterback	Tom	Planning Director	333 South Meridian, 2nd Floor	Puyallup	WA	98371	253-841-5502	2
City of Federal Way	Mr.	Hansen	Robert	Planning Manager	33325 8th Avenue South	Federal Way	WA	98003	253-835-2643	3
City of University Place Mr.	Mr.	Swindale	David	Planning Director	3715 Bridgeport Way West	University Place	WA	98466	253-460-2519	6
City of Bonney Lake Mr. Sullivan	Mr.	Sullivan	Jason	Senior Planner	9002 Main Street East, Ste 300	Bonney Lake	WA	98391	253-447-4355	2

### **RWSS Partners**

								Date Review
Company	Pre-fix	Pre-fix Last Name	First Name	Address	City	State	Zip Code	Zip Code Letter Submitted
City of Kent	Mr.	Bauer	Sean	220 4th Avenue S	Kent	WA	98032-5838	
Covington Water District	Mr.	Keown	Tom	18631 SE 300th PI	Kent	WA	98042-9208	
Lakehaven Water and Sewer District Mr.	Mr.	Bowman	John	PO Box 4249	Federal Way	WA	98063	

	Water System Plan (WSP) Pre-Plan	
	Content Description	WSP Page #
Chapter 1	Description of Water System	
onapto: .	Docomption of Water Oyotem	
	A. Ownership and management	A. Sections 2.2 and 2.3
	B. System history and background	B. Section 2.1
	C. Inventory of existing facilities	C. Chapter 5
	D. Related plans: Coordinated Water System Plan	D. Section 2.6
	(CWSP), Comp./Community	
	E. Information & <b>DATED</b> Maps: Services area, retail	E. Section 2.4, Figure 2.2, Appendix L
	service area, designated land use and zoning, future	
	comprehensive plan request for changes to land use, &	·
	agreements for plan approval period	
	<ul> <li>F. Policies: Service area, SMA, conditions of service,</li> </ul>	F. Section 2.5
	annexation	
	<ul> <li>G. Duty to serve requirement: identify process,</li> </ul>	G. Sections 2.4 and 2.5
	timeframes, conditions, appeals	•
	H. Consistency from local planning agency (new 2016	H. Appendix A1*
	LGC form to use)	
Chapter 2	Basic Planning Data	
•		
	A. Current water use: Population, customer classes, &	A. Section 3.1, Tables 3-2 and 3-3
	ERUs	The Country Fabros of 2 and 0 o
	B. Demand forecast for plan approval period (up to 10)	B. Tables 3-1 and 3-2, Figure 3-1,
	and a minimum of a 20 year period* for population,	Appendix L
	service connections & demand forecasts with & w/o	· • • • • • • • • • • • • • • • • • • •
	expected efficiency savings	
	C. Monthly and annual production. Totals per source.	C. Section 3.1, Figure 3-1,
	Water Supply Characteristics & Demand	Section 3.4 (Midnight Report),
	Characteristics (see Ch. 4). Add subtitles with	Chapter 4, Appendix F
	description & discussion on effect of water use	, , , , , , , , , , , , , , , , , , , ,
	<ul> <li>D. Annual usage for water supplied to other systems</li> </ul>	D. Table 3-3
	E. Annual usage by customer class	E. Table 3-3
	F. Historical total water loss (DSL) – percent and	F. Section 3.3, Table 3-8
	volumes	,
	G. >1,000, seasonal variations in consumption by	G. Section 3.2
	customer class	
Chapter 3	System Analysis	
•		
	A. Capacity analysis with water right self-assessment	A. Sections 4.3, 6.1, and 6.2; Appendix F
	(NEW FORMS DOH/ECY per MOU): Existing, plan	, , , , , , , , , , , , , , , , , , ,
·	approval period (up to 10) and 20 <sup>th</sup> year projections	
	B. System design standards	B. Section 5.7.1
	C. Water quality analysis	C. Section 7.3
	<ul> <li>D. System inventory, description and analysis</li> </ul>	D. Sections 5.1 through 5.6
	E. Source	E. Sections 4.1, 4.2, and 6.2; Appendix H
	F. Treatment	F. Sections 5.1.4, 5.3, and 7.5
	G. Storage	G. Sections 5.4 and 6.1, Appendix G
	H. Distribution system/hydraulics	H. Section 6.3, Appendix I
	<ol> <li>Summary of system deficiencies</li> </ol>	I. Sections 6.1.3, 6.2.2, 6.3.3
	J. Analysis of possible improvement projects	J. Chapter 11, Appendix M
Chapter 4	Water Use Efficiency Program and Water	
	Resource Analysis	
	1 to course 7 than your	
	A. Water use Efficiency Program per WAC 246-290-810	A. Section 3.2
	B. >1,000 Estimate water savings from measures past six	
	years.	B. Section 3.2.2, Figure 3-6
	C. If DSL is > 10%, water loss control action plan	
	required for compliance with a schedule & activities	- · · · · · · · · · · · · · · · · · · ·
	to minimize leakage in budget	Section 3.3, Table 3-8
	D. Sources of supply analysis: evaluation of supply	
	alternatives if pursuing addt'l water rights in next 20	D. Sections 4.1, 4.2, 4.3, and 5.2
	years	
	E. Interties	
	F. ≥1,000 connections explore reclaimed water	E. Section 2.4.2, Figure 2-2, Appendix D

