

***Appendix H – Wellhead and Watershed
Protection Program***

Wellhead and Watershed Protection Program

INTRODUCTION

All federally defined Group A public water systems that use groundwater as their source are required to develop and implement a wellhead protection program.

The City of Bonney Lake provides potable water to approximately 20,000 people on the Lake Tapps plateau. Water is supplied from two wellfields (Ball Park Well No. 1 and Tacoma Point Wells Nos. 2 and 4) and two spring sites (Victor Falls Springs and Grainger Springs).

The City conducted a Wellhead Protection and Monitoring Program (WHPMP) in 1997 – 1998 (City of Bonney Lake, 1998). The objective of the WHPMP was to protect the quality and quantity of the City's groundwater supply. These efforts will help the City to avoid the need for and costs associated with treating or replacing the existing supply.

Phase II of the City's Wellhead Protection and Monitoring Program (WPMP) was implemented between 1998 and 2000 (City of Bonney Lake, 2000). The objectives of Phase II were; 1) to further characterize the City's groundwater resources, and 2) to scientifically define approaches to protect the quality and quantity of these resources.

WELLHEAD PROTECTION ELEMENTS

The DOH administers the Washington State wellhead protection program. The required elements for wellhead protection and watershed control programs are contained in WAC 246-290-135 which include:

- Description of the watershed (location, hydrology and land ownership);
- Documentation of source water quality trends;
- Identification of current watershed control measures and monitoring activities;
- Completed susceptibility assessment of each water source;
- Delineation of wellhead protection areas for each water source;
- An inventory of known and potential contaminant sources (this inventory list must be updated every two years);
- Documentation of the purveyor's notification to all owners/operators of known and potential sources of contamination within wellhead protection areas;
- Documentation of the purveyor's notification to regulatory agencies and local governments of the defined boundaries of the wellhead protection areas and the findings of the contaminant source inventory;

- A contingency plan to ensure that customers have an adequate supply of water in the event that contamination causes a temporary or permanent loss of the system's principal source of supply;
- Documentation of the purveyor's coordination with local emergency spill responders (i.e. police, fire and health departments) regarding wellhead protection area boundaries, source susceptibility and contingency plans.

This information can be found in the City's Wellhead Protection Program reports.

POTENTIAL FOR CONTAMINATION

DOH Susceptibility Assessments for Bonney's Lakes water supply sources are included in the Phase I report (City of Bonney Lake, 1998).

The City's water supply sources were also independently ranked by RH2 Engineering scientists with regard to the potential for contamination at each source. The qualitative rankings were assigned based upon the Phase I results. The Tacoma Point Wells were assigned a Low Potential Contamination Ranking because the wells are 300 feet deep and overlain by thick (200 feet) low transmissivity glacial sediments. No evidence of water quality contamination in these wells has been found.

The Ball Park Well was also assigned a Low Potential Contamination Ranking. Well log data indicates that a silt layer, approximately 50 feet thick, is present between the well screens and the ground surface. It is suspected that this silt layer is confined to the aquifer from which the Ball Park Well draws. Pump and water quality testing were conducted at the Ball Park Well prior to Phase I. Test data indicate that recharge at the Ball Park Well is much less robust than that observed at the Tacoma Point Wells. In addition, the water quality is distinctly different from the Tacoma Point Wells or the spring sources.

Grainger Springs, considered a single source, was given a Moderate Potential Contamination Ranking. The City owns and protects the forested and grassy area directly surrounding this shallow spring collection area. However, the recharge area for this source is rapidly undergoing urban development. State Route 410, several gas stations, septic systems and other potential contamination sources are presently upgradient from the springs.

Victor Falls Springs, considered three individual sources, were given High Potential Contamination Rankings. The three shallow spring collection areas have septic systems in proximity (approximately 80 percent of the surface area of one year time-of-travel (TOT) zone is in septic system use).

Source	Phase I Preliminary Contaminant Risk Ranking
Tacoma Point Well	Low
Ball Park Well	Low
Victor Falls	High
Grainger Springs	Moderate

Contaminant Source Inventory

Wellhead protection 'TOT' zones were defined using the DOH's Calculated Fixed Radius (CFR) methodology and later modified based upon additional information. Potential sources of contamination throughout the 'TOT' zones were inventoried in 1997 and 1998 and included facilities which generate or handle dangerous wastes, sites with underground storage tanks containing petroleum or chemical products, sites with reported leaking underground storage tanks, domestic and municipal abandoned wells, high density animal-keeping facilities, roads and septic systems.

Nitrates

Findings

From the summer of 1998 through the summer of 1999, nitrate concentrations at Grainger and Victor Falls Springs were monitored on an hourly basis by instruments installed in the water collection boxes. In addition, seven chain-of-custody samples were collected from each of the Victor Falls Springs between August, 1999 and July, 2000. These samples were analyzed at a laboratory for nitrates, chlorides and specific conductance. All springs were consistently below the MCL of 10 mg/L during the monitoring period.

Grainger Springs

Findings

The discharge of Grainger Springs correlates broadly with seasonal precipitation, but is not directly influenced by the water level of Lake Tapps. Comparison of data for lake level and stream flow below the springs show that, while lake level is rising, discharge at Grainger Springs may be falling. Leakage through the lakebed likely contributes to the maintenance of regional groundwater levels, but the contribution to recharge of Grainger Springs is strongly attenuated and delayed. Comparison of discharge and monthly rainfall data indicates direct and seasonal relationships.

Victor Falls Springs

Findings

The recharge area for the Victor Falls Springs lies entirely south and east of the springs, including a portion of the site for the Falling Water development and unincorporated Pierce County. Lake Tapps does not influence the discharge of the Victor Falls Springs. Comparison of spring discharge with daily rainfall indicates no direct correlation, but a strong seasonal relationship does exist. Discharge from the Victor Falls Springs will decline significantly during prolonged dry periods.

Tacoma Point

Findings

Three monitoring wells were installed about 1,000 feet from the Tacoma Point wells. The locations were selected based upon ability to define the groundwater gradient from Lake Tapps. Water levels were continuously recorded from February, 1999, until September, 1999. In addition, Tacoma Point Production Well No. 6 was installed and a pump test was conducted in June, 1999.

Water level data from wells indicate that groundwater flows northwest and away from Lake Tapps. Pump test data indicate that the Tacoma Point aquifer extends beneath Lake Tapps. Leakage from Lake Tapps into the aquifer makes delineation of a recharge area for the supply wells very difficult. Surprisingly, comparison of the level of Lake Tapps and water levels in the Tacoma Point monitoring wells did not show a direct relationship. This data suggest that Lake Tapps is not in direct hydraulic continuity with the Tacoma Point wells, even though bed leakage appears to contribute to recharge of the Tacoma Point wells. Similarly, daily rainfall showed no direct correlation with water levels in the monitoring wells; however, seasonal precipitation trends do correlate with groundwater level.

Contrasting year 2000 pumping rates at the Tacoma Point Wellfield with monitoring well water levels, displays a direct and rapid aquifer drawdown response. Continuous water level monitoring was ended in August 2000.

Wellhead Protection Ordinance

After completion of the Phase I and Phase II Wellhead Protection Reports, the City developed and adopted a wellhead protection ordinance which is currently in effect.

Wellhead Protection – Supporting Information

Figures, tables and appendices which are included in the City's wellhead protection reports address:

- Topography
- Groundwater Gradients
- Groundwater Nitrate Data
- Time-of-Travel Zones
- Potential Sources of Contamination

Wellhead and Watershed Protection Program

- Infiltration Potential
- Source Well Logs
- Department of Health Susceptibility Assessments
- Water Quality and Pump Test Data
- Contaminant Inventory Data

REFERENCES

City of Bonney Lake. June 1998. Wellhead Protection and Monitoring Program – Phase I.

City of Bonney Lake. November 2000. Wellhead Protection and Monitoring Program – Phase II.

City of Bonney Lake. March 2001. Wellhead Education and Nitrate Investigation – Phase III.

Appendix I – Water System Facilities Data

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**City of Bonney Lake
Comprehensive Water System Plan
Springs Facilities Data**

Pump Data

Well Name	Pressure Zone	Year Const.	Current Pumping Rate (gpm)	Max. Pump Capacity (gpm)	Max Inst Water Right (gpm)	Meters	Ground Elv (feet)
Victor Falls No. 1	748	Rehab 1983	820	1000	1100	Water Specialties 852563	8
Victor Falls No. 2	748	Rehab 1983	0	1000	*	Water Specialties 851635	8
Grainger No. 1	748	1972	830	1000	1500	Water Specialties 963412	12
Grainger No. 2	748	1972	0	500	*	Water Specialties *	*

2600

Pump Data

Pump Name	Pump Manufacturer	Pump Model	Pump Type	Design Capacity (gpm)	Design Head (feet)	Motor Mfgr	Motor Size (HP)	Check Valve	Standby Power	Control Valve Size & Model
Victor Falls No. 1	Bryon-Jackson	12 GH 5 Stage	Vertical Turbine			GE5X6268XHIA	125	4" Cla-Val 61-02	EG	8" Cla-Val 129-01A
Victor Falls No. 2	Bryon-Jackson	12 GH 6 Stage	Vertical Turbine			GE5X6277XHIB	150	4" Cla-Val 61-02	EG	8" Cla-Val 81-02
Grainger No. 1	Bryon-Jackson	10	Vertical Turbine			GE5X6258X23A	75	4" Cla-Val 61-02	EG	6" Cla-Val 940-04
Grainger No. 2	American Turbine	12 MA 7 Stage	Vertical Turbine			GE5X6277XHIB	150	4" Cla-Val 61-01	EG	8" Ames 81-02

