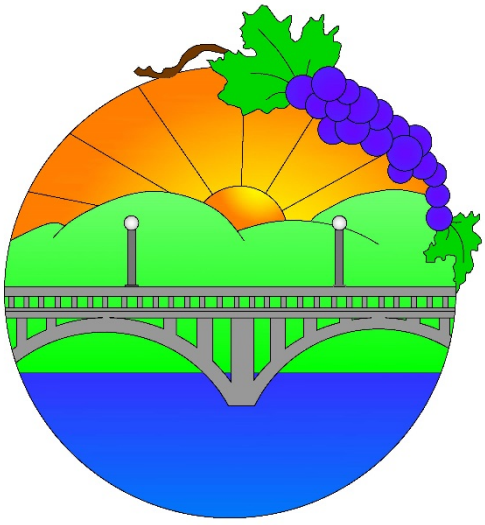
CITY OF PROSSER

CAPITAL FACILITIES PLAN



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PROJECT NO. 17059E

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July 18, 2019

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CAPITAL FACILITIES PLAN

June 2019

PREFACE

The City of Prosser has undertaken a comprehensive planning effort to upgrade its public facilities. The City owns, operates and/or utilizes the following capital facilities within its immediate service area: Streets, domestic water, irrigation, sanitary sewer, parks and recreation, and municipal buildings. The City of Prosser continually plans for the upgrade and operation of each of these individual systems. The purpose of this document is to consolidate the capital improvement plans for each system into a single planning document for review and adoption by the City that is updated annually during the budget process and may be updated during the City of Prosser's annual amendment process. If additional information is needed pertaining to the public works system inventories, needs, design criteria, and planning rationale, the reader is directed to the comprehensive plans referenced at the end of this document.

The requirements for a Capital Facilities Plan (CFP), as outlined by the State of Washington Department of Commerce, and the Growth Management Act of 1990 (GMA), specifically RCW 36.70A.070 and WAC 365-196-415, have been used to guide the contents of this Plan.

These Capital Facilities Plan requirements are:

a) An inventory of existing capital facilities owned by public entities, showing the locations and capacities of the capital facilities;

b) A forecast of the future needs for such capital facilities;

c) The proposed locations and capacities of expanded or new capital facilities;

d) At least a six-year plan that will finance such capital facilities within projected funding capacities and clearly identifies sources of public money for such purposes; and

e) A requirement to reassess the land use element if probable funding falls short of meeting existing needs and to ensure that the land use element, capital facilities plan element, and financing plan within the capital facilities plan element are coordinated and consistent. Park and recreation facilities shall be included in the capital facilities plan element.

Selection of capital improvement projects is based on a number of criteria varying for each individual system. Public health, safety, welfare, and compliance with regulatory requirements are considered to be of primary importance and weigh considerably in the selection of a project. Improving system reliability is of major importance and includes both the construction of those components which must be added to provide redundancy to critical system elements, or the replacement of facilities which have reached the end of their service lives. This is followed by reducing maintenance needs, as determined through a review of available maintenance records, and eventual system replacement. Planning for growth must also be carefully

considered for each public works facility as population trends and commercial, industrial, and public needs are evaluated. In each case, new or replacement facilities should be designed to meet the long-term needs of the community.

If a developer or other person desires to extend services, it is intended they do so at their own expense, provided they comply with the standards and other requirements of the City of Prosser. The City may administratively assist property owners who wish to establish a Local Improvement District for the purposes of constructing capital system improvements. Although the intent is for developers to extend services at their own expense, nothing in this Plan prohibits the City of Prosser from extending services at City expense. The City of Prosser will continue to apply for low-interest loans and/or grants to assist in extending City services throughout the community.

Where applicable, projects including multiple public works systems should be coordinated to provide for single project construction in a given project area. Funding sources could then be combined to provide maximum benefit to the community, and care could be taken to prevent excavating into recently constructed streets for new underground facilities. If funding is available, the proposed improvements could be accelerated to consolidate several years of improvements into a single larger project.

This *Capital Facilities Plan* was generally developed for the six-year period, 2019 through 2025.

BACKGROUND

A. General Description

Incorporated in 1899, the City of Prosser is located in the lower Yakima Valley, within the western part of Benton County, as shown on Figure 1 – Washington State Vicinity Map. The City lies along Interstate 82 and is bisected by the Yakima River, approximately 44 miles southeast of the City of Yakima and 32 miles west of the City of Kennewick. Prosser lies against the Horse Heaven Hills with the City varying from 620 to 850 feet in elevation above mean sea level. Prosser's current City Limits includes approximately 2,950 acres, shown on Figure 2 – City Limits and UGA Boundary.

Like the rest of the Yakima Valley, Prosser and its Urban Growth Area (UGA) have a warm and dry climate. The Cascade Mountain Range acts as a barrier between Benton County and the Pacific Ocean, keeping precipitation low and temperatures warm. The mean annual temperature range is from a low of 25.8° F to a high of 84.8° F. The median temperature is 63.6° F and the mean annual precipitation is 7.85 inches. With a warm climate and rich soils, Benton County is a significant agricultural region as well as a recreational area.

The economy of Prosser depends largely upon the agricultural industry. Produce grown throughout the Yakima Valley and the Columbia Basin is processed and shipped from facilities within the City, including three fruit juice and fruit products processors, eight wineries, and other fruit packing and storage facilities. Much of the employment in Prosser is tied directly to these agricultural facilities.

The City's goal is to services in a reliable, effective, efficient, economic, and environmentally responsible manner for existing and future residents, businesses, and visitors. The level of service standards shown in the following table, combined with current and forecasted needs,

were used to develop the list of capital projects for each City service sector described in this capital facilities plan.

City of Prosser Level of Service Standard	
Transportation	
Pedestrian	Sidewalks on both sides of arterials and collectors
	Crosswalks present every 600 feet
Bicycle	Network of bicycle lanes available on arterials and collectors
Auto	LOS of C during peak hours for all roads as defined by the Transportation Research Board's Highway Capacity Manual, unless specified otherwise LOS of F during Peak hours for downtown streets and intersections
Freight	Freight corridor provided from federal and state highways through industrial and commercial areas
Sanitary Sewers	
Maximum Month Flow	174 gallons per capita day
Peak Hydraulic or Peak Instantaneous Flow	226 gallons per capita day
Storm Water Management	
System Design Storm	Greater of 25-year, 24-hour or 25-year 3-hour duration SCS Type 1A Storm
Water (Potable)	
Water availability	353 gallons per Equivalent Residential Unit (ERU) as contained in Prosser's current WSP
Water (Irrigation)	
Water availability	36 inches per acre per year through pressurized system
Parks	
Local	4.5 acres per 1,000 people
Open Space/Wildlife Habitat	4.5 acres per 1,000 people

B. Urban Growth Area (UGA)

The City of Prosser and Benton County established the UGA for Prosser in 1996, as part of the GMA planning process; and, revised the UGA in 2018, as part of the GMA planning update. The Prosser UGA includes those lands to which the City may feasibly provide future urban services, and those surrounding areas which directly impact conditions within the City Limits.

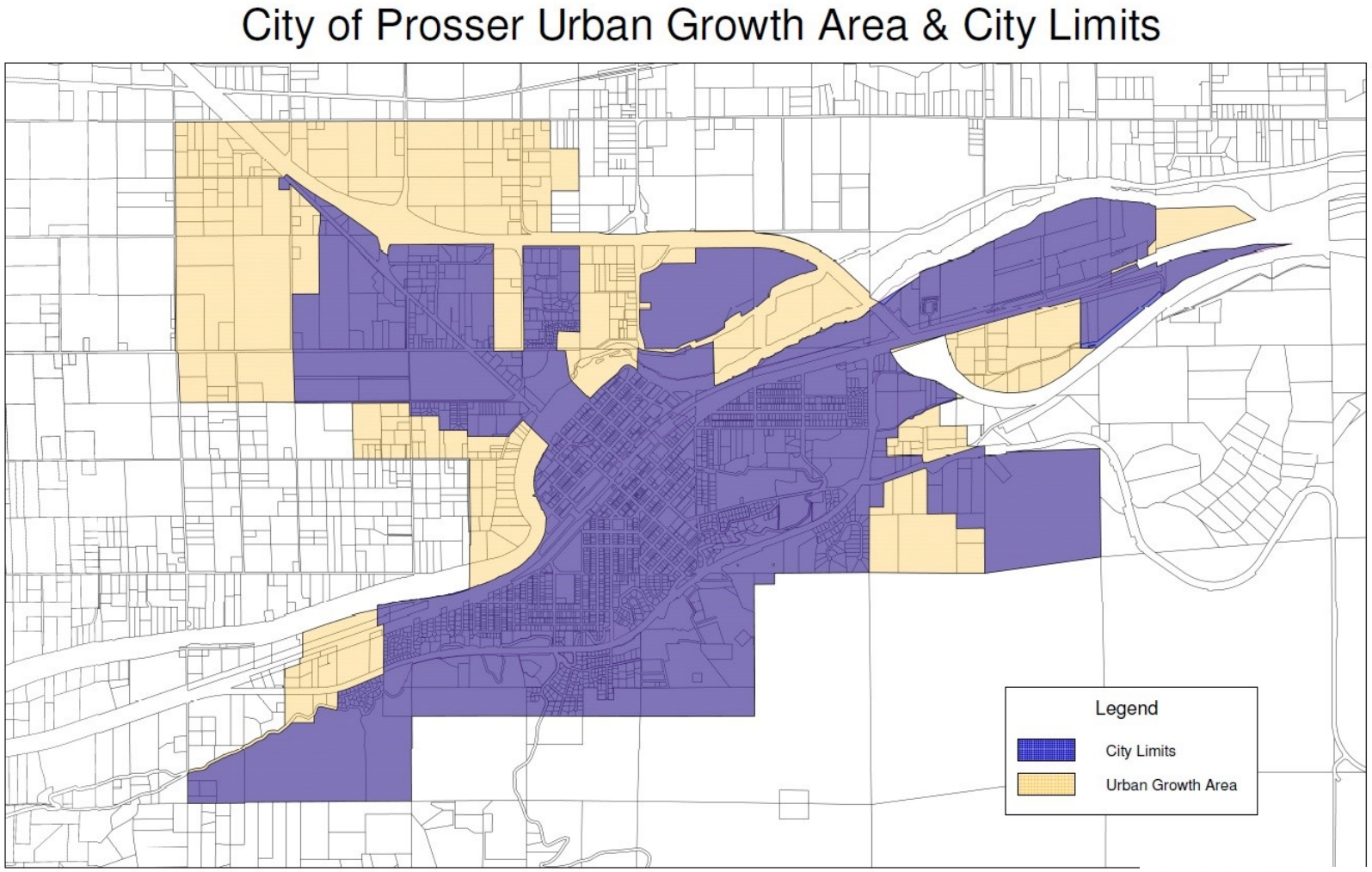
Although not required to extend City services at City cost to areas within the UGA, it is necessary for Prosser to have the ability to provide service to those areas in the future. Planning documents for the Prosser water and sewer system have included the possibility of serving the UGA, and some infrastructure improvements within the UGA are shown on maps within those documents. For more specifics on future system improvements within the UGA, the reader is directed to the comprehensive planning documents referenced at the end of this document.

