

# **Chapter 1: DESCRIPTION OF WATER SYSTEM**

## **1.1 INTRODUCTION**

This Water System Plan (WSP) is intended to accomplish the following objectives for the City of Sunnyside:

- Document the City's water system's existing and recent past production and consumption, system improvements, activities, and to provide an assessment of existing facilities.
- Consolidate various water quality monitoring plans and water system reports in one document.
- Demonstrate the system's operational, technical, managerial and financial capability to achieve and maintain compliance with relevant local, state and federal plans and regulations.
- Demonstrate how the system will address present and future needs in a manner consistent with other relevant plans.

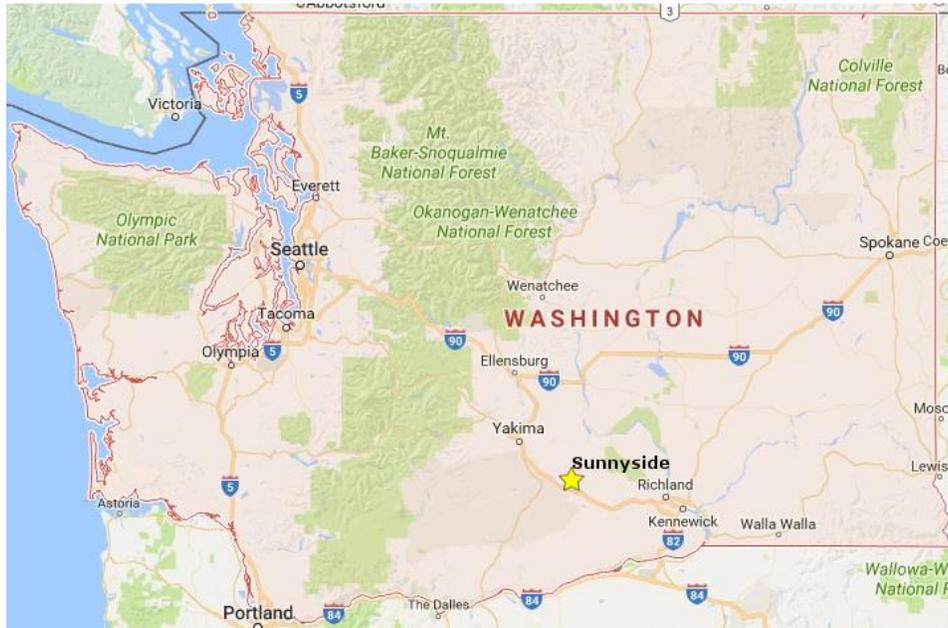
This WSP will also fulfill the requirements of WAC 246-290-100, Water System Plan, and is consistent with guidelines established by Washington State Department of Health, Office of Drinking Water.

The last Department of Health (DOH) approved plan was the Comprehensive Water System Plan Update finalized in January 2005. That plan had been prepared by HDR-EES. HDR also prepared and submitted another update in January 2013 which was reviewed by DOH. The City and HDR could not reach an agreement on addressing the numerous comments made by DOH as a result of that review, and finally came to a mutually agreed upon termination of the HDR contract for the update. Dan Sander, P.E. working through Backflow Management Inc., agreed to re-submit a new plan rather than attempting to respond to the DOH comments. Portions of the 2013 draft plan have been used in this plan, including the distribution system hydraulic analysis. Some data presented in the 2013 plan could not be verified, and was therefore not used in this plan.

## **1.2 BRIEF INVENTORY OF EXISTING SYSTEM**

The City of Sunnyside was incorporated in 1902. It is located approximately 35 miles southeast of the City of Yakima within Section 25, Township 10 North, Range 22 East, as shown in Figure 1-1.

**Figure 1-1 Vicinity Map**



The City currently provides water service to a population of approximately 16,280 within the existing service area, which is also its retail service area and coincides with the city limits. The City also provides water to 4 services outside of city limits that are within the UGA. Future connections outside the City Limits are allowed by City Code by way of special agreement, but such requests are infrequent. The service area for the City is consistent with the City's Urban Growth Area (UGA) boundary as established in coordination with Yakima County.

The County has adopted changes to the Urban Growth Area boundaries, comprehensive plan designations and zoning in December 2016. The City will update their 2007 Comprehensive Plan beginning in 2017. The water system's service area will then be revised to coincide with the UGA and City's Comprehensive Plan.

