



CITY OF  
**SUMNER**  
WASHINGTON

**DRAFT**  
**CAPTIAL FACILITIES PLAN**



Planning Commission Recommendation

2015-2021

June 2015

[www.ci.sumner.wa.us](http://www.ci.sumner.wa.us)



**MAYOR**  
Dave Enslow

**SUMNER CITY COUNCIL**

Steve Allsop  
Curt Brown  
Mike LeMaster  
Earle Stuard  
Cindi Hochstatter  
Nancy Dumas  
Kathy Hayden

**CITY ADMINISTRATOR**

John Galle

**CITY STAFF**

Jason Wilson, Administrative Services Director  
Paul Rogerson, Community Development Director  
Brett Vinson, City Attorney  
Carmen Palmer, Communications Director  
Bill Pugh, Public Works Director  
Kassandra Raymond, Financial Services Manager  
Brad Moericke, Police Chief

**SUMNER PLANNING COMMISSION**

Cynthia Bush  
Amanda Robbert  
James Storey  
Tom Powers  
Josh Hamilton  
Jon Swanson  
Tom McDermott

## **What is the Capital Facilities Plan for the City of Sumner?**

This Capital Facilities Plan (CFP) is a supporting document to the Comprehensive Plan. The CFP identifies what public facilities and services are needed for the planned growth and how to finance them. It evaluates existing infrastructure and levels of service for government facilities, water facilities, sanitary sewer, storm water, parks, public streets, fire facilities and public school facilities. With a set of capital projects and financial plans to carry them out, a CFP provides a clear path forward for infrastructure expansion. The CFP also ensures that infrastructure improvements are provided at the same time as development (“concurrent”) as required by state law.

# TABLE OF CONTENTS

<b>INTRODUCTION</b> .....	1
<b>Chapter 1. CONCURRENCY OF CAPITAL FACILITIES</b>	
1.1 Introduction .....	4
1.2 Concurrency - What It Is.....	4
1.3 Concurrency Applied .....	5
1.4 Absence of Concurrency.....	7
1.5 Capital Facilities Defined.....	7
<b>Chapter 2. EXISTING CITY OF SUMNER INFRASTRUCTURE</b>	
2.1 Introduction.....	8
2.2 General Government Facilities.....	8
2.3 Water Facilities.....	12
2.4 Sanitary Sewer Facilities.....	15
2.5 Storm Water Facilities.....	21
2.6 Parks Facilities.....	24
2.7 Fire Facilities .....	26
2.8 Public Streets and Road Facilities .....	28
2.9 Public School Facilities.....	30
<b>Chapter 3. LEVELS OF SERVICE AND PLANNING ASSUMPTIONS</b>	
3.1 Introduction.....	32
3.2 General Government Facilities.....	32
3.3 Water Facilities.....	34
3.4 Sanitary Sewer.....	37
3.5 Storm Sewer Facilities.....	39
3.6 Parks Facilities.....	39
3.7 Fire Facilities.....	41
3.8 Public Streets and Roads Facilities.....	42
3.9 Public School Facilities.....	44

<b>Chapter 4.</b>	<b>COORDINATION OF COMPREHENSIVE PLAN ELEMENTS</b>	
4.1	Introduction .....	46
4.2	Comprehensive Plan Consistency.....	46
4.3	Existing Capital Facility Deficiencies and Recommendations .....	47
4.4	Future Infrastructure Recommendations .....	51
<b>Chapter 5.</b>	<b>CFP PROJECTS AND FINANCIAL PLANS</b>	
5.1	Introduction .....	53
5.2	General Government Facilities .....	53
5.3	Transportation Plan .....	53
5.4	Sanitary Sewer Plan .....	53
5.5	Stormwater Facilities .....	54
5.6	Parks Facilities.....	56
5.7	Public Streets and Roads.....	58
5.8	Fire Facilities.....	58
5.9	Public School Facilities.....	58
5.10	Water System Improvement Plan .....	58
<b>Figures.</b>		
2-1	General Government Facilities Map .....	9
2-2	Public Works Shop Facilities.....	11
2-3	Water Service Area Map .....	13
2-4	Water Distribution Plan Map .....	16
2-5	Sanitary Sewer Facilities Map.....	18
2-6	Wastewater Treatment Plant--13114 63rd Street East.....	20
2-7	Stormwater Drainage Facilities Map.....	23
2-8	Parks and Open Space Map.....	25
2-9	Fire Facilities Map.....	27
2-10	Transportation Plan Functional Classification Map .....	29
2-11	School District and Facilities Map .....	31
<b>Tables.</b>		
1-1	Capital Facilities .....	7
2-1	City General Government Buildings .....	10
2-2	Public Works Shop Buildings .....	11
2-3	Water Source Capacities .....	12
2-4	Water System Storage Information .....	14
2-5	Water System Distribution Network Inventory (November 2001) .....	15
2-6	Pump Station Characteristics .....	17
2-7	Summary of City Park Spaces .....	24
2-8	Freeway, Arterial, Collector Roads Inventory .....	28
2-9	Inventory of Existing School Facilities .....	30
3-1	Population and Employment Assumptions.....	32
3-2	City Government Buildings LOS .....	33
3-3	Projected System Demands Water.....	34
3-4	Existing Park Facilities and Residential LOS.....	39
3-5	Urban Street Level of Service By Class .....	42
3-6	Level of Service Criteria for Signalized Intersections.....	43

3-7	Level of Service Criteria for Unsignalized Intersections.....	43
4-1	City Government Buildings LOS Analysis 2015-2021 .....	47
4-2	Police Level of Service (2 Officers/1,000 Population) .....	47
4-3	Student Enrollment Capacity, Sumner School District, 2013-2020 .....	52
5-1	General Government Facilities Capital Improvement Plan, 2016-2021 .....	53
5-2	Proposed Capital Improvement Projects, Stormwater .....	54
5-3	Improvement Plan for Parks and Open Space, 2015-2021 .....	57

**Appendices.**

APPENDIX A:	GLOSSARY OF TERMS.....	59
APPENDIX B:	2009 WATER SYSTEM PLAN CAPITAL IMPROVEMENT PLAN.....	63
APPENDIX C:	2014 SEWER CAPITAL IMPROVEMENT PLAN AND SCHEDULE.....	64
APPENDIX D:	2015 SIX-YEAR TRANSPORTATION IMPROVEMENT PROGRAM.....	65
APPENDIX E:	2014 SUMNER SCHOOL DISTRICT IMPACT FEES.....	66
APPENDIX F:	CITY COUNCIL FINAL ORDINANCE.....	67

## INTRODUCTION

The 1990 State Legislature approved the Growth Management Act (GMA), which directs local government to control and manage growth. The State Legislature recognized that uncoordinated and unplanned growth, together with a lack of common goals, could impact the environment and effect economic development and the high quality of life for Washington citizens.

GMA has significant requirements in the areas of facilities planning and capital improvement financing. GMA is to ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use, without decreasing current levels of service below locally established minimum standards.

The requirements for preparing a capital facilities plan under GMA have changed the way comprehensive planning generally has been done. Both the transportation element and the capital facilities element reinforce the requirement that comprehensive plans prepared according to GMA be realistic. The requirements for setting level of service standards, inventories and forecasts of existing and needed capital facilities, six-year financing plans, and concurrency all require a more complex level of planning than what existed prior to GMA.

The Sumner Capital Facilities Plan (CFP) is a document that provides a list of proposed major capital expenditures throughout the City. It also provides a multi-year look at the strategies and financing requirements for major capital programs. The plan projects needs six years into the future for major construction, infrastructure improvements and land acquisition, in addition to machinery and equipment purchases. The plan then provides a funding strategy and projected funding scenarios for each succeeding year. A CFP makes good business and planning sense.

The following are some of the benefits of a CFP:

- It provides policy makers with a current and future view of the capital needs
- It provides a mechanism for assessing the financial ramifications of funding or not funding programs
- It provides an opportunity to combine similar projects across departmental lines
- It supports good management that demonstrates the need for facilities and the need for revenues to pay for them
- It provides accessibility to various sources of revenues (i.e. grants, Public Works Trust Fund, impact fees, real estate excise taxes) that require a CFP in order to qualify for the revenue

The City of Sumner is responsible for providing facilities and services which are needed by the residents and businesses of the City for a safe, secure, and efficient environment within which to conduct their affairs. GMA defines public facilities to include: streets, roads, highways, sidewalks, street and road lighting systems, and traffic signals; domestic water systems; storm and sanitary sewer systems; parks and recreational facilities; and schools. It further defines public services to include fire protection and suppression, law enforcement, public health, education, recreation, environmental protection, and other governmental services.

As provided in GMA, capital facilities plans are a required part of the Comprehensive Plan and are to provide capital facilities for land development that is envisioned or authorized by the Land Use element. Capital facilities planning is grounded in local decisions. The City of Sumner defines what



constitutes a capital facility, sets overall levels of service, differential levels of service, contingencies, etc. based on local desires and needs. The capital facilities plan is meant to coordinate and provide consistency among the many plans for capital improvements, various master plans and other studies. It should insure the timely provision of adequate facilities as required by GMA.

The CFP is the element that makes the rest of the Comprehensive Plan come to life. By funding projects needed to maintain levels of service and for concurrency, the CFP determines the quality of life in the community. The requirement to fully finance the CFP provides a reality check for the vision of the Comprehensive Plan.

Planning for capital facilities is a complex task. First, it requires an understanding of future needs; second, it must assess the various types of capital facilities that could be provided, and identify the most effective and efficient array of facilities to support the needed services. Finally, it must address how these facilities will be financed.

Planning what is needed is itself only a beginning. Planning how to pay for these needs is another step. Only so much can and will be afforded. Securing the most effective array of facilities in light of limited resources and competing demands requires coordination of the planned facilities and their implementation. It also requires a thorough understanding of the fiscal capacity of the City to finance these facilities. Financial planning and implementation of capital facilities cannot be effectively carried out on an annual basis, since often the financing requires multi-year commitments of fiscal resources. As such, this plan is long-range in its scope.

Prioritization of the various projects has been done to set the funding package together. Each project proposal is matched against criteria.

That criterion (in order) is:

- A legal or statutory requirement for carrying out the improvement (a legal mandate)
- An emergency repair
- A continuation of multi-year projects (contractual obligations, etc.)
- Implementation of legislative (Council) goals and objectives
- Ability to leverage outside sources (grants, mitigation, impact fees, low interest loans, etc.)
- An enhancement of or general repair of existing facilities
- An acquisition and development of new facilities

For financial and accounting purposes, municipal operations are divided into two broad categories: general governmental, and enterprise.

1. General governmental activities are primarily tax and user fee supported, while
2. Enterprise activities rely primarily on fees generated from the sale of goods and services for their operations (rate payers).

Capital improvements for police, fire, parks, administration, and transportation are traditionally general governmental in nature, while water, sanitary sewer, storm drain and cemetery are enterprise.

Capital funding for both general governmental and enterprise categories emanates primarily from operating revenues, with grants, local improvement districts, latecomer, and impact fees frequently contributing substantial sums towards capital construction. General governmental and enterprise operations both use such debt financing strategies as bonding and leasing to help fund improvements like water, sewer, and storm drain rates or raising the connection charges or system development charges. In the general governmental area, however, Washington State law limits the revenue sources that municipalities can use, the tax rates and the amount of general obligation debt capacity that can be issued to raise funds for capital improvements.

As a result of GMA, through proper legislation of the City Council, impact fees for various areas can be established. They include:

- public streets and roads;
- publicly owned parks, open space and recreation facilities;
- school facilities; and
- fire protection facilities in jurisdictions that are not part of a fire district

The City of Sumner has adopted a Traffic Impact Fee (TIF) and school impact fees and adopted mitigation fees for parks, trails, and fire protection.

#### PLAN GUIDE

Each section of the plan (i.e. General Government, Transportation, Water, Sewer, and Storm Drainage) has a financial plan.

That financial plan:

1. prioritizes each project based upon the criteria mentioned earlier; and
2. lists all of the sources of revenues.

Each project has an individual worksheet that gives the overall cost of the project and the individual revenue sources. These worksheets may or may not be scheduled for construction in the same year as the financial plan indicates. That would depend on funding available from the various sources and coordination of construction projects. Other elements to be discussed in the plan include concurrency, existing infrastructure, school district plans, levels of service and planning assumptions.

## 1. CONCURRENCY OF CAPITAL FACILITIES

## 1.1 Introduction

Concurrency is a requirement that the capital facilities needed to serve new development are available concurrent with the impact of the new development on the community. This can be accomplished in a number of ways. It is based on maintaining a “level of service” (LOS) for these facilities that is adopted by the community in its comprehensive plan. In specific terms, the “concurrent” capital facilities must be constructed or have strategies in place (such as an impact fee program) at the time the new development is ready for occupancy. Alternatively, it is possible for a city to accept a performance bond to install the concurrent facilities within a six-year period of time after occupancy of the development. Concurrency is a comparison of the infrastructure needed by the new development (example: 4 lane road) to the existing infrastructure in place (example: 2 lane road) and providing for the construction of the new facilities needed (additional 2 lanes of road).

When concurrency is applied to a specific development, one of two outcomes is possible:

### *Outcome 1*

When a new development requires capacity of capital facilities that are already in place, then that development has satisfied the concurrency test. Development and occupancy can then proceed.

### *Outcome 2*

When a new development requires capital facilities that do not exist in order to maintain an adopted level of service, then that development does not satisfy the concurrency test. The new enhanced capital facilities must be strategized for, constructed, or bonded. Costs of the new facilities will be borne by the developer’s fair share impact, the City, and possibly other parties participating in the installation of facilities.

## 1.2 Concurrency — What is it?

Concurrency is synonymous with the provision of adequate public facilities for a particular development project. GMA gives numerous statements of standards to follow:

### *GMA Planning Goals 12 (RCW 36.70A.020)*

“ . . .public facilities and services. . . shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards.”

### *Subdivisions (RCW 58.17.110 (2))*

“A proposed subdivision and dedication shall not be approved unless the city, town, or county legislative body makes written findings that: (a) appropriate provisions are made for the public health, safety, and general welfare and for such open spaces, drainageways, streets or roads, alleys, other public ways, transit stops, potable water supplies, sanitary wastes, parks and recreation, playgrounds, schools and school grounds. . .”

### *Comprehensive Plans - Mandatory Elements (RCW 36.70A.070 (6)(b))*

“ . . . local jurisdictions must adopt and enforce ordinances which prohibit development approval if the development causes the level of services on a locally owned transportation facility to decline below the standards adopted in the transportation element of the

comprehensive plan, unless transportation improvements or strategies to accommodate the impacts of development are made concurrent with the development . . . For the purposes of this subsection, 'concurrent with the development' shall mean that improvements or strategies are in place at the time of development, or that a financial commitment is in place to complete the improvements or strategies within six years."

*Impact Fees. (RCW 82.02.050 (1)(a))*

"...It is the intent of the legislature . . . To ensure that adequate facilities are available to serve new growth and development."

*Interpretations on Concurrency. (WAC 365-195-070 (3))*

"...concurrency should be sought with respect to public facilities in addition to transportation facilities. ...Concurrency describes the situation in which adequate facilities are available when the impacts of development occur, or within a specified time thereafter. With respect to facilities other than transportation facilities and water systems, local jurisdictions may fashion their own regulatory responses and are not limited to imposing moratoria on development during periods when concurrency is not maintained.

### **1.3 Concurrency Applied**

The Comprehensive Plan and Transportation Plan address concurrency in a number of policies and sections. The Capital Facilities Element of the Comprehensive Plan sets forth the following policies and objectives relating to concurrency:

- 1.3.1 *Ensure new public facilities and services to support new development are provided concurrent with the development.*
- 1.3.2 *Develop procedures to ensure that public facilities and services necessary to support development and established Levels of Service are available at the time of development.*
- 1.3.3 *Work with other service providers and adjacent jurisdictions to coordinate service provision and improvements to capital facilities.*
- 1.3.4 *Coordinate with adjacent jurisdictions through joint planning to ensure service provision and development is consistent with the goals of this plan.*
- 1.3.5 *Generally make new development responsible for providing the services necessary to support the demands created by the development.*
- 1.3.6 *Encourage infill development which takes advantage of existing public facility capacity.*
- 1.3.7 *Establish and maintain a current 6-year capital improvement plan to finance the necessary capital improvements identified in the applicable capital facility plans.*

The Transportation Element of the 2014 Comprehensive Plan sets forth the following policies relating to concurrency:

- 1.3.8 *Transportation improvements or strategies shall be constructed to ensure that an adequate transportation system is in place to serve increased travel demands. Concurrency shall be defined as having a financial commitment in place to resolve the deficiency within six years. Concurrency will be implemented as part of the City's development review process under SEPA. The City will not approve new developments unless the LOS standards are met.*

*The City will not apply concurrency adopted on SR 167, a designated Highway of Statewide Significance (HSS), or its interchanges (per HB 1487).*

*Exceptions to concurrency also will be provided at the following locations in the City until improvements identified in the transportation plan are funded and constructed:*

- *On SR 167, a designated HSS, or its interchanges (per HB 1487);*
- *On SR 410, SR 162, or the three interchanges of SR 410 state highways serving the City (Traffic Avenue, SR 162, and Sumner-Tapps Highway);*
- *The Traffic Avenue/Main Street/Fryar Avenue intersection;*
- *The East Valley Highway/Forest Canyon Road or East Valley Highway/8<sup>th</sup> Street E intersections; and*
- *The Pacific Avenue/West Valley Highway corridor or Bridge Street*

*The above exceptions from denial under concurrency are identified since these corridors are affected by significant regional traffic growth and require regional funding solutions. Until improvements identified in the Transportation Plan are able to be implemented using State, other regional, and local funding, congestion will be allowed to occur. The City will review potential impacts and identify appropriate mitigation through impact fees (if adopted) and SEPA. The City will coordinate with the Washington State Department of Transportation (WSDOT) on identifying appropriate mitigation along SR 162 and at the interchanges of SR 410.*

## 1.4 Absence of Concurrency

If a particular development fails to meet levels of service or other plan performance measures, development standards, impact or mitigation fee charges, then that development should not be permitted for construction or occupancy. Furthermore, the City may enact a moratorium on new development if the level of service is not being met or will not be met in six years.

## 1.5 Capital Facilities Defined

GMA requires a jurisdiction’s capital facilities plan to discuss what existing capital facilities are owned and identify their locations and capacities. For the purposes of this CFP a capital facility means a structure, improvement, piece of equipment, or other major asset that has a useful life of at least 10 years, costs at least \$35,000 and has a specified level of service defined by the Comprehensive Plan. These capital facilities are provided by or for public purposes and services and are limited to: potable water, sanitary sewer; stormwater, parks and open space, police, fire, public schools, streets and sidewalks, general government, and Public Works shops. **Table 1-1** illustrates what types of structures, improvements, equipment, and other major assets may be considered “capital facilities.”

**Table 1-1 — Capital Facilities**

<b>Facility</b>	<b>Improvements, equipment, etc.</b>
Potable Water System	New well/Springs Water tanks Treatment facilities/buildings Transmission/distribution pipeline system
Sanitary Sewer	Wastewater Treatment Plant Pump stations & standby generators Sewer collection and conveyance system
Stormwater	Regional detention/Treatment facilities Subdivision detention/treatment facilities (public) Pipeline/open channel conveyance systems
Parks and Open space	Purchase of park property Construction of park facilities Construction of trail facilities
Police	Expansion of City Hall
Fire	Expansion of fire station Construction of new fire station Purchase of apparatus over \$35,000 in cost
Public Schools	New school/administration buildings Expansion of schools
Streets and Sidewalks	Arterial street improvements Collector, residential & neighborhood streets Intersection improvements including traffic signals Sidewalks Traffic calming and street amenities and roundabouts
General Government	Expansion of City Hall
Public Works Shops	Expansion of Public Works shops buildings or site Purchase of major piece of equipment over \$35,000 in cost (backhoe, etc.)

## 2. EXISTING CITY OF SUMNER INFRASTRUCTURE

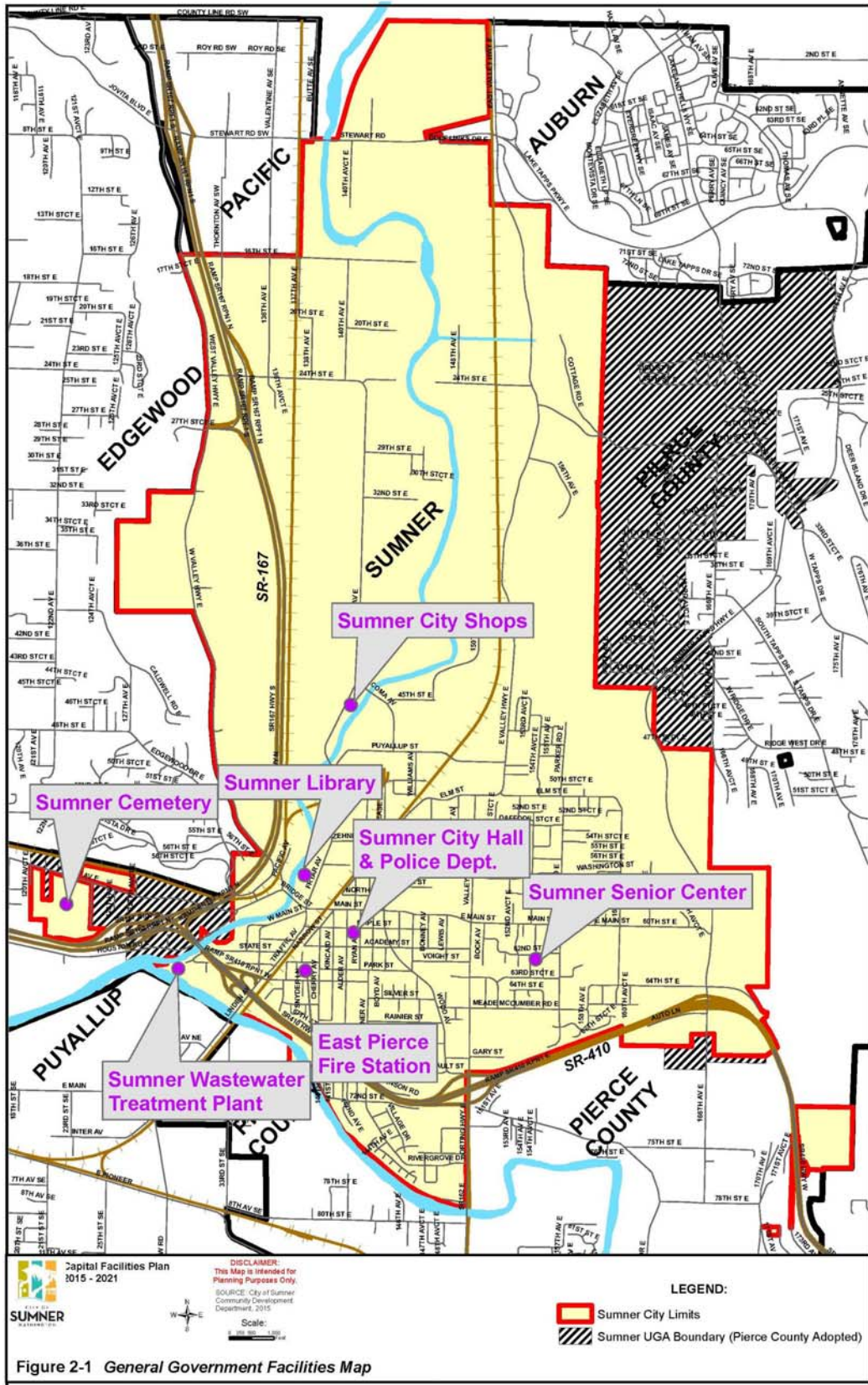
### 2.1 Introduction

This chapter contains a summary of capacities and locations for existing capital facilities owned by the City of Sumner, East Pierce Fire & Rescue (EPFR) and the school districts.