Pump Curve Data

Well Name	Point 1		Point 2		Point 3		Pump Serial Number	Pump Impeller Diameter
	Flow (gpm)	Head (feet)	Flow (gpm)	Head (feet)	Flow (gpm)	Head (feet)		
Victor Falls No. 1	0	400	350	330	580	280	HHJ811178	
Victor Falls No. 2							EWJ608109	
Grainger No. 1							MHJ1213151	
Grainger No. 2							AJJ110390	

Control Data

Well Name	Control Facility	Supplied Pressure Zone	Supply To Zone Priority	Address
Victor Falls No. 1	Ponderosa Tank?	748	Primary Supply	11700 Rhodes Lake Road
Victor Falls No. 2	Ponderosa Tank?	748	Primary Supply	11700 Rhodes Lake Road
Grainger No. 1	Ponderosa Tank?	748	Primary Supply	18100 SR 410
Grainger No. 2	Ponderosa Tank?	748	Primary Supply	18100 SR 410

**City of Bonney Lake
Comprehensive Water System Plan
Well Facilities Data**

Well Data

Well Name	Pressure Zone	Year Const.	Current Pumping Rate (gpm)	Max. Well Capacity (gpm)	Max Inst Water Right (gpm)	Casing Size (inches)	Well Depth (feet)	Well Screen Depth (feet)	Pump Intake Depth (feet)	Static Water Depth (feet)	Pumping Water Depth (feet)	Ground Elv (feet)
Tacoma Point No. 2	748	1988		750	2300							
Tacoma Point No. 4	748	1987			*							
Tacoma Point No. 6	748	2000			*							
Ball Park No. 1	748	2004	1100	1270	1000	12	241	199'-204', 215'-231'	185.1	103	135	583
Ball Park No. 2	748	2004	200	250	270	20	244	214'-234'	203.2	93.5	195.5	573.5

3570

Well Pump Data

Pump Name	Pump Manufacturer	Pump Model	Pump Type	Design Capacity (gpm)	Design Head (feet)	Motor Mfr	Motor Size (HP)	Control Valve Size & Model	Standby Power	Meters
Tacoma Point No. 2			Submersible				125	8" Cla-Val 81-02	EG	Water Specialties
Tacoma Point No. 4		__MA, __ Stage	Vertical Turbine				150	8" Cla-Val 81-02	EG	*
Tacoma Point No. 6	American Turbine 12-H-150	__MA, 8 Stage	Vertical Turbine	1300	504	US Electric RUE	150	8" Ames 912G-01-30	no	Water Specialties
Ball Park No. 1	Byron-Jackson 10HQH	__MA, _13 Stage	Vertical Turbine	1300	412	US Motors VHS	200	8" Cla-Val 81-02	EG	Water Specialties
Ball Park No. 2	Byron-Jackson 8MQL	__MA, _16 Stage	Vertical Turbine	300	440	US Motors VHS	50	6" Cla-Val 660G-11BY	EG	Water Specialties

Well Pump Curve Data

Well Name	Point 1		Point 2		Point 3		Pump Serial Number	Pump Impeller Diameter
	Flow (gpm)	Head (feet)	Flow (gpm)	Head (feet)	Flow (gpm)	Head (feet)		
Tacoma Point No. 2	0	400	350	330	580	280	250K802	
Tacoma Point No. 4							TFG233032	
Tacoma Point No. 6							P12P2940256R-1	
Ball Park No. 1							N06N0730187R-1	
Ball Park No. 2								

Control Data

Well Name	Control Facility	Supplied Pressure Zone	Supply To Zone Priority	Address
Tacoma Point No. 2	Ponderosa Tank?	748	Primary Supply	1110 182nd Ave E
Tacoma Point No. 4	Ponderosa Tank?	748	Primary Supply	1110 182nd Ave E
Tacoma Point No. 6	Ponderosa Tank?	748	Primary Supply	1110 182nd Ave E
Ball Park No. 1	Lakeridge Tank?	748	Primary Supply	6001 192nd Ave E
Ball Park No. 2	Lakeridge Tank?	748	Primary Supply	19515 South Tapps Drive

**City of Bonney Lake
Comprehensive Water System Plan
Storage Facilities Data**

Water Tank Data

Tank Name	Pressure Zone	Year Const.	Material	Capacity (gallons)	Overall Height (feet)	Diameter (feet)	Water Base Elev. (feet)	Overflow Elev. (feet)	Seismic Restraint (Y or N)	Address
Ponderosa No. 1	BL748	1972	Steel	1,010,000	43	63	705.0	748.0	Y	19808 106th Street CT E
Ponderosa No. 2	P800	1998	Steel	2,810,000	104	68	696.5	800.0	Y	19808 106th Street CT E
Lakeridge	BL748	1963	Steel	780,000	33	63	708.0	741.0	Y	4812 Ridgewest Drive E
Tacoma Point	BL748	1972	Steel	1,140,000	100	44	638.0	738.0	N	17501 N Tapps Hwy

Storage Data

Tank Name	Max Water Height	Volume Per Foot (gallons)
Ponderosa No. 1	43.0	23,560
Ponderosa No. 2	103.5	27,160
Lakeridge	33.0	23,560
Tacoma Point	100.0	11,370

Level Control Data

Tank Name	Controlled Supply Facility	Meters Manufacture	Size	Serial Number
Ponderosa No. 1	Victor Falls	Water Specialties	12-inch	982321
Ponderosa No. 2	Ponderosa BPS			
Lakeridge	Grainger Springs			
Tacoma Point	Tacoma Point			

**City of Bonney Lake
Comprehensive Water System Plan
Pump Station Facilities Data**

Pump Station Data

Name	Suction Pressure Zone	Discharge Pressure Zone	Year Const.	Above or Below Grade	Maximum Capacity (gpm)	Meter Size & Model	Standby Power	Surge Protection
Ponderosa	748	800	1990	Above	6" Water Specialti	EG		
Lakeridge	748	800	2000	Above		8" Badger	EG	
Panorama Heights	748	790	2004	Above		Water Specialti	EG	

Pump Data

Pump Name	Pump Manufacturer	Pump Model	Pump Type	Current Pump Rate (gpm)	Design Capacity (gpm)	Design Head (feet)	Motor Mfrgr	Motor Size (HP)	Control Valve Size & Model
Ponderosa D1	Peerless		620A		250		Baldor	7.5	
Ponderosa D2	Peerless		620A		250		Baldor	7.5	
Ponderosa D3	Peerless		620A		250		Baldor	7.5	
Ponderosa D4	Peerless		620A		250		Baldor	7.5	
Ponderosa F1	Peerless	C1250AP			1250		US Electric 32	40	4" Cla-Val
Ponderoa F2	Peerless	C1250AP			1250		US Electric 32	40	H94-10
Lakeridge - Pump 1	PACO	4012-1	VFD	254	610		US	20	4" Ames
Lakeridge - Pump 2	PACO	5012-7	VFD	400	1250		US	60	6" Ames
Lakeridge - Pump 3	PACO	6015-1	VFD	1400	2000		US	150	8" Ames
Panorama Heights - Pump 1	Grund Fos	CR 5	VFD	30	15	51	Baldor	3/4	2" 81-01
Panorama Heights - Pump 2	Grund Fos	CR 16	VFD	84	60	112	Baldor	5	2" 81-01
Panorama Heights - Pump 3	Grund Fos	CR 5	VFD	30	15	51	Baldor	3/4	2" 81-01
Panorama Heights - Pump 4	Grund Fos	CR 16	VFD	84	60	112	Baldor	5	2" 81-01

7510

Pump Curve Data

Pump Name	Point 1		Point 2		Point 3		Pump Serial Number	Pump Impeller Diameter
	Flow (gpm)	Head (feet)	Flow (gpm)	Head (feet)	Flow (gpm)	Head (feet)		
Ponderosa D1							NA	6
Ponderosa D2							NA	6
Ponderosa D3							NA	6
Ponderosa D4							NA	6
Ponderosa F1							9357457	10.68
Ponderoa F2							9357487	10.68
Lakeridge - Pump 1							00A0040404	9.8
Lakeridge - Pump 2							00A0040501	11.4
Lakeridge - Pump 3							00A0040601	13.6
Panorama Heights - Pump 1							A91128666P10327US156	
Panorama Heights - Pump 2							B33296845P10327US268	
Panorama Heights - Pump 3							A91128666P10327US155	
Panorama Heights - Pump 4							B33296845P10327US269	

Pump Control Data

Pump Name	Control Facility	Supplied Pressure Zone	Supply To Zone Priority	Pump Operation Priority	Station Has Telemetry
Ponderosa D1	Ponderosa Tank	800	Primary	Primary	Yes
Ponderosa D2	Ponderosa Tank	800	Primary	1st Lag	Yes
Ponderosa D3	Ponderosa Tank	800	Primary	2nd Lag	Yes
Ponderosa D4	Ponderosa Tank	800	Primary	3rd Leg	Yes
Ponderosa F1	Ponderosa Tank	800	Fire Flow	4th Leg	Yes
Ponderoa F2	Ponderosa Tank	800	Fire Flow	5th Leg	Yes
Lakeridge - Pump 1	800 System Pressures	800	Primary	Primary	Yes
Lakeridge - Pump 2	800 System Pressures	800	Primary	1st Lag	Yes
Lakeridge - Pump 3	800 System Pressures	800	Fire Flow	2nd Lag	Yes
Panorama Heights - Pump 1	790 System Pressures	790	Primary	Primary	Yes
Panorama Heights - Pump 2	790 System Pressures	790	Primary	Alternate	Yes
Panorama Heights - Pump 3	790 System Pressures	790	Primary	2nd Lag	Yes
Panorama Heights - Pump 4	790 System Pressures	790	Primary	Alternate	Yes

