

THE WATERWORKS UTILITY

General Description

The Waterworks Utility includes the City's water, sewerage and storm and surface water utilities (the "Water System," the "Sewer System," and the "Storm and Surface Water System"). The Waterworks Utility is managed and operated within the City's Public Works Department (the "Department"). Approximately 40 employees are part of the Department, which also includes streets, traffic signals, solid waste and recycling and City equipment.

The Department is overseen by the Director of Public Works, Gregory Clark, P.E. Mr. Clark is responsible for managing all aspects of Public Works and its sub-departments, in addition to budgetary development and adherence. He has held that position since December 2012. Mr. Clark's previous experience, under a professional services contract through Parametrix, includes serving as the City of Fircrest's Public Works Director and as a field engineer and construction manager for King County Flood Protection Projects. Prior to that, he worked 30 years for the City of Tacoma's Public Works Department, 15 of which were serving as the Assistant Engineering Division Manager of the Transportation Design Section. Mr. Clark has a bachelor's degree in Civil Engineering, a Certificate in Public Administration and Management and is a registered Professional Engineer in Washington State.

Rates

The City uses the services of independent consulting firms to conduct evaluations of its utility rates. The most recent rate study for the Water System was prepared in December of 2010, and the recommended rates were adopted for a 2-1/2-year period by the City Commission, beginning with the July 2011 billings. A draft rate study for the Sewer System was completed in March of 2013, and recommended rates were adopted on March 25, 2013 for rates effective beginning with the June 2013 billings. That study also recommended a rate increase of 20% in 2014, 5% annual increases in years 2015 – 2018 and 8% increases in 2019 and 2020, and a 3% increase in 2021, which the City Commission will consider in the future. A rate study for the Storm and Surface Water System was completed in April 2008, and current rates were adopted on May 27, 2008 for a six-year period, with rate adjustments effective beginning with the July 2008 billings.

The following table shows the percentage of rate increases adopted for the Waterworks Utility between 2008 and 2013. Percent changes are presented for the first 900 cubic feet of water used. In some years, the percent of change was different for higher amounts of water consumed.

Utility	Rate Increases Effective June 1, 2013					
	2008	2009	2010	2011	2012	2013
Water	4.0%	0.0%	0.0%	-2.9% ¹	8.8%	9.0%
Sewer	8.9	5.7	6.1	0.0	4.9	20.1
Storm & Surface Water	5.9	6.1	6.3	5.9	6.0	6.1

¹ Although rates went down for the first 900 cubic feet of water used, the overall increase in 2011 was 9.0%.

General Facilities Charges

Pursuant to RCW 35.92.025 and RCW 57.08.005, the City may impose charges for connecting to its Water System and Sewer System as an equitable share of the cost of facilities. The City's rate studies recommended the collection of capital improvement charges, which the City collects. See the subheadings below "- Water System - *Rates and Charges*" and "- Sewer System - *Rates and Charges*."

Service Agreements

In 2000, the City, along with the Washington State Department of Corrections ("DOC"), the Washington State Patrol ("WSP"), the Port of Shelton (the "Port"), and Mason County began cooperatively planning a regional water and wastewater system (see "- Regional Water and Sewer Plan" below). In 2006, these planning efforts led to the negotiation of utility service agreements (the "Agreements"). Under an Agreement with the Port, dated October 24, 2011, the City has agreed to provide water to the Port at wholesale rates. Under an Agreement with WSP, dated July 19, 2010, the City has agreed to provide water to the WSP Academy, located at the western edge of the City's Urban Growth Area ("UGA"), as designated by the State Growth Management Act. In a separate Agreement with WSP dated July 24, 2006, the City has agreed to provide wastewater service to the WSP Academy. Under an Agreement with the DOC dated July 24, 2006 (amended twice since), the City has agreed to provide wastewater service to the DOC's correctional facility (a defined "essential facility" outside of the Shelton UGA).

In separate Agreements with DOC and WSP, both dated July 14, 2006, the City has agreed to provide Class A reclaimed water, as defined by Washington State Department of Health ("DOH") and DOE, to both agencies' facilities following treatment at the City's Satellite Water Reclamation Plant (the "Satellite WRP"). The City, WSP and DOC are Regional Partners in the Regional Water and Sewer System (see "- Regional Water and Sewer Plan" below). Under the Agreements, the City collects certain fixed charges for operation and maintenance ("O&M charge") plus treatment and discharge charges and City taxes. The charge for treatment and discharge is variable and may be raised by the City, subject to an agreed-upon escalation factor, whereas the O&M charge may be adjusted periodically based on actual costs to operate the facility. The Agreements, subject to amendments, are in affect for a period of 40 years. The City has agreements with the Partners to incorporate fees and charges into the Shelton Municipal Code.