### 2.2 General Government Facilities

#### 2.2.1 General Government Buildings

General government facilities are mainly housed in City Hall at 1104 Maple Street (see **Figure 2-1**) City Hall houses offices for Administration, Municipal Court, Finance, Community Development, City Attorney, Human Resources, and Public Works Department. The City Hall building area housing these services is 14,577 square feet (this does not count the Police Department that is also in the same building; see discussion in **section 2.2.2**).



The current level of service for these facilities is outlined in **Table 2-1** below:



**Table 2-1 — City General Government Buildings**

<b>Facility</b>	<b>Building Area (s.f.)</b>
General Government	14,577
Police	7,654
Public Works Shops	17,136
<b>Total</b>	<b>39,367</b>

### 2.2.2 Police Facilities

The Police Department presently employs 19 FTE Commissioned Officers, 4 FTE Special Commissioned Officers and 5 FTE civilians for a total of 30 FTEs. Police also includes oversight of the Animal Control. Police Department Headquarters are in Sumner City Hall at 1104 Maple Street. Officers circulate throughout the City on patrol and respond to calls from a dispatch center in Puyallup.

The police facility in City Hall currently houses the communications center, holding cells, conference room, locker facilities, and sundry offices for a total area of 7,654 square feet (see **Table 2-1**). Jail facilities are provided through an inter-local agreement with the City of Puyallup. Animal Control is provided by the city as Metro Animal Services, which also serves the communities of Bonney Lake, Edgewood, Milton, and Puyallup through an inter-local agreement.

Animal control shelter is located at 1200 39<sup>th</sup> Ave S.E. in Puyallup and contains a combination of 16 kennels for dogs and 47 for cats. These include kennels for housing adoptable pets, stray dogs, and quarantine facilities. In the day to day operations these kennels may be used for different needs depending on demand. For instance, cat kennels can be used for small dogs.

### 2.2.3 Public Works Shop Facilities

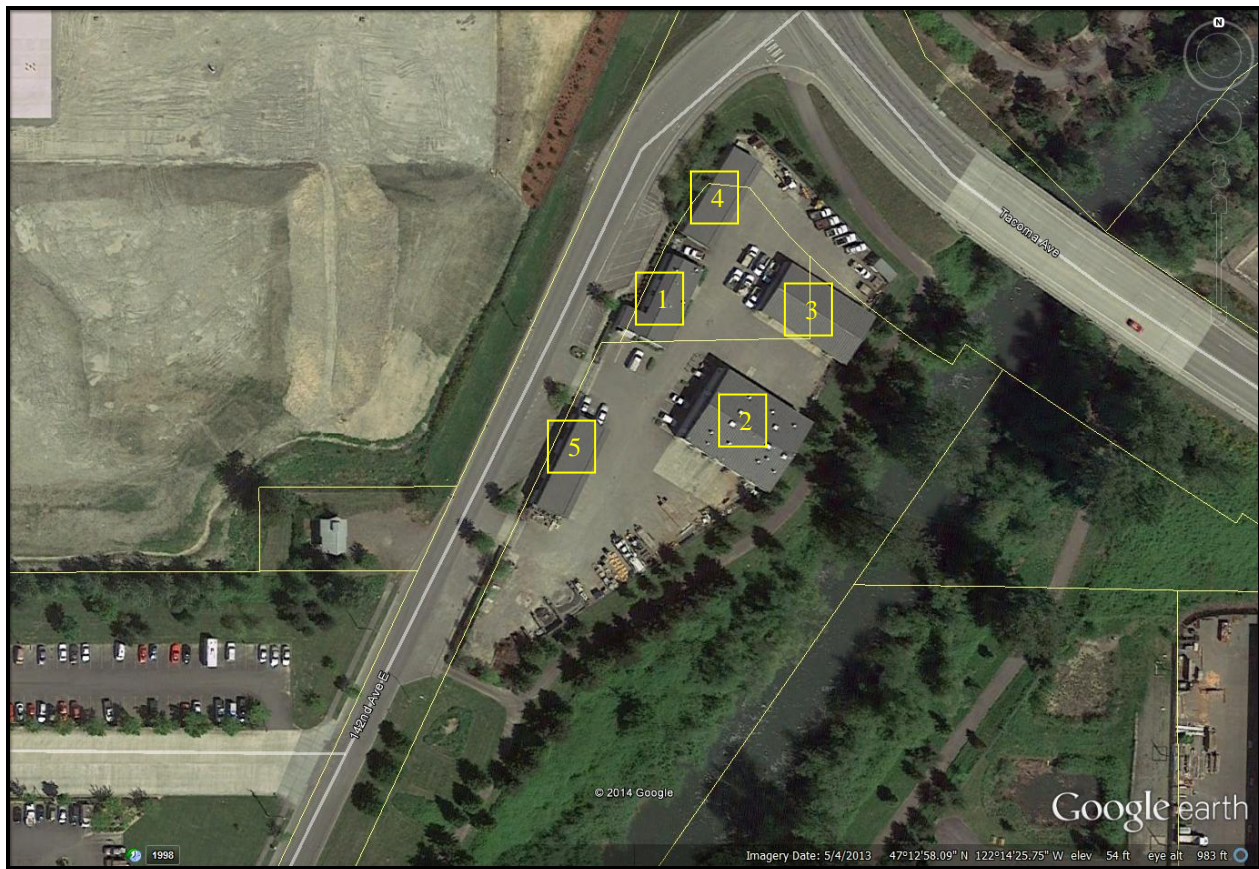
The Public Works shops are located at 4711 142<sup>nd</sup> Ave E. (See **Figure 2-2**) on approximately 8.35 acres and were constructed in 2000. This facility is made up of five buildings totaling 17,136 square feet and summarized in **Table 2-2** below.

**Table 2-2 — Public Works Shop Buildings**

<b>Building No.</b>	<b>Description</b>	<b>Size (s.f.)</b>
1	Offices, meeting rooms, restroom, lockers	2,520
2	Vehicle wash, repair, storage, sign shop, welding/fab shop.	5,880
3	Vehicle storage	4,032
4	Vehicle storage	2,352
5	Material storage (pipe, etc.)	2,352
<b>Total</b>		<b>17,136</b>

Source: City of Sumner Community Development Department

**Figure 2-2 — Public Works Shop Facilities**



## 2.3 Water Facilities

A schematic of the Sumner Water System is in the *Sumner Water System Plan Update, November 2009* and shows size and location of pipes. The reader is directed to this large format map for a complete inventory of the system.

### 2.3.1 Service Area

The Sumner water utility service area is situated in the Puyallup/White River basin and is adjoined by the water services areas of the City of Bonney Lake, the Mountain View neighborhood, the City of Edgewood, the City of Puyallup, the Valley Water District, the City of Auburn, Tacoma Water, and the City of Pacific. The Sumner water system has interties with both Pacific and Puyallup that are meant to be utilized for emergencies and do not provide water for daily demands. The future Sumner water service area, which is shown in **Figure 2-3**, is consistent with the *Pierce County Coordinated Water System Plan* and is located entirely within the Urban Growth Area (UGA) boundary established by Pierce County.

**Table 2-3 — Water Source Capacities**

DOH ID Number	Source Name	Source Type	Source Capacity (mgd)
SO 1	Sumner Springs	Free-flowing spring	1.15
SO 2	Weber Springs	Free-flowing spring	<sup>1</sup>
SO 3	Elhi Springs	Free-flowing spring	0.13
SO 4	County Springs	Free-flowing spring	0.71
SO 5	West Well	Artesian Well	0.36
SO 6	South Well	Artesian Well	1.01
SO 7	Dieringer Well	Artesian well	0.36
<b>TOTAL</b>			<b>2.57</b>

Source: Water System Plan, 2009

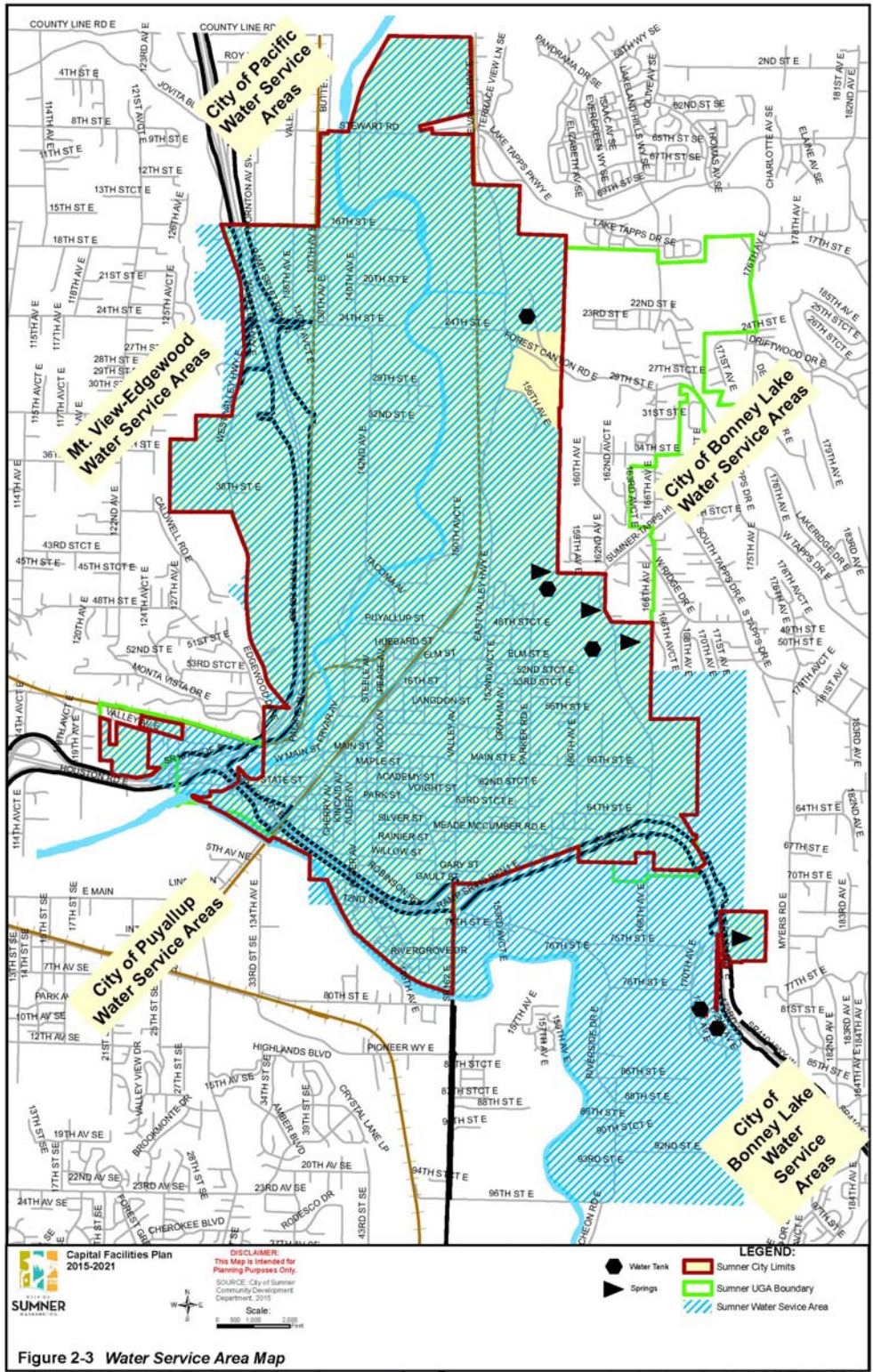
<sup>1</sup> Flow from Weber Springs combines with Sumner and County Springs.

### 2.3.2 Water System Source

Sumner currently uses seven potable water sources, including four springs (County Springs, Sumner Springs, Weber Springs and Elhi Springs) and three wells (South Well, Dieringer Well and West Well). The Sumner potable water sources physical capacity inventory is in **Table 2-3**. These water sources are also served by chlorination facilities.

### 2.3.3 Water System Storage

The City has five (5) storage tanks all but one being gravity fed with a total storage capacity of 5.398 million gallons; a summary of storage information is provided in **Table 2-4**. The tanks are in good condition, and in 1998 a 2.0 million gallon concrete post-tensioned cable wrap tank was constructed on the east hill to provide adequate fire flows to the North Sumner Industrial area. The 1.0 million gallon welded steel tank at Sumner Springs was refurbished and repainted (inside and out) in 2002. The 2.0 million gallon welded steel south tank was repainted in 2005. The Sumner Viewpoint tank was constructed in 2006 to serve a 120 lot subdivision.



**Table 2-4 — Water System Storage Information**

<b>Name</b>	<b>Functions</b>	<b>Total Volume</b>	<b>Working Volume<sup>1</sup></b>	<b>Dimensions (Diameter)</b>	<b>Height (feet)</b>	<b>Overflow Elevation (feet)</b>	<b>Floor Elevations (feet)</b>	<b>Condition</b>
Sumner Springs Tank Built in 1956 (steel) Repainted in 2002	Storage, Chlorine Contact	1.0 MG	1.0 MG	81 ft.	26.0	234.0	208.0	Good
County Springs Tank Build in 1986 Cast in place concrete	Primarily Chlorine Contact	68,000 gal	66,000 gal	20 ft.	28.0	234.0	207.0	Good
South Tank Built in 1973 (steel) To be repainted in 2005	Storage	2.0 MG	2.0 MG	104 ft.	104.0	234.0	202.0	Good
North Tank Built in 1998 Concrete post-tensioned	Storage	2.0 MG	2.0 MG	120 ft.	24.23	234.0	210.0	Good
Sumner Viewpoint Built in 2006	Storage, high pressure zone	330,000 gal	193,000 gal	26 ft.	85.00	392.00	310.0	Good

Source: Water System Plan, 2009

<sup>1</sup>To overflow elevation.

### 2.3.4 Distribution System

The distribution system piping ranges in size from a 2 to 18-inch diameter. The 85 miles of pipe also vary in age and material; most of the pipe installed before 1960 is cast iron with packed joints or small diameter steel pipe while the pipe installed between 1960 and the mid-1980s is mostly asbestos cement pipe with O-ring rubber gasket couplers. All new water mains installed since the mid-1980s is Class 52 ductile iron pipe. All three pipe materials have a long design life. The system has a sufficient number of in-line valves to isolate small sections, in an effort to reduce the number of services out of water during repair events. Detailed maps of the distribution network are maintained and updated by the City. These water system maps show pipe diameters, pipe material, locations of hydrants, valves, and abandoned pipes, and give the year of installation for most pipes. **Figure 2-4** is derived from these maps, and shows the distribution network and other water system features as they currently exist. The approximate length and percentage of each pipe size in the distribution network is listed in **Table 2-5**.

**Table 2-5 — Water System Distribution Network Inventory (November 2001)**

<b>Pipe Sizes (Inches)</b>	<b>Length (Feet)</b>	<b>Percentage of Total System</b>
2	6,282	1.4
3	1,339	0.3
4	6,177	1.4
6	110,920	24.9
8	144,590	32.4
10	3,701	0.8
12	150,829	33.8
14	11,391	2.6
16	5,217	1.2
18	5,557	1.2
<b>Total:</b>	<b>446,003</b>	<b>100.0</b>

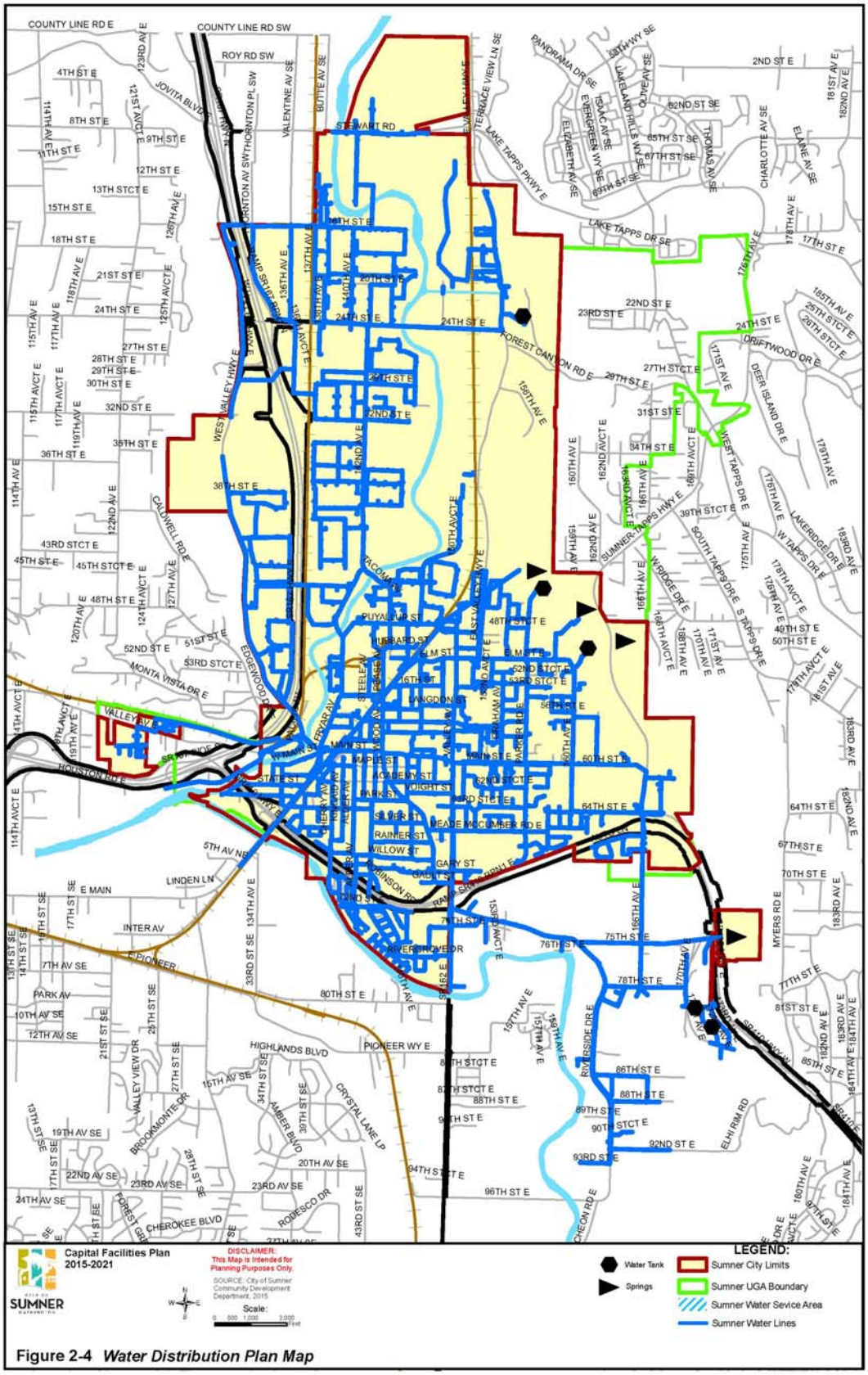
Source: Water System Plan, 2009

## 2.4 **Sanitary Sewer Facilities**

The information in this section is based on the City of Sumner Sanitary Sewer Comprehensive Plan (City Sanitary Sewer Plan), adopted in May 2000 (Parametrix, 2000), and the Wastewater Treatment Plant Capacity Increase Analysis completed in October 2009 (Gray & Osborne, Inc. 2009). The City Sanitary Sewer Plan analyzes the City's collection system, identifies any system deficiencies for existing and future flow conditions, and provides recommended improvements and cost estimates. In preparing the plan, the City's wastewater collection system was analyzed for existing and future capacity.