City of Bonney Lake
Comprehensive Water System Plan
Pressure Reducing Valve and Pressure Relief Valve Data

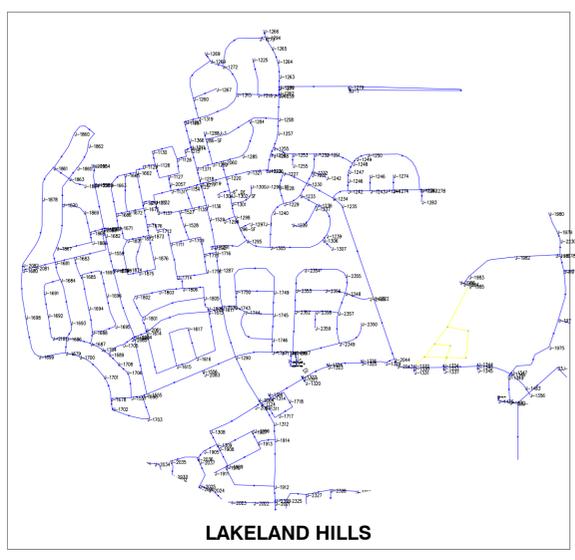
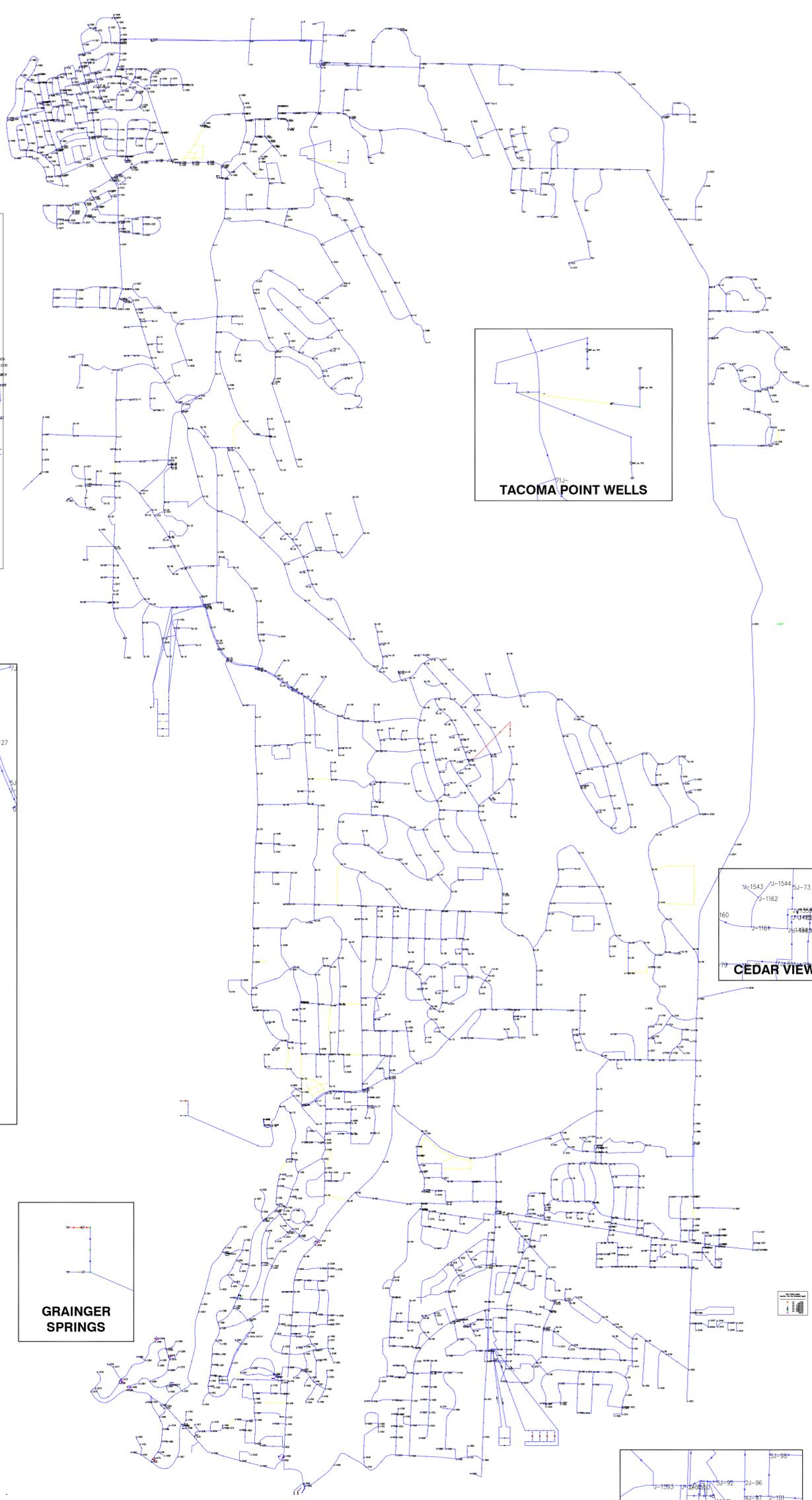
Station Data							
PRV Name	Upper Pressure Zone	Lower Pressure Zone	Year Const.	Ground Elev. (feet)	Normal Pressure (psi)		Station Operation Purpose
					Inlet	Outlet	
47th Street	810	625	1983		90		Supply
166th Avenue Ct. East	810	630	1983		118		Supply
Rhodes Lake	748	565	1993		150		Supply
Spiraea Glen (104th)	800	748	1994		75		Low Pressure
Willow Brooke	748	620	1997		150		Supply
Panorama	748	620			140		Supply
South Tapps Drive	810	748	2000		66		Low Pressure
Sumner Tapps	810	748	2000		70		Low Pressure/Relief
Cedar View	800	748	2001		84		Low Pressure
Bonney Lake Boulevard	810	748	2000		75		Low Pressure
Naches Terrace	748	620	2001		145		Supply
Ashton Woods	748	620	2004		120		Supply
Appletone Estates	660	To Atmosphere	2004		150		Relief
Ponderosa BPS	800	748	2000		17		Relief
Lakeridge BPS	810	748	2000		20		Relief
Victor Falls	748	To Atmosphere	1985				Relief
Panorama Heights BPS	790	748	2004				Relief
Summit	790	748	2004				Relief
Pinnacles	815	748	Proposed				Relief
Pinnacles BPS	815	748	Proposed				Relief
Angeline Valley South	748	620	Proposed				Supply
Angeline Valley North	748	620	Proposed				Supply
Sky Island West #1	748	660	2004				Supply
Sky Island West #2	748	660	2004				Supply
Sky Island West #3	660	565	2004				Supply
Creekridge Glen	565	465	Proposed				Supply
Panorama West #1	565	465	Proposed				Supply
Panorama West #2	465	385	Proposed				Supply
Panorama West #3	465	385	Proposed				Supply
Panorama West #4	385	310	Proposed				Supply
Panorama West #5	385	310	Proposed				Supply

PRV Set Point Data							
PRV Name	Description	Valve Size (inches)	Valve Mfr	Valve Model	Valve Elev. (feet)	Valve Set Point (psi)	Valve Set Point (feet H.E.)
Spiraea Glen (104th)	Small PRV	2-inch	Cla-Val	90G-01AS	-5	60	139
	Large PRV	6-inch	Cla-Val	90G-01AB	-5	55	127
	Small PRV	3-inch	Ames	912G	-5	60	139
Cedar View	Large PRV	8-inch	Ames	912G-SS	-5	50	116
	Relief	4-inch	Ames	920G-SS	-5	90	208
Ponderosa BPS	Relief	4-inch	Cla-Val	50G-01B			
Bonney Lake Boulevard	Small PRV	2-inch	Watts	M115-2	-5	50	116
	Large PRV	8-inch	Ames	912G-SS	-5	45	104
South Tapps Drive	Small PRV	2-inch	Ames	912G	-5	42	97
	Large PRV	8-inch	Ames	912G-SS	-5	35	81
Sumner Tapps	Small PRV	3-inch	Ames	912G	-5	50	116
	Large PRV	8-inch	Ames	912G-SS	-5	40	92
	Relief	4-inch	Ames	920G	-5	74	171
Lakeridge BPS	Relief	8-inch	Ames	920G-SS		50	
Willow Brooke	Small PRV	2-inch	Ames	912G-34	-5	75	173
	Large PRV	12-inch	Ames	52G-34	-5	65	150
Ashton Woods	Small PRV	3-inch	Cla-Val	90G-01ABCSKC	-5	75	173
	Large PRV	8-inch	Cla-Val	90G-01ABCSKC	-5	70	162
	Relief	8-inch	Cla-Val	50G-01BKCC	-5	88	203
Victor Falls	Relief	6-inch	Cla-Val	52G-03		160	
Panorama	Small PRV	2-inch	Watts	AVC	-5	75	173
	Large PRV	6-inch	Ames	910G-34	-5	65	150
Panorama Heights BPS	Relief						
Rhodes Lake	Small PRV	2-inch	Cla-Val	90G-01AS	-5	55	127
	Large PRV	8-inch	Cla-Val	92G-01AB	-5	50	116
Naches Terrace	Small PRV	2-inch	Cla-Val	90G01S	-5	68	157
	Large PRV	8-inch	Cla-Val	90G01S	-5	60	139
Angeline Valley South	Small PRV		Cla-Val		-5		
	Large PRV		Cla-Val		-5	2	
Panorama West #5	Small PRV		Cla-Val		-5		
	Large PRV		Cla-Val		-5	2	
47th Street	Small PRV	2-inch	Cla-Val	90G-01AS	-5	35	81
	Large PRV	4-inch	Cla-Val	90G-01AB	-5	25	58
166th Avenue Ct. East	Small PRV	1.5-inch	Cla-Val	90G-01AS	-5	45	104
	Large PRV	4-inch	Cla-Val	90G-01AB	-5	35	81
Appletone Estates	Relief	6-inch	Cla-Val	52G-03	-5	160	370