The City water system is considered a Group A community water system by DOH and has a Public Water System Identification Number of 85400. The system current consists of:

- 7 active wells ( 6, 7, 8, 9, 11, 12, 13) Wells 12 and 13 are considered a wellfield since they pump into a common pipe before entering the distribution system
- 1 emergency well (Well 10)
- 4 storage tanks with a combined capacity of 3.73 million gallons (3 Grandview tanks, 1 Skyline Drive)
- 3 pressure zones
- 9 pressure reducing valve stations
- Approximately 70 miles of transmission and distribution piping
- 5,069 service connections (2,800 single family residences, 152 multi-family residential connections servicing 1675 dwelling units and 594 non-residential connections)

The Sunnyside Valley Irrigation District (District) provides irrigation water to assessed land within the District. All property within the District is assessed annually regardless of use. The historic use of

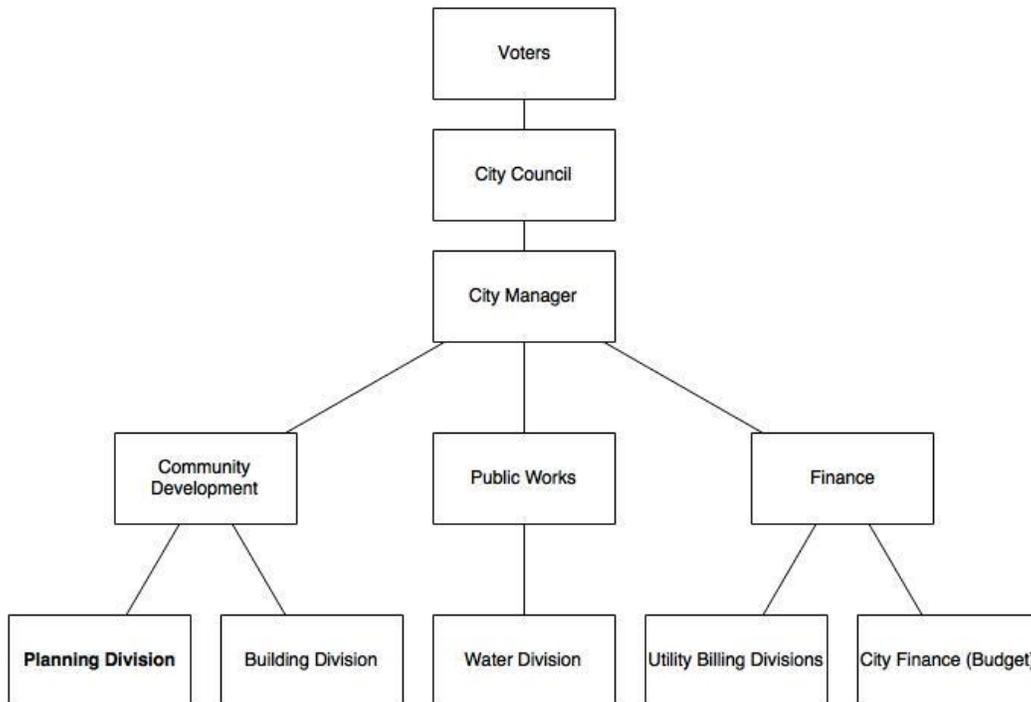
irrigation water was to supply and meet the needs of the various agricultural uses. But as the land within the District has developed, the District continues to provide irrigation water to developed parcels within its boundaries. About 50% of the City’s residential customers utilize the District’s water for irrigation. The District is expanding its irrigation delivery system within City limits, and connecting existing City residential customers upon request. All new subdivision must connect to the Irrigation District for irrigation water. The City requires that these new connections install a Double Check Valve Assembly on their domestic water line in conformance with the Cross Connection Control portion of the City Code.

### 1.3 OWNERSHIP AND MANAGEMENT

Sunnyside was the first city in the State of Washington to adopt the Council-manager plan of government in 1948. This plan provides for an elected city council which is responsible for policy making, and a professional city manager, appointed by the council, who is responsible for administration. The city manager provides policy advice, directs the daily operations of city government, handles personnel functions (including the power to appoint and remove employees) and is responsible for preparing the city budget. Under the council-manager statutes, the city council is prohibited from interfering with the manager's administration. The city manager; however, is directly accountable to and can be removed by a majority vote of the council at any time.