### 2.4.1 Service Area

The City of Sumner has operated a sanitary sewer system since 1927 and a wastewater treatment plant since 1957. The City's sanitary sewer service area includes the Sumner city limits,



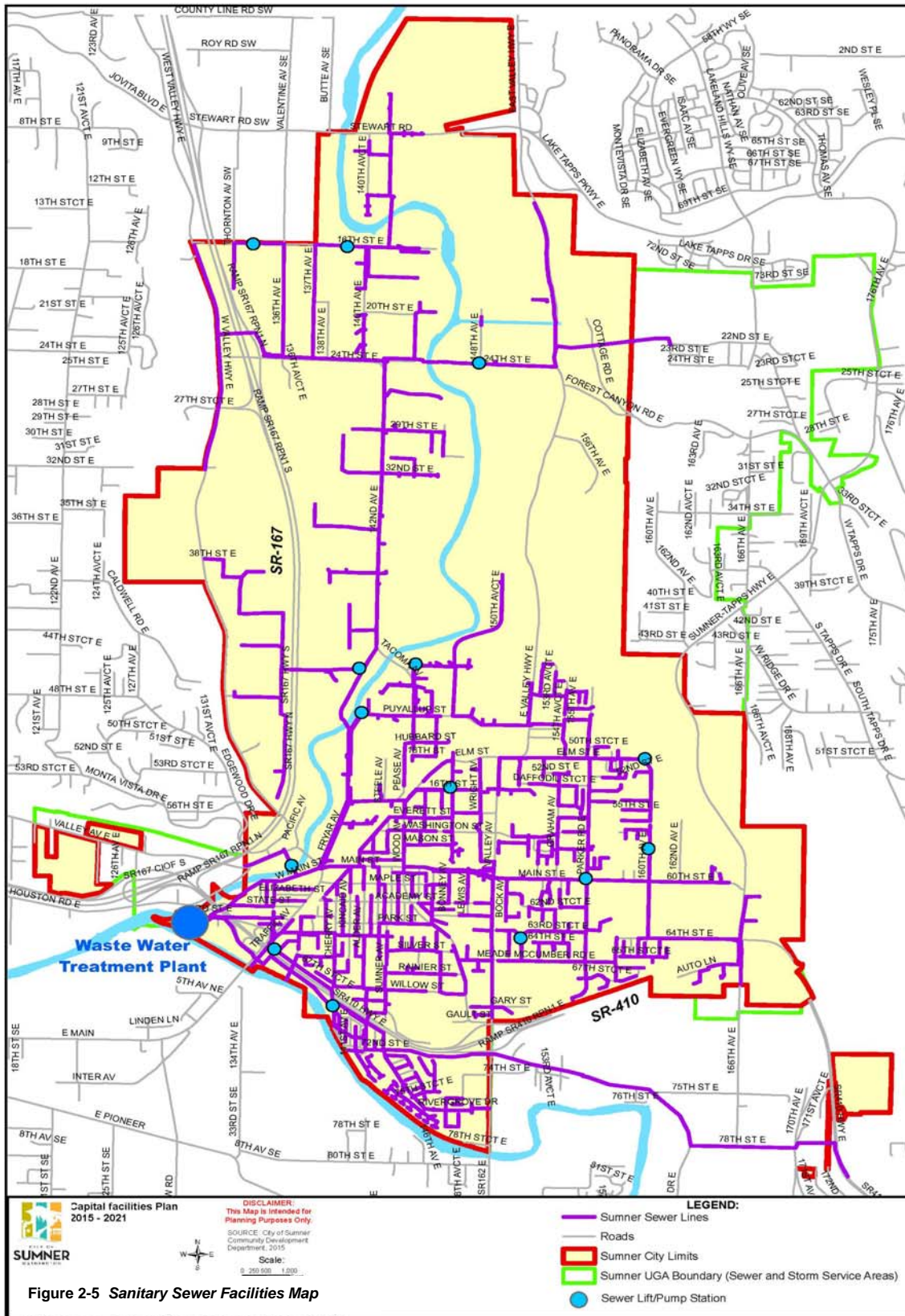
as well as portions of the Sumner UGA. As of 2010, the 7.2-square-mile service area contains 33.90 miles of sewer mains and 15 pump stations (**Table 2-6**) for different drainage basins throughout the area. The service area is divided into basins to analyze capacity needs. The boundaries of the service area and its constituent basins are shown in **Figure 2-5**, along with the existing collection system for sanitary sewer.

**Table 2-6 — Pump Station Characteristics**

<b>Pump Station Number</b>	<b>Station Name</b>	<b>Year Constructed</b>	<b>Last Year Rebuilt</b>	<b>Type</b>	<b>Station Design Capacity (Gallons per Minute)</b>
1	Tacoma Avenue	1982	2009	Dry/wet well	175
2	North	1957	1987	Dry/wet well	500
3	Van tassel	1977	2007	Submersible	250
4	Jansen	1979	2006	Submersible	130
5	Parker	1963		Dry/wet well	285
6	16th Street	1967	2009	Dry/wet well	700
7	Cherry	1966		Dry/wet well	535
8	South	1966		Dry/wet well	1,500
9	160th Street	1996		Submersible	130
10	142nd Street	1998		Submersible	2,280
11	16th PS No. 1	1998		Submersible	100
12	16th PS No.2	1998		Submersible	100
13	Cannery	2006		Submersible	213
14	Forest Canyon	2007		Submersible	600
15	North	2010		Submersible	500

Source: Kongsli pers. Comm; Sanitary Sewer Comprehensive Plan Amendment





## 2.4.2 Wastewater Treatment Plant (WWTP)

The wastewater treatment plant (WWTP) is located at 13114 63rd Street East, at the confluence of the Puyallup and White (Stuck) rivers (**Figure 2-6**). The WWTP provides sanitary sewer treatment to all of the current plan area as well as the City of Bonney Lake. The City maintains an agreement with the City of Bonney Lake which allows Bonney Lake to use up to 55% of the plant's capacity, while the remaining 45% of the plant's capacity is reserved for flows from the Sumner service area.

The WWTP is a secondary treatment facility and discharges treated effluent to the White (Stuck) River. The last major upgrade to the WWTP occurred in 2004. Capacity measurements for treatment plants include wastewater flow (measured in gallons per day) and organic influent loadings (or solids). The most common measurements of organic loadings are 5-day biochemical oxygen demand (BOD<sub>5</sub>) and total suspended solids (TSS). According to the 2010 Comprehensive Plan EIS, the WWTP treats an average wet weather wastewater flow of 2.44 MGD. According to Wastewater Treatment Plant Capacity Increase Analysis (2009), the permitted capacity of the WWTP as of 2009 was:

- Maximum Month (Design Flow): 4.59 MGD
- Peak Hour Flow: 14.43 MGD
- Peak Day Flow: 9.71 MGD
- Influent BOD<sub>5</sub>: 5,925 lb/d
- Influent TSS: 5,875 lb/d

By contrast, influent wastewater flows have grown more slowly than originally predicted, and the plant is not anticipated to reach its maximum permitted flow capacity until 2028.

### *System Capacity Improvements*

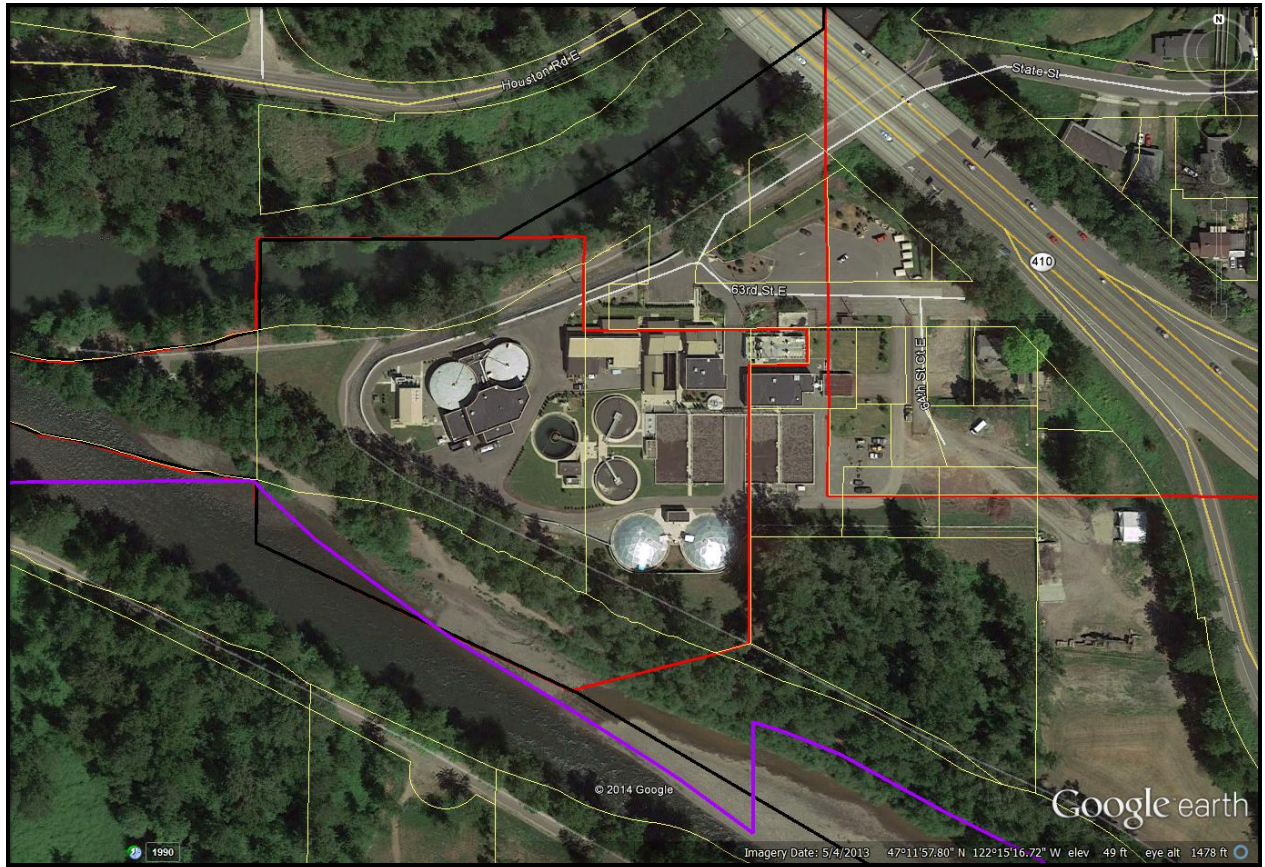
The City of Sumner is in the process of upgrading the WWTP to expand its treatment capacity, with completion anticipated for March 2016 (personal communication with Mike Dahlem, City of Sumner Public Works, 2015).

The resulting treatment capacity is as follows:

- Maximum Month (Design Flow): 6.10 MGD
- Peak Day Flow: 11.66 MGD
- Peak Hour Flow: 19.87 MGD
- Influent BOD<sub>5</sub>: 10,900 lbs/day
- Influent TSS: 12,660 lbs/day

Future studies of the WWTP will examine increasing capacity to 9.3 mgd (personal communication with Mike Dahlem, City of Sumner Public Works, 2015).

Figure 2-6 — Wastewater Treatment Plant--13114 63<sup>rd</sup> Street East



## 2.5 Stormwater Facilities

The information in this section is based on the *City of Sumner 2011 Stormwater Comprehensive Plan Update* (Parametrix Inc. 2011), which is an update to the *City of Sumner Stormwater Comprehensive Plan* adopted in 1992 and is incorporated in this study by reference. This section deals with the capacity issues associated with the physical stormwater collection and discharge system.

### 2.5.1 Background

The Sumner Valley has historically been drained to lower the natural water table, control flooding, and create land that was more conducive for agriculture. As more intensive commercial/industrial and residential development has occurred, expansion of the stormwater system has been necessary to collect and convey stormwater to the rivers and to prevent flooding.

The purpose of the Stormwater Plan has been to project the capacity infrastructure needs and address current problems with the stormwater system. Changes in state and federal water quality regulations, stormwater retention and detention standards, and other parameters have an effect on the overall system as well as accurately anticipating what type of growth will occur.

The Washington State Department of Ecology (Ecology ) issued an NPDES Phase II Stormwater Permit to the City in 2007. The Stormwater Comprehensive Plan contains projects to meet the requirements for the Phase II National Pollutant Discharge Elimination System (NPDES) Permit, and establishes a System Development Charge and monthly stormwater fee review. Sufficient revenue is needed to construct the new projects and to maintain the existing and new infrastructure..

### 2.5.2 Stormwater Facilities Inventory

The 1992 Stormwater Comprehensive Plan identified 44 drainage basins that generate and affect stormwater flows within the city limits. These basins were further divided into 115 sub basins. See **Figure 2-7** . The majority of these basins were modeled in 1992 for the 25-year, 24-hour event and the 100-year, 24-hour event using Type 1A precipitation distribution.

Hydraulic modeling was completed for the stormwater infrastructure to determine system deficiencies and identify potential capital improvement projects. The results of the modeling are contained in the 1992 Stormwater Comprehensive Plan.

The 2004 Stormwater Comprehensive Plan update included remodeling up to four of the sub-basins because of a significant change of land use designation (i.e., allowable development density) between 1992 and present. When remodeling based on the 2004 land use map and allowable land use densities it was determined there was no significant increase in allowable density for developable areas located within the city limits over what was modeled in 1992.

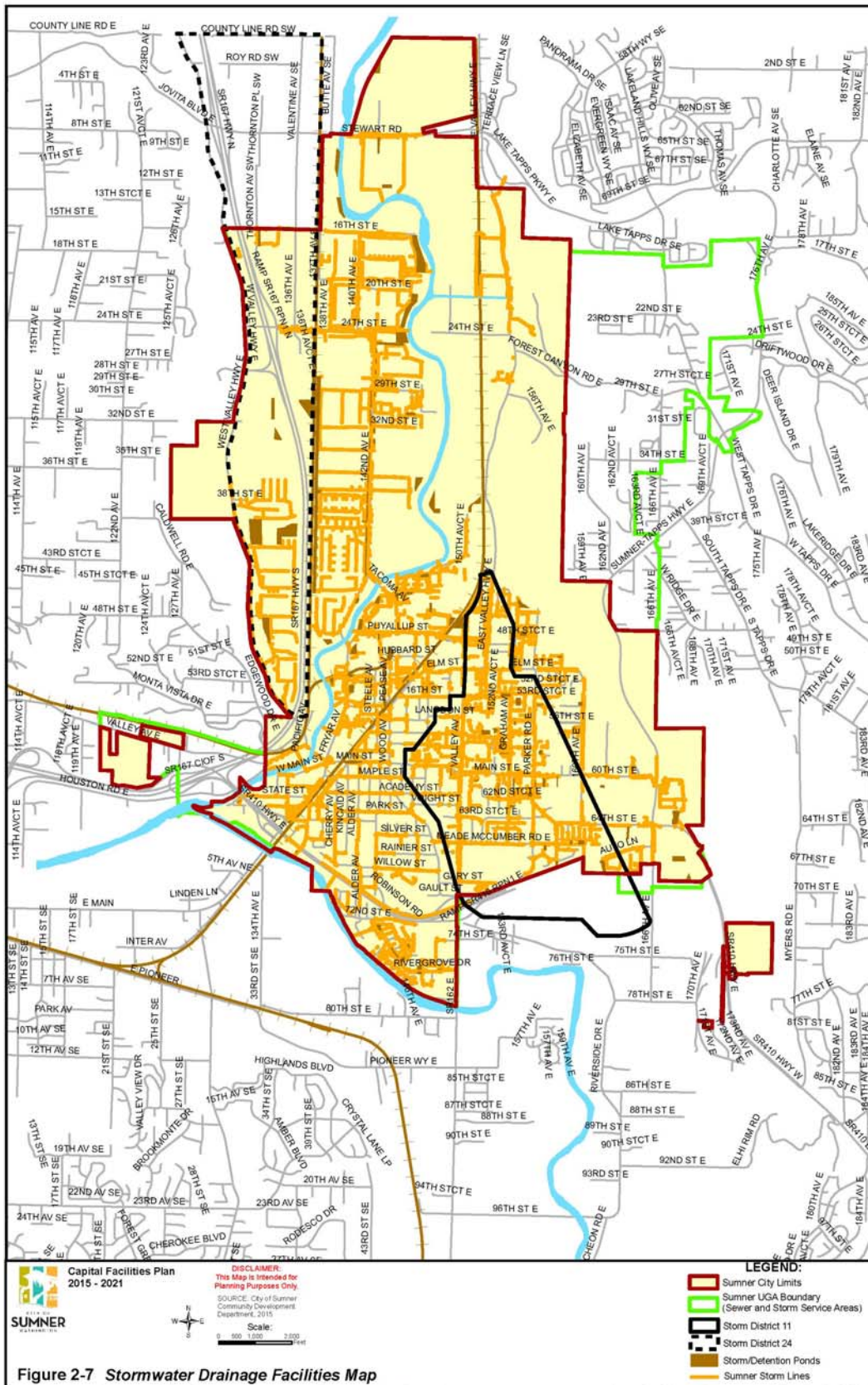
### 2.5.3 Low Impact Development

The 2004 Stormwater Comprehensive Plan also includes guidance for development and implementation of a low impact development (LID) policy for the City. The primary objective of LID

methods is to mimic the pre-developed site hydrology by using site design techniques that store infiltrate, evaporate, and detain runoff. Since every aspect of site development affects hydrologic patterns the site, LID control techniques focus mainly on site hydrology. If LID techniques can be used, the net result will be to more closely mimic the watershed's natural hydrologic functions. This can have a benefit to receiving waters by maintaining base flows, a more closely approximating the natural condition that are good for fish and wildlife using the streams and rivers.

In 2009, the City adopted a Comprehensive Plan text amendment, updating policies related to Low Impact Development. This amendment was intended to ensure that the City's policies reflect the evolving state of science related to LID and are consistent with updated information included in Ecology's 2005 Stormwater Manual. These updated goals and policies are contained in the latest version of the City's Comprehensive Plan.

The inventory of storm sewer facilities in the City of Sumner is shown in **Figure 2-7**.



## 2.6 Parks Facilities

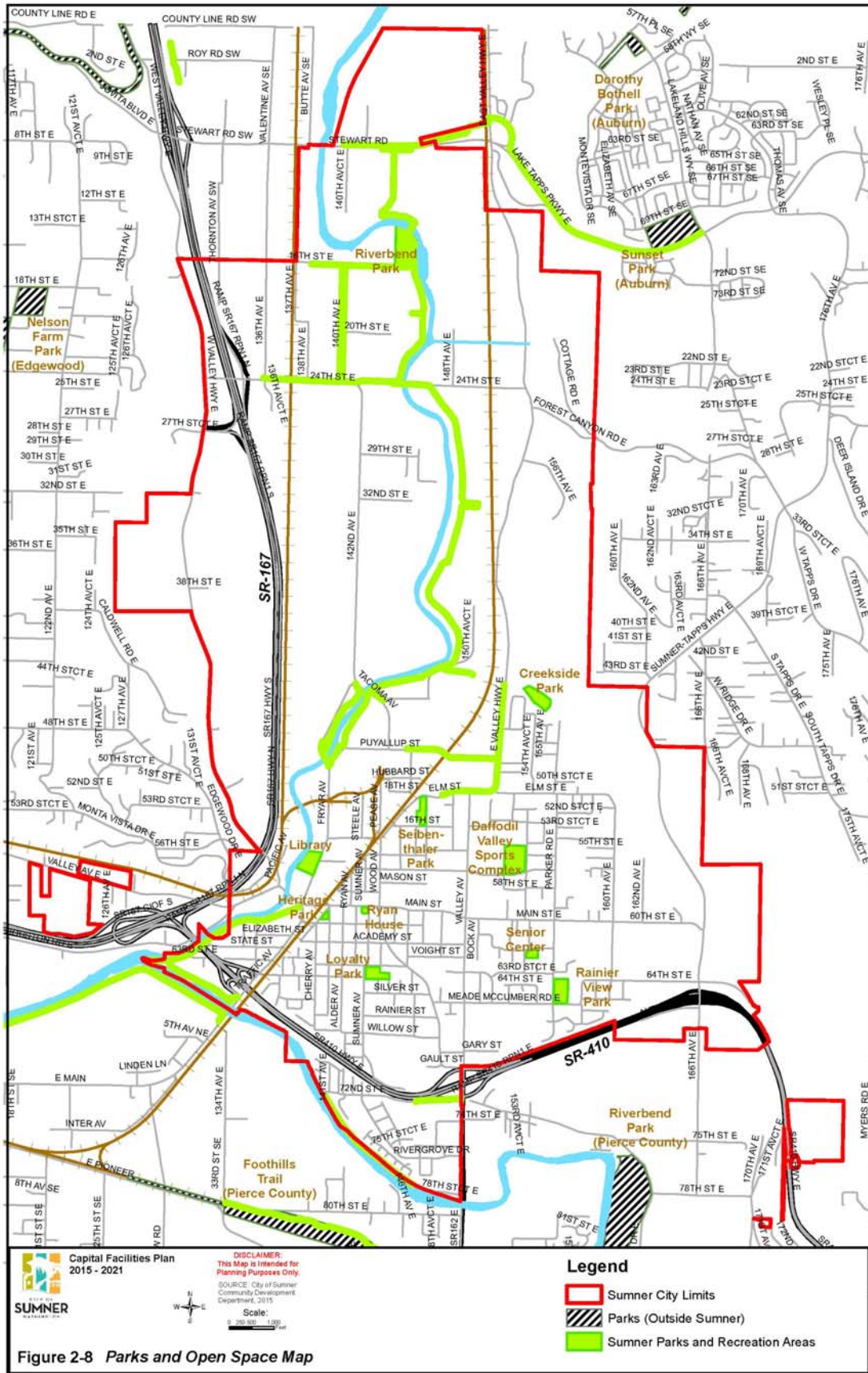
The City offers a variety of parks both community and regional with amenities ranging from a quiet picnic area with horseshoe pits to volleyball and regulation softball fields. The schools in Sumner also provide or a substantial amount of fields and facilities for the community including soccer fields. An inventory of park facilities and acreage is shown in **Table 2-7**, and mapped in **Figure 2-8** (Per 2014 *Draft Parks and Open Space Plan*).