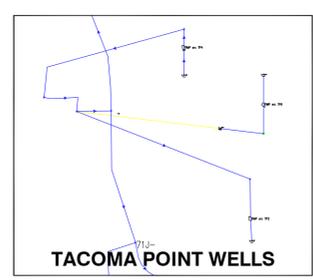
***Appendix J – Hydraulic Model Node
Diagram***

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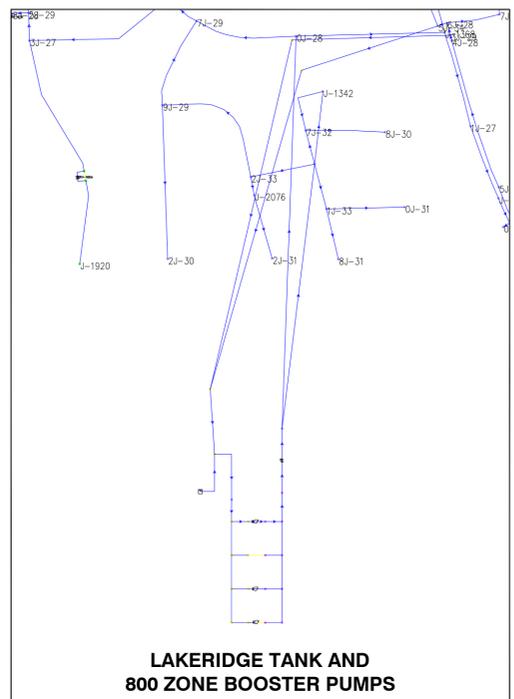
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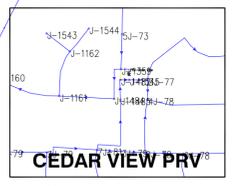
LAKELAND HILLS



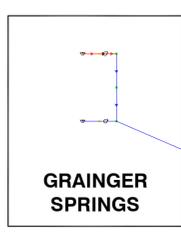
TACOMA POINT WELLS



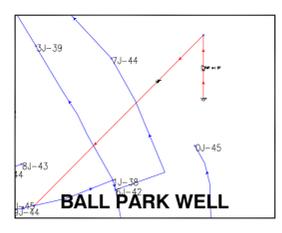
**LAKERIDGE TANK AND
800 ZONE BOOSTER PUMPS**



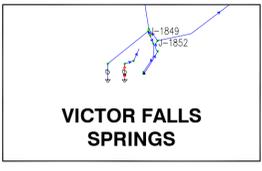
CEDAR VIEW PRV



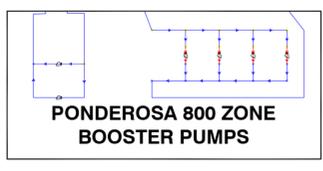
**GRAINGER
SPRINGS**



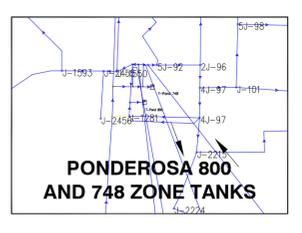
BALL PARK WELL



**VICTOR FALLS
SPRINGS**



**PONDEROSA 800 ZONE
BOOSTER PUMPS**



**PONDEROSA 800
AND 748 ZONE TANKS**

Appendix J
City of Bonney Lake
Comprehensive Water System Plan
EXISTING WATER SYSTEM
NODE DIAGRAM





SCALE: NTS

***Appendix K – Susceptibility Assessment
Forms***

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RECEIVED

MAY 31 2001



STATE OF WASHINGTON

DEPARTMENT OF HEALTH

20435 72nd Ave. S., Suite 200, K17-12 • Kent, Washington 98032-2358

May 30, 2001

MR. RICK SHANNON
CITY OF BONNEY LAKE WATER DEPARTMENT
PO BOX 7380
BONNEY LAKE, WA 98390

Subject: Bonney Lake Water Department (ID #07650)
Pierce County
Groundwater Under the Direct Influence of Surface Water
Victor Springs (S01) - First MPA Results

Dear Rick:

The Department has reviewed the results of the March 2001 Microscopic Particulate Analysis (MPA) samples that were collected from the three Victor Springs collection boxes. The sample results were all zero (0), indicating a Low Risk to direct surface water influence. These results satisfy the first MPA sampling requirement (noted in my December 5, 2000 letter to you).

Please plan on collecting the second MPA sample next winter, approximately two months into the rainy season. The sample should be collected during or immediately following a heavy rain event, when the soils are saturated and surface runoff is occurring in the area of the spring. (These are the same conditions I noted in my March 14, 2001 letter regarding MPA sampling for Grainger Springs.)

If you have any questions regarding this letter or the GWI program in general please do not hesitate to call me at 253-395-6762 or Jim Nilson at 253-395-6764.

Sincerely,

Chris R. McMeen, P.E.
Regional Engineer
NW Drinking Water Operations

cc: Tacoma Pierce County Health Department
Jim Nilson, DOH
RH2 Engineering, Inc.
GWI file



RECEIVED
MAR 15 2001

STATE OF WASHINGTON
DEPARTMENT OF HEALTH

20435 72nd Ave. S., Suite 200, K17-12 • Kent, Washington 98032-2358

March 14, 2001

MR. RICK SHANNON
CITY OF BONNEY LAKE WATER DEPARTMENT
PO BOX 7380
BONNEY LAKE, WA 98390

Subject: Bonney Lake Water Department (ID #07650)
Pierce County
Groundwater Under the Direct Influence of Surface Water
Grainger Springs (S02) - First MPA Result

Dear Rick:

The Department has reviewed the result of the February 2001 Microscopic Particulate Analysis (MPA) sample that was collected from the Grainger Spring (S02). The sample result of zero (0) indicates a Low Risk to direct surface water influence and satisfies the first MPA sample requirement (noted in my December 5, 2000 letter to you).

Due to the unusually dry weather this year, please plan on collecting the second MPA sample next winter, approximately two months into the rainy season. The sample should be collected during or immediately following a heavy rain event, when the soils are saturated and surface runoff is occurring in the area of the spring.

If you have any questions regarding this letter or the GWI program in general please do not hesitate to call me at 253-395-6762 or Jim Nilson at 253-395-6764.

Sincerely,

Chris McMeen, P.E.
Regional Engineer
NW Drinking Water Operations

cc: Tacoma Pierce County Health Department
GWI file
Jim Nilson, DOH
RH2 Engineering, Inc.

Appendix L – Emergency Response Plan

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Emergency Response Plan

For security reasons, the City's Emergency Response plan is not included in the Water System Plan. The Plan is available for review at the Department of Health by request.

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Appendix M – Water Ordinances and Code

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ORDINANCE NO. 1341

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF BONNEY LAKE, PIERCE COUNTY, WASHINGTON, ADOPTING THE 2009 COMPREHENSIVE SEWER PLAN, THE 2008 COMPREHENSIVE WATER PLAN, AND AMENDING THE UTILITIES ELEMENT OF THE COMPREHENSIVE PLAN REFERENCING THESE PLANS.

WHEREAS, on January 20, 2009 the City Council adopted the Planning Commission annual work plan that included consideration of making changes to the Utilities Element of the Comprehensive Plan; and

WHEREAS, a Notice of Public Hearing was issued on August 19, 2009; and

WHEREAS, the Planning Commission conducted a public hearing on September 2, 2009; and

WHEREAS, at the November 4, 2009 Planning Commission meeting the Planning Commission recommended that the City Council adopt the 2009 Comprehensive Sewer Plan and the 2008 Comprehensive Water Plan and update the language in the Utilities Element of the Comprehensive Plan to reference these two plans; and

WHEREAS, SEPA has been complied with via a Determination of Non-Significance issued on September 3, 2009; and

WHEREAS, RCW 36.70A.106 requiring a 60 day review by the Washington State Department of Commerce has been complied with; and

WHEREAS, this is one of three Comprehensive Plan amendments concurrently coming before the City Council; and

WHEREAS, the criteria for amending the Comprehensive Plan set forth in BLMC § 14.140.090 are: 1) the amendments are consistent with the goals and policies of the Comprehensive Plan, 2) the comprehensive plan would remain internally consistent, 3) the amendments are consistent with the Countywide Planning Policies, 4) the amendments are consistent with the Growth Management Act, and 5) the amendments advance the public health, safety, or welfare and are in the best interest of the residents of Bonney Lake; and

WHEREAS, Goal 7-1 of the City's Comprehensive Plan and its implementing policies are intended to ensure sufficient sewer, water, and stormwater service for the City and UGA through the planning horizon and the City's updates of the Water and Sewer Comprehensive Plans help to implement this goal; and

WHEREAS, the proposed amendments make the Comprehensive Plan more internally consistent, and

WHEREAS, adopting the Comprehensive Plan amendment does not violate any of the Countywide Planning Policies or the Growth Management Act, and

WHEREAS, because safety is not effected by the amendment, and public health and welfare are advanced.

