



COMPREHENSIVE PLAN

2024-2044

Adopted _____

2024 Update

June 14, 2024

Town of South Prairie

South Prairie Town Council

Carolyn Norris, Mayor

Jeff Robbins

Shane Norris

Mark Kauzlarich

Catherine Harris

Ross Watkins

Town of South Prairie Town Staff

Terri Berry, Clerk-Treasurer

Meagan Olds, Deputy Town Clerk

Consulting Services

Sound Municipal Consultants, Town

Planners BHC Consultants, Town Engineers

Ogden/Murphy/Wallace, Town Attorney



Contents

Chapter 1 Introduction and Community Description.....	1-1
Introduction.....	1-1
Historic Settlement	1-1
Geographic Setting	1-2
South Prairie Today	1-2
Population Discrepancy.....	1-2
Why Plan?.....	1-3
Planning Requirements.....	1-3
Washington State Growth Management Act.....	1-3
Goals and Policies	1-6
VISION 2050.....	1-7
Multicounty Planning Policies.....	1-8
Pierce County Countywide Planning Policies.....	1-9
Pierce County Buildable Lands	1-10
Compatibility	1-11
Structure of Comprehensive Plan.....	1-11
South Prairie Plan History	1-11
Citizen Participation	1-12
Community Character – Town Vision	1-12
Chapter 2 Introduction.....	2-1
Organization of the Land Use Element.....	2-1
Planning Requirements.....	2-1
Washington State Growth Management Act.....	2-1
VISION 2050 Multicounty Planning Policies (MPPs)	2-3
Population, Housing Unit and Employment Targets for 2044	2-4
Buildable Lands – Background Requirements of RCW 36.70A.215.....	2-4
Buildable Lands Countywide Planning Policy Summary.....	2-4
Targets for 2044.....	2-5
Pierce County Planning Policies (CPPs).....	2-7
Land Use Designations.....	2-9

Residential (R)	2-10
Commercial (C)	2-10
Agricultural (AG)	2-11
Industrial (I)	2-11
Planned Unit Developments (PUD)	2-12
Parks, Trails, and Open Space	2-12
Population and Land Use	2-12
Population and Age Distribution	2-12
Current Land Use	2-13
Urban Growth Area	2-13
Urban Service Area	2-13
Future Land Use	2-13
.....	2-14
Planned Land Use in Adjacent Jurisdictions.....	2-14
Major Characteristics of Adjacent Land Use Designations.....	2-15
Goals and Policies	2-15
Goal 1: Community Character.....	2-16
Goal 2: Residential Uses.....	2-18
Goal 3: Commercial Uses.....	2-19
Goal 4: Essential Public Facilities and Other Public Facilities.....	2-20
Goal 5: Environmental Quality.....	2-22
Goal 6: Water Resources	2-23
Goal 7: Development Regulations and Permit Processing	2-24
Goal 8: Interjurisdictional Planning	2-25
Goal 9: US Census the South Prairie RV Park.....	2-25
Chapter 3 Critical Areas Element.....	3-1
Introduction.....	3-1
Relationship to Regulations.....	3-1
Critical Areas	3-1
Goals, Policies and Objectives	3-1
Wetlands	3-5
Critical Aquifer Recharge Areas	3-8

Frequently Flooded Areas	3-9
Geologically Hazardous Areas	3-12
Seismic Hazard Areas.....	3-14
Erosion Hazard Areas.....	3-15
Landslide Hazard Areas.....	3-15
Fish and Wildlife Habitat Conservation.....	3-17
Chapter 4 Housing Element	4-1
Organization of the Housing Element.....	4-1
Planning Requirements.....	4-1
Washington State Growth Management Act.....	4-1
VISION 2050 Multicounty Planning Policies (MPPs)	4-2
Pierce County Planning Policies (CPPs).....	4-3
Housing Inventory	4-5
Residential Land Capacity.....	4-5
Population Discrepancy.....	4-7
Number and Type of Existing Dwellings.....	4-8
Future Housing Types and Intensities.....	4-8
Condition of Housing Stock	4-8
Household Characteristics.....	4-9
Housing Size and Type.....	4-9
Owners, Renters and Vacancies	4-9
Affordability	4-10
Housing Costs	4-10
Cost of Rental Units.....	4-11
Housing All Segments of Society.....	4-11
Maintenance Costs.....	4-12
Households in Need.....	4-12
Affordability and Community Character	4-13
Analysis	4-13
Goals and Policies	4-14
Goal 1: Encourage the Availability of Housing Affordable to All Economic Segments of the Population.....	4-14

Goal 2: Encourage Long Term Residency	4-16
Goal 3: Accommodate Households of Many Types	4-17
Goal 4: Maintain or Improve Neighborhood Desirability.....	4-17
Goal 5: Promote Resource-Conserving Neighborhoods.....	4-18
Goal 6: US Census the South Prairie RV Park.....	4-19
Chapter 5 Parks, Recreation and Open Space Element	5-1
Introduction.....	5-1
Organization of the Parks, Recreation, and Open Space Element.....	5-1
Parks, Recreation, and Open Space Planning Requirements.....	5-2
Requirements of Growth Management Act	5-2
VISION 2050 Multicounty Planning Policies (MPPs)	5-2
Pierce County Countywide Planning Policy	5-2
Existing Parks, Recreation and Open Space Facilities	5-3
Town Owned Facilities.....	5-3
Regional Parks, Trails and Open Space	5-8
Classification System	5-12
Regional Parks	5-12
Community Parks	5-12
Neighborhood Parks	5-13
Pocket Parks.....	5-13
Special Facilities	5-13
Trails	5-13
School Sites.....	5-13
Open Space Sites	5-13
Level of Service (LOS) Standards	5-13
Recommended LOS Standard	5-14
Assessment of Needs.....	5-14
Regional Park.....	5-15
Community Park.....	5-15
Neighborhood Park.....	5-15
Pocket Parks.....	5-15
Special Facilities and Amenities.....	5-15

Trails	5-15
School Site	5-15
Open Space Sites	5-16
Capital Facilities Plan	5-16
Parks Project Descriptions	5-16
Recommended Financing	5-17
Goals and Policies	5-17
Goal 1: Parks, Recreation and Open Space	5-17
Chapter 6 Utilities Element	6-1
Overview.....	6-1
Introduction.....	6-1
Utilities Planning Requirements.....	6-1
Requirements of Growth Management Act	6-1
Revised Codes of Washington and the Utilities and Transportation Commission.....	6-2
Federal Energy Regulatory Commission	6-2
Natural Gas Policy Act of 1978.....	6-2
Northwest Power Planning Council	6-2
1991 Clean Air Amendments	6-3
Related Planning Documents	6-3
Pierce County Coordinated Water System Plan & Regional Supplement, 2021 Update	6-3
2015 Comprehensive Plan Update	6-3
Wastewater System Planning	6-4
Water System Planning	6-4
Water System Planning – Town of South Prairie	6-4
Introduction.....	6-4
Source and Supply	6-5
Treatment.....	6-7
Storage	6-7
Transmission and Distribution System.....	6-9
Operations and Maintenance	6-10
Capital Improvement Plan	6-11
Recommended Financing Plan.....	6-12

Wastewater Collection and Treatment – Town of South Prairie	6-15
Introduction.....	6-15
Collection System.....	6-17
Treatment System	6-18
Reclaimed Water	6-19
Conveyance System.....	6-20
Outfall and Effluent Discharge.....	6-21
Operational and Maintenance Considerations.....	6-22
6-Year Capital Improvement Plan – Short Term	6-22
20-Year Capital Improvement Plan – Long Term	6-28
Additional Projects	6-32
Recommended Financing Plan.....	6-33
Funding Priorities	6-39
Capital Improvement Funding.....	6-39
Stormwater Collection and Treatment – Town of South Prairie	6-41
Utilities Provided by Others	6-41
Natural Gas System	6-41
Other Utilities	6-43
Electrical Utilities	6-43
Telecommunications Utilities.....	6-45
Solid Waste Collection	6-45
Chapter 7 Transportation Element	7-1
Introduction.....	7-1
Organization of the Transportation Element.....	7-1
Transportation Planning Challenge.....	7-1
Transportation Planning Requirements.....	7-2
Requirements of Growth Management Act	7-2
VISION 2050 Multicounty Planning Policies (MPPs)	7-2
Pierce County Countywide Planning Policy	7-3
Land Use Assumptions.....	7-5
Inventory of Facilities and Services	7-5
Streets.....	7-5

Bus Service	7-8
Shuttle Service	7-8
Rail Service	7-8
Air Service	7-8
Current and Projected Demand	7-9
Level of Service – Streets and Highways.....	7-9
Access Control.....	7-9
Multimodal Transportation Adequacy	7-10
Current Residential Trip Generation	7-10
Projected Residential Trip Generation	7-10
Existing and Projected Arterial Traffic Levels.....	7-10
Current and Projected Nonmotorized Facility Demand.....	7-10
Pedestrian and Bicyclist Facilities	7-11
Transit Service	7-11
Transportation Demand Management.....	7-11
Funding Capability and Resources.....	7-12
Capital Improvement Plan.....	7-12
Goals and Policies	7-12
Goal 1: Consistency with Regional Growth Strategy	7-13
Goal 2: Provision of Transportation Facilities	7-16
Goal 3: Parking and Load/Unload Areas	7-17
Goal 4: Air Quality	7-17
Goal 5: Citizen Participation	7-18
Chapter 8 Capital Facilities Element.....	8-1
Overview.....	8-1
Introduction.....	8-1
Relationship to Other Elements and Facility Plans.....	8-2
Utilities and Transportation Elements	8-2
Parks, Recreation and Open Space.....	8-2
Organization of the Capital Facilities Element	8-2
Planning Requirements.....	8-2
Washington State Growth Management Act.....	8-2

VISION 2050 Multicounty Planning Policies (MPPs)	8-3
Pierce County Planning Policies.....	8-4
South Prairie-Owned Capital Facilities.....	8-10
Introduction.....	8-10
South Prairie Owned Land and Buildings – Excluding Utilities	8-10
Capital Facilities Goals and Policies	8-11
Goal 1: Service Standards.....	8-12
Goal 2: Environmental Impacts.....	8-12
Goal 3: Facility and Service Providers.....	8-13
Goal 4: Costs and Financing.....	8-13
Goal 5: UGA and Annexations.....	8-14
Goal 6: Inter-jurisdictional Coordination	8-14
Goal 7: Consistency with Other Comprehensive Plan Elements.....	8-15
Goal 8: Concurrency.....	8-15
Goal 9: Power and Heating.....	8-16
Goal 10: Communication.....	8-17
Level of Service Standards.....	8-17
Current and Possible Funding Sources.....	8-18
Possible Funding Sources	8-20
Debt Financing.....	8-20
Local Municipal Levies	8-20
Local Single Purpose Levies	8-21
Local Non-Levy Financing Mechanisms	8-21
State Grants and Loans	8-23
Federal Grants and Loans	8-24
Utility Rates	8-25
Capital Facilities Financing Strategy	8-25
Expanded Revenue Base	8-26
Adjust Utility Rate Structure	8-26
New Revenue Sources.....	8-26
Six-Year Capital Improvement Program	8-27
Chapter 9 Economic Development Element.....	9-1

Purpose.....	9-1
South Prairie Community Profile.....	9-1
South Prairie’s History	9-1
South Prairie Today	9-1
South Prairie’s Setting	9-2
Current Economic Profile.....	9-3
South Prairie’s Assets and Opportunities.....	9-3
Planning Regulations.....	9-5
GMA Economic Development Goal.....	9-5
Puget Sound Regional Council Vision 2050 Multicounty Planning Policies.....	9-5
Pierce County Planning Policies.....	9-6
South Prairie’s Economic Development Goals and Policies.....	9-9

Appendices

- Chapter 1 Appendix A South Prairie Public Participation Plan
- Chapter 1 Appendix B South Prairie Public Participation Survey
- Chapter 1 Appendix C South Prairie Public Participation Survey Results
- Chapter 4 Appendix A Resolution 151 RV Park Land Use Agreement (1994)
- Chapter 6 Appendix A South Prairie 2023 GSP and Engineering Report (November 2023)
- Chapter 6 Appendix B 2018 Water System Plan
- Chapter 7 Appendix A Resolution 2024-01 Adopting 2024-2029 Six Year TIP

Chapter 1 Introduction and Community Description

Introduction

The Town of South Prairie is located in east-central Pierce County southwest of the City of Buckley, southeast of the City of Bonney Lake and northwest of the City of Orting. The small town has a rich history strongly influenced by agricultural activity but in more recent years has been home to a smaller population of residents who value the natural beauty of its setting, its affordability, and small-town atmosphere.

Historic Settlement

The prairie that would become known as South Prairie, Washington was first inhabited by Native Americans. A tribal village, Do'tiuq, was located on the shores of the South Prairie Creek. In 1855 Paul Emery settled on his Donation Land Claim in the valley along a river he called Salmon River (later renamed South Prairie Creek) in an area he named South Prairie. Soon after he settled in the valley the Indian War of 1855-1856 forced him to seek protection in Fort Nisqually. A bloody battle was fought in the Do'tiuq/South Prairie area during the war. The Army built Fort McAllister, named after Lt. McAllister, who was killed during the battle along the banks of South Prairie Creek.

Paul Emery abandoned his claim in 1861. In 1859 John Flett, a Canadian farmer, moved from Forest Grove, Oregon to establish a cattle ranch in South Prairie. He found a lush prairie well suited for grazing cattle, surrounded by fir-tree covered hills. Along with John and Ellen Flett and their seven children, his son-in-law and family, John and Elizabeth (Flett) Gale, and their daughter took up residence in South Prairie. John Joseph Flett born to John and Ellen Flett in 1862 was the first non-native child born in South Prairie.

The farming community remained small until the discovery of coal by two Flett brothers and a member of the Gale family in 1874. This discovery led to the extension of the railroad through South Prairie to Wilkeson and Carbonado. A tributary of Wilkeson Creek is still known as Gale Creek. The railroad expanded the economic vitality of the community by providing transportation for people, goods and services to the urban centers of Tacoma and to the thriving communities of Wilkeson and Carbonado. Much of the coal was used for the railroad and to drive pig iron mills in Tacoma.

Though originally named South Prairie by the first non-native settlers, the area was known as Melrose until 1889. A post office was established, and the community was renamed South Prairie. The area prospered, reaching a population of 500 in 1889. The Town of South Prairie stabilized at a population of approximately 325 around 1900. The Town contained two churches, a waterworks system, a hotel and several stores. The Town of South Prairie was incorporated as a 4th Class Town in Washington in 1909.

In the 1920s the demand for coal began to decline, along with the population of Wilkeson and the other coal producing areas surrounding that community. The economic decline was felt in South Prairie. The extension of State Highway 162 and the better transportation available after the turn of the century brought better access to the residents and further decline of South Prairie.

Geographic Setting

South Prairie is located in east-central Pierce County, west of the City of Buckley and southeast of the City of Bonney Lake. Two other small Towns, Wilkeson and Carbonado lie south of South Prairie. South Prairie Creek is an abundant fish-bearing stream and runs through the Town; adding to the charm and scenery of the community. The southern part of South Prairie is hilly, an ideal location for a residential home site with a view of the valley, and the high point for a municipal water tank. Farming on the outskirts of South Prairie has been more or less abandoned with only smaller scale farms remaining. The green fields becoming permanent open space as they are purchased by non-profit land conservation organizations and kept as greenbelts. The Foothills Trail (a major pedestrian and bicycle trail) runs through the Town connecting the more urban areas of Tacoma and Puyallup with the scenic Mount Rainier. State Highway 162 also runs through the Town in an east-west direction, connecting the City of Buckley to the east and the City of Orting to the west.

South Prairie Today

Only a few of the early commercial and other non-residential structures remain. Those still standing include the South Prairie Hotel (founded 1900, the earliest remaining building was constructed 1928). South Prairie was a “company town” and many of the homes were constructed for miners and their families during the period 1890-1930. Today, South Prairie is a small residential community. The majority of the people in the workforce commute to jobs in Tacoma, the Port of Tacoma area, Puyallup or up the Auburn-Kent Valley. Population growth in South Prairie has been slow and decreasing due to shortage of wastewater treatment capacity at the wastewater treatment plant.

The scale and character of the homes and the streets on which they are located retain much of the flavor of the earlier mining era. South Prairie is now a stable bedroom community for the greater Tacoma-Pierce County area and retains its historic small-town character.

Population Discrepancy

The U.S. Census reports that population of South Prairie in 2000 was 452 persons. This number decreased in 2010 to 434 residents. The Census showed a decline again in 2020 to only 373 residents. A major omission of the US Census is the South Prairie RV Park. The RV Park currently contains 180 units but is approved for up to 250 units. The Census fails to recognize the majority of the residents of the RV Park are not transient. This park is the permanent, full-time home to 128 RV trailers with varying household sizes¹. The Town has been providing water to the park since the original 1989 Development Agreement. An amended Development Agreement was enacted in 1994. Specifically, under the Development Agreement, Sections 16(c)(1) and 16(f), RVs in the park are defined as single-family residences and connected to the Town water system. Section 16(p) establishes that there is no length of stay requirement for the 93 spaces then existing in 1994 plus no length of stay requirement for anyone 55 years and older.

The Washington State Office of Financial Management has recently updated its population figures to reflect the presence of the RV Park Residents. Whereas the 2020 US Census estimated 373 residents, the OFM figures for 2023 is 645 residents. The US Census is undercounting South

¹ As per the South Prairie RV Park Development Agreement 1989, Amended 1994 via South Prairie Resolution 151.

Prairie's population by 42%! These residents of South Prairie are not accounted for in the federal system whatsoever.

Unfortunately, this large group of residents are also economically challenged. Without official acknowledgement of their existence, South Prairie is unable to receive low-income loans or grant assistance to provide services to this population. Since 2023, the Town of South Prairie has been working with the Rural Community Assistance Corporation, a 501(c)(3) nonprofit organization that operates in 13 western states and Pacific islands. They serve Indigenous and rural communities through training, technical and financial assistance and advocacy. RCAC has been surveying the RV Park residents to determine their household characteristics and income profile. The Town hopes to use this information to convince the US Census Bureau to acknowledge the missing half of our community.

Why Plan?

One of the central purposes of the South Prairie Comprehensive Plan is retaining the town's character and providing new opportunities for current and future residents of South Prairie, including those invisible to the federal system. This Plan for the Town of South Prairie and its Urban Growth Area (UGA) is provided to meet the requirements of the Washington State Growth Management Act (GMA). The GMA was adopted by the Washington State legislature in 1990. The GMA provided that cities and counties within certain growth areas must plan for anticipated growth. The GMA requires an inventory of the community, its facilities and needed services. The requirements of other state laws and regulatory requirements, including the Highway Act of 1991, requiring transportation management programs, the State Environmental Policy Act (SEPA), requiring environmental review of plans and permit actions, and various other statutes relating to urban growth and development are addressed by this Plan and its associated development regulations.

Planning Requirements

Washington State Growth Management Act

The WA GMA requires the town to:

Designate critical areas, agricultural lands, forestlands, and mineral resource lands, and adopt development regulations conserving these designated agricultural lands, forestlands, and mineral resource lands and protecting these designated critical areas, under RCW 36.70A.170 and 36.70A.060. (RCW 36.70A.040(3)(b))

The GMA has specific requirements for Comprehensive Plans, some of which are new for this Comprehensive Plan Update Cycle. In essence, the Comprehensive Plan must:

Consist of a map or maps, and descriptive text covering objectives, principles, and standards used to develop the comprehensive plan. The plan shall be an internally consistent document and all elements shall be consistent with the future land use map. A comprehensive plan shall be adopted and amended with public participation as provided in RCW 36.70A.140. (RCW 36.70A.070)

The Comprehensive Plan must include several elements (chapters) to comply with the GMA. These include Land Use, Housing, Capital Facilities, Utilities, Transportation, Economic Development, and Parks and Recreation. (RCW 36.70A.070). The Comprehensive Plan must also

review critical areas and natural resource lands with respect to preservation and with respect to meeting the required development requirements of the Pierce County Buildable Lands Report (RCW 36.70A.130(1)(c-d)). Of these the Land Use Element is the most extensive.

The **Land Use Element** must consider natural resources, environmentally sensitive areas, housing, economic development, parks and open spaces, capital facilities, public health, and reducing the risks of wildfire. From the GMA (RCW 36.70A.070(1)):

a Land Use Element designating the proposed general distribution and general location and extent of the uses of land, where appropriate, for agriculture, timber production, housing, commerce, industry, recreation, open spaces and green spaces, urban and community forests within the urban growth area, general aviation airports, public utilities, public facilities, and other land uses. The land use element shall include population densities, building intensities, and estimates of future population growth. The land use element shall provide for protection of the quality and quantity of groundwater used for public water supplies. The land use element must give special consideration to achieving environmental justice in its goals and policies, including efforts to avoid creating or worsening environmental health disparities.

Wherever possible, the land use element should consider utilizing urban planning approaches that promote physical activity and reduce per capita vehicle miles traveled within the jurisdiction, but without increasing greenhouse gas emissions elsewhere in the state.

Where applicable, the land use element shall review drainage, flooding, and stormwater runoff in the area and nearby jurisdictions and provide guidance for corrective actions to mitigate or cleanse those discharges that pollute waters of the state, including Puget Sound or waters entering Puget Sound.

The land use element must reduce and mitigate the risk to lives and property posed by wildfires by using land use planning tools, which may include, but are not limited to, adoption of portions or all of the wildland urban interface code developed by the international code council or developing building and maintenance standards consistent with the firewise USA program or similar program designed to reduce wildfire risk, reducing wildfire risks to residential development in high risk areas and the wildland urban interface area, separating human development from wildfire prone landscapes, and protecting existing residential development and infrastructure through community wildfire preparedness and fire adaptation measures.

The **Housing Element** also requires extensive planning and must ensure the vitality and character of established residential neighborhoods by including an inventory and analysis of existing and projected housing needs and identifies the number of housing units necessary to manage projected growth, provides for housing at all income levels including extremely low income, very low income, low income and moderate-income households and provide for a variety of housing types and densities. The plan must consider accessory dwelling units, manufactured and multifamily housing and provide adequate land for each type of housing. The plan must also consider emergency housing, emergency shelters, and permanent supportive housing. Finally, the plan must identify and begin to rectify any disparity in housing based on discrimination due to race. (RCW 36.70A.070(2))

The **Capital Facilities Element** must provide an inventory of existing capital facilities owned by public entities, including green infrastructure, showing the locations and capacities of the capital facilities; provide for a forecast of the future needs for such capital facilities; provide the proposed locations and capacities of expanded or new capital facilities; create 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 requires the reassessment of 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. The Town is required to endeavor in good faith to work with other public entities, such as special purpose districts. (RCW 36.70A.070(3))

The **Utilities Element** must demonstrate the general location, proposed location, and capacity of all existing and proposed utilities including, but not limited to, electrical, telecommunications, and natural gas systems. The Town must identify all public entities that own utility systems and endeavor in good faith to work with other public entities, such as special purpose districts. (RCW 36.70A.070(4))

The **Transportation Element** must be consistent with and implement the Land Use Element. The Transportation Element must demonstrate the land use assumptions used in estimating travel and provide for estimated multimodal level of service impacts to state-owned transportation facilities resulting from land use assumptions to assist in monitoring the performance of state facilities, to plan improvements for the facilities, and to assess the impact of land-use decisions on state-owned transportation facilities.

The Transportation Element must also provide for facilities and service needs including an inventory of air, water, and ground transportation facilities and services, including transit alignments, active transportation facilities, and general aviation airport facilities, to define existing capital facilities and travel levels to inform future planning. This inventory must include state-owned transportation facilities within the Town's jurisdictional boundaries. There are no air or water transportation facilities and services in South Prairie. There is County transit service and one arterial in South Prairie but are state and county owned. Town owned transportation infrastructure is exclusively low speed, low traffic, and residential in character.

The Transportation Element must demonstrate environmental justice and encourage enhanced community access and promote healthy lifestyles by analyzing the availability of non-motorized facilities for all demographic groups within the town boundaries. Given the relatively homogenous racial distribution in South Prairie, the primary focus here is ensuring safe non-motorized transportation options for all age and physical ability groups. This includes safe routes to school, curb cuts and working with transit providers to provide shuttles or other transit services.

The Transportation Element must provide for adopted Levels of Service and a funding plan for improvements to the transportation system to meet various goals. The Town's six-year transportation improvement plan must be consistent with the Pierce County and WSDOT plans. (RCW 36.70A.070(6))

The Capital Facilities, Utilities and Transportation Elements must identify budgets to conform to the overall Comprehensive Plan (RCW 36.70A.120).

The **Economic Development Element** must establish local goals, policies, objectives, and provisions for economic growth and vitality and a high quality of life. (RCW 36.70A.070(7))

Finally, the Comprehensive Plan must contain a **Parks and Recreation Element** that implements, and is consistent with, the capital facilities plan element as it relates to park and recreation facilities. The element shall include estimates of park and recreation demand for at least a ten-year period; an evaluation of facilities and service needs; an evaluation of tree canopy coverage within the urban growth area; and an evaluation of intergovernmental coordination opportunities to provide regional approaches for meeting park and recreational demand. (RCW 36.70A.070(8))

Comprehensive Plans for municipalities within Pierce County must be updated in full every 10 years (RCW 36.70A.130(5)(a)). The next update of this Comprehensive Plan is due before June 20, 2034.

Goals and Policies

The following goals are adopted to guide the development and adoption of the South Prairie Comprehensive Plan. The following goals are not listed in order of priority and shall be used exclusively for the purpose of guiding the development of comprehensive plans and development regulations:

- 1) **Urban growth.** Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.
- 2) **Reduce sprawl.** Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.
- 3) **Transportation.** Encourage efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans.
- 4) **Housing.** Encourage the availability of affordable housing to all economic and racial segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.
- 5) **Economic development.** Encourage economic development throughout the state that is consistent with adopted comprehensive plans, promote economic opportunity for all citizens of this state, especially for unemployed and for disadvantaged persons, promote the retention and expansion of existing businesses and recruitment of new businesses, recognize regional differences impacting economic development opportunities, and encourage growth in areas experiencing insufficient economic growth, all within the capacities of the state's natural resources, public services, and public facilities.
- 6) **Property rights.** Private property shall not be taken for public use without just compensation having been made. The property rights of landowners shall be protected from arbitrary and discriminatory actions.
- 7) **Permits.** Applications for both state and local government permits should be processed in a timely and fair manner to ensure predictability.
- 8) **Natural resource industries.** Maintain and enhance natural resource-based industries, including productive timber, agricultural, and fisheries industries. Encourage the conservation of productive forest lands and productive agricultural lands, and discourage incompatible uses.

- 9) **Open space and recreation.** Retain open space, enhance recreational opportunities, conserve fish and wildlife habitat, increase access to natural resource lands and water, and develop parks and recreation facilities.
- 10) **Environment.** Protect the environment and enhance the state's high quality of life, including air and water quality, and the availability of water.
- 11) **Citizen participation and coordination.** Encourage the involvement of citizens in the planning process and ensure coordination between communities and jurisdictions to reconcile conflicts.
- 12) **Public facilities and services.** Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards.
- 13) **Historic preservation.** Identify and encourage the preservation of lands, sites, and structures that have historical or archaeological significance.

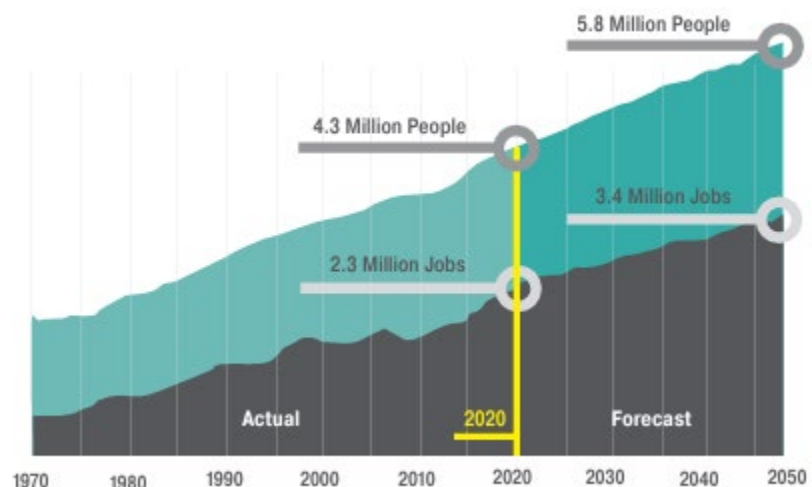
VISION 2050

The multicounty planning organization in central Puget Sound is the Puget Sound Regional Council (PSRC). PSRC's members include King, Kitsap, Pierce and Snohomish Counties, local cities and towns, ports, state and local transportation agencies, and Tribal governments within the central Puget Sound region.

PSRC promulgates a regional planning policy for Pierce, Kitsap, King and Snohomish Counties. The current regional growth plan is known as VISION 2050. The goal of VISION 2050 is to provide an

exceptional quality of life, opportunity for all, connected communities, a spectacular natural environment, and an innovative, thriving economy. The intent of VISION 2050 is to provide opportunities for all, increase housing choices and affordability, sustain a strong economy, significantly reduce greenhouse gas emissions, keep the region moving, restore the health of Puget Sound, protect a network of open spaces, grow in centers near trinity and act collaboratively and support local efforts.

By 2050, the region's population will reach 5.8 million people – equivalent to another two Seattles. The region is also expected to add an additional 3.4 million jobs by 2050. The region's cities, counties, Tribes, ports, agencies, businesses, and communities have



Source: PSRC

worked together to develop VISION 2050 to prepare for this growth and serve as a guide for sustaining a healthy environment, thriving communities and a strong economy. VISION 2050 is a plan for the long-term that can be adjusted as the region changes.

VISION 2050 is the long-range growth management, environmental, economic, and transportation strategy for the central Puget Sound region adopted on October 29, 2020 by the Puget Sound Regional Council (PSRC) General Assembly. VISION 2050 promotes an environmentally friendly growth pattern centered on environmental justice and equity that will contain the expansion of urban growth areas, conserve farm and forest lands, support compact communities where people may both live and work, and envisions that a significant share of new employment and housing will occur in vibrant urban centers. The region's vision for 2050 is to provide exceptional quality of life, opportunity for all, connected communities, a spectacular natural environment, and an innovative, thriving economy.

VISION 2050 focuses growth in the urbanized areas of the region, setting a goal of attracting 65% of the region's population growth and 75% of the region's job growth into regional centers and near high-capacity transit.

Multicounty Planning Policies

VISION 2050 includes a set of multicounty planning policies that provide an integrated framework for addressing land use, economic development, transportation, public facilities, and environmental issues. These multicounty planning policies establish a common region-wide framework that ensures consistency among county and city comprehensive plans adopted pursuant to RCW 36.70A.070, and countywide planning policies adopted pursuant to RCW 36.70A.210. They also provide a framework for regional plans developed within the central Puget Sound region, including regional transportation plans established under RCW 47.80.023, as well as plans of cities, counties, and others that have common borders or related regional issues as required under RCW 36.70A.100.

VISION 2050 promotes policies related to Regional Collaboration (MPP-RC-1 to 14), the Regional Growth Strategy (MPP-RGS-1 to 16), the Environment (MPP-En-1 to 22), Climate Change (MPP-CC-1 to 12), Development Patterns (MPP-DP-1 to 54) including building urban communities (MPP-DP-1 to 14), promoting healthy communities (MPP-DP-15 to 20), supporting connections to opportunities in centers (MPP-DP-21 to 26), annexation and incorporation (MPP-DP-27 to 30), rural areas and natural resource lands (MPP-DP-3 to 45) collaborating to preserve and enhance important uses (MPP-DP-46 to 51) and supporting growth through concurrency (MPP-DP-52 to 54); Housing (MPP-H-1 to 12), the Economy (MPP-EC-1 to 23), Transportation (MPP-T-1 to 34) including the Regional Transportation Plan (MPP-T-1 to 22), supporting the economy (MPP-T-23 to 28), protecting the environment (MPP-T-29 to 32) and innovation (MPP-T-33 to 34), and Public Services (MPP-PS-1 to 30). These 117 multi-county planning policies serve several goals including:

- **Regional Collaboration:** The region plans collaboratively for a healthy environment, thriving communities, and opportunities for all.
- **Regional Growth Strategy:** The regional accommodates growth in urban areas, focused in designated centers and near transit stations, to create healthy, equitable, vibrant communities well-served by infrastructure and services. Rural and resource lands continue

to be vital parts of the regional that retain important cultural, economic and rural lifestyle opportunities over the long term.

- **Environment:** The region cares for the natural environment by protecting and restoring natural systems, conserving habitat, improving water quality, and reducing air pollutants. The health of all residents and the economy is connected to the health of the environment. Planning at all levels considers the impact of land use, development, and transportation on the ecosystem.
- **Climate Change:** The region substantially reduces emissions of greenhouse gasses that contribute to climate change in accordance with the goals of the Puget Sound Clean Air Agency (50% below 1990 levels by 2030 and 80% below 1990 levels by 2050) and prepares for climate change impacts.
- **Development Patterns:** The region creates healthy, walkable, compact and equitable transit-oriented communities that maintain unique character and local culture, while conserving rural areas and creating and preserving open space and natural areas.
- **Housing:** The region preserves, improves, and expands its housing stock to provide a range of affordable, accessible, healthy, and safe housing choices to every resident. The region continues to promote fair and equal access to housing for all people.
- **Economy:** The region has a prospering and sustainable regional economy by supporting businesses and job creation, investing in all people and their health, sustaining environmental quality, and creating great central places, diverse communities, and high quality of life.
- **Transportation:** The region has a sustainable, equitable, affordable, safe and efficient multimodal transportation system, with specific emphasis on an integrated regional transit network that supports the Regional Growth Strategy and promotes vitality of the economy, environment and health.
- **Public Services:** The region supports development with adequate public facilities and services in a timely, coordinated, efficient, and cost-effective manner that supports local and regional growth planning objectives.

Pierce County Countywide Planning Policies

In 1991, the State legislature amended the GMA to require that the legislative body of the County adopt countywide planning policies, in cooperation with the municipalities in the County. Countywide planning policies are statements establishing a regional framework from which county and municipal comprehensive plans are developed and adopted. The framework is intended to ensure that municipal and county comprehensive plans are consistent.

The policies and implementing strategies were developed from a growing awareness that local land use decisions often influence and impact areas outside the jurisdiction. Coordination and consistency among all levels of government are two of the most important planning tenets of the GMA embodied within the Countywide Planning Policies.

On June 30, 1992 the Countywide Planning Policies for Pierce County, Washington were adopted by the Pierce County Council, following ratification by the cities and towns and a recommendation for adoption by the Pierce County Steering Committee (the predecessor to the Pierce County

Regional Council). The policies address issues that affect the County as a whole including affordable housing; agricultural lands; economic development and employment, education; fiscal impact; historic, archaeological, and cultural preservation; natural resources, open space and protection of environmentally sensitive lands; siting of public capital facilities of a countywide or state-wide nature; transportation; and urban growth areas. Amendments to the policies have been subsequently ratified and adopted, most recently on November 14, 2022. The policies, as amended, have been utilized as a guide for consistency in developing this Comprehensive Plan.

In coordination with VISION 2050, the Pierce County Countywide Planning Policies focus on Affordable Housing (CPP-AH-1 to CPP-AH-8), Agricultural Conservation and Lands (CPP-AG-1 to CPP-AG-8), Amendments and Transitions (CPP-AT 1 and 2), Buildable Lands (CPP-BL-1 to CPP-BL-10), Centers (CPP-C-1 to CPP-C-45), Community and Urban Design (CPP-CU-1 to CPP-CU-4), Economic Development and Employment (Urban) (CPP-EC-1 to CPP-EC-5), Education (CPP-ED-1 to CPP-ED-5), Environment (CPP-ENV-1 to CPP-ENV-46), Essential Public Facilities (CPP-EPF-1 to CPP-EPF-7), Fiscal Impact (CPP-FI-1 and 2), Growth Targets (CPP-GT-1 to CPP-GT-6), Health, Healthy Communities, and Healthy Community Planning (CPP-H-1 to CPP-H-6), Historic, Archeological and Cultural Preservation (CPP-HAC-1 to CPP-HAC-5), Military Installations and Compatibility (CPP-MI-1 to CPP-MI-5), Rural Areas (CPP-RUR-1 to CPP-RUR-13), Transportation Facilities and Strategies (CPP-TR-1 to CPP-TR-22), Tribal Consultation, Coordination and Lands Compatibility (CPP-TC-1 to CPP-TC-5), and Urban Growth Areas (CPP-UGA-1 to CPP-UGA-16). The County's Agricultural Conservation and Lands, Military Installations and Compatibility and Rural Areas policies do not apply to this plan.

Pierce County Buildable Lands

Comprehensive Plans and/or development regulations must provide sufficient capacity of land suitable for development to accommodate allocated housing and employment growth, including the accommodation of, as appropriate, the medical, governmental, educational, institutional, commercial, and industrial facilities related to such growth, as adopted in the applicable countywide planning policies and consistent with the twenty-year population forecast from the Washington State Office of Financial Management. (RCW 36.70A.115)

In 1997, GMA was amended to require certain counties and their cities and towns to monitor development activities and conduct a coordinated housing unit and employment capacity analysis for each of the jurisdictions. Pierce County and its cities and towns are required by state law to participate in this "Buildable Lands" monitoring program. Since 1997, Pierce County and its 23 cities and towns have worked collaboratively in a program to collect annual development permitting data, inventory developable land, and enhance information relating to wetlands and steep slopes.

The Buildable Lands Program, this collaborative program is aimed at satisfying the GMA requirements and improving accuracy in the information used to determine the capacity of Pierce County's UGA. Pierce County published its first consolidated residential/employment capacity analysis in August 2002, second in September 2007, and third in June 2014. The most recent Pierce County Buildable Lands Report was adopted in November 2022.

Compatibility

This comprehensive plan addresses each of the policy areas in the Growth Management Act, VISION 2050, the applicable Pierce County Countywide Planning Policies, and the requirements of the Pierce County Buildable Lands targets.

Structure of Comprehensive Plan

The Comprehensive Plan provides information on the existing conditions of the Town and provides a policy framework for decisions about the development and growth of the Town and its UGA. It is divided into several sections, as follows:

- CHAPTER 1: INTRODUCTION AND TOWN VISION** – is an introduction to the Town of South Prairie, the reasons for the Comprehensive Plan and the legal framework, the Town’s planning history, citizen participation and the Town Vision for the future.
- CHAPTER 2: LAND USE ELEMENT** – describing the Town and UGA’s current conditions, population growth forecasts, land use plan and growth management policies.
- CHAPTER 3: CRITICAL AREAS ELEMENT** – provides direction on how development should be regulated adjacent to and within critical areas.
- CHAPTER 4: HOUSING ELEMENT** – addressing housing conditions, needs and affordability issues.
- CHAPTER 5: PARKS, RECREATION AND OPEN SPACE ELEMENT** – addressing needs for public.
- CHAPTER 6: UTILITIES ELEMENT** – inventorying the major utility providers in South Prairie and their capacities or expansion plans.
- CHAPTER 7: TRANSPORTATION ELEMENT** – describing town transportation needs and plans as related to land use.
- CHAPTER 8: CAPITAL FACILITIES ELEMENT** – linking land use information to capital improvement and public facility needs.
- CHAPTER 9: ECONOMIC DEVELOPMENT ELEMENT** – providing strategies to retain and attract employers to the town.

South Prairie Plan History

The Town of South Prairie does not have a separate Planning Commission. The Town Council does all the legislative work of a Planning Commission as required by Law. The Town Council has been actively engaged in the preparation, discussion and completion of this Plan.

The first Town of South Prairie Comprehensive Plan was adopted in 1996. An update of the original Comprehensive Plan was adopted in 2007. The Comprehensive Plan work was followed by updating the Town’s Unified Development Ordinance and a Critical Areas Code. The most recent update of the Town’s Comprehensive Plan was adopted in 2015.

The current plan update conforms to recent legislation passed since the prior update and demonstrates compliance with the multicounty planning policies of PSRC’s VISION 2050, Pierce County’s Countywide Planning Policies, Washington Office of Financial Management population projections and the Pierce County Buildable Lands process.

Citizen Participation

The GMA requires that each town establish and broadly disseminate to the public a public participation program consistent with RCW 36.70A.035 and 36.70A.140 that identifies procedures and schedules whereby updates, proposed amendments, or revisions of the comprehensive plan are considered by the governing body of the town no more frequently than once every year. (RCW 36.70A.130(2)(a))

Citizen Participation is vital to the preparation and understanding of any Comprehensive Plan. One of the primary goals spelled out in the Growth Management Act requires active participation of/by the citizens.

It is customary for the South Prairie Town Council to actively engage the citizens in the discussion of all policy and action items on the Town Council. This local custom keeps the citizens engaged and allows their active participation in discussions. This custom has held true for the preparation and adoption of the Town Plan and Updates over the years.

In June 2023 the Town of South Prairie created a Public Participation Plan. Please see Appendix A. At the same time, the Town launched a Public Survey. The survey asked questions about what the community most enjoyed about living in South Prairie, what could be improved, what would make South Prairie ideal, whether any new businesses would be nice in town, what kind of housing the community would like to see, the community’s feelings about development in general, questions about the sewer issues, and the community’s feelings about local parks and trails. For the survey, please see Appendix B. Appendix C shows the raw data from the survey results.

A snapshot of the survey responses is shown on the following page.

Community Character – Town Vision

The overwhelming theme of the South Prairie citizens is for South Prairie to remain a compact town with a vibrant business district along SR 162. The business district has retail shops and commercial services for its residents. The residents live in residential areas surrounding the central business district. Veterans Park and Third Street Parks are the centers of community activity.

Top 5 Town Attributes Needing Improvement	What improvements or changes do you want to see in South Prairie?	What people like about living in South Prairie
Preservation of small-town character	Upgrade roads, bridges, and ditches	Small Town Feel
Community gathering opportunities and amenities	More outdoor recreation opportunities i.e. trails and parks	Community
More recreation opportunities and/or parks	Better public safety and emergency response	Outdoor Recreation/Environment
Natural environmental quality and Agricultural opportunities	Better sidewalks, roads or utilities	Friendly/Safe
Public infrastructure quality such as stormwater, wastewater, and water utilities and public safety	Solve flooding issues	Walkable

Chapter 2 Introduction

Organization of the Land Use Element

The land use element is divided into five sections. The first section summarizes mandated population, housing unit and employment targets and the provisions of the buildable lands program that are used to demonstrate Comprehensive Plan consistency with these targets. The second section lists goals and policies that shape how the South Prairie community lives on the land and how South Prairie's government officials and citizens will manage the processes of making land use decisions. The goals and policies also respond to the requirements, goals, and planning principles of the GMA while providing for the protection and enhancement of South Prairie's community character. The third section of the land use element identifies and defines land use designations and their applicability to the community. The fourth section contains required information such as population density, building intensity, and estimates of future growth. The fifth section examines planned land use in adjacent jurisdictions to ensure consistency.

Planning Requirements

Washington State Growth Management Act

The Washington State Growth Management Act (GMA), Section RCW 36.70A.070(1) requires that all comprehensive plans contain a land use element with information as follows:

"A land use element designating the proposed general distribution and general location and extent of the uses of land, where appropriate, for agriculture, timber production, housing, commerce, industry, recreation, open spaces and green spaces, urban and community forests within the urban growth area, general aviation airports, public utilities, public facilities, and other land uses. The land use element shall include population densities, building intensities, and estimates of future population growth. The land use element shall provide for protection of the quality and quantity of ground water used for public water supplies. The land use element must give special consideration to achieving environmental justice in its goals and policies, including efforts to avoid creating or worsening environmental health disparities. Wherever possible, the land use element should consider utilizing urban planning approaches that promote physical activity and reduce per capita vehicle miles traveled within the jurisdiction, but without increasing greenhouse gas emissions elsewhere in the state. Where applicable, the land use element shall review drainage, flooding, and stormwater runoff in the area and nearby jurisdictions and provide guidance for corrective actions to mitigate or cleanse those discharges that pollute waters of the state, including Puget Sound or waters entering Puget Sound. The land use element must reduce and mitigate the risk to lives and property posed by wildfires by using land use planning tools, which may include, but are not limited to, adoption of portions or all of the wildland urban interface code developed by the international code council or developing building and maintenance standards consistent with the firewise USA program or similar program designed to reduce wildfire risk, reducing wildfire risks to residential development in high risk areas and the wildland urban interface area, separating human development from wildfire prone landscapes, and protecting existing residential development and infrastructure through community wildfire preparedness and fire adaptation measures."