**Table 2-7 — Summary of City Park Spaces**

<b>Park Areas and Facilities</b>	<b>Acres</b>	<b>No. of Sites</b>
<b><i>Improved Community Parks</i></b>		<b>4</b>
Loyalty	2.60	
Seibenthaler	2.00	
Heritage	0.50	
Rainier View Park	4.00	
<i>Subtotal</i>	9.10	
<b><i>Unimproved Community Parks</i></b>		<b>2</b>
Riverbend Park	6.60	
Salmon Creek Park	6.40	
<i>Subtotal</i>	13.00	
<b><i>Regional Parks</i></b>		<b>1</b>
Sports Complex	11.20	
<i>Subtotal</i>	11.20	
<b><i>Waterfront Parks</i></b>		<b>1</b>
Library Park	0.50	
<i>Subtotal</i>	0.50	
<b><i>Special Use Area<sup>1</sup></i></b>		<b>2</b>
Ryan House	0.35	
Senior Center	1.00	
<i>Subtotal</i>	1.35	
<b><i>Beautification Sites</i></b>	1.50	<b>3</b>
<b>Total City Park Land</b>	<b>36.65</b>	<b>13</b>
<b>School District Recreation Facilities</b>	<b>14.50</b>	<b>4</b>
<b>Total Open Space with School Space</b>	<b>51.15</b>	<b>17</b>

Source: City of Sumner *Draft Parks and Open Space Plan*, 2014

<sup>1</sup> Special use areas include miscellaneous sites that do not fit another category. Examples include the Ryan House Museum and the Senior Center.





The Parks and Open Space Element of the Comprehensive Plan sets forth policies relating to concurrency that new development which impacts the park system pay its fair share of the cost of providing new park facilities.

## **2.7 Fire Facilities**

### **2.7.1 Inventory**

In 2008, the City of Sumner and Pierce County Fire District 1 joined East Pierce Fire and Rescue (EPFR). EPFR serves a population of more than 88,200 living in and around Bonney Lake, Sumner, Lake Tapps, the Ridge Communities, South Prairie, Edgewood, Milton, and Wilkeson. The district covers approximately 151 square miles and protects residents from eleven stations – five staffed and six volunteer. This includes 1 Fire Chief, 1 Deputy Chief, 4 Assistant Chiefs, 4 Battalion Chiefs, 9 administrative support staff, 34 career firefighter-EMTs, 49 career Firefighter-Paramedics, 44 volunteer firefighters, and 7 EMS-only volunteers. All full-time firefighters are cross-trained as either emergency medical technicians (EMTs) or paramedics and are able to respond to both medical emergencies and fires. An independently elected board of citizens, called Fire Commissioners, governs the agency.

EPFR currently operates 12 fire stations, two of which are located within the current plan area. Station 13 (Sumner Station) is located at 800 Harrison Street in Downtown Sumner (see **Figure 2-9**). This facility is approximately 8,200 square feet and includes sleeping quarters, a large drive-through apparatus bay, dayroom, conference room and sundry offices. The station is staffed by a minimum of 5 career personnel. Equipment available at Station 13 includes:

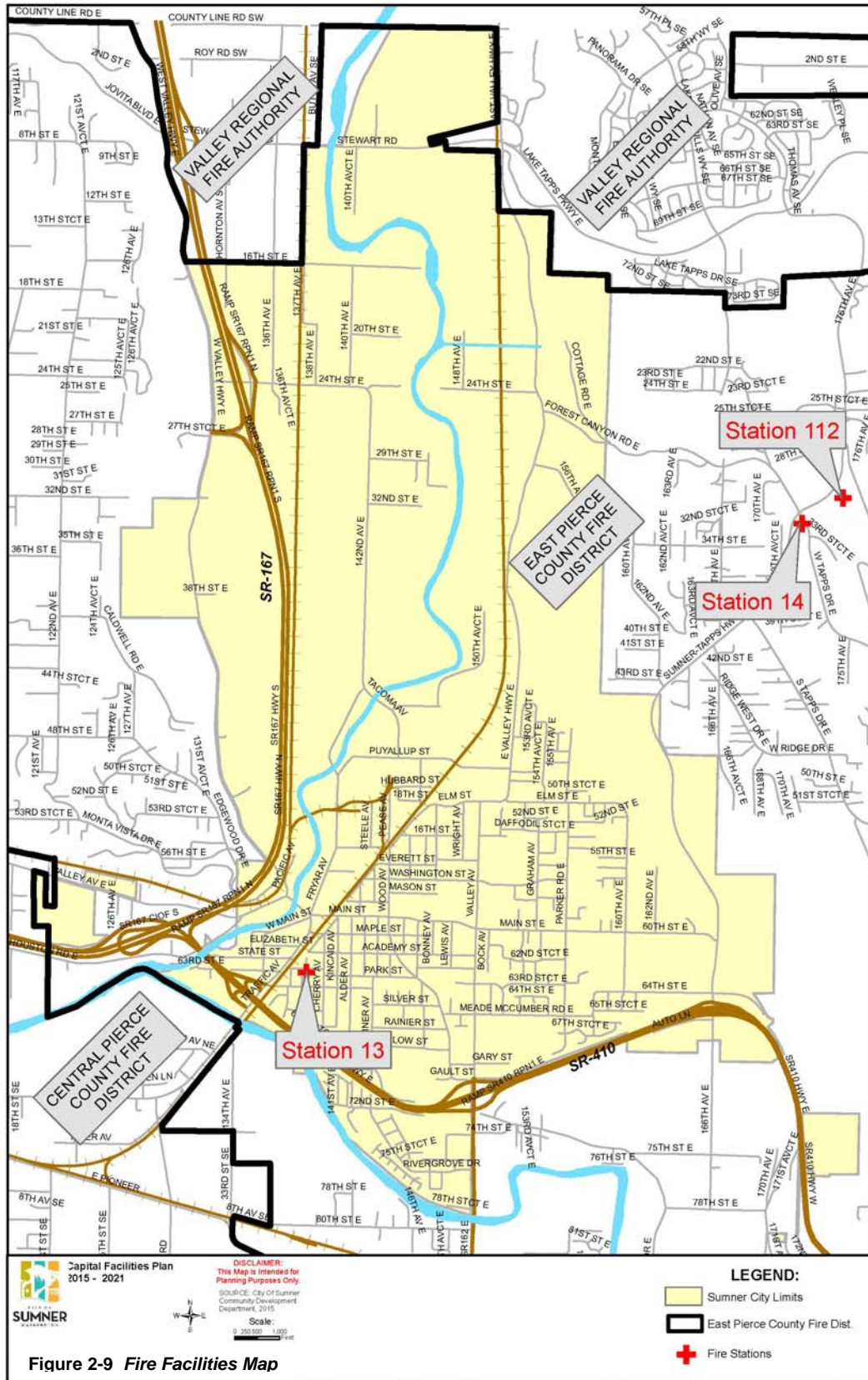
- 2 medic units
- 1 ladder truck
- 1 Rescue Vehicle #13
- 1 Rescue Trailer

Station 14 (West Tapps Station) is located within the East Hill UGA of the current plan area. The station is located at 3206 West Tapps Drive. Station 14 is approximately 3,616 square feet in size and is staffed by a minimum of 2 career fire personnel. Equipment available at Station 14 includes:

- 1 fire engine
- 1 medic unit

Station 112 (Boat House) is located at 2905 Sumner-Tapps Hwy. E. within the East Hill UGA and is used to store the following:

- 1 pontoon rescue boat



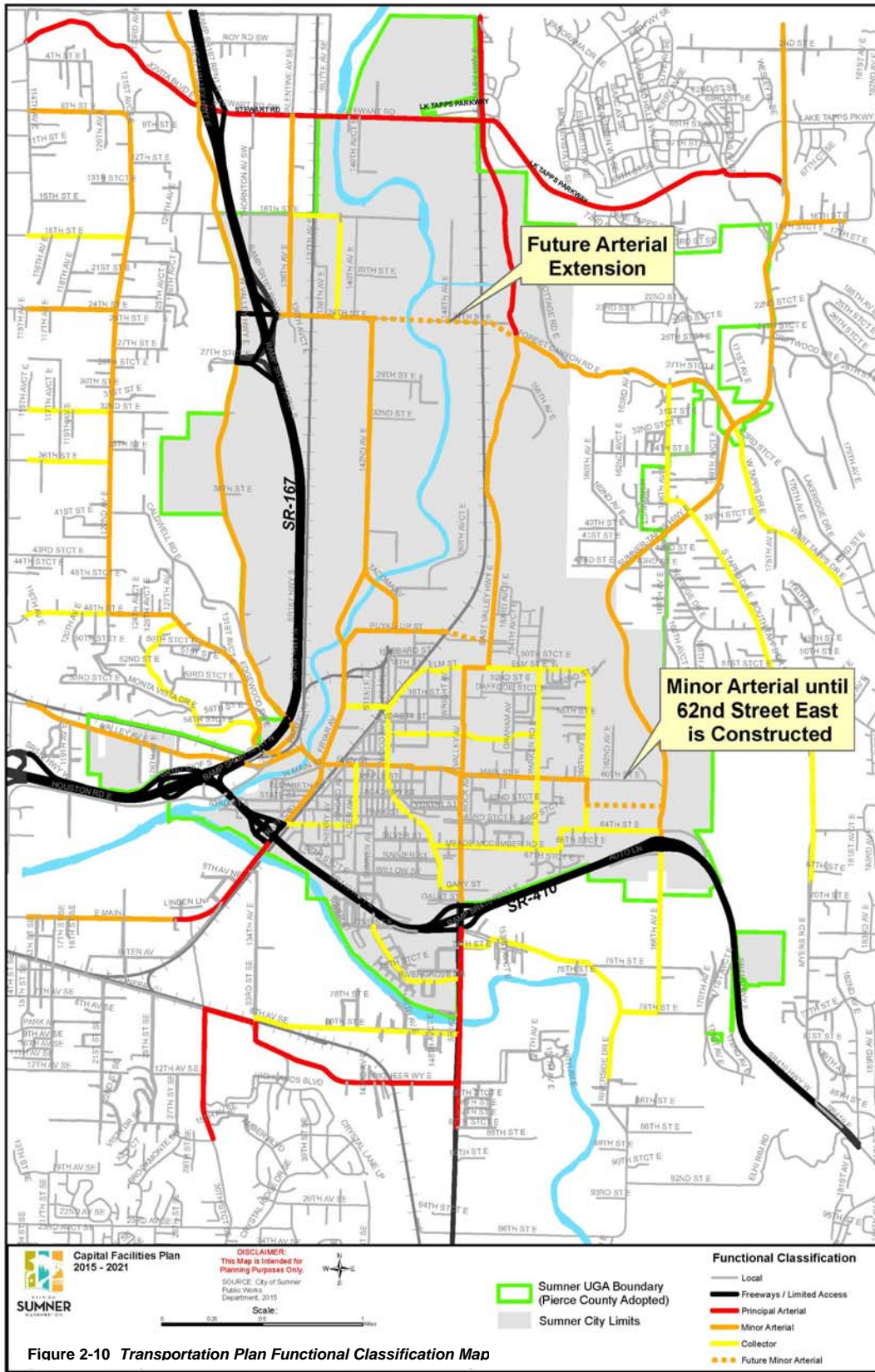
## 2.8 Public Streets and Road Facilities

Within the City of Sumner the streets and roads have functionally classified as freeways, principal arterials, minor arterials, collectors, residential streets, neighborhood streets and alleys. **Figure 2-10** shows the planned functional classification for streets in Sumner as presented in the Transportation Plan.

**Table 2-8 — Freeway, Arterial, Collector Roads Inventory**

Street Name/Section	Classification	Speed Limit (mph)	Number of Lanes
State Route 167	Freeway	60	4-limited access
State Route 410	Freeway	55	4-limited access
Traffic Avenue	Major Arterial	25	2-5
Fryar Avenue	Major Arterial	25	3
142 <sup>nd</sup> Avenue East	Major Arterial	35	5
24 <sup>th</sup> Street East	Major Arterial	35	5
Stewart Road (8 <sup>th</sup> Street East)	Major Arterial	35	2-5
Main Street	Major Arterial	25	2-3
Valley Avenue	Minor Arterial	25	2-3
136 <sup>th</sup> Avenue East	Minor Arterial	30	3 (after widening)
East Valley Hwy	Minor Arterial	25-35	2-3
West Valley Hwy	Minor Arterial	35	2
Sumner-Tapps Hwy	Minor Arterial	3	25
Bridge Street	Minor Arterial	25	2
Valley Avenue East	Minor Arterial	25	2-3
Puyallup Street	Minor Arterial	25	2-3
Elm St (Valley to E. Valley Hwy)	Minor Arterial	25	2
Forest Canyon	Minor Arterial	25-35	2
Sumner Heights Drive	Collector	25	2
Zehnder Street	Collector	25	2
Alder Avenue	Collector	25	2
Thompson Street	Collector	25	2
Wood Avenue	Collector	25	2
Elm Street (Wood to Valley; E. Valley Hwy to 160th)	Collector	25	2
158th Avenue East (Mead-McCumber to 64 <sup>th</sup> )	Collector	25	2
Meade-McCumber Road	Collector	25	2
Parker Rd (Mead-McCumber to Elm)	Collector	25	2
Washington St (Wood to Valley)	Collector	25	2
160 <sup>th</sup> Ave (Elm to 64 <sup>th</sup> )	Collector	25	2
64 <sup>th</sup> Street East (Sumner-Tapps Hwy to 158 <sup>th</sup> )	Collector	25	2
Rivergrove Drive	Collector	25	2
Riverside Drive	Collector	35	2

Source: Transportation Plan, 2015



## 2.9 Public School Facilities

Public schools are operated by local school districts and governed by State and federal laws and regulations. State funds provide a large part of school financing. School districts raise additional funds from local property taxes. State laws set standards for service levels and facility development, such as the site size and enrollment. They also specify funding methods. These laws perform much of the role of a functional plan for schools. For school districts to be eligible for development impact fees, the State GMA requires school capital facilities plans to be adopted and incorporated into city capital facilities plans.

### 2.9.1 Sumner School District

The *Sumner School District 2014-2020 Capital Facilities Plan* was adopted in 2014. The Sumner School District No. 320 operates within the City of Sumner and also encompasses the cities of Bonney Lake, portions of Edgewood, Pacific and unincorporated Pierce County. The district consists of 13 schools total, 4 of which are in Sumner (see **Figure 2-11**); a performing arts center, community swimming pool, a public gymnasium, and a recreation department. The Sumner School District serves over 8,500 students. **Table 2-9** shows existing schools in Sumner, in addition to locations, capacities of each, and support facilities serving the entire district.

**Table 2-9 — Inventory of Existing School Facilities**

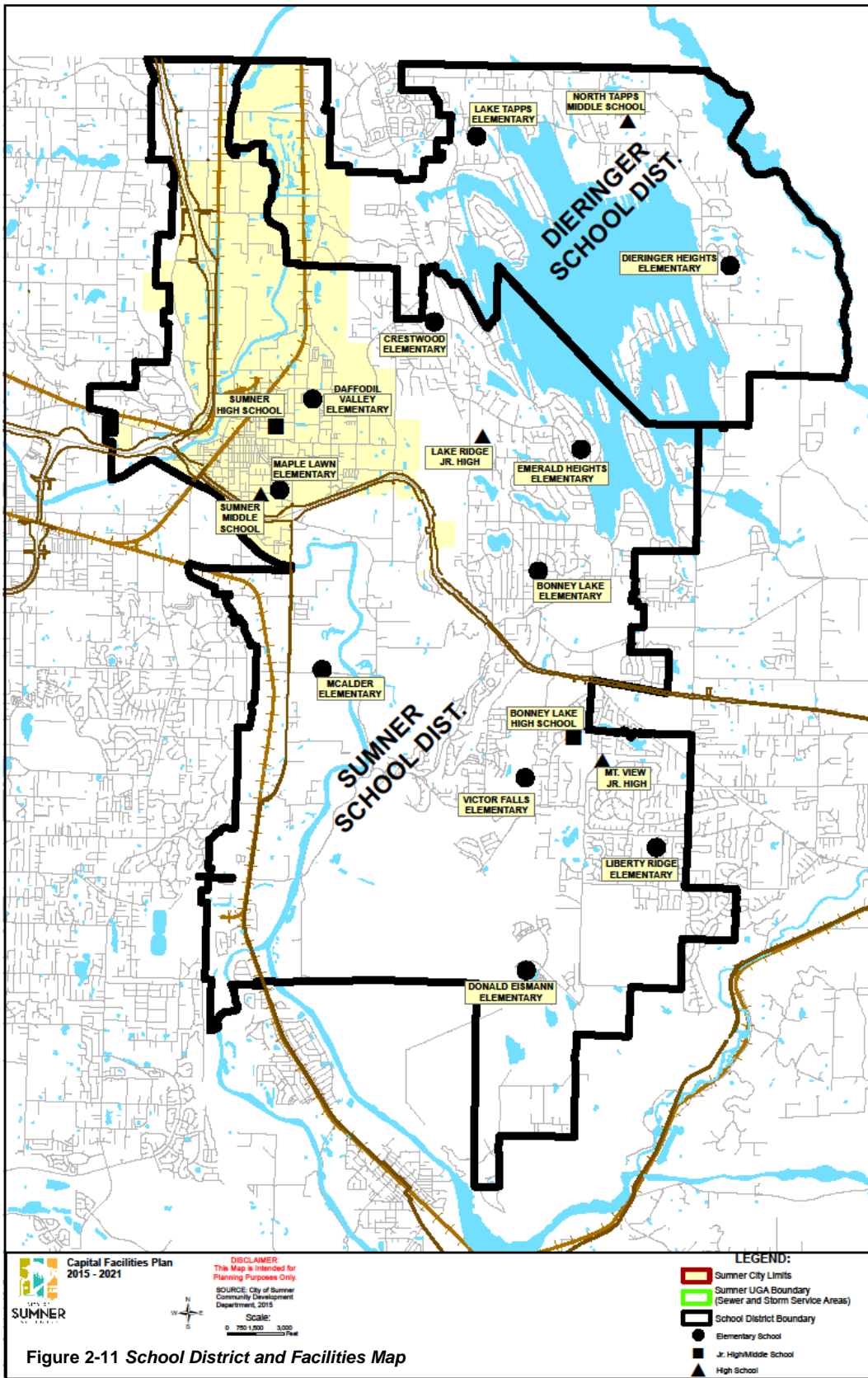
<b>Name</b>	<b>Capacity<sup>1</sup></b>	<b>Acres</b>	<b>Location</b>
<b>Schools</b>			
Daffodil Valley Elementary	451	12.7	1509 Valley Avenue
Maple Lawn Elementary	462	8.5	230 Wood Avenue
Sumner Middle School	750	23	1508 Willow Street
Sumner High School	1,300	26.8	1707 Main Street
<b>Total</b>	<b>2,963</b>	<b>70.8</b>	
<b>Support Facilities</b>			
Central Office (Administration)			1202 Wood Avenue
Sunset Chev Stadium (Athletic Office)			1707 Main Street
Recreation Department (Robert Miller Gym)			1509 Valley Avenue

Source: Sumner School District Capital Facilities Plan, 2014

<sup>1</sup>Capacity is based upon District capacity standards as described herein. All portables are excluded from permanent capacity calculations.

### 2.9.2 Dieringer School District

The Dieringer School District includes three schools, Lake Tapps Elementary School, Dieringer Heights Elementary School and North Tapps Middle School. The majority of Dieringer School District #343 is located in unincorporated Pierce County, bounded on the east by the White River, on the west by the Stuck River, on the north by the city of Auburn, and on the south by the cities of Bonney Lake and Sumner. The District surrounds the northern two-thirds of Lake Tapps and covers approximately 5.5 square miles (Dieringer School District, 2014). In the Sumner current plan area, the Dieringer School District serves the northeast Sumner city limits along East Valley Highway.



### 3. LEVELS OF SERVICE AND PLANNING ASSUMPTIONS

#### 3.1 Introduction

GMA Administrative Code (WAC 365-195-315) recommends that local capital facilities plans include a discussion on “. . .the selection of levels of service or planning assumptions for the various facilities to apply during the planning period (twenty years or more) and which reflect community goals.” Chapter 4 of this plan will constitute that discussion for the Sumner Capital Facilities Plan.

#### 3.2 General Government Facilities

##### 3.2.1 General Government Planning Assumptions and LOS

General government planning assumptions are based on the projected population growth for the City and in the city’s Urban Growth/Service Area. The population and employment assumptions are consistent with those in the City’s Comprehensive plan and account for growth for the next 20 years (as shown in **Table 3-1**). The 2010 Census showed a population of 9,541 and estimates for the 2035 population is 12,570. Additional growth will have to be accommodated in the City’s Urban Growth Area (UGA) and totals 3,394 population in 2035.

**Table 3-1 — Population and Employment Assumptions**

	<b>2010 City</b>	<b>2010 UGA</b>	<b>2035 City</b>	<b>2035 UGA</b>
Population	9,451	1,112	12,570	3,394
Housing Units	4,279	509	6,093	1,554
Employment	9,316	68	21,762	346

Source: Supplemental Draft EIS, 2015

**Table 3-2 — City Government Buildings Level of Service**

<b>City Facility</b>	<b>Required LOS (s.f./capita)</b>	<b>Existing Building Area (s.f.)</b>
General Government	1.13	14,577
Police	0.44	7,654
Public Works Shops	1.80	17,136

<sup>1</sup>Based on a current population of 9,545

<sup>2</sup>City limit population of 12,570

The current level of service for general government facilities is outlined in **Table 3-2** and shows that 1.13 square feet of building space is needed per capita. This is to house such areas of the City as Administration, Finance, Community Development and Public Works. The Police Department building needs level of service is 0.44 square feet per capita and current space totals 7,654 square feet and is currently located in the same building as the other services. The Public Works Shops have an LOS of 1.80 square feet per capita.

### 3.2.2 Police Department

The police service demands are a factor of population demographic, employment growth and types of business and land use. For example, higher income residential areas tend to have fewer calls for service and less demand on police and courts than areas of lower income or commercial areas. Generally, industrial development does not generate the calls for service demands that accompany residential and commercial development, but there are still calls.