C. Previous Capital Facility Improvement Planning Efforts

Prosser first began planning for coordinated improvements to its capital facilities in 2000, through the development of a Capital Improvement Program. Although never formally adopted, this 2000 plan served as a basis for the planning and implementation of capital facilities improvements throughout the City. This Capital Improvement Program was updated in 2002; and, while again not formally adopted, served as a basis for major facility improvements. In 2004 and 2016, the Capital Facilities Plan was once again updated. This 2019 Capital Facilities Plan represents an amendment of the March 2018 Capital Facilities Plan.

FIGURE 1 – WASHINGTON STATE VICINITY MAP

FIGURE 2 – CITY LIMITS AND UGA BOUNDARY



STREET SYSTEM

A. Background

The City of Prosser has approximately 42 miles of streets; the majority of which are paved with asphalt concrete pavement. Benton County owns the Grant Avenue bridge, and the City of Prosser owns the Wine Country Road and 6th Street bridges, all three cross the Yakima River. The Washington State Department of Transportation (WSDOT) inspects and recommends improvements to these bridges every two years. WSDOT owns and maintains Interstate 82, SR 22, and SR 221, all passing through the City of Prosser.

Aside from WSDOT facilities, the most heavily traveled roads, and those most important to the Prosser regional street system, are functionally classified as major collectors. Within Prosser, these major collectors include: Wine Country Road, North Gap Road, West Old Inland Empire, Grant Avenue, 6th Street, 7th Street, 10th Street, Sheridan Avenue, Bennett Avenue, Paterson Road, and Byron Road. Key roadways, but of lesser importance than major collectors, are classified as minor collectors. Within Prosser, these minor collectors include: East Old Inland Empire Hwy. The remaining streets within the City are classified as local access streets.

B. Capital Improvement Program

A *Six Year Transportation Improvement Program* (*TIP*) is reviewed, revised and adopted by the City on an annual basis. The most recent program was adopted July 2017, and covers the years 2019 through 2025. Fifteen roadway projects were identified with a total length of approximately 5.6 miles, and priorities were based upon roadway condition and cost. Aside from roadway improvement projects, the City has included four sidewalk/pedestrian improvement projects in the *TIP* with a total length of approximately 1.2 miles. In the past, Prosser has relied upon personal property taxes, real estate taxes, and motor vehicle fuel taxes to finance minor street maintenance and improvement projects. Larger projects have received funding assistance from various state and federal sources including Transportation Improvement Board (TIB) Programs, Surface Transportation Program (STP), and Transportation Alternatives Program (TAP).

The current TIP (for years 2019 through 2035) is summarized in **Error! Reference source not found.**. These improvements have been reviewed and adopted by the City of Prosser and are the recommended improvements under this Capital Facilities Plan. The recommended improvements are shown by year on Levels of Service of this Plan.

C. Street Funding

Proposed funding for the recommended roadway projects is the continued use of a combination of tax monies (local funds), state, and federal programs. Approximately 41% of property tax revenues are contributed to the operating street fund on an annual basis. In addition to the property tax revenues, fuel tax revenues from the state make up the remaining balance of the operating street fund. Over the past several years, the Washington State Transportation Improvement Board (TIB) has been an attractive and reliable source of funds for smaller communities; but, this appeal has generated a large number of applicants, and resulted in increased competition for funding. TIB funding programs available to the City are the Urban

Arterial Program (UAP), the Arterial Preservation Program (APP), and the Sidewalk Program (SP).

Another source is the Transportation Benefit District (TBD) which has been updated in 2019.

The Moving Ahead for Progress in the 21st Century (MAP-21) is the current federal transportation funding source available to the City. This program includes the Regional Competitive Surface Transportation Program (STP) Program, the Highway Safety Improvement Program (HSIP), Congestion Mitigation and Air Quality (CMAQ), and Transportation Alternatives Program (TAP). State programs include Pedestrian and Bicycle Safety (PBS) and Safe Routes to School (SRTS).

Currently, federal funds are awarded based on regional prioritization and selection, with separate funding categories for rural and urban areas. To obtain funding, a project application submittal is required by jurisdiction members when a call for projects is declared by the Benton-Franklin Council of Governments (BFCOG). The application is then reviewed by BFCOG and points are awarded based on the established program criteria. If the project scores high in comparison to other projects, funds are awarded to the project. These funds typically require a City financial match of 13.5%.

The street system budget should be reviewed annually and adjustments made to optimize the use of the available funds in the operating street fund.

STREET IMPROVEMENTS TABLE ST-1

Year	Project	Estimated Cost	Funding Source
2019	Yakima Avenue Rehabilitation (Market to Guernsey)	$73,100	TBD
2019	Bennett Ave - Reconstruction	$2,975,016	City/TIB
2019	WCR 2" grind and overlay	TBD	City/TIB
2020	Margaret Street Rehabilitation (Bennett to Myrtle)	$100,670	TBD
2020	OIE Reconstruct (West City Limits to WCR)	$2,612,270	STP 80% city 20%
2021	Florence Street Rehabilitation (Ellen to Evans, Florence to Lillian)	$84,600	TBD
2021	Byron Rd - Reconstruct Bike Path Addition (Sheridan Ave to West City Limits	$5,626,500	City/RCO
2021	Kinney Way/Concord/Market St - Sidewalk (Park Ave to SR22)	$755,900	TIB/City
2021	Prosser Avenue Improvements	$1,804,000	City
2022	Lillian Street Rehabilitation (Bennett to Myrtle, Lillian to Margaret)	$103,600	TBD
2022	Nunn Rd Improvements	$1,224,300	STP 80% city 20%
2022	Wamba Rd Improvements (OIE to Merlot)Phase 1	$1,648,400	STP 80% city 20%
2023	Alice Streets Rehabilitation (Bennett to Canyon	$102,600	TBD

2023	Alexander Court Improvement Phase 1 (Highland to Paterson)	$1,052,000	City
2023	Alexander Court Improvement Phase 2 (WCR to Highland)	$757,000	City
2023	Wamba Rd Improvements (WCR to OIE)Phase 2	$614,300	STP 80% city 20%
2024	Wine Country Rd Chip Seal (Exit 82 to Meade; Meade to 6th Street; 6th St Bridge to Gap)	$145,200	TBD
2024	Benson Avenue Improvements (Mercer Court to Alexander Court)	$637,300	City
2024	Downtown Intersection Improvements -5th Street (Bennett Ave to Meade Ave)	$362,000	City
2024	Highland Drive Improvements (Alexander Court to SR22)	$1,182,300	City
2032	Public Works Equipment Yard	TBD	City
TBD-Developer	OIE Phase 3 - Reconstruction (Wamba to Grant)	$2,337,300	STP 80% city 20%
TBD-Developer	OLE Phase 2 Reconstruction (WCR to Wamba	$1,218,000	STP 80% city 20%
TOTAL		**$22,598,086.00**	

Levels of Service

Figure T-1. Prosser Non-motorized Transportation levels of service.

LOS	Description
Sidewalks	Sidewalks on both sides of arterials and collectors, crosswalks every 600 feet where feasible.
Bicycle	Network of bicycle lanes available to provide alternative modes of transportation along arterials, collectors, and roads connecting significant residential developments to commercial hubs.
Sidewalks	Sidewalks on both sides of streets not collectors or arterials. May be waived on one side if approved under assigned authority of the Prosser Municipal Code.

Figure T-1.1 Street Motor vehicle levels of service.