See "- Regional Water and Sewer Plan," "- Water System" and "- Sewer System" below for a discussion of the treatment plants referred to above, and a description of each utility in the Waterworks Utility.

Billing Policies & Delinquent Bill Procedures

The City's combined utility bills are mailed to customers monthly. All accounts for City utilities are billed around the 25th day of each month. Payments are considered past due after 35 days from the date of the bill and are subject to a fee of \$5.00. A notice of delinquency is then mailed, stating the account number, the amount needed to bring the account current, the date that payment must be received by to avoid being placed on the disconnect list, and the name, address and phone number of the City department which may be contacted for further information on the non-payment process.

All accounts which are at least seven days past due shall be placed on the monthly disconnect list, unless credit arrangements have been made. Any account placed on the list is charged a fee of \$10.00. Before any account is disconnected, a notice of disconnect is posted at the account service address.

Said notice states the account number, the amount needed to bring the account current, the date that utility service will be disconnected if payment or arrangements are not made, and the name, address and phone number of the City department which may be contacted for further information on the non-payment process. An additional fee of \$20.00 is charged any account for re-establishing any disconnected services.

Compliance with Rules and Regulations

In January 2009, DOE served the City with an Administrative Order dictating a schedule for completing improvements to the City's main wastewater treatment plant located downtown (the "Main WWTP"), in response to violations of its National Pollutant Discharge Elimination System ("NPDES") permits for inflow to the Main WWTP. At that time, the Main WWTP was over 30 years old, beyond its expected design life, and operating approximately 12% over its designed capacity for loading of biological solids. The City has since taken a number of steps to address overload of biological solids and capacity issues identified by DOE in the Administrative Order, including the construction of the Satellite WRP. See "*- Regional Water and Sewer Plan*" and "*- Sewer System*" below for descriptions of the steps and projects the City has undertaken to address these issues.

The City believes the Waterworks Utility is currently operated in compliance with all federal and State environmental rules and regulations. The City has current permits for both of its sewage treatment plants, which are not currently required to be covered under the NPDES – Stormwater General Permit. The Satellite WRP permit was issued on October 2, 2009, with an expiration of October 31, 2014, and the Main WWTP permit was issued on March 14, 2008, with an expiration of March 31, 2013. The Main WWTP permit is currently being processed for renewal by DOE.

Capital Improvement Program

The City has identified future capital needs of the Waterworks Utility based on factors that include expected growth, regulatory requirements, and financial priority. The City has adopted a Comprehensive Plan, which incorporates growth and capital needs and sources of funding through utility-specific Comprehensive Plan updates, which are updated every six years. The Waterworks Utility's planned capital projects and expected timing are included within a Capital Improvement Plan ("CIP") as part of these updates, and are presented under the subheadings "*- Water System – Water System Future Capital Projects*," "*- Sewer System – Sewer System Future Capital Projects*" and "*- Storm Drainage System – Storm Drainage System Future Capital Projects*."

Regional Water and Sewer Plan

To meet increasing water and sewer demand and address the violations of its NPDES Permit described under "*- Compliance with Rules and Regulations*" above, the City entered into a succession of inter-governmental agreements related to a Regional Water and Sewer Plan (the "Regional Plan"), with the City serving as the lead agency and owner responsible for the operation and maintenance of the upgraded systems.

Phase I of Regional Plan included construction of the Satellite WRP, which was completed and accepted by the City on July 15, 2010. The total cost of Phase I was \$20,803,317 for design and construction. The City utilized a State and Tribal Assistance Grant (STAG) from the EPA in the amount of \$1,359,200 to support construction. The City issued \$465,000 in revenue bonds for design and received a PWTF loan of \$2,079,360 for construction. The County awarded the City monies, from the State Community Economic Revitalization Board's .08 Grant Funds for assistance in repaying these loans. The WSP and DOC provided approximately 75% of the funding for Phase I, which came from the State's Capital Budget appropriations. Currently, the WSP and DOC are the City's only

customers of the Satellite WRP and are assessed monthly fees based upon the level of services provided.

Phase II of the Regional Plan, the Dayton-Airport Road Water Expansion Project, is being funded 100% by WSP and DOC. A base mapping document was completed in 2005 to be used for this phase. The City, acting on behalf of these agencies, started design in August of 2010, with funding from its 2009-2011 State Capital Budget appropriations for this project. The agencies secured funding for the construction phase costs of this project in a supplement to their 2011-2013 biennial budgets for construction in the spring of 2013. The design cost was \$564,427 and construction is estimated to be approximately \$3 million, making the total cost for this phase an estimated \$3.5 million.