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF BONNEY LAKE, WASHINGTON, DO ORDAIN AS FOLLOWS:

Section 1. The City hereby adopts the Comprehensive Sewer Plan prepared by RH2 and dated February, 2009 and the Comprehensive Water Plan prepared by RH2 and dated October, 2008.

Section 2. The “Water” and “Sewer” sections of Page 7-1 of the City’s Comprehensive Plan are amended to read as follows:

Water

The City hereby adopts the City of Bonney Lake Comprehensive Water System Plan, prepared by RH2 and dated ~~March, 2006~~ October, 2008, as part of this Utilities Element. Copies are available at City Hall or the City Hall Annex.

Sewer

The City hereby adopts the City of Bonney Lake Comprehensive Sewer System Plan, prepared by RH2 and dated ~~March, 2006~~ February, 2009, as part of this Utilities Element. Copies are available at City Hall or the City Hall Annex.

Section 3. This Ordinance concerns powers vested solely in the Council, it is not subject to referendum, and shall take effect five (5) days after its passage, approval and publication as required by law

PASSED by the City Council and approved by the Mayor this 22nd day of December, 2009.



Neil Johnson, Mayor

ATTEST:



Harwood Edvalson
City Clerk

APPROVED AS TO FORM:



James Dionne
City Attorney

D-----

Passed: 12/22/09
Valid: 12/22/09
Published: 12/30/09
Effective Date: 1/4/10

AB09-171

Effective Date:

**City of Bonney Lake, Washington
City Council Agenda Bill (C.A.B.) Approval Form**

<u>Department / Staff Contact:</u> CD / Heather Stinson	<u>Workshop / Meeting Date:</u> 22 Dec 2009	<u>Agenda Bill Number:</u> AB09-171
<u>Ordinance Number:</u> D09-171	<u>Resolution Number:</u>	<u>Councilmember Sponsor:</u>

Agenda Subject: Comprehensive Plan Amendment of the Utilities Element

Proposed Motion: An Ordinance of the City Council of the City of Bonney Lake, Pierce County, Washington, Adopting the 2009 Comprehensive Sewer Plan, the 2008 Comprehensive Water Plan, and Amending the Utilities Element of the Comprehensive Plan Referencing these Plans

Administrative Recommendation: Approve the Ordinance as presented.

Background Summary: The water and sewer comprehensive plans have been updated and these plans need to be adopted. Hard copies of these documents are available and have been offered to Council members but no Council members have requested hard copies to date. These documents are also available on the City's website at the following link:

Sewer -
http://www.ci.bonney-lake.wa.us/UserFiles/File/Business_Downloads/Comprehensive_Plans/SewerCompPlan_09_DRAFT.pdf

Water-
http://www.ci.bonney-lake.wa.us/UserFiles/File/Business_Downloads/Comprehensive_Plans/DRAFTCWSP_2009.pdf

The Utilities Element of the Comprehensive Plan references these plans and the language should be changed to reflect the updates.

<u>BUDGET INFORMATION:</u>			
Budget Amount	Required Expenditure	Budget Impact	Budget Balance
Budget Explanation:			

<u>COMMITTEE/BOARD REVIEW:</u>
Subcommittee Review Date: -
Commission/Board Review Date: Planning Commission -04 Nov 2009
Hearing Examiner Date:

<u>COUNCIL ACTION:</u>	
Workshop Date(s): November 17 & December 15, 2009	Public Hearing Date(s): 2nd and 16th September 2009
Meeting Date(s): November 24, 2009	Tabled To Date:

Signatures:		
Director Authorization John P. Vodopich, AICP	Mayor	Date City Attorney Reviewed

RESOLUTION NO. 1846

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BONNEY LAKE,
PIERCE COUNTY, WASHINGTON, APPROVING THE 2008 WATER CAPITAL
FACILITIES PLAN.**

WHEREAS, the City of Bonney Lake Comprehensive Water System Plan (CWSP) was completed in February 2008; and

WHEREAS, the City Council has reviewed and accepted the CWSP as written; and,

WHEREAS, DOH requires City Council review and approval of the projects contained in the CWSP;

NOW THEREFORE, be it resolved; that the City Council of the City of Bonney Lake, Washington, does hereby approve the 2008 Water Capital Facilities Plan for the 10 and 20 year proposed water system improvements.

PASSED by the City Council this 13th day of May, 2008.



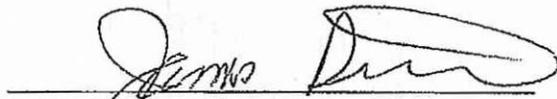
Neil Johnson Jr., Mayor

ATTEST:



Harwood T. Edvalson, CMC
City Clerk

APPROVED AS TO FORM:



James Dionne, City Attorney

RESOLUTION NO. 730

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BONNEY LAKE, WASHINGTON, RELATING TO THE ISSUANCE OF WATER AND/OR SEWER AVAILABILITY LETTERS BY THE CITY AND TO THE ADVANCE PAYMENT OF CONNECTION CHARGES.

WHEREAS, owners/developers of property located in and around the City who are interested in obtaining water and/or sewer service from the City for their property frequently approach the City requesting a letter indicating that water and/or sewer service are available to serve their property and their proposed development; and

WHEREAS, the City desires reasonably to accommodate the desire of these owners/developers for water and/or sewer availability letters so long as the commitments sought are not unreasonable or adverse to the interests of the City in operating and planning for the future operation of its water and sewer systems; and

WHEREAS, it is both reasonable and desirable from a planning and management standpoint for the City to limit its commitments with respect to the future availability of its water and sewer services in either of two ways: (1) imposing a time limit of one-year after issuance of the availability letter within which time the owner/developer of the property in question must have received a building permit for the project; or (2) requiring pre-payment to the City of the then-current connection charge for the water or sewer service sought to be reserved; and

WHEREAS, a number of water and/or sewer availability letters have been issued by the City in the past which letters indicate service availability and do not limit or condition that availability in either of the two ways identified above;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF BONNEY LAKE AS FOLLOWS:

Section 1: In all future instances in which the City responds affirmatively to any request made by an owner/developer of property for a commitment to future water or sewer service for the proposed development of their property, the availability commitment made will be limited to a period of one-year from date of issuance of the letter indicating service availability, such that the owner/developer of the property in question must have obtained a building permit for the proposed development within the one-year period or the service availability commitment will lapse.

Section 2: An owner/developer of property who is unable, despite the exercise of due diligence, to obtain a building permit for the property in question within one-year of issuance of the City's water or sewer availability letter, will be entitled to apply for and obtain a one-year renewal of the water or sewer availability letter upon a showing of said diligence and of substantial progress in the development project during the preceding year. Successive one-year renewals may be sought on this same basis.

Section 3: As an alternative to the one-year limitation on water and sewer availability letters provided for above, an owner/developer of property may pre-pay in full the City's then-current water or sewer connection charge applicable to proposed development and be entitled to receive a water or sewer availability letter which does not contain any time limitation within which substantial progress and due diligence must be shown or a building permit obtained. In the event of increases in water or sewer connection charges subsequent to pre-payment but before issuance of a building permit, owners/developers of property who have pre-paid must promptly pay the amount of the increase in connection charge upon notice or all water and/or sewer availability rights will be forfeited. Pre-paid water and/or sewer connection charges are not refundable by the City, in whole or in part.

Section 4: All owners/developers of property shown by City records to have previously been provided water or sewer availability letters which do not contain the one-year time limitation identified above shall be promptly notified that the provision of this resolution henceforth will apply to them and their property and that they have one-year from the date of such notice within which to either obtain a buildings permit or pre-pay the applicable connection charge or the City's service availability commitment shall terminate as provided for above.

Section 5: Except as expressly provided for herein, nothing in this Resolution is intended in any way to modify or affect any other existing policy or practice governing or otherwise relating to the provision of withholding of water or sewer service by the City.

PASSED and adopted this 11th day of April, 1995.

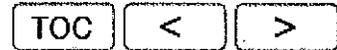
REXFORD R. PULFREY, MAYOR

ATTEST:

**KATHLEEN CLAYTON,
FINANCE DIRECTOR**

APPROVED AS TO FORM:

JAMES J. DIONNE, CITY ATTORNEY



Chapter 13.04 WATER SYSTEM REGULATIONS AND CHARGES

Sections:

Article I. General Provisions

- 13.04.010 Statement of intent.
- 13.04.020 Title.
- 13.04.030 Definitions.
- 13.04.040 Other applicable ordinances.
- 13.04.050 Shutoffs.
- 13.04.060 Water shortage emergency.

Article II. Rates and Charges

- 13.04.070 Water service application.
- 13.04.080 Water bills – Payment and collection.
- 13.04.090 *Repealed.*
- 13.04.091 Utility miscellaneous charges.
- 13.04.100 Water rates.
- 13.04.105 Annual rate adjustment.