LOS	Description
A - Free flow	Free flow. Low volumes and no delays
B - Reasonably free flow	Stable flow. Speeds restricted by travel conditions, minor delays. Presence of other users in the traffic stream
C - Stable flow	Stable flow. Speeds and maneuverability reduced somewhat by higher volumes.
D - Approaching unstable flow	Stable flow. Speeds considerably affected by change in operating conditions. High density traffic restricts maneuverability.
E - Unstable flow	Unstable flow. Low speeds, considerable delay, volume at or near capacity. Freedom to maneuver is extremely difficult.
F - Forced or breakdown flow	Forced flow. Very low speeds, volumes exceed capacity, long delays and queues with stop-and-go traffic.

Figure T-1.2 two way stop controlled Intersection LOS APPLIED.

LOS	Control Delay-Seconds
A	< 10.0
B	> 10.0 and < 15.0
C	> 15.0 and < 25.0
D	> 25.0 and < 35.0
E	> 35.0 and < 50.0
F	> 50.0

Figure T-1.3 four way stop controlled Intersection LOS APPLIED.

LOS	Control Delay-Seconds
A	< 10.0
B	> 10.0 and < 15.0
C	> 15.0 and < 25.0
D	> 25.0 and < 35.0
E	> 35.0 and < 50.0
F	> 50.0

Figure T-1.4 Prosser LOS Specific roadways APPLIED.

LOS Specific Roadways	
Residential roads that serve single family dwelling units (excludes Multi-family)	LOS B
Wine Country Road	LOS C
Historic Downtown and intersections within the Downtown	LOS F
All Other Roads (excluding State and Federal highways)	LOS C
All intersections on arterials	LOS C

Street Maintenance Program to be funded by the Prosser Transportation Benefit District

The City of Prosser formed a Transportation Benefit District in 2009, pursuant to the authority of RCW Chapter 36.73. The purpose of the Transportation Benefit District (TBD) is to pay for transportation improvements identified in statewide, regional, or local transportation improvement programs. The Prosser City Council assumed the powers of the TBD by passage of Ordinance Number 19-xxxx. The City of Prosser's transportation improvement program, to be funded by the Prosser Transportation Benefit District is an ongoing-rotating maintenance program consisting of street reclamation and street chipseal. The first eight years of the rotating reclamation maintenance is set forth in table TBD-1 below. This local plan shall be revised each time this Capital Facilities Plan is updated. Additional maintenance is shown on Maintenance Area Map identified as MAP-CS-1 in appendix. This local improvement program is in addition to the other programs previously identified in the Capital Facilities Plan and is ongoing. The additional maintenance shown on on table Map CS-1 shall be updated each time that this Capital Facilities Plan is updated.. The TBD funds will be used to finance the maintenance projects listed on table 1-1. The TBD funds may be used as a match in order to obtain grants, loans, or other financing in order to complete the improvements listed on table TBD-1. Developer financing may pay for a portion of the improvements listed in table TBD-1. If the TBD lacks adequate financing to complete all improvements listed on table 1-1, the City or TBD may secure other funding sources, including developer financing when improvement can be required at the time of development, in order to meet the goal of completing the improvements in table TBD-1 within 15 years.

- Maintenance portion of Projects listed the approved Six Year Transportation Improvement Plan (STIP)
- Roadways listed on the attached annual street maintenance program
    - The Annual Street Maintenance Program is revolving. Therefore, once the last cycle is completed, the first cycle begins again
    - Depending upon available funding, the TBD may decide to fund additional roadways in the next year's scope
    - This schedule is subject to change depending upon funding and changes will be process pursuant to Material Change Policy
    - It is important to note that annual maintenance includes: crack seal, chip seal, and striping

TABLE TBD-1

Year	Location	Description	Cost
2019	Yakima Ave (Market to Gurnsey)	Reclamation	$85,000
2020	Margret Street (Bennett to Myrtle)	Reclamation	$115,000
2021	Florence to Lillian, Park to Ellen and Evans,	Reclamation	$85,000
2022	Lillian Street Bennett to Myrtle and Evans	Reclamation	$104,000
2023	Alice Street. Bennett to Canyon Drive and Evans, Margret to Alice	Reclamation	$103,000

2024*	**Chip Seal (All streets in Prosser based on need) WCR**	**Chip Seal**	**$to be determined**
2025	Anna Street (Bennett to Canyon Drive)	Reclamation	$120,000
2026	Sadie Street (Bennett to Canyon)	Reclamation	$120,000
Additional reclamation maintenance projects will be identified each time that the Capital Facilities Plan is updated.			

Street Reclamation VS Chipseal

Chipseal is an ongoing process used to maintain and preserve existing streets. Chipseal should be interspersed in years that the TBD does not have a reclamation maintenance project that it is funding. The City should adopt a transportation improvement program that specifies how streets will be evaluated for reclamation improvement or the chipseal process depending on existing surface deterioration and other relevant factors. The City's/TBD's transportation program should be adopted with a goal of maintaining the entire transportation system in the City so that traffic may flow freely to all collectors and arterials. Therefore, even minor residential streets may qualify for maintenance under that program.

DOMESTIC WATER SYSTEM

A. Background

The City of Prosser owns and operates its own water system. Prosser's retail water service area boundary corresponds to the City Limits. The future retail service area boundary corresponds to the City's UGA Boundary.

The City of Prosser domestic water system consists of four distribution pressure levels. Under normal operating conditions, the static pressure within the Zone 1 (lower) pressure level ranges from 42 to 86 psi, and the static pressure within the Zone 3 (upper) pressure level ranges from 44 to 88 psi. Zone 2 (middle) is supplied from Zone 3 through pressure reducing valves, and the pressure within the Zone 2 pressure level ranges from 42 to 81 psi. Zone 2 North is supplied from the North Prosser 1.2 MG Reservoir and Zone 2 Booster Pump Station, and the pressure level ranges from 30 psi to 96 psi. Zone 2.5 (or the Painted Hills Zone), is supplied water from Zone 3 through a transmission main and pressure reducing valve station. The static pressure within the Zone 2.5 pressure level ranges from 42 to 86 psi.

The City is supplied water from five primary source wells and one emergency well. However, one primary source well (Well No. 2) is not currently operable due to sand production. The maximum combined pumping capacity of the five operable wells is 6,040 GPM, or 8.70 million gallons per day; although normal maximum production is limited to 5,750 GPM, or 8.28 million gallons per day, due to water right restrictions. The City's total existing water rights are 5,750 GPM, and 2,984 acre-feet per year (972.3 million gallons).

Prosser's total reservoir capacity is 5.45 million gallons. The lowest pressure level (Zone 1) is served by one reinforced concrete reservoir with a capacity of 1.3 million gallons. Water from Zone 1 is boosted into the Zone 3 (upper) pressure level through a booster pump station located at the City's water filtration plant. A single epoxy-coated, steel 3.0 MG reservoir serves Zone 3, Zone 2.5, and Zone 2. Water from Zone 3 is carried via a 12-inch transmission main to Zone 2.5 (Painted Hills) pressure level, through Zone 3 to Zone 2.5 PRV station located along SR-22. A telemetry system stationed at the water filtration plant controls the pump operations based on the water levels in the reservoirs and monitors the Zone 2.5 PRV stations.

The existing distribution system is looped, where possible, and consists of mainly 6-inch, 8-inch, and 12-inch water mains, approximately 55 miles in total length.

The City of Prosser owns and maintains a non-potable irrigation system that serves approximately 57% of the City's residential domestic water service customers. The irrigation system is operated through the Water System Fund including maintenance and capital improvements. The irrigation system is presented in a separate section of this Capital Facilities Plan.

B. Capital Improvement Program

A *Water System Plan* (WSP) was completed in June 2016, and approved by the Department of Health in October 2016, for the City of Prosser. The WSP examined, in detail, the system needs, and developed a program for implementing the recommended improvements. Primary improvements identified for the existing system were in three areas; supply, storage and distribution. Supply improvements include added well capacity, larger transmission mains, and treatment equipment. Storage improvements include operations and maintenance activities

only, including reservoir cleaning, inspection, and painting. Distribution improvements include replacing undersized and aged pipe to improve fire flow and system reliability. No irrigation system improvements were identified in the WSP.

In addition to those improvements listed in the Water System Plan, the City has identified desired improvements to allow growth in undeveloped locations within the City Limits and UGA. These improvement projects include extending the water system into the previous sprayfield site (location of new Regional Recreation Park), and across I-82, into the City's UGA.

Table W-1 lists recommended improvements by year (for years 2019 through 2035, and beyond six-year period), showing estimated costs and proposed funding sources. The recommendations presented in this table coincide with the recommendations identified in the *Water System Plan* in combination with needs identified by the City. These improvements are valid as the recommendations for this *Capital Facilities Plan*. The recommended improvements are shown on Table 2 of this Plan. The existing domestic water system, and recommended improvements, are also shown on Map B in the Appendix of this Plan.

Current growth projections, based on development interests, indicate that over the next seven-year period the population will increase to 8,000. This growth rate is nearly twice the 1.8% annual growth rate used in the WSP. Therefore, several improvement projects may need to be accelerated to provide services to meet these needs. Additionally, this accelerated growth projection raises a concern regarding the available water rights currently owned by the City. If the current projected growth rates are realized for an extended period, the existing annual water rights will be exhausted in approximately 15 years, assuming the water consumption rate of 353 gallons per day per single family residence continues.