Phase III of the Regional Plan, the Johns Prairie Utilities Extension Project, was initiated by Mason County Public Utility District No. 3 ("PUD No. 3") by extending water to its new facility in the Johns Prairie area. As the developer, PUD No. 3 financed the design and construction of this portion of the project's water line and it is contributing this water line extension to the City. The City continues to plan for the sewer and reclaimed water portion of this phase. These projects are being financed through a mix of grants and loans, and the formation of new partnerships with each entity paying a balance of the proportional share of the plan, per an agreed-upon future capacity of the Water and Sewer Systems that they will need.

Phase IV, the design of improvements to the City's Main WWTP, began in March 2008. The City has secured and utilized a \$1,390,850 State Revolving Fund loan, administered by the DOE, and a \$1 million PWTF loan for design. For construction, the project was awarded a grant and loan combination of \$8.722 million from the USDA-RD Program in 2006, followed by a subsequent grant and loan combination of up to \$25.114 million in 2009 and 2010. The WSP and DOC are providing approximately 3.3% of the funding for this phase. Total cost for this project is estimated to be \$33.1 million with construction beginning in January 2010 scheduled to be completed in the fall of 2014.

All of the water and sewer facility projects included in the Regional Plan are projected to be operational by the end of 2014, except for the Johns Prairie Sewer and Reclaimed Water piece of Phase III, which will be addressed at a later date. Total projected costs for all phases of the Regional Plan water and sewer projects are \$62.5 million.

See "- Water System – *Water System Future Capital Projects*" and "- Sewer System – *Sewer System Future Capital Projects*" below for further description of the projects being addressed under the Regional Plan and their costs and sources of funding.

Water System

Existing Water Supply Source

The Water System includes three groundwater sources that are used to supply the City with potable water. The City also owns the Shelton Springs (the "Springs"); however, this source has not been used since 2000 due to a directive from the DOH to provide additional treatment. The City intends to undertake capital improvement projects that will allow the Springs to be returned to service and meet DOH requirements. Wells No. 3 and 4 each have a pumping capacity of 1,200 gallons per minute ("gpm"), while Well No. 1 has a capacity of 1,500 gpm. All of the wells are controlled by the Water System's supervisory control and data acquisition ("SCADA") system, which was upgraded in 2009, based on the level of the reservoirs. Well No. 1 is generally the last pump to be activated due to water quality concerns with this source. City water is currently disinfected with sodium hypochlorite at each source; however this treatment method is inefficient for Well No. 1 due to the high level of hydrogen

sulfide present in the water. Construction of a water treatment system to address the hydrogen sulfide issues for Well No. 1 is planned as part of the City's six-year CIP. See "*Water System Future Capital Projects*" below for a description of specific projects included in the CIP, their timing and source of funding.

The Water System includes one storage tank for each pressure zone within the service area: Mountain View (611,000 gallons), Angleside (448,000 gallons), Downtown (High School) (507,000 gallons), and Capital Hill (218,000 gallons), which together provide a combined total storage capacity of 1,784,000 gallons. The Water System includes three booster pump stations and each pump station is equipped with two pumps. A portion of proceeds of the Bonds will be used to implement a new Upper Mountain View Pressure Zone for water storage and treatment and for the construction of the Angleside Booster Pump facility.

Analysis shows that the City has sufficient capacity from its existing wells and the Springs to meet projected demand through 2029. The City plans to construct a new well with a capacity of 750 gpm in either the Angleside or the Upper Mountain View pressure zone to further enhance source reliability, tentatively planned for 2020. Timing for the completion of the new source will depend on the completion of a water rights transfer for a portion of the Springs water right and future demand.

Water Production

Annual water source production (in millions of gallons) for the years 2008 through March 2013 is shown in the following table.

Source	2008	2009	2010	2011	2012	2013 ¹
Well No. 1	7.2	12.1	17.0	19.9	15.5	3.2
Well No. 3	215.4	217.3	208.3	214.5	197.5	28.8
Well No. 4	160.8	162.6	137.3	138.5	158.3	37.8
Total ²	383.4	392.0	362.6	372.9	371.3	69.8

¹ Through March 31, 2013.

² Figures include water pumped but lost in the distribution system. This is water loss through leakage and breaks, and averages 5% to 7% per year.

Annual Flow, Daily Flow and Peak Demand

Following is a table presenting annual water flow from deep wells, peak monthly flow and peak month for years 2008 through 2012.

Year	Total Annual Flow (MG)	Peak Monthly Flow (MG)	Peak Flow Month
2012	371.4	50.0	August
2011	372.9	48.6	August
2010	362.7	48.0	August
2009	392.0	52.6	July
2008	383.4	50.9	July

Existing Distribution System

The City's water transmission and distribution system consists of pipes ranging in diameter from 1 to 24 inches. Nearly 60 miles of water distribution main in the system are used to convey water to approximately 3,763 service connections.

Water Rates and Charge

The 2013 monthly Water System meter charges per unit are as follows.