Article III. Regulations

- 13.04.110 General regulations.
- 13.04.120 Water meters.
- 13.04.130 *Repealed.*
- 13.04.131 Defrauding a public utility – Statutes adopted by reference.
- 13.04.140 Special use of water.
- 13.04.150 Water system extension.
- 13.04.160 Use of hydrants.

Article IV. Water Service Cross-Connections

- 13.04.170 Inspection and right of access.
- 13.04.180 Responsibility of customer.
- 13.04.190 Prohibited.
- 13.04.200 Citation of specific standards.
- 13.04.210 Backflow devices.

Article V. Enforcement

- 13.04.220 Violation – Penalty.

Article I. General Provisions

13.04.010 Statement of intent.

It is the intent of the city council that the Bonney Lake water department shall serve all users of water within the city and within the city's water service area subject to appropriate statutes and ordinances and subject to the limitations of the water department's supply and delivery systems. (Ord. 588 § 1, 1987).

13.04.020 Title.

The ordinance codified in Articles I, II, III and V of this chapter shall be known as the water ordinance and may be cited as such. (Ord. 588 § 20, 1987).

13.04.030 Definitions.

A. "Business, commercial or industrial use of water" means any person, partnership or corporation which is a customer of the Bonney Lake water department and possesses a valid business or commercial license.

B. "City" means the city of Bonney Lake.

C. "Commodity charge" means the amount the customer must pay the city for water by volume (cost/100 cubic feet).

D. "Connection charge" means the total of the cost of the customer's connection to the system as defined in the "installation charge" plus the customer's equitable share of the cost of the system.

E. "Council" means the city council of the city of Bonney Lake.

F. "Developer" means any person, partnership or corporation which develops land for subdivision or constructs buildings.

G. "Duplex" means one structure containing two dwelling units.

H. "Dwelling unit" means a single unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.

I. "Installation charge" means the cost incurred by the city in making the physical connection to the water system, including both direct and indirect cost.

J. "Metered service" means the service for which charges are computed on the basis of measured quantities of water.

K. "Multifamily" means a single structure containing three or more dwelling units.

L. "Public works director" means the public works director of the city of Bonney Lake.

M. "Restoration fee" means a fee charged when service is reinstated to a property from which the owner had previously requested service be discontinued.

N. "Service charge" means the amount the customer must pay the city for the availability of water service, irrespective of whether any water is used.

O. "Utility rates" means those charges made for utility services by ordinance of the city council of Bonney Lake.

P. "Water department" means the city of Bonney Lake water department.

Q. Unless otherwise defined, all other terms shall have their usual and accustomed meanings. (Ord. 1221 § 1, 2007; Ord. 1129 § 1, 2005; Ord. 692 § 1, 1994; Ord. 588 § 2, 1987).

13.04.040 Other applicable ordinances.

It is the intent that Articles I, II, III and V of this chapter are not inconsistent with the city plumbing code and building code and Articles I, II, III and V are made a part of the building and plumbing codes. (Ord. 588 § 15, 1987).

13.04.050 Shutoffs.

The city of Bonney Lake water department may shut off the water supply at any time without notice for repairs or for any other necessary reason. (Ord. 588 § 8, 1987).

13.04.060 Water shortage emergency.

A. The mayor or his designee may declare a water shortage emergency. Upon such a declaration, the public works director may take such steps as may be necessary to conserve water for basic household and domestic uses. Basic household and domestic uses shall not include lawn and garden watering.

B. The mayor or his designee may direct the public works director to take one of the following steps:

1. Direct water customers that lawn and garden sprinkling be done only on designated days and/or times;
2. Direct water customers to cease all outside use of water from the city system;
3. Direct that each water customer be allowed a certain number of gallons of water per specified time period, the number of gallons and time period to be determined by the mayor or his designee.

C. Notice of the emergency regulation shall be published in the official city newspaper at the earliest publication available and shall thereafter be published weekly during the emergency period. Notice of the regulations may also be delivered to each water customer by the best means available. However, lack of said personal notice shall not relieve a water customer from the duty to abide by the emergency regulation.

D. Any water customer found in violation of the emergency water regulations shall be subject to the following penalties:

1. Disconnection from water service. A \$50.00 reconnection fee shall be charged and paid in advance before service is restored.
2. For a second violation during any one emergency period a customer's water service shall be disconnected for the balance of the emergency period, and a reconnection fee of \$50.00 shall be charged and paid in advance.
3. In addition to the above penalties any customer in violation of a gallonage regulation as imposed under subdivision 3 of subsection B, shall be charged \$.01 per gallon for the water used over and above his allotment. The customer's water meter shall be conclusive evidence of the amount of water used.

E. The mayor may, at his discretion, direct that the public works director, declare a termination of the water shortage emergency. The declaration shall be published in the city's official newspaper and the public works director shall contact as many news agencies as possible regarding the termination. (Ord. 588 § 4, 1987).

Article II. Rates and Charges**13.04.070 Water service application.**

A. All applications for water service shall be made at the City Hall by the property owner or his authorized agent. The records of the Pierce County auditor shall be prima facie proof of property ownership. The applicant shall furnish the city such information as may be required on the city's application form. At the time of filing the application the applicant shall pay the fee for such water services as required in this chapter. The applicant shall agree to conform to the rules and regulations for the

operation of the city’s water system as set forth in Articles I, II, III and V of this chapter.

B. Water Taps. The city reserves the right to regulate the size of water taps. Taps will be made only by the Bonney Lake water department or a contractor for an approved water extension.

C. Water Service Connection Charges. All connections to the water system of the city and the charges to be paid by the property owner toward the construction thereof shall be as provided in this subsection:

1. Installation Charge. The following installation charges will be paid by the property owner as part of their connection charge at the time application is made for water service.

Meter Size	Meter Set Only	Meter Set and Service Line
5/8" or 3/4"	\$200.00	\$1,000
1"	\$300.00	\$1,100
1-1/2" or larger	Actual time and materials plus indirect costs. If installation involves work underneath the roadway surface, the fee shall be according to the actual time and materials plus 20 percent for indirect costs.	

2. Charge for Equitable Share of System. Each new connection to the water system shall pay as part of their connection charges their equitable share of the cost of the system according to the following schedule:

- a. Residential System Development Charge (SDC).
 - i. Single-Family.

Meter Size	City and County SDC Charge
5/8" or 3/4"	\$7,700
1"	\$17,175
1-1/2" or larger	To be determined on each individual case, based on the projected amount of usage and peaking expected from the customer. These charges shall reflect residential equivalence (RE) values used for individual residential customers.

ii. Duplex Units. If a single meter or two meters are installed, an SDC rate of \$13,630 (100 percent for first unit and 77 percent of the single-family rate for the second unit) will be charged for the duplex when those meters are either five-eighths inch or three-quarters inch. SDC charge for larger meters shall be determined on each individual case, based on the projected amount of usage and peaking expected from the customer. These charges shall reflect residential equivalence (RE) values used for individual residential customers.

iii. Accessory Dwelling Units (ADU). If no additional meter is required, no SDC will be charged. If a second meter is required, an SDC of \$5,930 (77 percent of the single-family rate) will be charged when that new meter is five-eighths inch or three-quarters inch. An SDC of \$13,225 (77 percent of the single-family rate) will be charged if the new, second meter is a one-inch meter. If the

existing meter is replaced with a larger meter, the difference in the SDC rates for the two meters will be charged.

iv. Multifamily and Mobile Home Parks.

(A) Each unit shall be charged \$5,930 (77 percent of the SDC charged to single-family units).

(B) SDC charges for meters larger than two inches shall be determined on each individual case, based on the projected amount of usage and peaking expected from the customer. These charges shall reflect residential equivalence (RE) values used for individual residential customers.

(C) There shall be only one water meter installed for each building housing multiple residential units.

b. Nonresidential System Development Charge (SDC).

Meter Size	City and County SDC Charge
5/8"	\$9,790
3/4"	\$12,950
1"	\$19,260
1-1/2" or larger	To be determined on each individual case, based on the projected amount of usage and peaking expected from the customer. These charges shall reflect residential equivalence (RE) values used for individual residential customers.

c. Irrigation Only System Development Charge (SDC).

Meter Size	City and County SDC Charge
5/8"	\$6,310
3/4"	\$9,470
1"	\$15,790
1-1/2" or larger	To be determined on each individual case, based on the projected amount of usage and peaking expected from the customer. These charges shall reflect residential equivalence (RE) values used for individual residential customers.

d. The charges set out in this subsection (C)(2) shall not be applicable to an accessory dwelling unit (ADU) permitted pursuant to BLMC 18.22.090, so long as a second or larger water meter is not required by applicable codes or requested by the owner. Should the property upon which an accessory dwelling unit is located be sold, platted or otherwise segregated from the property upon which the primary residence is located, and, because of the exemption provided for in this subsection, the owner of the accessory dwelling unit did not previously pay a full, separate connection charge including equitable share charge for the accessory dwelling unit, then the following shall apply:

i. If no additional connection charge was paid for the accessory dwelling unit, the owner of the segregated accessory dwelling unit shall be required to pay a connection charge, including single-family equitable share charge, in the amounts provided for in this section at the time of segregation. A new water meter will be provided.

ii. If a reduced connection charge was paid for a second or larger

meter and/or connection for the accessory dwelling unit, the owner of the segregated accessory dwelling unit shall be required to pay the difference between that reduced charge and the amount of the connection charge, including single-family equitable share charge, provided for in this section at the time of segregation. A new water meter will be provided if necessary.

e. Annual Adjustment. Beginning January 1, 2009, and for every year thereafter, the installation and connection charges listed in this section shall be updated annually at a rate adjusted in accordance with the Engineering News Record (ENR) Construction Cost Index (CCI) for the Seattle area, using a November through November annual measure to establish revised fee schedules effective January 1st of each year.

f. These charges are to apply in all cases where distance from the water main to the meter location does not exceed 60 feet. In such cases where the distance is over 60 feet there shall be an additional fee, based on cost of labor and materials.

g. Property Owner's Responsibility. Property owners are responsible for all leaks or damage due to leaks from privately installed and owned water lines. The property owner shall install and maintain at his own expense all water service from the water meter to the place of use. (Ord. 1276 § 1, 2008; Ord. 1221 § 2, 2007; Ord. 1220 § 1, 2007; Ord. 1192 § 1, 2006; Ord. 1100 § 1, 2005; Ord. 1094 § 1, 2005; Ord. 1083 § 1, 2004; Ord. 1073 § 1, 2004; Ord. 968 § 1, 2002; Ord. 919 § 1, 2001; Ord. 828 § 2, 1999; Ord. 763 § 1, 1998; Ord. 692A §§ 1, 2, 1994; Ord. 692 § 2, 1994; Ord. 588 § 5, 1987).