Fifteen planning goals are contained in the GMA (RCW 36.70A.020). This land use element responds to those concerning land use, including:

- (1) **Urban growth.** *Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.*
- (2) **Reduce sprawl.** *Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.*
- (3) **Transportation.** *Encourage efficient multimodal transportation systems that will reduce greenhouse gas emissions and per capita vehicle miles traveled and are based on regional priorities and coordinated with county and city comprehensive plans.*
- (4) **Housing.** *Plan for and accommodate housing affordable to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.*
- (5) **Economic development.** *Encourage economic development throughout the state that is consistent with adopted comprehensive plans, promote economic opportunity for all citizens of this state, especially for unemployed and for disadvantaged persons, promote the retention and expansion of existing businesses and recruitment of new businesses, recognize regional differences impacting economic development opportunities, and encourage growth in areas experiencing insufficient economic growth, all within the capacities of the state's natural resources, public services, and public facilities.*
- (6) **Property rights.** *Private property shall not be taken for public use without just compensation having been made. The property rights of landowners shall be protected from arbitrary and discriminatory actions.*
- (7) **Permits.** *Applications for both state and local government permits should be processed in a timely and fair manner to ensure predictability.*
- (8) **Natural resource industries.** *Maintain and enhance natural resource-based industries, including productive timber, agricultural, and fisheries industries. Encourage the conservation of productive forestlands and productive agricultural lands and discourage incompatible uses.*
- (9) **Open space and recreation.** *Retain open space and green space, enhance recreational opportunities, enhance fish and wildlife habitat, increase access to natural resource lands and water, and develop parks and recreation facilities.*
- (10) **Environment.** *Protect and enhance the environment and enhance the state's high quality of life, including air and water quality, and the availability of water.*
- (11) **Citizen participation and coordination.** *Encourage the involvement of citizens in the planning process, including the participation of vulnerable populations and overburdened communities, and ensure coordination between communities and jurisdictions to reconcile conflicts.*

- (12) **Public facilities and services.** *Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards.*
- (13) **Historic preservation.** *Identify and encourage the preservation of lands, sites, and structures, that have historical or archaeological significance.*
- (14) **Climate change and resiliency.** *Ensure that comprehensive plans, development regulations, and regional policies, plans, and strategies under RCW 36.70A.210 and chapter 47.80 RCW adapt to and mitigate the effects of a changing climate; support reductions in greenhouse gas emissions and per capita vehicle miles traveled; prepare for climate impact scenarios; foster resiliency to climate impacts and natural hazards; protect and enhance environmental, economic, and human health and safety; and advance environmental justice.*
- (15) **Shorelines of the state.** *For shorelines of the state, the goals and policies of the shoreline management act as set forth in RCW 90.58.020 shall be considered an element of the county's or city's comprehensive plan.*

Finally, the GMA provides a mandatory framework for several other planning principles and techniques in the land use element:

- Establishment of urban growth areas (UGAs) for which municipalities assume responsibility for long-term planning of urban services,
- Identification of lands useful for public purposes and a process for siting essential public facilities, and
- Protection of critical areas from inappropriate development and to retain vital components of a healthy natural ecosystem.

VISION 2050 Multicounty Planning Policies (MPPs)

VISION 2050 recognizes that to meet the demands of a growing and changing population in the central Puget Sound, the region needs to develop vibrant communities that offer a diverse and well-distributed mix of homes affordable to both owners and renters in every demographic and income group in the context of a robust economy with an efficient and well distributed transportation and public services system while carefully protecting the natural environment. VISION 2050 offers 54 policies related to development patterns under the goal of encouraging the region to create healthy, walkable, compact, and equitable transit-oriented communities that maintain unique character and local culture, while conserving rural areas and creating and preserving open space and natural areas. The Multi-County Planning Policies respond to changing demographics and the need to address the region's development patterns. With respect to development patterns the MPPs address:

- Building urban communities,
- Promoting healthy communities
- Supporting connections to opportunities in centers
- Providing a framework for annexation and incorporation,

- Protection of Rural Areas and Natural Resource Lands,
- Collaboration to preserve and enhance Important Uses, and
- Supporting growth through concurrency.

Population, Housing Unit and Employment Targets for 2044

The Growth Management Act requires Pierce County to designate urban growth areas based on the urban growth population projection made for the County by the Office of Financial Management (OFM). Counties have the authority, as regional governments, to allocate population and employment to the cities within their boundaries. In addition, VISION 2050 requires Pierce County and its cities and towns to adopt housing unit and employment targets, accounting for PSRC's Regional Growth Strategy (RGS) by directing future growth to distinct regional geographies and local centers and their respective growth shares for population and employment.

Buildable Lands – Background Requirements of RCW 36.70A.215

RCW 36.70A.215 requires six counties, including Pierce County, to evaluate whether a county and its municipalities have sufficient capacity or land supply to accommodate urban densities within urban growth areas. To do this, the counties and municipalities compare growth and development assumptions, targets, and objectives contained in the Countywide Planning Policies and each jurisdiction's comprehensive plan with data that reveals actual growth and development patterns for urban, rural, and resource lands. At a minimum, the evaluation establishes the density of constructed housing and determines whether there is sufficient suitable land to accommodate the countywide population projection, as well as the extent of land developed for commercial and industrial uses within the urban growth area.

Buildable Lands Countywide Planning Policy Summary

Pierce County, in cooperation with other cities and towns within the County, has established a Pierce County Buildable Lands Program (Program) to provide a Countywide monitoring and analysis mechanism that complies with the requirements of RCW 36.70.A.215. The Program is coordinated through Pierce County Planning and Public Works. The focus of the Program is an analysis of annual development data related to locally adopted comprehensive plan goals and policies, the calculation of residential and employment land capacity as compared to the 20-year need, and identification of actions to rectify inconsistencies.

The primary product of the Program is the publication of a Buildable Lands Report by Pierce County every ten years, the first being issued in 2002 and the most recent being the fourth edition issued in September 2021 and revised in November 2022. Each municipality within Pierce County provides information on land development activities to the County and assists in an inventory of buildable lands. South Prairie and other municipalities follow the guidelines specified in the *Buildable Lands Report* for the collection, monitoring, and analysis of development activity and potential residential/employment capacity.

Pierce County, in consultation with its municipalities, analyzes inventoried buildable lands to evaluate the County's ability to accommodate its 20-year population and employment land needs. The Buildable Lands Report includes a summary of development activity by zoning classification and detailed assumptions incorporated in the residential and employment capacity analysis for each jurisdiction.

Targets for 2044

Pursuant to Pierce County Ordinance No. 2022-46s, the Pierce County Council has established population, housing unit, and employment targets for the year 2044 consistent with state and regional requirements and local considerations. The adopted targets for South Prairie are summarized in the table on the following page.

GMA Population, Housing Unit and Employment Targets			
Population	Estimated 2020 Census Population	2020-2044 Population Growth	2044 Total Population Allocation
	373	158	412
Housing Unit	Estimated 2020 Census Housing Units	2020-2044 Housing Unit Growth	2044 Total Housing Unit Allocation
	149	13	162
Employment	2020 Total Employment Estimate	2020-2044 Total Employment Growth	2044 Total Employment Target
	80	10	90

The Town must demonstrate it can accommodate this growth during this planning horizon by identifying that it has enough developable land zoned at sufficiently high enough densities and intensities to be able to achieve these targets.

Housing

The tables from the following page are from the 2022 Pierce County Buildable Lands Report. These tables summarize the land available for development by zone and use type – dwelling units and jobs. When combining vacant and underutilized land, vacant single units and the development in the pipeline at the time of the report, Pierce County determined there is adequate residential zoning to accommodate 73 new housing units, which is above the 2020-2044 target of 13 new units. On the surface, there is sufficient residential capacity to meet the County’s target. However, the Town’s sewer system is already over capacity. (See Chapter 7 Utilities Element.) Despite the Town’s continuing efforts to increase the efficiency of its sewer treatment and to encourage efficient usage, no new equivalent residential units of sewer are available without septic systems being installed. The likelihood is that no significant number of new sewer connections will become available and that even the provision of accessory dwelling units might be very challenging. Reducing lot sizes for zoning purposes cannot spur development without sewer or septic. All new development must be large lot developments with at least one acre of land for new septic to be installed, which is true even in the RV Park.

Zone	Vacant	Underutilized	Vacant Single Unit	Pipeline	Total
AGB	0	-1	0	0	-1
C	0	-1	0	0	-1
GOV	0	0	0	0	0
IND	0	0	0	0	0
R	17	34	20	0	71
R/CUP	0	4	0	0	4
Total	17	36	20	0	73

Zone	Vacant	Underutilized	Pipeline	Total
AGB	0	100	0	100
C	45	58	0	103
GOV	2	0	0	2
IND	0	0	0	0
R	4	8	0	12
R/CUP	0	1	0	1
Total	51	167	0	218

Population Discrepancy

According to the US Census, the population of the Town of South Prairie in 2020 was 373 residents. A major omission of the US Census is the South Prairie RV Park. The RV Park currently contains 180 units but is approved for up to 250 units. The Census fails to recognize the majority of the residents of the RV Park are not transient. This RV Park is the permanent, full-time home to 128 RV trailers with varying household sizes.² The Town has been providing water to the park since the original 1989 Development Agreement. An amended Development Agreement was enacted in 1994. Specifically, under the Development Agreement, Sections 16(c)(1) and 16(f), RVs in the park are defined as single-family residences and connected to the Town water system. Section 16(p) establishes that there is no length of stay requirement for the 93 spaces then existing in 1994 plus no length of stay requirement for anyone 55 years and older.

The Washington State Office of Financial Management has recently updated its population figures to reflect the presence of the RV Park Residents. Whereas the 2020 US Census estimated 373 residents, the OFM figures for 2023 is 645 residents. The US Census is undercounting South Prairie’s population by 42%! These residents of South Prairie are not accounted for in the federal system whatsoever. Given that South Prairie’s population is 645 residents, South Prairie has already exceeded the 2044 population target of 412 residents by 233 people (57%).

² As per the South Prairie RV Park Development Agreement 1989, Amended 1994 via South Prairie Resolution 151. See Appendix A.

Housing Target Achieved

Pierce County has assigned South Prairie a housing target of 162 total units for 2044. According to the US Census Bureau, the Town had a total of 149 housing units in 2020. However, the Census failed to count the 128 RV units that are occupied permanently, by legal prescription as single-family units, in the RV Park. Conservatively, South Prairie currently has 277 housing units which exceeds the 2044 housing unit target by 71%. Even if the RV are considered half an equivalent residential unit, though that is unreasonable given they have sleeping quarters, kitchen facilities and bathroom facilities equal to any studio apartment, the RV county would be 64 units. In either case, the 2044 housing target for South Prairie is already met with or without the needed sewer infrastructure improvements.

Employment

Similarly, there is enough land zoned for commercial uses to provide for 218 new jobs, which is far higher than the 10 jobs allocated to South Prairie in the 2020-2044 period. Therefore, South Prairie has adequate land capacity given its existing zoning to accommodate the buildable lands housing and employment projections.

Pierce County Planning Policies (CPPs)

Pierce County updated its Countywide Planning Policies (CPPs) in 2022 (Pierce County Ordinance No. 2022-46s). The major focus of the CPPs with respect to land use is compliance with the GMA, specifically with respect to:

- buildable lands,
- community and urban design,
- growth targets,
- health, healthy communities, and healthy community planning,
- historic, archaeological, and cultural preservation, and
- urban growth areas.

The following are CPPs are related to South Prairie’s Land Use Element:

CU-1: Incorporate community and urban design principles consistent with VISION 2050 to create communities that:

- 1.1: Impart a sense of place;
- 1.2: Preserve local character;
- 1.3: Provide for mixed uses and choices in housing types;
- 1.4: Encourage walking, bicycling and transit use; and
- 1.5: Provide access to healthy food purveyors such as grocery stores, farmers markets, and community food gardens in proximity to residential areas and centers.

GT-3: Jurisdictions should incorporate adopted growth targets when updating their local comprehensive plans.

- 3.1: Growth targets are the minimum number of residents, housing units, or jobs a given jurisdiction is planning to accommodate within the appropriate planning horizon and are to be developed through a collaborative countywide process that ensures all jurisdictions are accommodating a fair share of growth.
- 3.3: Targets are informational tools integrated into local land use plans to assist in formulating future residential and employment land needs.

H-1: Incorporate human health considerations into each planning element of comprehensive plans, including subarea plans. Prioritize planning practices (e.g. processes, policies, programs, projects and investment decisions) to support mental, social and physical wellbeing for all.

H-2: Apply a “Health-In-All-Policies” framework that considers and integrates healthy community planning when making planning and other policy decisions.

H-3: Identify and mitigate health and equity impacts of policy, regulation, or development proposals. This may include:

- 3.1: Seeking to consider the health ramifications of physical and built environment impacts when conducting SEPA reviews.
- 3.2: Utilizing a Health Impact Assessment when Environmental Impact Statement (EIS) is required.
- 3.3: Applying equity tools or other data-informed analyses to assess health and equity impacts, with particular emphasis on negative impacts to underserved populations.
- 3.4: Identifying, integrating, and implementing mitigation actions in collaboration with the affected populations.
- 3.5: Developing public investment evaluation criteria to prioritize public investments to address health disparities; or
- 3.6: Implementing development standards and conditions to prevent, minimize, and mitigate potential negative health impacts from development activities.

H-4: Meaningfully engage and empower all people, particularly the underserved, in planning for communities. This may include:

- 4.1: Increasing familiarity with health data, community-based/grassroots organizations, social and environmental determinants of health, and health inequities.
- 4.2: Making special efforts to outreach and understand community needs and the aspirations of underserved populations.
- 4.3: Working with populations experiencing health disparities and strengthen their capacity for collective efficacy.
- 4.4: Including special needs and diverse populations representative of your jurisdiction demographics or historically underserved.
- 4.5: Helping communities understand how short- and long-range policy, land use, infrastructure, and other decisions affect the public health of the entire community, and how to effectuate ongoing positive health outcomes.

H-5: Promote cooperation and coordination among public service providers, local government, the local health department, developers, community organizations, and all segments of the community to encourage healthy developments that promote and improve physical and social well-being for all.

H-6: Apply evidence and performance-based planning practices to carry out healthy community planning. This may include:

6.1: Conducting livability needs assessment to help identify needs, opportunities and threats, including, but not limited to, health and equity issues, to inform local comprehensive or subarea plan development.

6.2: Collecting, analyzing and interpreting health and other evidence-based data to support comprehensive or strategic planning.

6.3: Identifying health-supporting policies and strategies based on well-founded research evidence.

6.4: Developing, monitoring and managing meaningful built environment metrics and health outcomes to gauge implementation progress in collaboration with the public; or

6.5: Periodically revisiting goals and evaluating related policies and action strategies based on performance outcomes to improve health in collaboration with the affected public.

HAC-1: Utilizing applicable federal, state, and local designations, and in cooperation with the Indian tribes, all jurisdictions shall identify the presence of federal, state, and local historic, archaeological and cultural lands, sites, and structures, of significance within their boundaries.

HAC-2: Consider the potential impacts of development to culturally significant tribal sites.

HAC-3: Jurisdictions may, utilizing County standards or locally developed standards, identify and designate local historic, archaeological and cultural lands, sites, and structures of significance within their boundaries.

HAC-4: Encourage public education programs regarding historic, archaeological, and cultural lands, sites, and structures as a means of raising public awareness of the value of maintaining those resources.

HAC-5: Utilize urban design strategies and approaches to ensure that changes to the built environment preserve and enhance the region's and the county's unique attributes and each community's distinctive identity in recognition of the economic value of sense of place.

UGA-5: Pierce County, in conjunction with its cities and towns, shall establish a strategy for future annexations within the urban growth area.

Land Use Designations

Land use designations for this comprehensive plan have been determined primarily by existing land uses. South Prairie includes areas that were first developed over a century ago and have remained largely developed. These areas provide limited infill development opportunities. The Town also includes a few larger tracts of land surrounding the core of the community that are vacant or underdeveloped. As such, goals and policies not only address infill development and

redevelopment, but they also focus on the ongoing maintenance, refinement, and improvement of the existing community. This comprehensive plan emphasizes maintaining and enhancing South Prairie's community character through land use designations and goals and policies that cultivate the presence of desirable features in existing development, redevelopment, and infill development.

Land use designations for South Prairie and its UGA include:

- Residential (R) – SPMC 17.04.010
- Commercial (C) – SPMC 17.04.040
- Agricultural (AG) – SPMC 17.04.050
- Industrial (I) – SPMC 17.04.060
- Planned Unit Development (PUD) – SPMC 17.04.070
- Parks, Trails and Open Space – SPMC 17.04.080

The remainder of this section defines each land use designation for South Prairie and its UGA.

Residential (R)

Allowable Uses

The Residential (R) designation generally applies to areas of the community that have previously been platted and developed for single-family dwellings. Residential areas will include the following housing types:

- Single family attached and detached dwelling units,
- Public parks.

Special Permit uses in this zone include churches, nursery schools or day care centers and assisted living facilities. Conditional uses include mobile homes, recreational vehicle parks, schools, assembly halls and bed and breakfasts (SPMC 17.04.010). Home occupations that are compatible with the surrounding neighborhood are permitted.

Building Intensity

A building intensity of four to six dwelling units per acre will be achieved in Residential areas depending on the development pattern. Allowable building intensity, as measured by the coverage of land with impervious surface and other factors, is specified in the Town's zoning regulations (Title 17 SPMC).

Population Density

Assuming an average household size of 2.58 persons and five units per acre, the residential district areas will accommodate approximately 13 persons per acre.

Commercial (C)

Allowable Uses

The Commercial (C) designation is intended to accommodate a wide range of retail, office, and attached residential uses. The Commercial area allows retail businesses, offices, and services for which the primary clientele will most likely be South Prairie residents, local employees, and

tourists. Examples of such businesses include appropriately sized grocery stores and pharmacies, health care and other professional offices, tourist-oriented gift shops, bike and outdoor recreation equipment shops, small bakeries, clothiers, beauty shops, coffee shops, restaurants, small financial institutions, etc. Businesses and organizations that are culturally enriching will also be allowed. Examples of such businesses and organizations include art galleries, bookstores, dance studios, museums, live theaters, senior centers, etc. Commercial strip development should be discouraged. Automobile-oriented businesses such as restaurants with drive-up windows may be allowed subject to compliance with screening and other development standards intended to minimize impacts on neighboring properties.

In addition to commercial uses, residential uses are permitted in the Commercial district. These include lodging, transitional housing, single and multi-family development. Conditional uses allow for light industrial uses, public uses and recreational vehicle parks. Special uses include nursery and day care centers, churches, and assisted living facilities (SPMC 17.04.040).

Building Intensity

Building intensity is limited by the lot size (5,000sf minimum), site coverage maximum (70%) and building height (40 feet). There are otherwise no residential density maximums or prohibitive bulk and dimensional requirements (SPMC 17.04.020.E).

Agricultural (AG)

The purpose of the Agricultural District to provide appropriate locations for agricultural and agriculturally compatible uses, such as commercial farms, commercial livestock raising, commercial horse raising and/or boarding, and commercial agricultural product stores. Principally permitted uses are agricultural. Residential uses are allowed as accessory to the principal use (SPMC 17.04.050).

Industrial (I)

The purpose of the Industrial district is to provide areas suitable for a broad range of industrial activities whose characteristics are of a light industrial nature. Development standards are aimed at maintaining an efficient and desirable industrial area.

Allowable Uses

Primary permitted uses in the Industrial zone are manufacturing, warehousing, agricultural, assembly, retail and service, and gas stations. Conditional uses expand the permitted uses to those of similar type but more impacts (noise, odor) and also include both single and multifamily residential use (SPMC 17.04.060).

Building Intensity

Building intensity is limited by the lot size (20,000sf minimum), site coverage maximum (50%), setbacks and transitional buffer zones, and building height (35-60 feet). There are otherwise no residential density maximums or prohibitive bulk and dimensional requirements (SPMC 17.04.060.D).

Planned Unit Developments (PUD)

Allowable Uses

Planned Unit Developments are permitted in all zoning districts. The permitted uses are the same as the underlying zoning classification. If a PUD is 10 acres or more, the use may be mixed use in any underlying zone. PUDs offer density bonus standards. The Council may authorize up to 20% more dwelling unit density than permitted by the underlying zone with the provision of open space (4%), active recreation areas (4%), low impact stormwater management (2%), the use of native vegetation (4%), the limitation of parking into smaller areas (2%), mixed housing types (2%) and the use of a professional design/development team (2%) (SPMC 17.04.070).

Parks, Trails, and Open Space

The parks/trails/open space district is intended for low-intensity active-recreational uses which could be compatible with residential land uses. These active-recreational opportunities are meant to serve the recreational and social interaction needs of the town residents of all ages, economic situations, and physical conditions. Publicly owned lands, such as parks, may also be included in this district subject to approval by the town. Only those additional uses are permitted that are complementary to, and can exist in harmony with, the open space-recreation land use and surrounding land uses. This district may also support educational uses with approval of a conditional use permit. Currently, the only parks in South Prairie are Veteran's Park and Trailside Espresso's Park, both on Pioneer Way E. In addition, the PROS designation applies to the Foothills Trail, which runs along Hwy 162 through South Prairie, where the town has a designated trailhead.

Population and Land Use

Population and Age Distribution

As noted above, most of the housing units in South Prairie are in the South Prairie RV Park, a population that is not recognized in the US Census figures shown below. All figures below are from the 2020 US Census except for 2024 which is from the Washington State Office of Financial Management. OFM recognizes the town residents living within the RV Park, the Census does not. The median age is 50.1 years.

Year	Population	Age	Number	Percent
2000	452	Total population	373	100
2010	434	Under 5 years	25	6.7
2012	478	5 to 9 years	19	2.1
2014	369	10 to 14 years	15	4.0
2016	282	15-19 years	39	10.5
2018	280	20 to 64 years	221	59.3
2019	325	65 to 74 years	37	9.9
2020	373	75 to 84 years	17	4.6
2024	645	85 years and over	0	0

Current Land Use

Historically, the boundaries and configuration of South Prairie have been shaped by the presence of the Burlington Northern Railroad (and its predecessor), the South Prairie Creek and the steep slopes on either side of the valley. The Town contains 273 acres. Approximately 40 acres are vacant. As shown on the following table, the community is predominantly residential in nature.

Land Classification	Acres	Percent
R- Residential	152.63	55.81
R-CUP – Residential, Conditional Use	63.73	23.31
C - Commercial	15.67	5.73
I - Industrial	0.46	0.17
AB - Agricultural Business	10.00	3.66
Road & Utility Rights-of-Way	26.10	9.55
South Prairie Creek	4.85	1.77
Total	273.44	100.00

Urban Growth Area

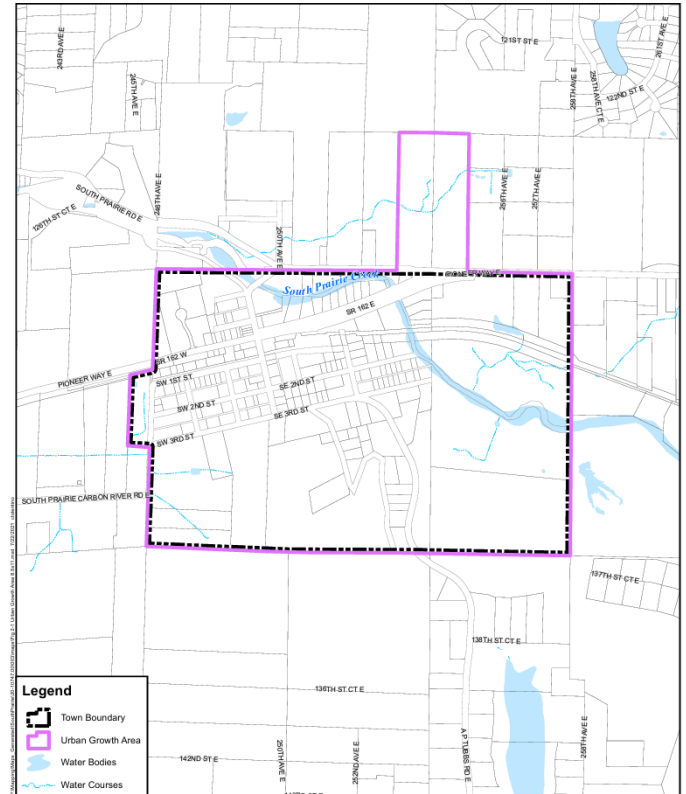
The current Urban Growth Area for South Prairie encompasses the municipal boundary plus a rectangular piece of land north of South Prairie Road East and Pioneer Way (aka: SR 162), comprised of two individual parcels (APN 0619074002 and 0619073006) together totaling 19.95 acres, as shown in light grey on the map below. Five people are estimated to reside in the UGA.

Urban Service Area

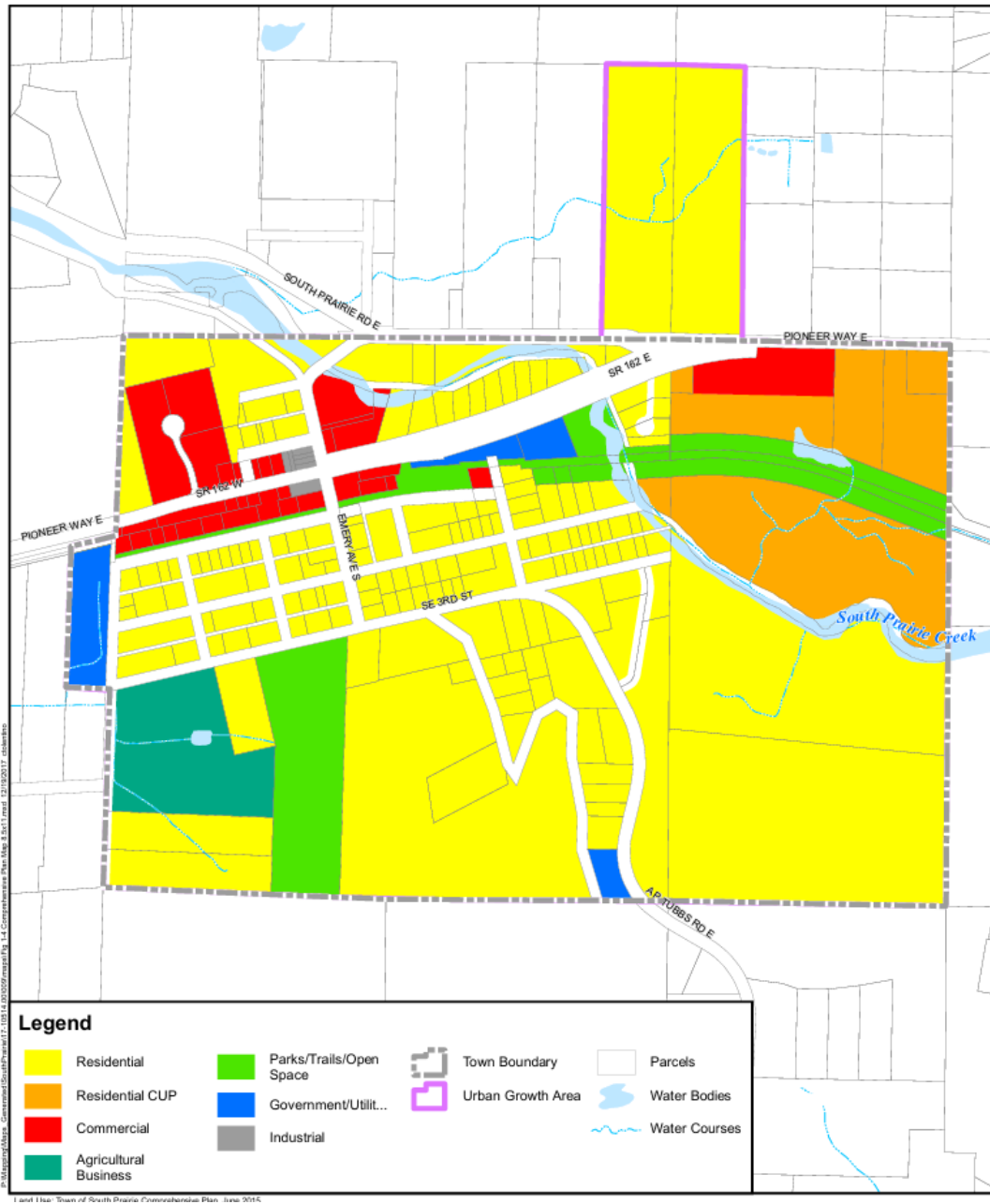
South Prairie provides municipal water and sewer services within its municipal limits.

Future Land Use

The Town and UGA are designated for future land uses generally consistent with existing land uses for developed properties. For vacant properties, land use designations reflect the community’s vision statement.



Future Land Use Map



Planned Land Use in Adjacent Jurisdictions

The future land use designations in South Prairie's UGA and surrounding area are indicated in the *Pierce County Comprehensive Plan*, and the Pierce County Future Land Use Map. Pierce County currently has jurisdiction over land use designations and regulatory authority over development that occurs in South Prairie's UGA and in the surrounding unincorporated areas.

The Pierce County Future Land Use Map has designated the area surrounding South Prairie as Rural classifications of Rural 10, Parks and Recreation, and Designated Agricultural Resource

Land. Most of the area north and west that is not currently built is not suitable for residential development due to its use as Natural Resource Lands (mainly Agricultural Resource Land), a general lack of infrastructure and difficult terrain. Some of the area to the south and in the UGA is suitable for further residential use because it has a gentler terrain, and the lots are large enough to accommodate both wellhead protection zones and a septic drainfield. However, the Future Land Use Map shows that only large acreage development is planned, and, in fact, the 2024 Pierce County Comprehensive Plan is eliminating the rural density bonuses for the areas around South Prairie. Adjacent land use designations are summarized in this comprehensive plan to identify potential inconsistencies and incompatibilities with South Prairie land uses. South Prairie will coordinate with other jurisdictions as appropriate to address consistency and compatibility issues.

Major Characteristics of Adjacent Land Use Designations

The table below summarizes the primary permitted uses for each land use designation within Pierce County jurisdictions near South Prairie and identifies the most similar land use designation in South Prairie.

Permitted by Pierce County Designations	Permitted by South Prairie Designations
<i>Rural 10</i> : Single-family detached dwellings, duplex dwellings, accessory dwelling units; one dwelling unit/10 acres or 2 dwelling units/10 acres when 50% or more of lot is dedicated to open space	No comparable designation in terms of density. In terms of use - <i>Residential</i> : Attached and detached single family dwellings, accessory dwelling units, 4-6 dwelling units/acre
<i>Park and Recreation</i> : Park, recreation and open space facilities	<i>Parks, Trails and Open Space</i> : Park, recreation and open space facilities
<i>Moderate Density Single Family</i> : Attached and detached single-family dwellings, 4-6 dwelling units/acre. Applies to South Prairie UGA.	<i>Low Density Residential</i> : Attached and detached single family dwellings, accessory dwelling units, 4-6 dwelling units/acre

Goals and Policies

The land use goals contained in this comprehensive plan are:

- Community character
- Residential uses
- Commercial uses
- Essential public facilities and other public facilities
- Environmental quality
- Water resources
- Development regulations and permit processing
- Interjurisdictional planning

Detailed goal statements and associated policies follow in this section.

Goal 1: Community Character

South Prairie 's community character should be preserved and enhanced through the application of historic mining town design guidelines and other design standards. These design guidelines and standards should be applied to new development and redevelopment in a manner that strengthens the historic fabric and reinforces the development patterns found throughout the Town. Design strategies and approaches should be utilized to ensure that changes to the built environment preserve and enhance the community's distinctive identity in recognition of the economic and aesthetic value of sense of place – in compliance with CPP CU-1.

Policies:

- 1.1 “Historic Coal Mining Town” design guidelines for commercial mixed-use areas should be implemented in cooperation with business proprietors to ensure that future development and redevelopment conform to South Prairie’s unique vision.
- 1.2: Goals and policies in the housing element and other elements of this comprehensive plan should promote preservation of historic structures and culturally significant features within the community.
- 1.3: All new development and redevelopment in commercial, residential, and park and recreation areas should be at the human, pedestrian scale. Development and redevelopment of public facilities should be at the human and pedestrian scale to the greatest extent possible, preferably, where they are located in close proximity to street frontages or visible from the street. Pedestrian safety features should be incorporated into all designs.
- 1.4: Repetitious building forms should be avoided in new development and redevelopment.
- 1.5: To maintain and enhance the existing landscape within South Prairie, the Town should encourage property owners to retain existing trees. Existing significant trees should be retained to the maximum extent possible at development and redevelopment sites. Where property owners elect to remove existing trees for safety or other reasons, South Prairie should encourage the property owner to replace removed trees with species and varieties that are safe, appropriate, and beneficial in the town environment.
- 1.6: Sign regulations should ensure that new and modified signage is unobtrusive and does not result in visual pollution throughout the community. Signage should be appropriately sized and placed for pedestrians and bicyclists as well as motorists. Commercial signage should be consolidated for uses within a single project to reduce sign clutter.
- 1.7: Subdivisions and other new development and redevelopment should include rights-of-way and facilities designed for the safe and convenient passage of pedestrians, bicyclists, and disabled persons as well as of motorized vehicles, where appropriate. Pedestrian and bicycle facilities should be added to streets as necessary to complete non-motorized circulation routes that connect destinations throughout the community with the Foothills Trail extension. Pedestrian and bicyclist facilities should provide

contiguous paths that are accessible to disabled persons throughout the community. All pedestrian and bicycle facilities should include adequate street and path lighting. Wherever feasible and appropriate, a landscaped strip containing street trees should provide a physical separation between automobile traffic and pedestrians.

- 1.8: Public facilities should be identified by similar signage and facility entry treatments throughout the community.
- 1.9: Arterial entrances to the Town should be upgraded with distinctive visual treatments unique to South Prairie to enable people to identify that they are entering (or leaving) the community. Landscaping of development in entrance vicinities should be compatible with entrance treatments.
- 1.10: As the Town's street network is extended, the streets should be laid out in a grid pattern that features relatively short block lengths, frequent street intersections, and alleys where appropriate. This pattern will reinforce South Prairie's historic development pattern, provide more alternative routes for pedestrian and vehicle traffic, and slow traffic – thereby enhancing public safety. The street grid may be adjusted to reflect topographic constraints, avoid environmentally sensitive areas, and respond to the presence of other significant physical features, as warranted.
- 1.11: The Town shall identify the presence of federal, state, and local historic, archaeological and cultural lands, sites, and structures, of significance within its boundaries – consistent with CPP HAC 1-5.
- 1.12: The Town shall encourage or accomplish the preservation of significant lands, sites, and structures through any one or a combination of the following techniques, as determined to be appropriate:
- Designation,
 - Incentives for preservation,
 - Loans and grants,
 - Public purchase,
 - Non-development easement,
 - Development rights transfer,
 - Restrictive covenants,
 - Regulations for protection, maintenance, and approval of appropriate development,
 - Plans/policies/standards for preservation as set by the U.S. Department of the Interior, and
 - Certified Local Government designation – consistent with CPP HAC 1-5.
- 1.13: The Town shall encourage public education programs regarding historic, archaeological, and cultural lands, sites, and structures as a means of raising public awareness of the value of maintaining those resources—consistent with CPP HAC 1-5.
- 1.14: Public buildings and public spaces should be designed to contribute to the unique sense of community and a sense of place.

Goal 2: Residential Uses

South Prairie should remain a predominantly residential community that encourages a mix of housing types, land uses and amenities that serve the needs of all residents and promotes an inclusive, welcoming community for all – in compliance with CPP H1-H6.

Policies:

- 2.1 Development regulations should accommodate and encourage a wide range of housing types to meet the needs of residents at all income ranges and various life stages, including individuals with disabilities, historically underserved populations, veterans, seniors, and those requiring transitional, permanent supportive, or emergency housing. Housing choice should be expanded beyond detached single-family dwellings to enable residents to remain living in the community as their housing needs or preferences change over time, and to attract new residents to the community.
- 2.2: The mix of housing within the community should include detached and attached single-family dwellings, small-scale multi-family dwellings including townhomes, accessory dwelling units, residential care facilities for those who are unable to maintain independent living arrangements, and other innovative housing that is compatible with the type and scale of surrounding residential development.
- 2.3: Encourage neighborhood development that supports healthy communities.
 - 2.3.1: Promote land use planning that supports walkability, tree canopy, access to services that meet daily household needs, access to parks and open space, and access to healthy and culturally relevant foods.
 - 2.3.2: Consider the environmental health and other impacts of land use decisions on overburdened communities (minority, low-income, tribal, or indigenous populations that potentially experience disproportionate environmental harms and risks). Encourage the participation of these communities in the decision-making process.
 - 2.3.4: Mitigate the environmental health effects of climate change, including air quality, stormwater, and heat impacts, through the acquisition of parks and open space and tree planting, prioritizing overburdened communities.
 - 2.3.5: Support energy efficiency and upgrade programs that reduce health risks for vulnerable populations due to extremes of heat and cold.
- 2.4: Innovation in site and building design should be incentivized in and adjacent to critical areas in accordance with comprehensive plan goals and policies. For example, portions of undeveloped residential tracts containing critical areas may exceed the maximum allowable dwelling units per acre if this facilitates placement of the development away from the critical areas and provided that *overall* density of a site does not exceed the maximum allowable dwelling units per acre. Appropriate buffering, design features, and amenities must be included in all innovative designs.
- 2.5: Through the Comprehensive Plan, Zoning Code, Subdivision Code and Design Guidelines, allow for a variety of housing types and lot configurations including

government-assisted housing, housing for moderate, low, very low, and extremely low-income households, manufactured and mobile housing, multifamily housing, group homes, foster care facilities, emergency housing, emergency shelters, permanent supportive housing, and duplexes, triplexes and townhomes (in compliance with the UGA, VISION 2050 and the Countywide Planning Policies).

- 2.6: Encourage home occupations that are compatible with the surrounding residential area to expand local economic opportunities for South Prairie 's residents.
- 2.7: Residential density must be consistent with the ranges specified for each residential land use designation in the land use element. Residential densities in specific locations may be modified to ensure the protection of critical areas, establish natural buffers, greenbelt areas, or preserve or establish open space areas. Proposed average residential densities for South Prairie and its UGA are five dwelling units per gross acre in low density residential areas eight dwelling units per gross acre in medium density residential areas.

Goal 3: Commercial Uses

The proportion of land designated for commercial use should be expanded where a clear benefit to South Prairie's residents is demonstrated. South Prairie should support the retention and revitalization of existing commercial areas and the development of newly designated commercial areas that harmonize with the historic mining town character of the community. Commercial areas should be developed in conformance with this goal and its associated policies. (Please also see Chapter 10 – Economic Development Element.)

Policies:

- 3.1 Commercial businesses that serve the daily needs of South Prairie 's residents for retail items or professional services should be encouraged. Commercial businesses that support the needs of Foothills Trail users and tourists visiting Mt. Rainier National Park or other scenic, historic and recreational areas should also be encouraged.
- 3.2: South Prairie should support locally owned and operated businesses to be established and remain in South Prairie, particularly home-based occupations.
- 3.3: Commercial and mixed-use buildings should be compatible with surrounding development and conform to design guidelines that support the scale and architectural style of a “historic coal mining town”. Where commercial rehabilitation, development, or redevelopment occurs in an area with historic significance, it should be respectful to the historic significance of the area.
- 3.4: Commercial strip development should be discouraged. Automobile-oriented businesses such as restaurants with drive-up windows may be allowed subject to compliance with screening and other development standards intended to minimize impacts on neighboring properties.
- 3.5: Buildings and off-street parking should be sited in a manner that enhances the streetscape and encourages pedestrian orientation. Parking should be located to the rear or side of buildings. Buildings should have an obvious pedestrian entrance

oriented toward the street, pedestrian-level storefront windows, weather protection, and architectural features and pedestrian-scale signage on the street.

- 3.6: Commercial and mixed-use development should incorporate landscaping, multi-seasonal seating, accent lighting, and other pedestrian-oriented amenities to enhance informal community gathering places and provide pleasant and comfortable resting, socializing, and picnicking areas for employees, residents, tourists, and shoppers.
- 3.7: Commercial and mixed-use development should include high quality, safe, and contiguous facilities for pedestrians, bicyclists, and historically underserved individuals with disabilities, seniors, and the youth. Site designs should also accommodate and support users of active transportation and public transit services with appropriate facilities in the event these services become available in South Prairie. Commercial and mixed-use development should be designed to take into consideration the connections of all transportation users, including vehicular, pedestrian, and bicyclist, to adjoining sites to reduce personal automobile trips. Sidewalks and internal pathways should be incorporated to enhance pedestrian circulation.
- 3.8: Lighting scale, placement, and design should facilitate safety while minimizing light impacts on the surrounding neighborhood and night sky.
- 3.9: Appropriate proportions and types of vegetative landscaping in commercial and mixed-use development should be installed consistent with landscaping regulations.
- 3.10: Limited residential uses in the form of accessory apartments and upper-floor dwelling units associated with commercial uses should be allowed in commercial areas. The design should ensure the privacy of residents.
- 3.11: The visual appearance of commercial areas should be improved through public and private measures for beautification, design strategies, maintenance, and streetscape improvements.
- 3.12: The adoption of maximum automobile parking standards should be considered for various types of commercial development, including the installation of electric vehicle charging stations. Shared parking facilities should be encouraged. Parking facilities should conform to the parking-related policies of the transportation element.
- 3.13: Commercial uses characterized by their minimal impact on surrounding areas should be preferred adjacent to residential land uses. Potential impacts on adjacent uses should be mitigated through compliance with adopted performance standards.

Goal 4: Essential Public Facilities and Other Public Facilities

Essential public facilities shall be allowed in locations appropriate for the services provided and the people served. Essential public facilities shall be compatible with the surrounding development and natural land and vegetation features.

Policies:

- 4.1 Small public facilities intended to serve a few neighborhoods may be located within a neighborhood. Examples of these facilities include neighborhood parks, drainage facilities, and electrical transformer boxes.

- 4.2 Public facilities intended to serve the entire community should be located to provide convenient access for residents who must frequent them. Examples of such facilities include community parks, schools, government offices, and similar facilities. Large facilities that serve the entire community, but not frequented by citizens, should be located where they will not disrupt the town landscape or disturb residential and commercial areas with noise, glare, dust, or other pollution. Examples of such facilities include power substations, water wells, and sewage treatment facilities.
- 4.3 Public facilities that have service areas extending substantially beyond the Town boundaries should be sited at a location appropriate to meet the transportation needs of the users of the facilities. Facilities that generate a significant amount of truck, automobile, or foot traffic should be located along arterial streets and convenient to public transit facilities, if available. School facilities should be given the flexibility to be located on non-arterial streets. Developers of these facilities should be required to make infrastructure improvements to support the facilities. These improvements may include, but are not limited to, street construction, signage, sidewalks, streetlights, transit shelters, benches, parking, bicycle racks, utility lines, and similar improvements.
- 4.4 South Prairie acknowledges that certain federal, state, regional, and county facilities could potentially have adverse impacts on the community if located within the Town. Such facilities should be paired with complementary facilities or programs that offer tangible benefits for the community. The Town should seek mitigation for disproportionate financial and other burdens resulting from the siting of essential public facilities in South Prairie.
- 4.5 Siting proposals by federal, state, regional, and county agencies should include clear justification for both the necessity of the facility and its placement within South Prairie. Alternate sites not in South Prairie should be explored through a cooperative inter-jurisdictional approach. If the final site selected is within South Prairie, the site should be consistent with the provisions of all of South Prairie 's comprehensive plan elements.
- 4.6 All public facilities should be sited, designed, and buffered to enhance compatibility with the surrounding neighborhood, taking into consideration the impacts of climate change, economic, and health impacts. Facility design and buffering should conform to the provisions of the urban landscaping and environmental goals and policies of this comprehensive plan. In addition, special attention should be given to minimizing the noise, light, glare, dust, and traffic associated with essential public facilities, prioritizing historically vulnerable populations and areas that have been disproportionately affected (MPP-PS-20 and MPP-En-8).
- 4.7 A public review process should be established by the state for essential public facilities that are difficult to site and should emphasize public, regional, and tribal involvement, including ample opportunities for South Prairie 's citizens to participate in the site selection process.
- 4.8 Proposals for public facilities that are not difficult to site should be processed using the minimum permitting procedures required to ensure the facilities conform to the

goals and policies of this comprehensive plan and have adequate opportunity for public input.

Goal 5: Environmental Quality

Land uses and development and redevelopment projects should be managed to preserve and improve the natural environment as well as the built environment.