Service	Single-Family	Multi-Family	Commercial	Irrigation	Private Fire Line
3/4 inch	\$ 9.70	\$ 8.55	\$ 8.26	\$ 25.63	\$ 7.59
1 inch	12.60	10.68	10.20	39.21	9.07
1 ¼ inch	15.66	12.78	12.07	55.50	10.38
1½ inch	18.72	14.88	13.92	71.77	11.68
2 inch	28.02	21.88	20.35	112.94	16.76
3 inch	69.02	56.71	53.66	239.02	46.48
4 inch	95.99	76.76	71.98	361.59	60.76
6 inch	166.70	128.26	118.70	697.73	96.27
8 inch	250.31	188.82	173.53	1,100.01	137.64
10 inch	376.53	288.13	266.14	1,598.10	214.55
12 inch	576.21	446.49	414.23	2,368.65	338.53

The 2013 monthly Water System consumption charges per unit are as follows.

Service	2013
Single-Family Residential/Duplex	
0 cf ¹ - 600 cf	\$0.0203
600 cf - 1,500 cf	0.0243
>1,500 cf	0.0302
Triplex/Multifamily/Mobile Home	0.0236
Commercial (Including Hotel/Motel)	0.0232
Irrigation	0.0302
Wholesale Rate	0.0210

¹ Cubic feet.

For new water connections, the City collects a General Facility Charge, which ranges from \$2,800 for a ¾" meter to \$224,000 for an 8" meter.

Major Water System Customers

Following are the ten largest Water System customers and their billing in 2012. Total Water System operating revenue in 2012 was \$1,632,812.

Business	2012 Amount Billed	Percent of 2012 Water Revenue
Timber Products	\$ 23,685	1.45%
Utility	13,509	0.83
Healthcare	12,940	0.79
Government	11,849	0.73
Education	10,757	0.66
Healthcare	10,467	0.64
Government	10,113	0.62
Retail Store	8,418	0.52
Government	8,059	0.49
Healthcare	7,180	0.44
Totals	\$116,977	7.17%

Water and Sewer Customers and Usage

The following tables present Water and Sewer System customers by type and water consumption for years 2010 through 2012.

Customer Type	2010		2011		2012	
	Water Accts.	Sewer Accts.	Water Accts.	Sewer Accts.	Water Accts.	Sewer Accts.
Commercial	357	323	365	323	360	324
Duplex	125	112	125	112	124	111
Fire Line	55	0	61	0	62	0
Governmental	58	47	58	47	62	49
Hotel/Motel	3	3	3	3	3	3
Industrial	2	2	2	2	2	2
Irrigation	99	0	99	0	101	0
Multunit	94	94	98	98	98	98
Residential	2,945	2,654	2,947	2,660	2,951	2,666
Total	3,738	3,235	3,758	3,245	3,763	3,253

Annual Water Consumption (Cubic Feet)

Customer Type	2008	2009	2010	2011	2012
Commercial	9,471,462	8,710,491	8,708,724	8,139,174	9,152,932
Duplex	1,086,941	981,983	950,712	1,098,463	1,092,961
Fire Line ¹	0	0	0	0	0
Governmental	3,073,806	3,080,630	2,915,829	3,467,111	2,890,358
Hotel/Motel	207,480	271,503	285,691	342,298	319,621
Industrial	433,340	247,190	232,220	256,470	180,370
Irrigation	1,683,887	5,122,501	3,660,739	3,611,222	5,195,368
Multunit	5,261,868	4,512,892	4,125,308	4,007,122	4,053,585
Residential	21,775,577	21,108,434	19,910,619	19,895,294	20,923,177
Total	42,994,361	44,035,624	40,789,842	40,817,154	43,808,372

¹ Water consumption for Fire Line customers is included with Commercial customer consumption.

Water System Future Capital Projects

Following are the City's long-term planned capital improvements to the Water System through 2029.

Project	Project Cost Estimate	Estimated YR Construction	Funding Source
Shelton Springs Disinfection	\$ 706,580	2017	TBD
Slip-Line Pipe from Shelton Springs to HS Reservoir	905,520	2017	TBD
Upgrade Well No. 3 (Upper Mt. View Pressure Zone)	375,000	2014/2015	Bond Proceeds
Aquifer Studies	100,000	2013/2014	Rates & Chgs.
New Angleside Source	1,460,000	2020	TBD
Regional Sys. Storage & Tmt. (Upper Mt. View PZ) ¹	4,083,000	2014/2015	Bond Proceeds
Booster Pump at Angleside Reservoir ¹	1,100,000	2014	Bond Proceeds
New Angleside Reservoir Land Acquisition	100,000	2018	TBD
New Angleside Reservoir	1,234,000	2018	TBD

13th St. Transmission Main	367,000	2016	Rates & Chgs.
12th St. Transmission Main	185,000	2016	Rates & Chgs.
Miscellaneous Distribution System Upgrades	220,000	2015	Rates & Chgs.
High School Loop Distribution Project	106,000	2016	Rates & Chgs.
Euclid Avenue Transmission Main	264,000	2017	TBD
Other Distribution Projects	2,100,000	2016 - 2029	TBD
High School Reservoir Re-coating	387,000	2017	Rates & Chgs.
Reservoir Inspections	30,000	2014/16/18	Rates & Chgs.
Planning and Water Rights Updates	80,000	2015	Rates & Chgs.
Total	\$13,803,100		

¹ All or a portion of these projects will be funded with proceeds from the Bonds.

