

CITY OF MARYSVILLE AGENDA BILL

EXECUTIVE SUMMARY FOR ACTION

CITY COUNCIL MEETING DATE: June 12, 2017

AGENDA ITEM:	
Public Hearing on Water Use Efficiency (WUE) Program Ordinance No. Adopting the 2016 Water System Plan (WSP)	
PREPARED BY:	DIRECTOR APPROVAL:
Jeff Laycock, City Engineer	
DEPARTMENT:	
Engineering	
ATTACHMENTS:	
1. Water Use Efficiency Program 2. WSP Executive Summary and Capital Improvement Program 4. PC Minutes from January 10, 2017 Public Hearing 5. PC Minutes from November 9, 2016 Workshop 6. Adopting Ordinance and Notice of Public Hearing	
BUDGET CODE:	AMOUNT:
N/A	N/A
SUMMARY:	

Attached to the Agenda Bill is a copy of the Water Use Efficiency (WUE) Program, 2016 Water System Plan (WSP) Executive Summary and Capital Improvement Program. An electronic copy of the complete WSP can be found here:

<http://docs.marysvillewa.gov/htcomnet/Handlers/AnonymousDownload.ashx?folder=2ae9acd5>

The WUE Rule requires monitoring of the City's water system production/consumption and to maintain a system leakage at or below 10%. Based on previous WUE goals and analysis of current water demands a new WUE goal of 7.1% reduction in average daily demand is proposed to be adopted with this WSP.

The WSP discusses planning consideration, existing conditions, operation and maintenance standards and recommended improvements to meet future water demands in the City's water service area for a 20-year period.

The Planning Commission (PC) held a public workshop on November 9, 2016 and a public hearing on January 10, 2017 to accept public comment and review the WSP following public notice. As reflected in the minutes from the public hearing, dated January 10, 2017, the PC recommends Council adopt the WSP by ordinance, as presented.

RECOMMENDED ACTION:

Staff recommends that Council authorize the Mayor to conduct a public hearing regarding the City's Water Use Efficiency Goals and, based on public testimony, and Council deliberations, sign the attached ordinance, affirming the Planning Commission's recommendation, adopting the 2016 Water System Plan.

WATER USE EFFICIENCY PROGRAM

INTRODUCTION

The City of Marysville (City) recognizes that water is a valuable and essential natural resource that needs to be used wisely. This Water Use Efficiency (WUE) program provides an approach to increase water use efficiency within the City's water service area.

BACKGROUND

THE WATER USE EFFICIENCY RULE

In September 2003, the Washington State Legislature passed the Municipal Water Supply – Efficiency Requirements Act, also known as the Municipal Water Law. The Municipal Water Law required the state to implement the WUE Rule. The intent of this rule is to help reduce the demand that growing communities, agriculture, and industry have placed on our state's water resources, and to better manage these resources for fish and other wildlife. Municipal water suppliers are obligated under the WUE Rule to enhance the efficient use of water by the system and/or its consumers.

The WUE Rule applies to all municipal water suppliers and requires suppliers to:

- Develop WUE goals through a public process and report annually on their performance;
- Maintain distribution system leakage at or below 10 percent of production;
- Meter all existing and new service connections;
- Collect production and consumption data, calculate distribution system leakage (DSL), and forecast demands;
- Evaluate WUE measures; and
- Implement a WUE program.

WATER USE EFFICIENCY PROGRAM REQUIREMENTS

The *Water Use Efficiency Guidebook*, originally published by the Washington State Department of Health (DOH) in July 2007 and revised in January 2009 and January 2011, identifies the water use reporting, forecasting, and efficiency program requirements for public water systems. A WUE program meeting these requirements is a necessary element of a water system plan as required by the DOH and is necessary to obtain water right permits from the Washington State Department of Ecology (Ecology). The *Water Use Efficiency Guidebook* defines the necessary components of a WUE program as the following four fundamental elements.

1. Planning requirements that include collecting data, forecasting demand, evaluating WUE measures, calculating DSL, and implementing a WUE program to meet goals.
2. A DSL standard of 10 percent or less based on a 3-year rolling average. For systems with less than 500 connections, the DSL standard may be increased to 20 percent if a request with supporting data is provided to the DOH.

3. Goal setting to provide a benchmark for achievement and to help define the success of the WUE program.
4. Annual performance reporting on progress towards meeting WUE goals.

WATER SUPPLY CHARACTERISTICS

Water in the City’s system is supplied by both Marysville-owned sources and from Everett. Everett’s water supply comes from the Sultan River. Marysville-owned sources include the Lake Goodwin Well, Edward Springs and Wells, the Stillaguamish River Ranney Collector, Sunnyside Wells No. 1R and 2, and the Highway 9 Well. The Highway 9 Well and Sunnyside Wells are currently offline for water quality purposes, however the Sunnyside Wells will be operational once their water treatment facility is completed in 2017.

A summary of the Marysville-owned sources is shown in **Table 1**, and a more detailed description of each source of supply is provided in **Chapter 2** of the City’s *Water System Plan (WSP)*.

Table 1
Supply Facilities Summary

Well	Pressure Zone	Year Installed	Use	Existing Pumping Capacity (gpm)	Well Depth (feet)	Well Diameter (Inches)	Pump Type	Pump Motor Size (hp)	Water Treatment
Stillaguamish Ranney Well Collector	240 Zone	1978	Active	2,250	n/a	n/a	(2) Submersible	(2) 100	Membrane, Chlorine
Edward Springs Spring Source	240 Zone	1930s	Active	760	n/a	n/a	Centrifugal	(2) 3	Chlorine, UV
Edward Springs Well No. 1R	240 Zone	2008	Active	170	182	12	Submersible	15	Chlorine
Edward Springs Well No. 2	240 Zone	Prior to 1960 ¹	Active	225	160	unknown	Submersible	15	Chlorine
Edward Springs Well No. 3	240 Zone	1987 ¹	Active	300	181	unknown	Submersible	25	Chlorine
Lake Goodwin Well	460 Zone	1970	Active	350	450	unknown	Vertical Turbine	50	Chlorine
Highway 9 Well	510 Zone	1981	Offline ²	n/a	270	unknown	n/a	n/a	n/a
Sunnyside Well No. 1R	360 Zone	2009	Offline ²	n/a	278	16	n/a	n/a	n/a
Sunnyside Well No. 2	360 Zone	1985	Offline ²	n/a	328	16	Vertical Turbine	100	n/a

¹ = Rehabilitated in 2004.
² = Currently offline for water quality purposes.

The City currently holds one water right permit and eleven water right certificates for its independent sources of municipal water supply. In addition, the City has water available to from the City of Everett through a Joint Operating Agreement (JOA) which is provided through the JOA supply pipeline. A summary of these water rights is presented in **Table 2**. Additional water rights information for each source may be found in **Chapter 6** of the WSP and on the certificates, permits, and water rights self-assessment, which are included in **Appendix J**.

**Table 2
Existing Water Rights and Interties**

Water Right	Document	Use	Source Name	Instantaneous Rate (gpm)			Annual Volume (afy)		
				Additive	Non-additive	Maximum From Source	Additive	Non-additive	Maximum From Source
SWC 184	Certificate	Mitigation	Edward Springs	200	0	1,392	108.3	0	2,232
	Municipal			180	0		487.7	0	
SWC 2180	Certificate	Municipal		1,032	0		1,656	0	
GWC 286	Certificate	Municipal	Edward Springs Well No. 1R	300	0	300	160	0	480
GWC 1152	Certificate	Municipal		0	300		0	320	
GWC 2098	Certificate	Municipal	Edward Springs Well No. 2	500	0	500	0	800	800
GWC 4155	Certificate	Municipal	Cedarcrest La Joy Well	57	0	57	0	91	91
GWC 3100	Certificate	Municipal	Sunnyside Well No. 1R	1,000	0	1,000	0	1,344	1,344
GWC 5469	Certificate	Municipal	Sunnyside Well No. 2	1,000	0	1,000	0	1,176	1,176
GWC 6980	Certificate	Municipal	Lake Goodwin Well	550	0	550	880	0	880
G1-00875C	Certificate	Municipal	Stillaguamish River Well	2,250	0	2,250	3,600	0	3,600
G1-23487C	Certificate	Municipal	Highway 9 Well	1,000	0	1,000	1,600	0	1,600
G1-25182P	Permit	Municipal	Edward Springs Well No. 3	400	0	400	0	451	451
Mitigation Peak/Total				200	0		108.3	0	
Municipal Peak/Total				8,249	300		8,363.7	4,182	
Water Right Total				8,449	300		8,472	4,182	
JOA Supply Line (Everett Intertie)				9,132		9,132	14,730		14,730
Municipal Grand Total				17,381			23,093.7		

Notes:
 - Takes into account mitigation requirement under SWC 184 and that that rate and volume is not available for municipal supply.
 - Considers full Edward Springs surface rights to equal combined 3.1 cfs.
 - 0.8 cfs = 360 gpm
 - 2.3 cfs = 1,032 gpm
 - Table represents peak usage periods of July 1 through September 30 when 200 gpm from SWC 184 is bypassed to Cougar Creek.
 - 8,472 afy total annual volume from Pollution Control Hearings Board Stipulation and Agreed Order of Dismissal for Case No. 96-153.
 - The JOA Pipeline supplies water from the City of Everett regional water system.

Sources of water derive from recharge of precipitation into aquifers that discharge to City-owned wells and springs, as well as area streams and rivers. Groundwater recharge to the City's sources of supply occurs within the Stillaguamish River watershed (Water Resources Inventory Area (WRIA) 5) and the Snohomish River watershed (WRIA 7) and these sources are beneficially used within both WRIA 5 and WRIA 7.