Options are available to compensate for the additional water right need, other than purchasing additional capacity, include decreasing current domestic water usage by:

1. Wherever available, use irrigation water rather than domestic water for irrigation uses.
2. Use of reclaimed water from the Wastewater Treatment Plant (WWTP) for plant process needs.
3. Encouraging industries to increase reuse and recycling of water for their process needs.
4. Providing incentives for low usage plumbing fixtures.
5. Customer education programs regarding water conservation practices.
6. Application for Return Flow Credit of water right for WWTP effluent discharges through Ecology.

C. Water System Funding

Along with identifying and prioritizing improvements to the water system, the *Water System Plan* identified possible funding sources for those improvements. There are five basic categories of potential financing for domestic water-related improvements:

1. Local Public Enterprise Funds
2. Use of Local Public Powers
3. State Assisted or Guaranteed Resources
4. Federally Assisted or Guaranteed Resources
5. Private Development

Current availability of funding is limited from a number of the sources within these categories. Many also restrict the use of funds to certain projects, and others limit their participation to a percentage of the total cost. Each of these categories is described briefly below.

1. Local Public Enterprise Funds

   Reserves in the Enterprise Fund are accumulated from available revenues from water user fees. The amount of the reserves will depend on the balance of operation and maintenance costs of the system versus total revenue generated by the fees. These reserves may be used to finance any water system related project allocated by the City Council.

   Funds for future projects may be generated by increases in user fees, thus building the reserves in the Enterprise Fund. With this method of financing, often called the "pay-as-you-go" approach, the City is collecting interest on the reserves as opposed to paying interest on a loan balance. One method used by some communities to accumulate reserves is through the development of a capital recovery charge system. This approach is similar to assessing connection fees, except the amount is based on the capital costs of constructing transmission mains and treatment facilities, and the collected funds are usually set aside as capital reserves for future projects.

2. Use of Local Public Powers

   In this section, three primary bonding techniques will be presented: general obligation bonds, revenue bonds, and special assessment bonds. There are advantages and disadvantages to each. The type of bond issued to finance a community improvement depends in part on custom, and in part on the circumstances of a particular offering. General information about the three principal types of municipal bonds follows.

   General Obligation Bonds: These bonds pledge the unlimited taxing power, and the full faith and credit of the issuing government to meet the required principal and interest payments.

   Special Assessment Bonds (LID Bonds): LID bonds are used to finance improvements where the property specially benefited can be identified. Special assessment bonds are frequently used to make capital improvements in a particular neighborhood. Principal and interest payments for these bonds are made by special assessment on the property benefiting from the improvement. Before special assessment bonds are issued, estimated costs are mailed to property owners, a public hearing is held to allow the affected property owners to say whether or not they want the improvement, and a 30-day protest period elapses during which property owners may protest the improvements prior to City Council action formally establishing the project. Debt financed by special assessment bonds is not subject to debt limitations.

   Revenue Bonds: Revenue bonds are frequently used to finance City-owned utilities, industrial parks, and other municipal public facilities. The bonds pledge the revenue from a particular revenue source to meet the principal and interest payments. Revenue bonds are appropriate debt instruments when the enterprise fund can be expected to generate sufficient revenue to meet both operating and debt service cost. Revenue bonds generally do not become a general obligation of the government issuing them. Communities may have to pay higher rates of interest on these bonds than on general

obligation bonds, because revenue bonds are considered less secure. But, revenue bonds also have an important advantage over general obligation bonds in that the amount of the revenue bonds is not included in the amount of indebtedness subject to state debt limitations. The legal requirements for issuing revenue bonds are more complex than those for issuing general obligation bonds. When revenue bonds are issued, a special authority (Water Fund) operates the facility and a special revenue fund receives and disburses all funds. A trust agreement to provide for the monthly reimbursement of revenues and containing provisions to protect the bond holders must be formulated.

3. State Assisted or Guaranteed Resources

Public Works Trust Fund (PWTF): This fund was created in 1985 to provide loans for replacement of public works facilities. Applications for construction funds may be submitted once each year (in May), and applications for pre-construction funds (for such items as engineering design, bid document preparation, right of way acquisition and environmental studies) may be submitted once each month. Projects are evaluated based on:

a. Merits of the project as to need;
b. Degree of capital improvement planning;
c. Adequacy of existing rate structure;
d. Degree of local participation in financing project; and
e. Whether the area is economically distressed.

Current allocations of funds have been allowed for a wide variety of projects, including domestic water system replacement projects. The interest rates on PWTF loans generally range from 0.5% to 2.0% depending on the amount of matching money provided by the City.
PWTF loans have recently become less reliable due to legislative transfers from the PWTF into the general fund as a result of budget deficits.

Drinking Water State Revolving Fund (DWSRF): This fund provides low-interest loans to publicly and privately owned water systems for projects which improve water systems and ensure public health. Up to 100% of eligible project costs are fundable through this program. Applications are accepted once a year in September.

Community Economic Revitalization Board (CERB): CERB is a state board focused on economic development through job creation in partnership with local governments. The Board has the authority to finance public infrastructure improvements that encourage new private business development and expansion. However, by law CERB may only fund construction projects which can demonstrate that either significant private job creation or significant private investment will occur as a result of the public project. CERB is primarily a loan program with grants awarded on a case-by-case basis. The interest rates on CERB loans are 2.5% for distressed areas and 3.0% for non-distressed areas. Applications are accepted year around, while the Board considers applications every two months.

4. Federally Assisted or Guaranteed Resources

Three federally financed funding sources are available for domestic water system construction: 1) the USDA's Rural Development, Rural Utilities Service (RUS) Program; 2) the Economic Development Administration's (EDA) Public Works Grants and Loans Program; and 3) the Department of Housing and Urban Development's (HUD) Community Development Block Grants administered by the State Department of Community Planning and Development.

Rural Utilities Service Water & Waste Disposal Direct Loans and Grants Program: This program is one of several programs established by the USDA to provide public works assistance to small communities in rural areas. Public entities such as municipalities, counties, special purpose districts or authorities, Indian tribes, and nonprofit corporations or cooperatives are eligible in areas with a population under 10,000. Priority will be given to public entities in areas smaller than 5,500 people to restore a deteriorating water supply, or to improve, enlarge, or modify a water facility. Preference will also be given to requests which involve the merging of small facilities and those serving low-income communities. Loans and grant funds may be used to construct, repair, improve, expand, or otherwise modify rural water supply and distribution, including reservoirs, pipelines, wells, and pumping stations. Targeted at the most needy communities, grants are designed to keep costs economical. Grants are limited to reducing the facility per user costs for debt service to a minimum of 1% of the area's family income. Loans in the past have also been available at a 5% interest rate for the useful life of the facility, or the statutory limit on the applicant's borrowing authority, or for a maximum of 40 years.

Public Works Grants and Loans Program: This program is funded by the Economic Development Administration (EDA) and used to encourage long-range development gains in jurisdictions where economic growth is lagging, or where the economic base is shifting. The program provides public works and development facilities needed to attract new industry and provide business expansion. Financial aid may be used to acquire and develop land and improvements for public works, and to acquire, construct, rehabilitate, alter, expand or improve such facilities, including related machinery and equipment. When completed, such projects are expected to bring additional private investment to the area.

U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant Program: This program is administered by the Washington State Department of Commerce. Communities with a population under 50,000 can apply for grants to undertake activities in providing adequate housing, expanded economic opportunities, and correcting deficiencies in public facilities which affect public safety and health of an area or community of residents. The program is designed to aid low and moderate income people and is also directed to have a maximum impact on stated community problems. Its primary focus is to assist blighted communities, or communities suffering a particular community or economic development problem.

5. Private Development

Expansion of domestic water facilities to newly developing areas outside the existing service area is a common requirement of the private developer. Installation of public utilities within housing subdivisions is normally financed entirely by the developer. The City may participate by paying the cost of over-sizing the water main for possible extension at a later time.

Although funding has been curtailed in a number of programs within the last few years, projects are still receiving financing statewide. Competition for available funds, however, has increased significantly. Projects showing the greatest need and having the largest local funding participation, or benefit to low-income families, receive the majority of financing from these programs. Careful planning and packaging of the project is necessary so that the most effective dollar use, including local participation, may obtain the maximum benefit for the greatest number of people. Monthly water rates to customers, grants, loans, and private funds were identified as the primary means for funding most improvements. The current water rates include a 4% annual increase through 2019, then the rate increase lowers to 3.5% annually.

Water System Improvements Table W-1

Year	Project	Estimated Cost	Funding Source
2019	I-82" Water Main Crossing	$945,000	RD
2019	Fire Hydrant Replacement	$30,000	City
2019	3mg reservoir painting	$115,000	City
2019	Chlorine Residual Analyzer	$125,000	City
2019	Well 4B HVAC Upgrades	$32,000	City
	2019 Total	**$1,247,000**	
2020	Fire Hydrant Replacement	$30,000	City
2020	Emergency Generator for Treatment Plant	$250,000	City
2020	Filter platforms at Water Treatment Plant	$75,000	City
2020	New Well #2 and #3	$2,500,000	DWSRF
	2020 Total	**$2,605,000**	
2021	Fire Hydrant Replacement	$30,000	City
2021	Downtown Utility Improvements	To Be Determined	City
2021	Water System Plan Update	$100,000	City
	2021 Total	**$130,000**	
2022	Fire Hydrant Replacement	$30,000	City
2029	3mg reservoir painting	$115,000	City
2022-2035	9th St 8" Water Main Loop	$448,230	DWSRF
2022-2035	Aeration Unit No. 4	$399,340	DWSRF
2022-2035	Frontier Rd 12" Water Main Extension (SR 22 to East City Limits)	$250,000	Developer/CERB
2022-2035	Highland Drive 8" Water Main Loop	$422,710	Developer
2022-2035	Prosser Heights Elementary 8" Water Main Loop and Zone 2 to Zone 1 PRV	$790,810	DWSRF
2022-2035	Source Well Main	$1,633,270	DWSRF
2022-2035	Stacy Ave 8" Water Main Loop	$270,880	Developer
TBD	OIE Highway 12" water main extension (Albro to Missimer)	$537,000	Developer
TBD	OIE Water System Utility Extension - West Gap rd to Albro (water)	$250,000	Developer
Overall Total		**$9,279,240**	

IRRIGATION SYSTEM

A. Background

The City of Prosser owns and operates an irrigation system within the City Limits and delivers irrigation water from Sunnyside Valley Irrigation District (SVID), as defined in a 1995 agreement. The primary use of the system is to provide an adequate irrigation water supply for the City's citizens, while decreasing the demand on the domestic water supply for non-potable uses. Those residences unable to access water from the irrigation system use City domestic water to irrigate their lawns, yards, and gardens.