Source: City's Updated 2010 Comprehensive Water Plan – Capital Projects (updated in 2013).

Water Conservation Plan

Residential water users account for approximately 63% of total water consumption (including single-family, multifamily and duplex units). Single-family residential users account for 50% of consumption. The City has adopted certain water conservation program goals in compliance with the State's Municipal Water Law, that include reducing total water consumption by one percent annually, reduce distribution system leakage to 15% or less within six years and reduce residential water consumption by 3% over the next six years. The City is using a number of tools to help achieve these goals, among which are: use of a water reclamation plant, requiring efficient fixtures in new development, monitoring and reporting consumption on water bills, leak surveys, public education efforts, providing water conservation kits and utilizing a rate structure that encourages conservation.

Sewer System

The Sewer System collects and conveys household and industrial wastewater through five pump stations and 52 miles of sewer lines. The City operates and maintains its Main WWTP at 1700 Fairmount Avenue. The Satellite WRP, a water reclamation treatment facility, was completed in 2012 to serve the northwest portion of the service area. The Main WWTP, built in 1979, was designed to provide required treatment until the year 2000. The Main WWTP was originally designed to treat a high-flow of four mgd, and annually averages of about 2.2 mgd. The Main WWTP discharges highly treated wastewater (effluent) into Oakland Bay through an outfall that extends 1,250-feet into the bay. The discharge pipe is at an elevation of -43.2 feet to ensure adequate disposal of the effluent.

In 1997, the City was given an order by the Washington State DOE to correct excessive infiltration and inflow ("I&I") of groundwater, which occurred particularly during the winter months. To address this matter and other Water and Sewer System needs, the City became the lead agency in developing and executing the Regional Plan, described above under "Regional Water and Sewer Plan." Major upgrades to the Main WWTP were completed in late 2012. The newly upgraded Main WWTP has designed capacities of 3.0 mgd annual average daily flow, 4.41 mgd maximum monthly average, and a peak hourly flow of 12 mgd with the upgrades. The outfall diffuser was also extended 96 linear feet into Oakland Bay and lowered to a depth of -53.0 feet. In addition, several I&I projects to Basins No. 1, 2 and 5 have been completed or are nearing completion. These projects have reduced I&I by an estimated 2 mgd.

In 1997, a Facility Plan Update (the "1997 Plan") determined that Basin 3 was experiencing an I&I flow factor of approximately 11,000 gallons per acre per day ("gpad"), and required significant I&I reduction measures and that the entire system needed to be replaced. Design of Basin 3 replacement

began in 2012 with completion anticipated in 2015. Basin 3 consists of approximately 16,000 linear feet of pipe ranging in diameter from 6-inch to 18-inch.

The 1997 Plan also revealed that Basin 6 experienced significant I&I throughout the Waterworks Utility as well with an I&I flow factor of approximately 6,500 gpad. Replacement of Basins 4 and 6 is planned for completion as part of an annual system maintenance program over the course of 10 to 15 years.

In addition to the above basin improvement projects, the City's 2013 Comprehensive Sewer Plan Update identifies a number of trunk line upgrade and replacement projects, pump station improvement projects, and Sewer System expansion requirements to meet projected growth. Among these anticipated future projects is the expansion of the existing Satellite WRP and potential construction of a second Satellite Plant, or other treatment facility near the John's Prairie area, to address future treatment needs. The development of both of these projects will depend on growth, type of growth and resulting flows. These projects, their projected construction dates and sources of funding are identified below under "*- Sewer System Future Capital Projects.*"

Sewer Moratorium and Impact on Development

On June 15, 2009, the City Commission established a development moratorium in accordance with Ordinance No. 1747-0609, limiting new sewer connections to 40 Equivalent Residential Units (ERUs). In addition to responding to permit violations, the 2009 Administrative Order issued by DOE, and the treatment capacity issue, the City also wanted to be proactive in protecting the waters of Oakland Bay from potential contamination. The City's planned construction schedule, which called for the Main WWTP upgrade project to be put out to bid in September 2009 and completed by June 2012, put the City well ahead of the schedule dictated by DOE. Ordinance No. 1747-0609 included a list of applicants that identified the projects eligible for allocation of the 40 ERUs. The moratorium was lifted on December 6, 2010, due in part to the prolonged recession and lower new construction activity, and in part, to the progress on the Main Plant upgrades which were already under construction. In addition, the City had secured funding to commence the Basin 5 I&I Reduction Project early in 2011. As improvements have been constructed, I&I flows to the WWTP are being reduced, freeing up additional treatment capacity.