Some of the sources of supply are located in the Snohomish basin, one of the 16 fish-critical basins identified through the Statewide Salmon Recovery Strategy. The City water rights are senior to the instream flow rules (Washington Administrative Code 173-507 and 173-505) and not subject to limitation by stream flow in the Snohomish or Stillaguamish River or their respective tributaries. The Snohomish River Basin Salmon Conservation Plan (2005) has identified water quantity in the Snohomish River Basin as a concern for sustainable fish populations. The Stillaguamish River Watershed Chinook Salmon Recovery Plan (2005) has identified increasing stream flow during the summer as a goal to improve habitat conditions for Chinook salmon, a species designated as Threatened under the Endangered Species Act in the Stillaguamish Basin.

Environmental factors such as drought and climate change could have a negative effect on recharge to the aquifers. With the exception of some undocumented reports of water level issues in private wells surrounding the Highway 9 Well (currently offline), there are no known issues with declining groundwater levels.

WATER USE EFFICIENCY PROGRAM

As previously described, the fundamental elements of a WUE program include planning requirements and DSL standards, as well as goal setting and performance reporting. The City's water use data, demand forecasts and other planning requirements are contained in **Chapter 4** of the WSP. The City is committed to continue collecting water use data beyond that presented in **Chapter 4** for evaluation of its WUE program and water use patterns, and for forecasting demands for future facilities. The City's WUE program that follows includes a statement of its goals and objectives, the evaluation and selection of alternative efficiency measures, the schedule and budget, and the method of program monitoring.

WATER USE EFFICIENCY GOALS AND THE PUBLIC PROCESS

Per Washington Administrative Code (WAC) 246-290-830, WUE goals must be set through a public process and shall be evaluated and reestablished a minimum of every 6 years. In compliance with the WUE Rule, public hearings were held on June 23rd and July 27th, 2009, to present and discuss goals. Background on the City's WUE program, water supply characteristics, water demand forecasts, and other elements were made available 2 weeks prior to the public forum date. All comments received at the forum were reviewed and considered by the City. The City's current WUE goals were adopted by the City in 2009. In the future, WUE goals will be evaluated and reestablished during the water system planning process, or at minimum of every 6 years.

Based on the successful implementation of the current WUE program, the City achieved the goal adopted in 2009. The 2009 goal was to save 129,000 gpd on an annual basis at full implementation of the six-year program (2014). The projected 2014 average day demand with conservation from the 2009 WSP was 12.2 MGD. The actual 2014 average day demand, as listed in **Chapter 4**, was approximately 6.7 MGD. A new goal has been proposed based on the demand analysis and projections presented in the City's updated WSP. It is anticipated that the proposed goals will be adopted along with the WSP at a regularly scheduled City Council meeting. Prior to adoption of the goals, a public notice will be posted at least 2 weeks before a City Council meeting public forum for presenting and considering public comments.

The proposed goals and objectives of the City's WUE program consist of:

- Reduce the system-wide average daily demand by 7.1 percent by 2035, and maintain this reduction through 2036 (the end of the 20-year planning period).

This goal is based on the City of Everett's goal to reduce the average daily demand projection in 2035 from 80.6 MGD to 74.9 MGD, a 7.1 percent reduction.

The City will achieve these goals and objectives through the implementation of the WUE program that follows.

EVALUATION AND SELECTION OF WATER USE EFFICIENCY MEASURES

The City's evaluation of WUE measures and selected levels of implementation are presented within this section. The measures fall within three categories of implementation: 1) mandatory measures that must be implemented; 2) measures that must be evaluated; and 3) additional measures selected by the City that must be either evaluated or implemented.

The City served an average of 20,376 water service connections in 2014. Based on the number of connections, at least nine WUE measures must be evaluated or implemented. Measures that are mandatory cannot be credited towards the system's WUE measures. Since the City implements the minimum number of required measures, a cost-effective evaluation is not required.

Mandatory Measures

Source Meters

The volume of water produced by the system's sources must be measured using a source meter or other meter installed upstream of the distribution system. Source meters are currently installed and operating at each of the City's sources. If any new sources are installed in the future, they will be equipped with a source meter.

Service Meters

All public water systems that supply water for municipal purposes must install individual service meters for all water users. Service meters are currently installed and operating at all connections throughout the distribution system. All future connections that are installed or activated will be equipped with a service meter.

Meter Calibration

The City must calibrate and maintain meters based on generally accepted industry standards and manufacturer information. Compliance will be maintained by the City by performing maintenance on the source and service meters every 5 to 10 years at a minimum. Meter calibration verification testing is performed on an as-needed basis, typically annually.

Water Loss Control Action Plan

To control leakage, systems that do not meet the DSL standard must implement a Water Loss Control Action Plan (WLCAP). As shown in **Chapter 4**, the City's DSL has consistently been negative, which indicates inaccuracy in the production or consumption data available. The City suspects the error is due to inaccuracy at the production meters (specifically the Everett Intertie meter) and will continue to work towards resolving these inaccuracies. The City will also work to improve recordkeeping for authorized water consumption uses such as construction, flushing, and firefighting activities to reduce the amount of DSL in the system. The City owns leak detection equipment and performs periodic leak detection surveys to monitor performance of various parts of the system. Leak detection was conducted on the transmission main that runs from the Stillaguamish Ranney Well to the Stillaguamish WTP in 2008; no leaks were found.

Customer Education

Annual customer education regarding the importance of using water efficiently is a required element of all WUE programs. Customer education is provided in the City's annual Consumer Confidence Report (CCR) to customers and includes information on the system's DSL, progress towards meeting WUE goals, and tips for customers on using water more efficiently.

Measures That Must Be Evaluated

Rate Structure

A rate structure that encourages WUE and provides economic incentives to conserve water must be evaluated, but is not required to be implemented. The City's current utility rates are designed to discourage excessive water use. A base water rate is charged, depending on the meter size, regardless of consumption. An increasing block rate structure imposes a unit charge for water use which increases as the volume of water consumed increases.

Reclamation Opportunities

The City evaluated reclamation opportunities as part of the 2011 Sewer Comprehensive Plan. This effort determined that reclaimed water could potentially be used in the City for industrial cooling water, irrigation/landscaping use, fire protection, ground water recharge, and other possibilities. However, it was determined that the cost of producing reclaimed water would be over three times the cost of potable water, so production and use of reclaimed water was determined to be economically unfeasible.

Selected Measures

The City has chosen to implement seven different WUE measures in addition to those that are mandatory or required to be evaluated. Because several of these WUE measures affect multiple customer classes (detailed below), the City's WUE program counts as 14 WUE measures, which is greater than the requirement of nine WUE measures based on the number of service connections.

Water Bill Showing Consumption History

The City currently shows historical consumption data for the previous 12 billing cycles on customer bills. Since this measure is implemented for three customer classes (single-family, multi-family, and commercial/other), it counts as three WUE measures for the City's program.

Notifying Customers about Leaks on Their Property

The city has an automated meter infrastructure (AMI) system that gathers meter readings from each meter at least twice daily. When consumption over a 24-hour period is greater than anticipated, the AMI system generates an alarm code that is viewed by the utility billing and meter reader/repair personnel. Follow up is conducted in the field to verify the presence of a leak. If it appears there is a leak on the customer's side of the meter, they are advised of the situation and asked to make repairs. Since the City notifies customers in three customer classes (single-family, multi-family, and commercial/other) of unusual high meter readings, it counts as three WUE measures for the City's program.

Toilet/Shower/Washer Rebates

The City offers rebates of up to \$50 to single-family customers who install low-flow toilets, low-flow showers, or tumble action washers. Since this measure is implemented for the single-family customer class only, it counts as one WUE measure for the City's program.

Indoor Retrofit Kits

The City has offered free indoor water conservation kits to residential customers since 2001. The kits may include a low-flow showerhead, a kitchen faucet aerator, two bathroom faucet aerators, a toilet tank water displacement bag, toilet leak detection tablets, a gauge to measure losses from household leaks, and a conservation brochure. Since this measure is implemented for the single-family customer class only, it counts as one WUE measure for the City's program.

Outdoor Irrigation Kits

The City has offered free outdoor water conservation kits to residential customers since 2001. The kits may include an automatic shut-off watering timer, a hose nozzle, a gauge to measure rainfall and/or sprinkler output, a package of hose washers to reduce leaks, and a conservation brochure. Since this measure is implemented for the single-family customer class only, it counts as one WUE measure for the City's program.

School-Based Education

The City participates in school-based education programs including classroom presentations, teacher workshops, and classroom educational materials. The classroom presentations are facilitated by trained instructors with curriculum designed for elementary, middle school and high school students. The presentations are marketed to teachers through newsletters and other communications. The teacher workshops assist teachers in educating students about water resource issues including conservation. Teachers participate in activities, experiments, and field trips and can receive continuing education credits or clock hours. The classroom educational materials include a broad collection of items such as books, videos, posters, and other supplies. Since this measure primarily affects residential water users (single-family and multi-family customer classes), it counts as two WUE measures for the City's program.

Public Outreach

The City engages in general public outreach intended to build and reinforce a water conservation ethic among customers. These outreach efforts include brochures, a summer watering calendar, transit advertising, and other regional efforts. Since this measure affects three customer classes (single-family, multi-family, and commercial/other), it counts as three WUE measures for the City's program.