Level of service standards as *proposed* in the 2014 Comprehensive Plan are as follows:

1.2 *Provide and maintain a police system sufficient to meet the community's public safety needs. This system may include normal police functions, responding to calls for service, community policing, care and custody of prisoners, and animal control.*

1.2.1 *Level of Service:*

- i. *Maintain a ratio of two (2) commissioned officers per 1,000 population.*
- ii. *Establish and maintain a ratio of not less than 1 commissioned patrol officer for every 1000 calls for service per year.*
- iii. *Provide one sergeant for every 6-7 commissioned patrol officers.*
- iv. *Provide and maintain one detective position at a ratio of 1/400 part A offenses.*

1.2.2 *Provide support to Sumner Schools through continued School Resource Officer program and instruction of Life Skills curriculum.*

1.2.3 *Could include "Crime Prevention through Environmental Design" components in site design guidelines for new development.*



1.2.4 *Maintain staffing to support community events such as parades, festivals, concerts, community gatherings, etc. that promote Sumner's sense of community.*

### 3.2.3 Public Works Shop Facilities

**Table 3-2** shows the area of the Public Works Shops Facilities 17,136 square feet and the current level of service as 1.8 s.f./capita.

### 3.3 **Water Facilities**

The Sumner water system projected demands look out 20 years to 2029 and a residential population within the water service area of 16,153 and 5,527 residential connections and a total average daily demand of 2.7 MGD (see **Table 3-3**).

**Table 3-3 — Projected Water System Demands**

	2009	2014	2019	2024	2029
Residential Population <sup>1</sup>	9,881	11,785	13,435	14,879	16,153
Estimated Residential Connections	3,359	4,017	4,587	5,087	5,527
System Production ERUs	6,524	7,733	8,766	9,669	10,466
Average-Day Demand (ADD) (MGD) <sup>2</sup>	1,714,753	2,027,015	2,297,642	2,534,441	2,743,381
Maximum Daily Demand (MDD): --DOH Guideline Method (MGD) <sup>3</sup>	3,429,506	4,054,030	4,595,285	5,068,882	5,486,762
Peak-Hour Demand (PHD): -- <sup>4 5</sup> DOH Guideline Method (gpm )	3,910	4,604	5,206	5,732	6,196

<sup>1</sup> Population projections based on information provided by City Planning Department and described in Section 3.2.  
<sup>2</sup> Average-demand requirement. Started with actual average use from years 1997 to 2008 and population projection increase.  
<sup>3</sup> DOH *Water System Design Manual*, August 2001. MDD = 2\*ADD.  
<sup>4</sup> gpm = gallons per minute.  
<sup>5</sup> PHD = (MDD/1,440)[1.6\*N+225] + 18. Use peak to average day factor in MDD.

#### 3.3.1 Water System Level of Service

The City of Sumner must comply with water quality regulations on both the federal and state level. State regulations enforced by the Washington State Department of Health (DOH) may be the same as or more stringent than the federal regulations. DOH regulates water quality of public water systems under the State Drinking Water Regulations, WAC 246-290-300 through 320. The DOH also has enforcement responsibility for federal regulations included in primacy agreements with the United States Environmental Protection Agency (EPA). Water quality regulations are currently evolving, and will continue to evolve, becoming more stringent due to implementation of the Safe Drinking Water Act and other state and federal legislation.

These water quality regulations address contaminant levels for inorganic chemicals, organic chemicals, heavy metals, pesticides, coliform, and other substances. The water system is regularly monitored to address levels of contamination and corrective actions are taken as needed to remain in compliance with state and federal laws.

*Policy in the Comprehensive Plan*

The Capital Facilities Element of the Comprehensive Plan shall contain policy as follows per the Water System Plan:

- 1.6 *Maintain an efficient water system to meet the needs of the community’s residential, commercial and industrial community.*

- 1.6.1 *Establish the following Levels of Service for water supply:*

**Demand**

*Residential Demand - 60.3 gpd/capita*  
*Employee Demand - 58.3 gpd/employee plus 252,000 gpd*

**Fire Flow**

<i>USE</i>	<i>MIN. FLOW (GPM)</i>	<i>REQUIRED DURATION (HOURS)</i>
<i>Medium and low density residential</i>	<i>1,000</i>	<i>2</i>
<i>High density residential and commercial</i>	<i>1,500</i>	<i>2</i>
<i>Industrial</i>	<i>3,500</i>	<i>3</i>
<i>Several existing buildings</i>	<i>4,500</i>	<i>4</i>

### Water System Reliability LOS

Criteria	Level of Service			
	A	B	C	F
Conveyance Reliability; Loop (min. 6" pipe) System	95% + of services on loop lines	90% + of services on loop lines	80% + of services on loop lines	Less than 80% of services on loop lines
Source Reliability;	Meets peak day w/ largest supply out	Meets peak day w/all supplies on	Meets 95% of peak day - use storage	Water restriction required
Distribution System Reliability; Isolation valves a min of 660 ft.	95% + of services meet this criteria	90% + of services meet this criteria	80% + of services meet this criteria	<80% of services meet this criteria
Power Backup for Supply Pumps;(standby generators)	100% of pumps with backup gen.	Sufficient backup for meeting MMADF	Sufficient backup for avg. daily flow	Less backup than needed for ADF
Emergency Response by Repair Crew	< 4 hrs. on 24-7 basis	< 8 hrs. on 24-7 basis	< 24 hrs on a 24-7 basis	> 24 hrs on a 24-7 basis

The minimum LOS for reliability is "B" as outlined above.

1.6.2 Deliver a high degree of water quality which satisfies federal, state and local regulations as follows:

LOS "A": Water quality that meets both Primary and Secondary Public Health Standards

LOS "B": Water quality meets only Primary Drinking Water Standards

For water quality, Sumner chooses a LOS "A".

1.6.3 Implement a water conservation program for residential, commercial, and industrial users consistent with the Sumner Water Plan.

1.6.4 Seek to expand the City watershed protection by acquiring additional land around the existing watershed.

1.6.5 Require new and existing businesses to use water at or below the average per capita employee level. Businesses which utilize higher than average rates of water usage shall be required to mitigate their impacts. Those businesses not able to

*meet the goal shall be encouraged to conserve, re-use water, or develop new water sources.*

1.6.6 *In conjunction with developing additional water sources, develop a well head and groundwater protection program.*

1.6.7 *Provide broad funding for water services facilities.*

### **3.4 Sanitary Sewer**

#### **3.4.1 Sanitary Sewer Planning Assumptions**

The Sumner Comprehensive Sanitary Sewer Plan was completed in 1989 and updated in 2000 by Parametrix. Since 2000 the City has continued to grow and develop with mainly industrial warehouse land uses and moderate growth in residential development at about 1.5% per year.

The sewer plan analyzes the City's collection system, identifies any system deficiencies for existing and future flow conditions, and provides recommended improvements and cost estimates.

#### **3.4.2 Existing Peak Day Flow Simulation (Existing Service Area)**

The capacity of the existing collection system was computer modeled and compared to actual peak day wastewater flow generated by the City's current service area.

The percent build-out of properties within the service area was established using aerial photo. Based upon the result of the computer modeling, the simulated peak day flow for the service area was 3.1 million gallons per day, which compared well to actual peak day flows of 2.7 million gallons per day.

#### **3.4.3 Future Peak Day Flow Simulation (Existing Service Area)**

A computer model also simulated and modeled the future peak day flow. This flow simulation used the same methodology as the existing peak day flow simulation, with the following exceptions:

- It was assumed that all the area currently served by the City's existing wastewater collection system would be at 100 percent build-out, which would be obtained between 20 and 25 years.
- It was assumed that the City would reduce I/I in the pump station basins with older pipeline not to exceed 500 gpad.

### 3.4.4 Expansion of the Collection System to Accommodate the Entire UGA

Generally, the portions of the City's UGA that are not yet served by the City's existing wastewater collection system. Those areas are described as follows:

- The area bounded by the White (Stuck) River on the west, Lake Tapps on the east, Salmon Creek on the south and the Pierce County line on the north (with the exception of a large plat in on the hill within the UGA).
- The region located along Valley Avenue East north of SR 167 and City of Edgewood on the north; near the existing city cemetery.
- The region located along 160th Avenue East south of SR 410, outside the City Limits.

Adding service area to the City's sewer system will increase flow to the downstream of the connection point. Future impacts to the system resulting from expanded service area was simulated using the same assumptions as the future peak day flow simulation with the following exceptions:

- The increase service area size to accommodate the additional UGA acreage.
- The area east of the East Valley Highway was assumed at 40% of total land utilization due to steep topography.

### 3.4.5 Level of Service

The following is the level of service standard as identified in the 2015 Comprehensive Plan, Capital Facilities and Public Services Element:

- 1.8 *Provide a sanitary sewer system adequate to the meet the demands of the community.*
  - 1.8.1 *Establish and provide for a Level of Service as defined in the adopted Sanitary Sewer Plan.*
  - 1.8.2 *Work with the Tacoma-Pierce County Health Department to eliminate the development of new residential and commercial uses on-site and community sewage systems within the Planning Area. The intent would be the elimination of all new permanent septic systems, but would allow for interim on-site approved septic systems where sewer facilities are not available.*
  - 1.8.3 *Prohibit on-site or community sewage systems supporting new industrial development. Recreational uses may be exempt from this policy.*
  - 1.8.4 *Seek broad funding for providing sanitary sewer services and facilities.*

### 3.5 Storm Sewer Facilities

#### 3.5.1 City Storm Water System Planning Assumptions

Stormwater modeling and assumptions included the use of Low Impact Development (LID) and land use development as presented in the City’s Comprehensive Plan. The following is the level of service standard as identified in the 2015 Comprehensive Plan, Capital Facilities and Public Services Element:

*1.7.1 Establish and maintain the Level of Service as the 25-year storm event, except in those areas where the 100-year storm design is appropriate to protect the natural environment.*

In addition to program elements required under existing regulations, it is anticipated that additional steps will be necessary to protect habitat and promote salmon recovery, both under the federal Endangered Species Act and the salmon restoration initiatives undertaken by the Governor and the legislature and to meet the NPDES II permit requirements.

### 3.6 Parks Facilities

#### 3.6.1 Parks and Open Space Planning Assumptions and LOS

The following **Table 3-4** illustrates the existing Level of Service based on the 2014 population of 9,545 and compared to the required level of service for park and recreational facilities.

**Table 3-4 — Existing Park Facilities and Residential LOS**

Activity	Req'd LOS	Exist. #	Location	Exist. LOS (Pop. 9,545)
Softball	1/2,000	7	Sports Complex, Maple Lawn, Junior High, High School	1/1,364
Baseball	1/5,000	5	Sports Complex, High School, Junior High	1/1,909
Soccer Fields	1/2,000	3	Sports Complex, Junior High, Seibenthaler	1/1,364
Football Fields	1/20,000	1	High School	1/9,545
Tennis Courts	1/3,000	8	Sports Complex, Junior High, High School	1/1,193
Basketball Courts	1/1,000	13	Sports Complex, Loyalty Park, Maple Lawn, Junior High, High School, Daffodil Valley, Bob Miller, Seibenthaler	1/734

<b>Volleyball Courts</b>	1/5,000	2	Sports Complex, Maple Lawn	1/4,772
<b>Indoor Pool</b>	1/20,000	1	High School	1/9,545
<b>Community Parks</b>	1 acre/1,000	9 acres	Loyalty, Seibenthaler, Heritage, Rainier View	1 acre/1,060
<b>Urban Trails</b>	0.95mi/1,000	7.8 mi	Constructed Sumner Link Trail and widened sidewalk for bike/ped access	0.82 mi /1,000
<b>Picnic Shelter/ Gazebo</b>	1/8,500	2	Heritage and Rainier View	1/4,772
<b>Picnic Tables</b>	1/250	32	Loyalty, Sports Complex, Heritage, Rainier View, Trail	1/298
<b>Horseshoes</b>	None	2	Library Complex	1/4,772
<b>Kid's Play Lots</b>	1/1,700	5	Loyalty; Rainier View Park; Seibenthaler	1/1,909
<b>Community Center</b>	None	None	Loyalty(2), Seibenthaler, Maple Lawn,	-
<b>Regional Park</b>	1 acre/710	11 acres	Sports Complex	1 acre/867

Source: Draft Parks and Open Space Plan, 2014

Notes for **Table 3-4:**

1. Where softball and soccer fields overlap, each is counted. Small youth t-ball fields are not counted.
2. Only regulation baseball fields are counted.
3. The high school has the only regulation football field, although it is not generally available to the public.
4. Both indoor and outdoor basketball courts are counted. Stand-alone basketball hoops are not counted.
5. All facilities at the sports complex are considered available to the public.
6. Although some sections of the riverside trail are completed, they are generally not accessible. Consequently, no trail amount is shown.
7. The kid's play lot at Loyalty Park is counted as two.
8. Although no LOS was established for Urban Trails in the Parks and Open Space Plan, it was later adopted by Ordinance 1911 based on the Sumner/Pacific Trail Master Plan (1996). Source: City of Sumner Community Development Department.

There are five areas (see shading above) in which the current LOS is below the desirable LOS: community parks, picnic tables, kid's play lots, urban trails and regional parks. The City will be updating the Park and Open Space Plan during the 2015-16 biennium, These discrepancies will be addressed during that update.

### 3.7 Fire Facilities

### 3.7.1 Fire Facilities Level of Service

The City contracts for fire service with EPFR and therefore will refer to their level of service standards for fire service.

EPFR level of service standards address two different perspectives: time to arrival of the first unit and time to the arrival of a minimum acceptable (effective) response force.

When applied to the arrival of the first unit, the standards of coverage document states:

*East Pierce Fire & Rescue shall strive to maintain sufficient personnel and equipment, strategically located such that the first-due response units arrive at fire and emergency medical incidents in urban areas served by staffed fire stations (as characterized by the City of Sumner) within 5 minutes to the 90th percentile.*

When applied to the arrival of the minimum acceptable (effective) response force, the standards of coverage document states:

*East Pierce Fire & Rescue shall strive to maintain sufficient personnel and equipment, strategically located to provide a minimum acceptable (effective) response force capable of arriving at emergency incidents within 10 minutes to the 90th percentile. An effective first alarm response force by call type is described below:*

<i>Structure Fire (residential and commercial hydranted areas)</i>	<i>17 personnel</i>
<i>Structure Fire (residential unhydranted areas)</i>	<i>19 personnel</i>
<i>Structure Fire (special risk/target hazards)</i>	<i>21 personnel</i>
<i>Emergency Medical (Basic Life Support)</i>	<i>4 personnel</i>
<i>Emergency Medical (Advanced Life Support)</i>	<i>4-6 personnel</i>
<i>Hazardous Materials</i>	<i>21 personnel</i>
<i>Technical Rescue</i>	<i>24 personnel</i>
<i>Water Rescue (Lake Tapps)</i>	<i>14 personnel</i>
<i>Wildland Fire (low risk)</i>	<i>3 personnel</i>
<i>Wildland Fire (high risk)</i>	<i>7 personnel</i>
<i>Mass Casualty Incident</i>	<i>23 personnel</i>

### 3.8 Public Streets and Road Facilities



### 3.8.1 Transportation Plan Planning Assumptions

The transportation plan is based on traffic modeling which uses the same planning assumptions regarding land use and population and employment growth as the Comprehensive Plan. GMA requires that transportation plans contain specific levels of service for the purpose of quantifying and qualifying traffic congestion levels at strategic roads and intersections. The Sumner Transportation Plan uses a Level of Service (LOS) methodology as described in detail below.

### 3.8.2 Level of Service Definitions

**Table 3-5** lists urban street LOS criteria based on average travel speed and urban street class. It should be noted that if demand volume exceeds capacity at any point on the facility, the average travel speed might not be a good measure of the LOS.

**Table 3-5 — Urban Street Level of Service by Class**

Urban Street Class	I	II	III	IV
Range of FFS <sup>2</sup>	55 to 45 mph	45 to 35 mph	35 to 30 mph	35 to 25 mph
Typical FFS	50 mph	40 mph	35 mph	30 mph
LOS		Average Travel Speed (mph)		
A	> 42	> 35	> 30	> 25
B	> 34-42	> 28-35	> 24-30	> 19-25
C	> 27-34	> 22-28	> 18-24	> 13-19
D	> 21-27	> 17-22	> 14-18	> 9-13
E	> 16-21	> 13-17	> 10-14	> 7-9
F	= 16	= 13	= 10	= 7

Source: Transportation Plan, 2002

Signalized intersection level of service is defined in terms of the average vehicle delay of all movements through an intersection. Vehicle delay is a method of quantifying several intangible factors, including driver discomfort, frustration, and lost travel time. Specifically, level of service criteria are stated in terms of average stopped delay per vehicle during a specified time period (for example, the PM peak hour). Vehicle delay is a complex measure based on many variables, including signal phasing (i.e., progression of movements through the intersection), signal cycle length, and traffic volumes with respect to intersection capacity. **Table 3-6** shows level of service criteria for signalized intersections, as described in the *Highway Capacity Manual* (Transportation Research Board, Special Report 209, 1994).

**Table 3-6 — Level of Service Criteria for Signalized Intersections**

Level of Service	Average Delay Per Vehicle (Seconds)	General Description (Signalized Intersections)
A	≥ 10	Free flow
B	> 10 - 20	Stable flow (slight delays)
C	> 20 - 35	Stable flow (acceptable delays)
D	> 35 - 55	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	> 55 - 80	Unstable flow (intolerable delay)
F	> 80	Forced flow (jammed)

Source: Transportation Plan, 2002

Unsignalized intersection level of service criteria can be further reduced into two intersection types: all-way stop-controlled and two-way stop-controlled. All-way, stop-controlled intersection level of service is expressed in terms of the average vehicle delay of all of the movements, much like that of a signalized intersection. Two-way, stop-controlled intersection level of service is defined in terms of the average vehicle delay of an individual movement(s). This is because the performance of a two-way, stop-controlled intersection is more closely reflected in terms of its individual movements, rather than its performance overall. For this reason, level of service for a two-way, stop-controlled intersection is defined in terms of its individual movements. With this in mind, total average vehicle delay (i.e., average delay of all movements) for a two-way, stop-controlled intersection should be viewed with discretion. **Table 3-7** shows level of service criteria for unsignalized intersections (both all-way and two-way, stop-controlled).

**Table 3-7 — Level of Service Criteria for Unsignalized Intersections**

Level of Service	Average Total Delay (sec/veh)
A	≤ 10
B	> 10 - 15
C	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

Source: Transportation Plan, 2002

### 3.8.3 Transportation Plan Level of Service Policies

The LOS standard for arterials and collectors in the City of Sumner shall be LOS D or better except for the following locations:

- Traffic Avenue/Main Street/Fryar Avenue (LOS F)
- Main Street/Alder Avenue (LOS F)

The levels of service shall be measured using methodologies identified in the *Highway Capacity Manual* (HCM).

The City desires to provide reasonable levels of traffic operations while minimizing the impacts and costs of creating wider roadways and intersections to accommodate traffic. The Transportation Plan identifies improvements that would meet the standard when fully implemented. The LOS F standard at the Traffic Avenue/Main Street/Fryar Avenue intersection is established since providing LOS D would require extensive additional improvements at the horizon year of the Plan, such as providing a four-lane bridge. The City in setting the LOS F standard for the Main Street/Alder Avenue intersection reflects the desire to maintain Main Street as a two-lane street with parking in order to promote the downtown design characteristics.

### 3.8.4 Level of Service Mitigation at Non-arterial Streets or Driveways

Levels of service for non-arterial collector roads, streets, or driveways intersecting with arterials will be evaluated at the time of development review. The City Engineer will identify appropriate mitigation to address potential operations or safety impacts. Left turns and through movements on side streets intersecting with arterials may operate below the adopted LOS standard. The poor level of service may affect relatively low traffic volumes and may not meet warrants for traffic signals. Furthermore, installation of traffic signals at a location may not be consistent with the Transportation Plan or traffic engineering practices. Each location will need to be reviewed based on traffic engineering studies at the time of development review. Appropriate mitigation should be identified and implemented to reduce potential safety and operation impacts, even though the intersection may operate below the adopted standard.

## 3.9 Public School Facilities

### 3.9.1 Public School Level of Service

The *Sumner School District's 2014-2020 Capital Facilities Plan* provides for a variety of level of service assumptions intended to meet all state requirements and provide for a quality education. The School District also utilizes other assumptions and a "Practical Capacity Model" to come up with the final estimate of capacity for anyone facility. Below are some key assumptions utilized to determine capacity and set a level of service (LOS):

1. New school design capacities will be:

Elementary School	-	550 students
Middle School	-	750 students
High School	-	1250 students
  
2. Continued use of portable classrooms when funding for permanent facilities is not available.
  
3. The District seeks to acquire minimum acreage per school site as follows:

Elementary School	-	15 acres
Middle School	-	25 acres
High School	-	40 acres

4. The primary determinants of building enrollment capacity in SSD are educational programs, building configurations, and class size policies.
5. A LOS goal as follows:

<b>Grade level:</b>	-	<b>Students/Classroom:</b>
Kindergarten	-	24 (except 18 at “impacted schools” then)
Grades 1 & 2	-	26
Grades 3 & 4	-	28
Grades 5-12	-	30
Special Education	-	12

The reader is referred to the Sumner School District's Capital Facilities Plan for additional discussion of assumptions and LOS standards. A summary table for calculating the impact fees for the 2014 Sumner School District Capital Facilities Plan is contained in **Appendix E**. Adoption of School Impact Fees by the City Council is done under a separate action and not as part of the adoption of the Capital Facilities Plan.

### 3.9.2 Financing

The District's financing plan shows various sources of funding identified for the District, including State school money and impact fees (see **Appendix E**).

## 4. COORDINATION OF COMPREHENSIVE PLAN ELEMENTS

### 4.1 Introduction

The Growth Management Act requires local capital facilities plans to ensure that their comprehensive plans' land use, transportation, and capital facilities elements are coordinated and consistent.