Policies:

- 5.1: The Town should enforce standards that will achieve environmentally sensitive development when it occurs within and adjoining critical areas, natural buffers, and areas designated as open space.
- 5.2: To allow reasonable use of property while protecting the environment, reduction or variation of residential lot sizes, density transfers and bonuses, planned developments, clustering of housing, and innovative development techniques should be considered when designed to preserve open space, protect critical areas, or provide vegetative buffers.
- 5.3: Performance standards should be considered as a regulatory alternative to fixed zoning regulations in and around environmentally sensitive areas.
- 5.4: Town facility projects, maintenance and operating procedures, and programs should be structured to minimize and mitigate environmental damage, restore and improve the environment if possible, and increase the environmental education and awareness of Town employees and citizens.
- 5.5: To minimize maintenance costs, conserve water, and provide vegetation with the maximum usefulness as wildlife habitat, urban landscaping should emphasize the use of indigenous plants that are drought tolerant during the summer months. Landscaping may also include non-native plant species that are well adapted to growing and providing wildlife habitat with minimal human intervention in the local climate and soils.
- 5.6: The Town should seek to protect wildlife habitat resources by preventing the indiscriminate and unnecessary removal of native trees, shrubs, and ground covers; and by promoting the protection of areas that provide food, cover, resting, and nesting areas for wildlife.
- 5.7: The Town should ensure that there is “no net loss” of wetlands by function and values.
- 5.8: The Town should ensure that development is properly located and constructed with respect to the limitations of the underlying soils, geological hazards, and areas subject to flooding.
- 5.9: Town facilities, services, programs, and procedures should be designed and managed to conserve resources and to reduce demand for facilities with significant environmental impacts. Similarly, procedures, programs, and rate structures should encourage citizens to conserve resources and to minimize the negative environmental impacts of their use of facilities and services.

- 5.10: Development activities and land uses within South Prairie should be managed to minimize noise; light and glare; and water, soil, and air pollution. The Town should work with adjacent jurisdictions and property owners to minimize transmission of pollutants from development activities and industrial, commercial, and public facility land uses near South Prairie's boundary.

Goal 6: Water Resources

Surface, ground, storm, and waste waters should be managed in an ecologically responsible manner and as interconnected components of the region's watershed.

Policies:

- 6.1 Private and public development projects should be conducted in a way that preserves or improves the viability of each component of the water ecosystem and of the entire ecosystem.
- 6.2: The quality of stormwater runoff should be improved, flooding due to stormwater runoff should be minimized, and the erosion of land by stormwater runoff should be minimized, in order to maintain natural aquatic communities and beneficial uses. Development regulations should be enforced to minimize stormwater runoff as a result of development projects by limiting grading and clearing of a development site only to the extent reasonably needed to accommodate the development project, minimizing roadways and other impervious surfaces in the completed project, and encouraging the use of natural vegetation and ground covers during development and in the completed project.
- 6.3: Where removal of trees or other vegetation may result in runoff and erosion, the Town should require effective erosion control during and after the tree or vegetation removal. Where extensive removal of trees or other vegetation occurs, the Town may require restoration and replanting consistent with landscaping guidelines and significant tree retention and protection standards.
- 6.4: All new development and redevelopment should be required to use the sanitary sewer system. Development currently using septic systems should be required to convert to sanitary sewer when any portion of the on-site system fails, functions improperly, or needs replacement, or whenever the Town's sewer system is extended by local improvement methods or becomes reasonably available by other means. Where property is adjacent to presently existing accessible sewer mains, connections should be made within a specified time period established by Town ordinance.
- 6.5: Town procedures and programs should be structured to minimize pollutants entering storm, surface, ground, and stream waters from Town-owned and Town-maintained properties. Town procedures and programs should encourage the Town's citizens to minimize non-point pollutants contributed from buildings, landscapes, automobiles, and similar sources.
- 6.6: The quality of ground water should be monitored closely and protective measures maintained or increased to ensure an uncontaminated water supply. Regulations should be implemented with regard to installation, inspection, maintenance, and removal of above ground and below ground tanks designed to store potentially

contaminating materials such as heating oil and industrial chemicals. Other protective regulations should be developed as appropriate to protect ground water.

- 6.7: Town procedures, programs, and water rates should be structured to minimize the Town's consumption of water and to improve the water conservation habits of South Prairie's citizens.
- 6.8: The Town should adopt and implement the latest version of the Department of Ecology's Stormwater Management Manual for Western Washington.

Goal 7: Development Regulations and Permit Processing

South Prairie should develop and implement a permit process for development and other local government approvals that is timely and fair to all affected parties.

Policies:

- 7.1 All development and redevelopment should conform to the land use map and associated land use designations described in the land use element of this comprehensive plan. Development guidelines and regulations should conform to the goals and policies set forth in this comprehensive plan.
- 7.2 Development regulations should be periodically reviewed and revised to ensure that they are consistent with and relate directly to implementation of the comprehensive plan and other state and federal mandates. Duplicate and unnecessary regulations should be eliminated.
- 7.3 In the event of conflict between development regulations and this comprehensive plan, the provisions of this comprehensive plan take precedence. This policy applies immediately upon adoption of this comprehensive plan. Development regulations that are significantly inconsistent with this comprehensive plan should be given high priority for rapid revision.
- 7.4 Procedures for processing permits should be periodically reviewed and modified to ensure uniform processing for all permit applications, enhance communication with applicants, combine and simplify processing steps, and minimize processing time.
- 7.5 Input from developers, business proprietors, residents, community-based organizations, and other interested parties should be solicited concerning updates to regulations and permit processing procedures, particularly historically marginalized members of the community.
- 7.6 Permit applications for minor projects of a routine nature should be processed at the staff level and should not require public hearings. However, the streamlining of permit processing procedures should not be done at the expense of public input concerning permit applications of a non-routine, major, or controversial nature. The public should be given ample opportunity to review and comment on major, non-routine, or controversial development permit applications.
- 7.7 The Town should consider the impact of land use ordinances and policies on the rights of private property owners. The Town should take steps to ensure the rights of private property owners are protected through a cost-effective and timely appeal process.

Goal 8: Interjurisdictional Planning

The Town should take steps to ensure that decisions, policies, and activities of other governmental and advisory agencies that may affect South Prairie are consistent with the goals and policies of South Prairie 's comprehensive plan. South Prairie should encourage cooperative, coordinated inter-jurisdictional efforts, and collaboration with Native Tribes that are consistent with this goal.

Policies:

- 8.1 The Town should participate in various county and regional organizations, and coordinate with tribal governments concerned with the implementation of the Growth Management Act and the planning and funding of transportation projects – in compliance with CPP HAC 1-5, the GMA and VISION 2050).
- 8.2: The Town should support the development of inter-jurisdictional programs that address regional problems and issues that affect South Prairie and the Puget Sound region. Examples of regional issues include affordable housing, transportation, health care, open space corridors, economic growth, impacts from climate change.
- 8.3: The Town should seek to develop and adopt interlocal agreements to address concerns relating to land use, new development, and redevelopment. The Town should attempt to reach agreements with adjacent jurisdictions to ensure that land uses and development adjacent to South Prairie are compatible with South Prairie land uses and minimize or mitigate negative impacts on the Town.
- 8.4: The Town should work with adjacent jurisdictions to identify and protect natural habitat networks that cross jurisdictional boundaries. Networks should link large, protected, or significant blocks of fish and wildlife habitats within and between jurisdictions to achieve a continuous countywide network.
- 8.5: The Town should work with Pierce County, the Washington Department of Fish & Wildlife, the Washington Department of Ecology, the Puyallup and Muckleshoot Tribes and other stakeholders to coordinate watershed/aquatic restoration planning and implementation activities within a watershed.

Goal 9: US Census the South Prairie RV Park

South Prairie RV Park represents more than half of South Prairie's residents and yet is not recognized by the US Census Bureau. South Prairie will continue to work to get this unacknowledged and marginalized population recognized as permanent residents of the town.

Chapter 3 Critical Areas Element

Introduction

The Growth Management Act (GMA) requires that critical areas, natural resource lands and the environment be protected. Countywide Planning Policies and the Multi-County Planning Policies (VISION 2050) also establish mandates for protection of the environment in the planning process. Updates to policies and regulations are required to be based on “best available science” and give special consideration to conservation or protection measures necessary to preserve or enhance habitat for anadromous fisheries. Legislation further requires jurisdictions to address climate change and greenhouse gas reduction in their policies and regulations. In addition, the Draft SEPA Determination of Non-Significance, prepared for the Comprehensive Plan in compliance with the State Environmental Policy Act (SEPA), discloses a variety of environmental impacts that could result from implementing the Comprehensive Plan. The policies below are intended to satisfy these statutory and regional policy directives.

Critical Areas within or surrounding the Town of South Prairie include critical aquifer recharge areas, wetlands, shorelines, frequently flooded areas, fish and wildlife habitat conservation areas, seismic hazards, and geologically hazardous areas. The beneficial functions and values they provide include water quality protection, preservation of fish and wildlife habitat, drinking water protection, protection from natural hazards; and recreation.

Relationship to Regulations

How land is to be developed within and around critical areas is specified in the development regulations. The critical areas development regulations must be consistent with the Comprehensive Plan and be designed to implement the goals and policies set forth in this chapter. Critical areas development regulations must be reviewed periodically and updated to reflect changes in State laws and regulations. Further, the critical areas development regulations must be based on scientific standards and must contain language that makes use of the best available science.

Critical Areas

The following goals, policies and objectives relate to environmentally sensitive practices and human health, safety and welfare issues that are not specific to a type of critical area.

Goals, Policies and Objectives

Overall

- 1. Practice environmental stewardship by protecting, enhancing and promoting the natural environment in Town of South Prairie.**
 - 1.1 Maintain up to date regulations that protect critical areas, the function and values of the natural environment, and/or safeguard the public from hazards to health and safety.
 - 1.2 Incorporate the use of “best available science” as required by the Growth Management Act in developing policies and development regulations to protect the functions and values of critical areas. Give special consideration to

conservation or protection measures necessary to preserve or enhance anadromous fisheries.

- 1.3 Promote cultural events that celebrate and inform the community about natural areas, such as fish and wildlife habitat, especially in relation to the Town's remaining forested land and around the Foothill Trail.
- 1.4 Work with the White River School District and other organizations to promote environmental education on topics such as local ecology, conservation, waste reduction, and environmental justice.
- 1.5 Promote equitable public access to unique and valuable natural areas, where access is designed to minimize impacts to the natural area.
- 1.6 Consider environmental justice in future project and policy decisions and ensure the benefits associated with environmental stewardship projects are equitably distributed throughout the town.

Air Quality

2. Protect air quality from adverse impacts.

- 2.1 Encourage alternative modes of transportation to reduce emissions and reliance on the automobile as the primary method of transportation.
- 2.2 Require air quality impact analysis for major new developments which could adversely impact the air quality levels in the vicinity.
- 2.3 Work with other agencies to educate the public about air quality impacts.
- 2.4 Work with other agencies to monitor air quality within the planning area.
- 2.5 Support infrastructure, codes and permit processes that encourage alternative fuels and electric vehicles.
- 2.6 Require trees and other vegetated barriers between busy roadways and schools, residential areas and other places with a high concentration of vulnerable children and adults.
- 2.7 Engage with the community, particularly overburdened populations, to understand and respond to local needs and concerns regarding air quality.

Climate Change

3. Reduce greenhouse gas emissions and encourage energy efficiency.

- 3.1 Encourage, through incentives and technical support, energy conservation, energy efficiency, efficiency in building materials and site design, and the

application of sustainable, or “green” design practices in all public and private development including large commercial and industrial projects, residential subdivisions, and infrastructure such as streets, within the Town.

- 3.2 Continue to enforce the energy efficiency requirements in the State Energy Code and other Washington State building codes.
- 3.3 Identify and evaluate potential changes to land use and development regulations to support and promote energy efficient, sustainable and green development.
- 3.4 Ensure that the South Prairie zoning regulations have the flexibility to accommodate, and provide incentives for, the installation of green energy features.
- 3.5 Require street trees and on-site landscaping in all new developments.
- 3.6 Require proposed rezones that significantly increase vehicle miles traveled to conduct a greenhouse gas emissions analysis and to propose mitigation.
- 3.7 Promote a healthy and sustainable environment in terms of air quality and climate, energy resources, and active lifestyles by using prudent building design and construction methods such as recycled construction materials, reducing space heating and electricity usage, reducing water consumption and waste generation, and encouraging alternative travel modes such as transit, walking, and biking.

4. Establish regulations and processes to allow and streamline permits for new energy technologies, such as battery storage facilities, small- and large-scale solar facilities, and similar alternative technologies.

- 4.1 Explore ways to streamline and reduce costs in the permitting process for residential-scale solar facilities.

Noise

5. Encourage a reduction in noise impacts associated with human activity and development.

- 5.1 Require new developments which could generate substantial levels of noise or could expose people to noise impacts sufficient to cause environmental health problems to submit an analysis of potential noise impacts and to propose mitigation.
- 5.2 Maintain the noise ordinance to address various noise sources, and periodically update it for consistency with industry standards and new environmental health data.

Natural Resource Lands

- 6. Protect viable long-term natural resource lands, including commercial agriculture and mining.**
 - 6.1 In coordination with other jurisdictions, protect viable mining areas through allowances for permits, provisions for mitigation of impacts and restoration, notice to adjacent property owners, and compatibility of uses.
 - 6.2 Cooperate with Pierce County in protecting lands designated by the State as agricultural lands of long-term commercial significance, through conservation tools such as transfer of development rights, purchase of development rights, cluster zoning, and limitations on the extensions of public utilities and public facilities.
 - 6.3 Establish right-to-farm legislation to protect agricultural lands with significant long term commercial significance, including adjacent agricultural lands in the county.

Surface Water

- 7. Protect surface water quality and quantity from significant degradation as required by state and federal law.**
 - 7.1 Implement development regulations and a surface water quality management plan to protect water quality.
 - 7.2 Maintain regulatory requirements for adequate vegetated stream buffers to functions and values such as temperature reduction, as well as filtration and attenuation (slow release) of surface water runoff.
 - 7.3 Monitor surface water quality discharges to provide a sufficient database for determining if water quality is being degraded.
 - 7.4 Work with other agencies to educate the general public and developers on the potential surface water quality degradation resulting from development and human activity and how to reduce impacts.
 - 7.5 Maintain consistency with local, regional and federal water quality protection plans and permits.
 - 7.6 Implement state-of-the-art stormwater management techniques including low impact development.
 - 7.7 Incorporate low impact development principles and practices into the design, construction, and operation of all town facilities and town-funded projects when economically feasible.

- 7.8 Require residential and commercial developers to incorporate low impact development techniques, where feasible, that preserve a site's natural hydrologic functions and practices that protect native vegetation and soils, facilitate reuse of resources, such as reclaimed water, and reduce impervious surface.
- 7.9 Identify and evaluate potential changes to land use development regulations and building codes to support and promote low impact development.

Wetlands

Wetlands are transitional areas between upland and aquatic environments where water is present long enough to form distinct soils and where specialized water loving plants can grow. Wetlands include marshy areas along major water bodies such as lakes, inland swamps, and seasonal watercourses. Wetlands are typified by a water table that usually is at or near the surface, and there may be standing water all or part of the year. Soils that are present in wetlands are known as hydric soils. Certain plant species, including trees, shrubs, grasses, and grass-like plants have adapted to the low oxygen content of wetland soils. These plants are known as "hydrophytes". Another distinguishing characteristic of wetlands, in addition to soils and plants, is known as hydrology. Wetland hydrology refers to wetness of the wetland- how often is the soil saturated or flooded with water and how long does it last? A wetland must have some form of moisture in the soils even in the dry season. All three factors, hydrology, hydric soils and hydrophytes are necessary to classify an area as a wetland.

Functions and Values

In their natural state, wetlands perform functions which are impossible or difficult and costly to replace. Wetlands provide erosion or sediment control - the extensive root systems of wetland vegetation stabilize stream banks, floodplains, and shorelines. Wetlands improve water quality by decreasing the velocity of water flow, resulting in the physical interception and filtering of waterborne sediments, excess nutrients, heavy metals, and other pollutants. Wetlands also provide food and shelter, essential breeding, spawning, nesting and wintering habitats for fish and wildlife, including migratory birds, anadromous fish, and other commercially and recreationally valuable species.

Classification

Wetlands in Washington State are classified as Category I, II, III or IV wetlands. The criteria for establishing wetlands categories are based on the current version of the Washington State Department of Ecology's "*Washington State Wetlands Rating System for Western Washington*".

- **Category I Wetlands.** Category I wetlands are those regulated wetlands of exceptional resource value based on significant functional value and diversity, wetland communities of infrequent occurrence, and other attributes which may not be adequately replicated through creation or restoration.
- **Category II Wetlands.** Category II wetlands are those regulated wetlands of significant resource value based on significant functional value and diversity, wetland communities of

infrequent occurrence, and other attributes which may not be adequately replicated through creation or restoration.

- **Category III Wetlands.** Category III wetlands are those regulated wetlands which have important resource value based on vegetative diversity.
- **Category IV Wetlands.** Category IV wetlands are those regulated wetlands of ordinary resource value based on monotypic vegetation of similar age and class, lack of special habitat features and isolation from other aquatic systems.

Identification and Mapping

The U.S. Fish and Wildlife Service prepares a set of maps entitled the National Wetland Inventory Maps. The map on the following page depicts wetlands inventoried by the U.S. Fish and Wildlife Service National Wetlands Inventory Maps in the Town of South Prairie, within the South Prairie UGA or adjacent to the municipal limits. Pierce County has also prepared wetland maps in addition to those wetlands identified in the National Wetland Inventory Maps. Wetlands may also be discovered while approving a building permit or a subdivision permit. The Town of South Prairie, while regulating development, from time to time may require that the developer provide the Town with a wetland delineation and assessment report. Once delineated and mapped, those wetland maps are kept on file at the Town Hall and used in subsequent development reviews.

Wetland Buffers

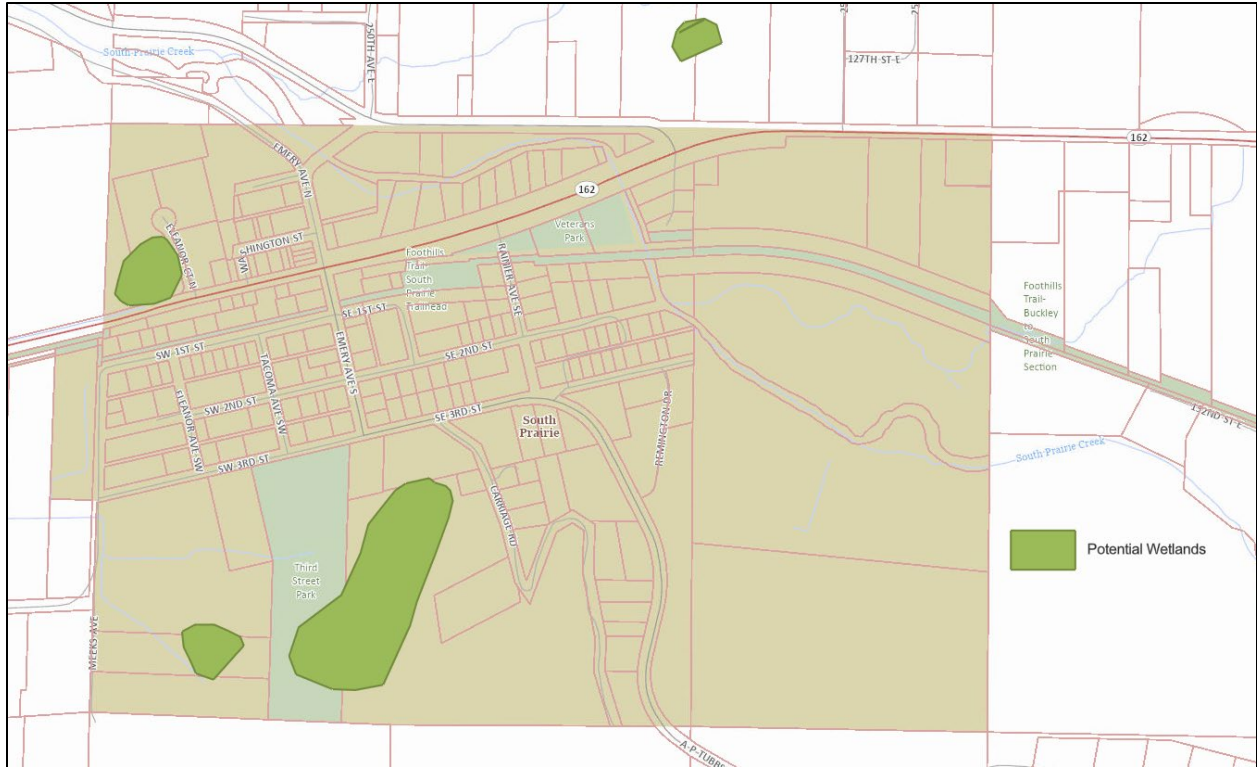
Wetlands need to be buffered to protect them from neighboring development. Wetland buffer widths increase along with the quality and function of the wetland. In South Prairie, wetlands are buffered, ranging from 35-300 feet, depending on the category of wetland and its habitat function (SPMC 15.18.240). Buffer widths may be modified in certain situations. Non-intrusive development may be permitted in wetland buffer zones, such as walking trails, etc.

Development Regulations

Development in the wetland environment is regulated by the Town of South Prairie. The wetlands section of the Critical Areas Ordinance specifies what type of development can take place in the wetland environments and under what conditions. The applicant may be required to prepare a wetlands delineation and assessment report, prepared by a professional wetlands biologist. Wetlands may be filled under only certain circumstances and compensatory mitigation is required. The regulations must allow "reasonable" use and a limited set of exceptions.

Best Available Science

The Growth Management Act requires cities and counties to include the best available science when drafting development regulations (RCW 36.70A.172). The Growth Management Act does not require communities to go out and conduct new scientific studies, but to include the best science that is available. To locate locally appropriate science, the Town of South Prairie will rely on Washington State Commerce Department's *Citations of Recommended Sources of Best Available Science for Designating and Protecting Critical Areas*.



Town of South Prairie Potential Wetlands

Wetland Goals and Policies

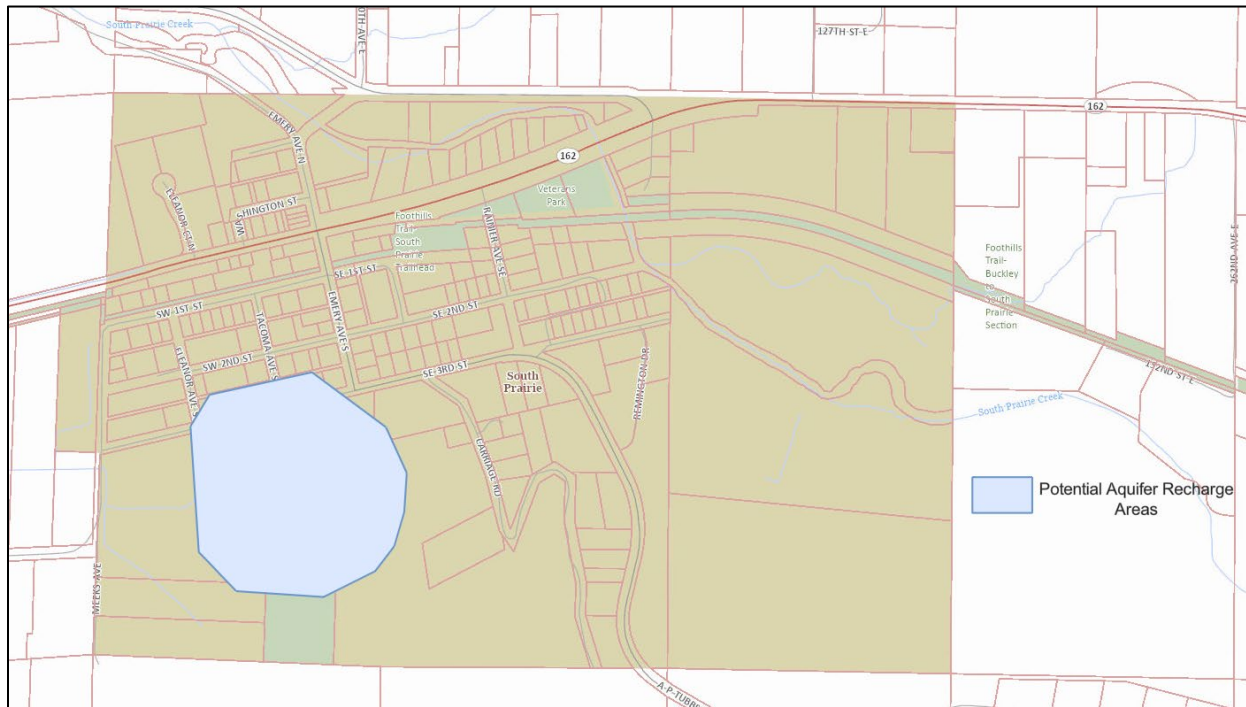
The Town of South Prairie has a number of goals and policies, if implemented, will lead to zero net loss of values and functions of wetlands. The goals and policies are listed below:

- 8. Provide for the long-term protection and "no net loss" of values and functions of wetlands.**
 - 8.1 Identify and map all wetland areas, including both private and public lands where regulated wetlands exist in the Town of South Prairie.
 - 8.2 Protect the natural ability of wetlands to improve the quality of storm water runoff by holding and gradually releasing stormwater.
 - 8.3 Protect the natural ability of wetlands to function as producers of plant matter, provide habitat for fish and wildlife, provide recreational opportunities and provide historical and cultural values.
 - 8.4 Provide educational opportunities that increase public understanding of the values and functions of wetlands and measures which Town residents can take to maintain wetlands on their properties.

- 8.5 When impacts on wetlands cannot be avoided, development of wetlands may occur where impacted wetlands are replaced at a ratio exceeding the impacted wetlands and taking into consideration the values and functions of impacted wetlands.
- 8.6 Review and, when necessary, amend the Town of South Prairie Wetland Management Regulations to provide wetland protection in accordance with the Comprehensive Plan.

Critical Aquifer Recharge Areas

As precipitation reaches earth it becomes part of a snowpack, enters into lakes, streams, rivers, oceans, wetlands, seeps into the soil to be taken up by plant roots, or seeps into the ground and becomes groundwater. As groundwater moves through the ground it may discharge to surface water features, such as lakes, streams, or rivers, which will in turn recharge the groundwater. The water that remains in the ground will make up the aquifer. Aquifers discharge water naturally through springs and seeps, streams, lakes, wetlands, and undersea springs. Man-made wells create additional discharge points which influence groundwater flow patterns. This flow, or movement, is generally very slow.



Town of South Prairie Potential Aquifer Recharge Areas

As aquifers discharge, they in turn are recharged. Recharge occurs primarily as a result of the infiltration of rainfall and secondly by the movement of water from adjacent aquifers or water bodies. The rate and quantity of water entering the ground depends on several factors. Natural factors include the amount of precipitation, soil type conditions, vegetation, and topography. Man-made factors include impervious surfaces associated with development, the channeling of runoff, changes in soil condition such as compaction, and removal of vegetation. Aquifers can also

be affected by contamination. A hazardous waste spill can have severe adverse impacts on an aquifer, possibly making the water unusable for years.

The following goal and policies, if implemented, will result in the protection of aquifer recharge areas.

Critical Aquifer Recharge Areas Goals and Policies

9. Prioritize and protect aquifer recharge areas to ensure that water quality and quantity are maintained or improved.

- 9.1 Identify and map aquifer recharge areas.
- 9.2 Take active measures to ensure adequate recharge of aquifers utilized by the Town of South Prairie residents for domestic water supplies, and to protect the quality of water in those aquifers.
- 9.3 Develop performance standards and regulate land uses for activities which can adversely impact water quality or quantity in aquifers, consistent with state and federal laws and regulations.
- 9.4 Require that new development meets the performance standards and that existing facilities be retrofitted, where feasible, to meet the standards.
- 9.5 Pursue both natural and engineered solutions to maintain aquifer recharge quality. Natural solutions (e.g., maintaining undisturbed vegetation) are preferred.
- 9.6 Provide for aquifer recharge through the use of stormwater management technologies which best protect water quality.

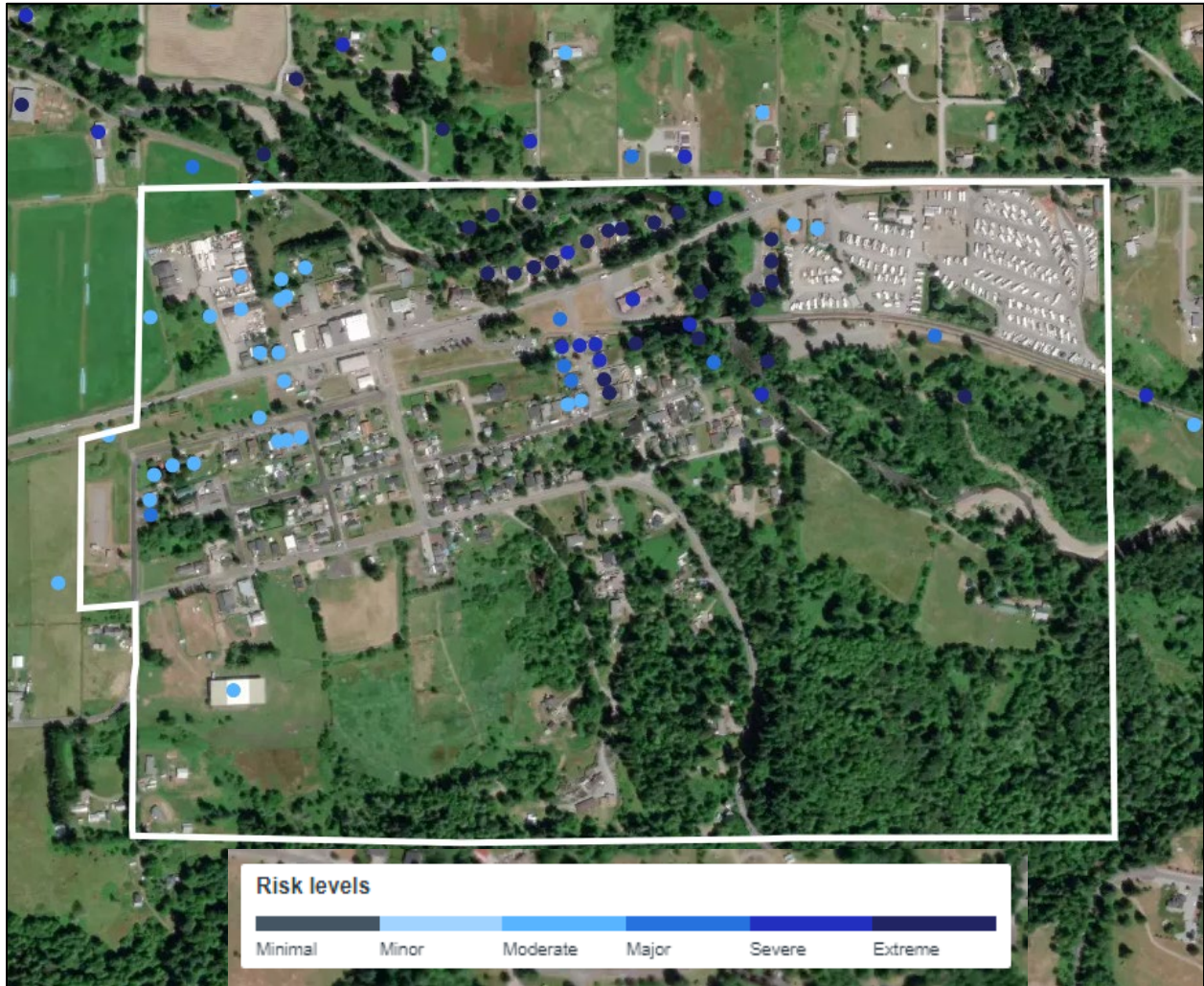
Frequently Flooded Areas

The 100-year flood plain is the area that has a 1 percent probability of inundation in any given year. Within the flood plain lies the floodway, which has higher velocity flow and substantially greater hazard. The area within the flood plain and outside the floodway is called the flood fringe. A flood fringe is generally associated with standing water rather than rapidly flowing water. To avoid the devastating and costly damage which, historically, results from flooding, the utilization of the floodway and flood fringe must be in accordance with the Town of South Prairie adopted development ordinances. There are frequently flooded areas in South Prairie along the banks of South Prairie Creek. These areas also include Channel Migration Zones as shown on the map on the following page.

Any development in the floodway should be prohibited unless the development consists of such facilities as stream bank stabilization, dams, diversion facilities, stormwater facilities, and bridges. Development in the flood fringe should be limited to low intensity uses and meet the flood fringe codes of the International Code Council for buildings. Sewer lines within the flood fringe must be

designed and constructed in a way to keep floodwater from entering the sewer system. Septic systems should not be allowed to be constructed in the flood fringe.

Town of South Prairie Risk of Flood to Structures



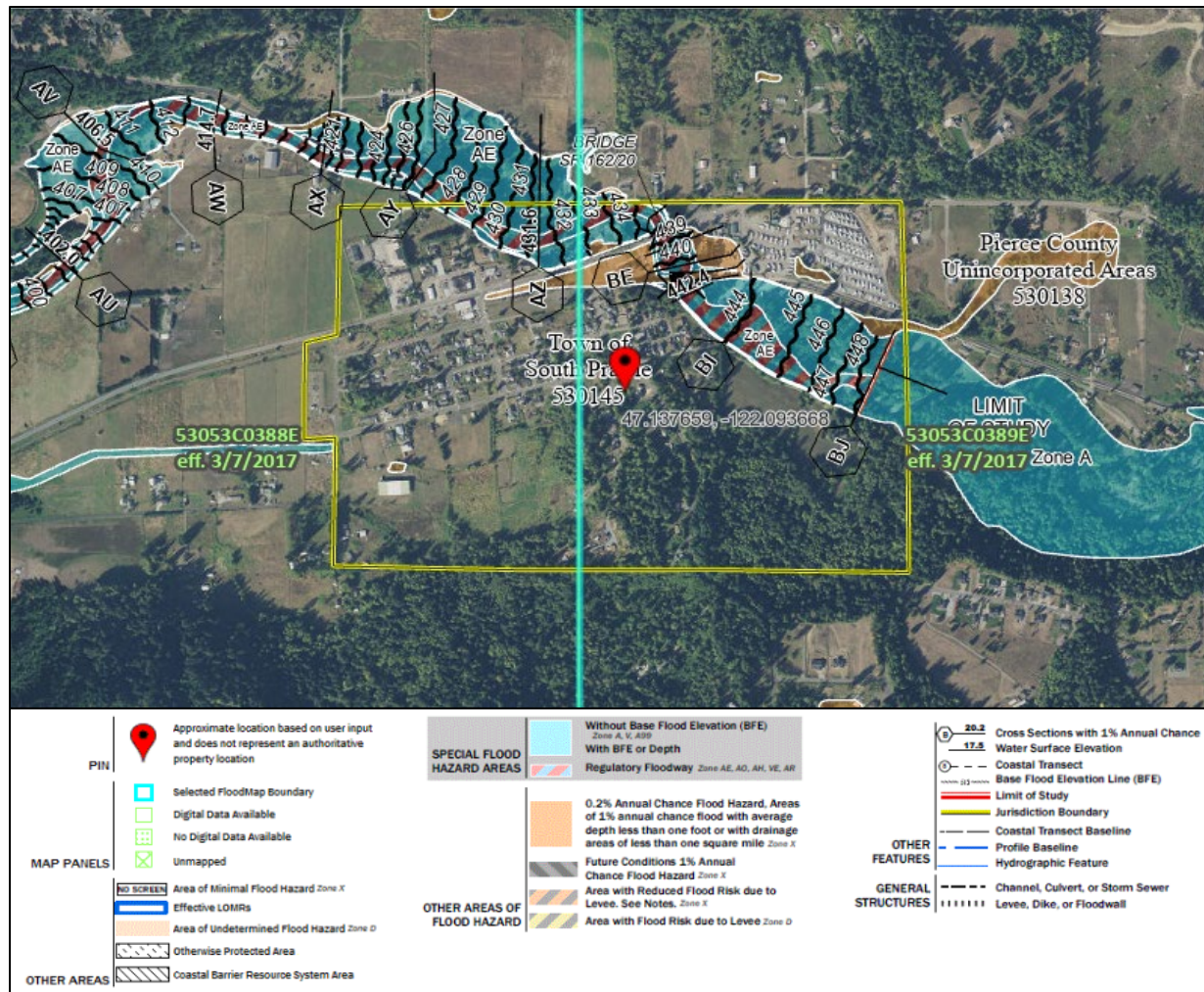
Source: Risk Factor

Frequently Flooded Areas Goals and Policies

The following goals and policies, if implemented, will result in the protection of properties and development in the flood fringe areas.

- 10. Establish land use practices in frequently flooded areas so that development does not cause or exacerbate natural processes which endanger the lives, property, and resources of the citizens of the Town of South Prairie.**

Town of South Prairie Frequently Flooded Areas



Source USGS

- 10.1 Encourage low intensity land use activities, including recreational land uses in floodplain areas.
- 10.2 Direct critical facility development away from areas subject to frequent flooding where the effects of hazards cannot be mitigated.
- 10.3 Where the effects of hazards can be mitigated, require appropriate standards for site development and for the design of structures in areas subject to flood hazard.
- 10.4 Work with appropriate agencies to develop and implement regulations to reduce flood damage, including reinforced building design, compensatory flood storage, limitations on the location of building in floodplains, and adoption of a “zero-rise” standard or floodplain development.

- 10.5 Continue to implement wetland protection and stormwater management regulations to help mitigate flooding impacts to the community.

Geologically Hazardous Areas

Geology

The USGS published a flood study of the South Prairie Creek watershed in 1998, following several destructive floods in the preceding decade. This study contains a description of the geology of the area, which is summarized as follows. South Prairie Creek Basin lies in the Puyallup River Basin on the west side of the Cascade Mountains in the foothills just northwest of Mount Rainier. Subsurface geology consists primarily of sedimentary and volcanic rock from the Eocene (the Puget Group, which includes the Spiketon, Northcraft, and Carbonado Formations), the Oligocene (Ohanapecoh Formation) and the Miocene (volcanic mudflow deposits) epochs.

The surface geology consists mostly of unconsolidated Pleistocene glacial-drift deposits known as the Vashon Drift, with small areas of mudflow deposits. The drift consists primarily of glacial till deposited at the base of the glacier ice and stratified drift deposited by glacial meltwater. The till is well compacted and allows little infiltration of water, and the stratified drift is much less compacted and is found throughout the basin. This comprises the hilly southeastern part of South Prairie.

About 4,800 years ago after volcanic eruptions on Mount Rainier, the Osceola mudflow flowed down the White River, and a sizable lobe flowed down the South Prairie Creek valley. Much of the mudflow material remains exposed on the surface of the lower valley, and the remainder has been eroded and replaced with recently deposited gravel and cobble alluvium in the stream channel and silt and sand in the adjacent flood plain. This is mainly located in the flatter, western part of South Prairie.

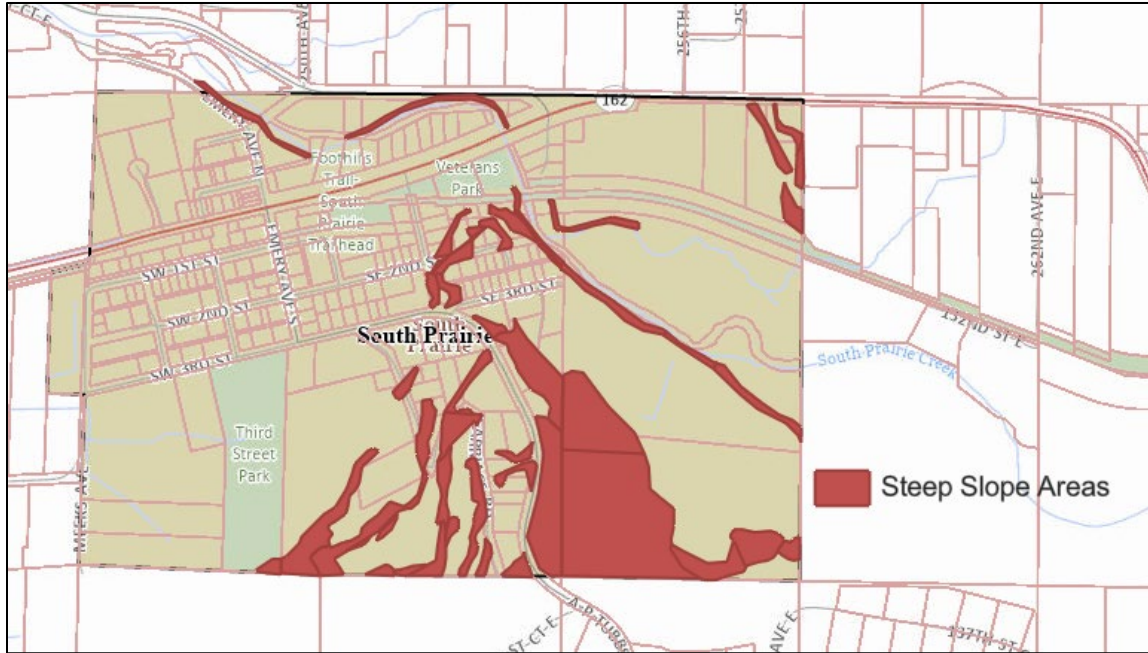
Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible commercial, residential, or industrial development is sited in areas of significant hazard. Geologically hazardous areas also have an important function in maintaining habitat integrity. Mass wasting events, such as landslides and debris flows, contribute needed sediment and wood for building complex instream habitats, estuarine marshes, and beaches important for fisheries, wildlife, and recreation. At the same time, mass wasting events can harm habitat and lead to the need for stream restoration.

Some geological hazards can be reduced or mitigated by engineering, design, or modified construction or mining practices so that risks to health and safety are acceptable. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas is best avoided. Areas that are susceptible to one or more of the following types of hazards should be classified as a geologically hazardous area:

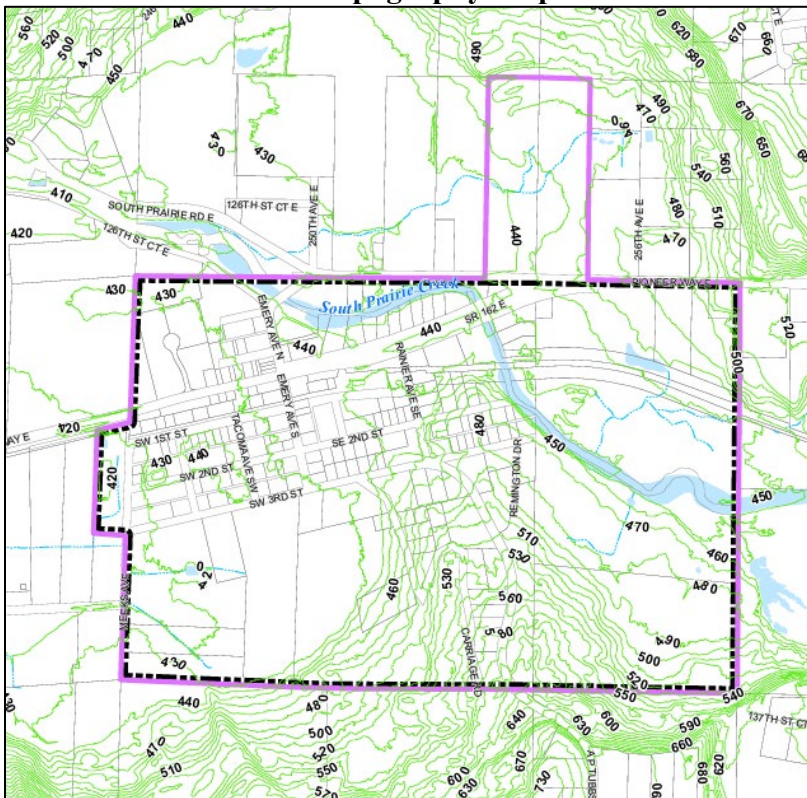
- Erosion hazards (including river, streambank erosion areas, and channel migration areas)
- Landslide hazards

- Seismic hazards
- Areas subject to other geological events such as coal mine hazards and volcanic hazards including: mass wasting, debris flows, rock falls, and differential settlement.