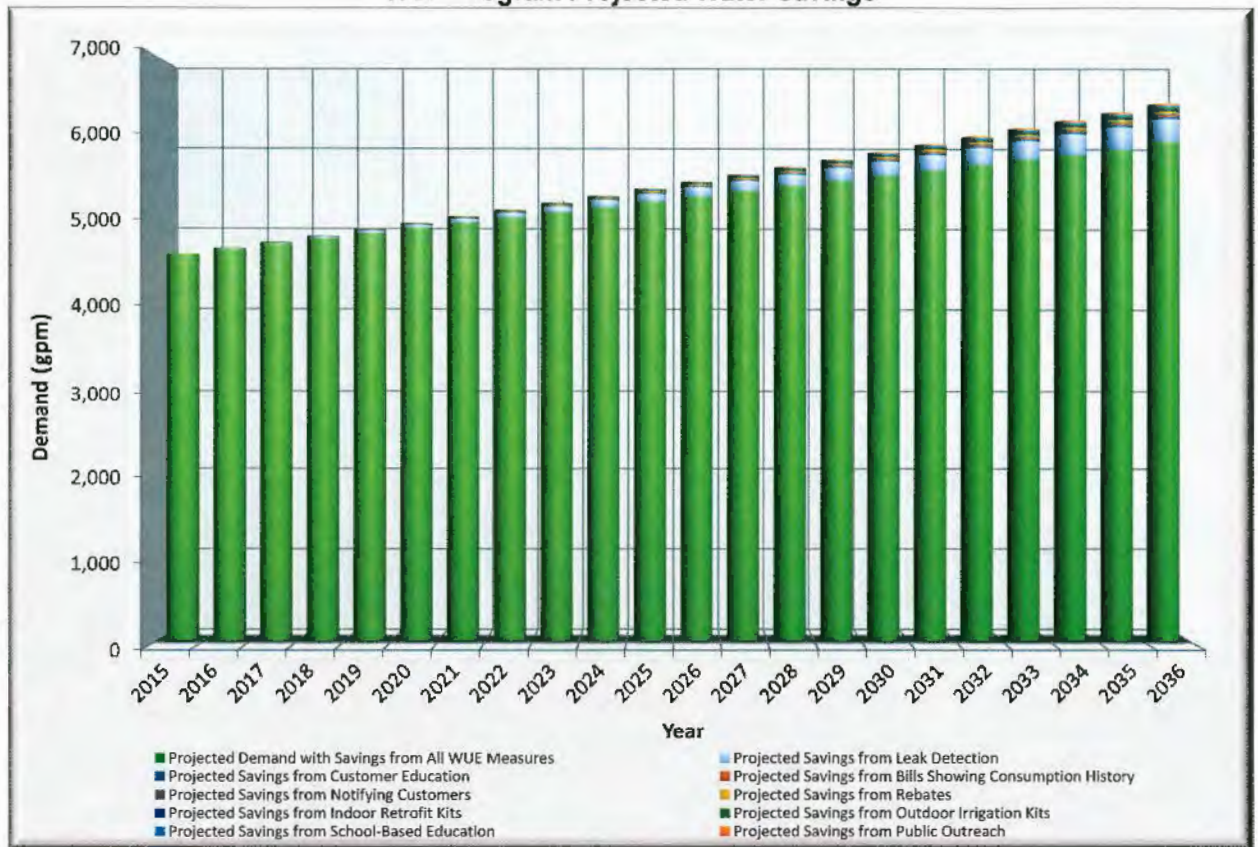
WATER USE EFFICIENCY PROGRAM SCHEDULE AND BUDGET

The WUE measures described above and selected for implementation by the City are summarized in **Table 3** with their corresponding schedule and budget. Most of the water use efficiency activities are funded by the City's operations and maintenance budget and the City plans to fund water use efficiency activities, such as leak detection, as needed to meet the established goals. The successful implementation of this program is expected to reduce the system-wide average daily demand by 7.1 percent by 2035, and maintain this reduction through 2036, as shown in **Chart 1**.

**Table 3
WUE Program Schedule and Budget**

Water Use Efficiency Measure	Schedule	Budget
Mandatory Measures		
Source Meters	Ongoing	O&M Funded
Service Meters	Ongoing	O&M Funded
Meter Calibration	Ongoing	O&M Funded
Water Loss Control Action Plan/Leak Detection	Ongoing	O&M Funded
Customer Education - Annual Consumer Confidence Report	Ongoing	O&M Funded
Measures That Must be Evaluated		
Rate Structure	In Place	N/A
Reclamation Opportunities	2021/2031	Sewer CIP Funded
Selected Measures		
Water Bill Showing Consumption History	In Place	N/A
Notifying Customers about Leaks	Ongoing	O&M Funded
Toilet/Shower/Washer Rebates	Ongoing	O&M Funded
Indoor Retrofit Kits	Ongoing	O&M Funded
Outdoor Irrigation Kits	Ongoing	O&M Funded
School-Based Education	Ongoing	O&M Funded
Public Outreach	Ongoing	O&M Funded

Chart 1
WUE Program Projected Water Savings



WATER USE EFFICIENCY PROGRAM EVALUATION AND REPORTING

The City will continue to evaluate overall demand, per capita and per ERU water use, and the amount of DSL on an annual basis. The City will evaluate the performance of its WUE program and implemented measures by analyzing demand data and determining the long-term trend towards reducing water usage and meeting WUE goals. If the program monitoring shows that progress towards meeting the WUE goals is not being accomplished, more rigorous program implementation or additional program items will be considered, along with a cost-effective evaluation of measures.

The City will continue to provide annual WUE performance reports to its consumers in the CCR, and will detail the results of water use monitoring and progress towards achieving the system’s WUE goals. A copy of the City’s current CCR is included in **Appendix N** of the City’s WSP.

ES | EXECUTIVE SUMMARY

PURPOSE OF THE WATER SYSTEM PLAN

The City of Marysville's (City) water system is a major infrastructure, much of which is invisible to the customers that receive its water. The water system requires qualified staff to operate and maintain an ongoing capital improvement program to replace old components to meet the requirements mandated by federal and state laws. The primary purpose of the City of Marysville Water System Plan (WSP) is to identify and schedule water system improvements that correct existing system deficiencies and ensure a safe and reliable supply of water to current and future customers. This WSP complies with Washington State Department of Health (DOH) regulations under Chapter 246-290 Washington Administrative Code (WAC), which requires water purveyors to update their water system plans every 6 years. In anticipation of the proposed changes to the water system planning requirements to extend the planning horizon to 10 years, this WSP was prepared to serve as a 6-year and 10-year document.

The City's previous WSP was prepared in June 2009. This updated 2016 WSP reflects Snohomish County's (County) 2035 population allocation to the City and the City's current Urban Growth Area (UGA), which are consistent with the City and County 2015 *Comprehensive Plan* updates. The WSP also reflects improvements and changes to the water system since the completion of the 2009 WSP.

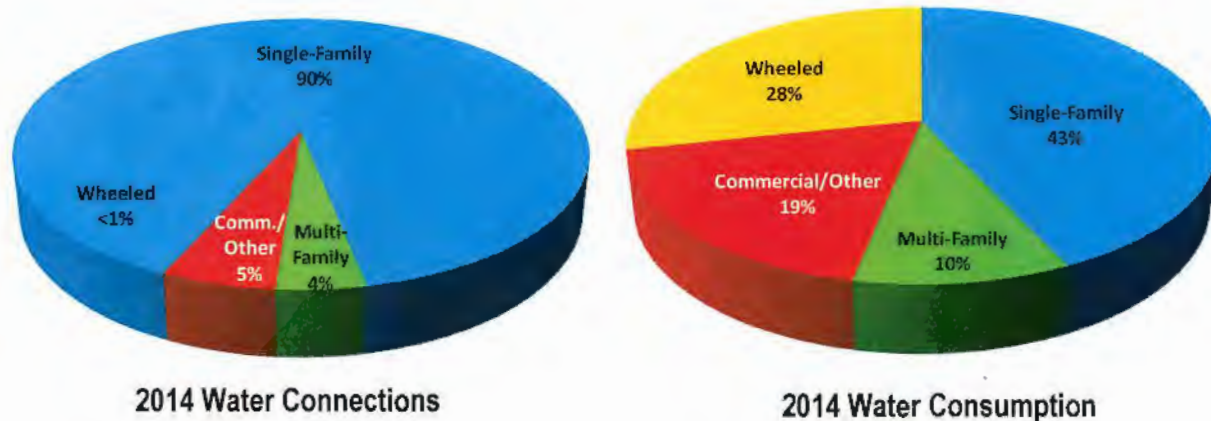
SUMMARY OF KEY ELEMENTS

This WSP presents a description of the existing water system and service area, a forecast of future water demands, policies and design criteria for water system operation and improvements, the operations and maintenance program, staffing requirements, a schedule of improvements, and a financial plan to accomplish the improvements. The WSP also includes several ancillary elements that include a water use efficiency plan, a water quality monitoring plan, a wellhead protection plan, a watershed control plan, and a cross-connection control program. A summary of the key issues related to these elements is provided in the following sections.

WATER SERVICE AREA

The City provides water service to approximately 66,686 people throughout its water service area boundary, which extends beyond the City's corporate limits. The City is responsible for providing public water service, utility management, and water system development within this area. The City will provide new water service within the City limits and where there are existing water mains (i.e., the retail water service area). Requests for new water service outside of the City limits but within the UGA, where there are no existing water mains fronting the property, will only be granted after the area is annexed to the City or upon completion of an annexation agreement.

In 2014, the City provided water service to an average of 20,376 connections, which were mainly comprised of single-family connections. Single-family connections represent approximately 90 percent of all accounts, but the single-family class only consumed 43 percent of all water supplied to the system in 2014. The City's two wheeled connections, the Tulalip Tribes and the Snohomish County PUD, accounted for 28 percent of consumption.



EXISTING WATER SYSTEM

The City's water system was initially established in the 1930s. Edward Springs was the first source for the system. The Edward Springs water right was originally limited to 0.5 million gallons per day (MGD), but has been increased to 3.2 MGD. The Sunnyside Wells began supplying the system in the 1950s and 1960s. The Lake Goodwin Well was constructed and began supplying the system in 1970, and the Stillaguamish River Ranney Well was constructed and began supplying the system in 1978. The Highway 9 Well was constructed and entered service in 1981, but is currently offline due to water quality concerns. The Stillaguamish River Ranney Well and the Edward Springs source were designated groundwater under the influence of surface water (GWI) sources in 2000. In response, the Edward Springs treatment plant was constructed in 2004 and the Stillaguamish River Water Treatment Plant (WTP) was constructed in 2006. A new treatment facility for the Sunnyside Wells is currently under construction and is anticipated to be online in 2017. A summary of the City's sources is shown in **Table ES-1**.