The City benefited from revenues received from planned development and public sector projects constructed during the recession. In 2008, permit activity was bolstered by construction of the new Saint Edwards Church, which included payment of water and sewer GFCs. In 2009, the City commenced the reconstruction of the Main WWTP and a significant remodel and expansion of the downtown Fire Station. In 2010, there was an increase in new residential construction starts which were delayed from the prior year (and during the moratorium), as well as improvements to the PUD No. 3 facility and an extension of City water to the main PUD No. 3 campus in Johns Prairie. The County also commenced construction of a major upgrade to the Courthouse. In 2011, Mason General Hospital began construction of its \$34 million expansion and upgrade project. In 2012, there were no significant public sector projects permitted, which reflects the downturn in both building permit and GFC revenues.

In 2013, the City is expecting an increase in permit activity over 2012. The City will soon issue building permits for the Mason County Shelter Project, which will provide new transitional housing for residents of the County who are trying to recover financially. This project will generate over \$74,000 in sewer GFCs and \$28,000 in water GFCs. In addition, the City anticipates that in early 2014, construction will commence on the Shelton Hills development, a 604-acre master-planned development that will include over one million square feet of mixed-use development (commercial,

business park, and public facilities) and approximately 1,750 new residential units, to be constructed over the next twenty years. The Project Planned Action Environmental Impact Statement (EIS) for this project is expected to be released for public comment in June 2013.

Annual Flow, Daily Flow and Peak Demand

Following is a table presenting annual sewage flow, average monthly flow, the peak flow and date of peak flow for years 2008 through 2012 at the City's two treatment plants.

Main Wastewater Treatment Plant

Year	Total Flow (MG)	Average Monthly Flow	Peak Daily Flow	Date of Peak Daily Flow
2012	866.3	72,190,000	7,590,000	11/19/12
2011	804.5	67,040,000	8,600,000	01/16/11
2010	785.0	65,420,000	9,410,000	12/12/10
2009	696.4	58,030,000	9,790,000	01/07/09
2008	672.7	56,060,000	6,130,000	11/12/08

Reclaimed Water Treatment Plant Satellite

Year	Total Flow (MG)	Average Monthly Flow	Peak Daily Flow	Date of Peak Daily Flow
2012	78.4	6,534,000	305,000	06/01/12
2011	83.9	6,992,000	408,000	03/11/11
2010	65.9	5,995,000	282,000	04/08/10

Sewer Rates and Charges

The City Commissioners adopted Ordinance No. 1824-0313 on March 18, 2013, which includes the 2013 monthly sewer service charges becoming effective with the June 2013 billings.

Service	Charge
Single-Family Residential/Duplex	
Base Charge	\$31.9800
Consumption Charge	0.0640
Without Water Service	82.1000
Triplex/Multifamily/Mobile Home	
Base Charge	\$31.9800
Consumption Charge	0.0691
Commercial	
Base Charge	
0 cf ¹ – 1,000 cf	\$38.7500
1,000 cf – 2,000 cf	57.9600
>2,000 cf	80.4000
Consumption Charge	0.0692
Hotel/Motel (Each Unit)	
Base Charge	\$5.8600
Consumption Charge	0.0692

¹ Cubic feet.

General Facility Charge

For new sewer connections, the City collects a General Facility Charge, which ranges from \$7,240 for a ¾” meter to \$579,200 for an 8” meter. New connections in the Grandview Heights Development pay 50% lower connection fees.

Major Sewer System Customers

Following are the ten largest Sewer System customers and their billing in 2012. Total Sewer System operating revenue in 2012 was \$3,412,685.

Business	2012 Amount Billed	Percent of 2012 Sewer Revenue
Corrections	\$497,830	14.59%
Timber Products	60,874	1.78
Law Enforcement	56,295	1.65
Timber Products	55,112	1.61
Healthcare	33,598	0.98
Education	27,663	0.81
Healthcare	26,745	0.78
Government	26,384	0.77
Retail Store	22,807	0.67
Healthcare	19,467	0.57
Totals	\$826,775	24.23%

Sewer System Future Capital Projects. Following are the City’s planned capital improvements to the Sewer System through 2029.