	Content Description	WSP P	Page #
Chapter 5	Source Water Protection (Check One or Both)		
		^	Obstan 7.7 Annualis K
	A. Wellhead protection program		Section 7.7, Appendix K
	B. Watershed control program	Ď.	Section 7.6, Appendix E
Chapter 6	Operation and Maintenance Program		
	A. Water system management and personnel	Α.	Section 2.3
	B. Operator certification		Section 8.2
	C. Routine operating procedures and preventative maintenance	C.	Sections 10.3 and 10.4
	D. Water quality sampling procedures & program – Identify WQ PN Requirements and a limited area water outage/de-pressurization event protocol with a limited health advisory	D.	Sections 7.2 and 8.7
	E. CMP plan/map. Add RTCR and Ground Water Rule (GWR) narrative, actions	E.	Sections 7.2, 7.4, and 8.7
	F. Emergency program, water shortage plan, service reliability per WAC 246-290-420	F.	Chapter 9
	G. Address sanitary survey findings	G.	
	<ul> <li>H. Cross-connection control program – Summarize next actions to address</li> </ul>	Н.	Section 8.6
	<ol> <li>Recordkeeping, reporting, and customer complaint program</li> </ol>	I.	Section 8.4.2
	J. Summary of O&M deficiencies	J.	Section 10.4
Chapter 7	Distribution Facilities Design and		
	Construction Standards		
	A. Standard construction specification for distribution mains	A.	Section 5.7
Chapter 8	Improvement Program		
	Capital improvement schedule for the identified planning period (up to 10) and within a 20-year planning period at a minimum	A.	Table 11-1, Appendix M
Chapter 9	Financial Program		승규들이 얼마나 얼마를 했다.
	A. Balanced budget for the <b>planning period (up to 10)</b> and demonstrating financial viability	Α.	Chapter 12
	B. Revenue and cash flow stability to fund capital and emergency improvements	В.	Section 12.5, Table 12-3
	C. Evaluation of affordable rate structure that encourages customer demand efficiency. Budget line item if Water Loss control Action Plan is required	C.	Section 12.6.2, Section 12.7 (Rate and Financial Policy)
Chapter 10	Miscellaneous Documents		
	A. Meeting of the consumers (documentation). Approval by EGB prior to DOH approval	A.	Appendix A4*
	B. County/Adjacent Utility Correspondence	B.	Appendix A2*
	<ul> <li>C. ≥1000 connections – State Environmental Policy Act (SEPA) Determination</li> </ul>	C.	
	D. Agreements (intertie, service area, franchise, etc.)	D.	Section 2.4
	E. Satellite Management Program	E.	Section 2.5

<sup>\*</sup> Will be added when WSP finalized