**Table ES-1
Supply Facilities Summary**

Well	Pressure Zone	Year Installed	Use	Existing Pumping Capacity (gpm)	Well Depth (feet)	Well Diameter (Inches)	Pump Type	Pump Motor Size (hp)	Water Treatment
Stillaguamish Ranney Well Collector	240 Zone	1978	Active	2,250	n/a	n/a	(2) Submersible	(2) 100	Membrane, Chlorine
Edward Springs Spring Source	240 Zone	1930s	Active	760	n/a	n/a	Centrifugal	(2) 3	Chlorine, UV
Edward Springs Well No. 1R	240 Zone	2008	Active	170	182	12	Submersible	15	Chlorine
Edward Springs Well No. 2	240 Zone	Prior to 1960 ¹	Active	225	150	unknown	Submersible	15	Chlorine
Edward Springs Well No. 3	240 Zone	1987 ¹	Active	300	181	unknown	Submersible	25	Chlorine
Lake Goodwin Well	460 Zone	1970	Active	350	450	unknown	Vertical Turbine	50	Chlorine
Highway 9 Well	510 Zone	1981	Offline ²	n/a	270	unknown	n/a	n/a	n/a
Sunnyside Well No. 1R	360 Zone	2009	Offline ²	n/a	276	16	n/a	n/a	n/a
Sunnyside Well No. 2	360 Zone	1965	Offline ²	n/a	328	16	Vertical Turbine	100	n/a

1 = Rehabilitated in 2004.
2 = Currently offline for water quality purposes.

The City's water system has nine storage facilities that provide storage directly to the 510 Zone, 460 Zone, 360 Zone, 327 Zone, 240 Zone, 170 Zone, and Stillaguamish Zone. Details of the City's storage facilities are shown in **Table ES-2**.

**Table ES-2
Storage Facilities Summary**

Reservoir	Approximate Location	Pressure Zone	Year Constructed	Material	Capacity (MG)	Diameter (feet)	Base Elev. (feet)	Overflow Elev. (feet)
Edward Springs Reservoir	614 Lakewood Rd	240 Zone	1975	PVC-lined embankment	6.0	Irregular	223	239.4
Stillaguamish River WTP Clearwell	17906 43rd Ave NE	Stillaguamish	2006	Steel	0.2	39.0	130	152.5
Wade Road Reservoir	7011 Wade Rd	240 Zone	2007	Steel	3.0	120.6	204	239.4
327 Zone Reservoir	614 Lakewood Rd	327 Zone	2008	Welded Steel	0.7	66.0	296	329
Getchell Reservoir	8210 98th Place NE	360 Zone	1995	Pre-stressed Concrete	6.0	182.0	328	360
Cedarcrest Reservoir	7300 71st Ave NE	170 Zone	1987	Pre-stressed Concrete	3.5	150.0	146.2	170.5
Highway 9 Reservoir	8812 64th St NE	510 Zone	1998	Steel	1.8	77.0	457.5	510
Sunnyside Reservoir	4021 71st Ave NE	360 Zone	2008	Welded Steel	3.0	89.0	296	360
Lake Goodwin Standpipe	3914 176th St NW	460 Zone	unknown	Corrugated Metal Pipe	0.003	4.0	427	459

The City's water system has three booster pump station facilities that provide supply to the 240, 460, and 510 Zones, respectively, as shown in Table ES-3.

**Table ES-3
Booster Pump Station Facilities Summary**

Pump Station	Suction Pressure Zone	Discharge Pressure Zone	Year Constructed	Existing Pumping Capacity	Number of Pumps	Pump Type	Pump Motor Size (hp)
Edward Springs BPS	240 Zone	460 Zone	2001	3,500	2	Vertical Turbine	2 (75)
Cedarcrest BPS	170 Zone	510 Zone	1987	2,400	3	Submersible	3 (150)
Stillaguamish WTP BPS	Stillaguamish	240 Zone	2006	2,200	3	Centrifugal	3 (50)

The City's water system contains more than 297 miles of water main ranging in size from 2 inches to 24 inches. As shown in Table ES-4, most of the water main (approximately 73 percent) within the system is 8 inches in diameter or less. The remaining 27 percent of the water main is 10 inches in diameter or larger.

**Table ES-4
Water Main Diameter Inventory**

Diameter (Inches)	Length (Feet)	% of Total
4 or smaller	69,128	4.4%
6	423,314	26.9%
8	659,505	42.0%
10	62,073	4.0%
12	259,115	16.5%
14	15,344	1.0%
16	29,834	1.9%
18	42,740	2.7%
20	11	0.0%
24	10,269	0.7%
Totals	1,571,333	100%

PAST WATER USAGE

In general, the amount of water consumed by the City's customers and other authorized uses remained relatively steady from 2007 until approximately 2014. This was most likely the result of water use efficiency practices, including new buildings with low flow plumbing fixtures, and the repair of water system leaks.

Typically, the average day demand (ADD) for each year would be calculated from the City's annual supply totals. However, the City's metered customer demands are higher than the City's supply totals. As a result, the ADD is calculated as the total annual customer demands plus any other known authorized consumption in terms of gallons per minute (gpm). Table ES-5 lists the annual consumption totals and the average day demand.

Table ES-5
Historical Water Supply and System Demand

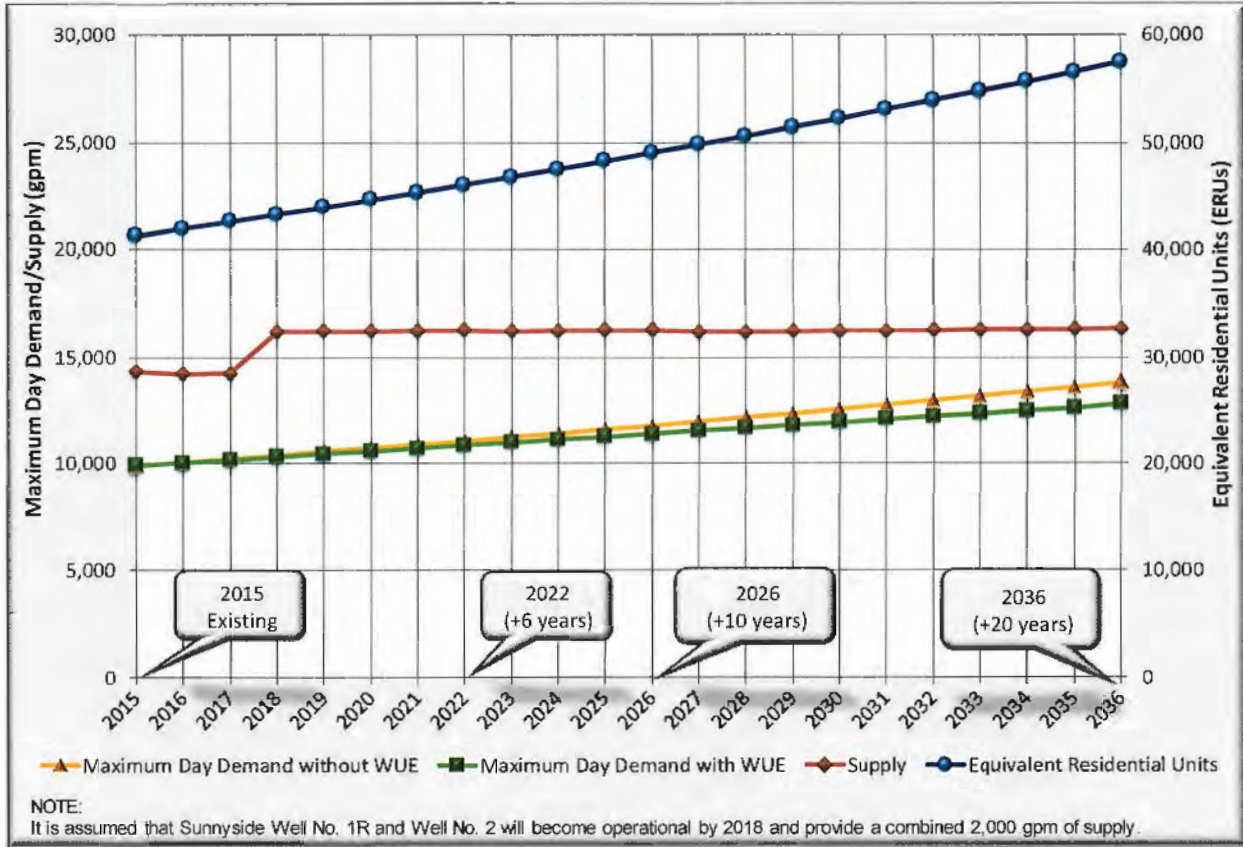
Year	Annual Consumption (gallons) ¹	Average Day Demand (gpm) ¹
2007	2,294,160,000	4,365
2008	2,459,716,000	4,667
2009	2,275,584,000	4,329
2010	2,283,860,000	4,345
2011	2,333,554,384	4,440
2012	2,349,325,256	4,458
2013	2,451,092,426	4,663
2014	2,462,419,872	4,685

NOTES:
1. Annual Consumption and ADD include authorized non-revenue water consumption.

FUTURE WATER DEMANDS AND WATER SUPPLY

Overall water demand within the City's system is expected to increase by approximately 140 percent of 2014 demand by the end of the 20-year planning period. With the Sunnyside Wells online, the City will have sufficient water supply from its supply sources to meet the demand requirements of the system until at least 2036, as shown in Chart ES-1.

**Chart ES-1
Future Water Demands and Water Supply**



WATER SOURCE AND QUALITY

The City’s municipal water supply is provided by surface water diverted from Edward Springs and groundwater pumped from the Edward Springs Wells, the Stillaguamish River, the Sunnyside Well site, and the Lake Goodwin Well. Water is also delivered from the City of Everett through the Joint Operating Agreement (JOA) supply line. The Highway 9 Well is not currently online.

Water from the Stillaguamish River is treated by membrane filtration and chlorine at the Stillaguamish River WTP. The Edward Springs sources are all treated with chlorine and the surface water is additionally treated with ultraviolet disinfection. The Lake Goodwin Well is treated with chlorine. When the Sunnyside Well Water Treatment Facility is brought online in 2017, it will provide on-site sodium hypochlorite generation and an oxidation/filtration treatment process to remove iron and manganese from Sunnyside Well Nos. 1R and 2.