13.04.080 Water bills – Payment and collection.

A. Inasmuch as the city provides year-round facilities for supplying water and collecting wastewater, all users will be billed on a continuing basis for the water and sewer availability. Billings will terminate upon disconnection from the system. Service will not be resumed until payment of the restoration fee as per BLMC 13.04.091(D) (1).

B. Billing will be done on a monthly basis for the water availability portion of the charge. Meters will be read bimonthly and water consumption billed thereafter.

C. Charges for utility services shall be due and payable on or before the tenth day following the date of billing. Amounts unpaid shall become delinquent 60 days after the billing date. A monthly penalty of two percent of the outstanding balance shall be charged to all accounts which have been delinquent for 60 days or more.

D. The Bonney Lake water department is authorized to discontinue the water service 30 days after the date of delinquency. The person responsible for payment of charges shall be notified by mail on or after 15 working days from the date of delinquency of a selected shutoff date. In order to have a disconnected service turned on all charges plus the turn-on fee of \$25.00 must be paid.

E. The owner of the premises to which the water service is attached shall be responsible for the payment of all connections, shutoffs, turnon, service charges and liens. Utility billings for any property occupied by someone other than the owner shall be billed to the owner care of the tenant only upon the written request of the owner; provided, however, even upon such written request being made, the owner shall remain responsible for the payment of all charges under this chapter.

F. The city is authorized to establish payment plans for delinquent water customers meeting standard city guidelines for financial hardship. Such guidelines may be adopted and revised from time to time by the finance director. Where such plans take the form of a written agreement, such agreements shall either be approved by the

council or be in a standard form agreement previously approved by the council for future use. (Ord. 871 § 1, 2001; Ord. 768 §§ 1, 4, 1998; Ord. 588 § 6, 1987).

13.04.090 Miscellaneous charges.

Repealed by Ord. 1151. (Ord. 826 § 13, 1999; Ord. 662 § 1, 1993; Ord. 588 § 7, 1987).

13.04.091 Utility miscellaneous charges.

A. Turn-On Charge.

1. Whenever utility service has been discontinued by the city for past due or a violation of any other provision of this chapter, the service will not be renewed until all charges plus the turn-on fee have been paid, provided a payment plan has not been established.

2. When it is desired to have the water turned on after it has been turned off for any reason other than past due, a charge of \$50.00 for such turn-on during the normal working hours of 8:00 a.m. to 4:00 p.m., Monday through Friday, and for the city's actual cost for all other hours. There is no charge for turn-off of customer water service.

3. This section shall not apply to disconnected service for violation of water shortage emergency as per BLMC 13.04.060.

B. Meter Testing Charge.

1. Where there is a question of the accuracy of a water meter and the customer requests a check of the meter, the following shall apply:

a. If the meter reads correctly, the customer shall pay \$50.00.

b. If the meter does not function properly, the city will repair or replace the meter at no expense to the customer and adjust the water consumption charge accordingly and sewer volumetric charge if applicable.

C. Transfer Charge.

1. For any change of property ownership, there is a charge of \$35.00; for a duplicate bill sent to an alternative address, there shall be a \$45.00 setup charge per request. However, the property owner shall be responsible for payment of the utility bill in accordance with this chapter. Any other read outside the billing cycle will have a \$45.00 charge. Requests for estimated finals will be in writing and a charge of \$5.00 per request will be applied to the current owner's utility account.

D. Restoration Charge.

1. Billings will only terminate upon disconnection from the system as defined in BLMC 13.04.080(A).

2. The restoration charge will be calculated by 10 percent of the new connection fee for the first year with each consecutive year adding an additional 10 percent up to 10 years after which a new connection fee will be required.

E. Fire Flow and Water Availability Certificate Completion Charge.

1. The following fee schedule applies to complete fire flow and water availability forms for submission to Pierce County or other entities or jurisdictions:

No testing required, all info available at City Hall	\$50.00
Testing required, info not available at City Hall	\$150.00
Fire flow analysis, if required	\$400.00

F. If a lock has been removed from a meter that has been locked off for any

reason, a \$100.00 fee will be charged in addition to any utility charges due and payable. If the meter or meter setter is damaged by this action, the property owner will be charged for the labor and materials to repair the service.

G. A returned check charge shall be imposed upon any account who, in full or partial payment of a city utility bill, tenders a check which is returned to the city for any reason.

H. Miscellaneous Charges.

1. Change of ownership	\$35.00
2. Returned check charge	\$35.00
3. Payment plan setup charge	\$15.00
4. Read outside standard cycle	\$45.00
5. Estimate final (per request)	\$5.00

(Ord. 1151 § 2, 2005).

13.04.100 Water rates.

A. Discount for Senior Citizens and Disabled Persons. Owners of single-family residences who have qualified for real estate property tax exemption through the Pierce County assessor-treasurer’s office on the basis of age and/or disability, and who present proof thereof to the appropriate authority of the city, shall qualify and be entitled to a reduced water rate as may, from time to time, be set by the city council and established as a 50 percent reduction from the water availability charge.

B. Monthly Water Rates – Within City Limits.

Water Availability Charge	
Meter Size	2008
5/8" – 3/4"	\$15.45
Qualified Senior, 5/8" – 3/4"	See subsection A.
1"	\$25.70
1-1/4"	\$51.05
1-1/2"	\$51.05
2"	\$81.70
3"	\$153.10
4"	\$255.00
6"	\$510.00

In addition, the consumption charge per 100 cubic feet (CCF), or any part thereof used, shall be as follows:

Winter (October 1st through May 31st)	2008
0 – 10 CCF per month	\$1.07
Over 10 CCF per month	\$2.12

Summer (June 1st through September 30th)

0 – 10 CCF per month	\$1.07
Over 10 CCF per month	\$3.63

C. Monthly Water Rates – Outside City Limits.

Water Availability Charge

Meter Size	2008
5/8" – 3/4"	\$20.00
Qualified Senior, 5/8" – 3/4"	See subsection A.
1"	\$33.30
1-1/4"	\$66.35
1-1/2"	\$66.35
2"	\$106.10
3"	\$199.00
4"	\$331.70
6"	\$646.80

In addition, the consumption charge per 100 cubic feet (CCF), or any part thereof used, shall be as follows:

Winter (November 1st through June 30th)	2008
0 – 10 CCF per month	\$1.55
Over 10 CCF per month	\$3.08
Summer (July 1st through October 31st)	
0 – 10 CCF per month	\$1.55
Over 10 CCF per month	\$5.27

D. Multiple Residential Units.

1. The water availability charge for a connection serving multiple residential units shall be the availability charge set forth above, multiplied by the number of dwelling units connected to the meter, as follows:

a. Each duplex unit will be billed as though separately connected to the water main, based on five-eighths- or three-quarters-inch meter rates.

b. In the case of apartment/trailer courts having one meter, each unit will be billed as though separately connected to the water main, occupied or not, based on five-eighths- or three-quarters-inch meter rates.

c. In the case of building lots which have been granted a conditional use permit to allow more than one dwelling on one service meter, each dwelling unit will be billed as though separately connected to the water main, based on five-eighths- or three-quarters-inch meter rates.

2. The consumption charge provided for in this section shall be applied to

multiple residential units as provided for above, except that the lower consumption charge rate shall be applied to the first "X" CCF per month, where "X" is the number of units served by the connection multiplied by 10. All consumption greater than that threshold will be charged the higher consumption charge rate.

3. There shall be only one water meter for each building housing multiple residential units.

E. Multiple Commercial and Industrial Buildings. Where all commercial or industrial buildings connected to a single service are used in the same business under single management, billing shall be made as for a single building.

F. Demand Charge.

1. Private fire hydrants, stand pipes, fire sprinkler systems, etc., shall have a monthly charge of \$3.00.

2. Special purpose use of water from fire hydrants or stand pipes shall be \$10.00 plus \$1.00 per 100 cubic feet for all water used inside the city limits and \$14.00 plus \$1.44 for all water used outside the city limits.

3. Where the water meters are shut off, the monthly charge will be \$5.00 within the city limits and \$6.90 outside the city limits.

4. Where unusual circumstances prevent a meter reading, water consumption will be estimated at an average of 1,000 cubic feet per month.