The 2018 SVID irrigation assessment totaled 1,561.86 acres at a cost of $179,613.90. The service area is primarily in the City's Zone 1 due to the location and elevation of the Prosser SVID Lateral. In 2018, about half of Prosser was served by irrigation water obtained from SVID. Expanding the current irrigation system may be feasible with the City's existing SVID shares, or by purchasing additional shares in the future to provide irrigation water to un-served areas within the City. Based upon similar projects in the Yakima Valley, the cost to expand the existing irrigation system would be approximately $5,000 per service (equivalent to $3.0 million dollars) to serve the remaining customers within the City of Prosser.

B. Capital Improvement Program

The City plans to expand the irrigation system to provide all of the City's residences with irrigation service. This expansion project will be phased over a multi-year period, but actual phasing has not yet been determined. As a result, specific improvement locations by year have not been identified. However, one improvement is evaluating the irrigation system, and formulating a phased plan to implement the City-wide pressurized system.

C. Irrigation System Funding

Sources of funding to finance capital improvements of the City's irrigation system are primarily City and private funds, with assistance from SVID and the Washington State Recreation and Conservation Office (RCO). Irrigation revenues and expenditures are included in the City's water system fund balances, tracked under irrigation line items. Irrigation revenues are estimated to increase by approximately 3.5% per year through rate increases. The irrigation system assessment project will include a financial program for project funding.

Irrigation System Improvements Table IR-1

Year	Project	Estimated Cost	Funding Source
2021	Irrigation System Evaluation	$71,000	City
To Be Determined	OIE Irrigation System Utility Extension - West Gap Rd to Albro (irrigation)	$225,000	DEVELOPER

SANITARY SEWER SYSTEM

A. Background

The City of Prosser wastewater facilities consist of a sewage collection system and a wastewater treatment facility. The sewage collection system includes approximately 149,300 linear feet (LF) of gravity pipe (with a majority of the pipe being 8-inch in diameter), 12,500 LF of force main, and 6 sewage lift stations. A detailed inventory of the sanitary sewer system can be found in the draft 2005 General Sewer Plan.

Since 1948, the City of Prosser has provided treatment and disposal for residential, commercial, and industrial wastewater generated within the City. Prosser's wastewater treatment facilities have undergone many expansions and upgrades since original construction. These modifications have been in response to increasing population, increasing industrial waste treatment needs, and increasingly stringent discharge requirements.

Prosser's wastewater treatment facilities are located on the north bank of the Yakima River, below Prosser Dam, and immediately adjacent to the Chandler Canal. Wastewater enters the treatment facility at the headworks, where large incoming solids are removed by a mechanical fine screen. Heavy material is then removed from the waste stream via an aerated grit chamber. From the headworks, wastewater flows to the primary clarifier where settleable material is removed. The material which settles in the primary clarifier is pumped to the primary anaerobic digester for further treatment. Wastewater exiting the primary clarifier is pumped to the trickling filters where biological treatment occurs. From the trickling filters, wastewater flows to the secondary clarifier where biological solids produced as a result of the trickling filter process are removed prior to the wastewater entering the sequencing batch reactor (SBR). Biological solids settled in the secondary clarifier are returned to the primary clarifier influent for co-settling with the primary solids. Within the SBR, additional biological treatment of the wastewater occurs, including ammonia removal. Biological solids generated as part of the SBR process are removed to the aerobic sludge holding tank. The finished wastewater is disinfected in the SBR chlorine contact tank, and then discharged to the Yakima River.

Wastewater solids removed from the primary clarifier are pumped to the primary anaerobic digester, which is both heated and mixed. Sludge overflowing the primary digester goes to the secondary anaerobic digester. Periodically, liquids from the secondary anaerobic digester are dewatered prior to being stored in drying beds until land applied in accordance with the City's biosolids permit.

Biological solids removed from the treatment process by the SBR are pumped to the aerobic sludge holding tank. From the aerobic holding tank, sludge is thickened prior to being pumped to the primary anaerobic digester where it is co-processed with the primary sludge as described above. Solids removed from the aerated grit chamber are pumped to a grit classifier where they are washed and made suitable for landfill disposal.

In 2012, the Washington Department of Ecology (Ecology) issued National Pollutant Discharge Elimination System (NPDES) Permit No. WA0020800 to the City of Prosser for waste discharges. Condition S4.B of the Permit required the submittal of a *Plan to Maintain Adequate Capacity* when actual flows or waste loads reached 85% of the design criteria for three consecutive months. The City recently completed the 2015 Wastewater Treatment Plant Improvements project which included a new primary anaerobic digester, converting existing anaerobic digester into a secondary digester, a new sludge thickener, a new SBR, and other site improvements. The improvements will expand the treatment design loadings as shown in Table SW-1– Prosser Wastewater Treatment Facility Design Criteria.

Table SW-1– Prosser Wastewater Treatment Facility Design Criteria		
Parameter	2012 Permit	2015 Design
Average Flow for the Maximum Month	1.80 mgd	2.43 mgd
BOD_5 for the Maximum Month	6,750 lbs/day	10,125 lbs/day
TSS for the Maximum Month	4,722 lbs/day	7,080 lbs/day
Total Kjeldahl Nitrogen for the Maximum Month	325 lbs/day	490 lbs/day

An application to revise the NPDES permit through the Washington State Department of Ecology (Ecology) was submitted in April 2016. Ecology extended the existing permit until further notice due to lack of funding to prepare a new permit.

B. Capital Improvement Program

A draft *General Sewer Plan* was completed in July 2005 for the City of Prosser, which examined in detail the needs for the system, identifying deficiencies. The Plan identified pipeline segments and lift stations where current capacity with respect to existing or projected 2025 peak wastewater demands was insufficient. The Plan did not include specific improvements to mitigate such needs, but included pipeline upsizing ranges and projected capacity requirements at each lift station.

Error! Reference source not found. lists the recommended improvements for years 2019 through 2035, showing estimated costs and proposed funding sources. The recommended improvements are shown on Table 5 of this Plan. The existing sanitary sewer system and recommended improvements are also shown on Map D in the Appendix of this Plan.

C. Sewer System Funding

Though specific improvements to the sewer system were not included, the draft *General Sewer Plan* identified possible funding sources for the improvements.

Prosser annually reviews its sewer rates to ensure there is adequate revenue to operate the system, as well as fund necessary improvements. The City will continue to investigate funding improvements through grant and low-interest loan programs, such as the Public Works Trust Fund, the Centennial Grant Program, the State Revolving Fund, and other sources.

Funds may be available for financing the proposed improvements from several sources. Those considered in this section are listed below:

1. Local Public Enterprise Funds.
2. Use of Local Public Powers.
3. State Assisted or Guaranteed Resources.
4. Federally Assisted or Guaranteed Resources.
5. Private Development.

Available funding is limited in a number of these five sources. Many also restrict the use of funds to certain projects, while other sources limit their participation to a percentage of the total cost. Each of these categories is described briefly below.

1. Local Public Enterprise Funds

Reserves in the Enterprise Fund are accumulated from revenues from sewer user fees. The amount of the reserves will depend on the balance of operation and maintenance costs of the system versus total revenue generated by the fees. These reserves may be used to finance any sewer system related project approved by the City Council.

Funds for a future project may be generated by increases in user fees, thus building the reserves in the Enterprise Fund. With this method of financing, often called the "pay-as-you-go" approach, the City is collecting interest on the reserves as opposed to paying interest on a loan balance. One method used by some communities to accumulate reserves is through the development of a capital recovery charge system. This approach is similar to assessing connection fees, except the amount is based on the capital costs of constructing collection system trunk lines and treatment facilities, and the collected funds are usually set aside as capital reserves for future projects.

2. Use of Local Public Powers

The use of local public powers consists of three primary bonding techniques including general obligation bonds, special assessment bonds, and revenue bonds. There are advantages and disadvantages to each. The type of bond issue to finance a community improvement depends in part on custom and in part on the circumstances of a particular offering. General information about the three principal types of municipal bonds follows:

General Obligation Bonds: These bonds pledge the unlimited taxing power and the full faith and credit of the issuing government to meet the required principal and interest payments.