Groundwater is often fluoridated to assist in the prevention of tooth decay. Water received from Everett is fluoridated while the City’s other sources are not; therefore, customers may receive water that is fluoridated, non-fluoridated, or only partially fluoridated depending on water system operating conditions.

OPERATIONS AND MAINTENANCE

The City's operations and maintenance organization is staffed by well qualified, technically trained personnel. City staff regularly participate in safety and training programs to keep abreast of the latest changes in the water industry and ensure a smooth and safe operation of the water system. The current staff of supervisory personnel and field crew, in which many are responsible for the water system and other utilities, have effectively operated and maintained the water system in the past. However, to optimize the preventative maintenance program and operations of the water system, additional personnel are recommended. As the water system expands in the future and continues to age, additional staff will also be required. The City plans to add staff to meet the increased requirements from system expansion as the budget allows.

The City has taken several steps to prepare for emergency situations. Vulnerability Assessment and Emergency Response Plans have been prepared that conform to the requirements of the Bioterrorism Act of 2002. The documents contain a vulnerability assessment of the City's water system facilities, a contingency operation plan for responding to emergency events, a list of water personnel responsible for making decisions in emergency situations, and other elements.

WATER SYSTEM EVALUATION

The existing water system was evaluated to determine its ability to meet the policies and design criteria of the City and those mandated by DOH. The results of the evaluation are summarized below.

- The City has sufficient water supply to meet the demands of existing and future customers until at least 2036 once the Sunnyside Well Water Treatment Facility is online in 2017.
- Additional storage will be required in Operating Area D to resolve current storage deficiencies and provide sufficient capacity for future customers.
- A new 560 Zone supplied by a booster pump station needs to be constructed to provide suitable pressures to the City's highest elevation customers.
- Booster pump stations need to be constructed to convey water from the Sunnyside Wells to higher pressure zones, and to provide for expansion and redundant supply to the higher pressure zones.
- The Lake Goodwin standpipe needs to be replaced.
- Manganese treatment likely will need to be implemented at the Lake Goodwin Well. Improvements to the well are also needed to enable the water right capacity to be withdrawn without clogging the well screen.
- Arsenic treatment likely will need to be implemented at Edward Springs. Improvements are also needed for the spring collectors and wells to increase their capacity to the water right amount.
- The Highway 9 Well needs to be evaluated and improved if feasible.
- Cathodic protection needs to be installed on the City's steel reservoirs.
- A new pressure reducing valve (PRV) needs to be constructed between the 327 and 240 Zones to allow water produced at Lake Goodwin to reach the system's lower pressure zones.

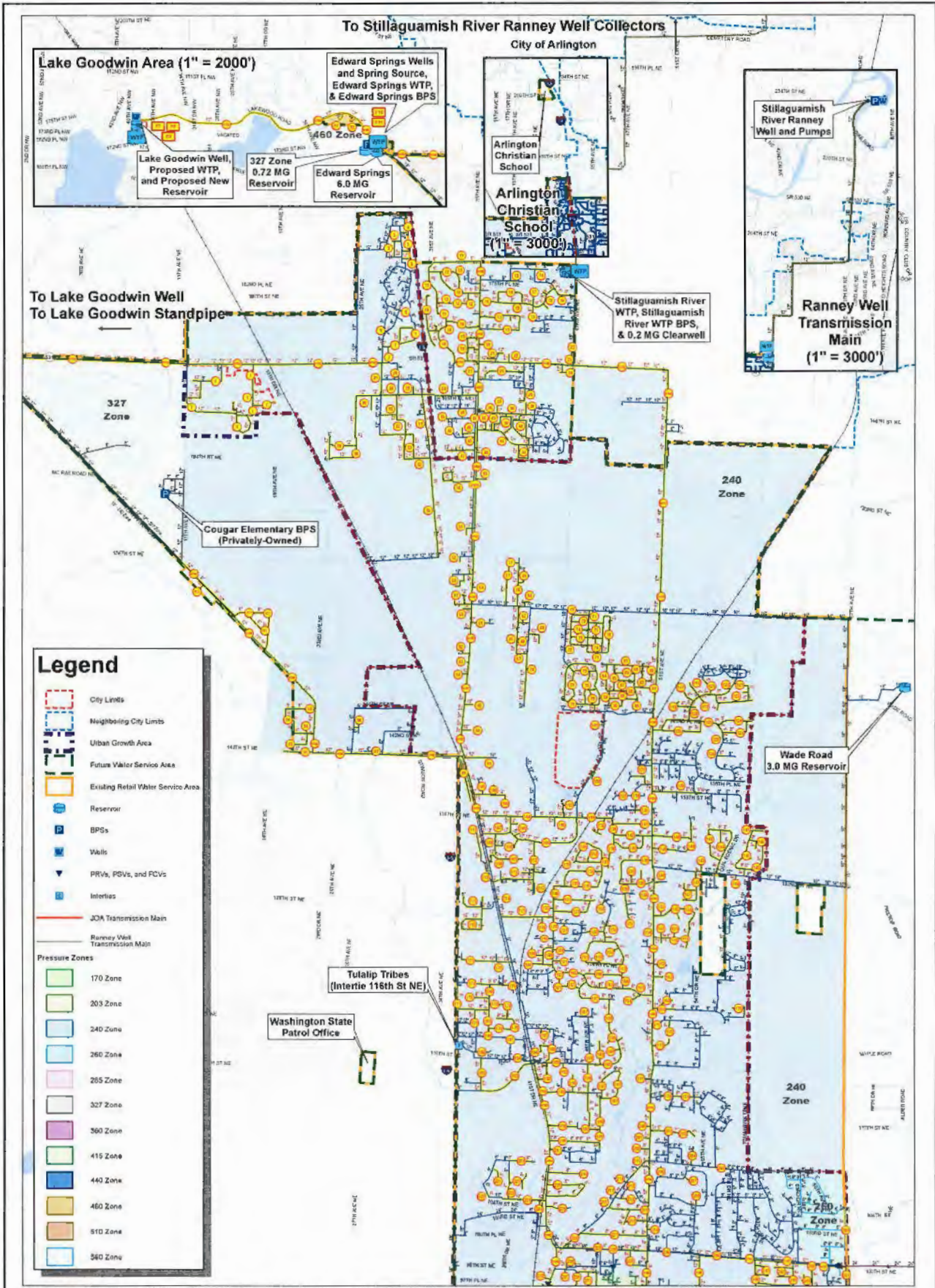
- Several pressure zone improvements, consisting of new water main, PRVs, and valve configuration changes, need to be implemented to address high and low pressures.
- Several areas of the system require water main replacements to resolve deficiencies related to low fire flows, aging water main, and undesirable materials.

PROPOSED WATER SYSTEM IMPROVEMENTS AND FINANCING PLAN

Improvements to the water system are necessary, primarily to resolve existing system deficiencies, but also to accommodate the increase in water demands from future growth. Improvements identified for the first 5 years of the capital improvement program (2017 through 2021) are estimated to cost approximately \$29,884,000, which results in an average expenditure of approximately \$5,977,000 per year. Improvements in the following 5 years (2022 through 2026) are estimated to cost approximately \$28,830,000, or approximately \$5,766,000 per year. Improvements for 2027 through 2036 are estimated to cost approximately \$42,057,000, or approximately \$4,205,700 per year. The financial analysis is intended to illustrate the feasibility of funding the operation and maintenance and capital improvements recommended for the water system in the next 6 years.