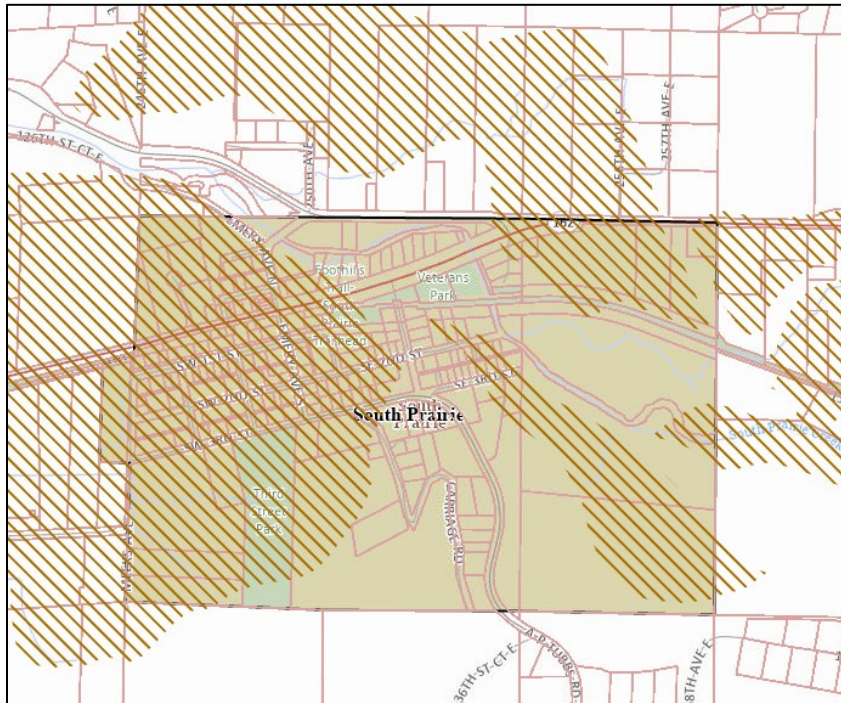
Town of South Prairie Steep Slope Areas



Town of South Prairie Topography Map



Town of South Prairie Potential Seismic Hazards



Potential Seismic Hazards based on hydric soils (liquefaction risk)

Seismic Hazard Areas

Seismic hazard areas include areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, soil liquefaction, or surface faulting. One indicator of potential for future earthquake damage is a record of earthquake damage in the past. In Washington, ground shaking is the primary cause of earthquake damage, and the strength of ground shaking is primarily affected by:

- The magnitude of an earthquake.
- The distance from the source of an earthquake.
- The type of thickness of geologic materials at the surface.
- The type of subsurface geologic structure.

Settlement and soil liquefaction conditions occur in areas underlain by cohesion-less soil of low density, typically in association with a shallow ground water table.

Geologically hazardous areas in and around the Town of South Prairie are shown on the map on the prior page. South Prairie's critical areas regulations with respect to landslide hazard areas detail the specific studies and performance standards necessary to protect the public health, safety and welfare.

Erosion Hazard Areas

Geologically hazardous erosion, such as those areas with high probability of streambank erosion as well as channel migration areas, should be designated as critical areas. Erosion hazard areas may also include those areas identified by the U.S. Department of Agriculture Natural Resources Conservation Service as having a "severe" rill (a rill is a long narrow trench or valley) and inter-rill erosion hazard.

Landslide Hazard Areas

Landslide hazard areas are potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. Landslide hazard areas include any areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. Examples of these areas may include, but are not limited to the following:

- Areas of historic failures, such as those areas delineated by the U.S. Department of Agriculture Natural Resources Conservation Service as having a "severe" limitation for building site development; or areas designated as quaternary slumps, earth flows, mudflows, lahars, or landslides on maps published by the U.S. Geological Surveyor Washington State Department of Natural Resources Division of Geology and Earth Resources.
- Areas with all three of the following characteristics:
 - Slopes steeper than 15 percent.
 - Hillsides intersecting geologic contacts with relatively permeable sediment overlying a relatively impermeable sediment or bedrock.
 - Springs or ground water seepage.
- Areas that have shown movement during the ice age (from 10,000 years ago to the present) or which are underlain or covered by mass wastage debris of that epoch.
- Slopes that are parallel or sub parallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials.
- Slopes having gradients steeper than 80 percent subject to rock fall during seismic shaking.
- Areas potentially unstable as a result of rapid stream incision, and/or stream bank erosion.
- Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding.

- Any area with a slope of 40 percent or steeper and with a vertical relief of ten or more feet except areas composed of consolidated rock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least ten feet of vertical relief.

Geologically Hazardous Areas Goals and Policies

The following goals and policies, if implemented, will result in the protection of geologically hazardous areas.

11. Protect life and property in geologically hazardous areas and special flood hazard areas. Geologically hazardous areas include landslide, erosion, seismic, and volcanic hazard areas.

Note: This goal and related policies have been updated to match the terminology of WAC 365-190-120.

- 11.1 Work with other agencies to develop and implement inclusive public education and notification systems related to geologically hazardous areas.
- 11.2 In conjunction with other agencies, including Pierce County, school districts, and the Buckley Fire Department, implement an emergency notification system and evacuation plan to provide early warning of impending disasters. As necessitated by new development, the system and plan shall be periodically revised.
- 11.3 Use title and plat notices for new development to inform current and future property owners of potential risk from applicable geologically hazardous areas and special flood hazard areas.
- 11.4 In conjunction with Pierce County, the federal government, the Red Cross, and other applicable agencies, educate the general public about the risks associated with geologically hazardous areas and special flood hazard areas and methods to reduce risk.
- 11.5 Create a disaster resistant and resilient community through proper design of critical facilities, inclusive public education of the public, and land use planning.
- 11.6 Emergency notification systems and evacuation plans should consider the diverse needs of the population to address accessibility, access to technology, and language.
- 11.7 Take measures to reduce risk and hazard from volcanic hazards off Mount Rainier.
- 11.8 Take measures to reduce risk and hazard from earthquakes (seismic hazards) and associated effects through disaster preparedness and public education, and facility design.

- 11.9 Take measures to protect hillsides and hillside development from landslides or other geologic hazards and the impacts associated with building on steep slopes.
- 11.10 Take measures to reduce erosion and other geologic hazards in all areas, particularly in areas with high risk of erosion, and the associated impacts.
- 11.11 Implement land use and environmental regulations with flexibility to include protecting geologically hazardous areas.

Fish and Wildlife Habitat Conservation

Fish Habitat Areas

The designated Fish Habitat Conservation Area in the vicinity of the Town of South Prairie are shown on the map on the following page. Most of the Fish and Habitat Conservation Areas are outside of the town boundaries except for Fish Habitat in the creek. South Prairie Creek is home to Chinook, Coho and Chum/Pink Salmon, Bull Trout, Steelhead Trout and Reticulate Sculpin. All of these fish are federally listed as Threatened or Candidates for Endangered Species designation. The nearby Carbon River has been identified by the Washington State Fish and Wildlife Department as containing Chinook, Coho, Steelhead and Chum Salmon. Chinook salmon is a federally listed species under the Endangered Species Act (ESA):

Wildlife Habitat Areas

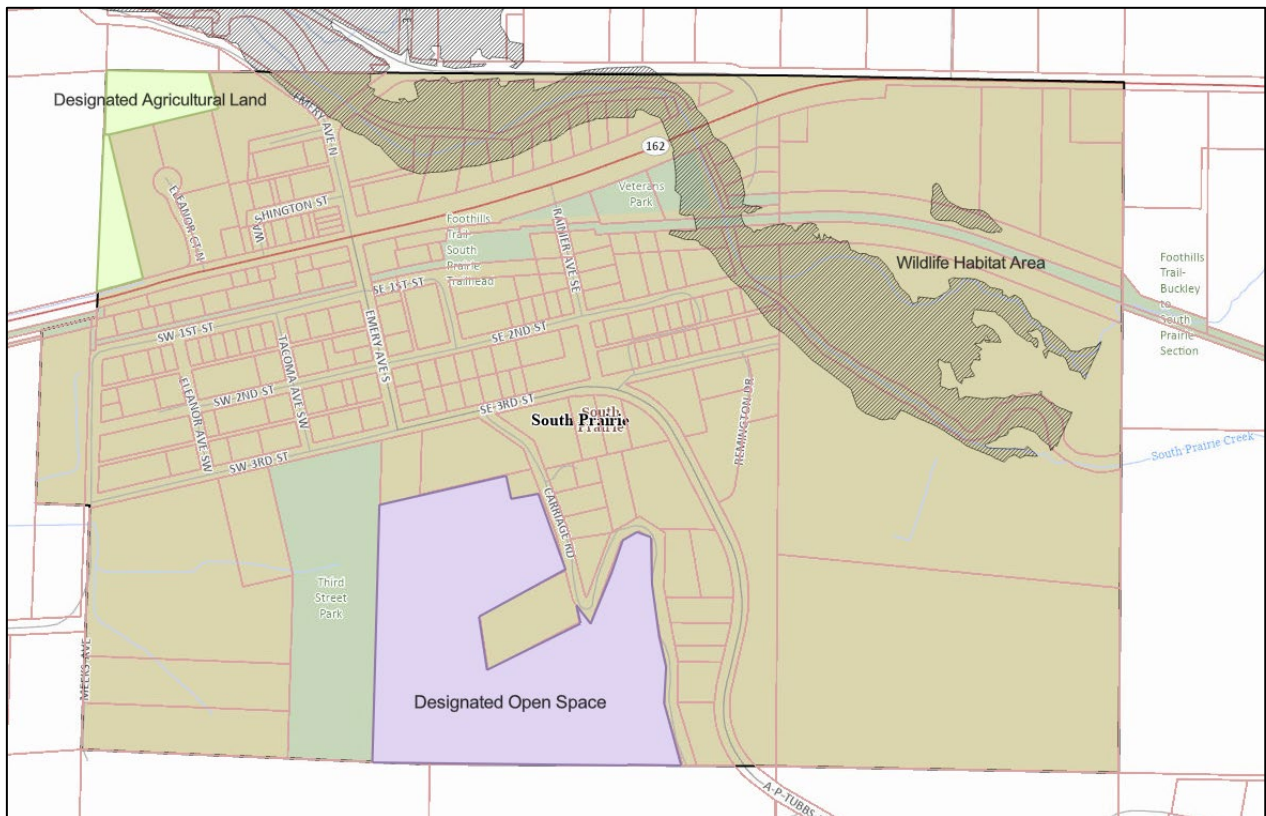
Wildlife habitat can be described as a geographic area containing the necessary combination of food, water and protective cover for the survival and propagation of a species of animal. Habitats differ between species but are closely related to plant communities. A single plant community such as a wetland, for example, may provide all the necessary habitat requirements for certain small mammals or amphibians. Larger mammals may require more than one plant community to complete their habitat, such as forest cover and wetland for food and water.

Fish and Wildlife Habitat Conservation Areas Goals and Policies

The following goals and policies, if implemented, will result in the protection of fish and wildlife habitat conservation areas.

- 1. Protect and enhance unique, valuable, and critical plant, fish and wildlife habitat conservation areas and promote biodiversity.**
 - 1.1 Implement regulations and programs to protect unique, valuable and critical plant, fish and wildlife habitat conservation areas, including flexible design standards.
 - 1.2 Protect shorelines, fish and wildlife habitat conservation areas, and wetlands through appropriate regulations, acquisition, and non-regulatory policies such as education, stewardship, density credits, restoration, etc.
 - 1.3 Develop an urban forestry strategy to encourage the planting of trees on public and private property.

- 1.4 Within the urban forestry strategy develop specific standards for planting of public trees such as minimum size, type, minimum soil conditions, and maintenance requirements.
- 1.5 Incorporate climate resilience strategies into the Town's urban forest management, such as increasing townwide species diversity, native or climate resilient species, and increasing tree planting in areas with low canopy cover.
- 1.6 Protect forested hillside areas which provide environmental benefits, such as slope stability, wildlife habitat, water filtration and attenuation (slow release), from the impacts of development.
- 1.7 Give priority to conservation and protection measures that preserve and enhance areas where anadromous fisheries and endangered, threatened, and sensitive species have a primary association.
- 1.8 Allow for the clustering of development at higher densities on a portion of a property when preserving fish and wildlife habitat conservation areas or wetlands on site.



South Prairie Fish and Wildlife Habitat and Conservation Areas

Chapter 4 Housing Element

Organization of the Housing Element

The Growth Management Act (GMA) requires consideration of housing needs through the State Planning Goals and through the requirements for a housing element. Housing Elements are required to recognize the vitality of existing neighborhoods, inventory existing and projected housing needs, identify sufficient land for a variety of housing types and needs, and make adequate provisions for the existing and projected needs for all economic segments of the community.

This housing element contains the following sections:

- Planning Requirements
- Housing inventory
- Household characteristics
- Housing costs
- Affordability
- Analysis
- Goals and policies

Planning Requirements

Washington State Growth Management Act

The Washington State Growth Management Act mandates that counties and cities encourage the availability of affordable housing to all economic segments of the population, promote a variety of residential densities and housing types, and encourage preservation of the existing housing stock (RCW 36.70A.020(4)). The Washington State legislature passed House Bill 1220 in 2021, which requires that jurisdictions plan to accommodate, and provide adequate provisions for, housing unit needs for extremely low-, very low-, low-, and moderate-income levels. The amendment also requires jurisdictions to identify local policies that result in racially disparate impacts, displacement, and exclusion, and then implement policies and regulations to undo them.

The term “affordable housing” is defined in RCW 36.70A.030(2) as, unless the context clearly indicates otherwise, residential housing whose monthly cost, including utilities other than telephone, do not exceed thirty percent of the monthly income of a household whose income is:

- For rental housing, 60 percent of the median household income adjusted for household size, for the county where the household is located, as reported by the United States Department of Housing and Urban Development (HUD); or
- For owner-occupied housing, 80 percent of the median household income adjusted for household size, for the county where the household is located as reported by HUD.

The GMA requires the adoption of countywide planning policies for affordable housing in order to establish a consistent county-wide framework from which county and city comprehensive plans are developed and adopted. These policies are required to, at a minimum, “*consider the need for affordable housing, such as housing for all economic segments of the population and parameters for its distribution*” (RCW 36.70A.210(3)(e)).

The GMA also identifies mandatory and optional plan elements. (RCW 36.70A.070 and .080). A Housing Element is a mandatory plan element that must, at a minimum, include the following (RCW 36.70A.070(2)):

- An inventory and analysis of existing and projected housing needs that identifies the number of housing units by income level necessary to manage projected growth, including permanent supportive and emergency housing,
- A statement of goals, policies and objectives, and mandatory provisions for the preservation, improvement and development of housing, including single-family residences.
- Identification of sufficient land for housing, including, but not limited to, government assisted housing, housing for low-income families, manufactured housing, multi-family housing, group homes, and foster care facilities; and
- Adequate provisions for existing and projected housing needs of all economic segments of the community.

Comprehensive Plans must be internally consistent documents (RCW 36.70A.070), meaning all plan elements must be consistent with the future land use map prepared as part of the required Land Use Element (RCW 36.70A.070). These other constraints such as utility and capital facilities availability, environmental constraints from wetlands, shorelines, slopes and other critical areas, and the availability of a variety of motorized and non-motorized transportation facilities all have bearing on the feasibility of housing types, locations, and price points. As described in Chapter 2 Land Use Element, South Prairie participated in the Pierce County Buildable Lands Program (RCW 36.70A.215) and will strive to meet the population, housing unit and employment goals as set out for South Prairie by that program and as adopted by the County (Pierce County Ordinance No. 2022-46s).

Recent state legislation calls for cities above 25,000 persons to expand middle housing allowances in single-family residential zones (HB 1110). Cities below 25,000 persons must permit duplex units within all residential zones. South Prairie's code already permits duplexes in the residential and commercial zones (CMC 17.04.010 and 17.04.040). South Prairie has already updated its accessory dwelling unit code to comply with HB 1337 which permits up to two accessory dwelling units per lot, provides for a minimum size of 1000sf, removes limitations on owner occupation, and sets parking requirements. Lots with critical areas or their buffers are exempt from the requirements of both HB 1110 and HB 1337.

VISION 2050 Multicounty Planning Policies (MPPs)

VISION 2050 recognizes that to meet the demands of a growing and changing population in the central Puget Sound, the region needs to develop vibrant communities that offer a diverse and well-distributed mix of homes affordable to both owners and renters in every demographic and income group. VISION 2050 encourages housing production that will meet the region's needs and places a major emphasis on providing residences that are safe and healthy, attractive, and close to jobs, shopping, and other amenities. The Multicounty Planning Policies respond to changing demographics and the need to diversify the region's housing supply.

The MPPs address:

- 1) housing diversity and affordability,

- 2) jobs-housing balance, and
- 3) best practices for home construction.

VISION 2050 offers 12 policies related to housing under the goal of preserving, improving, and expanding the housing stock to provide a range of affordable, accessible, healthy, and safe housing choices for every resident including fair and equal access to housing for all people. These Multicounty Planning Policies place an emphasis on preserving and expanding housing affordability, incorporating quality and environmentally responsible design in homebuilding, and offering healthy and safe home choices for all the region's residents.

Pierce County Planning Policies (CPPs)

Pierce County updated its Countywide Planning Policies (CPPs) in 2022 (Pierce County Ordinance No. 2022-46s). The major focus of the CPPs with respect to housing is compliance with the GMA, specifically with respect to affordable housing. The following are CPPs related to Affordable Housing?

- AH-1: Explore and identify opportunities to reutilize and redevelop existing parcels where rehabilitation of the buildings is not cost-effective, provided the same is consistent with the countywide policy on historic, archaeological, and cultural preservation and with Policy AH-8 regarding displacement.
- AH-2: Plan to meet their affordable and moderate-income housing needs goals by utilizing a range of strategies that may include a Housing Action Plan and will result in the preservation of existing housing, and the production of new, affordable and moderate-income housing that is safe and healthy.
 - 2.1: Jurisdictions should consider adopting reasonable measures and innovative techniques (e.g., moderate density housing, clustering, accessory dwelling units, cottage housing, small lots, planned urban developments, and mixed use) to stimulate new higher- density affordable and moderate-income housing stock on residentially zoned vacant and underutilized parcels.
- AH-3: Determine the extent of the need for housing for all economic segments of the population, with special attention paid to the historically underserved, both existing and projected, over the planning period, and shall encourage the availability of housing affordable to all economic segments of the population.
 - 3.1: Affordable housing needs not typically met by the private housing market should be addressed through more coordinated countywide and regional approaches/strategies.
 - 3.2: Each jurisdiction may adopt plans and policies for meeting its affordable and moderate income housing needs in a manner that reflects its unique demographic characteristics, comprehensive plan vision and policies, development and infrastructure capacity, location and proximity to job centers, local workforce, and access to transportation.

3.3: Each jurisdiction should plan to accommodate a sufficient supply of permanent supportive housing as defined in RCW 36.70A.030(16), foster care housing, and those requiring special needs housing (i.e., the elderly, developmentally disabled, chronically mentally ill, physically disabled, homeless, persons participating in substance abuse programs, persons with AIDS, and victims of domestic violence) that is equitably and rationally distributed throughout the County.

AH-4: Establish a countywide housing affordability program by an organization capable of long-term consistent coordination of regional housing planning, design, development, funding, and housing management. All jurisdictions should cooperatively maximize available funding opportunities and leverage private resources in the development of affordable housing for households.

4.1: All jurisdictions should jointly explore opportunities to develop a countywide funding mechanism and the potential for both voter-approved measures (bond or levy), and nonvoter-approved sources to revenue to support the development of housing affordable to all economic segments.

4.2: All jurisdictions should jointly pursue state legislative changes to give local jurisdictions the authority to provide tax relief to developers of affordable housing.

4.3: All jurisdictions should jointly pursue state legislative changes to give local jurisdictions the authority to provide tax relief to developers of affordable projects.

4.4: All jurisdictions should explore the expansion of existing non-profit partnerships, increased coordination with local public housing authorities, a county-wide land trust, as well as future involvement of larger County employers, in the provision of housing assistance for their workers.

4.5: Jurisdiction should evaluate inclusionary or incentive zoning measures as a condition of major rezones and development.

4.6: New fully contained communities- in unincorporated Pierce County shall contain a mix of dwelling units to provide for the affordable and moderate-income housing needs that will be created as a result of the development.

AH-5: Explore and identify opportunities to reduce land costs for non-profit and for-profit developers to build affordable housing.

5.1: Jurisdictions should explore options to dedicate or make available below-market-rate surplus land and also identify opportunities to assemble, reutilize, and redevelop existing parcels for affordable housing projects.

5.2: All jurisdictions should review and streamline development standards and regulations to advance their public benefit, provide flexibility, and minimize costs to housing.

AH-6: Jurisdictions shall periodically monitor and assess their success in meeting the housing needs to accommodate its 20-year population allocation.

6.1: Jurisdictions should utilize the available data and analyses provided by federal, state, and local sources to monitor their progress in meeting housing demand as part of the required Growth Management Act comprehensive plan update process.

- 6.2: Countywide housing allocations shall be monitored with each Buildable Lands Report and evaluated to determine if countywide needs are being adequately met; the evaluation should identify all regulatory, programmatic, and financial measures taken to address the allocation need.
 - 6.2.1: Each jurisdiction should provide, if available, the quantity of affordable housing units created, preserved, or rehabilitated since the previous Buildable Lands Report.
 - 6.2.2: Jurisdictions should consider using a consistent reporting template for their evaluations to facilitate the countywide monitoring and assessment.
 - 6.2.3: In conjunction with the Buildable Lands Report, a report should be forwarded from GMCC to the Pierce County Regional Council (PCRC) addressing the progress in developing new affordable housing.
- AH-7: Support and encourage homeownership opportunities for low-income, moderate-income, and middle-income families and individuals while recognizing historic inequities in access to homeownership opportunities for communities of color.
- AH-8: Jurisdictions should identify potential physical, economic, and cultural displacement of low-income households and marginalized populations that may result from planning, public investments, private redevelopment, and market pressure, and use a range of strategies to prevent and minimize, the cultural and physical displacement and mitigate its impacts to the extent feasible.

Housing Inventory

The GMA requires the Housing Element to include an inventory to “identify sufficient capacity of land for housing including, but not limited to, government-assisted housing, housing for moderate, low, very low, and extremely low-income households, manufactured housing, multifamily housing, group homes, foster care facilities, emergency housing, emergency shelters, permanent supportive housing, and within an urban growth area boundary, consideration of duplexes, triplexes, and townhomes”. (RCW 36.70A.070(2)(c)).

This section identifies how much land is currently available for residential development in South Prairie. It demonstrates how the Town will meet the 2044 population and housing unit allocations assigned to South Prairie by the Pierce County Council for GMA planning purposes. It also summarizes the range of housing types supported by Plan provisions.

Residential Land Capacity

Pursuant to Pierce County Ordinance No. 2022-46s, the Pierce County Council has established population, housing unit, and employment targets for the year 2044 consistent with state and regional requirements and local considerations. The adopted targets for South Prairie are summarized in the table on the following page.

GMA Population, Housing Unit and Employment Targets			
Population	Estimated 2020 Census Population	2020-2044 Population Growth	2044 Total Population Allocation
	373	39	412
Housing Unit	Estimated 2020 Census Housing Units	2020-2044 Housing Unit Growth	2044 Total Housing Unit Allocation
	149	13	162
Employment	2020 Total Employment Estimate	2020-2044 Total Employment Growth	2044 Total Employment Target
	80	10	90

The Town must demonstrate it can accommodate this growth during this planning horizon by identifying that it has enough developable land zoned at sufficiently high enough densities and intensities to be able to achieve these targets.

The Buildable Lands Report states that the current residential land capacity is an additional 73 units, based on an assumed density of four units per acre for the Town’s Residential (R). These assumed densities are based on the observed residential density in comparison with the permitted density. As there were only three residential permits issued in South Prairie from 2013 to 2020, there is little development trend to analyze. The growth target for housing is 13 new housing units by 2044. The calculated capacity for housing growth is 73 units.

As shown on the table below from the County’s 2022 Buildable Lands Report, Pierce County assumed there is no capacity for residential in the Town’s Commercial zone (SPMC 17.04.040). No mention was made of the Town’s Planned Unit Development Code (WMC 17.03.060). The Commercial zone allows for single family, multi-family, assisted living and transitional housing with no dwelling unit/acre density maximums. Under RCW 43.21C.450, and chapters 35A.21, 35.21 and 19.27A RCW, any of the existing commercial buildings in the Commercial can be retrofitted for residential use and in fact a commercial building was retrofitted to contain three residential units and a commercial unit during the planning period. Additionally, South Prairie’s existing PUD code allows for residential or mixed use with an allowable density bonus of 20%. South Prairie has already adopted the new Accessory Dwelling Unit codes (RCW 36.70A.681) and conforms to the Missing Middle Housing requirements of at allowing a duplex in every residentially zoned lot (RCW 36.70A.635(1)(c)).

Table 19-4: Town of South Prairie Assumptions Summary

Zone	Residential		Employment		Residential Market Factor		Non-Residential Market Factor		Land for Capital Facilities
	Percent	Density	Percent	Density	Vacant	Underutilized	Vacant	Underutilized	
AGB	0%	0	100%	20	0%	0%	10%	50%	0%
C	0%	0	100%	20	0%	0%	10%	50%	0%
GOV	0%	0	100%	20	0%	0%	10%	50%	0%
IND	0%	0	100%	9	0%	0%	10%	50%	0%
R	100%	4	0%	20	25%	25%	0%	0%	0%
R/CUP	100%	4	0%	20	25%	25%	0%	0%	0%

Table 19-8: Town of South Prairie 2020-2044 Housing Capacity (Dwelling Units)

Zone	Vacant	Underutilized	Vacant Single Unit	Pipeline	Total
AGB	0	-1	0	0	-1
C	0	-1	0	0	-1
GOV	0	0	0	0	0
IND	0	0	0	0	0
R	17	34	20	0	71
R/CUP	0	4	0	0	4
Total	17	36	20	0	73

Population Discrepancy

According to the US Census, the population of the Town of South Prairie in 2020 was 373 residents. A major omission of the US Census is the South Prairie RV Park. The RV Park currently contains 180 units but is approved for up to 250 units. The Census fails to recognize the majority of the residents of the RV Park are not transient. This RV Park is the permanent, full-time home to 128 RV trailers with varying household sizes.³ The Town has been providing water to the park since the original 1989 Development Agreement. An amended Development Agreement was enacted in 1994. Specifically, under the Development Agreement, Sections 16(c)(1) and 16(f), RVs in the park are defined as single-family residences and connected to the Town water system. Section 16(p) establishes that there is no length of stay requirement for the 93 spaces then existing in 1994 plus no length of stay requirement for anyone 55 years and older.

The Washington State Office of Financial Management has recently updated its population figures to reflect the presence of the RV Park Residents. Whereas the 2020 US Census estimated 373 residents, the OFM figures for 2023 is 645 residents. The US Census is undercounting South Prairie’s population by 42%! These residents of South Prairie are not accounted for in the federal system whatsoever. Given that South Prairie’s population is 645 residents, South Prairie has already exceeded the 2044 population target of 412 residents by 233 people (57%).

Pierce County has assigned South Prairie a housing target of 162 total units for 2044. According to the US Census Bureau, the Town had a total of 149 housing units in 2020. However, the Census

³ As per the South Prairie RV Park Development Agreement 1989, Amended 1994 via South Prairie Resolution 151.

failed to count the 128 RV units that are occupied permanently, by legal prescription as single-family units, in the RV Park. Conservatively, South Prairie currently has 277 housing units which exceeds the 2044 housing unit target by 71%. Even if the RV are considered half an equivalent residential unit, though that is unreasonable given they have sleeping quarters, kitchen facilities and bathroom facilities equal to any studio apartment, the RV county would be 64 units. In either case, the 2044 housing target for South Prairie is already met.

Number and Type of Existing Dwellings

The predominant housing type in South Prairie is recreational vehicles followed by detached single-family dwelling. In 2022 there were no multi-family dwellings or group living facilities within South Prairie or its UGA. The following table shows the number of residential dwellings and their types for South Prairie and its UGA according to the 2023 Washington State Office of Financial Management Forecasting and Research Division.

Area	Detached Single Family	Attached Single Family	Mobile Home or RV	Total
Dwelling units in South Prairie's current corporate boundaries	131	0	141	272
Dwelling Units in UGA	2	0	0	2
Total	133	0	141	274

Future Housing Types and Intensities

This Comprehensive Plan supports increased choice and development of additional housing types, including:

- Attached and detached accessory dwelling units to the extent permitted under state law (2 ADU plus the principal dwelling unit) pursuant to RCW 36.70A.635(1)(c), RCW 36.70A.681 and SPMC 17.08.060;
- Multifamily dwelling units in the Commercial zone with no density maximum (SPMC 17.04.040);
- Assisted living facilities, small group homes residential care facilities, residential treatment facilities, and retirement homes (SPMC 17.04.040); and
- Up to an additional 70 residential RV units for senior living.

Condition of Housing Stock

Housing in South Prairie and its UGA ranges from relatively new to over 80 years in age. For stick-built structures, which represent less than half of South Prairie’s housing stock, about a quarter were built prior to 1940. Approximately 43% were built from 1980-1999, South Prairie’s most recent building boom. Only 11 homes were built between 2000 and 2020. Though the population of the RV Park has held steady, South Prairie overall has lost population since 2000.

Household Characteristics

Housing Size and Type

The table below shows the types of households in South Prairie in 2020 based on the US Census, which means that it only covers those households outside the RV Park. There are more dwelling units inside the park than outside of it within the Town boundaries. Over 68 percent of households were family groups of two or more members. Nonfamily households, which include households with people living alone and households that do not have any members related to the householder, comprise the remainder. South Prairie's average household size in 2020 outside of the RV park was 2.58 members, which is the same as the County's average of 2.58.

HOUSEHOLD TYPES

Type	Number	Percent
Total households	115	100.0
Family households	78	67.8
Nonfamily households	37	32.1
Households with individuals under 18 years	25	21.7
Households with individuals 60 years and older	40	34.8
Average household size	2.58	N/A
Average family size	3.09	N/A

Source: U.S. Census Bureau 2020

Owners, Renters and Vacancies

The table below is based on the 2020 US Census and therefore only depicts those households outside of the South Prairie RV Park where most of South's Prairie's households reside. Almost 94 percent of South Prairie's dwellings were occupied by owners in 2020. Research from a variety of sources has indicated that high home ownership ratios increase neighborhood stability. The 2020 American Community Survey found that the median length of residence for homeowners in their current homes is 18 years while for tenants this figure was fewer than two years. The analysis of Census data similarly indicates less residential mobility and greater property value appreciation in areas with greater homeownership (Rohe and Stewart, 1996). On the one hand, the neighborhood and community are more stable, but on the other, it contributes to a lack of housing opportunity and affordability. In 2020, South Prairie had a high number of vacant units at 12.2 percent, which may reflect the condition of housing units overall given the tight real estate market as shown by the complete lack of vacancy by tenure. There are no vacancies in the RV Park which holds 128 owner occupied housing units.

OWNERS, RENTERS AND VACANCIES

Type	Number	Percent
Total housing units	131	100.0
Occupied housing units	115	87.8
Vacant housing unit	16	12.2
Homeowner vacancy rate	0	0
Rental vacancy rate	0	0
Owner occupied housing units	108	93.9

Affordability

Housing Costs

The table below identifies that in 2020, South Prairie had a median house value of \$256,500 and a median selected monthly owner cost of \$1,693. Of those households with a mortgage, nearly a quarter (24%) are cost burdened with monthly housing costs exceeding 30% of household income. This table does not account for residents living in RVs within the RV Park.

HOUSING VALUES, COSTS AND AFFORDABILITY

Value	Number	Percent
Less than \$50,000	12	11.1
\$50,000 to \$99,999	0	0
\$100,000 to \$149,999	11	6.5
\$200,000 to \$299,999	44	10.2
\$300,000 to \$499,999	34	31.5
\$500,000+	0	0
Median (dollars)	\$264,500	
Selected monthly owner costs for units with a mortgage		
Housing Units with a Mortgage	75	69.4
Less than \$500	7	9.3
\$500 to \$999	0	0
\$1,000 to \$1,499	22	29.3
\$1,500 to \$1,999	23	30.7
\$2,000 to \$2,499	9	12.0
\$2,500 to \$2,999	14	18.7
\$3,000 or more	0	0
Median (dollars)	\$1,693	

Source: U.S. Census Bureau 2020

Cost of Rental Units

In 2020, South Prairie only seven rental units providing an alternative to owner-occupied housing. Permanent residents in the RV Park are likely all owners as the park doesn't own any units for long term rental. Reported rents ranged from \$500-\$1,499. Three of the renters (42.9%) reported rent between \$500 and 999. The remaining four renters (57.1%) reported rents of \$1,000-\$1,499. The same percentage (57.1%) reported paying rent representing 30-34.9% of their household income, and therefore being cost burdened for housing.

Housing All Segments of Society

In 2021, HB 1220 changed the GMA to require municipalities to plan to house all segments of society, from no income to above area median income. Specifically, South Prairie must identify sufficient land for housing including, but not limited to, government-assisted housing, housing for low-income families, manufactured housing, multifamily housing, group homes and foster care facilities. These dwelling units must make adequate provisions for existing and projected housing needs of all economic segments of the community (WAC 365-196-410(1) and (2)(e)). This housing needs analysis further defines the targets in the Pierce County Buildable Lands Report to not only say how much housing is necessary, but what types. In order to support this effort, the Washington State Department of Commerce created a Housing All Planning Tool (HAPT) that gives a rough breakdown of the types of housing necessary by income for each municipality based on the County's overall growth projections. The table below shows the type and quantity of affordable housing South Prairie should strive to provide in by 2044. PSH stands for permanent supportive housing. AMI stands for Area Median Income. The chart was created using HAPT Allocation B methodology based on Wilkeson's percentage of County population growth 2020-2044.

This chart is based on allocated share of the County's projected population growth. It does not consider the flawed Census data regarding the majority of South Prairie's population, i.e. the residents of the South Prairie RV Park. There is no income data for this segment of South Prairie's population. We acknowledge that these residents are likely to be on the lower end of the income spectrum but do not currently have the data to say where they fit within the graph below, if anywhere given they weren't accounted for in the creation of this table. Without official acknowledgement of their existence, South Prairie is unable to receive low-income loans or grant assistance to provide services to this population. Since 2023, the Town of South Prairie has been working with the Rural Community Assistance Corporation, a 501(c)(3) nonprofit organization that operates in 13 western states and Pacific islands. They serve Indigenous and rural communities through training, technical and financial assistance and advocacy. RCAC has been surveying the RV Park residents to determine their household characteristics and income profile. The Town hopes to use this information to convince the US Census Bureau to acknowledge the missing half of our community. We also expect to find that we have already accommodated our required population in the 0-50% AMI brackets.

HOUSING NEEDED FOR ALL SEGMENTS OF SOCIETY 2020-2044

	Total	0-30% AMI		>30-50% AMI	>50-80% AMI	>80-100% AMI	>100-120% AMI	>120% AMI	Emergency Housing Needs (Beds)
		Non-PSH	PSH						
Estimated Supply (2020)	149	0	0	12	58	47	14	19	0
Allocation (2020-2044)	14	8	7	8	-14	-20	4	20	3

Maintenance Costs

South Prairie has a large proportion of existing homes that are aging; hence, maintenance and repair costs will figure significantly among the housing costs incurred by residents in the future. Because South Prairie has a large proportion of homeowners, it is likely that many residents will be aging along with their dwellings. The reduction in income associated with becoming elderly will have an impact on home maintenance in South Prairie. This issue is magnified for the residents of the RV Park because RVs are not made for long term residences and have different maintenance issues and requirements.

A constructive response to housing maintenance and repair, or in the case of RVs replacement, needs may be the single most important factor through which South Prairie can ensure continued housing adequacy at a reasonable cost for South Prairie's current generations and future generations. This comprehensive plan includes policies that facilitate the maintenance necessary to retain existing housing stock for the benefit of current and future generations.

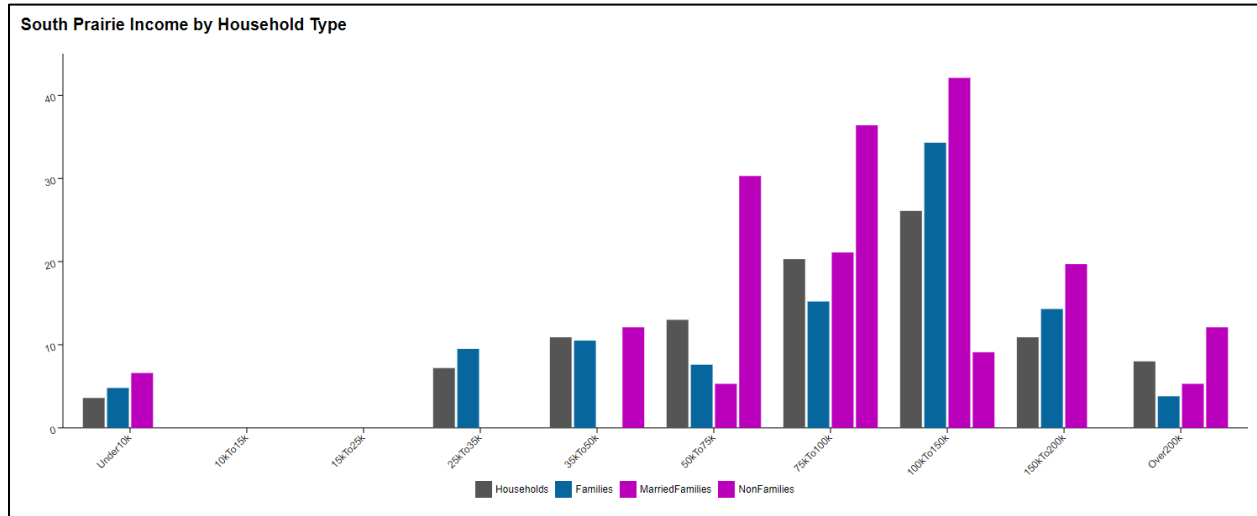
Households in Need

A household is generally defined to be living in housing affordable *to that household* if it is paying no more than 30 percent of its gross income on housing costs, including utilities. This definition treats all households equally, regardless of income level. Hence, a household with a gross income of \$150,000 per year that is spending \$50,000 on housing costs is living in "unaffordable" housing. The housing issues for such a household differ significantly from those of a household with a gross income of \$15,000 per year and spending \$5,000 on housing costs.

The 2020 US Census notes the poverty rate in South Prairie outside of the RV Park (which was not considered) is fairly low at 3.97% of households. The median household income outside the RV Park was \$94,167 with an average of \$107,542 per annum. Both the median and mean household incomes are well above the Pierce County Median Household Income.

As noted in the housing affordability tables above, about 24% of homeowners in traditional stick-built housing in South Prairie who have mortgages (representing about 70% of households according to the U.S. Census in 2020) are spending more than 30 percent of gross income on housing costs. About 57 percent of renters in South Prairie are spending more than 30 percent of gross income on housing, though this only represents a small sample size, four of seven total

rental households. Clearly, a gap exists between average ownership costs or rents and the ability of many households in South Prairie to cover these expenditures without being cost-burdened.



Affordability and Community Character

Without knowing the income characteristics of the residents of the RV Park, which comprise the bulk of South Prairie’s population, it’s difficult to ascertain where South Prairie falls on the affordability scale, especially with respect to the GMA requirements. As noted above, the Town has been working with the Rural Community Assistance Corporation on surveying the RV Park residents to determine their household characteristics and income profiles. For the remainder of the town, the predominantly single-family residential character of the community, and home ownership and demographic patterns, preclude simple answers to housing problems. The community’s adopted Vision Statement does, however, express support for expanding the types of housing beyond detached single-family dwellings to help meet future housing needs. As demonstrated by the RV Park, South Prairie has had a commitment to affordable housing since at least 1994 when the park was approved. Currently, 128 RVs are permanently occupied. Affordable housing policies developed for the comprehensive plan must, at a minimum:

- Meet the unique needs of South Prairie residents now and in the future,
- Preserve or improve neighborhood character, and
- Contribute to the overall quality of life of the entire community.

To ensure neighborhoods continue to meet the expectations of residents, issues must be addressed concerning home ownership versus renting, the appropriate mix of single family and other types of dwellings, the simultaneous aging of South Prairie’s population and housing stock and rapidly increasing housing costs across the region.

Analysis

South Prairie is particularly challenged in several ways. The Town is remote with no access to transit. The Town’s sewer system is already over capacity. (See Chapter 7 Utilities Element.) Despite the Town’s continuing efforts to increase the efficiency of its sewer treatment and to encourage efficient usage, no new equivalent residential units of sewer are available without septic systems being installed. The likelihood is that no significant number of new sewer connections

will become available and that even the provision of accessory dwelling units might be very challenging. Reducing lot sizes for zoning purposes cannot spur development without sewer or septic. All new development must be large lot developments with at least one acre of land for new septic to be installed, which is true even in the RV Park.

Another challenge is there are little to no employers in town so anyone without vehicular access must work inside the town either in a small-scale enterprise servicing the other residences (coffee shop, gas station, farm, daycare, lawn care, dog walking, housekeeping, or home health aide for example) or must work remotely in a home occupation. South Prairie contends if the permanent RV Park residences were officially counted, the Town will have already met its growth targets. The lack of sewer means that all lots new must be quite large to accommodate the new necessary septic drainfields which means there is limited opportunity for additional development.

Goals and Policies

The housing goals contained in this comprehensive plan are:

- Encouraging long-term residency,
- Accommodating households of many types,
- Accommodating households at all economic levels and demographics,
- Maintaining or improving neighborhood desirability, and
- Promoting resource-conserving neighborhoods

Detailed goal statements and associated policies follow in this section.

Goal 1: Encourage the Availability of Housing Affordable to All Economic Segments of the Population

To ensure that South Prairie can continue to accommodate households as their financial situations change over time, and to accommodate aging in place, South Prairie shall encourage a mix of housing opportunities that are suitable for households at all economic levels, including underserved populations. Housing mix should facilitate maintaining a supply of desirable housing for households with low to moderate incomes, particularly households making less than 30 percent of Area Median Income (AMI). To the extent practicable, South Prairie shall implement policies consistent with the Affordable Housing policies contained in the Pierce County Countywide Planning Policies.

Policies:

- 1.1 South Prairie should explore and identify opportunities to reutilize and redevelop existing parcels where rehabilitation of the buildings is not cost-effective, provided the same is consistent with the countywide policy on historic, archaeological, and cultural preservation – consistent with CPP AH-1.
- 1.2: South Prairie should meet the affordable and moderate-income housing goal by utilizing a range of strategies that may include a Housing Action Plan and will result in the preservation of existing, and production of new, affordable and moderate-income housing that is safe and healthy – consistent with CPP AH-2.
- 1.3: South Prairie should promote the use of reasonable measures and innovative techniques (e.g., moderate-density housing, clustering, accessory dwelling units, cottage housing,

- small lots, planned urban developments, and mixed use) to stimulate new higher-density affordable and moderate-income housing stock on residentially-zoned vacant and underutilized parcels while ensuring compatibility with South Prairie's community character – consistent with CPP AH-2.1.
- 1.4: South Prairie should determine the extent of the need for housing affordable to all economic segments of the population, particularly those historically underserved, both existing and project – consistent with CPP AH-3.
 - 1.5: South Prairie should encourage the development of housing that is affordable to low to moderate-income households in a manner that reflects its unique demographic characteristics, comprehensive plan vision and policies, development and infrastructure capacity, location and proximity to job centers, local workforce, and access to transportation – consistent with CPP AH-3.2.
 - 1.6: South Prairie should plan to accommodate a sufficient supply of permanent supportive housing as defined by the state, foster care housing, and those requiring special needs housing – consistent with CPP AH-3.3.
 - 1.7: South Prairie should support efforts by the County and other municipalities in the county to establish a countywide affordability program by an organization capable of long-term consistent coordination of regional housing planning, design, development, funding, and housing management. South Prairie should be represented in directing the work program and priorities of the organization to the extent feasible – consistent with CPP AH-4.
 - 1.8: South Prairie should jointly explore opportunities to develop a countywide funding mechanism and the potential for both voter-approved measures (bond or levy), and nonvoter-approved sources of revenue to support the development of housing affordable to all economic segments – consistent with CPP AH-4.1.
 - 1.9: South Prairie should jointly pursue state legislative changes to give local jurisdictions the authority to provide tax relief to developers of affordable housing – consistent with CPP AH-4.2.
 - 1.10: South Prairie should explore opportunities to dedicate revenues from sales of publicly owned properties, including tax title sales, to affordable housing projects – consistent with Affordable Housing Policy AH-4.3.
 - 1.11: South Prairie should explore the expansion of existing non-profit partnerships, increase coordination with local public housing authorities, a county-wide land trust, as well as future involvement of larger County employers, in the provision of housing assistance for their workers – consistent with CPP AH-4.4.
 - 1.12: South Prairie should seek and secure state funds such as the Housing Trust Fund, and federal subsidy funds such as Community Development Block Grant, HOME Investment Partnership, and other sources to implement housing preservation programs, when feasible.
 - 1.13: South Prairie should evaluate inclusionary zoning or incentive zoning measures as a condition of major rezones and development – consistent with CP AH-4.5.

- 1.14: South Prairie should explore and identify opportunities to reduce land costs for non-profit and for-profit developers to build affordable housing – consistent with CPP AH-5.
- 1.15: South Prairie should periodically monitor and assess its success in meeting the housing needs to accommodate its 20-year population allocation – consistent with CPP AH-6.
- 1.16: South Prairie should support and encourage homeownership opportunities for low-income, moderate-income, and middle-income families and individuals while recognizing historic inequities in access to homeownership opportunities for communities of color – consistent with CPP AH-7.
- 1.17: South Prairie should consider identifying potential physical, economic, and cultural displacement of low-income households and marginalized populations that may result from planning, public investments, private redevelopment, and market pressure, and use a range of strategies to prevent and minimize, the cultural and physical displacement and mitigate its impacts to the extent feasible – consistent with CPP AH-8.
- 1.18: South Prairie should take advantage of using volunteers; social service organizations; and county, state, and federal programs as much as possible when implementing policies that facilitate housing affordability for low- to moderate-income households.