Special Assessment Bonds (LID Bonds): LID bonds are used to finance improvements where the property specifically benefitted can be identified. Special assessment bonds are frequently used to make capital improvements in a particular neighborhood. Principal and interest payments for these bonds are made by the special assessment on the property benefitting from the improvement. Before special assessment bonds are issued, estimated costs are mailed to property owners, and a public hearing is held to allow the affected property owners to say whether or not they want the improvements. During a subsequent 30-day protest period, property owners may protest the improvements prior to City Council action formally establishing the project. Debt financed by special assessment bonds is not subject to debt limitations. This type of financing is typically not suited to treatment plant improvement projects or for construction of trunk sewers within a collection system. However, it is often used as a means to finance extension of sewers into a new service area.

Revenue Bonds: Revenue bonds are frequently used to finance City-owned utilities, industrial parks, and other municipal public facilities. The bonds pledge the revenue from a particular revenue source to meet the principal and interest payments. Revenue bonds are appropriate debt instruments when the enterprise fund can be expected to generate sufficient revenue to meet both operating and debt service cost. Revenue bonds generally do not become a general obligation of the government issuing them. Communities may have to pay higher rates of interest on these bonds than on general obligation bonds, because revenue bonds are considered less secure. However, revenue bonds also have an important advantage over general obligation bonds: the amount of the revenue bonds is not included in the amount of indebtedness subject to state debt limitations. The legal requirements for issuing revenue bonds are more complex than those for issuing general obligation bonds. When revenue bonds are

issued, the Sewer Fund must be used to operate the utility and the Sewer Fund receives and disburses all funds. A trust agreement to provide for the monthly reimbursement of revenues that contains provisions to protect the bond holders must be formulated.

3. State Assisted or Guaranteed Resources

Centennial Grant Program: This program is state-funded through the Washington State General Fund, primarily through the State Building Construction Account. Ecology administers the Centennial Program as grants to local governments and tribes. The Centennial program provides grants for water quality infrastructure and nonpoint source pollution projects to improve and protect water quality. Up to two-thirds of the funds in this program can be used for activities and facilities related to point source discharges. The Centennial Program will fund up to 50% of the total eligible project costs. Applications are accepted once a year. However, rules for these funds prohibit their use on projects where state or federal grants were previously awarded and the same objective achieved. Eligible infrastructure projects are limited to wastewater treatment construction projects for financially distressed communities.

Clean Water State Revolving Fund: This fund provides low-interest loans to local governments for projects which improve and protect the state's water quality. Up to 100% of eligible project costs are fundable through this program. Applications are accepted once a year, concurrent with the Centennial Grant Program applications.

Public Works Trust Fund (PWTF): This fund was created in 1985 to provide loans for replacement of public works facilities. Applications for construction funds may be submitted once each year, and applications for pre-construction funds (for such items as engineering design, bid document preparation, right of way acquisition, environmental studies, and infiltration/inflow studies) may be submitted anytime during the year. Current allocations of funds have been for a wide variety of projects including domestic wastewater projects. The interest rate on PWTF loans ranges from 0.5% to 2% depending on the amount of matching money provided by the City. PWTF loans have recently become less reliable due to legislative transfers from the PWTF into the general fund as a result of budget deficits.

Community Economic Revitalization Board (CERB): CERB is a state board focused on economic development through job creation in partnership with local governments. The Board has the authority to finance public infrastructure improvements that encourage new private business development and expansion. However, by law CERB may only fund construction projects which can demonstrate that either significant private job creation or significant private investment will occur as a result of the public project. CERB is primarily a loan program with grants awarded on a case-by-case basis. The interest rates on CERB loans are 2.5% for distressed areas and 3.0% for non-distressed areas. Applications are accepted year around, while the Board considers applications every two months.

4. Federally Assisted or Guaranteed Resources

Three federally financed funding sources are available for domestic wastewater system construction: the USDA's Rural Development Program, the Economic Development Administration's Public Works Grants and Loans Program, and the Department of Housing and Urban Development's Community Development Block Grants administered by the State Department of Community, Trade, and Economic Development.

USDA Rural Development Program (RD): RD is one of several programs established by USDA to provide public works assistance to small communities in rural areas. Public entities such as municipalities, counties, special purpose districts or authorities, Indian tribes, and nonprofit corporations or cooperatives are eligible in areas under 10,000 population. Priority will be given to public entities in areas smaller than 5,500 people to improve, enlarge, or modify a wastewater facility. Preference will also be given to requests that involve the merging of small facilities and those serving low-income communities. Loans and grant funds may be used to construct, repair, improve, expand, or otherwise modify rural wastewater collection and treatment systems. Targeted at the most needy communities, grants are designed to keep costs economical. Grants are limited to reducing the facility's per user annual costs for debt service to a minimum of 1% of the area's median family income. Loans in the past have also been available at a 5% to 10% interest rate for the useful life of the facility, or the statutory limit on the applicant's borrowing authority, or for a maximum of 40 years.

Public Works Grants and Loans Program: This program, funded by the Economic Development Administration (EDA), is used to encourage long-range development gains in jurisdictions where economic growth is lagging or where the economic base is shifting. The program provides public works and development facilities needed to attract new industry and provide business expansion. Financial aid may be used to acquire and develop land and improvements for public works and to acquire, construct, rehabilitate, alter, expand, or improve such facilities, including related machinery and equipment. When completed, such projects are expected to bring additional private investment to the area. Prosser has successfully used these funds for past water and wastewater system upgrades by showing demonstrable benefits to the local industries.

U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant Program: This program is administered by the Washington State Department of Commerce. Communities under 50,000 can apply for grants to undertake activities in providing adequate housing, expanded economic opportunities, and correcting deficiencies in public facilities which affect the public safety and health of area or community residents. The program is designed to aid low- and moderate-income people, and is also directed to have maximum impact on stated community problems. Its primary focus is to assist blighted communities, or communities suffering a particular community or economic development problem. Sanitary sewer system projects in low-income areas of the City could be eligible for funding under this program.

5. Private Development

Expansion of wastewater facilities to newly developing areas outside the existing service area is a common requirement of private developments. Installation of public utilities within housing subdivisions is normally financed entirely by the developer.

Although funding has been curtailed in a number of programs within the last few years, some projects statewide are still receiving financing. Competition for available funds, however, has increased significantly. Projects showing the greatest need and having the largest local funding participation, or benefit to low-income families, receive the majority of financing from these programs. Careful planning and packaging of the project is necessary so that through effective dollar use, including local participation, a funding agency may obtain the maximum benefit for the greatest number of people.

Waste Water System Table W-2

Year	Project	Estimated Cost	Funding Source
2019	I-82" Sewer Main Crossing	$1,005,000	RD
2019	Industrial Sewer Holding	To Be Determined	CERB/USDA/EDA/City/Private
2019	Lift Station 1 and 2 and 3	$1,000,000	City/DWSRF
2019	WWTP Sludge Dewatering Equipment (Belt Filter Press)	$2,000,000	City
2022	Wastewater Treatment Plan Disinfection System Upgrades	$1,400,000	City
2022	Wastewater Treatment Plant Headworks and Grit Removal	$642,000	City
To Be Determined	Downtown Utility Improvements	To Be Determined	TBD
TBD - Developer	Nunn Rd 8" Sewer Main Extension (Steele to South Nunn)	$561,000	City/Developer/CERB
To be Determined - Developer	OIE Highway 12" sewer main extension (Albro to Missimer)	$1,180,000	Developer/CERB
To Be Determined - Developer	Frontier Rd 8" sewer main extension (SR 22 to East City Limits)	$235,000	Developer/CERB
To Be Determined - Developer	OIE Highway 4" Sewer Force Main Extension (to Regional Park)	$350,000	City/Developer/CERB
To Be Determined - Developer	OIE Sewer System Utility Extension - West Gap rd to Albro (sewer)	$350,000	Developer/CERB
To Be Determined Developer	WCR 8" Sewer main extension (city limits to UGA)	$578,000	Developer/CERB
TOTAL		**$9,451,000**	

STORM DRAINAGE SYSTEM

A. Background

The City of Prosser does not operate a separate storm drainage utility; instead, the City's storm drain system is included in the street system. When street improvements are made, the associated drainage facilities are evaluated and the necessary replacements or modifications are incorporated into the street project.

A majority of the City's concrete curb and gutter storm drainage systems consist of catch basins draining to drywells, or infiltration trenches preceded by pretreatment manholes. However, some catch basins are part of the original storm drain system. Some streets within the City do not include curb and gutter features, thus stormwater runoff typically drains to swales or neighboring unpaved properties. At these types of locations adjacent to the Yakima River, stormwater runoff generally sheet flows to the river.

The City of Prosser's existing storm sewer system serves a portion of the residential, commercial, and industrial areas within the City. Within these portions served by storm sewers, stormwater enters the system through roof drains, catch basins, and surface drains and, depending on location within the City, is disposed of in one of the following two ways:

1. Stormwater enters catch basins/manholes and infiltrates into the ground; or

2. Stormwater enters catch basins, is transported through an underground piping system, and is ultimately combined with sanitary sewer and treated at the wastewater plant.

In those areas of the City not served by the storm sewer system, specifically where City streets do not have concrete curb and gutter or storm drain systems, storm water typically drains to neighboring unpaved properties. The existing storm drainage system is shown on Map E in the Appendix of this Plan.

Each catch basin within the City is cleaned annually, and storm drain lines known to receive large amounts of leaves or debris are rodded annually. In addition, catch basin lids are inventoried annually as to their condition and replaced if necessary.