The Water Division is part of the Public Works Department and deals with cooperates with all the Divisions in the City, it works primarily with the Departments of Community Development (Planning and Building Divisions), Finance (City Finance and Utility Billing) and Public Works as show on Figure 1-2.

**Figure 1-2 Sunnyside Organizational Chart**



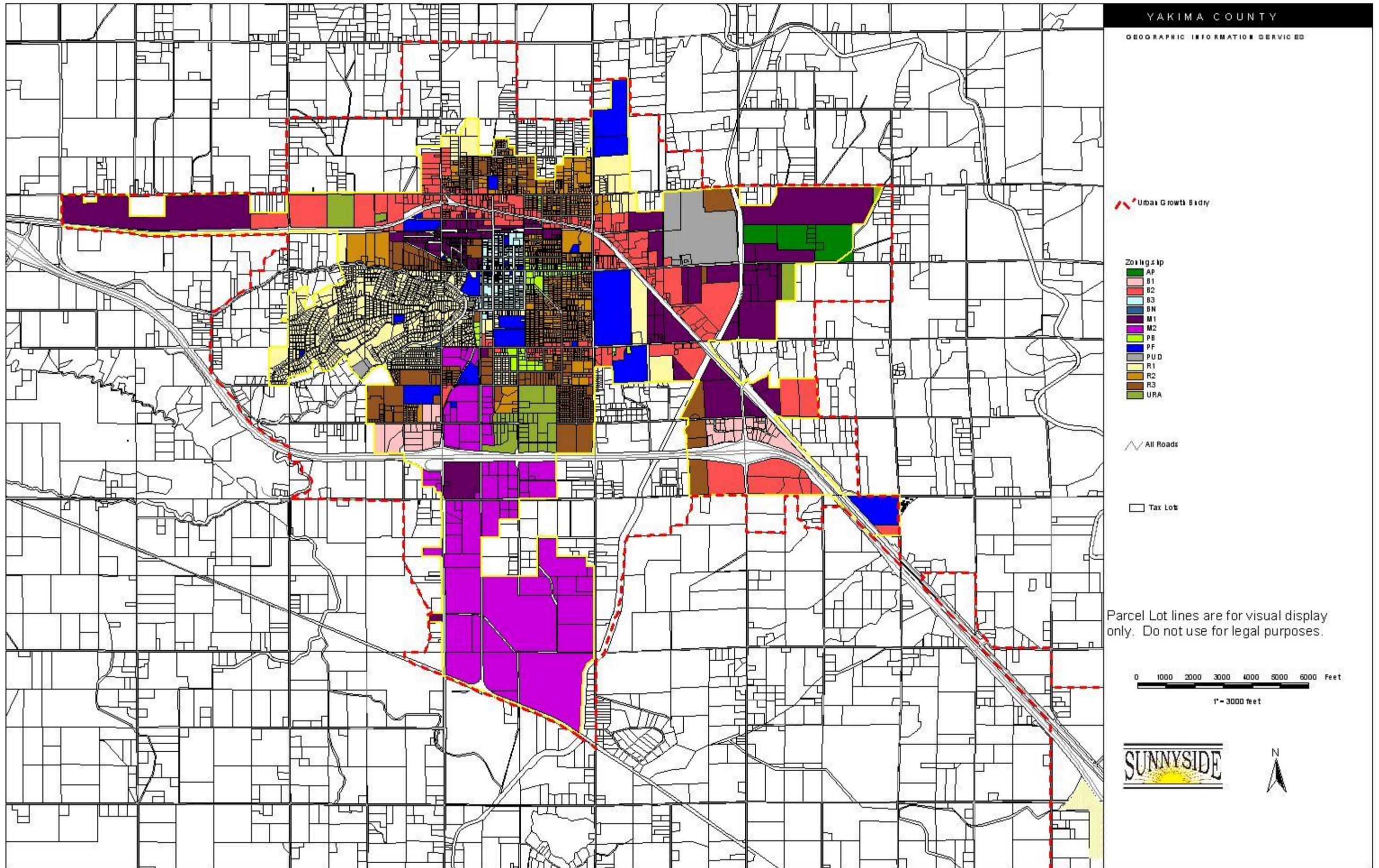
## **1.4 SERVICE AREA CHARACTERISTICS**

The City of Sunnyside's retail service area consists of the typical varied land uses. Within City Limits the City Zoning Ordinance, which is based on the City's Comprehensive Plan, governs new developments. For those areas outside of City limits, but within the UGA, the County Zoning Ordinance is in effect.