Goal 2: Encourage Long Term Residency

To maintain neighborhood stability and a sense of community, existing households and their familial generations will be encouraged to remain in South Prairie.

Policies:

- 2.1 Facilitate stable succession of home ownership through familial generations by encouraging the development of accessory dwelling units that allow elderly homeowners to remain living on their established properties within proximity to younger households. Proposed units should harmonize with the scale of the existing neighborhood. The single-family character of the property should be retained through the use of design techniques including the use of landscaping and architectural elements that visually integrate the accessory dwelling unit with the main structure and limiting the amount of impervious pavement on the lot.
- 2.2: To increase home ownership opportunities, development and redevelopment of affordable owner-occupied units such as condominiums and manufactured modular homes (with full foundations) will be encouraged, as long as the units are compatible with the surrounding neighborhood.
- 2.3: 2.3 Households that are renting in South Prairie should be given consideration commensurate with households that own homes in South Prairie when making decisions related to land use, housing, quality of life, transportation, utilities, and capital facilities. Notification procedures concerning development and civic matters should include steps designed to reach rental households as well as property owners.

Goal 3: Accommodate Households of Many Types

To ensure that South Prairie can continue to accommodate households as their compositions change over time, South Prairie shall encourage the preservation and development of a variety of residential dwelling units that accommodate households of many types and at various income levels in a socially and economically integrated community.

Policies:

- 3.1 South Prairie will support housing that is affordable to all economic segments of the community throughout the Town, including government-assisted housing, housing for moderate, low, very low, and extremely low-income households, manufactured housing, permanent supportive housing, duplexes and townhomes, and those in need of transitional or emergency housing.
- 3.2: South Prairie shall encourage fair and equitable access to housing provisions for all households in accordance with the state and federal law.
- 3.3: Special needs housing, including, group homes, foster care facilities, assisted living facilities, residential care facilities, emergency housing, emergency shelters, permanent supportive housing and residential treatment facilities should be allowed in all residential areas, provided they are compatible with the scale of the surrounding neighborhood.
- 3.4: Allow retirement housing compatible with the scale of the surrounding neighborhood in all residential areas. The Town will encourage the development of retirement housing that provides a range of living styles and services from independent living to convalescent care. Retirement housing development that integrates services for elderly living at differing levels of independence will be especially encouraged. When siting retirement housing, the proximity of services shall be considered. The Town may consider reductions in parking requirements for those retirement facilities that offer transportation services to residents.

Goal 4: Maintain or Improve Neighborhood Desirability

South Prairie shall encourage the presence of desirable neighborhoods for households in all economic segments.

Policies:

- 4.1 Residential uses should be screened from incompatible commercial land uses and from principal arterial roadways (SR-165) by vegetative and open space buffering.
- 4.2: Single family neighborhoods should incorporate residentially oriented amenities such as neighborhood parks, shared open space, sidewalks and bike paths, street and overhead lighting, vegetative landscaping, and sidewalk benches.
- 4.3: Multifamily housing areas should incorporate residentially oriented amenities such as recreational facilities, sidewalks and bike paths, street and overhead lighting, vegetative landscaping, picnic areas, and shaded off-street parking sufficient to meet the needs of the population density planned for the area. In addition, private outdoor living space should be provided for each dwelling unit.

- 4.4: Implement zoning regulations, design standards, and guidelines, that complement and enhance existing neighborhoods without implementing barriers to the development of non-single family residential housing types.
- 4.5: When determining the suitability of a proposed site for the development or redevelopment of affordable housing, South Prairie should consider the site's proximity to public services that may be useful to households in need. The Town may require the developer to construct or fund appropriately located complementary facilities.
- 4.6: Support innovative housing types that facilitate achievement of affordability or energy efficiency, dedication of park land or open space, implementation of vegetative landscaping, or continuation of historic development patterns. Innovative designs should be compatible with the surrounding neighborhood.
- 4.7: Development regulations should support the stability of established residential neighborhoods and not unnecessarily restrict the development potential of unusual lots, nor implement barriers to the development of diverse housing types.
- 4.8: Ensure there are zoning ordinances and building policies in place that allow and encourage an increase in the housing supply attainable to households along the full range of income levels.
- 4.9: South Prairie should explore and facilitate opportunities for community volunteers and county programs that offer home repair and maintenance assistance for extremely low- to low-income households, elderly, and disabled householders with routine and emergency property maintenance and repairs.
- 4.10: South Prairie should encourage private reinvestment in older residential neighborhoods and private rehabilitation of housing by completing related public works projects and by keeping the streets, sidewalks, and other municipal systems in good repair.
- 4.11: Implement zoning regulations, design standards, and guidelines, that complement and enhance existing neighborhoods without implementing barriers to the development of non-single family residential housing types.

Goal 5: Promote Resource-Conserving Neighborhoods

South Prairie shall encourage the development of energy-efficient housing and neighborhoods and promote programs and rehabilitation that increase the energy efficiency of existing development.

Policies:

- 5.1: South Prairie should promote the use of weatherization programs in existing housing. Weatherization modifications should integrate harmoniously with the original architectural design of historic homes or other homes of architectural merit.
- 5.2: South Prairie should develop and maintain code provisions and incentives promoting energy and water conservation, and energy efficiency in building materials and site design.

- 5.3: Promote climate-friendly housing that minimizes energy and resource use throughout the construction and life of residential structures, and that is adaptable to a changing climate, including heat, flooding, air pollution and wildfire events.
- 5.4: Standards for residential housing design and orientation, streets, pedestrian and bicycle facilities, parking lots, and landscaping should include provisions for reducing the impacts of climate change and increase resilience. Structures should provide continuous shade on sidewalks, utilize cool roof strategies or green roofs to reduce costs for building cooling and heat-related impacts, and other building strategies to reduce heat loss in the winter and provide natural cooling or shade during the summer.
- 5.5: South Prairie should encourage private property owners to landscape with native or locally adapted plants that require a minimum of water and energy resources to thrive. Property owners should actively manage their land to prevent the proliferation of noxious weeds or the creation of nesting places for disease-carrying animals. Property owners should distinguish the difference between attentive cultivation of plants that are desirable in small town/urban areas, and the neglect of one's property.

Goal 6: US Census the South Prairie RV Park

South Prairie RV Park represents more than half of South Prairie's residents and yet is not recognized by the US Census Bureau. South Prairie will continue to work to get this unacknowledged and marginalized population recognized as permanent residents of the town.

Chapter 5 Parks, Recreation and Open Space Element

Introduction

The Parks, Recreation and Open Space Element serves as an expression of the community's goals, objectives, needs and priorities for recreation planning. In all communities, recreation provides an important personal, as well as social, outlet. Parks, recreation and open space facilities are common areas that South Prairie residents, as well as visitors, can enjoy. They provide places for exercise, sports, children's playgrounds, relaxation, and community gatherings. These areas also enhance the aesthetic qualities of the community. They serve as important community centers and are among the most heavily used and enjoyed places within South Prairie.



Playground at Veteran's Park

As with other facilities and services provided by the Town, parks, recreation and open space facilities must be planned to meet the changing demands that occur with growth and in the ways people use and experience active and passive open spaces. When the population increases, the demand placed upon existing

facilities may increase, as well. As such, parks, recreation and open space areas and facilities may need to be expanded to meet the growing needs. Adequate land must be set aside for these purposes, and capital funds must be made available to develop the facilities. This Element is intended to ensure that provisions will be made to prepare for future needs so that the citizens of South Prairie will continue to enjoy a high level of parks, recreation, and open space services into the future.

Organization of the Parks, Recreation, and Open Space Element

This Parks, Recreation and Open Space Element is divided into eight sections. The first section summarizes the intent for the element and the applicable planning requirements. The second section provides an inventory of existing facilities and proposed facilities. The third section describes the classification system for parks, recreation and open space facilities. The fourth section establishes level of service standards for the park categories described in the third section. The fifth section provides a needs assessment and identifies the extent to which current demand and projected needs for park and recreation facilities are, or will be, met based on current assumptions. The sixth section provides a summary of the public involvement. The seventh section is the Capital Facilities Plan. The final section provides Goals and Policies for managing parks, recreation and open space facilities.

Parks, Recreation, and Open Space Planning Requirements

Requirements of Growth Management Act

The provision of Open Space and Recreational amenities are goals of the Washington State Growth Management Act (GMA). The GMA states its planning goal with respect to parks is to “retain open space and green space, enhance recreational opportunities, enhance fish and wildlife habitat, increase access to natural resource lands and water, and develop parks and recreation facilities” (RCW 36.70A.020(9)). As a mandatory element of the Town’s Comprehensive Plan, the Parks, Recreation and Open Space (PROS) Element must implement, and be consistent with, the Capital Facilities Plan Element as it relates to park and recreation facilities. The PROS element must include estimates of park and recreation demand for at least a ten-year period, an evaluation of facilities and service needs, an evaluation of tree canopy coverage within the urban growth area, and an evaluation of intergovernmental coordination opportunities to provide regional approaches for meeting park and recreational demand (RCW 36.70A.070(8)). Additionally with respect to Open Space, RCW 36.70A.160 requires each municipality to identify open space corridors within and between urban growth areas. These shall include lands useful for recreation, wildlife habitat, trails, and connection of critical areas as defined in RCW 36.70A.030.



Private Trailhead – Trailside Connection Espresso

VISION 2050 Multicounty Planning Policies (MPPs)

VISION 2050 offers an integrated approach to addressing land use, transportation, public facilities planning, economic development and the preservation of open spaces. Parks and open spaces are part of the larger regional strategy for preservation of the environment. MPP-En-15 asks municipalities to provide parks, trails, and open spaces within walking distance of urban residents. When new parks, recreational facilities and open spaces are planned, the priority should be on providing these investments in historically underserved communities. As part of building urban communities, municipalities should identify and create opportunities to develop parks, civic spaces and public spaces (MPP-DP-11).

Pierce County Countywide Planning Policy

The GMA’s parks, recreation and open space planning requirements and VISION 2050 environmental preservation and development pattern policy directives are expounded upon in greater detail in Pierce County's County-Wide Planning Policies (2022). Unlike in other policy areas, the parks, recreation and open space planning areas are scattered throughout the larger countywide goals and objectives. Countywide Planning Policies applicable to South Prairie PROS Element include:

- ED-3: Coordinate with other institutions or governmental entities responsible for providing educational services, in order to ensure the provision of educational facilities along with other necessary public facilities and services and along with established and planned growth patterns through:
 - 3.6: Encouraging joint (municipal/school district) use of playgrounds, parks, open spaces and recreational facilities.
- ENV-11: Open space, for the purpose of this Policy, includes federal, state, and local parks, recreation areas, greenbelts/natural buffers, scenic and natural amenities, or unique geological features or unique resources.
- ENV-14: Jurisdictions may make the following uses of open space:
 - 14.1: Recreational areas, including parks (golf courses, picnic areas, bicycle, equestrian and walking trails) and general recreation;
 - 14.2 Uses as considered on a case-by-case basis; and
 - 14.3 Uses derived from community definition (i.e., greenbelts).
- UGA-12: Capital facilities plans shall identify existing, planned, and future infrastructure needs within Urban Growth Areas.
 - 12.1: The County and each municipality in the County should identify appropriate levels of service and concurrency standards that address schools, sewer, water, and parks.

Existing Parks, Recreation and Open Space Facilities

Existing parks, recreation and open space facilities, and proposed improvements to these facilities, are summarized below. Pursuant to RCW 36.70A.160, South Prairie has identified an open space corridor that consists of the vacated Burlington Northern Railroad ROW. This corridor is part of the Foothills Trail system, which provides a regional bicycle and pedestrian pathway that will extend from Tacoma to Carbonado via Puyallup, Orting, South Prairie and other communities, upon completion. The Town has also identified Town owned facilities that provide recreational opportunities, and regional recreational facilities and open space that contribute to the health and wellbeing of South Prairie’s residents in compliance with Pierce County Countywide Planning Policies ED-3.6, ENV-11, ENV-14 and UGA-12 and VISION 2050 MPP-En-15 and MPP-DP-11.

Town Owned Facilities

Community Park – Veteran’s Park

Veteran’s Park is a 2.68-acre park that shares the Fire Station and Community Hall Property. The Foothills Trail runs to the north of this park and provides trail users with access to the park. The park is located to the south of SR 162 and is bordered on the east by South Prairie Creek. This park is very popular during the summer because it provides swimming access to the creek. The park provides passive nature viewing opportunities. It also provides active recreational opportunities. Facilities at the park include a 40sf kiosk with shelter and a two-face metal sign, a gazebo with a two-seat swing, a picnic gazebo, covered and uncovered picnic tables, parking and a recently installed fenced children’s playground with various play structures. The community center is 1933sf and contains public meeting space.



Veteran's Park

Neighborhood Park – 3rd Street Park

South Prairie’s 3rd Street Park is a 9.60-acre parcel owned by the White River School District but leased annually at no cost to the Town. The Town is responsible for maintaining all improvements on site. Improvements include a bathroom, a picnic table, a baseball diamond, parking, and a fenced playground area. The site is sparsely developed with all improvements adjacent to SW 3rd Street. About six acres of the park is natural habitat with critical areas. There is an abandoned town well on this property. The Town Council is interested in purchasing this property and maintaining it as park.



3rd Street Park

Trails

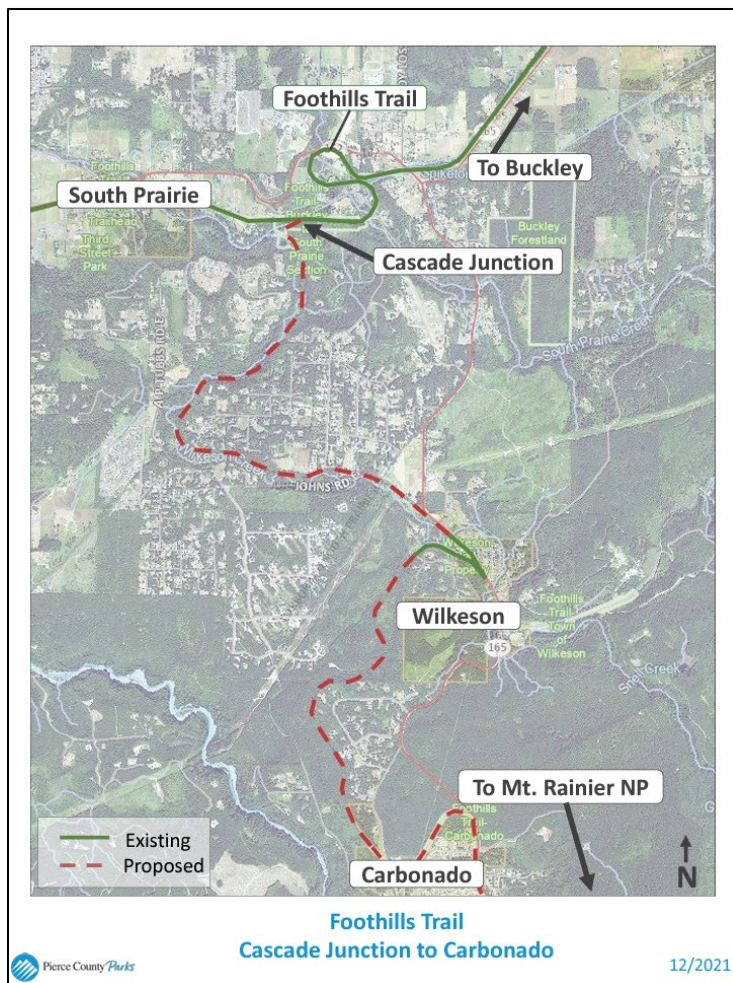
Foothills Trail

The Foothills National Recreation Trail is a rail to trail that extends from the East Puyallup Trailhead at 13810 80th Street in Puyallup to east of the Town of South Prairie (Cascade Junction) where it splits into northern and southern sections. The northern section



South Prairie Trailhead

continues to Buckley. Construction of the eastern terminus in Enumclaw is planned with a bridge over the White River construction in 2024. The section between Puyallup and the White River is 21 miles.



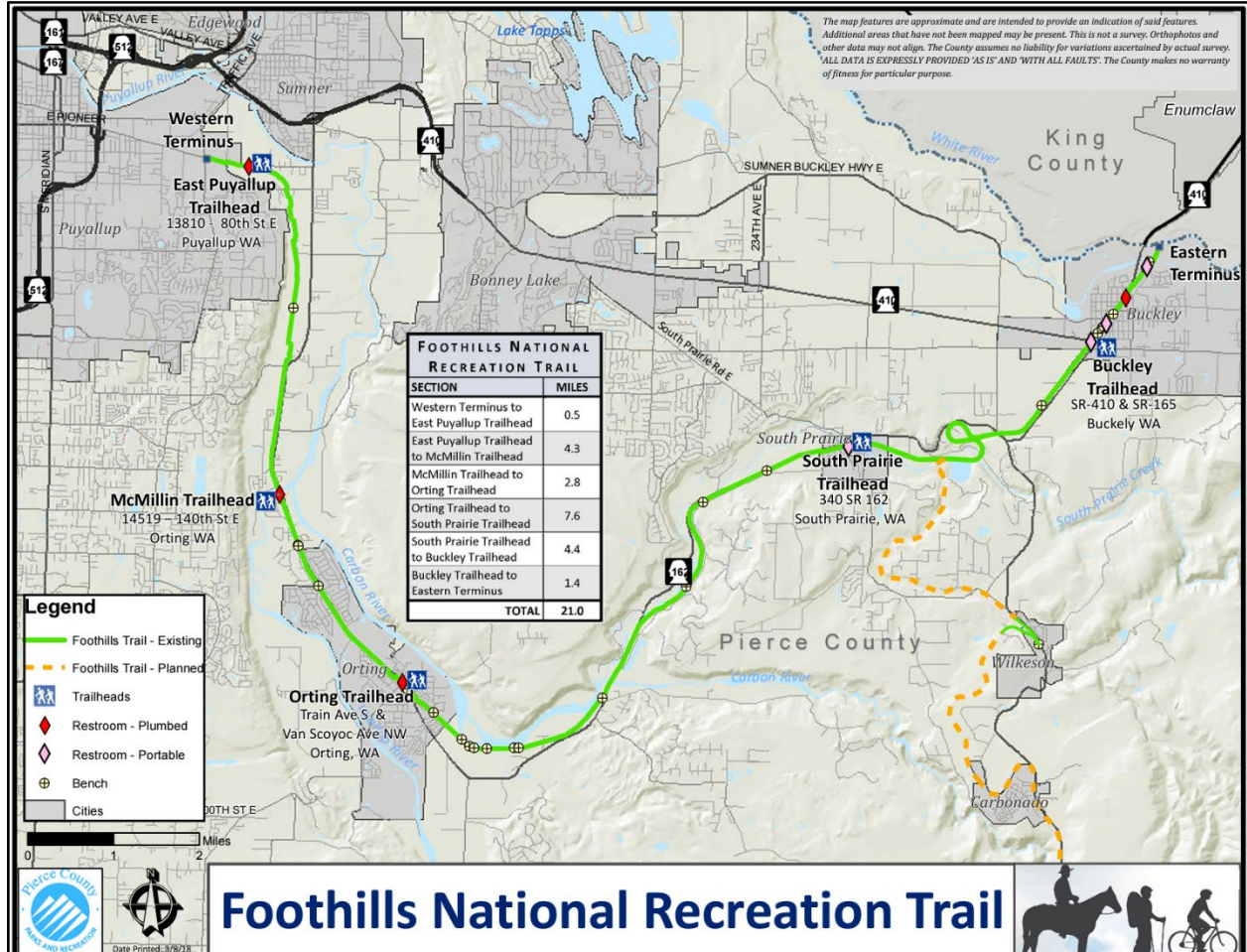
The southern branch extends from Cascade Junction to the east of South Prairie through Wilkeson to Carbonado and eventually towards the Carbon River entrance of Mount Rainier National Park. South Prairie has paved the section within their Town limits. The section between South Prairie and Wilkeson is unpaved as is the section after Wilkeson through Carbonado to the Fairfax Bridge over the Carbon River and south to the National Park. The unpaved trail between South Prairie and Carbonado is three miles. The unpaved trail past Carbonado is 2.25 miles to the Fairfax Bridge.

In 2021, Pierce County initiated a project to begin work on developing the trail alignment between Cascade Junction and Mount Rainier National Park. This project is studying current conditions on the ground, analyzing route options, and identifying permitting requirements. This project will result in a preferred trail route and

high-level cost estimates to inform the planning and development of the trail. In February 2022, the County's Consultant, Parametrix, submitted a technical memorandum regarding trail feasibility and an alignment study. The work identified nine problem areas within ownership gaps or deteriorated trail conditions, with the most severe areas (Areas 3-8) located within or near the Wilkeson/Gale Creek canyon area. These six areas are characterized by erosion and landslides and

are located within and/or adjacent to regulated floodplains, river channel migration zones, landslide hazard areas, wetlands, shoreline jurisdiction, and habitat conservation areas. The report notes these areas and designations indicate the presence of complex natural processes that would create significant permitting, design and constructability challenges. Three areas of feasibility were studied including:

1. Structural solutions entirely within Pierce County ownership,
2. Upland construction with some property acquisition, and
3. Structural improvements and upland construction with significant property acquisition.



Outside of the problem areas, there are serviceable solutions within the existing trail system, though these areas may also eventually be susceptible to the same erosive forces that have affected the other areas. Anticipated costs of the first two alternatives range between \$5 and \$13 million just for the most difficult problem areas and do not include other improvements (i.e. widening and surfacing) that would be necessary to complete the project. The final alternative would cost a minimum of \$17-40 million to fix just the most problematic section.

In all areas, the report, finds that accessibility and constructability will be highly problematic. It notes, the canyon and adjoining forested areas are relatively remote or located on private property. Getting the project equipment in place for construction would be very challenging. The

engineering challenges for bridge crossings will be high given the narrowness of the canyon. Additionally, design grades would likely exceed ADA requirements due to lack of space.

The final recommendation by Parametrix was to pause the analysis of the in-canyon alternatives between Wilkeson and Cascade Junction to take a broad brush look at the out-of-canyon alternatives. These latter alternatives would consider connecting Wilkeson to Cascade Junction using existing transportation and utility corridors and public lands to the extent practicable.

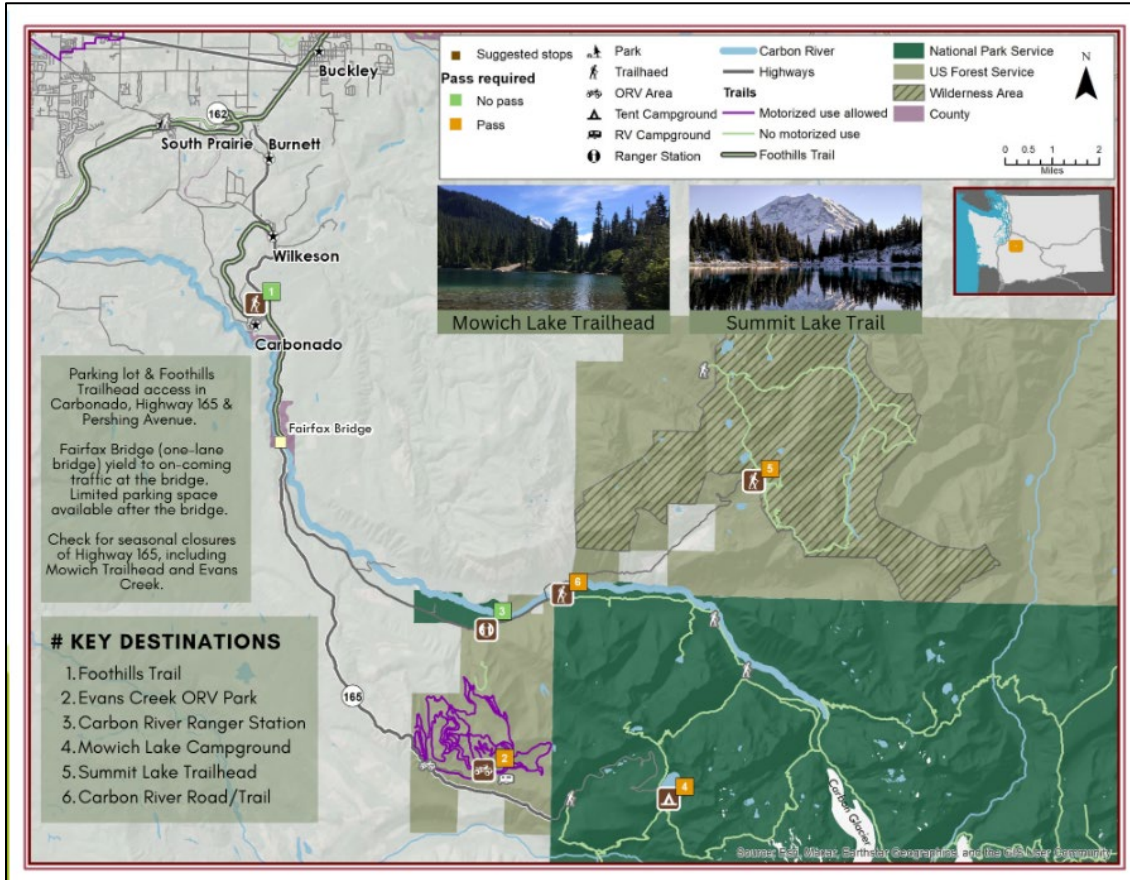
South Prairie's paved section is 0.86 miles. The entire section within South Prairie is owned by the Town.

Open Space

South Prairie is surrounded by open space and/or large lot residential or agricultural uses on all sides.

Town of South Prairie Parks, Recreation and Open Space Amenities

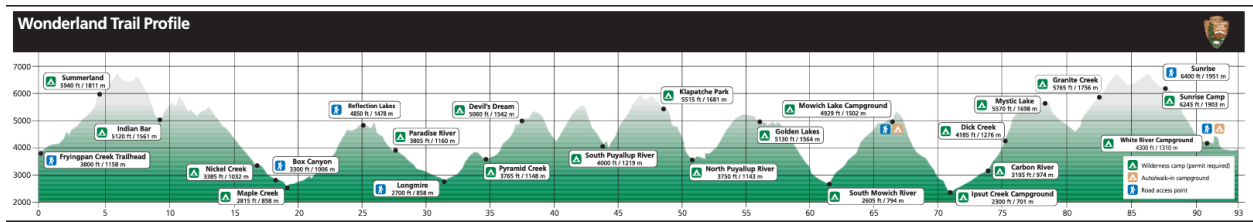




Mount Rainier National Park



Mount Rainier National Park is 369 square miles, encompassing the 14,410-foot Mount Rainier and its surrounding forested foothills. This Federally owned National Park is operated by the National Park Service. South Prairie is the closest incorporated municipality to the park, located eight miles from the Park’s northwest corner, the Carbon River entrance. This part of Mount Rainier National Park receives consistently high amounts of rainfall, so the climate and plant communities found here resemble that of a temperate rainforest. Mt. Rainer National Park and surrounding forest land provide recreational opportunities on a regional level, including hiking, camping, fishing, mountaineering, backcountry skiing and snowshoeing, and other outdoor activities.



The Wonderland Trail (Profile)

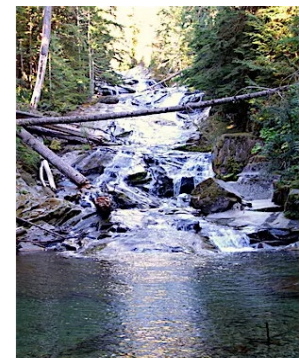


Carbon Glacier

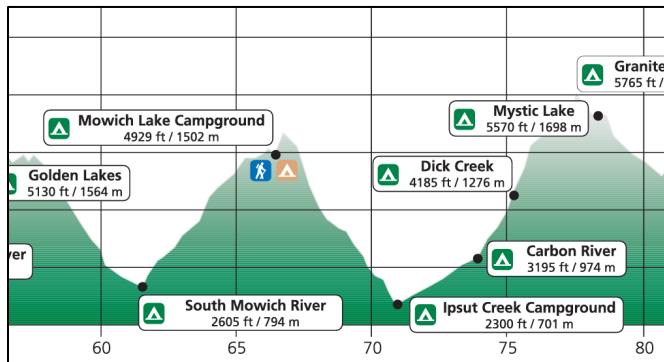
The closest entrances to the National Park from South Prairie are about 15 miles away. There are two entrances close to South Prairie, the Carbon River Entrance from Carbon River Road (accessible from SR 165) and the Mowich Lake Entrance from SR 165. The Carbon River Entrance is open year-round. Mowich Lake is open from mid-July to mid-October and is accessible by rough road vehicles.

The Carbon Glacier is the lowest elevation glacier in Mount Rainier National Park and the lowest in the lower 48 states. Mowich Lake is the Park's largest and deepest lake and provides a gateway to spectacular subalpine lakes and meadows.

Both areas feature rustic campgrounds, though the Ipsut Creek Campground, five miles from the entrance, is not serviced and is hike or bike in only. Mowich Lake Campground, six miles from the Mowich Lake Entrance, is a rustic wilderness campground near subalpine meadows surrounding the lake.



Chenuis Falls



Hiking around the Carbon River Entrance includes the washed-out road to Ipsut Creek. From there, hikers can continue on to the foot of the Carbon Glacier on the Carbon Glacier Trail, a 17-mile round trip from the Ipsut Creek Trailhead or 27 miles roundtrip from the park entrance. There is a small 0.3-mile loop called the Rain Forest Nature Trail near the Carbon River Entrance. Chenuis

Falls is a 7.4-mile roundtrip trail accessible 3.5 miles from the Carbon River Entrance across a footlog, though occasionally the footlog washes out and must be replaced. The Green Lake Trail begins 3.6 miles east of the Carbon River Entrance along Carbon River Road and is a 10.8-mile roundtrip hike through dense forest to a beautiful mountain lake. Ranger Falls can also be viewed from this trail as a short side trip.

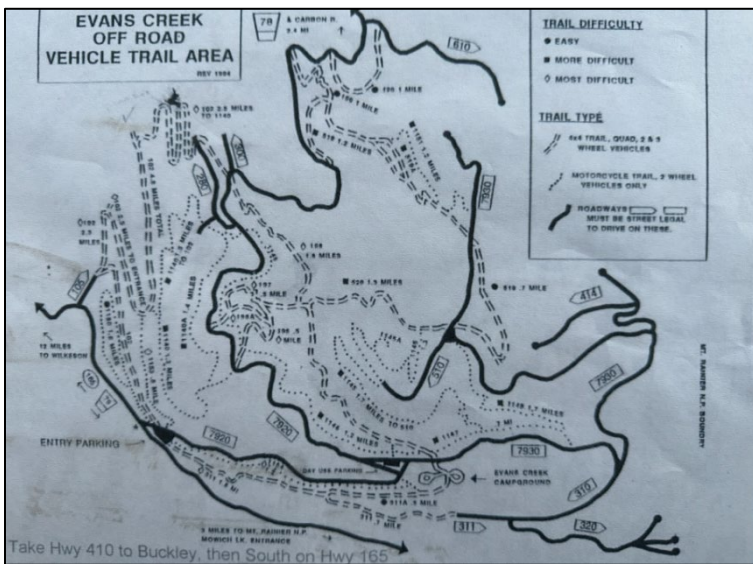
The Mowich Lake area features some spectacular trails. The Tolmie Peak Trail (6.5 miles roundtrip) to one of the Park's four historic fire lookouts begins on the north side of Mowich Lake.

This trail passes by subalpine Eunice Lake. Other nearby trails are Spray Park Trail, a 6-mile roundtrip that starts on the Wonderland Trail and leads to subalpine meadows. A spur trail two miles in leads to Spray Falls. The Wonderland Trail, a strenuous 93-mile loop trail which circumnavigates the park, passes through this area.



Mowich Lake

Evan Creek ORV Park



The Evans Creek Off-Road Vehicle Park is located about 20 miles south of South Prairie off SR 165 past the Fairfax Bridge and the Carbon River Road cut off. This park is operated by the US Forest Service and US Department of Agriculture. The park contains 40 miles of combined four-wheel drive and motorcycle/quad trails of varying difficulty. There is a covered picnic shelter and a first-come, first-served campground with a hand pump for water and a primitive toilet. This park is very popular for off-road vehicles. There is a 10-mile off-road vehicle loop

with several spur trails that snake through second and third growth forest. Views of Mount Rainier from this park are spectacular.



Mt. Rainier from Evans Creek ORV Park

Classification System

For the purpose of identifying level of service standards, the existing park types within South Prairie, and those which are not within the Town but provide service to its residents, are categorized below. The classification system utilized by the Town is intended to serve as a guide for the identification of the variety of recreational opportunities and for the provision of a well-balanced park and open space system. An important consideration is to provide a variety of park types that satisfy the broad range of community recreational needs.

Regional Parks

Regional parks/reserves are areas of natural quality for resource-oriented outdoor recreation, such as viewing and studying nature, hiking, fishing, boating, camping, and swimming. These areas may include active play areas, but typically at least 80 percent of a site is managed for natural resource protection. Regional parks and reserves service a multi-community area with a one-hour drive time to the park. The nearest regional parks to South Prairie are the Evans Creek ORV Areas, Mount Rainier National Park and the undeveloped portions of the Foothills Trail.

Community Parks

Community Parks are defined as recreation areas capable of supplying a broad range of active and passive activities. Community parks typically contain both natural settings and developed play areas. Facilities normally provided at Community Parks include a swimming pool or beach, field

and court games, picnicking and nature study. They also serve as nodes for communitywide pathway systems. South Prairie's Community Park is Veteran's Park.

Neighborhood Parks

Neighborhood Parks are defined as recreation areas providing primarily active recreation opportunities. Facilities may include softball and baseball diamonds, playground equipment, basketball and tennis courts, and other facilities that support intensive activities. Passive recreation opportunities may also be provided if a natural setting exists. 3rd Street Park is a Neighborhood scale park. Though, at less than 700 people and a five-minute walk from one end of town to the other, South Prairie itself is on the neighborhood scale. This park has both active and passive recreation areas with a parking lot, a bathroom, a baseball diamond and a fenced playground.

Pocket Parks

A pocket park is a small outdoor space, usually no more than $\frac{1}{4}$ of an acre, usually only a few house lots in size or smaller, most often located in an urban area surrounded by commercial buildings or houses on small lots with few places for people to gather, relax, or to enjoy the outdoors. South Prairie does not have any pocket parks.

Special Facilities

Special facilities are outdoor recreational amenities such as a skate park, climbing rock or a pump/bicycle track. Generally special facilities are provided at a rate of about 1 facility per 7,500 persons. South Prairie does not have any special features parks.

Trails

Trails include park trails, rails to trails, gravel or asphalt paths and all terrain bike trails. Park trail mileage demand is based on 2,000 in population, walking and hiking trails are determined by each unit of 5,000 population and all-terrain bike trails are based on 3,000 in population. The Town of South Prairie has paved its portion of the Foothills Trail within the town limits. This portion of the trail is 12-foot-wide asphalt and is currently 0.86 miles.

School Sites

School Sites provide facilities that support intensive recreational activities that also serve to fulfill recreational needs for a community. They are similar in size and function to neighborhood parks and help to satisfy the demand for park and recreation facilities. South Prairie does not have any school sites.

Open Space Sites

Open Space Sites are generally undeveloped areas that serve a variety of uses. These lands may include, but are not limited to, wetlands, wetland buffers, public access sites, and wildlife habitat areas. These sites rarely provide recreational improvements and facilities and are managed to conserve the resource on the site. South Prairie is adjacent to hundreds of acres of farm and forestland.

Level of Service (LOS) Standards

The Town applies level of service (LOS) standards derived from the standards of the National

Recreation and Park Association (NRPA), the Statewide Comprehensive Outdoor Recreation Plan (SCORP), and other communities with similar demographic profiles and physical attributes.

A universally accepted standard methodology is to use a per capita acreage LOS standard. A per capita acreage standard, expressed as the number of acres of a specific park category of a specific type per thousand population, is intended to determine whether the overall volume of park and recreation facilities is sufficient to satisfy recreational demands. The recommended per capita acreage requirements for the Town’s various park classifications are shown below.

Recommended LOS Standard

Park Type	Level of Service (LOS) Standard
Regional Park	- 5-10 acres/1,000 population
Community Park	- 8 acres/1,000 population
Neighborhood Park	- 2 acres/1,000 population
Pocket Park	- 0.25 acre/1,000 population
School Site	- None specified
Open Space Site	- None specified
Sports Complex	
- Softball Fields	- 1 facility/2,000 population
- Baseball Fields	- 1 facility/2,000 population
- Basketball Courts	- 1 facility/3,500 population
- Soccer Fields	- 1 facility/3,500 population
- Volleyball Courts	- 1 facility/4,000 population
- Tennis or Pickleball Courts	- 1 facility/4,000 population
Special Facilities	
- Skate Park	- 1 facility/7,500 population
- Climbing Rock	- 1 facility/7,500 population
- Pump/Bicycle Track	- 1 facility/7,500 population
Pathways	
- Park Trails	- 1 mile/2,000 population
- Walking/Hiking Trails	- 1 mile/5,000 population
- All Terrain Bike Trail	- 0.5 mile/3,000 population

Assessment of Needs

The Level of Service standards are based on acres of individual park type for each 1,000 persons. The 2020 population of South Prairie from the US Census was 499 persons. Based on the Pierce County Buildable Lands Report, South Prairie is expected to grow by 187 persons by 2044 for a

total population of 686 persons. This assessment will use a pro rata share of the population standard.

Regional Park

South Prairie's future demand for a Regional Park style amenity will be 3.20-6.45 acres. South Prairie does not have any regional parks. South Prairie is about 15 miles away from Mount Rainier National Park. Mount Rainier National Park is 369 square miles, which is nearly two million acres. There are approximately 2,400 acres of national park for every South Prairie resident, now and in 2044. Even if only the facilities available at the Carbon River Entrance are considered, there are still ample Recreational Park opportunities available to the residents of South Prairie. The other Regional Park level of opportunities are the Mowich Entrance to Mount Rainier and the Evans Creek ORV Park. A future linear park along the Foothills Trail will also serve as a regional park opportunity once the portions outside of South Prairie are completed towards South Prairie and Carbonado. South Prairie's portion of the trail within its municipal limits is completed with 12-foot-wide asphalt and a trailhead.

Community Park

The 2044 demand for the Community Park type of amenity is 5.16 acres. South Prairie's Veteran's Park is a Community Park with 2.68 acres. The nearby South Prairie Foothills Trail Trailhead is located on a 1.80-acre parcel. Combined, these two amenities provide 4.48 acres of Community Park amenity for the residents of South Prairie.

Neighborhood Park

South Prairie's 3rd Street Park is the only Neighborhood Park style amenity in South Prairie. The pro rata LOS for 645 people in 2044 is 1.3 acres. 3rd Street Park is 9.6 acres and contains neighborhood park amenities with a picnic shelter, bathroom, baseball diamond and fenced playground with play structures. South Prairie has ample neighborhood park space and amenities for its current and future population.

Pocket Parks

South Prairie has no pocket parks. The LOS of 0.16-acres for South Prairie's projected 2024 population.

Special Facilities and Amenities

South Prairie's population will not require special facilities and amenities to satisfy LOS standards.

Trails

The Foothills Trail passes through South Prairie, entering from the northwest corner of the town, then splitting towards the southwest and southeast. This trail is part of a huge regional trail system. South Prairie has paved 0.86 miles of the Foothills Trail within its town limits. The trails LOS for South Prairie requires only 0.32 miles of trails. South Prairie has more than adequate trail coverage and the opportunity to be part of a world class trail network when adjacent areas are complete.

School Site

School Sites provide facilities that support intensive recreational activities that also serve to fulfill

recreational needs for a community. They are similar in size and function to neighborhood parks and help to satisfy the demand for park and recreation facilities. As noted above, the South Prairie doesn't have any school sites.

Open Space Sites

While there is no specified standard for Open Space, the South Prairie area is replete with this amenity. South Prairie is surrounded on all sides by farmland and forested lands owned by a mosaic of owner types including private farms, large residential tracts with large lot zoning, and undeveloped forestland.

Capital Facilities Plan

The Town has identified the following parks, recreation and open space capital projects for the comprehensive plan horizon.

Parks and Recreation Capital Improvements Schedule

No.	Project	Year	Estimated Project Cost
P-1	Veteran's Park Improvement and Expansion Funding Source: Local Funds, RCO Grant	2030	\$500,000 (2024)
P-2	3 rd Street Park Acquisition and Improvements Funding Source: Local Funds, RCO Grant	2035	\$1,150,000 (2024)

Parks Project Descriptions

P-1 – Veteran's Park Improvement and Expansion. The Town plans to improve and expand Veteran's Park by:

- Re-grading and re-seeding the lawn areas,
- Adding two more swing sets including one ADA accessible swing set,
- Adding another gazebo,
- Adding more play equipment including a slide,
- Adding and ADA bathroom,
- Adding benches and outdoor exercise equipment adjacent to the trail (in the unopened portion of the SE 1st Street right of way on the south side of the Foothills Trail Trailhead).

P-2 – 3rd Street Park Acquisition and Improvements. The Town of South Prairie currently leases the 3rd Street Park site from the White River School District. The Town would like to acquire this property in fee simple and upgrade the playground, level the ballfield, upgrade the baseball diamond, improve the parking area and replace the existing maintenance garage.



Proposed Improvements near Foothills Trail

Recommended Financing

The Town of South Prairie collects general fund revenues for capital improvements, which may be used as a source of funding for parks and recreation. The Town uses “pay-as-you-go” financing as its current revenue financing for specific capital projects. The Town expects funding for parks, recreation and open space projects to come from a mix of Washington State Recreation and Conservation Office grant funds and local funds.

Goals and Policies

Goal 1: Parks, Recreation and Open Space

South Prairie’s Park facilities, recreation programs, and open space should be maintained, increased, and improved to equitably serve the needs of all South Prairie's current and future residents.

Policies:

- 1.1 South Prairie should coordinate with federal, state, county and non-governmental entities to advance development of the Foothills Trail regionally and in South Prairie.
- 1.2 South Prairie should strive to create a pocket park as part of the planned open air market improvement at the intersection of SR 162 and Emery Avenue N (APN 0619182065).
- 1.3 The Town has many landslide hazards and steep slope areas that currently provide habitat for wildlife. These areas should be preserved with both human safety and wildlife habitat and open space preservation in mind.
- 1.4 On large lot developments, the Town should attempt to preserve as much natural forest cover as possible through the imposition of Covenants, Conditions and Restrictions.
- 1.5 On large lots that are currently forested, the Town should cooperate with Pierce County Conservation District to obtain that land for open space conservation.
- 1.6 Other than the 12-foot-wide Foothills Trail and any associated amenities, the trail corridor should stay wild for open space and wildlife habitat.

- 1.7 Park planning and use of facilities should be coordinated with other Town projects and not-for-profit, private or public groups to assure maximum use of recreational facilities. South Prairie should encourage a variety of uses in all existing public schools and facilities to efficiently help meet the recreational needs of the community. The Town should cooperate and coordinate with other jurisdictions in the planning and development of regional parks and recreational facilities.
- 1.8 South Prairie should develop and implement a plan for park and recreation facility development, maintenance and beautification.
- 1.9 Neighborhood parks should be established, maintained and enhanced where needs exist for safe play areas. These parks should be sited and designed to meet the needs of the people in the immediate neighborhood. They should be oriented toward pedestrians and bicyclists and should not provide automobile parking except for vehicles of disabled persons. Bicycle parking and automobile unload areas should be provided.
- 1.10 All new multifamily development should incorporate open space. Recreational facilities should be included that are suitable for the types of households that will be occupying the completed dwelling units.
- 1.11 Parks should include facilities that provide active and passive recreational opportunities for people of all ages.
- 1.12 To ensure adequate park and open space land is dedicated within South Prairie, the Town should assure that park or open space land has been dedicated or impact fees collected to contribute to park land acquisition and facility development before granting development or redevelopment approvals for residential projects.
- 1.13 Park, recreation and open space level of service standards of 8 acres per 1000 population for community parks and 2 acres per 1000 population for neighborhood parks should be achieved and maintained. Portions of acreage classified as community park may be considered as meeting neighborhood park demand if developed with neighborhood park type facilities and improvements.

Chapter 6 Utilities Element

Overview

Introduction

This Utilities Element has been developed in accordance with RCW 36.70A.070 of the Growth Management Act (GMA) to address utility services in the Town of South Prairie and the surrounding Planning Area. The GMA requires all Comprehensive Plans to include a Utilities Element consisting of the general locations, proposed locations, and capacities of all existing and proposed utilities. The utilities element represents the community's policy plan for growth over the next 20 years (2024-2044). The Utilities Element describes how the goals in the other plan elements will be implemented through utility policies and regulations and is an important element in implementing the comprehensive plan.