The Water Quality Act of 1987 may have a long-range impact on stormwater disposal for the City of Prosser. Large municipalities (with populations greater than 100,000) and other designated cities in urbanized areas are required to obtain NPDES Storm Water Permits, and to develop and implement stormwater management programs. However, current stormwater regulations do not impose requirements on municipalities the size of the City of Prosser.

Per the *City of Prosser Design and Construction Standards and Specifications for Public Works Improvements*, storm runoff occurring on all new lots and developments (private property) shall be retained and disposed of on-site. No storm runoff from private property will be allowed to enter public property or the City's storm drainage system. All infiltration storm drain facilities shall have oil and silt separation and treatment. Infiltration facilities shall be designed in accordance with the *Stormwater Management Manual for Eastern Washington.*

B. Capital Improvement Program

Improvements to the storm drain system are typically constructed as part of a street improvement project, or on an as-needed basis. Since these drainage improvements are part of street improvement projects, total costs of the improvements are typically included in the transportation improvements costs.

Improvements to the storm drain system unrelated to street improvement projects have been identified by year (for years 2019 through 2035) and are included in **Error! Reference source not found.**. These improvements have been reviewed and adopted by the City of Prosser and are the recommended improvements under this *Capital Facilities Plan*. The recommended improvements are shown by year on Table 6 of this Plan. The storm drainage system and recommended improvements are also shown on Map E in the Appendix of this Plan.

C. Storm Drainage System Funding

Storm drainage facilities and improvements are typically constructed and funded as part of a street improvement project, and this method should be continued in Prosser. Improvements to the storm drain system unrelated to street improvement projects are currently funded through the street fund.

Other options for funding storm drainage projects include:

1. Formation of a Storm Drain Utility
2. Use of Local Public Powers
3. State Assisted Resources
4. Private Development

Availability of funding within these categories is limited. Each of these categories is briefly described below:

1. Storm Drain Utility

   A Storm Drain Utility could be formed by the City of Prosser. The utility would function as an enterprise fund, charging a monthly rate for commercial, industrial, and private individual users. Reserves in the utility fund would be accumulated from the excess revenues of the user fees. The amount of the reserves would depend on the balance of operation and maintenance costs of the system versus the total revenue generated by the fees. The reserves could be used to finance any storm drain project authorized by the City Council or applied as a match to a major funding source.

2. Use of Local Public Powers

   If a Storm Drain Utility were formed, it would have the power to issue revenue bonds, but the City would be faced with paying interest as well as the principal on those bonds. Other funding sources include use of the general sewer fund, general obligation bonds, and formation of local improvement districts to finance drainage improvements. However, general obligation bonds are typically reserved for general municipal needs, and it is difficult to generate support for local improvement districts when property that often creates runoff does not itself have a flooding problem.

3. State Assisted Resources

The Public Works Trust Fund (PWTF) can be used for replacement of storm drain facilities. This fund was created in 1985 to provide loans for replacement of public works facilities. Applications for construction funds may be submitted once each year (in May), and applications for pre-construction funds (for such items as engineering design, bid document preparation, right of way acquisition and environmental studies) may be submitted once each month. Projects are evaluated based on the following: Merits of the project as to need, degree of capital improvement planning, adequacy of existing rate structure, degree of local participation in financing project, and whether the area is economically distressed. PWTF loans have recently become less reliable due to legislative transfers from the PWTF into the general fund as a result of budget deficits.

As mentioned earlier, roadway projects which are financed in part by State or Federal funds contain provisions for improving the storm drain system. Other State and/or Federal funding programs associated with water quality improvement and enhancement may, in the future, make stormwater treatment systems eligible for financial assistance.

4. Private Development

Expansion of storm drain facilities to newly developing areas is a common requirement of private developers. Construction of storm drain facilities is typically part of the roadway improvement requirement for land development and is financed by the private developer.

Storm Water Service Table ST-1

Year	Project	Estimated Cost	Funding Source
2020	Downtown Storm Drainage System Evaluation	$26,000	City
2022	City-Wide Storm Drainage System Evaluation	$83,000	City
2022	Downtown Storm Drainage Improvements (Design)	$52,000	City
2024	Downtown Storm Drainage Improvements (Construction)	$416,000	City
2025	Establish Storm Drainage Utility	$11,000	City
TOTAL		**$588,000**	

PARKS AND RECREATION FACILITIES

A. Background

Parks, recreation, and open space areas consist of sites, facilities, and programs to serve the community. The City of Prosser owns and operates ten (10) City parks which are used for many types of outdoor recreational activities. Encompassing approximately 27 acres, Prosser's existing City parks and recreation facilities are described in Table P-1

Table P-1 – Existing Parks and Recreation Facilities

Park Name	Size (Acres)	Amenities
City Park	4.18	Picnic area, playground equipment, basketball courts, restrooms, museum building, civic festival facilities, concessions, outdoor theater, and open play
EJ Miller Park	6.03	Outdoor swimming pool, wading pool, bathhouse, basketball courts, playground equipment, storage sheds, three lighted tennis courts, covered picnic pavilion with sink and barbecue pit, restrooms, skateboard park, and open play
Crawford Park	4.88	Restrooms, boat ramp, picnic shelter, riverfront path, and soccer field
Empire Park	.49	
Farrand Park	5.68	Restrooms, picnic facilities, and open play
Market Street Park	3.44	Landscaped and open play field
Grant Street Park	0.84	Riverfront and dam views, and grassy areas
6th and Sherman	0.48	Open space, grassy areas, and picnic facilities (Water Department owned)
Flag Pole Park	0.23	Flag pole and lawn area
Rotary Park	0.17	Landscaping, gazebo, and picnic facilities
Depot Square	1.27	Landscaped, plaza amenities, and parking
Total	**27.69**	

B. Capital Improvement Program

The City's *2018 Consolidated Comprehensive Plan* identified improvements for a majority of the parks listed above, for years 2018-2038. Some of the improvements identified in the Plan have been implemented, but a majority of the improvements remain to be constructed, mainly due to lack of funding. These remaining improvements were evaluated in comparison to City-desired improvements and a new capital program was formulated. The capital improvement program includes upgrading existing parks and construction of a new Regional Recreational Park at the City's sprayfield property.

The Parks and Recreation Capital Improvement Program lists recommended improvements by year (for years 2019 through 2035), showing estimated costs. These improvements do not include typical maintenance costs. These improvements will be reviewed and adopted by the City of Prosser and are the recommended improvements under this *Capital Facilities Plan*

C. Park and Recreation Facilities Funding

The primary state funding source for parks and recreation facilities is administered by the State of Washington's Recreation and Conservation Office (RCO). RCO administers several grant programs for recreation and habitat conservation purposes. To be considered for funding assistance, RCO requires proposed projects to be operated and maintained in perpetuity for the purposes for which funding is sought. RCO grants are awarded based on a public, competitive process which weighs the merits of proposed projects against established program criteria.

A secondary state funding source for parks and recreation facilities that are beneficial to the fish and wildlife resources of Washington State is the Aquatic Lands Enhancement Account (ALEA) Volunteer Cooperative Grant Program, administered by Washington Department of Fish & Wildlife. The ALEA Grant Program provides monetary support, on a cost reimbursement basis, for qualifying organizations who utilize volunteers to undertake justified projects. ALEA grants are awarded in a similar fashion to RCO grants.

Another source of federal funding may be the federal Moving Ahead for Progress in the 21st Century including the Surface Transportation Program (STP) Program and Transportation Alternatives Program (TAP). State programs include Pedestrian and Bicycle Safety (PBS) and Safe Routes to School (SRTS). While projects receiving these funds must be directly related to surface transportation, potential funding may include building multi-modal trails, which provide and promote alternative methods of transportation (walking, biking) linking City facilities.

Funding sources for energy efficiency improvement projects may be available through Energy Service Companies (ESCO). ESCO companies may provide funding or rebates for where the energy savings can be estimated and/or measured over a specific time period.

Though state and federal funding sources are available, they are highly unreliable due to the competitive application processes. Due to this unreliability, the City generally uses local funds as means of financing parks and recreation improvement projects. Minor improvement projects, requiring fewer resources, typically utilize maintenance and operations (M&O) funds.

Prosser will continue to explore other sources of funding for parks and recreation projects.

Parks & Recreation Projects

Year	Project	Estimated Cost	Funding Source
2019	Community Garden	$10,000	City
2019	EJ Miller Pavilion Reroof	$20,000	
	2020 Total	**$30,000**	
2020	EJ Miller Park - Skate Park Fence	$20,000	City/RCO
2020	City Park - Replace Playground	$500,000	City/RCO
	2020 Total	**$520,000**	
2021	Crawford Park/Farrand Park - Boat Ramp and Dock	$750,000	City/RCO/USDA
2021	Crawford Park/Farrand Park - Combine Parks, Pathway, and Parking	$100,000	City/RCO
2021	Crawford Park/Farrand Park - New Restrooms	$400,000	City/RCO/USDA
2021	Multipurpose Event Grounds	$250,000	City
2025-2035	City Park - New Pavilion & Facility Upgrades	To Be Determined	City
2025-2035	Crawford & Farrand Park - Dog Park	To Be Determined	City
2025-2035	Hillside Trails	To Be Determined	City
2025-2035	Market St Park - New Restrooms	To Be Determined	City
2025-2035	Hillside Acquisition/Open space Preservation	$650,000	City/RCO/Private Grant
2025-2035	Single Community Facility Concept	$2,500,000	Grants/ Partners/Private
TBD	Community Center HVAC Replacement	To Be Determined	City/RCO/USDA
TBD	Aquatic Center Phase 2 - Lazy River	To Be Determined	City/RCO/GO Bond
TBD	Parking Lot Expansion/Improvements at PAC	To Be Determined	City/RCO
TBD	Farrand Park Dog Park	$20,000	City
TBD	Tennis Court Resurfacing	$150,000	City/RCO
TBD	6th Street Bridge Lighting	$300,000	EDA/Private Grant
TOTAL		**$5,690,000**	

MUNICIPAL BUILDINGS

A. Background

The policy of the City Council is to provide essential public services in a manner that is cost effective and based on need. Many general governmental services and associated buildings are provided through contractual agreements to take advantage of the efficiencies and economies of scale achieved. The municipal buildings included in this section are those in which the City has primary responsibility. The existing municipal buildings operated by the City of Prosser are described below.