Table 9-6
Proposed Improvements Implementation Schedule

No.	Description	Estimated Cost (2016 \$)	20-Year Schedule of Improvements											
			2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027-2038	2037+
Water Main Improvements														
WM1	Annual Water Main Replacement Program	\$179,249,000	\$1,65K	\$1,65K	\$1,65K	\$1,65K	\$1,65K	\$1,65K	\$1,65K	\$1,65K	\$1,65K	\$1,65K	\$1,65K	\$1,65K
WM2	Replace CI Water Main SR 631 with DI	\$9,570,000			\$957K	\$1,723K	\$957K	\$2,060K	\$3,350K					
WM3	Replace CI and AC Water Main in Smokey Pl Blvd with DI	\$9,490,000		\$75K	\$2,088K	\$2,847K	\$3,795K							
WM4	Replace CI WM in 51st Ave NE, Amar Rd, and Liberty St with DI	\$12,330,000												
WM5	Replace CI WM in Grove St with DI	\$5,110,000												
WM6	Replace AC WM in Fony Fvia Rd, 23rd Ave NE, and 140th St NE	\$5,130,000												
WM7	Replace CI WM in 100th St NE	\$1,220,000												
WM8	Replace CI WM in 550 Ave NE	\$1,390,000												
WM9	Replace CI WM in 71st Ave NE	\$2,660,000												
WM10	Replace CI WM in Marine Dr NE and Quil Cadek Creek Casino Area	\$2,660,000												
WM11	Replace CI WM in 61st St NE and Sunnyside Blvd	\$1,700,000												
WM12	Replace CI WM in 67th Ave NE and between 62nd St NE and Sunnyside Reservoir	\$2,820,000												
WM13	Loop Water Main to improve FF in Oldcrest Golf Course	\$240,000				\$240K								
WM14	Loop Water Main to improve FF in Glenwood Mobile Estates	\$440,000				\$440K								
WM15	Connect Water Main in Smokey Pl Blvd to improve FF	\$30,000				\$30K								
WM16	Loop Water Main to improve FF in 46th Dr NE/Liberty St Area	\$160,000				\$160K								
Pressure Zone Improvements														
PZ1	North 240 Zone Conversion to 327 Zone	\$1,410,000	\$470K	\$940K										
PZ2	Convert to 350 Zone from 510 Zone	\$10,000	\$10K											
PZ3	Convert to 350 Zone from 440 Zone	\$10,000	\$10K											
PZ4	Convert to 360 Zone from 240 Zone	\$310,000		\$310K										
PZ5	Convert to 360 Zone from 510 Zone	\$10,000		\$10K										
PZ6	Convert to 285 Zone from 415 Zone	\$150,000												
PZ7	Convert to 360 Zone from 415 Zone	\$980,000												
PZ8	Convert to 380 Zone from 510 Zone	\$1,710,000												
PZ9	Convert to 510 Zone from 300 Zone	\$10,000	\$10K											
PZ10	Convert to 510 Zone from 300 Zone	\$120,000												
PZ11	Convert to 350 Zone from 415 Zone	\$10,000												
Facility Improvements														
F1	560 Zone BPS and Pressure Zone Conversion - Phases 1 and 2	\$3,900,000	\$1,000K											
F2	Future Water Service Area Planning	\$100,000	\$100K											
F3	Future Water Service Area 510 Zone Reservoir	\$2,800,000												
F4	Super Hill 415 Zone Reservoir and Water Main	\$3,300,000												
F5	Future Water Service Area 510 Zone BPS	\$3,200,000												
F6	Sunnyside 510 Zone BPS and Water Main	\$4,100,000												
F7	Replace Lake Goodwin Slendpipe	\$960,000	\$320K	\$640K										
F8	Plot Study/Redesign for Mangroves Treatment Plant at Lake Goodwin Well	\$150,000												
F9	Construction of Mangroves Treatment Plant at Lake Goodwin Well	\$2,400,000												
F10	Plot Study/Redesign for Arsenic Treatment Plant and Capacity Improvements at Edward Springs	\$300,000												
F11	Construction of Arsenic Treatment Plant and Capacity Improvements at Edward Springs	\$11,500,000												
F12	Reservoir Cathodic Protection	\$250,000	\$250K											
F13	Highway 9 Well Evaluation Study	\$200,000	\$200K											
F14	Highway 9 Well Improvements	\$4,900,000												
F15	327 Zone to 240 Zone PRV	\$140,000	\$140K											
Miscellaneous Improvements														
M1	Fire Hydrant Replacement Program	\$1,500,000	\$75K	\$75K	\$75K	\$75K	\$75K	\$75K	\$75K	\$75K	\$75K	\$75K	\$75K	\$75K
M2	Water System Plan Update	\$500,000												
Total Estimated Costs of City Funded Impr.		\$277,959,000	\$6,868K	\$5,759K	\$5,885K	\$5,759K	\$5,885K	\$5,759K	\$5,885K	\$5,759K	\$5,885K	\$5,759K	\$5,885K	\$5,759K



\\rh2\dfs\Bothell\Date\MAR1114-084\GIS\Maps\Figure 9-1a CIP.mxd By: gdevidon Plot Date: 10/18/2016 Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet

NORTH

1 inch = 1,200 feet

0 600 1,200 2,400 Feet

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"



Figure 9-1A

Capital Improvement Projects - North

City of Marysville

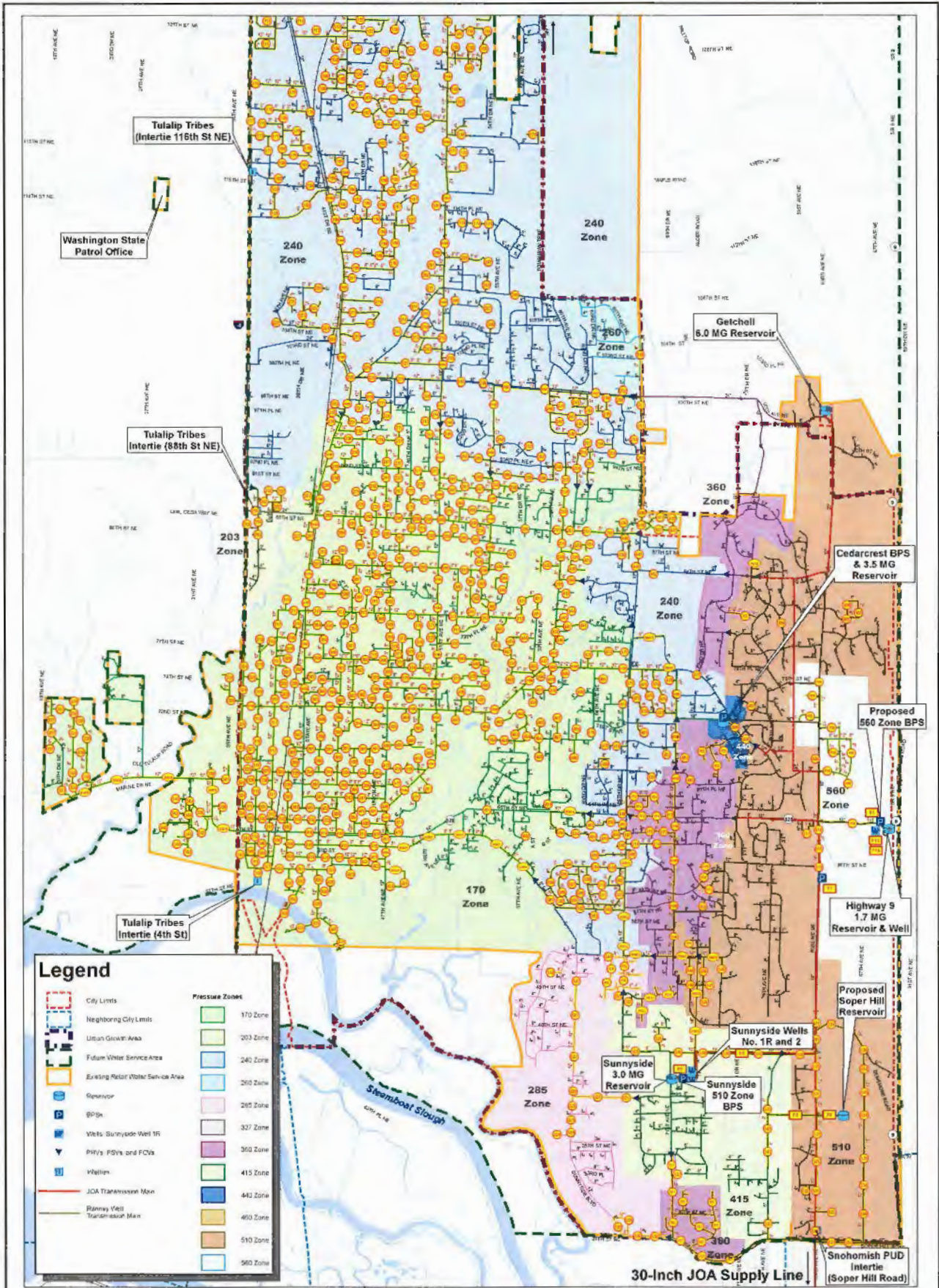
2016 Water System Plan

Vicinity Map

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Legend

	City Limits		170 Zone
	Neighboring City Limits		203 Zone
	Urban Growth Area		240 Zone
	Future Water Service Area		260 Zone
	Existing Retail Water Service Area		285 Zone
	Reservoir		300 Zone
	BPS		337 Zone
	Wells: Sunnyside Well 1R		360 Zone
	PFDs, POCs and POCs		415 Zone
	Valves		442 Zone
	JOA Transmission Main		460 Zone
	Ranney Well Transmission Main		510 Zone
			560 Zone

J:\Data\MAR\114-064\GIS\Maps\Figure 9-1b CIP.mxd By: zschremp Plot Date: 2/20/2017 Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet

NORTH

RF2

1 inch = 1,200 feet

0 600 1,200 2,400 Feet

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"



Figure 9-1B
Capital Improvement Projects - South
City of Marysville
2016 Water System Plan

Vicinity Map

For more details, contact the City of Marysville.

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PLANNING COMMISSION



MINUTES

January 10, 2017

7:00 p.m.

City Hall

CALL TO ORDER

Chair Leifer called the January 10, 2017 meeting to order at 7:00 p.m.

Marysville

Chairman: Steve Leifer

Commissioners: Roger Hoen, Jerry Andes, Kay Smith, Kelly Richards, Brandon Whitaker

Absent: Commissioner Tom Thetford (excused)

Staff: Community Development Director Dave Koenig, Senior Planner Angela Gemmer, Senior Planner Cheryl Dungan, Project Engineer Ryan Morrison, Surface Water Specialist Mathew Eyer

APPROVAL OF MINUTES

December 13, 2016

Commissioner Richards noted he would be abstaining from the vote as he was not present at the December 13 meeting.

Motion made by Commissioner Hoen, seconded by Commissioner Andes, to approve the December 13, 2016 Meeting Minutes. **Motion** passed (5-0) with Commissioner Richards abstaining.

AUDIENCE PARTICIPATION

Evan Kaiser, 2910 73rd Avenue NE, Marysville, WA, commented that when information is submitted to the Planning Commission all the pertinent documents should be submitted. He suggested that the Planning Commission conduct research on what other cities are doing when working on their codes. He asked if he could send emails to the

Planning Commission through Janis at the Planning Department and expect a reply in a reasonable time period. Chair Leifer replied that would be appropriate.

PUBLIC HEARING

A. City of Marysville – Water System Plan

Project Engineer Ryan Morrison made a PowerPoint presentation reviewing the Water System Plan Update.

Chair Leifer asked about adequate pressures for fire suppression equipment in the area north of 116th up to 152nd as referred to in his discussions with the fire marshal. His understanding is that there is a still an issue with adequate pressure and fire flow. Project Engineer Morrison said he wasn't aware of any broad low pressure issues or fire flow issues in that area. Chair Leifer commented he heard there is a marginal amount of flow available. Project Engineer Morrison reviewed fire flow requirements and data and explained that the consultant highlighted deficiencies as part of the Water Plan but that area was not highlighted. Chair Leifer asked about the commercial industrial area. Project Engineer Morrison reviewed the commercial fire flow requirements. Chair Leifer summarized that the maximum they can get out of these is 2000 gpm, but the requirement is 2500 gpm. Project Engineer Morrison explained that that the maximum is calculated per port, but it is expected that there will be multiple hydrants which makes it workable.