### 4.2 Comprehensive Plan Consistency

As the City's Land Use and Transportation Plans are set forth, capital facility system improvements needed to support growth can be adequately financed by the City through the Capital Facilities Plan (CFP). If, in the future, capital facilities (system improvements) needed to obtain concurrency for development are not funded by the CFP due to omission or lack of funds, one or more of five strategies must be employed to obtain consistency of plans and concurrency of necessary infrastructure:

**Strategy 1:** *Unfunded infrastructure projects can be voluntarily fully-funded by a project developer. The provision to use fair-share payback arrangements such as latecomers' agreements would be available. Also, the LID process would be an alternative funding.*

**Strategy 2:** *The City increases tax revenues, grants, and/or issue bonds to increase CFP funding and thereby construct needed infrastructure.*

**Strategy 3:** *The City amends the CFP to re-prioritize projects and thereby fund infrastructure projects needed to obtain concurrency.*

**Strategy 4:** *The City reassesses its Land Use Plan and zoning to lower land use densities and thereby decrease the demand for construction of new infrastructure.*

**Strategy 5:** *The City lowers its level of service standards for transportation and identify minimum standards for other infrastructure through respective plan documents.*

If the City is engaged in such a preceding reassessment, pending development applications affected by such considerations will be held in suspension for no longer than three months; after which the City will communicate its intent on whether or not to allow the project to proceed in its application cycle. Specific findings of fact laying out the City's decision amending the CFP should be prepared and approved by the City Council. If the aforementioned three month maximum time period cannot be successfully accomplished with the once per year limitation on comprehensive plan amendments, the City Council may declare an emergency and suspend the comprehensive plan amendment limitation.

### 4.3 Existing Capital Facility Deficiencies and Recommendations

#### 4.3.1 Introduction

The Capital Facilities Plan is required by GMA to identify deficiencies in capital facilities, which are not eligible for development impact fee support. City facilities which are deficient are those which do not now exist in number, size, or location to satisfy levels of service as set forth in City plans for its existing populations:

#### 4.3.2 General Government Facilities

The General Government and Police Department building space meets the established LOS through 2021, however, the Public Works Shops is currently at a 45 s.f. deficit and this grows to 1,650 s.f. by 2021 (see **Table 4-1**).

**Table 4-1— City Government Buildings LOS Analysis 2015-2021**

	Required LOS (s.f./capita)	Existing Building Area (s.f.)	Surplus/Deficit (s.f.)						
			2015	2016	2017	2018	2019	2020	2021
Population			9,545	9,688	9,833	9,981	10,131	10,283	10,437
General Government	1.13	14,577	3,791	3,629	3,465	3,298	3,129	2,958	2,783
Police	0.44	7,654	3,454	3,391	3,327	3,262	3,196	3,130	3,062
Public Works Shops	1.80	17,136	(45)	(303)	(564)	(830)	(1,099)	(1,373)	(1,650)

<sup>1</sup>Based on a current population of 9,545

<sup>2</sup>City limit population of 12,570

**Table 4-2 — Police Level of Service (2 Officers/1,000 Population)**

	2015	2016	2017	2018	2019	2020	2021
Population <sup>1</sup>	9,545	9,688	9,833	9,981	10,131	10,283	10,437
Surplus/Deficit <sup>2</sup>	(45)	(188)	(333)	(481)	(631)	(783)	(937)
Officers/1000	1.99	1.96	1.93	1.90	1.88	1.85	1.82

<sup>1</sup>Population growth assumed at 1.5% per year

<sup>2</sup>Currently 19 commissioned officers

There are currently 19 commissioned officers serving a population of 9,545, so the ratio is 1.99 officers per 1,000 population, which is below the adopted level of service.

### 4.3.3 Potable Water System Facilities

Deficiencies for potable water facilities are set forth in the Water System Plan and summarized as follows.

**Distribution System:** The City plans to continue to expand the water system as development occurs, especially in the northern portions of the City where the area is developing as industrial. The City also has existing pipes that are in need of replacement due to age or disrepair.

Sumner's water source capacity is equal to the production from its springs and wells. The 2009 Water System Plan showed total production equal to 3.72 mgd: Sumner Springs (1.15 mgd), County Springs (0.71 mgd), Elhi Springs (0.13 mgd), Dieringer Well (0.36 mgd), West Well (0.36 mgd) and South Well (1.0 mgd). Sumner's peak day demand is its required source. Subtracting source capacity from peak day demand yields source surplus/deficiency. The 2009 Water System Plan showed a surplus of 0.58 mgd in 2008, but predicted that water source would be insufficient to meet peak daily demand by the end of 2012. However, the 2009 water plan notes that "through a series of planned source improvements, new interties, new source construction and water right transfers the shortfall will be filled and a surplus created."

The City is working on expansions to existing sources, development of new interties with adjacent providers, and acquisition of additional water rights. These efforts include a 450-gallon-per-minute (gpm) intertie with the City of Pacific, a 347-gpm intertie with the Mountain View–Edgewood Water District, improvements to spring sources, and construction of a new well. Combined, these improvements could provide an additional 3.31 mgd of source capacity by 2011. Construction of these improvements would eliminate the projected 2029 capacity deficit.

The Central Well preliminary design was completed in the 2011-2012 biennium and construction is planned for the 2015-2016 biennium (City of Sumner, 2014). City staff has confirmed that as of January 2015, Central Well construction is in progress and will provide a capacity of 1,100 gallons per minute, or the equivalent of 1.58 mgd. Adding this new capacity to the existing 3.72 mgd capacity provides a total of 5.30 mgd. In addition, city staff has indicated that per capita water consumption has been reduced through leak detection and repair as well as water conservation measures.

**Storage Improvements:** The City has adequate storage capacity projected through 2020 when additional water sources are required. There is also a need for cleaning, repairing and placing earthquake control valves on existing tanks. This also includes the construction of an additional tank on the west side of the valley.

### 4.3.4 Sanitary Sewer Facilities

#### *System Reliability*

The condition of the existing system was examined to determine if service area expansion would have potential impacts on the system reliability. The system's condition was established by interviewing City maintenance staff, reviewing the results of the modeling exercise, and researching the age of the collection system pipelines and pump stations throughout the City's system. Those portions of the City's collection system that need to be upgraded over the next 20- to 25-year planning period were noted and improvements were recommended.

### *System Capacity Improvements*

The City Sanitary Sewer Plan listed recommended improvements to correct the capacity deficiencies in the collection system resulting from existing peak-day flow volumes. These projects, along with updated notes on current status, are listed below:

- Increase the existing capacity of the Parker Pump Station from 285 gallons per minute (gpm) to 950 gpm. Ultimately, the Parker Pump Station will need to be upgraded to 1,800 gpm to accommodate future peak-day flows. Replace the existing 6-inch-diameter force main with 4,000 feet of 10-inch-diameter force main from the Parker Pump Station to a new discharge at Wood Avenue. This project is pending.
- Increase the existing capacity of the Van Tassel Pump Station from 135 gpm to 365 gpm. Extend the 4-inch-diameter force main from the current discharge approximately 1,800 feet further west along Elm Street to a new discharge at Wright Avenue. This project was completed in 2007.
- Increase the existing capacity of the 16th Street Pump Station from 700 gpm to 1,400 gpm. Capacity increases were completed in 2009. An electrical system upgrade at this location is still pending.
- Replace approximately 1,400 lineal feet of existing 10-inch-diameter gravity pipe main with 12-inch-diameter pipe from the 16th Street Pump Station east along 16th Street, then south along Wright Avenue to between Langdon and Washington Streets. This project is pending.
- Increase the existing capacity of the Tacoma Street Pump Station from 175 gpm to 372 gpm. This project was completed in 2009.

The following are improvements recommended in the 2000 plan to correct capacity deficiencies in the existing collection system resulting from future peak-day flow volumes:

- Increase the capacity of the Cherry Street Pump Station from 534 gpm to 1,180 gpm. This project is pending.
- Increase the capacity of the South Street Pump Station from 1,115 gpm to 1,750. This project is pending.

The following are improvements recommended in the 2000 plan to provide capacity to the collection system to allow for expansion into unserved portions within the UGA:

- Increase the capacity of the 142nd Street Pump Station from 2,300 gpm to 5,200 gpm. Install a new 14-inch-diameter force main parallel to the existing line from the existing station to a new discharge at the intersection of W. Main Avenue and Fryar Avenue. This improvement is contingent on the actual industrial wastewater flow meeting or exceeding per-acre flow estimates. These improvements have since been cancelled.
- Expand the capacity of the 16th Street Pump Station No. 2 from 100 gpm to 160 gpm. This project was completed in 2009.



### *Collection System Upgrades*

The following improvements were recommended in the 2000 plan to upgrade the collection system, reduce I/I, extend the lifecycle of the collection system, and extend the life and capacity of the treatment plant:

- Eliminate the hydraulic intertie between Parker, Van Tassel, and 160th Street Pump Stations. This project has been cancelled.
- Identify and eliminate excessive I/I within the collection system. This project is pending.
- Institute a sewer main replacement and/or rehabilitation program to reduce I/I and extend the lifecycle of the collection system. This project is pending.
- Install flow meters at all existing pump stations. Flow meters have been installed at Parker, Cherry, and South pump stations.
- Install standby generators at the South, North, Tacoma, and Cherry Street pump stations. Generators have been installed at North and Forest Canyon pump stations.
- Rewire the Cherry Street and 16th Street pump stations to meet current electrical code requirements. This project has been completed at the Cherry Street station; improvements are pending at 16th Street.

#### 4.3.5 Stormwater Facilities

Problem areas in the stormwater facilities are set forth in the Stormwater Comprehensive Plan, January 1992 and subsequent update in 2004 and 2011. These problem areas were identified during the 25 and 100-year storm events routed through the existing system based on the computer analysis conducted for the plan. The Stormwater Comprehensive Plan includes a detailed map and descriptions of the basins and portions of the system with deficiencies.

#### 4.3.6 Parks Facilities

There are five areas in **Table 3-4** in which the current LOS is below the desirable LOS: community parks, picnic tables, kid's play lots, urban trails and regional parks. The City will be updating the Parks and Open Space Plan during the 2015-16 bienneum. These areas of discrepancy will be addressed during that update. **Table 5-3** contains a list of potential improvements and costs that can be incorporated into a future parks plan or be provided sooner if needed.

#### 4.3.7 Fire Facilities

While it is important to ensure that resources arrive quickly, it is equally important that sufficient personnel arrive on scene safely to perform the critical tasks discussed above in section 3.7

As of 2009, EPFR was meeting its 5-minute response time goal only 60% of the time for fire response, though its 90% performance was 5 minutes and 37 seconds. For EMS-only responses, the district met its goal only 59% of the time, and its 90% performance was 6 minutes and 4 seconds.

In 2013, EPFR responded to 8,519 calls, with 74% consisting of EMS incidents. Average (mean) response time (time of dispatch to on-scene) for the first unit to arrive on scene was 6 minutes, 34 seconds (EPFR 2014).

At this time, response time data related to the assembly of a minimum acceptable (effective) response force standard (10 minutes 90% of the time) are not available. Limitations in the structure of the data collected by EPFR and the software used for data collection and reporting make it impractical to develop reliable data for response time reporting.

To meet LOS standards for first-due response units and minimum acceptable (effective) response force, EPFR’s staffing of fire stations serving the current area need to be increased. Staffing a minimum of five firefighters per station will allow EPFR to split crews for multiple responses, as needed, and to meet the Washington State Labor and Industries Two-In/Two-Out safety requirement (Washington Administrative Code [WAC] 296-305-05001).

In order for EPFR to achieve all the LOS standards necessary to accomplish critical tasking, mount an effective response force, and achieve acceptable response times, additional fire stations strategically located in the current plan area may also be required.

EPFR should use updated population and employment allocations and land capacity in the Comprehensive Plan and supporting documents as part of their ongoing capital facility planning process. Finally, the City and EPFR could consider an agreement that implements impact fees for capital improvements in city limits and revises the SEPA mitigation fees to help pay for other needs and services.

#### 4.3.8 Public School Facilities

##### *Six-year Facility Needs—Sumner School District*

Projected excesses or deficiencies in student enrollment capacity can be derived by subtracting the projected student enrollment for each year within the forecast period from existing 2014 facility capacity. Deficiencies in student enrollment capacity by grade span, based on this calculation are depicted in **Table 4-3**. Portable classroom space is not counted in capacity calculations.

By the end of the forecast period (2020 in the Sumner School District CFP), additional students at the elementary level will be housed in classrooms funded through future impact fee revenue.

**Table 4-3 — Student Enrollment Capacity, Sumner School District 2013-2020**

<b>Grade Span</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Elementary (K-5)	-65	-164	-287	-398	-498	-600	-667	-766
Middle School (6-8)	147	180	203	198	151	78	-18	-71
High School (9-12)	-85	-154	-180	-178	-154	-105	-115	-161
<b>Total</b>	<b>73</b>	<b>-138</b>	<b>-264</b>	<b>-378</b>	<b>-501</b>	<b>-627</b>	<b>-800</b>	<b>-998</b>

The Sumner School District is working on an update to the capital facilities plan and including the public in a technical advisory committee that is exploring options for meeting future capacity needs.

#### 4.3.9 Public Streets and Road Facilities

The Transportation Plan sets forth the current and future deficiencies in the City's street and road network. See the Transportation Improvement Program in **Appendix D**.

## 5. CAPITAL FACILITIES PLAN PROJECTS AND FINANCIAL PLANS

### 5.1 Introduction

This chapter contains the financial plans and project worksheets for Water System Plan, Sewer Plan and Transportation Plan. Other plans will be included as they become available.

### 5.2 General Government Facilities

General Government facilities have a total appraised value of \$7.9 million as shown in **Table 5-1**. The deficiencies predicated on the growth in the City's population will result in need for expanded facilities and the city's funding strategy for meeting this need totals \$750,000 over the next 6 years.

**Table 5-1 — General Government Facilities Capital Improvement Plan—2016-2021**

Facility	Appraised Value <sup>1</sup>	2016	2017	2018	2019	2020	2021	Total <sup>2</sup>
City Hall	\$5,625,700	-	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
Public Works Shops	\$2,281,300	-	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000
<b>Total</b>	<b>\$7,907,000</b>	<b>-</b>	<b>\$150,000</b>	<b>\$150,000</b>	<b>\$150,000</b>	<b>\$150,000</b>	<b>\$150,000</b>	<b>\$750,000</b>

<sup>1</sup>Appraised for City insurance purposes, as of 05/31/2014. Values reflect total insurable replacement cost.

<sup>2</sup>Figures reflect accrual of replacement funds; not full replacement cost. Accrual of replacement dollars is dependent upon City Council appropriation through the budget process. Upon facility replacement, City may utilize reserves or debt capacity for funding options.

### 5.3 Water Facilities

The City will be updating the Parks and Open Space Plan in 2015-2016 and a new capital facilities park implementation and acquisition plan will be developed at that time and address any deficiencies.

**Appendix B** contains the 2009 Water Capital Improvement Plan and Schedule.

### 5.4 Sanitary Sewer Plan

The 2014 Capital Improvement Program for sanitary sewer shows a number of projects including new generators, WWTP expansion, new pumps and control valves and property acquisitions totaling \$7.6 million by 2021.

**Appendix C** contains the 2014 Sewer Capital Improvement Plan and Schedule.

## 5.5 Stormwater Facilities

The stormwater facilities capital improvement projects are scheduled as far out as 2029. These projects include White River levee improvements totaling \$3.09 million; culvert replacements; and numerous other system improvements totaling \$44.9 million.

**Table 5-2** contains the 2011 Stormwater Management Plan Capital Improvement Projects.

**Table 5-2 — Proposed Capital Improvement Projects, Stormwater**

<b>Capital Improvement Project</b>	<b>Project Priority<sup>1</sup></b>	<b>Total Cost Year 2008</b>	<b>Year of Completion</b>
CIP No. 1—Alder Avenue High Flow Bypass	Low	\$5,533,000	2019–2029
CIP No. 2—Gary Street Improvements	Medium	\$291,000	2014
CIP No. 4—Railroad Street Improvements	Low	\$80,000	2019–2029
CIP No. 6—River Street Improvements	Low	\$178,000	2019–2029
CIP No. 7—151st Avenue E and 152nd Avenue E Improvements	Medium	\$407,000	2014
CIP No. 8—63rd Street Court E Improvements	Medium	\$484,000	2015
CIP No. 10—64th Street E Outfall Improvements	Medium	\$197,000	2011
CIP No. 11—South 160th Avenue E Improvements	High	\$106,000	2013
CIP No. 12—North 160th Avenue E Improvements	High	\$293,000	2013
CIP No. 13—Elm Street Interceptor	High	\$185,000	2011
CIP No. 14—North Parker Road Improvements	High	\$117,000	2011
CIP No. 15—Parker Road Improvements	High	\$129,000	2012
CIP No. 17—Main Street Improvements	Low	\$168,000	2019–2029
CIP No. 18—Willow Street Interceptor and Tributary Improvements	Medium	\$1,196,000	2015
CIP No. 19—Puyallup Street Outfall Improvements	Medium	\$419,000	2015
CIP No. 21—South SR 410 Diversion Interceptor	Low	\$1,266,000	2019–2029
CIP No. 22—Meade McCumber Street Improvements	Low	\$145,000	2019–2029
CIP No. 24—East Main Street/160th Avenue E Improvements	High	\$248,000	2013

<b>Capital Improvement Project</b>	<b>Project Priority<sup>1</sup></b>	<b>Total Cost Year 2008</b>	<b>Year of Completion</b>
CIP No. 25—Poole Road Outfall Improvements	High	\$357,000	2012
CIP No. 26—Wahl Road Interceptor	Low	\$1,426,000	2019–2029
CIP No. 27—South Parker Road Improvements	High	\$61,000	2011
CIP No. 28—136th Avenue E Improvements	High	\$701,000	2012
CIP No. 29—Puget Sound Power and Light Canal Drainage	Low	\$496,000	2019–2029
CIP No. 31—62nd Street East	High	\$244,000	2012
CIP No. 33—REI/Railroad Culvert Improvements	High	\$156,000	2009
CIP No. 34—Parker Road Culvert Improvements	High	\$66,000	2010
CIP No. 35—Puyallup Watershed Access Culvert Improvements	High	\$61,000	2011
CIP No. 36—47th Street Court E Culvert Improvements	High	\$59,000	2012
CIP No. 37—160th Avenue E Culvert Improvements	High	\$493,000	2013
CIP No. 38—162nd Avenue E Culvert Improvements	Medium	\$138,000	2014
CIP No. 39—East Main Street Culvert Improvements	Medium	\$31,000	2015
CIP No. 40—Salmon Creek Restoration	Medium	\$263,000	2016
CIP No. 41—64th Street E Culvert Improvements	High	\$355,000	2013
CIP No. 42—8th Street E Corridor Improvements	High	\$914,000	2010
CIP No. 43—East Valley Highway Improvements—Detention Pond with Bioswale	Medium	\$2,018,000	2017
CIP No. 44—East Valley Highway Improvements	Medium	\$936,000	2018
CIP No. 45—West Valley Highway Improvements-Detention Pond with Bioswale	Low	\$560,000	2019-2029
CIP No. 46—16th Street East Improvements	Low	\$478,000	2019–2029

<b>Capital Improvement Project</b>	<b>Project Priority<sup>1</sup></b>	<b>Total Cost Year 2008</b>	<b>Year of Completion</b>
CIP No. 47—White River Levee Improvements	High	\$3,049,000	2013
CIP No. 48—Milwaukee Ditch Regional Facility	Medium	\$2,512,000	2014
CIP No. 49—Golf Course Culvert Improvements	High	\$243,000	2013
CIP No. 50—Development Rights Relinquished by City	High	\$1,524,600	2010
CIP No. 51—Stuck River Setback Levee	Low	\$10,000,000	2019–2029
CIP No. 52—Number 9 Ditch and Forest Canyon Class III Habitat Improvements	Medium	\$611,000	2016
CIP No. 53—Rivergrove Flood Wall	High	\$3,100,000	2011
SITE A.1—42-inch Outfall Water Quality Facility	High	\$421,000	2009
SITE A.2—48-inch Outfall Water Quality Facility	High	\$294,000	2013
SITE D—Detention Pond with Water Quality Facility	High	\$1,518,000	2012
SITE J—Water Quality Treatment Vault	Medium	\$377,000	2016
Total Capital Asset Funds (2008 dollars)(City-funded only—exclude developer or LID-funded projects)		\$44,904,600	

Source: Windish pers. comm.

<sup>1</sup> High = Completed 0–5 years; Medium = Completed 5–10 years; low = Completed within 10–20 years

## 5.6 Parks Facilities

Parks and Opens Space capital improvement projects are listed in **Table 5-3** and show, presents the needs to replace playground equipment, add shelters and picnic areas, and complete bridges for trails totaling \$2.2 million.

**Table 5-3 Improvement Plan for Parks and Open Space — 2015-2021**

<b>FACILITY</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
<b>Loyalty Park</b>	\$20,000 Playground Equip Replace 1 of 2		\$20,000 Shelter - Picnic Area		\$25,000 Playground Equip Replace 2 of 2			\$65,000
<b>Seibenthaler</b>				\$45,000 Playground Equip & Update				\$45,000
<b>Rainier View</b>					\$500,000 Spay-park			\$500,000
<b>Daffodil Sports Complex</b>		\$10,000 Turf care & Restroom	\$15,000 Sk8-Park Resurface	\$30,000 Court Resurface & LED Install				\$55,000
<b>Trails</b>		\$250,000 SR- 410/Cherry Pump	\$1,000,000 Completion of Link Section		\$300,000 Stewart Bridge			\$1,550,000
<b>Total Capital Costs</b>	\$20,000	\$260,000	\$1,035,000	\$75,000	\$825,000	0	0	\$2,215,000
<b>Trails O &amp; M</b>	\$15,000	\$15,000	\$17,000	\$17,000	\$20,000	\$20,000	\$23,000	\$127,000
<b>Parks O &amp; M</b>	\$625,000	\$680,000	\$700,000	\$721,000	\$745,000	\$765,000	\$780,000	\$5,016,000
<b>Total</b>	\$660,000	\$955,000	\$1,752,000	\$813,000	\$1,590,000	\$785,000	\$803,000	\$7,358,000



## **5.7 Public Streets and Roads**

The 2015 Transportation Plan contains numerous transportation improvements and projects that will be necessary to maintain the level of service. The Six-year Transportation Improvement Program (TIP) contains projects ranging from finishing the three bridge projects to adding signal lights at various congested locations. The projects will be funded through a combination of federal, state, and local general fund monies.