City Hall/Annex – City Hall is located at 601 7th Street. This two-story building, constructed in the 1900s, is currently occupied by the City's Administrative Department, the Public Works Department, the Building Department, Recreation Department, and the Prosser Police Department. This building underwent a major remodel in 2000, although the remodel did not include the second floor or the area occupied by the Police Department.

Prosser City Library – The Mid-Columbia Libraries Prosser Branch is located at 902 7th Street. This single-story building, constructed in 1973, is occupied by the City's library. Library services are provided by the Mid-Columbia Library District (MCL) under a contract with the City.

Prosser Community Center (Senior Center) – The Prosser Community Center is located at 1231 Dudley Avenue. This single-story building, constructed in 1984, is occupied by the Prosser Senior Citizens Club. The building is also used for private functions (wedding receptions, etc.). The building contains a full galley, meeting hall, office spaces, reception room, and ADA-compliant restrooms.

Meade Avenue Building – The Meade Avenue Building is located at 1109 Meade Avenue. This single-story building, constructed in the 1950s, is occupied by Prosser School District. The building was remodeled in 2001 to accommodate the School Districts needs.

B. Capital Improvement Program

This plan lists recommended improvements by year (for years 2019 through 2035), showing estimated costs and proposed funding sources. These improvements do not include typical maintenance costs. These improvements have been reviewed and adopted by the City of Prosser and are the recommended improvements under this *Capital Facilities Plan*.

C. Municipal Buildings Funding

The use of local public powers consists of bonding techniques including general obligation bonds. General obligation bonds pledge the unlimited taxing power and the full faith and credit of the issuing government to meet the required principal and interest payments.

Prosser will continue to explore other sources of funding for municipal buildings improvement projects.

Year	Project	Estimated Cost	Funding Source
2019	Security Cameras Community Center	$12,000	City/USDA
2020	Police Station	$5,000,000	City
To Be Determined	Security Cameras Shop	$12,000	City
To Be Determined	Security Cameras PAC	$104,000	City/RCO
To Be Determined	Security Cameras Parks	To Be Determined	City/RCO
To Be Determined	Security Cameras Water	$19,000	City
To Be Determined	Security Cameras Sewer	$12,000	City
To Be Determined	Meeting Space at Gun Range	To Be Determined	City
To Be Determined	Community Center Campus	$1,500,000	RCO/Grants
Total		**$ 6, 659,000**	

RECOMMENDATIONS

A. General

The following recommendations are made regarding capital improvements to the City of Prosser public works facilities:

1. A Capital Facilities Plan (CFP) is a tool which the City can use to plan for and implement future capital improvement projects. The CFP should be reviewed annually and updated as necessary to account for changing conditions and community needs.

2. The CFP should be reviewed in conjunction with the preparation of the annual City budget, and service rates should be adjusted to account for the fiscal year's expenditures.

3. Where feasible, improvements from several of the public works systems in a given area should be combined into a single project. This will allow combining funding sources and will reduce the construction impact on the public.

4. Prosser's method of funding public works projects is to optimize funding by utilizing a combination of reserve funds, anticipated revenues, available loans and grants, and revenue bonds. The main advantage of using reserve funds (the "pay as you go" approach) is the community does not have to pay interest on borrowed money and, in turn, can earn interest on accumulated balances.

5. To further facilitate construction financing, especially on projects over $500,000, other recommended funding sources are revenue bonds repaid from system revenues, and state and federal grant and loan programs. The CFP and Comprehensive Plans should be reviewed on an annual basis to determine which funding applications should be submitted for upcoming improvements.

B. Summary of Capital Improvement Project Costs

Error! Reference source not found. lists the recommended capital improvement project totals by system for the next six-year period.

CFP Summary

CAPITAL IMPROVEMENT	COST
Streets	$22,598,086
Water	$9,279,240
Irrigation	$296,000
Sewer	$9,451,000
Storm Water	$588,000
Parks	$5,690,000
Facilities	$6,659,000
TOTAL	**$54,661,326**

REFERENCES

1. City of Prosser, *Design and Construction Standards and Specifications for Public Works Improvements,* City of Prosser, March 2018.

2. City of Prosser, Draft *General Sewer Plan,* Huibregtse, Louman Associates, Inc., July 2005.

3. City of Prosser, *Six Year Transportation Program for 2018 to 2023,* Washington State Department of Transportation, adopted July 2017.

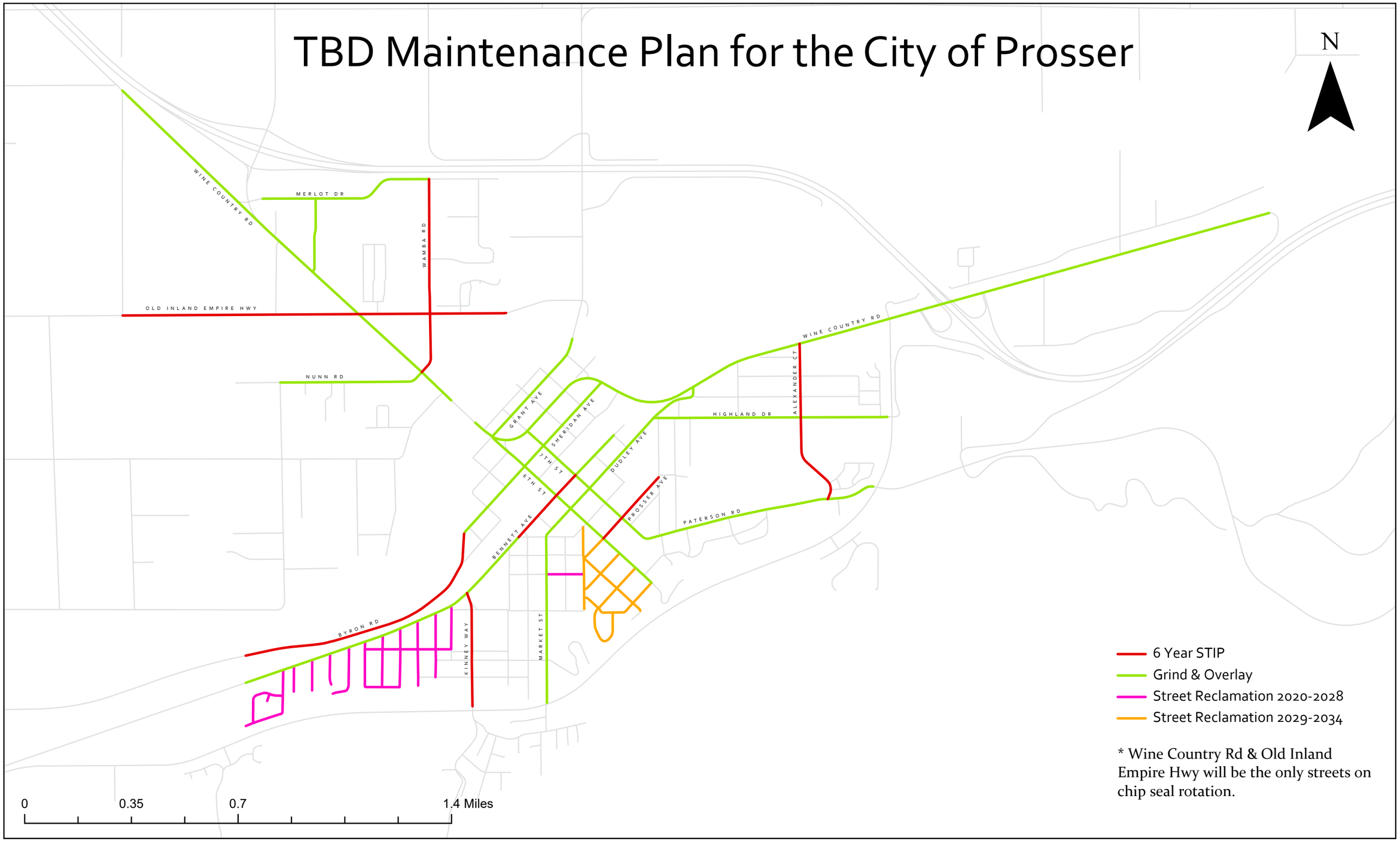
4. City of Prosser, *Consolidated Comprehensive Plan,* City of Prosser, April 2011.

5. City of Prosser, *Water System Plan,* HLA Engineering and Land Surveying, Inc., June 2016.

APPENDIX

MAP CS-1 – Chip Seal Road Improvements

TBD Maintenance Plan for the City of Prosser



Map Date: 7/19/2019 Created by nalsbury