The City's Zoning Ordinance provides includes the following zones and as shown on Figure 1-3.

- R1 – Low density residential
- B2 – General commercial
- M1 – Light industrial
- HTC – Highway/Tourist Commercial
- GC – General Commercial
- R-10/5 – Rural – 10/5

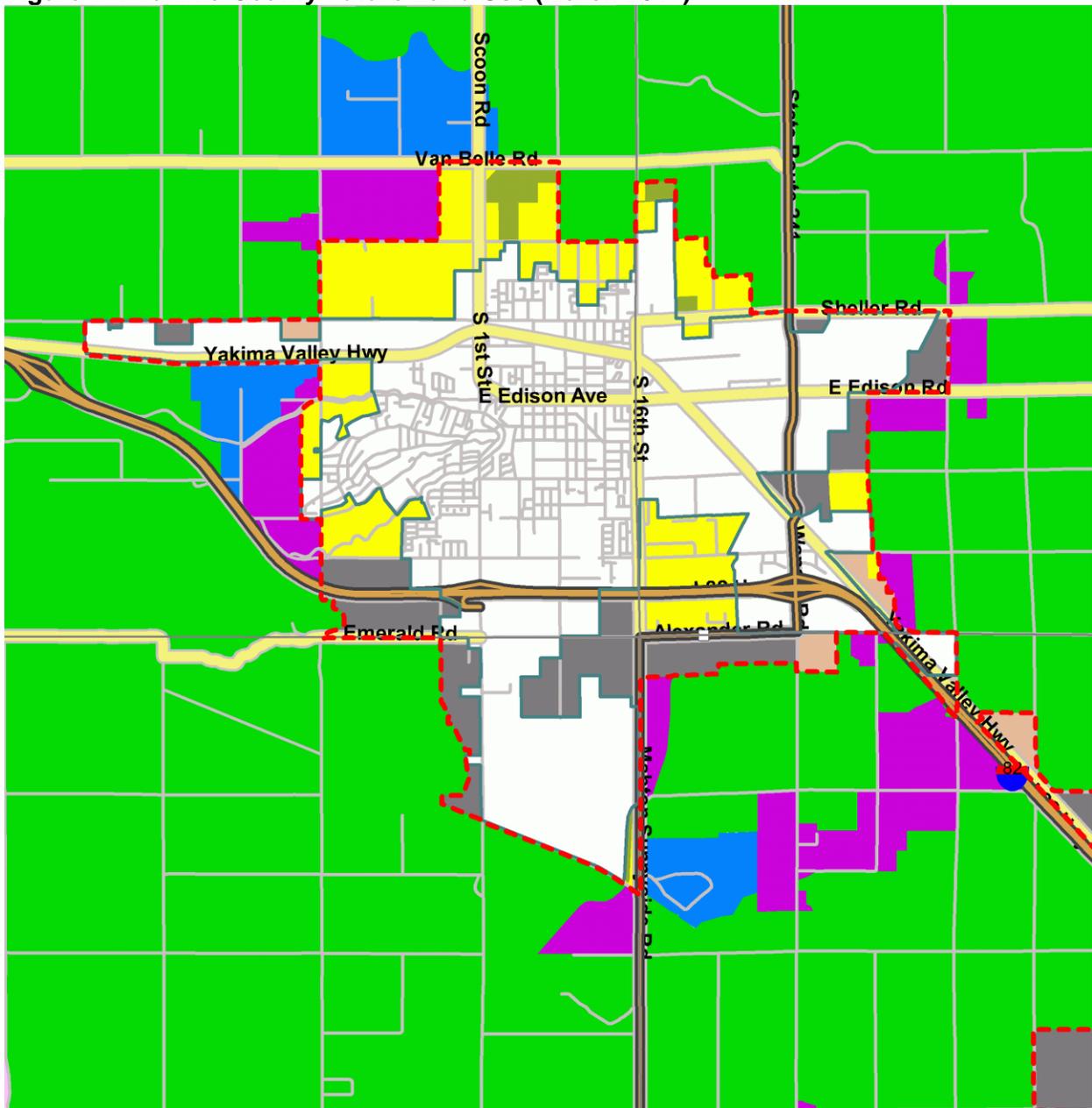
Figure 1-3 City Zoning Map



Currently, the land uses within the City are approximately:

- 70% Residential (dispersed throughout the City)
- 10% Industrial (older area along Warehouse Ave and newer areas in the Sunnyside Port District in the southern portion of the UGA, and western area of the City between Yakima Valley Hwy. and Outlook Road), eastern area near the airport.
- 10% Commercial / Business (north central and along Yakima Valley Hwy.
- 10% Public (Parks, Schools, Airport)

Figure 1-4 Yakima County Future Land Use (March 2017)

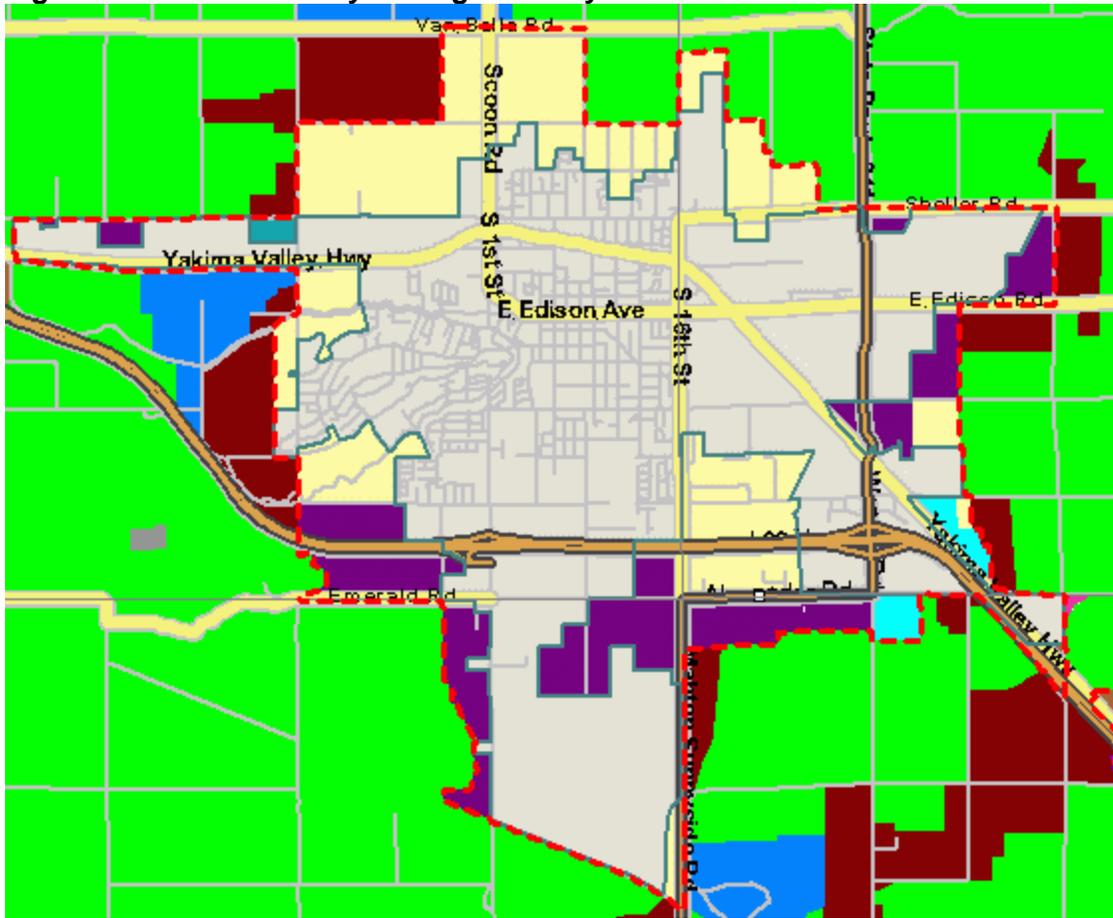


Yakima County Plan 2015 Designation

----- Urban Growth Area Boundary (Service Area Boundary)



Figure 1-5 Yakima County Zoning in Sunnyside UGA – December 2016



Yakima County Zoning (YCC Title 19 )

----- Urban Growth Area Boundary (Service Area Boundary)



The revised Urban Growth Area Boundaries, County's Future Land Use designations, and zoning are shown in Figure 1-4 and Figure 1-5.