G. Leakage – Rate Reduction.

1. In the event that there is a leak in the water service line on the property owner's side of the water meter;

2. That after the service line is repaired by the owner and upon written request by the property owner, the city water department will make an adjustment in the water bill;

3. The adjustment shall be two-thirds of that portion of the customer's water bill which is over the average normal water usage. The adjustment shall be limited to the period of 90 days prior to the repair of the leak and inspection thereof.

4. Only one leakage adjustment will be allowed in any two-year period. Additional leaks will require on-site inspection and verification of repairs.

H. Irrigation Meters.

1. New multifamily (three or more units) and nonresidential connections shall be required to install a separate meter for irrigation use, effective January 1, 2005.

2. Existing multifamily (three or more units) and nonresidential connections shall be required to install a separate meter for irrigation use no later than January 1, 2007.

3. There shall be no availability charge applicable to irrigation meters. The commodity charge shall be 25 percent greater than the applicable commodity charge for nonirrigation usage that exceeds 10 CCF per month (the "tailblock"). (Ord. 1277 § 1, 2008; Ord. 1129 § 2, 2005; Ord. 1101 § 1, 2005; Ord. 1046 §1, 2004; Ord. 907 § 1, 2002; Ord. 828 § 3, 1999; Ord. 763 § 2, 1998; Ord. 692A § 3, 1994; Ord. 588 § 9, 1987).

13.04.105 Annual rate adjustment.

Effective January 1st of each year, beginning on January 1, 2009, the water rates listed in BLMC 13.04.100 shall be adjusted by the annual change in the most recent Seattle-Bremerton-Tacoma Consumer Price Index (Urban Consumers) published by the U.S. Department of Labor. (Ord. 1277 § 2, 2008; Ord. 692 § 4, 1994).

Article III. Regulations

13.04.110 General regulations.

A. All ordinances and water regulations shall be effective in the city and the water service area.

B. All water connections shall be metered.

C. Where more than one water connection supplies a premises, the consumption of water measured by each meter shall be computed and billed separately.

D. Unless otherwise stated in Article I, II, III or V of this chapter, each and every occupancy or use shall be served by a separate connection and shall be billed separately.

E. No new application for water connection will be honored until a septic tank permit or a sewer connection permit has been procured from the Pierce County health department or the city.

F. New water connections will be charged the minimum water availability charge beginning on the date of installation.

G. All water connections and all charges connected therewith are the responsibility of the owner of the property served.

H. Every water connection within the city limits shall be provided with garbage service as per Chapter 8.04 BLMC and its amendments. Garbage, sewer and water charges will be billed together. Any delinquency in garbage or sewer bills shall be deemed a delinquency as to water service.

I. All water taken or appropriated for use within the city shall be taken or appropriated from the municipal water supply of the city, pursuant to appropriate connections thereto in conformity with the ordinances of the city.

J. All buildings or structures within the city, designed, intended or actually used for human occupancy shall contain such plumbing as may be required by the appropriate provisions of the building code of the city, and shall be connected to the aforesaid municipal water utility of the city.

K. No building permit shall be issued unless and until a connection charge is paid to the aforesaid municipal water utility of the city in cases where it is appropriate under BLMC 13.04.030 and 13.04.070. If the building permit expires through suspension or abandonment under BLMC 15.04.081, the connection charge shall be refunded at the request of the applicant; provided, that if the applicant re-applies for a new permit pursuant to BLMC 15.04.081, the connection charge shall be re-calculated at current rates and the amount of the connection charge already paid and not refunded may be credited toward the new connection charge.

L. At such time as a property owner connects to city water service, through either development, new construction or when a property owner with a well chooses to connect to public water, the well must either be abandoned or deeded to the city.

M. Any property used or occupied in violation of the provisions of Articles I, II, III and V of this chapter shall be brought into conformity with the provisions hereof within 90 days of the effective date of the ordinance codified in this chapter. (Ord. 1230 § 20, 2007; Ord. 892 § 1, 2001; Ord. 588 § 3, 1987).

13.04.120 Water meters.

A. All meters provided and installed on water service connections shall be and remain the property of the city and shall be removed only by the city.

B. The city will maintain and repair all domestic and commercial services to and including the meter when rendered unserviceable by ordinary use and will replace meters periodically when necessary.

C. Where replacements, repairs or adjustments to any meter are made necessary

by improvements to the premises or by the willful act, neglect or carelessness of the owner or occupant of the premises served, all expenses of such replacement, repairs or adjustments incurred by the city shall be borne by the water customer. (Ord. 588 § 10, 1987).

13.04.130 Tampering.

Repealed by Ord. 1151. (Ord. 588 § 11, 1987).

13.04.131 Defrauding a public utility – Statutes adopted by reference.

RCW 9A.61.010, 9A.61.050, 9A.61.060 and 9A.61.070 are hereby adopted by reference. (Ord. 1151 § 4, 2005).

13.04.140 Special use of water.

A. Contractors, land developers and similar users shall be charged for water use at commercial rates as provided in BLMC 13.04.100.

B. Users desiring to install additional fire protection systems, auxiliary hydrants, etc., within their property will be subject to such additional expense as may be required by the city in the case of such installations. The cost of these installations, including a detector-check meter will be borne by the user desiring this type of protection. (Ord. 588 § 12, 1987).

13.04.150 Water system extension.

A. If a developer or other person desires to extend the water system he may do so under contract with the city and at his own expense; provided, he can comply with all the standards and conditions and other requirements of the city.

B. All developers shall furnish the city complete plans, cost estimates and specifications for the proposed extension of water service. Inspection of the construction will be by the city public works director or his designee, the cost of which shall be paid by the developer. The developer may consult the city public works director, prior to designing a water system in order to expedite such design. The public works director may determine that the city will contract directly with a consultant for a review of the developer's extension or installation plans and may bill the cost of such consultant to the developer. The public works director shall advise the applicant of the estimated costs of the inspection and review prior to the incurring of those costs; the applicant shall post bond, or otherwise ensure payment of such costs.

C. The city reserves the right to approve or reject any developer's extension or installation. All materials shall be new and bills of materials and evidence of payment of all bills and other necessary data will be required prior to the acceptance of the new water system extensions. Prior to acceptance by the city the developer must convey the extension to the city together with all necessary easements before actual connection.

D. All persons or local improvement districts desiring to extend water mains in the water service area must do so under the supervision of, and as directed by the public works director. All such extensions must be carried across the full width of the property being served except in those cases, where, in the opinion of the public works director, the utility involved can never, under any circumstances, be extended beyond the property being served.

E. Where a water main is extended along a street at the expense of the property owner or owners on the portion of the street only, or where such a line is extended through property not to be currently served and not contributing to the cost of the

line, the person or persons paying said costs may be reimbursed by the noncontributing property owners at the time these owners connect to the water main, as per the provisions of RCW 35.91.020.

F. Service to properties that are not on a water main and can only be serviced by a long extended service line is not allowed. (Ord. 588A § 1, 1994; Ord. 588 § 13, 1987).

13.04.160 Use of hydrants.

A. It is unlawful for any person other than properly authorized employees of the city or Pierce County Fire Protection District No. 22 to operate fire hydrants and hose outlets unless arrangements have been made with the city for payment for such water and written permission has been granted by the fire chief of Pierce County Fire Protection District No. 22.

B. When it is deemed necessary, the city will furnish an inspector to operate a fire hydrant or hose connection to avoid damage and to obtain the necessary information for computing the volume of water consumed. Water supplied, together with the expense for the services of the inspector and equipment furnished, will be charged at the city's cost. (Ord. 851 § 12, 2000; Ord. 588 § 14, 1987).

Article IV. Water Service Cross-Connections

13.04.170 Inspection and right of access.

Authorized employees of the city water system with proper identification shall have free access at reasonable hours of the day, to all parts of a premises or within buildings to which water is supplied. Water service may be refused or terminated to any premises for failure to allow necessary inspections. (Ord. 577 § 5, 1986).

13.04.180 Responsibility of customer.

Water service to any premises shall be contingent upon the customer providing cross-connection control in a manner approved by the city water system. (Ord. 577 § 3, 1986).

13.04.190 Prohibited.

The installation or maintenance of any cross-connection which would endanger the water supply of the city water system is prohibited. Any such cross-connection now existing or hereafter installed is declared unlawful and shall be adapted immediately. (Ord. 577 § 1, 1986).

13.04.200 Citation of specific standards.

The control or elimination of cross-connections shall be in accordance with WAC 248-54-275. The policies, procedures and criteria for determining appropriate levels of protection shall be in accordance with the Accepted Procedures and Practice in Cross Connection Control Manual-Pacific Northwest Section-American Waterworks Association, Third Edition, or any superseding edition. (Ord. 577 § 2, 1986).

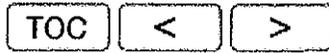
13.04.210 Backflow devices.

Backflow devices required to be installed shall be a model approved by the State Department of Social and Health Services. (Ord. 577 § 4, 1986).

Article V. Enforcement

13.04.220 Violation – Penalty.

Any person, firm or corporation willfully violating any of the provisions of Articles I, II and III of this chapter is guilty of a misdemeanor. Said person, firm or corporation shall also be subject to the provisions of RCW 80.28.240 providing for civil damages. (Ord. 588 § 16, 1987).



This page of the Bonney Lake Municipal Code is current through Ordinance 1318, passed April 14, 2009.

Disclaimer: The City Clerk's Office has the official version of the Bonney Lake Municipal Code. Users should contact the City Clerk's Office for ordinances passed subsequent to the ordinance cited above.

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