Project	Project Cost Estimate	Estimated Year of Construction	Funding Source
Repair and Rehabilitation Projects:			
Basin 3 I&I Reduction	\$ 3,706,351	2014	Grant
Improvement Projects:			
Trunk Line 1	1,401,000	2014	Developer & Fees
Trunk Line 2	376,000	2016	Fees & Charges
Trunk Line 3	401,000	2017	Fees & Charges
Trunk Line 4	161,000	2018	Fees & Charges
Trunk Line 5	41,000	2021	Fees & Charges
Trunk Line 6	164,000	2021	Fees & Charges
Enhanced Model (O&M)	200,000	2014-2021	Fees & Charges
On-Going Monitoring and I/I Evaluation Study (O&M)	75,000	2014-2029	Fees & Charges
Pump Station Evaluation (O&M)	50,000	2014-2021	Fees & Charges
Force Main Inspection and Repair Program (O&M)	30,000	2014-2029	Fees & Charges

Expansion Projects:

Existing Satellite WRP Expansion Phase II	21,000,000	2019-2020	Grant or Developer
New Satellite WRP Construction	23,100,000	2025-2026	Grant or Developer
Main WWTP Mitigation upgrades	2,677,710	2013	USDA Grant
Genie Motorized Lift	20,000	2013	Fees & Charges
KPPS Dmg Pump Replacement	106,000	2013	Fees & Charges
Basin 5 Improvements Completion	4,222,126	2013	USDA Loan
Total	<u>\$57,731,187</u>		

Source: 2013 Sewer Comprehensive Plan Update – Capital Improvements Plan.

Storm and Surface Water System

The Storm and Surface Water System is designed to protect water quality and prevent flooding. The City maintains a system of underground pipe, storm drains and stormwater ponds that carry stormwater runoff from roads and rooftops to local streams, Oakland Bay and Hammersley Inlet. Water runoff quantity and quality is monitored for pollutants to determine changes. The City addresses drainage issues through education and outreach programs, technical assistance and with regulations.

A six-year Storm and Surface Water Comprehensive Plan was prepared by an independent consultant in May 2008. The plan identified a multi-phased program for the utility which addressed regulatory compliance matters, system monitoring and reporting methodology, staffing needs, and capital improvement goals, among others. To implement the plan, sources of funding were identified, which resulted in the City’s adoption of an ordinance that included rate increases over a 6-year period through 2013. See “THE WATERWORKS UTILITY – Rates” above for the percent increase in rates over that period.

Storm and Surface Water Rates and Charges

The City Commission adopted Ordinance No. 1727-0508 on May 27, 2008, which includes the current monthly Storm and Surface Water service charges presented in the following table.

Service	Charge
Single-Family Residential/Duplex	
Base Charge	\$12.10
Commercial, Hotel/Motel, Triplex/Multifamily/Mobile Home	
<5,000	\$ 22.70
5,001-10,000 sq. ft.	45.40
10,001-25,000 sq. ft.	71.00
25,001-35,000 sq. ft.	106.40
35,001-55,000 sq. ft.	141.85
>55,000 sq. ft.	283.70

Major Storm and Surface Water Customers

Following are the ten largest Storm and Surface Water System customers and their billing in 2012. Total Storm and Surface Water System operating revenue in 2012 was \$678,293.

Business	2012 Amount Billed	Percent of 2012 Stormwater Revenue
Education	\$20,556	3.03%
Government	11,860	1.75
Government	9,379	1.38
Real Estate	8,042	1.19
Education	6,424	0.95
Healthcare	6,042	0.89
Utility	6,025	0.89
Construction	4,419	0.65
Lumber	4,417	0.65
Property Management	3,469	0.51
Total	\$80,633	11.89%

Storm and Surface Water Customers and Usage

The following table presents Storm and Surface Water System customers by category for years 2010 through 2012.

Year	2010	2011	2012
Commercial	364	363	359
Duplex	113	113	113
	45	45	47
Hotel/Motel	3	3	3
Industrial	1	1	1
Irrigation	4	4	4
Multi-unit	88	89	89
Residential	2,828	2,829	2,833
Total	3,446	3,447	3,449

Storm and Surface Water System Future Capital Projects

Following are the City's planned capital improvements to the Storm and Surface Water System through 2020. To date, \$1,050,000 of projects identified in the 2008 Six-Year Surface and Stormwater Comprehensive Plan have been completed.

Project	Project Cost Estimate	Estimated Yr. of Construction	Funding Source
Canyon Creek Habitat, Water Quality, and Flood Reduction Project	\$4,510,000	2019	Rates
North 3rd & Laurel Streets Conveyance	390,000	2015	Rates

System Upgrades			
West Franklin Street Drainage Improvements	610,000	2020	Rates
Ravenna Trail Drainage Outfall Improvements	160,000	2017	Rates
East Mt. View Drainage Improve. (Conveyance partially completed)	1,000,000	2019	Rates
South Eighth Street and May Avenue Flood Reduction	290,000	2016	Rates
Boundary Street Stormwater Conveyance Improvements (Primarily completed - treatment component remains)	250,000	2018	Rates
Laurel Street Drainage Improvements Between 2nd and 7th Streets	440,000	2015	Rates
South Front and East Grove Streets Flooding Reduction	250,000	2020	Rates
Total	\$7,900,000		

Source: City of Shelton Six-Year Surface and Stormwater Comprehensive Plan, May 2008.