The Town is an incorporated community located in northern Pierce County (County) and is surrounded by rural areas of unincorporated Pierce County. The South Prairie UGA consists of approximately 250 acres. The Town contains existing and designated residential and commercial areas.

The developed core of South Prairie is within a relatively flat valley area primarily adjacent to and south of South Prairie Creek. The South Prairie UGA includes undeveloped upland area consisting of forested lands south of the developed core, as well as some available land to the north that allows for moderate density residential development. The highest point in the UGA is approximately 600 feet above sea level, with elevations decreasing to approximately 420 feet above sea level along the banks of South Prairie Creek at the Town's western limits.

The Town operates water and wastewater treatment systems. This Element describes the utilities owned and operated by the Town. Privately owned or County-owned utilities include natural gas, electrical, telecommunications and solid waste. Natural gas and electricity are operated by Puget Sound Energy. The County manages solid waste disposal.

Utilities Planning Requirements

Requirements of Growth Management Act

The Washington State Growth Management Act identifies public facilities and services planning and, specifically, ensuring that public services and facilities necessary to support development are adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards (RCW 36.70A.020(12)). In addition, it identifies a utilities element as a mandatory element of a county or city comprehensive plan (RCW 36.70A.070(4)). The utilities element must include: a) the general location, proposed location, and capacity of all existing and proposed utilities including, but not limited to, electrical, telecommunications, and natural gas systems, (b) identification of all public entities that own utility systems and endeavor in good faith to work with other public entities, such as special purpose districts, to gather and include within its utilities element the information required above. (RCW 36.70A.070(4)(a)-(b)]. The Growth Management Act expressly requires a Countywide Planning Policy on promotion of contiguous and orderly development and provision of urban services to such development [RCW 36.70A.210(3)(b)].

The GMA also contains requirements pertaining to the important concept of concurrency. Concurrency means that jurisdictions must be able to demonstrate that all public facilities, including roads, can be made available for all new development at the time such development is constructed. This is a sometimes overlooked, but very critical part of the GMA. Plans for making those utilities available when the development is built must include a financing plan. Thus, while the capital facilities, land use, and transportation elements of this Comprehensive Plan describe other issues relevant to meeting the concurrency requirements of the GMA, this utilities element represents an important part of the plans needed to meet the concurrency of GMA.

The utilities element also has been developed in accordance with county wide planning policies and has been integrated with all other planning elements to ensure consistency throughout the comprehensive plan. The utilities element considers the general location, proposed location, and capacity of existing and proposed utilities, including water, sewer, surface water drainage, natural gas, electricity, and communications.

Revised Codes of Washington and the Utilities and Transportation Commission

Utilities and transportation are regulated in Washington by the Washington Utilities and Transportation Commission (WUTC). The WUTC, composed of three members appointed by the Governor, is empowered to regulate utilities (including, but not limited to, electrical, gas, irrigation, telecommunications, and water companies). State law (WAC 480-120) regulates the rates and charges, services, facilities, and practices of utilities.

The WUTC requires gas providers to demonstrate that existing ratepayers will not subsidize new customers. Thus, historically gas main extensions have not been planned in advance but have been initiated only when there is sufficient customer demand.

Federal Energy Regulatory Commission

The Federal Energy Regulatory Commission (FERC) is an independent five-member commission within the U.S. Department of Energy. FERC establishes rates and charges for the interstate transportation and sale of natural gas, for the transmission and sale of electricity, and the licensing of hydroelectric power projects. In addition, the Commission establishes rates or charges for the interstate transportation of oil by pipeline.

Natural Gas Policy Act of 1978

The central theme of the National Gas Policy Act (NGPA) is encouragement of competition among fuels and supplies across the country. As a result, natural gas essentially has been decontrolled. The NGPA also contained incentives for developing new natural gas resources and a tiered pricing structure aimed at encouraging the development of nation-wide transmission pipelines.

Northwest Power Planning Council

The Northwest Power Planning Council (NWPPC) focuses on the generation of electricity; however, its policies have implications for gas, too. The NWPPC has directed the region to develop cogeneration as an energy resource and hydro firming as a power back-up system.

Cogeneration is the use of heat, as a byproduct of power generation, for industrial processes or for space and water heating. Natural gas is often used as a fuel source for cogeneration.

Hydro firming is the backup of the region’s intermittent excess spring hydro generation with gas-fired combustion turbines to provide back-up if hydroelectric power generation is below normal levels.

These two policies could have a major impact on natural gas consumption in the northwest. However, natural gas for heating purposes is up to 50 percent more efficient than generating electricity with gas, for the same heating function. The most efficient use of natural gas, interior heating and water heating, can contribute to a balanced regional energy policy.

1991 Clean Air Amendments

The passage of the Washington State Clean Air Act in 1991 indicates the state’s intent to promote the diversification of fuel sources for motor vehicles. This is in response to a need to both reduce atmospheric emissions and reduce the nation’s reliance on gasoline for strategic reasons. It also studies the potential and encourages the development of natural gas vehicle refueling stations.

Related Planning Documents

Pierce County Coordinated Water System Plan & Regional Supplement, 2021 Update

The Public Water System Coordination Act of 1977 created Critical Water Supply Service Area (CWSSA) in Washington State because "an adequate supply of potable water for domestic, commercial, and industrial use is vital to the health and well-being of the people of the state," RCW 70.116.010. All of Pierce County was declared a CWSSA in 1983, requiring the County to develop a Coordinated Water System Plan (CWSP). The first Pierce County Coordinated Water System Plan (CWSP) was established in 1988. The County’s CWSP:

- Provides maximum integration and coordination of public water system facilities,
- Helps coordinate delivery of water of Group A water systems,
- Sets framework and process of water system review plans,
- Is the coordinating document that provides policy recommendations,
- Sets minimum standards for fire flow, and
- Identifies future demand and if there are sufficient water rights to meet demand.

The CWSP was updated in 2001. Since the 2001 limited update, many changes have occurred relating to water resources, water supply, and land use planning. On May 22, 2018, the Pierce County Council enacted Resolution No. R2018-39s2, which updated Water Utility Coordinating Committee (WUCC) membership and authorized the WUCC to review and update the County’s CWSP. The 2020 CWSP update was in response to the County’s Comprehensive Plan (most recently updated in 2015) and new regulations implemented since adoption of the 2001 CSWP. The updated plan was adopted by Pierce County Council on July 13, 2021.

2015 Comprehensive Plan Update

Town of South Prairie Comprehensive Plan, *Kask Consulting, 2015*

The Town of South Prairie Comprehensive Plan, (Kask Consulting), was updated in 2015 pursuant to the GMA. This document was developed to comply with the Growth Management Act (GMA) and was consistent with the planning policies of Pierce County. The prior Comprehensive Plan update provided:

- Policies and recommendations to direct public and private decisions affecting future growth and development,
- A framework of goals and policies adaptable to the changing attitudes and resources of the region,
- A long-range vision, based on community values and goals, of how citizens want South Prairie to look and function in the future as well as guidance for achieving that vision, and
- Guidelines for making decisions on growth, land use, transportation, public facilities, and services, parks, and open space.

Wastewater System Planning

General Sewer Wastewater Facility Plan, *November 2023, BHC Consultants*

This Plan describes the Town’s existing collection and treatment systems and provides an evaluation of the systems and recommends improvements. The plan identified various deficiencies in the sewer capacity, outfall and treatment plant. Specifically, there is a capacity deficiency in the 2-inch pipe the STEP stations at the RV Park discharge into. The plan also noted the Town’s existing low-pressure sewer main system consists of 2-inch diameter pipe, totaling approximately 10,100 linear feet, or 60 percent of the existing pipes in the system. The AWCS recommends installation of low-pressure sewer mains with a diameter of 3-inches or greater. A greater concern is outfall to South Prairie Creek. Due to dynamic changes to the streambed, the location of the outfall relative to the banks has shifted in the past and continues to do so. Additionally, peaks in stream flow associated with storm events are progressively resulting in streambank erosion to one private property upstream of the buried outfall facilities. Without stabilization, this trend in erosion will expose and cause failure of the outfall facilities in the near future. The plan identifies two options to repair and prevent failure of the outfall: maintaining the current outfall with a bank stabilization project or constructing a new outfall at a new location along South Prairie Creek. With respect to the wastewater treatment plant, the plan recommends securing additional collection system Operations and Maintenance staffing resources and adopting policies and goals for maintenance activities to meet industry standards.

Water System Planning

Town of South Prairie Water System Plan, *March 2019, BHC Consultants*

This plan discusses the existing water system facilities, water usage and design criteria, conservation programs, system expansion, and water system improvements. This plan identified system deficiencies related to meeting system pressure and fire flow availability in conformance with state and jurisdictional requirements. Specifically, the plan recommended installation of a new 8-inch diameter ductile iron transmission main along Tubbs Road from the Upper Well to 2nd Street and looping the exiting 8-inch diameter AC pipes on Emery Avenue between SW 1st Street and 3rd Street.

Water System Planning – Town of South Prairie

Introduction

In accordance with Washington Administrative Code (WAC) 246-290-100 and the Washington State Department of Health (DOH), water system plans are required to be updated and submitted

to DOH every 10 years, or more frequently, if necessary, to reflect the current conditions of the water system. The South Prairie Water System Plan is attached as Appendix A.

The Town of South Prairie currently maintains approximately 176 water service connections, which consist of both non-residential and residential hookups. The existing Town water usage charge is based on account type and consists of a monthly base fee for account connection and a usage fee based on the pipe size and the meter and volume charge⁴. The 2016 water usage records indicate that a total volume of just under 11 million gallons was consumed by the Town's service population. This total included both non-residential and residential usage, the residential usage accounts for approximately 68 percent of the total. The estimated average per capita demand for 2013 through 2016, is 51 gallons per day per equivalent residential connection (gpd/ERU). In 2016 there were 149 residential ERU and 17 commercial ERU. This average consumption figure established does not include adjustments for commercial and/or public facility usage. This exclusion inflates the average per capita consumption figures.

The Urban Growth Area (UGA) boundary was selected in order to ensure that urban services, including utilities, can be provided to the residents of each development at an acceptable level of service. This includes the provision of utility and other capital facilities. The UGA is depicted in the Future Land Use Map in Chapter 3, the Land Use Element.

All development requiring urban services will be located in the UGA and will have these services extended in a timely feasible manner. For that portion of the UGA which is currently located outside Town boundaries, annexation would need to occur prior to extension of most Town services, with the exception of areas where existing service agreements may apply, or where services may be extended for public health and safety reasons.

Source and Supply

Level of Service

Level of service for water system planning in South Prairie is based on the following axioms:

1. The water system quality shall be in compliance with Washington Administrative Code (246-290) requirements for water quality.
2. The source capacity shall equal or exceed the design maximum demand rate plus that rate necessary to replace fire suppression storage within 72 hours.
3. Fire flow service shall be provided to insurance services office (ISO) standards for Class 6 fire protection facilities.

Inventory of System

The Upper (Tubbs Road) Well is the Town's sole source of water. Pierce County identified aquifer recharge areas around the Town of South Prairie. The Town of South Prairie owns and operates the water system, which serves the Town and adjacent properties to the north and west in unincorporated Pierce County as shown on the map on the following page.

⁴ Pursuant to South Prairie Ordinance 550-2015.

The Upper Well is 12-inches in diameter and 425 feet deep. Ground surface elevation of the well is approximately 570 feet above mean sea level. The submersible well pump is set 325 feet below the top of the casing and is controlled by wire telemetry when water level drops in the adjoining storage tanks. Controls and other equipment are housed in an 11ft x 15ft room in the concrete masonry pump house, which is enclosed in a 100ft x 120ft fenced yard.

The Town has water rights but no physical access rights to springs on the south valley slope (Permit 13407, pages 93 and 94) and to the Lower Well, an old well on the south side of 3rd Street (Permit 1527, page 768A). The Lower Well location was decommissioned in 2007 due to elevated levels of arsenic. This well and its equipment are not longer in an operable condition.

These physical assets are used to currently serve 156 residential connections and 20 non-residential connections (the South Prairie RV Park, a manufacturing/industrial facility, and several other small businesses).

The DOH water system identification number for the Town of South Prairie water system is 82300 R. A copy of the Water Facilities Inventory (WFI) is included in Appendix S of the Town of South Prairie Water System Plan Update, March 2023.

South Prairie's water system is a publicly owned utility that is managed by an elected Mayor and Town Council. The Town of South Prairie manages its water system in accordance with established water system policies and criteria that govern various facets of utility operations. The policies are established by the Town to provide the framework for the design, operation and on-going well-being of the Town's water system.

The Town of South Prairie has no interties and has been self-sufficient in supplying the water demands of its customers. The proximity of the Tacoma Water service area to South Prairie's UGA creates the possibility of an intertie in the future to offer an alternative source of supply. An intertie would introduce fluoridated water to the Town's distribution system.

Forecast of Future Needs

The Town has not seen substantial growth due to its geographic proximity to major urban centers and the limitations on future sewer service connections. The average day demand is 141 gpd/ERU and the maximum day demand is 348 gpd/ERU. With promotion of water conservation, the water usage represented by an ERU may decrease. Also, with the extension of new water mains and replacement of old water mains the DSL rate may also decrease. For projection of water system demands, it is more conservative to assume that water usage per ERU will not decrease. Source capacity is the limiting factor, with 560 ERUs. This is enough capacity for projected growth through 2037 and possibly unexpected development.

The following project descriptions are provided as a brief outline to source water improvements, which will be suggested to support the anticipated future development and maintain adequate water service to existing development within the urban growth area boundary.

- **S-1 Upper Well Improvements.** Several facilities at the Upper Well site need upgrade or replacement including installation of a new sodium hypochlorite injection system, replacement of the existing well supply ductile iron pipe and fitting and flowmeter, and building modifications including HVAC upgrades, replacement of the exterior curtain wall, remodeling of chemical injection room, and any electrical/controls/SCADA upgrades necessitated by the other improvements. Replacement of the existing ATEC filter system

onsite and purchase of a spare well pump are also included in this project. These improvements will result in a more dependable well supply and reduce maintenance efforts.

- **S-2opt Intertie to Tacoma Water Supply Line #1.** This intertie is not currently needed. The Upper Well provides adequate supply for the planning period. This project would provide a redundant supply source.

Treatment

Level of Service

The treatment of potable water shall be provided to comply with the standards as set by the Federal Safe Drinking Water Act (SDWA).

Inventory of System

Disinfection is by sodium hypochlorite injection. Water is filtered for iron and manganese. The current operational production capacity is about 180 gpm. The maximum allowable instantaneous withdrawal rate, by water right, is 350 gpm.

Forecast of Future Needs

The Upper Well treatment system continues to adequately reduce source water iron and manganese concentrations below recommended secondary MCLs. During the 20-year planning period, some maintenance costs will be required to perform minor system improvements, such as replacing filter media, valves, or instrumentation, as well as other chemical injection system and communication/control upgrades. There are no current treatment system improvement needs forecast to meet the targeted capacity needs besides those mentioned above as part of the Upper Well improvements and on-going maintenance.

Storage

Level of Service

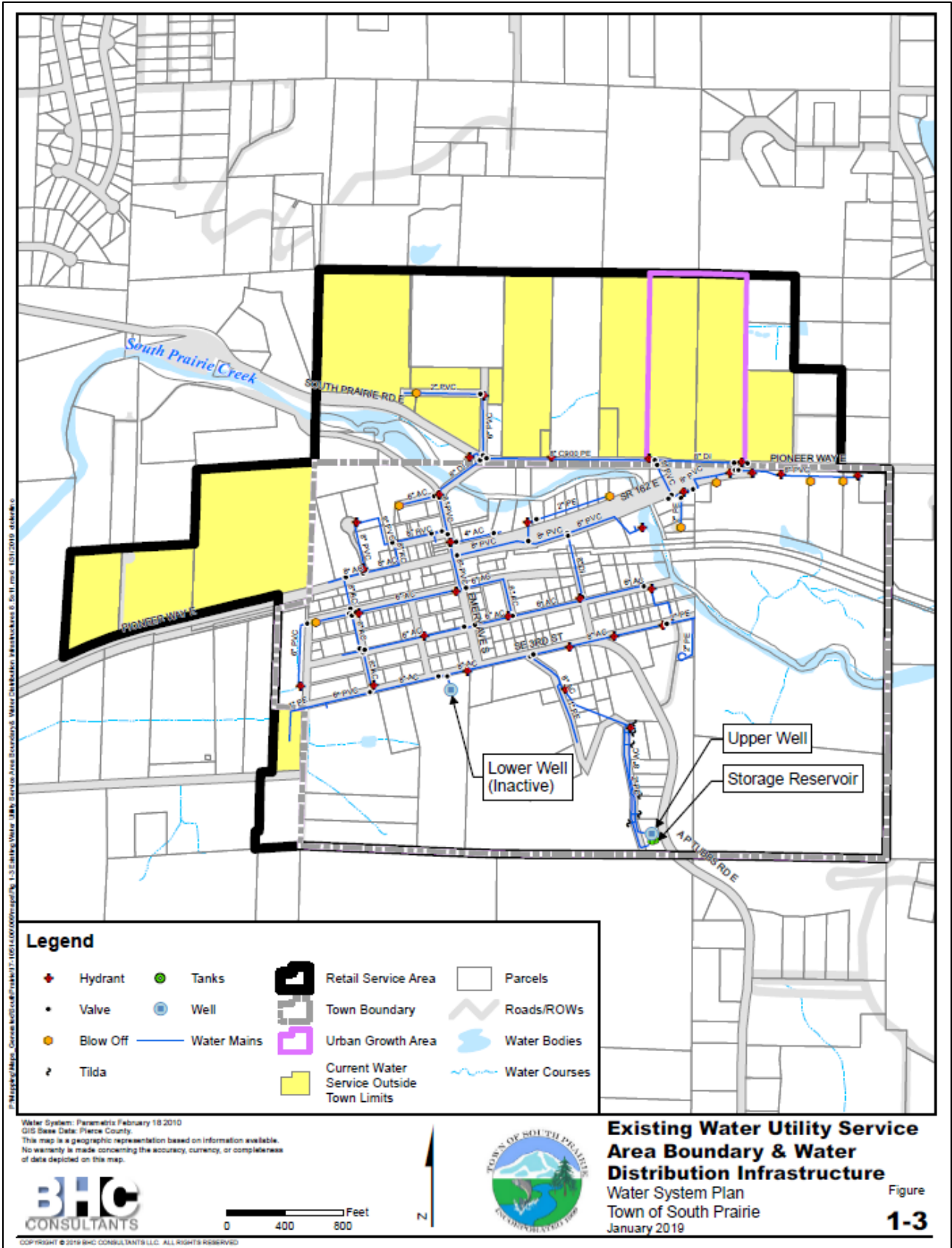
Storage capacities shall be per the Washington State Department of Health's sizing guidelines and requirements as stated within the Ten State Standards.

Inventory of System

Storage is accomplished via a 248,000-gallon tank located at the southern border between AP Tubbs Road and Carriage Road on the same property as the Upper Well. The tank is a 33.6ft in diameter glass fused, steel bolted tank with a concrete foundation. System pressure is maintained by the water level in the storage tank.

Proposed Location and Future Needs

Based on projected growth rates and required storage volumes, the Town has adequate storage capacity to meet projected demands beyond the 20-year planning period. The storage tank is only five years old and remains in good condition. There are no existing deficiencies associated with storage; however, the Town should make operational considerations to ensure continuous source supply in advance of any scheduled tank maintenance. Current storage facilities are in need of ongoing maintenance. There are no other storage improvement needs forecast to meet the targeted capacity needs.



Transmission and Distribution System

Level of Service

This supply of water to various areas within the urban growth boundary shall be completed to comply with the Department of Health, Ten State Standards, and County Fire Marshall Standards.

Inventory of System

The Town’s distribution grid and its Tubbs Road tank and well complex are connected by 1,800 linear feet of 8-inch AC pipe built in 1967. The transmission main was installed, without trace wire, through easements and within an unmaintained Town road right of way. The exact location of the transmission main and its current condition are unknown, though there have been no reported or observed leaks in recent years. The Towns distribution system consists of 4.5 miles of one-to-eight-inch diameter AC, polyvinyl chloride, polyethylene, and ductile iron pipes built in stages since 1967. For the most part, the distribution system is well looped. Meters are provided at each service. Service lines and meter boxes are generally in good condition. The Town operates a system with two pressure zones.

Dead-ends in the system limit fire flow and lower chlorine residuals where demands do not promote turnover.

The water system has remaining asbestos concrete pipe that should be programmed for replacement with a reasonable future window. The system has a high percentage of unaccounted for water at an average of 25% of water produced from 2013 to 2016.

Approximately 60 percent of the pipe is asbestos concrete (AC), which is typically prioritized when considering pipe replacement. The age of the existing system varies but a sizable portion of the network was installed over 50 years ago.

Table 6-1 Transmission and Distribution System Inventory

Diameter	Approximate Length (ft)					
	Asbestos Cement (AC)	Polyvinyl Chloride (PVC)	Polyethylene (PE)	Ductile or Cast Iron	Steel	Total
1 inch	0	0	1,263	0	0	1,263
2 inch	0	537	2,398	0	0	2,935
4 inch	370	0	0	0	0	370
6 inch	10,242	2,647	0	0	0	12,889
8 inch	6,840	5,682	0	3,285	0	15,807
Total	17,452	8,866	3,661	3,285	0	33,264

The Town has two pressure zones with static pressures generally ranging between 45 and 90 psi. The 45-psi range applies only to the residential customers in the immediate vicinity of the upper well and storage tank. These customers are served from the storage tank by a booster pump, constituting a pressure zone with an approximate hydraulic grade line (HGL) of 690. There is a hydrant connected

to the 8-inch diameter transmission main in the vicinity of these customers allowing 750 gpm of fire flow at approximately 30 psi residual pressure. Other customers generally reside at a relatively constant elevation in proximity to the downtown grid. These customers make up the other pressure zone and are served by gravity flow from the storage tank with an HGL of 624.

Proposed Locations and Future Needs

The following project descriptions are provided as a brief outline to improvements, which will be required to support the anticipated future development and maintain adequate water service to existing development within the UGA boundary (see Figures 10-1 and 10-3 of the Land Use Element, Town of South Prairie Comprehensive Plan 2015-2035). The improvements which have been noted represent additions to the existing main line conveyance systems and are presented to allow for the delivery of water to the estimated development areas, for both potable and fire flow usage. Additional improvements will undoubtedly be required within various communities as the location of growth and the type of development would dictate. The following projects are listed in order of priority.

Distribution

- D-1. **New 8-inch Diameter Tubbs Road Transmission Main.** The project consists of installing a new 8-inch diameter PVC transmission main along Tubbs Road from the reservoir to the existing 8-inch diameter asbestos concrete pipe on 3rd Street. The project will reduce the susceptibility of the system to a prolonged supply outage, as well as meet the Town's long-term growth needs. The project will increase system transmission capacity to address deficient pressures at the east end and uppermost portion of the system on Pioneer Way under fire flow conditions.
- D-2. **Emery Avenue 8-inch Extension Loop.** This project consists of installing approximately 575 linear feet of 8-inch diameter PVC pipe on Emery Avenue between 1st Street and 3rd Street. This project will loop the existing 8-inch diameter AC pipe on 3rd Street to the 6-inch diameter pipe on 1st Street. The project will increase system transmission capacity to address deficient pressures at the east end and uppermost portion of the system on Pioneer Way under fire flow conditions.
- D-3. **Water Main Replacement Program.** This project anticipates that existing aging AC and other water mains not specifically identified in the capital improvements program (CIP) will be replaced in the future as part of street improvement projects or as identified in the operations and maintenance leak detection program. The program will be subject to the constraints of Town funding but is currently budgeted to provide substantial replacement of the remaining distribution system AC pipe within the 20-year planning horizon.

Operations and Maintenance

The following operations and maintenance (OM) program activities are required to modernize the operations and maintenance program, increase the operational effectiveness and reliability of the system, and address deficiencies. The costs necessary to complete these projects are in addition to the existing operating budget requirements.

- OM-1. **Leak Detection Program.** The Town continues to incur a high percentage of unaccounted for water. This program is essential for identification and replacement of failing water distribution lines and to assist the Town in meeting water conservation

goals. Any repair work will be performed under Project D-3 – Replacement of Old Water Mains.

- OM-2. **Clean and Inspect Storage Reservoirs.** The Town’s reservoir should be inspected and cleaned of sediment every three to five years. Accumulated sediment can harbor microbes in the potable water system.
- OM-3. **Flushing Fire Hydrants and Water Mains, Exercising Valves.** Flushing and operation of water system components should be continually performed to confirm valve functionality and increase water quality. Additional assistance is required to ensure these tasks are performed and documented.
- OM-4. **Public Education Program.** Activities under this project are a mandatory element of the Water Use Efficiency program (See Chapter Five of Appendix B). Activities include publicizing the need for water conservation through news articles, public water system bill inserts, or other means. South Prairie will accomplish this through distribution of Ecology, DOH and private industry conservation brochures or other printed material. Materials will be distributed with monthly billings to customers and through handouts to contractors prior to beginning work in Town.
- OM-5. **Cross-Connection Control Plan.** This project will implement the requirements of the Cross-Connection Control Program. (See Section 7.9 of Appendix B).
- OM-6. **GIS Mapping and Database.** This project includes ongoing efforts associated with updating the Town’s GIS database including additions and changes to water system infrastructure and software updates.

Capital Improvement Plan

Source and Storage Project (S)

Table 6-2 presents a capital improvement plan for source and supply projects. The table lists the year of completion and the probable source of funds for each project. The projects are described in more detail in the previous sections. Data for the source and supply projects were taken from the Town of South Prairie Water System Plan Update, March 2019. Some of the projects have already been completed. Project S-1 was partially completed in 2021-2022.

Table 6-2 Source and Supply Water Projects

Project Number	Year of Completion	Funding Source	Estimated Project Cost (2024)
S-1	2021	Rates, reserves	\$370,000
S-2opt	2028-2037	Grants, loans, interlocal agreement	\$1,000,000- \$3,000,000

Distribution System Improvements (D)

Table 6-3 presents a capital improvement plan for distribution system projects. The table lists the year of completion and the probable source of funds for each project. The projects are described

in more detail in the previous sections. Data for the distribution main projects were taken from the Town of South Prairie Water System Plan Update, March 2019. Some of the projects have already been completed.

Table 6-3 Distribution Main Projects

Project Number	Year of Completion	Funding Source	Estimated Project Cost (2024)
D-1	2025-2030	Rates, reserves	\$1,000,000
D-2	2025	Rates, reserves	\$750,000
D-3	On-going	Rates, reserves	\$2,260,000

Operations and Maintenance Projects (OM)

Table 6-4 presents a capital improvement plan for the other water projects. The table lists the year of completion and the probable source of funds for each project. The projects are described in more detail in the previous sections. Data for the water storage projects were taken from the Town of South Prairie Water System Comprehensive Plan, March 2019. These projects are on-going.

Table 6-4 Other Projects

Project Number	Year of Completion	Funding Source	Estimated Project Cost (2018)
OM-1	On-going	Rates, reserves	\$100,000
OM-2	On-going	Rates, reserves	\$100,000
OM-3	On-going	Rates, reserves	\$100,000
OM-4	On-going	Rates, reserves	\$24,000
OM-5	On-going	Rates, reserves	\$45,000

Recommended Financing Plan

The revenue to operate and maintain the Town of South Prairie’s water system is collected through a monthly water rate. The existing Town water usage charge is based on account type and consists of a monthly base fee for account connection and a usage fee based on the pipe size and the meter and volume charge by tier⁵. Customers are classified into Residential and Commercial. Table 6-5 on the following page summarizes South Prairie’s existing rate structure by account type. Table 6-6 shows the Water Consumption Charges by Tier. Table 6-7 shows the water consumption tier ranges. Rates are adjusted by 5% annually.

In addition to the meter base charges, customers are charged new account and connection fees. The new connection fee and water meter fee for the Town water system is \$3,805 for each connection.

⁵ Pursuant to South Prairie Ordinance 550-2015.

Table 6-5 Monthly Water System Base Rates

Customer	Meter Size	2024 Rates
Residential	In town 5/8"	\$50.15
	Out of Town 5/8"	\$60.18
Commercial	5/8"	\$55.29
	1"	\$123.92
	1.5"	\$238.36
	2"	\$375.66

Table 6-6 Water Consumption Charges by Tier

Customer Type	Service	Average Number of Connections	Tier	2024 Rates per ccf	Average Annual Usage	Average Annual Usage Revenue	
Residential	In Town 5/8"	127	Tier 1	\$4.21	814,456	\$34,309	
			Tier 2	\$4.75	56,100	\$2,666	
			Tier 3	\$5.29	7,700	\$407	
	Out of Town 5/8"	16	Tier 1	\$5.06	111,000	\$5,617	
			Tier 2	\$5.70	2,100	\$120	
			Tier 3	\$6.35	0	\$0	
Commercial	5/8"	16	Tier 1	\$4.21	14,200	\$598	
			Tier 2	\$4.75	9,800	\$466	
			Tier 3	\$5.29	40,400	\$2,138	
	1"	1	Tier 1	\$4.21	5,336	\$225	
			Tier 2	\$4.75	1,321	\$63	
			Tier 3	\$5.29	59	\$3	
	1.5"	2	Tier 1	\$4.21	17,000	\$716	
			Tier 2	\$4.75	17,000	\$808	
			Tier 3	\$5.29	280,138	\$14,822	
	2"	1	Tier 1	\$4.21	9,930	\$418	
			Tier 2	\$4.75	7,880	\$374	
			Tier 3	\$5.29	64,484	\$3,412	
	Total		163		Total	1,458,804	\$67,161

Table 6-7 Water Consumption Tier Ranges

Tier	5/8-inch	3/4-inch	1-inch	1.5-inch	2-inch	3-inch	4-inch	6-inch	8-inch
Tier 1	<10 ccf	<15 ccf	<25 ccf	<50 ccf	<80 ccf	<160 ccf	<250 ccf	<500 ccf	<800 ccf
Tier 2	10-20 ccf	15-30 ccf	25-50 ccf	50-100 ccf	80-160 ccf	160- 320 ccf	250- 500 ccf	500- 1000 ccf	80- 1600 ccf
Tier 3	>20 ccf	>30 ccf	>50 ccf	>100 ccf	>160 ccf	>320 ccf	>500 ccf	>1000 ccf	>1600 ccf

The Town of South Prairie Water Reserve Fund, Fund No. 401 as established by SPMC 13.20.010, is funded from revenues consisting of a portion of the water service charges and all connections fees. The Water Reserve Fund shall be used for the purpose of designing and constructing improvements to the water system.

There are four principal ways that the improvements outlined in this water section can be financed aside from setting aside a portion of the monthly service charge. Rates and charges must be maintained at an adequate level to ensure a sufficiency of funds to properly maintain and operate the system and provide funds for construction of the projects identified through a combination of cash contributions and debt financing.

Developer Financing

Developers of presently unimproved property will finance many of the new facilities constructed in the Town. All of the improvements required for service to property with new plats or commercial developments will be designed and constructed in accordance with the Town’s developer project policies. In some cases, latecomer’s agreements may be executed for any water main serving property other than the property owned by the developer that is financing the project.

Combination Financing by the Town and Developers

It may be necessary in some cases to require the owner to construct a larger diameter water line than is required by the current development in order to support the comprehensive development of the Town’s water system. The Town may enter into a latecomer’s agreement or reimburse the developer for the extra cost of increasing the size of the line over that required to serve the property under development. Oversizing should be considered when it is necessary to construct any pipe over a certain diameter in a single-family residential area to comply with the water comprehensive plan.

Revenue Bond / General Obligation Bond

Water treatment plant improvements, water storage facilities, and other major capital improvement projects that are a general benefit to a major portion of the Town may be financed by revenue bonds or general obligation bonds. Improvements that will benefit primarily a single developer should be financed by the developer of the property. The Town may use whatever funds are available for the payment of the debt service on the revenue bonds. A major source of these funds

is from the water rate revenues from the Town customers. However, all funds, such as general facility fees, connection charges or latecomer charges, may be used for debt service. Water system improvements that will service many different property owners in areas that are already developed may be financed through the establishment of a local improvement district (LID). The financing is accomplished through the sale of revenue bonds or general obligation bonds. These bonds are retired with income from the assessments and/or other funds of the Town.

Grant Funds / Loans

State and federal authorities provide funds under various grant programs for the construction of major improvements to or rehabilitation of water systems. Programs available include Drinking Water State Revolving Fund Loan (DWSRF), United States Department of Agriculture Rural Development (USDA RD), and Public Works Trust Fund Loan Program (PWTF).

Wastewater Collection and Treatment – Town of South Prairie

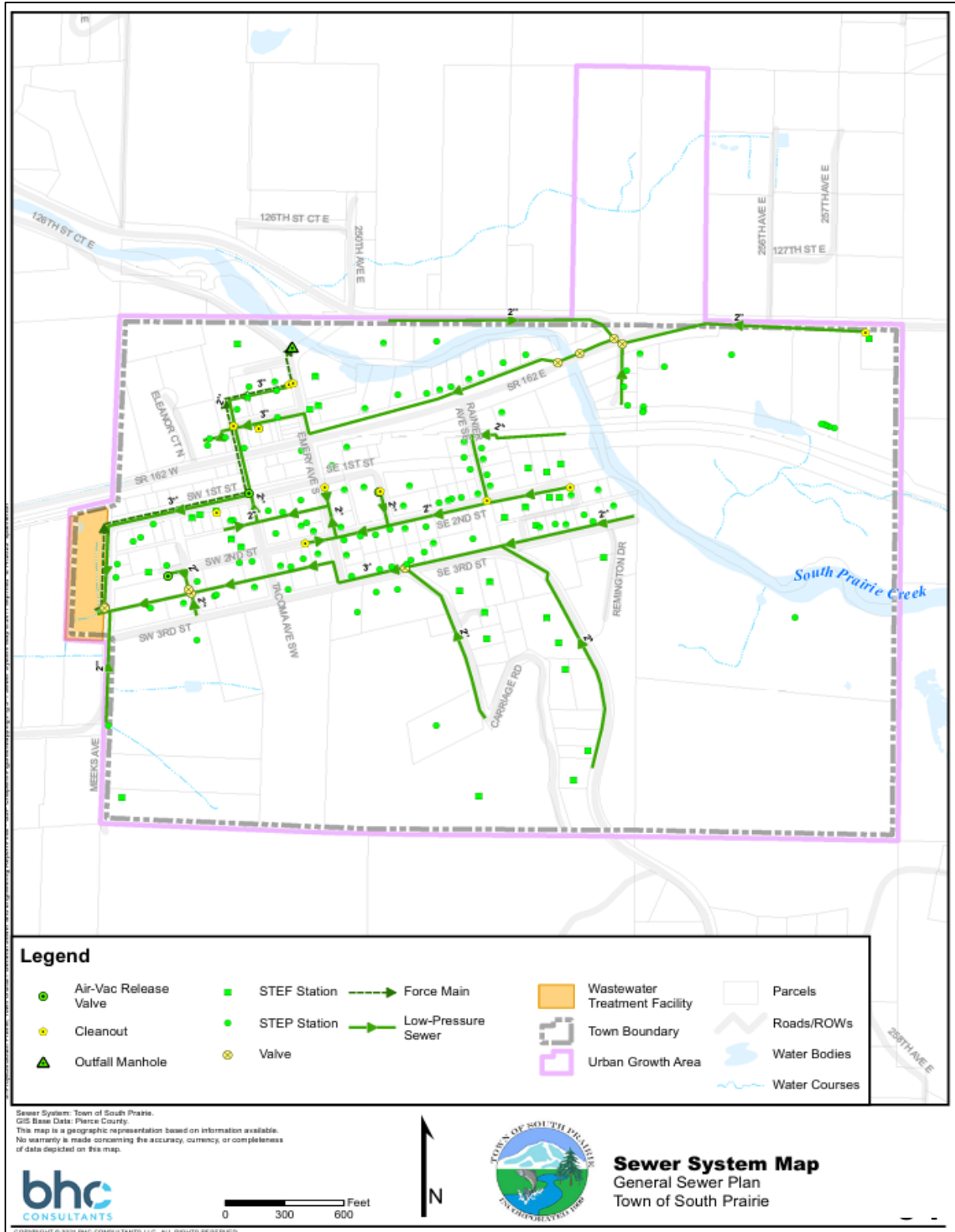
Introduction

The Town of South Prairie owns and operates its wastewater treatment plant (WWTP), which has a permitted discharge to South Prairie Creek. The WWTP and other publicly owned wastewater treatment facilities (POTWs) within a 20-mile radius are identified in Figure 1-1 of Appendix A the Town of South Prairie General Sewer Plan and Engineering Report. The existing South Prairie WWTP began operation in 1992. Under its current permit, the facility must be under the responsible charge of a Class 2 certified operator, with a Class 1 operator available for all regular shifts. Classifications are designated by level of education, training and experience, with the higher levels of certification obtained through the most training and experience. The Town's contracted operator maintains a certification level meeting these requirements. The treatment plant provides sewer service connections to over 440 residential and commercial customers.

The Town's wastewater collection system includes small diameter pipes, service laterals, and individual service holding or dosing tanks with either a septic tank effluent pump (STEP) or a septic tank effluent filter (STEF) station controller. The STEP and STEF installations serve both residential and commercial customers. There are no significant industrial users currently served by South Prairie. The Town owns and maintains the collection system including all mainline piping and valves, service laterals from tanks to mainline, and the dosing tanks including pumps, filters, and alarms. The plumbing between the building and the dosing tank is the responsibility of the property owner.

The Town of South Prairie is responsible for managing the wastewater collection and treatment facilities. These facilities are funded through wastewater rates and general facility charges associated with new development. These revenues provide for future capital improvements and pay for current operating expenses, maintenance of the system, replacement, and/or emergency repairs. Other funding opportunities that might be available through state and federal grant and loan programs, as they might benefit future system operations and capital improvement expenditures, are discussed in the Capital Improvements Plan section below. Sewer service in the Town of South Prairie is currently limited to the City's Urban Growth Area (UGA).

This section of the report first addresses the conditions and needs of the sanitary collection system and then those for the wastewater treatment facility.



Collection System

Level of Service

The Level of Service (LOS) for the sanitary sewer system was established from the Criteria for Sewage Works Design, Department of Ecology, 1998, and construction standards adopted by the Town through its municipal codes.

The Level of Service (LOS) requirements for the sanitary sewer collection system include the capability of handling peak flow and providing adequate pipeline velocity. New construction is required to meet standards to limit infiltration and inflow into the system. These standards include precast manhole sections with gasketed seals, concrete pipe with rubber joints, or heavy-duty PVC pipe.

Inventory of System

The Town's sewer collection system includes 0.44 miles of 3-inch force main; 3.07 miles of 2-inch and 3-inch low-pressure sewer mains; STEP Stations; and Septic Tank Effluent Filter (STEF) Stations. Complete record drawings of system infrastructure are not documented, but the majority of collection system piping material is polyvinyl chloride (PVC). Based on available information and records, the extent of the existing sewer system is shown on the map on the prior page.

Wastewater is conveyed to the South Prairie WWTP through two 3-inch low-pressure sewer mains, which combine just east of the plant. Wastewater is treated at the WWTP using a recirculating gravel filter bed to achieve biological oxygen demand (BOD) and total suspended solids (TSS) removal in compliance with the facility's National Pollutant Discharge Elimination System (NPDES) permit. Other unit processes include the recirculation tank, effluent filtration, and ultraviolet (UV) disinfection. A holding tank at the WWTP stores wasted solids and is intermittently pumped and hauled. Treated effluent is pumped via a 3-inch force main to the 4-inch diameter outfall with a diffuser that discharges into nearby South Prairie Creek.

The WWTP and STEP collection system were initially constructed in 1991. Upgrades to the WWTP in 2006 added additional gravel bed perforated feed pipes, as well as effluent disk filtration.

To prevent the creation of intermediate high points, all low-pressure sewer mains maintain a positive slope from specified low points to air vacuum release valves. All sewer laterals were constructed at a consistent slope, either positive or negative, to avoid intermediate high points throughout the system.

Under normal system conveyance conditions, topography in portions of the service area enables gravity flow conditions within the low-pressure sewer mains. Without complete record drawings, it is not possible to adequately identify the areas of the system that operate under gravity flow conditions, and these areas will vary to some extent based on the number of STEP pumps in operation. The town has 10,095 LF of 2" diameter and 6,130 LF of 3" diameter, respectively, of low-pressure sewer mains and 2,304 LF of 3" force main.

Existing STEP and STEF Stations

There are a total of 137 STEP and STEF stations in the Town's sewer collection system. Each station is located on private property. The town has an easement for each station for operation and maintenance purposes. The typical STEP station installation consists of:

- a standard sized 1,000-gallon fiberglass dosing tank,
- a 4-inch inlet pipe from the served building to the dosing tank,
- a PVC vault with plastic screen that houses the effluent pump and associated float controls (on/off/high water alarm), and
- a 1-inch PVC outlet pipe that connects to the low-pressure sewer main.

Each tank also contains a 6-inch cleanout providing access to the inlet pipe and a riser with a fiberglass lid that provides access to the PVC vault, effluent pump, float controls, and discharge piping.

The electrical conduits that power the effluent pumps for each STEP station extend from the electrical splice box located in the tank riser to the building the tank serves, where the panel is mounted on an exterior building wall. The control panels are Model S-1 Simplex Control Panels by Orenco Systems, Inc.

The standard STEF station installation is identical to the STEP station described, with the exception of the PVC vault configuration, effluent pump, and outlet piping. The PVC vault for STEF stations consists of:

- an effluent screen,
- a 1-1/4-inch intrusion pipe centered in the vault with a 5/16-inch orifice located at the bottom of the pipe, and
- a 1-1/4-inch flex hose that connects intrusion pipe in the PVC vault to the 1-1/2-inch outlet pipe.

While a STEP station relies on a pump to convey the effluent to the conveyance system, a STEF station fully operates via gravity and does not have a pump component. There are a total of 19 STEF stations in the system, most of which are located in the periphery of the service area and on top of hills on SE 2nd Street, SE 3rd Street, and Carriage Road.

Newer 1,000-gallon dosing tanks installed in the collection system have two compartments separated by a baffle – one compartment for settling solids and the other for housing the PVC vault and outlet piping. While most tanks have a 1,000-gallon volume, there are a few stations with 1,500-gallon tanks. Some customers also have a multiple tank system. For this configuration, the dosing tanks are installed in series with a 4-inch PVC pipe connecting the tanks.

Treatment System

Level of Service

The Level of Service (LOS) for the sewage treatment plant was established from the Criteria for Sewage Works Design, DOE, 2008. The WWTP is currently permitted for a maximum month flow of 38,200 gallons per day (GPD), average monthly dry weather flow of 28,680 GPD, maximum month BOD load of 68 pounds per day (lbs/day), and maximum month TSS load of 17.5 lbs/day. A detailed description of the limitations for each effluent parameter can be found by referencing the Town's WWTP NPDES permit through Washington State Department of Ecology's (Ecology) Permitting and Reporting Information System (PARIS) online database.

Inventory of System

The Town of South Prairie WWTP has had ongoing challenges with effectively treating the Town's wastewater since it was constructed in the 1990s. These performance issues led to a moratorium on new services for many years and resulted in subsequent modifications to the WWTP at its currently rated capacity.

The existing WWTP consists of the recirculation tank, gravel filter, effluent filtration, UV disinfection, and a solids holding tank. The WWTP is located on the west side of the town. To the east of the site along South Prairie Carbon River Road are single family homes. The parcels to the south and west of the WWTP site are located outside the Town limit and zoned as Rural 10 under Pierce County jurisdiction. State Route 162 is directly to the north of the site. The 100-year floodplain reaches the parcel to the south of the WWTP via a small tributary to the South Prairie creek; however, flooding from the 100-year flood is not expected to impact the WWTP.

Challenges to operating the existing system stem largely from the STEP system. During normal operation, the WWTP operates satisfactorily. Power outages, which occur infrequently, result in the shutdown of STEP pumps within the system. When power comes back online, all the STEP pumps run at once, which significantly increases flows to the WWTP. While this only occurs for a short period, the high flows can easily overwhelm the system as well as change the characteristics of the influent wastewater. The WWTP operator manages these events by pumping down the system while on generator power, which frees up the volume needed to treat large incoming flows. The operator also remains vigilant during these events to changing influent conditions, which have included low biological loading and pH fluctuations that make meeting permit limits challenging and sometimes necessitate modifying recirculation and wasting procedures.