Commissioner Hoen expressed concern about involvement of water drawing agencies in the water system plan update. Project Engineer Morrison replied that all the surrounding jurisdictions as well as the Department of Health have copies of this Plan and are invited to review and comment. This is the same for other jurisdictions. They are also in communication with the Fire Department about the fire flow.

Commissioner Hoen asked about the status of the water lines in the City. Project Engineer Morrison replied that most of the water main is ductile iron, but some of it is asbestos cement or cast iron. Asbestos cement is the oldest portion. This is on a schedule for maintenance as part of the renewals and replacement. They are replaced depending on prioritization and budgeting. Commissioner Hoen asked if available water for the system was predicted to be adequate through 2036. Project Engineer Morrison affirmed that it is.

Commissioner Richards asked if the Sunnyside Well will relieve the city of the need for Everett water. Project Engineer Morrison replied that it will not, and the City will want to keep that intertie in place. Commissioner Richards suggested talking to Everett about stopping adding fluoride to the water.

The public hearing was opened at 7:20 for public testimony. Hearing no comments, the hearing was closed at 7:20 p.m.

Commissioner Hoen noted that there are several areas that are expanding in Lakewood. He asked if staff believes there is adequate water planned to get water to the new facilities. Project Engineer Morrison affirmed that there is.

Motion made by Commissioner Richards, seconded by Commissioner Smith, to forward this item to Council with a recommendation for approval. **Motion** passed unanimously (6-0).

B. City of Marysville – Surface Water Comprehensive Plan

Surface Water Specialist Matthew Eyer made a presentation reviewing the Surface Water Comprehensive Plan Update. He explained that there are 25 projects identified as needed in the future. Five major projects have been identified for the next six years: Historic Downtown Green Retrofit Study, Culvert Removal and Bridge Installation along Quilceda Creek at State Avenue, Water Quality Treatment Facility at Downtown Marina Outfall, Conveyance for Regional Pond 2, and Edgecomb Creek Regional Detention Facility. The simplified financial review showed that the 2% annual rate increase will cover the operating increase, but not the capital projects.

Commissioner Hoen asked if the impact fees are adequate. Senior Planner Gemmer stated that impact fees are not expected to cover all expenses. Other funding mechanisms help finance projects.

Chair Leifer asked about the area near 152nd near the Edgecomb detention pond. He asked if the total anticipated volume has taken into account the requirements for Low Impact Development and that a portion of the water will be going into the ground. Surface Water Specialist Matthew Eyer stated that would be taken into consideration going forward with any new pond. Staff hasn't looked into how a new pond would look under the new manual. As it currently stands, the pond is designed to take all the water from all the sites.

Chair Leifer asked about money for realignment of Edgecomb Creek. He asked if a route has been established. Surface Water Specialist Matthew Eyer clarified it was Hayho Creek which is the barrier, not Edgecomb. Edgecomb Creek has some theoretical language in the Comprehensive Plan about the potential realignment. Senior Planner Dungan explained that Otak developed a plan on possibilities for that. She explained that during the recession a lot of the properties went back to the banks. The City backed away from this due to lack of interest from the property owners and is no longer pursuing it at this time.

The public hearing was opened at 7:41 for public testimony. Hearing no comments, the hearing was closed at 7:41 p.m.

Motion made by Commissioner Andes, seconded by Commissioner Richards, to forward this item to Council with a recommendation for approval. **Motion** passed unanimously (6-0).

NEW BUSINESS

A. Code Amendment – Flagpoles

Senior Planner Gemmer reviewed the proposed amendments to how the City deals with flags and flagpoles. She reviewed background on this item and explained that the majority of Washington jurisdictions researched are silent on flagpole regulations with the exception of Spokane. Staff is proposing regulations adapted from Spokane's. She reviewed three different options for flagpole definitions. She also reviewed other proposed changes.

There were clarification questions regarding the language under 22C.010.220 Height-Exceptions to limits (3). Staff noted they would review the language for clarifications.

Commissioner Richards asked how tall a flagpole could be on top of his house. Director Koenig replied they would look into that, but currently it would be as high as the zone allows.

Commissioner Andes referred to the proposed language for setbacks and suggested they just keep it the same as the property setbacks. Senior Planner Gemmer indicated they could, but noted that some setbacks are much bigger, up to 20 feet. Commissioner Andes recommended keeping it the same as building setbacks to keep it simple.

Commissioner Hoen asked about vertical sail-type flags that he has seen around which are used for advertising. Senior Planner Gemmer replied that those are generally prohibited in the code and present an ongoing code enforcement issue. They are considered signs, not flags.

Chair Lelfer referred to item 11 under 22C.160.180 Exemptions in the Sign Code and stated he would like to see preference given to the United States flag by giving it an additional height allowance above and beyond all others. Director Koenig commented that the intent is not to get into regulating college flags, 12th man flags, etc. The etiquette of flags requires that the US flag is to be flown on top above all others. Language relating to this can be added.

Commissioner Richards agreed with the standard regarding the US flag, but noted that people will use this as a statement. Senior Planner Gemmer suggested getting legal guidance on whether or not this is something that can be regulated.

B. 2017-2022 -- Draft Capital Facilities Plan

Senior Planner Dungan introduced the Capital Facilities Plan for 2017-2022 as contained in the Planning Commission packet.

Commissioner Whitaker asked how the projects are prioritized. Senior Planner Dungan stated that there is a rating system within the City's database to help determine this. The plan is changed every two years in response to changes in these priorities.

Commissioner Whitaker asked what is behind the justification for moving forward with the project. Senior Planner Dungan replied that they are policies and goals that are outlined in the Comprehensive Plan and through the Growth Management Act. Commissioner Whitaker asked how estimates are made for construction of projects that are out in the future. Senior Planner Dungan replied that they are based on best case estimates.

Commissioner Richards noted that some of these are budgeted for, but some are not. Senior Planner Dungan explained that they will be depending on grant funding for a lot of things.

Commissioner Hoen noted that sidewalks continue to be discussed as something that is lacking in the City. He asked if there is part of a plan that says we are going to do a certain amount of sidewalks. Senior Planner Dungan replied that there is an allowance for sidewalks in the maintenance code. In the zoning code under residential density incentives there are additional bonus credits given to developers if they do off-site sidewalk improvements. Senior Planner Gemmer commented that with any new projects there is an expectation that frontage improvements will be done. Moving forward the situation should be improving. Also, in the existing Transportation Plan which was adopted in 2015 there is prioritization of where the City wants sidewalks constructed.

Chair Leifer referred to the potential options for improvements around Geddes Marina and asked if the third one assumes that the previous ones were completed. Senior Planner Dungan explained that there are steps that need to be completed. Cleanup of the site is the first step. The park will likely be constructed in phases as funding allows. Director Koenig explained that this reflects the Council's direction relating to the budget. Senior Planner Dungan commented that the Capital Facilities Plan as presented was adjusted to address Council's wishes related to budget discussions.

Chair Leifer commented that it appears that the improvements to Public Works would allow the existing building to be utilized by other uses, and a new facility for Public Works would be constructed. Director Koenig didn't think there was a new facility or expansion planned for Public Works. Senior Planner Dungan commented that Sanitation is relocating some of their trucks onto the old mill site that is adjacent.

Chair Leifer asked if Public Safety is the planned site for the new facility. Director Koenig commented that they don't have a site yet for the new facility, but there are also some fire uses there. He noted that this project is complicated by the Regional Fire Authority issue right now.

Commissioner Andes asked if water and road improvements would be done at the same. Senior Planner Dungan replied that typically they would be, but noted that someone from Public Works will be present at the hearing to answer questions.

Motion made by Commissioner Richards, seconded by Commissioner Andes, to schedule this for a public hearing. **Motion** passed unanimously (6-0).

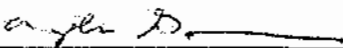
CITY COUNCIL AGENDA ITEMS AND MINUTES

ADJOURNMENT

Motion made by Commissioner Smith, seconded by Commissioner Richards, to adjourn the meeting at 8:28 p.m. **Motion** passed unanimously (6-0).

NEXT MEETING:

January 24, 2017



Angela Gemmer, Senior Planner, for
Laurie Hugdahl, Recording Secretary

PLANNING COMMISSION



MINUTES

November 9, 2016

7:00 p.m.

City Hall

CALL TO ORDER

Chair Leifer called the November 9, 2016 meeting to order at 7:00 p.m. noting the absence of Kelly Richards.

Roll Call

Chairman: Steve Leifer

Commissioners: Roger Hoen, Kay Smith, Brandon Whitaker, Jerry Andes, Tom Thetford, Kelly Richards

Staff: Community Development Director Dave Koenig, Senior Planner Angela Gemmer, City Engineer Jeff Laycock, Project Engineer Ryan Morrison, Water Resources Manager Kari Chennault, Surface Water Specialist Matthew Eyer

Absent:

APPROVAL OF MINUTES

October 25, 2016

Chair Leifer requested that two corrections be made to the minutes to clarify the intent of the statements made.

Motion made by Commissioner Smith, seconded by Commissioner Richards, to approve the October 25 Meeting Minutes as corrected.

Commissioner Richards arrived at 7:05.

Motion passed unanimously (7-0), to approve the minutes as corrected.

AUDIENCE PARTICIPATION

None

PUBLIC HEARING

School District's 2016-2021 Capital Facilities Plan

Chair Leifer opened the hearing at 7:06 p.m. Ms. Gemmer explained what the requirements were for school impact fees to be collected by school districts. The districts had submitted CFP's that met all the required criteria. She then described the criteria that had to be met, and stated that all required elements for approval had been addressed. Lake Stevens School District was utilizing a local discount in their plan this year to determine fees due to a large increase in the school impact fee. The large increase is based on the need to construct new elementary school and new classrooms to the existing high school. In order to mitigate the impacts of a large increase in fees, a local discount was being proposed to balance the needs of the school district with the impacts to future residents and developers

Ms. Gemmer overviewed each of the districts' proposed impact fee changes. Staff is requesting Planning Commission make a recommendation to City Council to approve the plans as presented.