Regional Utility Rate Comparison

The following utility monthly residential rate information for the City and nearby utilities was extracted by the City from each utility's website in April 2013.

City	Water Rates	Sewer Rates	Stormwater Rates
Montesano	\$29.51	\$29.06	\$ 2.49
Elma	19.99	39.03	--
Tumwater	22.58	48.61	8.01
Lacey	20.91	50.47	7.36
Yelm	31.77	51.00	2.50
Olympia	20.34	52.53	11.21
Kent	35.49	57.06	11.09
Bremerton	23.30	62.18	9.54
The City Current	25.23	65.99	12.10
Centralia	42.20	78.04	6.00
The City (June 2013)	25.23	79.21	12.10
Chehalis	33.35	84.76	6.45
Seattle	50.76	85.98	24.10
Belfair	95.66	96.00	--
Camas	19.01	43.96	9.27
Gig Harbor	44.24	66.70	12.93

Source: The City's survey of other city websites.

Water monthly rates calculated for residential customers, 3/4" meter in City, using 738 cf per month.
Stormwater monthly rates calculated for residential customers.

WATERWORKS UTILITY DEBT AND OPERATING RESULTS

The following tables present information on the Waterworks Utility's debt, historical operating results and the 2011 Budget, including debt service coverage and Waterworks Utility fund balances.

Historical Operating Results

The following table presents the City's operating results and debt service coverage for the Waterworks Utility for the years 2010 through 2012 and the budget for 2013.

	Audited 2010	Audited 2011	Unaudited 2012 ¹	Budget 2013 ²
Revenue				
Water Service Charges & Fees	\$1,493,933	\$ 1,502,940	\$ 1,632,812	\$ 1,655,268
Sewer Service Charges & Fees	4,651,581	3,271,926	3,412,685	3,574,095
Storm & Surface Water Charges & Fees ³	644,443	678,293	717,299	750,000
Total Revenue	\$6,789,957	\$ 5,453,159	\$ 5,762,796	\$ 5,979,363
Expenses				
Water Expenses	\$1,197,571	\$ 1,213,603	\$ 1,143,940	\$ 632,583 ³
Sewer Expenses	2,430,084	1,671,005	1,597,257	1,724,614
Stormwater Expenses ⁴	335,289	340,052	702,810	257,101
Total Expenses	\$3,962,944	\$ 3,224,660	\$ 3,444,007	\$ 2,614,298³
Operating Income (Loss)	\$2,827,013	\$ 2,228,499	\$ 2,318,789	\$ 3,365,065³
Non-Operating Revenues (Expenses)				
Interest and Investment Revenue	\$ 16,024	\$ 13,470	\$ 14,868	\$ 5,840
Gains (Losses) on Capital Asset Disp.	2,550	700,212	121,060	0
(Losses) on Capital Asset Disposition	(9,325)	(696,734)	(128,390)	0
General Facility Charges	73,080	60,240	10,040	154,400
Total Non-Operating Revenues (Expenses)	\$ 82,329	\$ 77,188	\$ 17,578	\$ 160,240
Net Revenue Available for Debt Service	\$2,909,342	\$2,305,687	\$2,336,367	\$ 3,525,305³
Parity Bond Debt Service	\$ 127,790	\$ 128,410	\$ 128,685	\$ 1,164,453
Parity Bond Debt Coverage	22.77x	17.96x	18.16x	3.03x ³
Available for Jr. Lien Debt Service/Other Uses	\$2,781,552	\$2,177,277	\$2,207,682	\$2,360,852³

¹ Figures are preliminary and subject to change.

² Budget figures are presented on a cash basis of accounting.

³ Decline in Water Expenses is due to a temporary reallocation of administrative costs to capital projects from operations, which are expected to rebound in 2014 and be comparable to 2012. If such administrative costs (including those for Sewer and Stormwater) had been included in the 2013 Operating Budget, net available for debt service would be projected to be reduced by \$892,703 and debt service coverage would have been projected to be 2.26x.

⁴ By the Bond Ordinance, the City has combined the Water and Sewer System with the Storm and Surface Water System. Information presented in this table reflects a combined Waterworks Utility for all years including the Debt Service Coverage amounts.

Source: Figures for years 2008 through 2011 are extracted from the City's audited financial reports; 2012 figures are preliminary and unaudited; and 2013 figures are from the City's adopted 2013 Budget.