Because of the high peak flow rates that have been experienced at the WWTP recently, and the operator's limited ability to adapt to rapid changes in influent with the limitations of existing process equipment, the Town has adopted a temporary sewer moratorium. The moratorium is revisited every 6 months, and the Town's objective is to lift the moratorium through completion of near-term capital projects that enhance the reliability of the existing WWTP. Ultimately, however, it is felt that a change in treatment process technology will be necessary to maintain compliance under more stringent future discharge permit limits and larger wastewater flows.

Reclaimed Water

In accordance with Revised Code of Washington (RCW) 90.48.112, engineering reports for the construction of new sewer systems and facilities, or for improvements to existing sewer systems and facilities, submitted under RCW 90.48.110 must include consideration of opportunities for the use of reclaimed water. The WWTP does not currently produce reclaimed water. The Town does not currently have any goals of reclaimed water production, as there are no opportunities for substantial beneficial use of reclaimed water that have been identified, and the cost of enhanced treatment and reclaimed water distribution is prohibitive to the Town's small customer base.

Table 6-8 NPDES Permit Limit Summary

Parameter	Average Monthly	Average Weekly
BOD ₅ , mg/L	20	30
BOD ₅ , lbs./day	6.4	9.6
TSS, mg/L	20	30
TSS, lbs./day	6.4	9.6
Fecal Coliform (CFU/100mL)	200	400
Parameter	Maximum Daily	
pH	6 – 9 Standard Units	
Total Ammonia (as NH ₃ -N)	8.0 lbs./day from May 1 st to October 31 st	

Conveyance System

Introduction

Analysis of the Town of South Prairie’s (Town) sewer collection system is a critical component in determining the ability of the existing infrastructure to accommodate future growth and to identify any operations and maintenance limitations from system operation. The sewer collection system is categorized as a Septic Tank Effluent Pumping (STEP) system where single septic tank systems with electric pumps discharge the tank’s effluent into a community low-pressure sewer main. A few Septic Tank Effluent Filter (STEF) systems also exist within the system, which do not contain electric pumps and instead convey effluent into the sewer main solely by gravity. The Town has standardized the septic tank systems manufactured by Orenco Systems (Sutherlin, OR) for individual services. The equipment and facilities for these services are installed within the customer’s property, with Town established Town easements permitting access by contracted operations and maintenance staff.

The hydraulic capacity of the system was analyzed using a Microsoft Excel spreadsheet with standard hydraulic equations and design criteria presented in Washington State Department of Ecology’s (Ecology) Orange Book, the Orenco Effluent Sewer Design Manual (Orenco Manual), and the U.S. Environmental Protection Agency (EPA) Alternative Wastewater Collection Systems Manual (AWCS). The primary information sources used to develop the hydraulic analysis spreadsheet include the as-built drawing set for the 1991 Wastewater System Improvements and a list of the existing STEP/STEF stations, both of which were obtained from the Town. Clarifications were offered by Town staff for information that was not available through the as-builts.

The system was analyzed for existing conditions (2021), the 6-year planning horizon (2027), and the 20-year planning horizon (2041).

Conveyance System Capacity Evaluation

System profiles were generated from record drawings for the low-pressure sewer mains that comprise the Town’s collection system. All existing STEP/STEF locations were grouped into distinct areas relative to their impact on the collection system. The extent of these system

evaluation areas are typically dictated by intersections, system maintenance valves, and pipe size increases.

2021 Peak Flow Results

The cumulative Equivalent Dwelling Units (EDUs), corresponding peak design flow, and hydraulic grade line for each designated analysis area were calculated (See Section 6.3.1 of Appendix A). The results for the 2021 capacity evaluation indicate that the existing low-pressure sewer main system maintains sufficient capacity to handle existing peak design flows, except for the 2-inch diameter pipe that the South Prairie Creek RV Park (RV Park) flows discharge directly into.

2041 Peak Flow Results

The cumulative EDUs, corresponding peak design flow, and hydraulic grade line for each designated analysis area were calculated (See Section 6.3.3 of Appendix A) using the equations the 2041 projected population presented in Chapter 3 of Appendix A. The net increase in residential and employment populations were distributed evenly amongst all existing STEP/STEF connections since the exact locations at which growth within the service area will occur is not currently known. The results for the 2041 capacity evaluation indicate that the existing low-pressure sewer main system maintains sufficient capacity to handle the projected 2041 peak design flows, with the exception of the 2-inch pipe directly downstream of the RV Park. The 2041 flow projections marginally increased from the 2021 baseline population at the beginning of the planning period. Unless a large-scale development is constructed adjacent to the Town's service area and requests sewer service, the growth projected within the existing service area over the 20-year planning period is unlikely to trigger any capacity-related capital improvement projects.

Conveyance System Capacity Deficiency Summary

The single capacity deficiency identified is the 2-inch pipe the STEP stations at the RV Park discharge into. This capacity deficiency is prevalent for existing 2021 peak flows, projected 2027 peak flows, and projected 2041 peak flows. Additionally, much of the Town's existing low-pressure sewer main system consists of 2-inch diameter pipe, totaling approximately 10,100 linear feet, or 60 percent of the existing pipes in the system. The AWCS does recommend installing low-pressure sewer mains with a diameter of 3-inches or greater. Installing a 2-inch diameter pipe has the same installation and construction costs as a 3-inch diameter pipe, whereas the 3-inch diameter pipe has considerably more capacity. As operation and maintenance issues or equipment/pipeline failures occur in these areas, a systematic replacement of these 2-inch sections should be considered.

Outfall and Effluent Discharge

The current outfall in South Prairie Creek is permitted for treated WWTP effluent discharge. Due to dynamic changes to the streambed, the location of the outfall relative to the banks has shifted in the past and continues to do so. Additionally, peaks in stream flow associated with storm events are progressively resulting in streambank erosion to one private property upstream of the buried outfall facilities. Without stabilization, it is clear that this trend in erosion will expose and cause failure of the outfall facilities in the near future.

Operational and Maintenance Considerations

Routine and consistent system maintenance is required to ensure proper operation of the STEP conveyance system. These tasks include inspecting air-vac release valves for proper operation on a yearly basis; exercising isolation valves located on low-pressure sewer mains on a yearly basis; cleaning the pipelines when warranted by field observations; and pumping each STEP/STEF tank and inspecting/cleaning the effluent screen, effluents pump, and control system once every three years. The labor and associated costs for performing these Town-contracted services are covered under the sewer utility fund as an established and budgeted annual operating expense.

6-Year Capital Improvement Plan – Short Term

Several capital needs have been identified and itemized for funding. The goal of short-term improvements is to improve operator confidence in the existing system by removing process bottlenecks, providing new equipment for better process control, and increasing capacity of existing systems projected to be insufficient based on short term flow projections. The Town's goal is to lift the sewer moratorium and allow for further land development in the community. The short-term capital projects are intended to provide more reliability in managing high influent flows and to maintain near-term permit compliance. The WWTP can manage its permitted flows (aside from power outages) and can maintain treatment based on permitted BOD5 and TSS loading. Ammonia loading is the one area where the plant is projected to be unable to maintain treatment, thus several of these improvements are targeted at providing a more stable nitrification process with increased flows and loads.

All short-term improvements are designed to meet the 20-year flow projections, which assume very limited growth within the Town and minimal new sewer connections. These improvements continue to be evaluated from a cost-benefit perspective to limit investments in facilities that might not be integrated into any major WWTP project that changes process technologies necessary for future permit limits. The Town anticipates a major process overhaul will be needed within the 20-year time frame for the implementation of enhanced treatment that meets more stringent anticipated permit limits and/or developer driven increases in flows.

Self-Installation

Several smaller capital needs discussed above are currently planned to be self-implemented by the Town by 2025.

- **Valve Replacements.** The Town operator plans to replace seized valves, including buried valves with incompatible materials (not corrosion resistant) and the sludge holding tank influent motorized butterfly valve. This improvement will allow the operator to control wastewater routing and TSS spikes at the WWTP more effectively. This improvement also includes the replacement of the inoperable 8-inch sludge holding tank isolation valve with a new manual plug valve to enable use of this tank for periodic sludge wasting. This improvement will increase the vacuum truck cleaning frequency of the recirculating tank and sludge holding tank to an annual basis, as well as allow the WWTP operator to control sludge age more effectively in the system.
- **Generator/ATS Installation.** The Town operator has recently completed work to replace the generator and manual transfer switch with a new generator and an automatic transfer

switch. The active treatment system (ATS) will start the generator automatically on utility power fail.

Operations and Maintenance

In addition to the following projects, the Town should seek to accomplish these two goals:

1. **Secure Additional Collection System O&M Staffing Resources.** Appreciable time has historically been spent each week by the previous Town Mayor, Anthony Caldwell, providing oversight and coordinating maintenance and repair duties associated with STEP system facilities. With his retirement from the position at the end of 2021, he has stayed on assisting part time to prevent leaving a void in personnel for the duties he has performed. When STEP system alarm occurs at customers' properties, they usually require a quicker response time than when issues arise at the WWTP. The current Contract Operator is more limited in his ability to respond with this immediacy at all times of the day. The Town should seek to contract an additional part-time local employee who can receive training on the system from the former mayor, as well as gain familiarity and training with the STEP system equipment (Orengo) that must be maintained.

2. **Adopt Policies and Goals for Maintenance Activities Where Industry Recommendations are Made.** The primary DOE resource established for operation of wastewater systems is the Criteria for Sewage Works Design, which offers the following recommendations for STEP systems:
 - Monitoring and inspecting each system STEP station at least once every three (3) years, including equipment checks and cleaning of effluent screens, effluent pumps, and control system.

 - Pumping STEP tanks frequently enough to avoid sludge levels greater than two thirds of the tank volume. Inspecting STEP station can also occur during scheduled tank pumping.

 - Maintaining on hand 3 to 5 percent of parts for critical system components.

South Prairie should plan appropriate increases in its annual sewer utility operating budget to work towards these goals, as O&M costs are expected to increase with time due to inflation. The 2022 operations budget was increased 37 percent over the 2021 budget.

The following are short-term Operations and Maintenance Capital Improvement Projects.

- W-1. **Effluent Drum Filter Replacement.** The effluent drum filter is no longer supported by the manufacturer, and spare parts are difficult to obtain for this aging piece of equipment. Additionally, the WWTP operator has indicated that this piece of equipment is a significant hydraulic bottleneck at the plant. The effluent filter should be sized for a minimum of 65 gallons per minute (gpm) to ensure adequate capacity at the projected 2041 peak hour flow.

The new drum filter will tie into the existing 4-inch filter influent and effluent piping within the existing filter building. The existing filter bypass would be maintained and used during installation of the new filter as needed. The new filter will use a small pump to pump solids through the existing 1½-inch sludge outlet pipe, similar to the existing filter. The proposed filter is sized for average flows of 50,000 gpd, and peak flows of 100,000 gpd, providing more than adequate capacity for the projected flows. A new local control panel specific to the filter will be installed. The existing 100A power service to the filter building is expected to be adequate for the new equipment, which includes a ½ HP drive motor, and 2 HP backwash pump, though this will be confirmed during design.

Replacement of the filter is planned to be deferred due to high cost and uncertainty of compatibility with potential long-term improvements. Interim improvements will include replacement of failing parts. Most recently, the gearbox was in need of replacement. This project considers only gearbox replacement.

- W-2. **Ultraviolet (UV) and Drum Filter Pipe Revisions.** Simplify piping arrangement between in-line drum filter and UV disinfection and move piping to above grade. This improvement will help with the removal of biological growth and the accumulation of worms in the UV system. New 4-inch piping will be placed above grade and supported in a manner to minimize the number of fittings between the filter and UV. The new piping will maintain the connection to the existing filter bypass pipe.
- W-3. **Influent Flow Measurement.** Influent flow measurement can be erratic due to design flaws within the system. Upstream conditions can be mitigated with an additional manhole installed upstream of the flume, with new larger piping to promote laminar flow. Downstream conditions are more challenging to control, as the hydraulic restriction causing the backup is uncertain. The recirculation tank influent piping appurtenances may add enough headloss that some flow backs up towards the flume. This equipment appears to be designed to distribute flow through the front end of the tank, thus its removal would require the addition of mixing within the tank. Separating the influent pipe from the recycle piping is also likely to mitigate issues with influent flow measurement.

The costs for this project, presented in Chapter 9, include new 4-inch pipe for the raw influent with a new pipe penetration. The existing recirculation piping and solids piping will reuse the existing penetration, with an elbow for a cleanout added where the influent piping currently expands from 4-inch to 8-inch. Tank mixing is not included, as project W-9 is expected to include this work.

- W-4. **General Electrical Update.** Update electrical wiring to meet hazardous (classified) area methods per the electrical code. The influent Parshall flume manhole is considered a Class 1, Division 1 hazardous (classified) area per NFPA 820. The wiring methods in use, including liquid tight flexible conduits without seal off fittings, are not rated for this classification category. This project provides new conduit, wiring, junction boxes, and seal offs to comply with area classification requirements.

Capacity

The following are short-term Capital Improvement Projects related to Capacity.

- W-5. **Effluent Pump Replacement.** Replace effluent pumps and upgrade level controls with a total of three (3) float switches – one to turn on the first pump, one to turn on the second pump and one to alarm high water level. The effluent pumps should be sized for a minimum of 65 gpm each to ensure adequate capacity at the projected 2041 peak hour flow. Design of these improvements will include discussions with the Town on pump sizing, as additional capacity may be beneficial for pumping the system down when needed to free up capacity during power outages. The project costs presented in Chapter 9 include the cost to replace pumps, pump rails, and installation. Costs do not include pump station replacement or modifications to the structure.
- W-6. **Holding Tank Pump Replacement.** The holding tank pumps are designed for a peak hour capacity of 60 gpm, which is expected to be exceeded in 2024 based on peak hour flow projections. Replumbing the piping and replacing the drum filter as previously noted could possibly provide additional hydraulic capacity and allow the pumps to remain in service for a longer period of time, but these pumps were included in the 6-year Capital Improvement Plan (CIP) to remain conservative. The costs for this project assume no modifications to the existing holding tank structure.
- W-7. **Gravel Filter Cover.** Cover gravel filter with impermeable removable tarp to prevent precipitation from entering gravel filters and reducing treatment capacity. The cover will also prevent sunlight from reaching the gravel bed, which will significantly reduce vegetation growth atop the filter. The cover will be equipped with supports and an anchoring system from the cover manufacturer. Access to the filter will require that the tarp be temporarily removed, which can be achieved by rolling up a small portion in the area where access is needed.
- W-8. **Alkalinity Dosing System.** Add alkalinity dosing to the influent manhole with continuous pH monitoring due to periodic drops in influent pH. This improvement includes a small metering pump with skid assembly and does not account for chemical cost. The goal of this improvement is to manage influent pH and alkalinity such that nitrification is not inhibited, and the Town can remain compliant with effluent ammonia with increases to flows and loads. The Operator has indicated that bicarbonate is added to the system frequently to adjust alkalinity, and an automated dosing system would improve reliability in maintaining nitrification.

The new dosing system would be placed outdoors adjacent to the control building. A small canopy would be installed, and all piping would be heat traced. Heating blankets would be onsite to keep chemical totes from freezing. An online pH probe would be used to control the dosing rate of a chemical feed pump. As the NPDES permit includes seasonal limits for effluent ammonia (from May 1 through October 31), it is not expected that the system will be utilized in the cooler months unless online pH readings indicated that additional alkalinity is needed to address a process upset.

- W-9. **Recirculation Tank Aeration System.** Install coarse bubble diffusers and 350 to 400 standard cubic feet per minute (scfm) blower to provide aeration to the recirculation tank. This improvement includes the installation of a positive displacement (PD) blower with controls and weather-proof enclosure, stainless steel air distribution piping, and EPDM diffusers. The cost estimate of this high priority improvement could be reduced by considering a diffuser system and smaller blower that only disperses flow to a portion of the tank.

The goal of this improvement is to provide additional aeration needed for nitrification stability and improved mixing to the recirculation tank. The nitrification process would be more reliable and stable with the addition of aeration and would allow flows and loads to comfortably increase to the WWTP design flows.

- W-10. **Outfall Improvements.** Modify the outfall manhole to hard pipe the force main through the diffuser section, increasing scour velocity for sediment removal. This project also includes the installation of a temporary hose connection to allow the force main to continue to discharge in the event the outfall is lost.
- C-12. **STEP Conversion.** The Town has twenty (20) septic tanks that discharge flow into the shared system of low-pressure sewer mains via gravity, which are referred to as STEF systems. Since these tanks do not have pumps, the filtering system easily gets plugged, requiring more maintenance from Town staff. This project will upgrade the ten (10) most problematic tanks in the system from gravity-fed (STEF) tanks to pumped tanks (STEP).
- C-13. **Capacity Related Pipe Replacement.** The 2-inch and 3-inch pipes downstream of the South Prairie RV Park are identified as capacity-deficient for existing and future peak design flows by STEP system equipment vendor recommended criteria. As operational observation has yet to confirm significant overloading of these pipes through individual STEP tank pumping and draining issues, the project therefore is not prioritized like the preceding CIPs. It will involve replacing approximately 1,315-LF of 2-inch and 3,650-LF of 3-inch low-pressure sewer force main with 4-inch pipe.

Outfall and Effluent Discharge

Recommended improvements consisted of hard-piping the outfall to the force main to increase velocity through the outfall and scour settled sediment. These improvements also include provisions to connect a hose to the force main and maintain discharge in the event of a complete loss of the outfall. These short-term improvements were designed and approved by Ecology in early 2023 and were constructed in 2023.

- W-11. **Short-Term Outfall Improvements.** The short-term outfall improvements primarily involve piping modifications, including hard-piping the outfall to the force main and installing emergency connection equipment to the force main allowing for outfall bypassing. These modifications will help prevent sediment buildup at the outfall and provide a mechanism for discharge if the outfall were to fail completely. The cost for the short-term outfall improvements totals \$90,000 which will be fully funded through the ARPA grant received by the Town in 2023 and the project was completed in Summer 2023.

Table 6-98 6-Year Capital Improvement Plan (2021-2027)

CIP No.	Project	Type	Replacement	Upgrade	Expansion	Eligible for Connection Fee	Project Description
W-1	Effluent Drum Filter Gear Box	O&M	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<ul style="list-style-type: none"> Replace the effluent drum filter gear box to prolong the useful life of the existing equipment.
W-2	Ultraviolet (UV) and Drum Filter Pipe Revisions	O&M	<input checked="" type="checkbox"/>				<ul style="list-style-type: none"> Simplify piping arrangement between in-line drum filter and UV disinfection and move piping to above grade.
W-3	Influent Flow Measurement Repiping	O&M	<input checked="" type="checkbox"/>				<ul style="list-style-type: none"> Install new piping to separate recirculation and solids piping from raw influent piping that enters the recirculation tank.
W-4	General Electrical Update	O&M	<input checked="" type="checkbox"/>				<ul style="list-style-type: none"> Update electrical wiring to meet hazardous (classified) area methods per the electrical code.
W-5	Effluent Pump Replacement and Controls Upgrade	Capacity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<ul style="list-style-type: none"> Replace effluent pumps and upgrade level controls with a total of three (3) float switches.
W-6	Holding Tank Pump Replacement	Capacity	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<ul style="list-style-type: none"> Replace the holding tank pumps to meet projected peak hour flow.
W-7	Gravel Filter Cover	General		<input checked="" type="checkbox"/>			<ul style="list-style-type: none"> Install impermeable removeable tarp over gravel filter bed to prevent sunlight and inhibit vegetation growth and reduce infiltration of rainwater.
W-8	Alkalinity Dosing System	Capacity		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<ul style="list-style-type: none"> Add alkalinity dosing to the influent manhole with continuous pH monitoring due to periodic drops in influent pH. Includes a small metering pump with skid assembly.
W-9	Recirculation Tank Aeration System	Capacity		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<ul style="list-style-type: none"> Install coarse bubble diffusers and 350 to 400 scfm blower to provide aeration to the recirculation tank. Includes the installation of a positive displacement blower with controls and weather-proof enclosure, stainless steel air distribution piping, and EPDM diffusers.
W-10	Long-Term Outfall Bank Stabilization and Receiving Water Studies	O&M		<input checked="" type="checkbox"/>			<ul style="list-style-type: none"> Geomorphic and Flood Risk Assessment to identify scope and design of outfall bank stabilization project. Design, permitting, and construction of outfall bank stabilization to address concerns with bank erosion near outfall.
W-11	Short-Term Outfall Improvements	O&M		<input checked="" type="checkbox"/>			<ul style="list-style-type: none"> Outfall-related piping modifications including hard-piping the outfall to the force main and installing emergency connection equipment to the force main.
C-12	STEP Conversion	O&M		<input checked="" type="checkbox"/>			<ul style="list-style-type: none"> Upgrade the ten (10) most problematic existing STEF tanks to STEP tanks.
C-13	Capacity-Related Pipe Replacement	Capacity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<ul style="list-style-type: none"> Upsize approximately 4,970 linear feet (LF) of 3-inch low-pressure sewer mains to 4-inch.

20-Year Capital Improvement Plan – Long Term

Existing WWTP

Long term capital needs are divided into two categories: those that assume the long-term use of the existing facility, and those that replace the existing facility to maintain effluent compliance with potential future permit changes.

For continued use of the existing facility, the only major capacity constraint is the 60-gpm limit for effluent pumping, the drum filter, and UV disinfection. The projected peak hour flow for 2027 and years beyond slightly exceeds the 60-gpm threshold. There are short-term and long-term projects in this scenario including the effluent pump replacement (W-1 and W-5). In the long term, the effluent drum filter is need of replacement due to hydraulic constraints. Long-term replacement of the drum filter has been deferred to avoid sunk costs associated with upgrading the existing WWTP that is likely to be replaced entirely. The UV disinfection system needs to be replaced and sized for a minimum of 65 gpm each to ensure adequate capacity at the projected 2041 peak hour flow. The current UV system is expected to exceed capacity in the year 2033 based on the flow projections.

Future Permit Compliance

In 2021, Ecology is issued the Puget Sound Nutrient General Permit (PSNGP) to start the process for limiting the discharge of inorganic nitrogen to the Puget Sound. As South Prairie does not discharge directly to the Sound, the Town’s system has been excluded from the initial issuance of the general permit. Additional studies are underway to model the impact of nutrients from tributary watersheds, which may result in future discharge limits on inland dischargers. This may affect South Prairie’s NPDES permit at some point in the future, with potential limits to nitrogen, phosphorus, or both, depending on the results of the modeling efforts.

Per the 2015 Capacity Assessment, the maximum allowable flow at the plant is estimated to remain compliant with the facility’s current discharge limit on ammonia is 34,000 gpd on a max month basis, which is not exceeded in the 20-year planning horizon. Retrofits to maintain compliance on effluent ammonia were discussed in that 2015 Capacity Assessment, but it is unlikely that the South Prairie WWTP could achieve the upper limit of Ecology’s currently discussed total inorganic nitrogen discharge limit of 8 mg/L without a significant process overhaul. The City’s engineers do not recommend implementation of a high level of nutrient removal with the current process due to limited opportunities to expand, and difficulty in adapting current process to achieve nitrification and denitrification. New process upgrades will need to meet all known, available and reasonable methods or prevention, control and treatment (AKART) for nutrient removal when upgrading processes.

The capacity analysis assumed limited Town growth. In order to grow, significant WWTP capacity increases need to be realized. Ecology requires planning to maintain adequate capacity (PMAC) to begin once a facility achieves 85 percent of its rated max month capacity during three consecutive months, which equates to a max month flow of 32,470 gpd, max month BOD5 load of 57.8 lbs./day, or a max month TSS load of 14.9 lbs./day. Based on the 2041 per capita flow estimates, and growth projections, an additional nine residents above the 2041 projection would push the Town WWTP over this threshold for flow. The additional nine residents would not cause the BOD5 and TSS loading threshold to be exceeded at the 85 percent level, as the WWTP is limited on a hydraulic basis as opposed to a loading basis. This is expected, as a significant portion

of influent loads is reduced with the STEP system. As a result, any development in the Town resulting in additional sewer connections may require a capacity increase at the WWTP.

One possible alternative to achieve goals for capacity expansion and/or nutrient removal is the conversion of the WWTP process to activated sludge. The activated sludge process conversion was estimated to cost \$1.53M in 2019 U.S. dollars. This prepackaged system proposal was based on a maximum month flow rate equal to the facility's current design flow of 38,200 gpd.

Three alternatives to maintain future permit compliance were considered for additional evaluation. These alternatives are considered for long term improvements related to nutrient removal. The design criteria for these alternatives uses flows that differ from those previously presented in this Plan. Any future plant-wide improvement project assumes lifting of the development moratorium and an increase in flows to sewer all septic systems within the Town, while allowing for additional growth and sewer connection associated with new development. Under this scenario, the design maximum month flow is nearly double the existing rated capacity of the plant. A higher capacity will allow additional connections from within the Town, conversion of any remaining septic users to Town sewer, and the flexibility to consider the provision of sewer to development proposals adjacent to the Town. The following paragraphs summarize the future treatment alternatives and challenges. Conceptual level project costs (capital and O&M) are discussed in the long-term improvement analysis section below.

Membrane Bioreactor

A membrane bioreactor (MBR) uses permeable membranes to separate mixed liquor and effluent. MBR systems produce a high-quality effluent that is virtually free of Total Suspended Solids and can be configured for nutrient removal. A detailed study was commissioned by the Town. The study noted a subtotal of \$3.6M for all necessary project elements, which does not include contingency, sales tax, design, permitting, or services during construction.

Conventional Activated Sludge

A conventional activated sludge system would use secondary clarifiers to separate mixed liquor from effluent. A prepackaged system was used as the basis of this alternative. The system would be located at the existing WWTP site, which includes unused footprint to the north and east of the gravel filter beds. Constructing new facilities in unused space would allow the existing plant to operate while the new systems are constructed.

Pumping to Orting

This alternative would divert influent wastewater from the South Prairie WWTP to the City of Orting (Orting) WWTP. The South Prairie WWTP would be decommissioned and converted into a pump station, and the outfall would be abandoned in place. This alternative would reduce chemical and labor costs associated with WWTP operations and maintenance (though energy costs would increase due to pumping) and eliminate concerns with maintaining discharge compliance to South Prairie Creek.

Pumping raw wastewater would require securing an agreement with the City of Orting for a certain capacity right within their WWTP, at an unknown cost to the Town. The Town would also lose control over the wastewater treatment process and would be reliant on Orting to maintain the wastewater treatment process and discharge permits.

The diversion of wastewater effluent to Orting would require approximately 8.8 miles (46,500 feet) of new pipe, which is envisioned to follow the route of State Route (SR) 162. Assuming an installed cost (materials and labor) of \$140 per linear foot of C900 pipe, the total cost of pipe installation along is on the order of \$6,500,000. This cost does not account for engineering design, permitting, contractor mobilization, contingency, the cost of conversion of the WWTP to a pump station, or operational costs. The total project duration, including design, permitting, and construction, is estimated to be 21 to 36 months.

Additional Considerations

In addition to major plant improvements focusing on nutrient removal, limits on copper, temperature, or dissolved oxygen may be a possibility in future iterations of the Town’s NPDES permit.

Long Term Improvement Analysis and Recommendations

The Town’s engineers performed a life cycle cost estimate for each alternative. Life cycle costs include total project capital costs and O&M costs. A net present value for the 20-year life cycle of each alternative was prepared assuming a 4 percent annual discount rate. Conventional activated sludge is the least expensive option, from both a capital and O&M perspective. The MBR option is about 45 percent more expensive than conventional activated sludge in terms of capital costs, with O&M and life cycle costs similarly higher. Pumping to Orting is even more expensive and does not appear to be a viable option based on the cost assumptions. Note that these estimates do not include potential limits related to effluent copper, temperature, or dissolved oxygen.

Table 6-10 Life Cycle Cost Summary of Long-Term Alternatives

Cost Criteria	MBR	CAS	Pump Station
2023 Capital Project Cost	\$ 7,816,000	\$ 5,378,000	\$ 13,907,000
2023 O&M Cost	\$ 533,705	\$ 378,763	\$ 656,541
Annual Discount Rate	4%	4%	4%
O&M 20-year NPV	\$ 7,253,000	\$ 5,148,000	\$ 8,923,000
20-year Life Cycle Cost	\$ 15,069,000	\$ 10,526,000	\$ 22,830,000

The Town engineers recommend the preparation of studies on South Prairie Creek that better describe future permitting conditions before choosing the best and most cost-effective treatment alternative. Technological advances might result in differing alternative costs at that point, and specific permit parameters could force the Town into alternative discharge location considerations from South Prairie Creek that one of these technologies could more readily support. At the time that this decision is made, a more informed funding program can be launched to identify subsidies that will assuredly be necessary to complete the WWTP project.

Outfall and Effluent Discharge

Additional outfall improvements are required to maintain discharge of wastewater to South Prairie Creek after the short-term improvements noted above are implemented. Two options have been identified for long-term outfall improvements: maintaining the current outfall with a bank stabilization project or constructing a new outfall in a new location in South Prairie Creek. In either

case, there are several permitting hurdles. Partnering with Ecology will be necessary and may result in additional benefits such as restoration, bank protection, recreation, or other environmental goals. A mixing zone study is needed to ensure that adequate function of the outfall is preserved once the creek in proximity to the outfall has been stabilized in flow pattern and direction.

Long term improvement alternatives to the WWTP treatment process are directly related to the need for maintaining the outfall. Pumping to Orting, for example, removes the need for both WWTP process improvements and the existing outfall. Additionally, the Town has explored the option of discharge to groundwater. Groundwater discharge is administered via a State of Washington Department of Health (DOH) permit and would result in different effluent requirements and allow the Town to abandon the existing outfall in place if it were permitted as a year-round alternative. However, the results of a pilot infiltration test indicated that groundwater infiltration is not feasible.

Maintain Current Outfall with Bank Stabilization

The first alternative identified is to maintain the current outfall with a bank stabilization project. This alternative would be coupled with additional long-term investments to upgrade the WWTP treatment technology such that the outfall discharge can maintain permit compliance with more stringent future limits.

This alternative would protect the existing outfall by stabilizing the streambed with erosion mitigation measures. The existing manhole and outfall would remain in place and operational, and the short-term improvements discussed above would stay in place and remain functional. An outfall bank stabilization project was previously presented in the Outfall Evaluation Technical Memorandum and proposed riprap armoring along the edge of the bank for stabilization. Ecology has expressed concerns with riprap armoring, instead preferring to use more natural methods such as bioengineering as a bank stabilization measure. The effectiveness of bioengineering is currently unknown for this site. Additional information related to river hydraulics, sediment transport, geomorphic, and geologic conditions are needed.

The cost for this project is estimated at \$765,000. It should be noted that this cost estimate makes assumptions as to the scope of bank stabilization. The Pierce County Memorandum estimated costs between \$600,000 and \$1.25M, depending on the type of bank stabilization and the extents required. Additional sewer utility costs would be incurred in the long term to upgrade the treatment technology at the WWTP to a more robust process that could produce higher quality effluent to meet future permit limits. The O&M costs for the bank stabilization project are not expected to differ significantly from the current WWTP and outfall O&M costs. Total project duration for permitting, design, and construction is estimated at 36 to 60 months.

- W-10. Long-Term Outfall Bank Stabilization and Receiving Water Studies.** The long-term outfall improvement project includes stabilizing the streambed immediately upstream of the outfall with erosion mitigation measures. The scope and design of this project will be informed by a Geomorphic and Flood Risk Assessment conducted by Natural Systems Design, Inc starting in June 2023. The assessment will be fully funded by the Pierce County Flood Control Zone District funds for the Flood Risk Reduction and Watershed Management Economic Stimulus Grant Program for a total of \$125,000. The Town has secured \$760,000 in ARPA funding for the design, permitting, and construction portion of the outfall stabilization project. At this time,

the Geomorphic and Flood Risk Assessment has not yet been completed, so there is some uncertainty regarding total project cost for outfall bank stabilization project. Ultimate project costs may exceed the allocated ARPA funding and the Town may need to secure more funding to complete the long-term outfall improvements. To that end, the Town applied for and received \$125,000 of grant money from Pierce County for additional investigation of the creek to provide recommendations for bank stabilization. This additional grant money is not included in the Opinion of Probable Project Costs presented herein.

Relocate and Construct New Outfall

The second alternative identified includes relocating the outfall to a new location where the creek banks have remained stable over the past several years and constructing a new outfall. This alternative would also be coupled with additional long-term investments to upgrade the WWTP treatment technology such that outfall discharge can be maintained under a more restrictive permit. This alternative could possibly be carried out in partnership with another regional restoration project on South Prairie Creek that brings in funding for bank protection and/or restoration. Additional coordination with Ecology may be required for permitting a new outfall, which could lead to new effluent requirements. Due to the change in discharge location, a water rights impairment analysis might also become necessary.

As with the bank stabilization project alternative, additional studies (fluvial geomorphology, geology, site survey) are required to further develop the project and select a site for a new outfall. With a new site, the Town would need to acquire additional land, as the land up to a mile downstream is owned by either the County or private landowners. Relocation of the outfall would additionally require the installation of new effluent pipeline, and the short-term improvements discussed above might ultimately be abandoned.

The Pierce County Memorandum suggested a project to relocate the outfall downstream, indicating a cost of \$275,000. This recommendation and cost estimate does not account for land acquisition, permitting, and mitigation associated with a new outfall location. The actual cost is likely to exceed \$600,000 due to the longer pipe length and need for property acquisition. The O&M costs associated with a new outfall are not expected to differ significantly from the current outfall O&M costs. Total project duration for permitting, design, and construction is estimated at 24-48 months.

Additional Projects

The following three projects are recommended for the 20-year CIP.

W-101 – UV System Replacement. This project is a capacity related improvement project at the WWTP. The WWTP UV system capacity is expected to be exceeded by projected peak hour flow in 2033. In addition to increasing capacity, a UV system upgrade would also replace aging equipment. Additional capacity improvement projects are not anticipated to be necessary during the planning period but would be required in the event of growth not accounted for within this plan.

W-102 – Long-Term WWTP Improvements. This project serves to account for long term WWTP improvements to support continued discharge to South Prairie Creek with more stringent permit requirements. Long term improvements are discussed in detail above. The costs presented herein are intended to serve as a placeholder cost based on

the most stringent potential treatment requirements that would be met by a membrane bioreactor facility. Costs for a membrane bioreactor facility are the most cost-prohibitive of all the options studied for a WWTP expansion. As noted above, the treatment alternative should be further evaluated as long-term permit requirements become more certain to confirm the most cost-effective option is selected to move forward. These improvements are not included within the 6-year CIP, and implementation of a long-term improvement project will require an update to the Town's funding program.

C-103 – 2-inch Pipe Replacement. This project involves upsizing all existing 2-inch low-pressure gravity sewer mains in the South Prairie Sewer System to 3-inch. The level of service standard should be that the smallest diameter pipe installed for low pressure conveyance systems is 3-inches. This upgrade will allow for consistency with industry standard and will drastically increase capacity in the system if the growth within the Town's service area becomes more pronounced than currently projected.

Recommended Financing Plan

The funding analysis presented below was performed in August 2022 and included in the draft General Sewer Plan (GSP), which was submitted to Washington State Department of Ecology (Ecology) in 2022. Based on comments received from Ecology, the GSP was revised to address Ecology's comments and incorporate new developments on several projects, including drum filter replacement, influent flow meter repiping, the outfall bank stabilization project, and long-term WWTP improvements. The latter project falls outside of the 6-year CIP and therefore did not affect the financial analysis. The remaining projects modifications resulted in a \$25,000 dollar reduction of the total 6-year CIP expenditure. As the net sum of the projects required has been reduced, the conclusions presented below are still relevant and affordable, but the timing and quantity of projects may differ from what is shown below.

As the financial consultant is now retired and impacts on the overall financial analysis are minimal, the draft plan's financial analysis was left intact because the revenue recommendations are still applicable and there are no major impacts from costs.

Financial viability is the ability for the sewer system to meet its financial needs to operate, meet debt obligations, repair/replace/improve the system components, and maintain reserves, as necessary. Financial viability is very important to make sure the sewer utility remains in a position to provide safe and reliable sewer service for years into the future. The Town of South Prairie (Town) has shown its commitment to financial viability with recent rate studies, preparing annual budgets for planned operations and capital improvements, paying off outstanding debt, and continuing regular annual rate increases. There is no outstanding debt for the sewer utility.

The Town owns and operates both the sewer collection system and wastewater treatment plant (WWTP). The sewer utility is self-supporting and is budgeted and accounted for separately from the water utility. Each year during budget preparation, the Town reviews the financial outlook to ensure that sewer revenue is meeting the necessary sewer expenditures. Table 6-14 shows the projected 6-year sewer financial outlook. The bottom line is that sewer revenue has exceeded the expenditures in some years and not in others, with the excess being held in reserves for emergencies and future improvements.

Operating revenue has been sufficient to fund the operating expenses each year. The Annual Use of Reserves (shows as negative) in 2019 was for final debt payment and in 2022 is for planned capital improvements. Total sewer revenue ranged from \$257,000 to \$278,000. This revenue first provides increasing funds for operating expenses ranging from \$156,000 to \$226,000, a final debt payment of \$139,000 in 2019, and the remainder for capital improvements beginning in 2021. The 2022 budget includes a step up in operations to improve maintenance levels and capital outlay for the sewer outfall project. Table 6-13 provides a summary of sewer expenses.

Table 6-10 20-Year CIP and Future Sewer Extensions (2027-2040)

CIP No.	Project	Type	Replacement	Upgrade	Expansion	Eligible for Connection Fee	Project Description
W-101	UV System Replacement	Capacity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<ul style="list-style-type: none"> Upgrade UV system to ensure effluent disinfection capacity is sufficient to meet projected peak hour flows. Placeholder cost for long term WWTP improvements that may be needed for compliance with future South Prairie Creek discharge regulations. Cost presented herein assumed a membrane bioreactor, but the technology used should be further evaluated as future discharge regulations become more defined. Upsize all remaining 2-inch pipes to 3-inch.
W-102	Long-Term WWTP Improvements	Capacity/General	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
C-103	2-inch Pipe Replacement	Capacity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			

Table 6-11 Opinion of Probable Project Costs, 6- and 20-Year CIP

CIP No.	Project	Opinion of Probable Project Cost ¹	ARPA/Third Party Funding	2023	2024	2025	2026	2027	2028	2029+
W-1	Effluent Drum Filter Gear Box	\$ 10,000	\$ 10,000	\$ 10,000						
W-2	UV and Drum Filter Pipe Revisions	\$ 12,000			\$ 12,000					
W-3	Influent Flow Measurement Repiping	\$ 39,000				\$ 39,000				
W-4	General Electrical Update	\$ 24,000				\$ 24,000				
W-5	Effluent Pump Replacement and Controls Upgrade	\$ 92,000		\$ 92,000						
W-6	Holding Tank Pump Replacement	\$ 97,000			\$ 97,000					
W-7	Gravel Filter Cover	\$ 74,000					\$ 74,000			
W-8	Alkalinity Dosing System	\$ 75,000				\$ 75,000				
W-9	Recirculation Tank Aeration System	\$ 168,000						\$ 168,000		
W-10	Long-Term Outfall Bank Stabilization and Receiving Water Studies	\$ 760,000	\$ 760,000	\$ 478,000	\$ 282,000					
W-11	Short-Term Outfall Improvements	\$ 90,000	\$ 90,000	\$ 90,000						
C-11	STEP Conversion	\$ 61,000			\$ 61,000					
C-12	Capacity-Related Pipe Replacement	\$ 374,000							\$ 56,000	\$ 331,000
W-101	UV Disinfection Replacement	\$ 200,000								\$ 200,000
W-102	Long-Term WWTP Improvements	\$ 7,816,000								\$ 7,816,000
C-103	2-inch Pipe Replacement	\$ 583,000								\$ 583,000
Total²:		\$ 1,558,000	\$ 860,000	\$ 670,000	\$ 452,000	\$ 138,000	\$ 74,000	\$ 168,000	\$ 56,000	\$ 8,930,000
Total Town Responsibility³:		\$ 573,000		\$ 92,000	\$ 45,000	\$ 138,000	\$ 74,000	\$ 168,000	\$ 56,000	\$ 8,930,000

Notes:

- Costs are presented in 2022 dollars.
- This row provides a sum of total project costs per year, inclusive of the grant money the Town secured through ARPA and other third-party funding sources. Costs outside of the 6-year CIP (2029+) are excluded from the overall total.
- This row provides a sum of projects costs the Town is responsible for covering through sewer rate revenue, exclusive of ARPA and third-party funding sources. Costs outside of the 6-year CIP (2029+) are excluded from the overall total.

Table 6-12 Sewer 6-Year CIP Funding Sources, 2022-2028

CIP Funding Sources	2022	2023	2024	2025	2026	2027	2028	Total 2022-2028
<i>New ERU's</i>	0	0	0	0	0	0	0	0
GFC Connection Charges	0	0	0	0	0	0	0	0
Grants - Pierce County ARPA*	200,000	133,000						333,000
Borrow: Ecology SRF			398,000	235,100				633,100
Funded by Rates/Reserves	343,762	105,900	66,000	-	86,600	204,400	56,000	862,662
Total CIP Funding Sources	543,762	238,900	464,000	235,100	86,600	204,400	56,000	1,828,762
<i>* Pierce Co. ARPA funds require 10 percent local match.</i>								

Table 6-13 Sewer Financial History

Financial History - Sewer Fund 402	2019	2020	2021	Budget 2022
Revenue				
CARES Act - Covid-19		2,008		
Sewer Charges	248,069	251,764	264,044	275,000
Sewer Late Fees	1,407	-	50	2,000
Investment Interest - Sewer	10,988	3,386	786	1,000
Sewer Misc. Revenue (Theft Ins)	152			
Subtotal S Revenue	260,615	257,158	264,880	278,000
Expenditures				
Clerk Salaries & Wages	10,831	9,641	12,528	17,500
Clerk Benefits	1,006	919	1,444	4,350
Insurance	7,034	6,821	7,000	7,100
Professional Services	2,077	2,896	2,066	3,500
Legal Services	910	-	-	4,000
Prof Svcs - State Auditor (20%)	4,132	-	3,124	3,500
Town Utility Tax	16,172	16,401	18,448	19,000
State Excise Tax	9,026	8,449	7,764	10,000
Sewer Comp Plan	-	-	52,742	60,000
Judgements & Settlements	11,107	-	-	-
Sewer Salaries & Wages	1,794	2,363	2,165	3,750
Sewer Benefits	240	311	359	675
Operating Supplies	4,525	6,459	1,239	10,000
Fuel	171	79	568	1,000
Small Tools & Minor Equip - Sewer Ops	1,319	8,682	57	1,000
Capital Outlay-Small Tools & Minor Equip	-	-	-	73,762
Prof Svcs-FloHawks (100%) RACO Alarm (50%), Calibration (100%)	33,451	50,636	33,309	50,000
Capital Outlay-Prof Svcs	-	-	-	100,000
Contracted Svcs (Operator 70%)	27,212	24,897	29,400	38,500
Communication	2,721	2,351	842	2,000
Town Cell Phone	290	266	198	200
Postage	556	342	689	800
Web, Outlook, Cloud, Backup Hosting	27	20	-	-
Advertising	-	-	-	100
Public Utility Service	11,437	9,229	11,551	13,000
Repairs & Maintenance	8,445	9,313	30,364	35,000
Capital Outlay-Repairs & Maint.	-	-	-	310,000
Fees	1,047	45	1,044	1,200
Dues	565	-	565	200
USDA Principal	135,831			
USDA Loan Interest	4,082	-	-	-
Subtotal S Expenses	296,006	160,120	217,467	770,137
Annual Increase/(Use) of Reserves	(35,391)	97,039	47,413	(492,137)

Table 6-14 Sewer Fund 402 Balance (2022)

Sewer Fund 402 - 6-Year Outlook	2022	2023	2024	2025	2026	2027	2028	Comments
Revenue								
Sewer Charges	275,000	288,800	303,200	318,400	334,300	351,000	368,600	adds # new homes x rate x 12 mos
Sewer Late Fees	2,000	2,000	2,000	2,000	2,000	2,000	2,000	flat
Investment Interest - Sewer	1,000	1,000	1,000	1,000	1,000	1,000	1,000	flat
Subtotal Sewer Revenue	278,000	291,800	306,200	321,400	337,300	354,000	371,600	
Expenditures								
Sewer Operating Expenses	226,375	233,200	240,200	247,400	254,800	262,400	270,300	by cost escalation
Existing Debt	-							by debt schedule
CIP Funding from Rates	343,762	105,900	66,000	-	86,600	204,400	56,000	annual amount escal by constr.
New Debt for CIP	-	-	-	24,300	38,700	38,700	38,700	
Planned Use of Reserves	(293,000)	(54,000)			(43,000)	(152,000)		
Subtotal Expenditures	277,137	285,100	306,200	271,700	337,100	353,500	365,000	
Annual Increase/(Use) of Reserves	863	6,700	-	49,700	200	500	6,600	<i>with rate funding for CIP</i>
Estimated Monthly Residential Rate	\$107.58	\$112.96	\$118.61	\$124.54	\$130.76	\$137.30	\$144.17	
Estimated Monthly Increase		\$5.38	\$5.65	\$5.93	\$6.23	\$6.54	\$6.87	
Estimated Percentage Change		5%	5%	5%	5%	5%	5%	

Funding Priorities

Sewer service charges, or monthly rates, are the primary source of revenue for sewer maintenance, operations, administration, debt and capital improvements.