**Appendix D** contains the Six-year Transportation Improvement Program.

## **5.8 Fire Facilities**

An operations and maintenance levy failed to be passed by the voters in the East Pierce Fire and Rescue district and this has resulted in unexpected changes being made to the budget and a capital facilities plan is in the process of being updated in 2015.

## **5.9 Public School Facilities**

The 2014 Sumner School District Capital Facilities Plan is adopted in this plan by reference. Portion of qualifying improvements can be paid for through school impact fees. The impact fees are intended to cover the cost of development between the time of the impact and the time taxes from developed properties begins to cover costs. The City Council has the option to adopt the school impact fee and to determine how much the fee will be.

**Appendix E** contains the summary of the Sumner School District calculations for school impact fees which are collected through ordinance adopted by the City.

## **5.10 Water System Improvement Plan**

The 2009 Water System Improvement Plan has projects related to distribution lines, storage, and water sources. The total for the 20 year duration of the Plan is: \$4.07 million

**Appendix B** contains the Water System Capital Improvement Plan and Schedule.

**APPENDIX "A"**

**GLOSSARY OF TERMS**

## GLOSSARY OF TERMS

**Adequate public facilities.** Facilities that have the capacity to serve development without decreasing levels of service below locally established minimums.

**Assessed Valuation.** Refers to how much the total real estate and personal property within a jurisdiction is worth. The value is established by the County Assessor at 100% of appraised market value, and adjusted by the State to account for variations in assessment practices among counties.

**Available public facilities.** Facilities or services are in place or that a financial commitment is in place to provide the facilities or services within a specified time. In the case of transportation, the specified time is six years from the time of development.

**Bonding.** Is the act of issuing the debt to finance capital projects and other expenditures.

**Budget.** A plan of financial operation embodying an estimate of proposed expenditures for a given period and the proposed means of financing them.

**Capital Program.** A plan for capital expenditures to be incurred each year over a fixed period of years to meet capital needs arising from the long-term work program or otherwise. It sets forth each project or other contemplated expenditure in which the government is to have a part and specifies the full resources estimated to be available to finance the projected expenditures.

**Centennial Clean Water Program (“CCWP”).** In 1986, legislation was passed which provides grants to public entities for financing water pollution control activities and facilities to protect surface and underground water from pollution. In addition, a State revolving loan program was established to provide loans or combinations of grants/loans to finance public facilities.

**Community Park.** Those parks so designated in the City of Sumner Parks and Recreation Plan.

**Concurrent or Concurrency.** Means that adequate public facilities are available when the impacts of development occur. This definition includes the two concepts or “adequate public facilities” and of “available public facilities” as defined above.

**Councilmanic General Obligation Debt.** Councilmanic bonds refer to bonds issued with the approval of the Council, as opposed to voted bonds, which must be approved by vote of the public. Councilmanic bonds must not exceed 0.75 percent of the assessed valuation and voted bonds 1.75 percent.

**Debt Limit.** The maximum amount of gross or net debt that is legally permitted under state law. Debt is an obligation resulting from the borrowing of money.

**Development Activity.** Any construction or expansion of a building, structure, or use, any change in use of a building or structure, or any change in the use of land, that creates additional demand and need for public facilities.

**Encumbered.** To reserve, set aside or otherwise earmark, the impact fees in order to pay for commitments, contractual obligations or other liabilities incurred for public facilities.

**Enterprise Fund.** Governmental services supported mainly by rates and user fees. A fund established to account for operations: (a) that are financed and operated in a manner similar to private business enterprises - where the intent of the governing body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges; or (b) where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital, maintenance, public policy, management control, accountability, or other purposes (i.e. Water, Sewer, Storm Drain).

**Fee in Lieu of Charge (“FILO”).** Charges are contributions made by developers toward future improvements of City facilities resulting from the additional demand on the City's facilities generated from the development. See also **Mitigation Fees**.

**General Obligation Debt.** Debt that will be repaid mainly by taxes and other general governmental revenues. This debt includes limited and unlimited general obligation bonds, capital leases and other notes and contracts issued with the full faith and credit of the government.

**Guaranty Fund.** A fund established by a bond issuer that is pledged as security for the payment of one or more bond issues. Normally used for Local Improvement Districts (LID).

**Impact Fee.** A fee assessed on new development that creates additional demand and need for public facilities.

**Infiltration of stormwater.** Groundwater that seeps into the wastewater collection system through pipe cracks, faulty joints, and faulty manholes.

**Inflow of stormwater.** Consists of water that may enter the wastewater system through illegal connections such as roof gutters, area drains, catch basins, and unplugged clean out openings.

**Infrastructure.** The underlying foundation, especially the basic installations and facilities on which the continuance and growth of a jurisdiction depends, i.e., streets, and roads, sewer, and water systems.

**Latecomer Fees.** Fees paid by developers or future service users for their share of past improvements financed by others.

**Leasing.** A financing technique whereby ownership of the project or equipment remains with the financing entity, and where title may or may not transfer to the City at the end of the lease.

**Levy Lid.** A statutory restriction on the annual increase in the amount of property tax a given public jurisdiction can assess on regular or excess levies.

**Local Improvement District (“LID”).** A method of carrying out a specific improvement by allocating the costs among the benefiting properties. The project is usually financed through a long term bond issue, and the repayment of which is mainly from the collection of special assessments from the benefiting properties.

**Mitigation Fees.** Contributions made by developers toward future improvements of City facilities resulting from the additional demand on the City's facilities generated from the development. See also **Fee in Lieu of Charge**.

**Public Facilities.** The capital facilities owned or operated by the City or other governmental entities.

**Public Works Trust Fund (“PWTF”).** A low-interest revolving loan fund which helps local governments finance critical public works needs. To be eligible for trust fund financing, the applicant must be a local government entity that has a long-term plan for financing public works needs. If the applicant is a city or county, it must be imposing the optional one-quarter percent real estate excise tax for capital purposes. Eligible projects include streets and roads, bridges, storm sewers, sanitary sewers, and water system. Loans will only be made for the purpose of repairs, replacement, reconstruction, or improvements of existing eligible public works systems to meet current standards and to adequately serve the needs of the existing populations. New capital improvement projects are not eligible. The maximum loan amount has been one million with a minimum local match of ten percent. Interest rates vary from one to three percent, depending on the match.

**Real Estate Excise Tax (“REET”).** A tax upon the sale of real property from one person or company to another.

**Revenue Bonds.** Bonds whose principal and interest are payable exclusively from earnings of an enterprise fund.

**Special Assessment.** A compulsory levy made against certain properties to defray part or all of the cost of a specific improvement or service deemed to primarily benefit those properties. See also **Utility Local Improvement District**.

**System Improvement.** Public facilities included in the Capital Facilities Plan and designed to provide service within the community, in contrast to project improvements.

**Transportation Improvement Account (“TIA”).** Provides funding for transportation projects through two programs: The urban program and the small cities program. Urban projects must be attributable to congestion caused by economic development or growth. They must be consistent with State, regional, and local transportation plans (including transit and rail), and be partially funded by local contributions. Through its urban program project selection process, the TIA requires multi-agency planning and coordination and public/private cooperation to further the goal of achieving a balanced transportation system in Washington State. Small cities program projects are primarily selected on the basis of pavement condition and substandard roadway width. Funding is 1-1/2 cents a gallon on the State gas tax.

**Transportation Improvement Board (“TIB”).** The purpose of the TIB is to administer funding for local governments for transportation projects. This is accomplished through the Transportation Improvement Account Program and the Urban Arterial Trust Account Program. Revenues are from the State fuel tax, local matching funds, and private sector contributions.

**Urban Arterial Trust Account (“UATA”).** This is a State grant program for funding urban arterial road and street projects to reduce congestion and improve safety, geometric, and structural concerns. Funding is 7.12% of the 17 cents per gallon of the State gas tax and 1/3 of 1 cent of the State gas tax.

**Utility Local Improvement District (“ULID”).** Created for improvement to sewer, water, and other utilities and differs from a LID in that all assessment revenues is pledged for payment of debt service of bonds issued to finance the improvements. See also **Special Assessment**.

**APPENDIX "B"**

**2009 WATER SYSTEM PLAN  
CAPITAL IMPROVEMENT PLAN**

Table 8-1. City of Sumner DRAFT Capital Improvement Plan Schedule

Project No. – Description	Funding Source	Total Cost Year 2009	Year of Completion										
			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019-2029
Seattle Construction Cost Index (increases at an average of 3.06%/year)		8652	8652	8917	9190	9471	9761	10059	10367	10684	11011	11348	11695
<b>DISTRIBUTION SYSTEM IMPROVEMENTS</b>													
D1 – Gary Street and Parker Road Loop	D	\$291,000										\$382,000	
D2 – Rainier Street Replacement	CM	\$125,000					\$142,000						
D3 – Main Street and Kincaid Avenue Loop	CM	\$150,000					\$170,000						
D4 – Thompson Street and Silver Street Loop	CM	\$520,000			\$553,000								
D5 – West Valley Highway	D	\$204,000		\$211,000									
D6 – 30th Street East, South of 24th Street East Loop	D	\$167,000				\$183,000							
D7 – 29th Street East and 32nd Street East Loop	D	\$164,000			\$175,000								
D8 – Extend from 149th Avenue to East Valley Highway	CM	\$413,000						\$96,000	\$396,000				
D9 – East Valley Highway from Salmon Creek to CTI	CG	\$2,500,000						\$2,907,000					
D10 – East Valley Highway from 24th Street East to CTI	D	\$650,000				\$712,000							
D11 – 8th Street East	CG	\$496,000	\$23,000	\$489,000									
D12 – 8th Street East and East Valley Highway Loop	CG	\$880,000			\$935,000								
D13 – Valley Avenue East from the West Well to Houston Road	CG	\$1,400,000						\$1,628,000					
D14 – Fryar Avenue / Main Street Intersection	CM	\$208,000		\$215,000									
D15 – Riverside Drive and 151st Avenue	CG	\$222,000							\$267,000				
D16 – Parker Road and 62nd Street Court East	CG	\$69,000									\$88,000		
D17 – Kincaid Avenue, Maple Street to Academy Street	CG	\$277,000											\$376,000
D18 – 140th Avenue East and 20th Street East	CG	\$42,000										\$56,000	
D19 – Replacement of Old Water Mains with Street Projects	CM	\$4,005,000				\$200,000	\$200,000	\$200,000	\$200,000	\$220,000	\$235,000	\$250,000	\$2,500,000
<b>Subtotal:</b>		<b>\$12,783,000</b>	<b>\$23,000</b>	<b>\$915,000</b>	<b>\$1,663,000</b>	<b>\$1,095,000</b>	<b>\$512,000</b>	<b>\$4,831,000</b>	<b>\$863,000</b>	<b>\$220,000</b>	<b>\$323,000</b>	<b>\$688,000</b>	<b>\$2,876,000</b>
<b>Subtotal City Funded (Capital Imp Related to Growth) (CG):</b>		<b>\$5,886,000</b>	<b>\$23,000</b>	<b>\$489,000</b>	<b>\$935,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,535,000</b>	<b>\$267,000</b>	<b>\$0</b>	<b>\$88,000</b>	<b>\$56,000</b>	<b>\$376,000</b>
<b>Subtotal City Funded (Capital Imp Related to Maintenance) (CM):</b>		<b>\$5,421,000</b>	<b>\$0</b>	<b>\$215,000</b>	<b>\$553,000</b>	<b>\$200,000</b>	<b>\$512,000</b>	<b>\$296,000</b>	<b>\$596,000</b>	<b>\$220,000</b>	<b>\$235,000</b>	<b>\$250,000</b>	<b>\$2,500,000</b>
<b>Developer Funded (D):</b>		<b>\$1,476,000</b>	<b>\$0</b>	<b>\$211,000</b>	<b>\$175,000</b>	<b>\$895,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$382,000</b>	<b>\$0</b>

(Table Continues)

Table 8-1. City of Sumner DRAFT Capital Improvement Plan Schedule (continued)

Project No. – Description	Funding Source	Total Cost Year 2009	Year of Completion										
			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019-2029
Seattle Construction Cost Index (increases at an average of 3.06%/year)		8652	8652	8917	9190	9471	9761	10059	10367	10684	11011	11348	11695
<b>SOURCE IMPROVEMENTS</b>													
S1 – West Well Improvements	CM	\$950,000						\$1,106,000					
S2 – South Well Improvements	CM	\$665,000			\$706,000								
S3 – Central Well	CG	\$2,264,000		\$250,000	\$2,140,000								
S4 – New Well at 148th Avenue East and 24th Street East Intersection	CG	\$1,139,000							\$1,407,000				
S5 – Intertie with Auburn	CG	\$238,000											\$322,000
S6 – Intertie with Pacific	CG	\$187,000				\$205,000							
S7 – Water Right Modifications	CG	\$105,000		\$55,000	\$56,000								
S8 – Additional Water Rights Acquisition	CG	\$810,000		\$209,000	\$646,000								
S9 – Intertie with Mountain View-Edgewood	CG	\$750,000			\$797,000								
S10 – Springs Source Improvements	CG	\$566,000		\$117,000	\$481,000								
S11 – Intertie with Puyallup	CG	\$325,000		\$335,000									
	<b>Subtotal:</b>	<b>\$7,999,000</b>	<b>\$0</b>	<b>\$966,000</b>	<b>\$4,826,000</b>	<b>\$205,000</b>	<b>\$0</b>	<b>\$1,106,000</b>	<b>\$0</b>	<b>\$1,407,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$322,000</b>
	<b>Subtotal City Funded (Capital Imp Related to Growth) (CG):</b>	<b>\$6,384,000</b>	<b>\$0</b>	<b>\$966,000</b>	<b>\$4,120,000</b>	<b>\$205,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,407,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$322,000</b>
	<b>Subtotal City Funded (Capital Imp Related to Maintenance) (CM):</b>	<b>\$1,615,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$706,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,106,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>STORAGE IMPROVEMENTS</b>													
ST1 – Construct 2 MG Reservoir on West Hill	CG	\$2,550,000							\$3,056,000				
ST2 – Earthquake Control Valves and Foundation Improvements	CM & D/LID/Other	\$3,502,000			\$300,000						\$4,076,000		
ST3 – Reservoir Mixing	CM	\$107,000				\$40,000	\$41,000	\$42,000					
	<b>Subtotal:</b>	<b>\$6,159,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$300,000</b>	<b>\$40,000</b>	<b>\$41,000</b>	<b>\$42,000</b>	<b>\$3,056,000</b>	<b>\$0</b>	<b>\$4,076,000</b>	<b>\$0</b>	<b>\$0</b>
	<b>Subtotal City Funded (Capital Imp Related to Growth) (CG):</b>	<b>\$2,250,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,056,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
	<b>Subtotal City Funded (Capital Imp Related to Maintenance) (CM):</b>	<b>\$1,682,900</b>	<b>\$0</b>	<b>\$0</b>	<b>\$135,000</b>	<b>\$40,000</b>	<b>\$41,000</b>	<b>\$42,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,834,200</b>	<b>\$0</b>	<b>\$0</b>
	<b>Developer / LID / Other Funded (D/LID/Other):</b>	<b>\$1,926,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$165,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,241,800</b>	<b>\$0</b>	<b>\$0</b>
<b>OPERATIONS AND MAINTENANCE PROGRAMS</b>													
O&M1 – Meter Replacement Program – 10 Years	O	\$393,000	\$98,000	\$101,000	\$104,000	\$108,000							
O&M2 – Hydrant and Isolation Valve Upgrades – 20 Years	O	\$576,000	\$29,000	\$30,000	\$31,000	\$32,000	\$32,000	\$33,000	\$35,000	\$36,000	\$37,000	\$38,000	\$389,000
O&M3 – Source Meter Calibration (All Sources)	O	\$194,000	\$8,200	\$8,400	\$8,600	\$8,800	\$9,000	\$9,200	\$9,400	\$9,600	\$9,800	\$10,000	\$103,000
O&M4 – Increased Telemetry Maintenance	O	\$26,000	\$26,000	\$27,000	\$28,000	\$28,000	\$29,000	\$30,000	\$31,000	\$32,000	\$33,000	\$34,000	\$176,000
O&M5 – Water Use Efficiency Program / WLCAP	O	\$153,000	\$15,300	\$16,000	\$13,000	\$13,000	\$12,000	\$12,000	\$9,000	\$9,000	\$10,000	\$10,000	\$62,000
	<b>Operating Funds (O):</b>	<b>\$1,342,000</b>	<b>\$176,500</b>	<b>\$182,400</b>	<b>\$192,900</b>	<b>\$198,500</b>	<b>\$91,200</b>	<b>\$93,800</b>	<b>\$94,500</b>	<b>\$97,200</b>	<b>\$100,900</b>	<b>\$103,600</b>	<b>\$872,000</b>
	<b>TOTAL WATER FUND (ALL CITY-FUNDED PROJECTS):</b>	<b>\$24,880,900</b>	<b>\$199,500</b>	<b>\$1,852,400</b>	<b>\$6,641,900</b>	<b>\$643,500</b>	<b>\$644,200</b>	<b>\$6,072,800</b>	<b>\$4,013,500</b>	<b>\$1,724,200</b>	<b>\$2,258,100</b>	<b>\$409,600</b>	<b>\$4,070,400</b>

Notes: CG Capital Improvement Projects Related to Growth (Infrastructure Expansion) D Developer Funded  
CR Capital Improvement Projects Related to Maintaining Existing Infrastructure O Operating Funds



**APPENDIX "C"**

**2014 SEWER  
CAPITAL IMPROVEMENT PLAN AND SCHEDULE**

# City of Sumner

## 2014 Utility Rate Study: Sewer Model

### Capital Improvement Program

Project Costs and O&M Impacts in Year: **2014**

[Source](#)

For Conn. Fee Calc. Purposes: Only Includes 10-Year CIP (2014-2023)

No	Description	2014	2015	2016	2017	2018	2019	2020	2021	Annual O&M Impact	Useful Life (Years)	% Upgrade / Expansion	% R&R	Upgrade / Expansion Costs	R&R Costs
1	<b>Capital Related O&amp;M</b>														
2	Other Improvements	44,340	-	44,340	-	-	-	-	-		50.00	0%	100%	-	88,680
3	Machinery & Equipment	46,850	-	46,850	-	-	-	-	-		50.00	0%	100%	-	93,700
4												100%		-	-
5	<b>Capital Projects</b>											100%		-	-
6	CIP#1 - LS#2 New Generator (Puyallup St)	-	75,000	-	-	-	-	-	-		50.00	0%	100%	-	75,000
7	CIP#2 - LS#5 Purchase Property for New LS Location (Parker PS)	50,000	-	-	-	-	-	-	-		50.00	30%	70%	15,000	35,000
8	CIP#3 - LS#5 Design and Construction (Parker PS)	250,000	1,500,000	-	-	-	-	-	-		50.00	30%	70%	525,000	1,225,000
9	CIP#4 - LS#6 New Above-Grade Electrical Panel (Siebenthaler)	-	-	100,000	-	-	-	-	-		50.00	0%	100%	-	100,000
10	CIP#5 - LS#6 New Pumps and Control Valve (Siebenthaler)	-	-	75,000	-	-	-	-	-		50.00	0%	100%	-	75,000
11	CIP#6 - LS#7 Pump Station Upgrade (Cherry)	260,000	2,065,000	-	-	-	-	-	-		50.00	0%	100%	-	2,325,000
12	CIP#11 - LS#8 Design and Construction (New Station)(Mt Circle)	200,000	-	800,000	-	-	-	-	-		50.00	30%	70%	300,000	700,000
13	CIP#12 - LS#14 New Generator (Forest Cyn)	-	-	70,000	-	-	-	-	-		50.00	30%	70%	21,000	49,000
14	CIP#14 - Trailer Mounted Generator Salvaged from LS#2	-	10,000	-	-	-	-	-	-		50.00	0%	100%	-	10,000
15	CIP#16 - I&I Portable Flow Measuring Equipment	-	-	25,000	-	-	-	-	-		50.00	0%	100%	-	25,000
16	CIP#19 - Property Purchase WDFW	95,000	-	-	-	-	-	-	-		50.00	100%	0%	95,000	-
17	CIP#21 - WWTF Expansion Design and Construction:	1,577,000	2,000,000	1,030,500	-	-	-	-	-		50.00	100%	0%	4,607,500	-
18	CIP 08-02 136th Avenue	75,000	145,000	-	-	-	-	-	-		50.00	100%	0%	220,000	-
19	CIP 13-10 East Sumner Neighborhood	110,600	100,000	-	-	-	-	-	-		50.00	100%	0%	210,600	-
20	CIP#22 - Property Purchase Second Home	200,000	-	-	-	-	-	-	-		50.00	100%	0%	200,000	-
21	CIP#25 - Vehicle and Equipment Storage Building	100,000	-	-	-	-	-	-	-		50.00	100%	0%	100,000	-
22	CIP#26 - Digester Piping Mod. Design, Construction, and Tank Cleaning	50,000	-	-	-	-	-	-	-		50.00	0%	100%	-	50,000
23	O&M - Sewer Main Replacement/Rehab	-	500,000	-	1,000,000	-	1,000,000	-	-		50.00	0%	100%	-	2,500,000
24	O&M - Infiltration and Inflow Program	-	100,000	-	100,000	-	100,000	-	-		50.00	0%	100%	-	300,000
25												100%		-	-
<b>TOTAL CAPITAL PROJECTS (unescalated)</b>		<b>\$ 3,058,790</b>	<b>\$ 6,495,000</b>	<b>\$ 2,191,690</b>	<b>\$ 1,100,000</b>	<b>\$ -</b>	<b>\$ 1,100,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>		<b>45%</b>	<b>55%</b>	<b>\$ 6,294,100</b>	<b>\$ 7,651,380</b>
Total Upgrade/Expansion Projects		2,307,600	2,695,000	1,291,500	-	-	-	-	-			6,294,100	7,651,380	5,691,400	602,700
Total R&R Projects		751,190	3,800,000	900,190	1,100,000	-	1,100,000	-	-					602,700	7,048,680
Projects by CIAC														-	-
Projects by Enterprise Fund														6,294,100	7,651,380