Chair Leifer stated that all of his curiosities had been satisfied at the previous meetings when each district presented their individual plans.

Commissioner Hoen questioned why Lake Stevens was in the Marysville Plan. Ms. Gemmer explained the reason for this; being the boundaries don't always neatly coincide with City limit boundaries. Director Koenig added that school district boundaries are separate from City boundaries, and that as the City has grown, it has grown into other school district boundaries.

Public Comment – None

Motion made by Commissioner Richards, seconded by Commissioner Smith, to forward this to the City Council with a recommendation for approval. **Motion** passed unanimously (7-0).

The public hearing was closed at 7:15 p.m.

NEW BUSINESS

Water Comprehensive Plan

Mr. Morrison began an explanation of the Comp Plan and described the update process for the plan. Mr. Morrison gave a presentation of the current water service provided by the City, including the current water service area and types of connections, as well as consumption history and demand and projected consumption for the future. He then

described the proposed improvements to the water system that would be required in the future and the costs associated with those improvements. Mr. Morrison explained that the plan focused on the use of City sources in order to limit the reliance on the Everett system, which comes at a much higher cost.

Chair Leifer questioned a recent Tribe funded water main and how the diversion to the Tribes would be reduced. Morrison and Laycock commented that once that line went active, it would likely reduce the City's contribution. Chair Leifer also asked if the water system contributed to the general fund or if rates were just enough to cover costs. Mr. Morrison and Laycock explained that the capital fees funded the infrastructure and that the rates covered the needs of the system.

Commissioner Richards questioned what the Arlington Christian School box on the map meant. Mr. Morrison explained that they receive water from Marysville. He also questioned whether fluoride in City water was necessary. Mr. Morrison commented that Marysville does not fluoridate its water, though the Everett water supply does. Ms. Chennault added that there is not a hard boundary between water systems, so it is difficult to tell the percentage of fluoride. Generally, the further north you are in the City, the less fluoride in the water.

Mr. Laycock discussed the work being done to ensure adequate supply and flow in the 83rd and 87th Ave. area to accommodate the expected development in that area. There was discussion about any plans to increase pressure north of 100th Street. Ms. Chennault noted that the plan had looked for any deficiencies throughout the City and that any areas with psi below 40 had been identified. The area Chair Leifer mentioned was approximately 55 psi, so was not identified as deficient in the plan.

It was noted that there was sufficient water for the anticipated population growth.

Stormwater Comprehensive Plan

Mr. Eyer described the current stormwater system. The system is regulated by DOE. He explained that we are in the middle of a permit cycle, so the planned goals are to look at any deficiencies in the system and how to correct them. The entire system underwent analysis and concerns were identified. He overviewed the results of the analysis, including a total of 25 projects identified. A six year plan was developed to address the 25 projects identified as well as the potential funding sources to address the issues identified. Mr. Eyer overviewed each of the projects. He explained the financial review included in the plan.

Commissioner Thetford questioned if the total for the water treatment facility project included the grant funds. Mr. Eyer replied that it did, and if the grant funding were not received, the project would not be feasible without a grant.

Commissioner Whitaker asked if the list of CIP projects submitted with the Municipal Permit annual reports to DOE were included in the Surface Water Plan update. Mr. Eyer responded that the stormwater comp plan was a bit unlike the water and sewer comp

plans in that there is not a RCW requirement or permit requirement to include that and that was why they tried to streamline it and not include anything that was not useful.

Chair Leifer questioned the remaining capacity in the stormwater ponds. Mr. Eyer replied that Pond 1 is at capacity, and Pond 2 had 147 acres of developable land capacity still available. There was discussion on whether pond 1 acreage that had been paid for but that was not currently being used. Ms. Chennault added that the ordinance required a building permit be obtained in order to buy into the pond and that many properties obtained a grading permit, but did not necessarily have civil plans or an actual planned project at this time. Low Impact Design methodologies were discussed including how the expected new requirements to utilize these methodologies would affect someone that had already bought into the pond. Ms. Chennault responded that the ponds themselves are a low impact development feature and that she was hopeful this fact could be utilized to meet some of the requirements.

Chair Leifer commended staff on the work and thoroughness of the presentations.

CITY COUNCIL AGENDA ITEMS AND MINUTES

ADJOURNMENT

Motion made by Commissioner Richards, seconded by Commissioner Thefford, to adjourn the meeting at 7:51 p.m. **Motion** passed unanimously.

NEXT MEETING – November 22



Amy Hess, Recording Secretary

CITY CLERK

**Notice of Public Hearing
Before the Marysville City Council**

Notice is hereby given that the Marysville City Council will hold a Public Hearing at 7:00 p.m., on Monday, June 12, 2017 in the Council Chambers of Marysville City Hall located at 1049 State Avenue, Marysville, Washington. The purpose of this public hearing is to:

Meet the City's public process requirement to establish Water Use Efficiency goals and to consider an Ordinance of the City of Marysville adopting the 2016 Water System Plan in accordance with WAC 246-290-100.

Any person may appear at the hearing and be heard in support of or opposition to this proposal. Additional information may be obtained at the Marysville City Clerk's Office, 1049 State Avenue, Marysville, Washington 98270, (360) 363-8000. Comments may also be submitted before June 12, 2017 via email to cityclerk@marysvillewa.gov or via mail to City of Marysville Public Works, Attn: Brenda Donaldson, 80 Columbia Ave, Marysville, WA 98270.

The Water Use Efficiency Plan and Water System Plan are available for review online at: <http://docs.marysvillewa.gov/htcomnet/Handlers/AnonymousDownload.ashx?folder=2ae9acd5>. A printed copy will be available for review at the Public Works office.

The City of Marysville

April O'Brien
Deputy City Clerk

Dated: May 26, 2017

Published Marysville Globe: May 27, 2017 and June 3, 2017

Special Accommodations: The City of Marysville strives to provide accessible meetings for people with disabilities. Please contact the City Clerk's Office at (360) 363-8000 or 1-800-833-6384 (voice relay), 1-800-833-6388 (TDD relay) two days prior to the meeting date if any special accommodations are needed for this meeting.

**THIS NOTICE IS NOT TO BE REMOVED, MUTILATED OR
CONCEALED IN ANY WAY BEFORE DATE OF HEARING.**

CITY OF MARYSVILLE
Marysville, Washington
ORDINANCE NO. _____

**AN ORDINANCE OF THE CITY OF MARYSVILLE, WASHINGTON,
ADOPTING THE 2016 CITY OF MARYSVILLE WATER SYSTEM PLAN,
PURSUANT TO WAC 246-290-100.**

WHEREAS, WAC 246-290-100(10) requires water purveyors to update the Water System Plan and obtain approval from the Washington State Department of Health prior to expiration of the existing plan; and

WHEREAS, the City of Marysville's existing Water System Plan was approved by Ordinance No. 2781 on July 27, 2009, and WAC 246-290-100(9) provides that Water System Plans are effective for ten years; and

WHEREAS, the City of Marysville retained RH2 Engineering, Inc. to prepare the 2016 Water System Plan in accordance with WAC 246-290-100 and to submit said plan for review by adjoining purveyors; and

WHEREAS, the 2016 Water System Plan identifies the necessary capital improvements for the City's water system to meet future water demands in the City's Retail Water Service Area for a 20-year horizon commencing in 2017; and

WHEREAS, the City of Marysville submitted the 2016 Water System Plan to the Washington State Department of Health for review and approval as required by WAC 246-290-100; and

WHEREAS, pursuant to WAC 246-290-100(8)(b) the 2016 Water System Plan shall be approved by the Marysville City Council, prior to approval by the Washington State Department of Health; and

WHEREAS, the proposed 2016 Water System Plan is based on and complies with the objectives and requirements of the Washington State Growth Management Act (GMA) RCW 36.70A and the City's Comprehensive Plan; and

WHEREAS, the City has submitted the 2016 Water System Plan to the State of Washington Department of Commerce for 60-day review in accordance with RCW 36.70A.106; and

WHEREAS, following public notice and comment, the City issued Addendum No. 26 to the Final Environmental Impact Statement for the City of Marysville Comprehensive Plan, on December 7, 2016, and Addendum No. 26 addresses the environmental impacts of the 2016 Water Comprehensive Plan; and

WHEREAS, for the purpose of complying with the requirements of WAC 246-290-100 and RCW 36.70A.070, the Marysville Planning Commission held a public workshop on November 9, 2016 and a public hearing on January 10, 2017 to accept public comment and to review the 2016 Water System Plan; and

WHEREAS, on June 12, 2017 the Marysville City Council reviewed the Planning Commission's recommendation relating to the adoption of the 2016 Water System Plan;

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

Section 1. The document entitled "2016 City of Marysville Water System Plan," attached hereto as Exhibit A, is hereby adopted as the City of Marysville's Water System Plan pursuant to WAC 246-290-100. A copy of said plan shall be made available for inspection and review at the office of the City Clerk and the office of Community Development.

Section 2. Upon adoption, and for both the purpose of WAC 246-290-100 and RCW 36.70A.070, the "2016 City of Marysville Water System Plan" shall replace and supersede all previous Water Comprehensive Plans or Water System Plans adopted by the City of Marysville, which shall no longer be in effect.

Section 3. Severability. If any section, subsection, sentence, clause, phrase, or word of this ordinance should be held to be invalid or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality thereof shall not affect the validity or constitutionality of any other section, subsection, sentence, clause, phrase, or word of this ordinance.

PASSED by the City Council and APPROVED by the Mayor this _____ day of _____, 2017.

CITY OF MARYSVILLE

By: _____
JON NEHRING, MAYOR

Attest:

By: _____
APRIL O'BRIEN, DEPUTY CITY CLERK

Approved as to form:

By: _____
JON WALKER, CITY ATTORNEY

Date of Publication: _____

Effective Date: _____
(5-days after publication)