The normal annual precipitation for Sunnyside is 6.7 inches and therefore characterized as arid. Winter is the wettest time of the year, with approximately 40 percent of the rainfall (2.6 inches normal precipitation) occurring in the months of December, January and February combined. The summer months are generally dry, having 0.91 inch normal precipitation falling in June, July and August combined. The average monthly temperatures for June, July and August are 66.9°F, 71.2°F and 70.4°F respectively.

## **1.5 CITY CODES AND RELATED PLANS / LOCAL GOVERNMENT CONSISTENCY**

The City has established regulations governing the water utility which are codified in various chapters of its Municipal Code including as shown in Table 1-1. The Sunnyside Municipal Code is current through Ordinance 2016-02, passed February 2, 2016. In addition the City has adopted standard specifications and details/drawings as summarized in Chapter 7. The water related City Codes and standards are located in Appendix 1 and 10 respectively.

**Table 1-1 Water Related Sections of Sunnyside City Code**

Chapter	Title	Sections	Major Topics
8	Public Health	8.24 Fire Hydrants	Standards Locations and number
13	Water and Sewer System	13.08 General Provisions  13.16 Water Service  13.18 Cross Connections  13.20 Rates and Charges  13.24 Reimbursement Agreements for Utility Improvements	Outside City limits terms Fire hydrant operation Interference with system Action to collect delinquent charges  Application for service Responsibility for leaks  Authority Cross connections regulated Suspension of service  Schedule of charges and rates Tampering prohibited – penalty  Fire hydrant meters, agreement and fees Process
16	Subdivisions	16.36 Short and Long Subdivisions – Improvement Requirements	Plans Required Inspection As-built drawings

This Water System Plan is consistent with the City’s existing 2007 Comprehensive Plan and current Yakima County Plan, as evidenced by the Local Government Consistency Review Checklist in Appendix 2. As noted above, the City plan will be updated in the near future including minor changes in Urban Growth Area (UGA)/service. No major land use changes are anticipated as a result of these plan updates.

**1.6 DUTY TO SERVE**

DOH regulations state that municipal water supplier (City) has a duty to provide retail water service to all new service connections within its retail service area if the following four factors are met:

1. Service can be provided in a timely and reasonable manner
2. The City has sufficient water rights to provide service
3. The City has sufficient capacity to serve water in a safe water in a safe and reliable manner
4. The service request is consistent with adopted local plans and development regulations.

The City has adequate legal and physical ability to serve new subdivisions, and individual requests for service with its existing service area, which is also its retail service area. The City Code specifies that applications for service must be made and appropriate fees paid prior to obtaining a permit.

For new subdivisions a complete domestic water distribution and fire protection system shall be installed and connected to the City water system. The water distribution system shall conform to the City standards and specifications, and the City’s comprehensive water plan.

Water and sewer connections or extensions to lands outside the corporate limits of the City shall be permitted, when reasonably available, within the Sunnyside UGA, and where the recipient of said services pays for or arranges for payment of the costs of said extension. Extension of utility services to areas outside of the City limits which do not meet the above requirements would need to be reviewed, in advance, by the City Council for approval or denial. Any connections or extensions outside of the City limits shall be subject to the charges and costs specified in the City code and shall be subject to specifications and policies of the City.

## 1.7 SATELLITE MANAGEMENT INFORMATION

The City is not a Satellite Management Agency.

There are seven Group A water systems within 5 miles of the City’s service area. These systems are listed on Table 1-2 and have been sent a notice this plan is available for review. The letter, the list of who it was sent to, and any comments received is also included in Appendix 2.

**Table 1-2 Nearby Group A Public Water Systems**

DOH Id #	Name	Type	Connections	Distance/Direction
28970	City of Grandview	Community	3334	2.5 miles / SE
65919	Panorama Place Water Assn.	Community	47	2.5 miles / S
04157	Teddy Bear Corner	NTNC	5	3 miles / S
64937	Outlook Community Water	Community	56	2 miles / W
64940	Outlook Elementary School	NTNC	1	2 miles / NW
29000	City of Granger	Community	728	5 miles / NW
02351	Sunnyview Park	TNC	2	Within City Limits/SW

In addition there are several Group B water systems near Sunnyside that could be included in the Sunnyside Water System if the lands were annexed. The City has a policy of not extending services to existing developments without annexation. The policy includes more than just water service. It also includes sewer, police, and fire protection. No other water system has expressed an interest in annexing to the city and therefore, an evaluation to include them as a part of this system is not included here.