**APPENDIX "D"**

**2015 SIX-YEAR TRANSPORTATION IMPROVEMENT PROGRAM**

**Table 5-2  
Transportation Improvement Projects and Programs**

ID <sup>1</sup>	Map ID <sup>1</sup>	Roadway	Project Limits	Description	Total Costs (\$ 1000's)	Estimated Sumner Cost (\$1,000)	Sumner Financing Strategy				Relative Priority	Timing	Comments	Status
							Grants	Developer Mitigation/LID	Impact Fee	General City Transportation Funds				
<b>Arterial Street Program</b>														
3b	R3	8 <sup>th</sup> St E	8th St at White River Crossing	White River Bridge - 4 lanes	\$14,000	\$14,000	\$11,200	\$1,000	\$1,800	\$0	H	H	In design with projected complete date of 2018	In Design
44	R44	8 <sup>th</sup> St E	W Valley Hwy to Lake Tapps Parkway E	Coordinate traffic signal along 8th St E (see R50). (Coordinate with City of Pacific, WSDOT, & UPRR)		With WSDOT- \$880,000 and \$4,400,000 grants	No change				H	H		
		8th St E	8th St at UPRR crossing and Butte Ave SE intersection signal	UPRR crossing on 8th St E. and new signalized intersection at Butte Ave SE. (City of Pacific project)	\$3,400						H	H		
5.2	R5.2	24 <sup>th</sup> St E	24 <sup>th</sup> St E at UPRR Crossing	Construct railroad undercrossing of 24 <sup>th</sup> St E to improve freight mobility.	\$8,000	\$8,000	\$6,400	\$0	\$1,600	\$0	L	L	With WSDOT- \$880,000 and \$4,400,000 grants	No change
5.3	R5.3a	24 <sup>th</sup> St E	142nd Ave E to East Valley Hwy	Reserve right-of-way to extend 24th St E as a 2/3-lane roadway across the Stuck River to East Valley Hwy. Provide signalized intersection at 24th Street E/E Valley Hwy. Provide improvements to the 24th St E/142nd Avenue E including potential NB right-turn lane and closing of the north leg driveway access.	\$6,000	\$6,000					H	H		No change
5.3	R5.3b	24th St E	24th St E White River Crossing	White River Bridge - 2 lanes. Provide signalization at 24th St E. and 142nd Ave East.	\$11,000	\$11,000		\$9,000	\$1,000	\$1,000	M	M	In design with projected complete date of 2018	In Design
5.3	R5.3c	24th St E	24th St E at BNSFRR Crossing	Construct railroad overcrossing of 24 <sup>th</sup> St E to improve automotive mobility and connection to East Valley HWY E	\$10,000	\$10,000	\$3,000	\$4,000	\$2,000	\$1,000	L	L		No change
6	R6	East Valley Hwy	Sumner City Limits to Forest Canyon Rd	Widen roadway to provide left-turn lanes, where needed and improve to minor urban arterial standards with curb, gutter, sidewalks, and bike lanes (see also R5.3).	\$4,000	\$4,000	\$2,800	\$800	\$400	\$0	L	L	Road is in need of repair.	No change
7	R7	East Valley Hwy	Forest Canyon Rd to Salmon Creek	Widen roadway to provide left-turn lanes, where needed and improve to minor urban arterial standards with curb, gutter and sidewalks on one side.	\$6,300	\$6,300	\$4,410	\$840	\$1,050	\$0	M	M	Work includes new box culvert crossing of Salmon Creek.	No change
45	R45	Puyallup St	Puyallup St/Tacoma Ave	Install new signal, when warranted.	400	400			200	200	M	M		
10.1	R10	Sumner-Tapps Hwy	SR 410 interchange to 62 <sup>nd</sup> St E	Widen roadway to 4/5 lanes and improve to minor urban arterial standards with curb, gutter, and sidewalks. Reconstruct intersection at 64th St E.	\$1,750	\$1,750	\$1,400	\$0	\$350	\$0	L	L		Partial
10.2	R10	Sumner-Tapps Hwy Interchange	Sumner Tapps Hwy/SR 410 On/Off Ramps	Reconfigure/resconstruct interchange including widen area to provide 4/5 lane cross-section with turn lanes. Reconfiguration could include consideration of realignment of WB ramps to use 64th St E, provision of a Single Point Urban Interchange (SPUI), etc. (WSDOT)	\$6,000	\$1,000	\$0	\$0	\$500	\$500	H	M		No change
11	R11	62 <sup>nd</sup> St	160 <sup>th</sup> Ave E to Sumner Tapps Hwy	Construct a 2/3-lane minor arterial to serve East Sumner in accordance with the approved neighborhood plan. Install signal at Sumner-Tapps Hwy/62nd St with associated turn lanes. Close Main St (60th St E) at Sumner-Tapps Hwy (see R34).	\$5,000	\$5,000	\$1,000	\$3,000	\$500	\$500	M	H	Planning phase. 2/3 lanes	Planning Phase
14.3	R14	Traffic Ave	Thompson St/WB SR 410 Ramps to the Puyallup River Bridge	Widening Traffic Ave to provide a 5 lane overpass. Reconfigure interchange to provide additional capacity and upgrade signals. (WSDOT)	\$14,000	\$2,000	\$3,000	\$8,000	\$1,000	\$1,000	H	M		DRAW UP MAP
17.2	R17	SR 162	SR 410/SR 162 Interchange	Widening Traffic Ave to provide a 5 lane overpass. Reconfigure interchange to provide additional capacity and upgrade signals. (WSDOT)	\$8,100	\$1,000	\$0	\$0	\$500	\$500	M	M		No change
17.3	R17	SR 162	SR410 to Puyallup River	Widen to 4/5 lanes with geometric and intersection improvements along corridor. (WSDOT)	\$54,000	\$0	\$0	\$0	\$0	\$0	M	M		No change
18	R18	Fryar Ave	Fryar Ave/Zehnder St Intersection	Install new signal, when warranted.	\$350	\$350	\$0	\$0	\$350	\$0	L	L		No change
19	R19	Main St E and 160 <sup>th</sup> Ave E	Main Street from 158 <sup>th</sup> to 160 <sup>th</sup> and 160 <sup>th</sup> Ave E from Main St to 64 <sup>th</sup> St E	Improve intersection at Main Street and 160th including widen streets to minor arterial standards with bike paths and sidewalks. Install traffic signal at Main St E/160th Ave E intersection, when warranted.	\$3,530	\$3,530	\$2,824	\$0	\$0	\$706	M	M		Partial
20	R20	Main St E	Main St E/Parker Rd	Installation traffic signal, when warranted to alleviate problems associated with increasing traffic. Underground conduit for signals installed as part of LID No. 60 in 1994. Intersection improvements should be in coordination with the East Main St Design Strategy Plan.	\$350	\$350	\$0	\$100	\$250	\$0	H	H		No change
22	R22	Main St E	Main St E/Wood Ave	Upgrade signal and improve intersection operations by adding protected-permitted left-turn phasing on the eastbound-westbound directions to avoid queuing. Restripe to provide westbound left-turn lane. Provide pedestrian signal upgrades to comply with ADA standards. Reconstruct intersection to minor arterial roadway standards.	\$350	\$350	\$175	\$0	\$135	\$40	L	L		Partial
24	R24	Bridge Street	Traffic Ave to Pacific Ave	Replace and upgrade existing bridge to improve safety.	\$12,000	\$12,000	\$11,000	\$0	\$0	\$1,000	H	H	Trucks will be restricted on Bridge Street after the completion of the North Sumner Interchange. (project R 5). In design and environmental	In Design
46	R46	West Valley Hwy	24th St E to Sumner-Heights Dr E	Widen to provide turn lanes and/or refuge/merge lanes as needed at key access points along the corridor.							M	L		Partial
28	R28	Wood Ave	Wood Ave/Zehnder St	Improve intersection safety and reconstruct railroad crossing.	\$300	\$75	\$0	\$200	\$50	\$25	L	L	Most of the cost is borne by Sound Transit	No change
<b>Limited Access Facilities</b>														
1		SR 167	I-5 to SR 167	Phase 1 improvement including 1 lane in each direction between the existing SR 167 freeway terminus at the Meridian interchange in Puyallup to I-5. There will be two lanes in each direction from the I-5/SR 167 Extension to SR167/54th Avenue.(WSDOT)	\$764,000	\$0	\$0	\$0	\$0	\$0	H	M		No change
2		SR 167	SR 410 to 15th Street SW/NW	Extend HOV/HOT lanes from current termini to SR 410 in Sumner. (WSDOT)	\$62,000	\$0	\$0	\$0	\$0	\$0	H	M		No change
37		SR 410	SR 167 / 410 Interchange to White (Stuck) River Bridge	EIS and right-of-way preservation for future freeway to freeway HOV connection between SR 167 and SR 410. (WSDOT)	\$20,000	\$0	\$0	\$0	\$0	\$0	H	M		No change
38		SR 410	White (Stuck) River Bridge to 184th Ave E	Widen from 4 to 6 lanes creating one HOV lane each direction, interchange improvements, etc. (WSDOT)	\$65,000	\$0	\$0	\$0	\$0	\$0	M	L		No change
47	R47	SR 167 Interchange at 8th St E	W Valley Hwy to SR 167 Northbound Ramps	Widen interchange area to provide 4/5 lane cross-section with turn lanes. (WSDOT)							M	L		Partial
48	R48	SR 167 interchange 24th St E and West Valley Hwy	SR 167 interchange	Provide additional turn lanes and coordinate intersections along 24th St E (see also R44). (WSDOT)							M	L		

**Table 5-2  
Transportation Improvement Projects and Programs**

ID <sup>1</sup>	Map ID <sup>1</sup>	Roadway	Project Limits	Description	Total Costs (\$ 1000's)	Estimated Sumner Cost (\$1,000)	Sumner Financing Strategy					Timing	Comments	Status
							Grants	Developer Mitigation/LID	Impact Fee	General City Transportation Funds	Relative Priority			
<b>Collector Street Program</b>														
30	R30	Parker Rd	62nd St to Meade McCumber	Reconstruction of existing road to collector street standards with curbs, gutters, sidewalks, and drainage facilities.	\$400	\$400	\$0	\$100	\$0	\$300	L	M		Partial
49	R49	Wood Ave	Wood Ave from Main Street to Elm Street	Reconstruction of existing road to collector street standards with curbs, gutters, sidewalks, and drainage facilities.	\$2,000	\$2,000	\$1,600			\$400	L	L		
		Elm Street	Elm St from Wood Ave to Valley Ave	Reconstruction of existing road to collector street standards with curbs, gutters, sidewalks, and drainage facilities.	\$2,500	\$2,500	\$2,000			\$500	L	L		
		Elm Street	Elm St from East Valley to 160th Ave E	Reconstruction of existing road to collector street standards with curbs, gutters, sidewalks, and drainage facilities.	\$1,500	\$1,500	\$1,200			\$300	L	L		
33	R33	Van Tassel (160th Ave)	Elm St to Main St	Improve to collector street standards with curb, gutter, and sidewalks each side. Overlay roadway. Portions may be completed as parts of development prior to this time.	\$3,000	\$3,000	\$1,800	\$600	\$0	\$600	M	L	Interim asphalt walkways should be constructed as part of citywide sidewalk program to facilitate school access.	No change
34	R34	E Main Street	E Main St/ 166th Ave	Close East Main St at Sumner-Tapps Hwy to improve safety. Improvement would be tied to construction of the 62nd St project (R11).	\$80	\$80	\$0	\$20	\$0	\$60	M	H		No change
<b>Transit Projects</b>														
35		SR 167	Sumner Vicinity	Construct a 500-stall park-and-ride lot between mileposts 9 and 10. (WSDOT)	\$19,000	\$0	\$0	\$0	\$0	\$0	L	L	WSDOT Transportation Plan "Congested" HSS High End Estimate	Follow up with WSDOT to see if still a project
x	x	Sumner Sound Transit Station		Additional parking							H	H		
x	x													
<b>City-Wide Transportation Programs</b>														
		Arterial Maintenance/Street Overlay	City Wide	Conduct systematic maintenance of arterials and local streets based on pavement management system.	\$2,500	\$2,500	\$0	\$0	\$600	\$1,900	H	H	Budget at \$100,000 / year	No change
		Sidewalk Rehabilitation Program	City Wide	Ongoing pedestrian system improvement program to repair sidewalks and add wheelchair ramps.	\$800	\$800	\$0	\$320	\$0	\$480	H	H	Budget at \$40,000 / year.	No change
		Sidewalk Construction Program	City Wide	Program to construct missing sidewalks throughout the City.	\$850	\$850	\$340	\$340	\$40	\$130	H	H		No change
		Sumner Trail System	City Wide	Construct city wide trail system, including trails, landscaping, and other amenities.	\$1,100	\$1,100	\$8,480	\$0	\$0	\$2,120	H	H	Budget at average of \$100,000 year for 12 years. Subtracted \$1.5 million Pacific cost & \$3.0 million for trail segments outside Sumner City Limits.	No change
		Sumner Ave Non-Motorized Overcrossing	Downtown	Construct non-motorized overcrossing from Rivergrove Dr to Sumner Ave over SR 410. Crossing will provide a pedestrian and bicycle link between the downtown and the Rivergrove areas.	\$1,500	\$1,500	\$1,000	\$0	\$0	\$500	L	L		No change
		Neighborhood Traffic Control Program	City Wide	Modify residential streets to enhance pedestrian safety, slow traffic, and minimize cut-through travel.	\$500	\$500	\$150	\$0	\$0	\$350	M	M	Budget at \$25,000 / year	No change
<b>Sumner Costs (\$1,000 in 2002 dollars)</b>					<b>\$1,115,560</b>	<b>\$103,835</b>	<b>\$63,779</b>	<b>\$28,320</b>	<b>\$12,325</b>	<b>\$14,111</b>				No change

**APPENDIX "E"**

**2014 SCHOOL DISTRICTS IMPACT FEES**

# **CAPITAL FACILITIES PLAN 2014-2020**

## **Sumner School District Board of Directors**

**Paul Bucich, President**  
**Casey Chamberlain, Vice President**  
**Richard Hendricks**  
**Deb Norris**  
**Erin Markquart**

**Dr. Sara E. Johnson, Superintendent**

The Sumner School District Capital Facilities Plan was prepared with input from the following individuals:

### **Staff**

Craig Spencer, Assistant Superintendent  
Debbie Campbell, Executive Director, Business Services

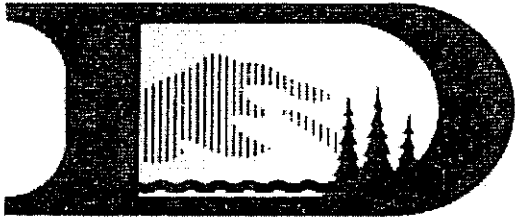
### **Consultant**

Jeff Greene, Planning Consultant

The Capital Facilities Plan was adopted by the Sumner School District Board of Directors on \_\_\_\_\_. If you have questions or would like additional information, please contact Craig Spencer at 253-891-6083

<b>School Site Acquisition Cost:</b> ((Acres X Cost per Acre)/Facility Capacity) X Student Generation Factor						<b>CALCULATIONS</b>	
	Facility Acreage	Cost per Acre	Facility Capacity	SGF SFH	SGF MFH	Cost per SFH	Cost per MFH
Elementary*	30.00	\$ 150,000	1100	0.323	0.112	\$ 1,321.36	\$ 458.18
Middle	25.00	\$ 150,000	750	0.152	0.070	\$ 760.00	\$ 350.00
High	40.00	\$ 150,000	1250	0.174	0.102	\$ -	\$ -
						<b>\$ 2,081.36</b>	<b>\$ 808.18</b>
* Two future elementary school sites							
<b>School Construction Cost:</b> ((Facility Cost/Facility Capacity) X Student Generation Factor) X (Permanent/Total Sq. Ft.)							
	Facility Cost	Facility Size	SGF SFH	SGF MFH	Cost per SFH	Cost per MFH	
Elementary	\$ 25,000,000	550	0.323	0.112	\$ 14,681.82	\$ 5,090.91	
Middle	\$ -	750	0.152	0.070	\$ -	\$ -	
High**	\$ 3,500,000	50	0.174	0.102	\$ 12,180.00	\$ 7,140.00	
					<b>\$ 26,861.82</b>	<b>\$ 12,230.91</b>	
** Represents share for growth related to Elhi Hill Program							
<b>Temporary Facility Cost:</b> ((Facility Cost/Facility Capacity) X Student Generation Factor) X (Temporary/Sq. Ft.)							
	Facility Cost	Facility Size	SGF SFH	SGF MFH	Cost per SFH	Cost per MFH	
Elementary	\$ 1,050,000	189	0.323	0.112	\$ 1,794.44	\$ 622.22	
Middle	\$ 150,000	30	0.152	0.070	\$ -	\$ -	
High	\$ 300,000	54.6	0.174	0.102	\$ 956.04	\$ 560.44	
					<b>\$ 2,750.49</b>	<b>\$ 1,182.66</b>	
<b>State Match Credit</b> Area Cost Allowance X SPI Sq. Ft X State Match X Student Generation Factor							
	Area Cost Allowance	SPI Footage	State Match %	SGF SFH	SGF MFH	Cost per SFH	Cost per MFH
Elementary	\$200.40	90.00	62.18%	0.323	0.112	\$ 3,622.38	\$ 1,256.06
Middle	\$200.40	108.00	62.18%	0.152	0.070	\$ -	\$ -
High	\$200.40	130.00	62.18%	0.174	0.102	\$ 2,818.65	\$ 1,652.31
						<b>\$ 6,441.02</b>	<b>\$ 2,908.37</b>
<b>Tax Payment Credit</b>							
Average Assessed Value						\$ 244,150.00	\$ 126,652.00
Capital Bond Interest Rate						3.71%	3.71%
Years Amortized						10	10
Property Tax Levy Rate						\$2.22	\$2.22
						<b>\$4,460.82</b>	<b>\$2,314.03</b>
<b>Present Value of Revenue Stream</b>							
<b>FEE SUMMARY</b>						<b>SINGLE FAMILY</b>	<b>MULTIPLE FAMILY</b>
School Site Acquisition Cost						\$ 2,081.36	\$ 808.18
Permanent Facility Cost						\$ 26,861.82	\$ 12,230.91
Temporary Facility Cost						\$ 2,750.49	\$ 1,182.66
State Match Credit						\$ (6,441.02)	\$ (2,908.37)
Tax Payment Credit						\$ (4,460.82)	\$ (2,314.03)
Subtotal Unfunded Need						\$ 20,791.83	\$ 8,999.35
						\$ -	\$ -
<b>FEE (50%)</b>						<b>\$ 10,395.91</b>	<b>\$ 4,499.68</b>





*Dieringer School District*  
*Capital Facilities Plan*  
*2014-2019*

*Board Approved*  
*July 30, 2013*

School Impact Fee Calculation 6/13			DISTRICT Dieringer School District				
<b>School Site Acquisition Cost:</b>							
((AcresxCost per Acre)/Facility Capacity)xStudent Generation Factor							
	Facility	Cost/	Facility	Student	Student		
	Acreeage	Acre	Capacity	SFR	MFR	Cost/	Cost/
						SFR	MFR
Elementary	12.00	\$500,000	400	0.322	0.172	\$4,824	\$2,580
Middle				0.130	0.070		
						<b>TOTAL</b>	<b>\$4,824</b>
							<b>\$2,580</b>
<b>School Construction Cost:</b>							
((Facility Cost/Facility Capacity)xStudent Generation Factor)x(permanent/Total Sq Ft)							
		Facility	Facility	Student	Student	Cost/	Cost/
		Cost	Capacity	Factor	Factor	SFR	MFR
				SFR	MFR		
Elementary No. 3		\$21,375,000	400	0.322	0.172	\$17,207	\$9,191
				0.130	0.070		
						<b>TOTAL</b>	<b>\$17,207</b>
							<b>\$9,191</b>
<b>Temporary Facility Cost:</b>							
((Facility Cost/Facility Capacity)xStudent Generation Factor)x(Temporary/Total Square Feet)							
	%Temp/	Facility	Facility	Student	Student	Cost/	Cost/
	Total Sq.Ft)	Cost	Size	Factor	Factor	SFR	MFR
				SFR	MFR		
Elementary		\$0	0	0.322	0.172		
Middle		\$0	0	0.130	0.070		
						<b>TOTAL</b>	<b>\$0</b>
							<b>\$0</b>
<b>State Matching Credit:</b>							
Boeckh Index X SPI Square Footage X District Match % X Student Factor							
	Boeckh	SPI	District	Student	Student	Cost/	Cost/
	Index	Footage	Match %	Factor	Factor	SFR	MFR
				SFR	MFR		
Elementary							
Middle							
						<b>TOTAL</b>	<b>\$0</b>
							<b>\$0</b>
<b>Tax Payment Credit:</b>							
Average Assessed Value 2012						SFR	MFR
Capital Bond Interest Rate (est) 6/12						3.50%	3.50%
Net Present Value of Average Dwelling						\$2,897,672	\$2,088,408
Property Tax Levy Rate						10	10
2013						\$3.9457	\$3.9457
Present Value of Revenue Stream						\$11,433	\$8,240
<b>Fee Summary:</b>				<b>Single</b>	<b>Multiple</b>		
				<b>Family</b>	<b>Family</b>		
Site Acquisition Costs				\$4,824.00	\$2,580.00		
Permanent Facility Cost				\$17,206.88	\$9,191.25		
Temporary Facility Cost				\$0.00	\$0.00		
State Malch Credit				\$0.00	\$0.00		
Tax Payment Credit				(\$11,433.34)	(\$8,240.23)		
FEE				\$10,598	\$3,531		
FEE WITH DISCOUNT OF 50%				\$5,299			
FEE WITH DISCOUNT OF 50%					\$1,766		

**APPENDIX "F"**

**CITY COUNCIL FINAL ORDINANCE**

**[To be included after adoption]**