The target cash flow/emergency reserve is equal to 3-months of sewer expenditures. The purpose is to make sure the sewer utility can meet its obligations, to ensure that the sewer balance does not fall below zero, and to help recover from emergencies. Any surplus annual sewer funds are held in reserve for system replacement and capital improvements.

The Town prepares annual budgets and reviews rates to demonstrate that the utility is self-funded, to ensure financial viability, and to be sure the Town can continue to provide reliable sewer service at affordable prices for generations into the future.

Sewer rates are adjusted as necessary. Since at least 2019, The Town has increased rates at 5.0 percent per year. The six-year sewer financial plan demonstrates that with a continued 5 percent annual rate increase, the sewer operations and recommended CIP with additional new debt can be afforded. The Town has been adjusting sewer rates on a regular annual basis with 5 percent increases. The six-year outlook with conservative financial assumptions assumes this practice continues.

As the sewer facilities continue to age, the Town is focusing on increasing the maintenance program to extend the life and capacity of the current facilities. New in this rate study has been to begin annual funding toward capital improvements to soften future impacts on rates. After completing the recommended sewer outfall and WWTP improvements, the Town should establish a pipe replacement program to provide annual funding from rates toward the highest priorities with ongoing main replacement.

With one large customer and the ability to review the rate based on wastewater flow, it would be prudent to evaluate whether the RV Park's contribution of wastewater is relative to the contribution to planned capital improvements through monthly rates.

This plan was developed with reasonable assumptions based on current knowledge and cost estimates. As with all projections, real life will vary from the projections. The Town will monitor the plan through the annual budget process and update as necessary to achieve balance between maintenance and operations, completing necessary improvements, and the impact on rates, while continuing to provide safe, reliable service.

Long-term debt is planned and used when appropriate for capital improvements.

Capital Improvement Funding

Local Funding Sources

Monthly sewer rates provide an on-going level of funds for planned capital repairs and rehabilitation. These funds are appropriate for repair and replacement of the sewer system to serve existing customers. Sewer capacity and general facilities charges from new connections are available to fund improvements to the sewer system. The Town can borrow from the above-mentioned financial assistance programs and any loans will need to be repaid by monthly rates and connection charges. The Town also has authority to sell revenue bonds to fund planned system improvements. Revenue bonds will be repaid by sewer rates and connection fees.

Developers are responsible for projects to connect their property to the system. When developers complete approved infrastructure projects, the infrastructure is deeded over to the Town. The developer can negotiate a latecomer agreement with the Town to be reimbursed by new development making use of the facilities constructed by the developer for a specified period allowed by state law. In certain instances, on a case-by-case basis, such as when additional capacity is provided by a developer-funded project, the Town may opt to participate in a cost sharing mechanism.

The Town has the option to complete area-specific projects and be reimbursed as new development occurs in that area through a special connection charge. The Town also has the option to establish a local improvement district (LID), where the properties specially benefiting from an infrastructure investment would pay their share through a special assessment.

Developer Financing

Developers of presently unimproved property will finance many of the new facilities constructed in the Town. All of the improvements required for service to property with new plats or commercial developments will be designed and constructed in accordance with the Town's developer project policies. In some cases, latecomer's agreements may be executed for any sewer main serving property other than the property owned by the developer that is financing the project.

Combination Financing by the Town and Developers

It may be necessary in some cases to require the owner to construct a larger diameter line than is required by the current development in order to support the comprehensive development of the Town's sewer system. The Town may enter into a latecomer's agreement or reimburse the developer for the extra cost of increasing the size of the line over that required to serve the property under development. Oversizing should be considered when it is necessary to construct any pipe over 10 inches in diameter in single-family residential areas to comply with the sewer capital facilities plan. Construction of any pipe in residential, multiple family, or commercial areas that is larger than the size required to serve that development is considered oversizing.

Revenue Bond/General Obligation Bond

Interceptor, lift station, force main and treatment plant improvements that are a general benefit to a major portion of the Town may be financed by revenue bonds or general obligation bonds. Improvements that will benefit primarily a single developer should be financed by the developer of the property. The Town may use whatever funds are available for the payment of the debt service on the revenue bonds. A major source of these funds is from the sewer rate revenues from the Town customers. However, all funds, such as general facility fees, connection charges or latecomer charges, may be used for debt service. Sewer system improvements that will service many different property owners in areas that are already developed may be financed through the establishment of a Utility Local Improvement District (ULID). The financing is accomplished through the sale of revenue bonds or general obligation bonds. These bonds are retired with income from the assessments and/or other funds of the Town.

Grant Funds/Loans

State and federal authorities provide funds under various grant programs for the construction of major improvements to or rehabilitation of sewer systems. Programs available include the Department of Commerce Community Development Block Grant (CDBG) General Purpose Grant

Program, State Revolving Fund Loan (SRF), United States Department of Agriculture Rural Development (USDA RD), Community Economic Revitalization Board (CERB).

The primary source of capital improvement funding for sewer includes grants and mostly loans from the State of Washington Department of Ecology (Ecology) Combined Water Quality Programs: Centennial Clean Water Fund, Clean Water State Revolving Fund and Section 319 Non-point Pollution. These programs share a combined competitive process with annual applications due October of each year. Early planning is recommended as Ecology requires certain approvals prior to application. Also keep in mind that these programs may include federal funding which may have federal requirements.

The Public Works Board Traditional Program (formerly PWTF) offers competitive pre-construction, construction and emergency loans with low interest rates. The pre-construction loans are offered year-round with a maximum of \$1,000,000 per jurisdiction per biennium. The construction loans have a maximum of \$10,000,000 per jurisdiction per biennium. This source has been available for capital improvement funding for sewer. The applications are due year-round when funds are available.

Stormwater Collection and Treatment – Town of South Prairie

The Town of South Prairie does not operate a stormwater utility. The Town has catch basins and culvert sections that are interconnected with open ditches or swales that infiltrate or ultimately convey stormwater to South Prairie Creek with an identified discharge location on the south side of the Fire Station. South Prairie has adopted the Pierce County Stormwater Management and Site Development Manual (SPMC 15.78.050). The limited scale of development in South Prairie means most projects are self-contained. There has been no development in the last decade that triggered improvements within the Town's right of way and very little development is anticipated given the Town is prohibited from adding sewer connections. South Prairie falls below the Phase 2 NPDES permit system threshold. The Town performs routine maintenance on the existing stormwater system using general revenue funds.

Utilities Provided by Others

Natural Gas System

The natural gas distribution utility is owned, operated, and maintained by the Puget Sound Energy (PSE).

Company Overview

Puget Sound Energy (PSE) is a private utility providing natural gas and electric service to homes and businesses in Puget Sound region of Western Washington and portions of Eastern Washington, covering 10 counties and approximately 6,000 square miles. PSE's regional and local natural gas and electric planning efforts are integrated and centered on providing safe, dependable, and efficient energy service. PSE provides natural gas to more than 770,000 customers, throughout 6 counties, covering approximately 2,900 square-mile area.

Regulatory Environment

PSE's operations and rates are governed by the Washington Utilities and Transportation Commission (WUTC). PSE natural gas utility operations and standards are further regulated by

the U.S. Department of Transportation (DOT), including the Pipeline and Hazardous Materials Administration (PHMSA). PHMSA's Pipeline Safety Enforcement Program is designed to monitor and enforce compliance with pipeline safety regulations. This includes confirmation that operators are meeting expectations for safe, reliable, and environmentally sound operation of PSE's pipeline infrastructure. PHMSA and the WUTC update pipeline standards and regulations on an ongoing basis to assure the utmost compliance with standards to ensure public safety. The residents within the Town of South Prairie rely on the coordinated effort between PSE and the Town for the adoption and enforcement of ordinances and/or codes to support safe, reliable, environmentally sound construction, operation and maintenance of PSE's natural gas facilities.

Integrated Resource Plan

In order for PSE to meet its regulatory requirements, it updates and files an Integrated Resource Plan (IRP) with the WUTC every two years. The IRP identifies methods to provide dependable and cost-effective natural gas service that address the needs of retail natural gas customers. Natural gas sales resource need is driven by design peak day demand. The current design standard ensures that supply is planned to meet firm loads on a 13-degree design peak day, which corresponds to a 52 Heating Degree Day (HDD). The IRP suggests the use of liquefied natural gas (LNG) for peak day supply and support the needs of emerging local maritime traffic and truck transport transportation markets.

Natural Gas Supply

PSE controls its gas-supply costs by acquiring gas, under contract, from a variety of gas producers and suppliers across the western United States and Canada. PSE purchases 100 percent of its natural gas supplies needed to serve its customers. About half the natural gas is obtained from producers and marketers in British Columbia and Alberta, and the rest comes from Rocky Mountain States. All the gas PSE acquires is transported into PSE's service area through large interstate pipelines owned and operated by Williams Northwest Pipeline. PSE buys and stores significant amounts of natural gas during the summer months, when wholesale gas prices and customer demand are low, and stores it in large underground facilities and withdraws it in winter when customer usage is highest; ensuring a reliable supply of gas is available.

System Overview

To provide the Town of South Prairie and adjacent communities with natural gas, PSE builds, operates, and maintains an extensive system consisting of transmission and distribution natural gas mains, odorizing stations, pressure regulation stations, heaters, corrosion protection systems, above ground appurtenances, and metering systems. When PSE takes possession of the gas from its supplier, it is distributed to customers through more than 21,000 miles of PSE-owned natural gas mains and service lines.

PSE receives natural gas transported by Williams Northwest Pipeline's 36" and 30" high pressure transmission mains at pressures ranging from 500 PSIG to 960 PSIG. The custody change and measurement of the natural gas occurs at locations known as Gate Stations. PSE currently has 39 such locations throughout its service territory. This is also typically where the gas is injected with the odorant mercaptan. Since natural gas is naturally odorless, this odorant is used so that leaks can be detected. The Gate Station is not only a place of custody transfer and measurement but is also a common location of pressure reduction through the use of "pressure regulators". Due to state requirements, the pressure is most commonly reduced to levels at or below 250 PSIG. This reduced

pressure gas continues throughout PSE's high pressure supply system in steel mains ranging in diameter of 2" to 20" until it reaches various other pressure reducing locations. PSE currently has 755 pressure regulating stations throughout its service territory. These locations consist of Limiting Stations, Heaters, District Regulators, and/or high-pressure Meter Set Assemblies.

The most common of these is the intermediate pressure District Regulator. It is at these locations that pressures are reduced to the most common levels ranging from 25 PSIG to 60 PSIG. This reduced pressure gas continues throughout PSE's intermediate pressure distribution system in mains of various materials consisting of polyethylene and wrapped steel that range in diameters from 1-1/4" to 8" (and in a few cases, larger pipe). The gas flows through the intermediate pressure system until it reaches either a low-pressure District Regulator or a customer's Meter Set Assembly.

To safeguard against excessive pressures throughout the supply and distribution systems due to regulator failure, over-pressure protection is installed. This over-pressure protection will release gas to the atmosphere, enact secondary regulation, or completely shut off the supply of gas. To safeguard steel main against corrosion, PSE builds, operates, and maintains corrosion control mitigation systems to prevent damaged pipes as a result of corrosion.

Future Projects

To meet the regional and Town of South Prairie natural gas demand, PSE's delivery system is modified every year to address new or existing customer growth, load changes that require system reinforcement, rights-of-way improvements, and pipeline integrity issues. The system responds differently year to year and PSE is constantly adding or modifying infrastructure to meet gas volume and pressure demands. At this time, there are no known major construction projects anticipated in the Town of South Prairie.

Current and future system integrity work will include ongoing investigations throughout the Town to determine the location of where gas lines have been cross bored through sewer lines and make subsequent repairs.

Other Utilities

Electrical Utilities

Puget Sound Energy (PSE) serves the Town of South Prairie.

Company Overview: Puget Sound Energy (PSE) is a private utility providing electric and natural gas service to homes and businesses in Puget Sound region and portions of Eastern Washington, covering 10 counties and approximately 6,000 square miles. PSE's regional and local electric and natural gas planning efforts are integrated and centered on providing safe, dependable, and efficient energy service. PSE provides electrical power to more than 1.2 million electric customers throughout 8 counties.

Regulatory Environment

PSE's operations and rates are governed by the Washington Utilities and Transportation Commission (WUTC). PSE electric utility operations and standards are further governed by the Federal Energy Regulatory Commission (FERC), the National Electric Reliability Corporation (NERC), and the Western Electricity Coordinating Council (WECC). These respective agencies monitor, assess and enforce compliance and reliability standards for PSE. The residents of the

Town of South Prairie and the region rely on the coordinated effort between PSE and the Town for the adoption and enforcement of ordinances and/or codes to protect transmission and distribution line capacity and support federal and state compliance of safe, reliable, and environmentally sound operation of PSE's electric facilities. Routine utility maintenance work, including vegetation management is required to maintain compliance with FERC, NERC, and WECC regulations.

Integrated Resource Plan

In order for PSE to meet regulatory requirements, it updates and files an Integrated Resource Plan (IRP) with the WUTC every two years. The IRP presents a long-term forecast of the lowest reasonable cost combination of resources necessary to meet the needs of PSE's customers to provide dependable and cost-effective service over the next 20 years. The current plan, which was filed in May of 2013, details both the energy supply and transmission resources needed to reliably meet customers' wintertime, peak-hour electric demand over the next 20 years. The plan, which will be updated, forecasted that PSE would have to acquire approximately 4,900 megawatts of new power-supply capacity by 2033. This resource need is driven mainly by expiring purchased-power contracts and expected population and economic growth in the Puget Sound region. The IRP suggests that roughly more than half of the utility's long-term electric resource need can be met by energy efficiency and the renewal of transmission contracts. This reduces the need down to 2,200 MW by 2033. The rest of PSE's gap in long-term power resources, the IRP stated is likely to be met most economically with added natural gas-fired resources.

PSE generates approximately 46 percent of the electricity for its customers from its own generation, specifically generation plants; hydro, thermal, solar and wind. PSE currently has about 3,000 megawatts of power-generating capacity and purchase the rest of its power supply from a variety of other utilities, independent power producers and energy marketers across the western United States and Canada.

System Overview

To provide the Town of South Prairie with electricity, PSE builds, operates, and maintains an extensive integrated electric system consisting of generating plants, transmission lines, substations, switching stations, sub-systems, overhead and underground distribution systems, attachments, appurtenances, and metering systems.

Electricity provided by PSE to the Town of South Prairie is often produced elsewhere and is interconnected to the Northwest's regional transmission grid through an extensive network of transmission facilities providing bulk transmission service to meet the demands of electricity customers within the region's eight states. The PSE electric transmission facilities in the Town of South Prairie are important components of the electric energy delivery grid serving the Puget Sound region. As electricity reaches the Town of South Prairie the voltage is reduced and redistributed through lower-voltage transmission lines, distribution substations, overhead and underground distribution lines, smaller transformers, and to individual meters.

PSE will be prudently and systematically deploying smart grid technology at each level of infrastructure to enhance and automate monitoring, analysis, control and communications capabilities along its entire grid. Smart grid technologies can impact the electricity delivery chain from a power generating facility all the way to the end-use application of electrical energy inside a residence or place of business. The ultimate goals of smart grid are to enable PSE to offer more

reliable and efficient energy service, and to provide customers with more control over their energy usage.

Future Projects

To meet regional and Town of South Prairie electric demand, PSE is upgrading the existing 55 kilovolt (kV) substations and transmission lines between Electron Heights (vicinity of Kapowsin) and Enumclaw to 115 kV. The multi-year projects began in 2009 and entail converting the voltage of over 20 miles of transmission line between the Electron Heights and Krain Corner (Enumclaw) substations, installing roughly 1.5 miles of new transmission line in Enumclaw, as well as converting, upgrading or completely rebuilding four substations as well as constructing a new substation in Buckley and adding a fiber-optic line to existing transmission facilities between Buckley and Enumclaw.

Telecommunications Utilities

The Town of South Prairie is served by Lumen (formerly Century Link). Various facilities are located throughout the County and the Town.

Cellular telephone service is provided in the South Prairie area by Comcast. Cable TV is provided to the South Prairie area by Comcast for areas surrounding the Town.

The provision of telecommunication services is driven by the needs of its customers. As the Town grows, telecommunication facilities will be upgraded to ensure adequate service levels. Facilities will be upgraded as technology advances.

Solid Waste Collection

The Town contracts with Murrey's Disposal Company, Inc. for solid waste collection. Collection is performed once a week.

Chapter 7 Transportation Element

Introduction

Organization of the Transportation Element

This transportation element contains the following sections:

- Introduction
- Inventory of facilities and services
- Current and projected demand
- Levels of service
- Adequacy of transportation facilities
- Funding capability and resources
- Goals and policies

The transportation improvement program is described in the capital facilities element.

Transportation Planning Challenge

The *Washington State Growth Management Act* (GMA) challenges communities to rethink transportation planning strategies used during the last several decades, to analyze strategic shortcomings, and to develop new local strategies that help to solve problems of traffic congestion, pollution, and the diminishing quality of life associated with automobile dependence.

This challenge is echoed in regional and county planning documents, namely PSRC's *Vision 2040* and *Transportation 2050*, and the *Pierce County Countywide Planning Policies*. Throughout the Pacific Northwest, streets designed primarily for automobiles and lacking in convenient, interconnected facilities for other transportation modes have resulted in an automobile dependency that starts at almost every residence's door and ends at almost every travel destination. The scope of walking and bicycling has been reduced to exercise and recreation – not transportation – in most peoples' lives.

The South Prairie area has been influenced by these transportation trends. The Town's location, which is remote from the nearest bus service provided by Pierce Transit, provides a challenge to citizens who lack mobility. The population of the Town and surrounding area is insufficient to support efficient and convenient local public transit. Because employment opportunities are limited in South Prairie, most South Prairie households are supported by people who must commute via automobile. Though the Foothills Trail provides a continuous bicycle path to Puyallup, the distance (about 20 miles) is infeasible as a regular commuting option for most. The absence of public transit service means residents must use their automobiles to reach local travel destinations in the South Prairie vicinity and beyond.

Fortunately, from a transportation planning perspective, much of South Prairie has been developed with a traditional street grid that features short blocks, interconnected, narrow streets narrow and other characteristics that support pedestrian activity. Almost all streets within South Prairie are either Town owned or privately owned with posted speed limits of 25 mph or less. Nearly every

place within the town proper is walkable within ½ mile or less. From the center of town, every public facility is walkable within ¼ mile. The exceptions are State Route 162, a WSDOT owned facility, and County owned and maintained roads including South Prairie Rd E, A P Tubbs Rd E, South Prairie Carbon River Road E and 126th Street Court E.

This transportation element focuses on defining transportation system policies that will guide South Prairie 's transportation improvements in compliance with GMA requirements and regional and County policies while realistically accommodating the practical limitations determined by South Prairie 's small size, remote location and land use. These policies are designed to encourage South Prairie 's residents to walk and bicycle not only for exercise and recreation, but to use nonmotorized and public transit transportation modes, when available, to reach common travel destinations.

Transportation Planning Requirements

Requirements of Growth Management Act

The Washington State Growth Management Act identifies transportation facilities planning and, specifically, encouraging efficient multi-modal transportation systems based on regional priorities and coordinated with local comprehensive plans, as a planning goal to guide the development and adoption of comprehensive plans and development regulations [RCW 36.70A.020(3)]. In addition, it identifies a transportation element as a mandatory element of a county or city comprehensive plan [RCW 36.70A.070(6)]. The transportation element must include: (a) land use assumptions used in estimating travel; (b) facilities and service needs; (c) finance; (d) intergovernmental coordination efforts, including an assessment of the impacts of the transportation plan and land use assumptions on the transportation systems of adjacent jurisdictions; and (e) demand management strategies [RCW 36.70A.070(6)(a)- (c)]. The Growth Management Act expressly requires a Countywide Planning Policy on transportation facilities and strategies [RCW 36.70A.210(3)(d)].

VISION 2050 Multicounty Planning Policies (MPPs)

VISION 2050 offers an integrated approach to addressing land use and transportation, along with the environment and economic development. It calls for a clean, sustainable transportation future that supports the regional growth strategy. Sustainable transportation involves the efficient and environmentally sensitive movement of people, information, goods and services – with attention to safety and health. Sustainable transportation minimizes the impacts of transportation activities on our air, water, and climate. It includes the design of walkable cities and bikeable neighborhoods, as well as using alternatives to driving alone. It relies on cleaner, renewable resources for energy.

Another major focus of VISION 2050 is related to equity. Many of the new policies are related to implementing transportation programs and projects that provide access to opportunities while preventing or mitigating negative impacts to people of color, people with low incomes, and people with special transportation needs (MPP-T-9 and 10). This goal is also reflected in multi-modal systems planning (T-Action-1 Regional Transportation Plan, PSRC's *Transportation 2050*). South Prairie's population is homogeneously spread with no concentrations of any particular ethnic group or income class. Because the town is so small and remote, all South Prairie's citizens lack these amenities equally.

VISION 2050 contains 22 multicounty planning policies related to transportation. Because South Prairie is remote and accessible by only HWY 162 or few low traffic, rural routes, many of the larger multicounty planning policies and actions will not have a direct effect on South Prairie. While South Prairie certainly supports these goals, especially MPP-T-4 regarding improving the safety of the transportation system to reduce fatalities and serious injuries, and MPP-T-7, 12, 13, and 15 which support the creation of the multimodal system, the Town also understands that the roads these policies and actions most impact are not within the Town's control, they are owned by WSDOT and Pierce County. Therefore, the Town supports those larger entities in their efforts to improve overall safety.

Pierce County Countywide Planning Policy

The GMA's transportation planning requirements and VISION 2050 transportation planning policy directives are expounded upon in greater detail in Pierce County's County-Wide Planning Policies (2022). Countywide Planning Policies specifically related to Transportation are "*Transportation Facilities and Strategies*". These policies are subdivided into several categories including:

- General,
- Inclusiveness and Equity,
- Healthy Communities and Transportation Systems,
- Land Use/Transportation Integration,
- Ports, Freight, and Aviation, and Military Installations,
- Sustainability and the Environment,
- Transit,
- Performance Standards and Concurrency,
- Maintenance, Operations, and Preservation,
- Resiliency and Disaster Preparedness,
- Transportation Technologies, and
- Funding.

The Transportation related countywide policies have been greatly expanded in the 2022 update from the prior framework. Not all of the Countywide Planning Policies have direct bearing on South Prairie, in fact many don't. South Prairie is not near any ports, freight, aviation or military installations. There is no available transit. Transportation technologies for now are limited to walking and biking within town and the use of single occupancy vehicles for most trips outside of town. There currently isn't sufficient demand to warrant the creation of electric vehicle charging stations in town beyond residentially based charging stations (CPP TR-21). As noted above, South Prairie will work with outside agencies to bring the possibility of other modes of transit into town such as regional bus service (CPP TR-5.1.2, 9.5.2 and 13).

South Prairie absolutely wishes to promote inclusiveness and equity in transportation planning. According to the 2020 US Census South Prairie's population was 86% Caucasian. People of two or more races account for 11.53% of the population. The remaining 2.5% are African American, Native American or Alaska Native, Native Hawaiian or Other Pacific Islander or another race. This data does not reflect the 42% of South Prairie's population that reside in the South Prairie RV Park because the Census fails to acknowledge this population of South Prairie's residents. Most of

(83.8%) of South Prairie households report speaking English as a primary language at home. Less than 16.2% of households speak another language at home, the most common at 13.7% was Spanish while the other households speak Asian or Pacific Island and Indo-European languages. The median household income for those residents acknowledged by the US Census was \$94,167 in 2022 which is significantly above the Pierce County median at \$82,574. The overall poverty rate for this population is 5%. However, the income statistics for the South Prairie RV Park are not reflected. As noted in Chapter 2 Housing Element, the Town is working with the Rural Community Assistance Corporation (RCAC) to survey this population and obtain accurate income statistics. This poverty is concentrated by household type. A primary goal throughout this Comprehensive Plan is to convince the US Census to acknowledge this completely marginalized population within town. That said, the entire town is akin to a small residential neighborhood in a larger, more diverse municipality. Everyone shares the transportation system equally.

The Town has made the safety and convenience improvements it can to its non-motorized system to help seniors, youth and the disabled population to safely and efficiently navigate town (CPP TR-4.5, 5, 5.2 and 5.3). A later section within this chapter will discuss the transportation capital improvements plan.

Countywide Planning Policies applicable to South Prairie include:

- Those related to promoting an equitable, sustainable and coordinated multi-modal transportation system for multiple types of users and modes of transportation (CPP TR-1, TR-4, TR-5).
- Improvement of safety by working towards the State’s Target Zero death and disability injury goal (CPP TR-2).
- Consideration of HWY 162 as an essential public facility (CPP TR-3).
- Promotion of cooperation and coordination among transportation providers, South Prairie, and developers to ensure that joint and mixed-use developments, should any prove feasible, are designed to promote and improve physical, mental, and social well-being and improve the natural and built environments (CPP TR-7).
- Addressing environmental impacts of transportation policies, project implementation, and operations wherever practical (CPP TR-9).
- Use of low-impact development practices or environmentally appropriate approaches for the design, construction and operation of transportation facilities to reduce and mitigate environmental impacts, including, but not limited to, greenhouse gas emissions and storm water runoff from streets and roadways (CPP TR-10).
- Consider the impacts of local planning activities on neighboring jurisdictional (inclusive of WSDOT) roadway facilities when developing and administering a jurisdiction’s performance standards or level of service (LOS) standards (CPP TR-14-18).

Land Use Assumptions

The land use assumptions used while developing this transportation element are summarized below and described in detail in the documents listed:

Area	Document
Within South Prairie	Future land use will remain relatively unchanged, although there will be an incremental increase in commercial, mixed-use development, and housing types other than detached single-family dwellings. The land use and housing elements of this comprehensive plan provide details.
Outside of South Prairie	The <i>Comprehensive Plan for Pierce County, Washington</i> specifies that generally, most land uses in areas adjacent to South Prairie will remain unchanged from those existing at the time this plan was adopted.

As noted in Chapter 2 Land Use Element, the 2020 US Census placed South Prairie's population at 373 people. However, as described in that Element and Chapter 4 Housing Element, the actual population of South Prairie is closer to 645 people if the completely unacknowledged residents on the South Prairie RV Park are counted. South Prairie anticipates without a completely new wastewater treatment system (See Chapter 6 Utilities), very little residential growth will occur.

Inventory of Facilities and Services

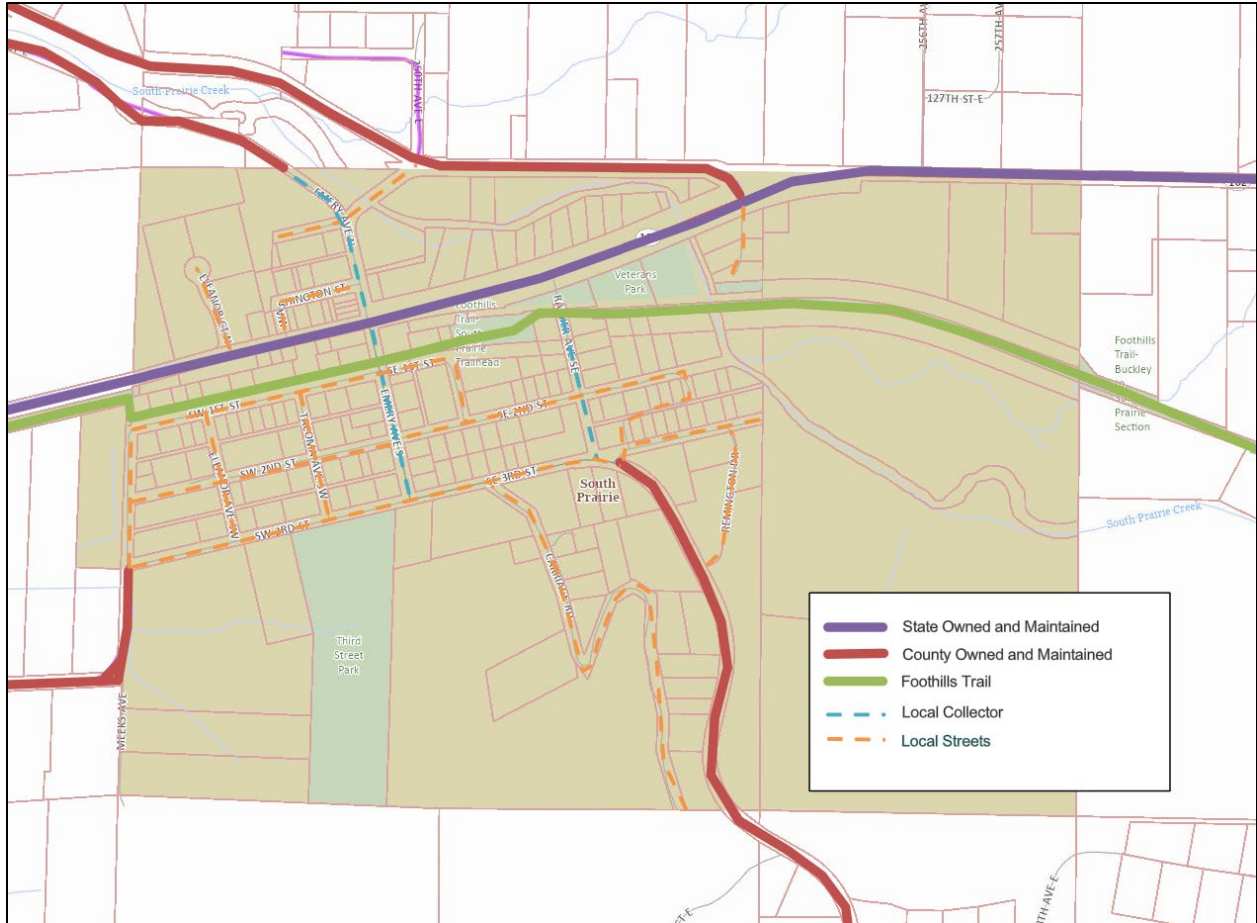
Because South Prairie is a geographically small, land-locked rural community with limited internal commercial activity, South Prairie does not contain many of the typical components of a multimodal transportation network. South Prairie has no water, air, or rail facilities. The Town's transportation facilities are limited to streets and those transportation modes and services that use streets and the South Prairie portion of the Foothills Trail.

Streets

Functional Classification

A roadway network is a series of streets which increasingly focus and concentrate traffic as one moves away from residential neighborhoods, much in the way small rivulets join streams and ultimately converge into rivers. A community roadway network is typically comprised of local streets, collector streets, and arterial streets.

Designation of roadway facility functional classification is an integral part of managing street use and land development. Designation should be consistent with land use policies and adopted street standards. In Washington, as in most states, classification of streets is necessary for receipt of state and federal highway funds. State law requires that cities and counties adopt a street classification system that is consistent with state and federal guidelines. The legal basis and requirement for the classification of streets is in RCW 35.78.10 and RCW 47.26.180.



Town of South Prairie Street Map and Classifications

The Washington State Department of Transportation defines three street functional classification categories, which are applicable to urban areas such as the Town of South Prairie. In South Prairie, streets, roads and highways are classified as arterials, collectors or local access streets. A primary determinant of the functional classification is the present and anticipated traffic volumes to be carried by a street. Within a given classification the number of lanes can be varied to accommodate the anticipated volume. Roadway functional classifications are summarized below.

Arterial Streets, Roads and Highways

Arterial streets, roads and highways provide for traffic movements into, out of, and through the Town. Many of the trips using arterials have neither their origin nor their destination within South Prairie but are generated by the surrounding areas of Pierce County. Arterials carry the highest traffic volumes and serve the longest trips. The traffic movement function is emphasized at the expense of convenient access to adjacent land uses. In South Prairie, arterial routes also provide local access to businesses and residences. In South Prairie, Highway 162, also known as Pioneer Way E, is designated a major arterial. Other arterials include AP Tubbs Road, South Prairie Carbon River Road E and South Prairie Road East.

Collector Streets and Roads

Collector streets and roads provide for movement within neighborhoods and funnel neighborhood trips onto the arterial street system. Collectors typically carry moderate traffic volumes, relatively shorter trips than the arterials and little through traffic. In South Prairie there are no true collector roads because the town is both very compact and organized as a grid. However, the streets most like this classification are Emery Avenue and Rainier Avenue SE.

Local Streets

Local streets comprise all roadways and streets not otherwise classified as arterials or collectors. Their main function is the direct access to abutting properties, often at the expense of traffic movement – low speeds and delays caused by turning vehicles are common.

Design Standards

Street design standards for arterial, collector and local access streets are specified in the Pierce County Public Works Development and Construction Standards Manual. Storm drainage design is specified in the Pierce County Stormwater Management and Site Design Manual.

Ideal Classification System

In an ideal system, streets would be laid out in a rectangular grid with a functionally strict hierarchy, and a sharp differentiation between classifications. Land use patterns, topographical constraints and environmental considerations dictate an irregular street system. Therefore, the classification system can only achieve a rough approximation of these ideal guidelines. The higher classified streets handle the highest traffic volumes. Arterials account for only 5-10% of the total highway mileage in an urban area but carry 40-65% of the total travel (measured in vehicle miles of travel). Local streets, on the other hand, comprise 65-80% of the system but carry only 15-20% of the travel demand.

Jurisdiction

SR 162 is within the State of Washington Department of Transportation's jurisdiction. County owned and maintained roads include AP Tubbs Road, South Prairie Carbon River Road E and South Prairie Road East. All other streets within the Town boundaries are under the jurisdiction of the Town of South Prairie. Some streets are privately owned and maintained.

Traffic Characteristics

Daily Variations: Traffic volumes also vary for each day of the week. Mondays and Fridays tend to be higher travel days of the five-day workweek, while Tuesday, Wednesday and Thursday volumes are lower. Saturday and Sunday travel is normally higher than the average weekday.

Monthly Variations: Traffic volumes vary from month to month. Low volume months are the winter months, and the high-volume months are the summer months when the normal day-to-day travel is supplemented with vacation travel.

Hourly Variations: The hourly travel variations for a typical high-volume intersection in the Town of South Prairie are as follows: AM peak hour occurs at 10 AM, after which volume decreases slightly between 12 Noon and 2 PM. After 2 PM, travel volumes again increase and peak between 3 and 5 PM.

Traffic Volumes

State Route (SR) 162 is an important north-south highway for the South Prairie residents and surrounding east Pierce County. The SR 162 corridor serves businesses and residents from South Prairie to Orting and Sumner. Commuters use SR 162 to reach the Sumner Sound Transit station. It is also heavily used by freight and recreational users heading to nearby state and national parks. Traffic volumes on State Route 162 have been steadily increasing over the years at around 9,800 vehicles per day at the intersection with South Prairie Road E. Traffic volumes on South Prairie Road E are 7,425 AADT at 234th Avenue E.

Bus Service

Regionally, bus service is provided by Pierce Transit within a service area that is focused on the more densely populated areas of Pierce County along the I-5 corridor and nearby communities. The nearest bus service to South Prairie is located within Sumner, Puyallup, Bonney Lake and the unincorporated South Hill. The closest transit service is in Bonney Lake, about three miles from South Prairie.

Pierce Transit does not serve the Town of South Prairie with any regular routes. The closest bus stops are at the park and ride on State Route 410 in downtown Bonney Lake (5.6 miles away). Enumclaw is in King County and is served by King County Metro Transit.

While the nearby City of Buckley currently is not served by Pierce Transit, their comprehensive plan includes goals to work with WSDOT and Pierce County to obtain funding to support transit to and from the city. South Prairie may wish to coordinate with the City of Buckley, as well as with other nearby municipalities and tribes, to encourage development of a coordinated transit system in the area.

Shuttle Service

Paratransit service is provided by Pierce Transit for persons with disabilities in accordance with the requirements of the Americans with Disabilities Act (ADA) and within the Pierce Transit Service Area. The ADA requires transit agencies to provide paratransit (door-to-door) service that is "complementary" to fixed route (bus) service. "Complementary" is defined as a service that operates the same hours as fixed route service and within three quarters of a mile of existing bus routes. South Prairie is located outside Pierce Transit's service area and is currently not provided paratransit service. However, individuals who travel to locations within the service area may obtain paratransit service under Pierce Transit's program for travel to locations within Pierce Transit's service area.

Rail Service

Sound Transit provides commuter rail service between Lakewood and Seattle, with stations located in Tacoma, Puyallup, Sumner and other communities. Amtrak also provides rail service in the region to communities located along the I-5 corridor.

Air Service

Regional air service in the Central Puget Sound area is provided via the Seattle-Tacoma International Airport in SeaTac.

Current and Projected Demand

Level of Service – Streets and Highways

Level of traffic service is generally defined as the roadway or intersection's ability to carry the traffic load. The Highway Capacity Manual (Transportation Research Board) defines the traffic level of service for signalized and unsignalized intersections as described below:

LOS	GENERAL DESCRIPTION
A.	Nearly all drivers find freedom of operation and there is seldom more than one vehicle in the queue.
B.	Some drivers begin to consider delay and inconvenience and occasionally there is more than one vehicle in the queue.
C.	Many times, there is more than one vehicle in the queue and most drivers feel restricted, but not objectionably so.
D.	Often there is more than one vehicle in the queue and drivers feel quite restricted.
E.	Represents a condition in which the demand is near or equal to the probable maximum number of vehicles that can be accommodated by the movement and there is almost always more than one vehicle in the queue.
F.	Forced flow which represents an intersection failure condition that is caused by geometric and/or operational constraints external to the intersection.

South Prairie has the following levels of service:

Street	Level of Service
SR 162-Pioneer Way (WSDOT)	C
South Prairie Road E (Pierce County)	B
Emery Avenue N (Pierce County)	B
Collectors and Local Streets (Local)	B

Pierce County, and the cities and towns therein, have adopted Level of Service D as the standard. When Level of Service drops to the level of E or F, corrective action must be taken. Adding a turn lane at the intersection or installing a traffic signal will usually alleviate the problem. Highway 162 is designated a Highway of Regional Significance (HRS) and as such the Level of Service standard (LOS) is set by the Puget Sound Regional Council (PSRC) in consultation with WSDOT. PSRC has established a LOS standard of C for HWY 162.

Access Control

Access control is a technique used in designing roads to manage where and in what way automobiles will be able to enter and exit the road. Access control typically means limiting the number of driveways connecting commercial and residential sites directly to a road. Under access control, entrances and exits to the road via driveways are restricted. Thus far, SR 162 has not been access limited.

Multimodal Transportation Adequacy

Current Residential Trip Generation

South Prairie predicts transportation demand in residential areas by multiplying the number of trips per day that each household will generate by the number of households. The number of trips generated per day per household in a multifamily unit is generally assumed to be six; for a household in a single-family unit, the number is ten. When planning transportation improvements associated with new residential development, the assumption is that all trips will be made via private automobile.

The following table indicates generation for residential land uses based on six daily trips for each multifamily unit and ten daily trips for each single-family unit:

Residential Area	Single Family	Multifamily	Total
South Prairie's current corporate boundaries	2,770 trips based on 277 units*	0	2,770 trips
South Prairie's UGA	20 trips based on 2 units*	0	20 trips
Total residentially generated trips in both areas	2,790 trips based on 279 units	0	2,790 trips

*2020 US Census plus OFM listed 218 RV units occupied as single-family

Projected Residential Trip Generation

The 2020 Census estimated South Prairie had 353 residents. However, if the permanent residents of the South Prairie RV Park are factored in, the current population of South Prairie is 645 residents (See Chapter 2 Land Use). The likelihood is that South Prairie will not grow appreciably unless and until the wastewater treatment plant is upgraded and the sewer connection moratorium can be lifted (See Chapter 6 Utilities). Therefore, the projected residential trips in 2044 is likely to remain around 2,800 trips.

Existing and Projected Arterial Traffic Levels

Future traffic volumes are driven by population growth in a community. The population in South Prairie is forecasted to remain roughly the same through 2044. All local, county and state roads are predicted to remain at their volumes and meet or exceed their respective levels of service through 2044. Therefore, no capacity increasing improvements on Highway 162 are necessary. Future traffic volumes do not appear to require capacity increasing improvements on collector streets.

Current and Projected Nonmotorized Facility Demand

Pierce County Department of Parks and Recreation has built and is operating a pedestrian and bicycle trail, known as the Foothills Trail, which runs west to east directly through Town. The trail enters South Prairie to the west, then extends east to the Town limits. It is likely that the current recreational demand level for pedestrian and bicycle facilities will continue indefinitely. Future demand depends on the success of South Prairie and other jurisdictions and agencies in

cooperatively providing continuous pedestrian and bicycle facilities that link conveniently with travel destinations and with public transit. South Prairie 's transportation goals and policies and transportation improvement projects support the development of convenient, contiguous pedestrian and bicycle facilities along newly developed streets and existing streets, primarily within available rights-of-way.

Pedestrian and Bicyclist Facilities

Citizen interest in improving pedestrian and bicyclist facilities complements the GMA goal of encouraging multi-modal travel. Almost all streets except for HWY 162, AP Tubbs Road, South Prairie Road East and South Prairie Carbon River Road within South Prairie are either Town owned or privately owned with posted speed limits of 25 mph or less. Nearly every place within the town proper is walkable within ½ mile or less. From the center of town, every public facility is walkable within ¼ mile. Bicyclist facilities are located in the Foothill's Trail area along HWY-162 where the trail has dedicated bike lanes, bike routes, or off-street bike paths.

The trail parking located along the south side of HWY 162 from eastern Town limits is paved and provides a shared bike and pedestrian pathway along the regional Foothills Trail.

Transit Service

As noted above, Pierce Transit in the last decade reduced its service area, pulling back from areas of Pierce County that had relatively infrequent service, low ridership and limited taxpayer support for the additional funding needed to maintain existing service. The closest bus service to South Prairie is now located in Sumner, Puyallup, South Hill and Bonney Lake, approximately 5.6 miles from the Town. This distance makes the use of transit for commuter trips and in support of other activities challenging, if not impractical, for most residents and employees. South Prairie's goals and policies provide for coordination with Pierce Transit for future route planning when conditions change to support enhanced service to the South Prairie area.

Transportation Demand Management

Transportation demand management (TDM) strategies can help create or preserve existing capacity of roadways by reducing demand, thereby deferring or negating the need for capacity improvements. TDM strategies focus on increasing the availability of alternative transportation modes, discouraging single-occupancy-vehicle (SOV) use, and reducing time of travel. Given South Prairie's rural location, small size, relatively low population density and low employment levels, there are practical limitations on how effective certain TDM strategies may be in managing the capacity of roadways to meet projected growth. In addition, chronic funding limitations have led to Pierce Transit reducing its service area and the number of routes and frequency of service within the reduced service area. This has reduced the availability of bus service in east Pierce County, making it an even less viable option for residents of South Prairie. Nonetheless, as conditions change within the community and surrounding region over the planning horizon, an increasing number of the following examples of TDM strategies may warrant consideration:

- Increasing the availability of transit and paratransit to east Pierce County;
- Encouraging the use of high occupancy vehicles and related programs, e.g., buses, carpools and vanpools;

- Providing a more continuous system of sidewalks, walkways and bikeways servicing the community; and
- Encouraging employers to promote commuter trip reduction practices in the workplace through employee incentives for using high occupancy vehicles, preferential parking for high occupancy vehicles, improved access for transit vehicles, compressed work weeks, flexible work hours, and telecommuting;
 - Providing facilities and services which make multimodal travel more convenient, e.g., covered transit stops and shuttle services to regional transit centers; and
 - Using traffic calming strategies to reduce vehicular speeds and enhance the safety of pedestrians and bicyclists, thereby maximizing pedestrian and bicycle mobility. Examples of traffic calming strategies include the use of raised crosswalks, traffic circles, medians (especially near intersections), narrow driving lanes, interrupted sight lines, narrow distance between curbing to create "neck-downs" or "chokers" (curb extensions), textured pavement, and neighborhood speed watch programs.

Funding Capability and Resources

Historically, South Prairie has relied on a pay-as-you-go approach to funding local street maintenance. For new development, developers will pay for new infrastructure, including streets, sidewalks, bike trails and associated transportation facility improvements, with the Town assuming long-term maintenance responsibilities for these new facilities.

Planning, design and construction of transportation facilities that cross jurisdictional lines need to be coordinated with neighboring governmental entities. Also, transportation projects that influence or impact the neighboring governmental jurisdiction need to be coordinated. In South Prairie, this coordination has been and will continue with Pierce County Public Works Department and the Washington State Department of Transportation. GMA requirements regarding the financing and funding of transportation-related improvements are addressed in the capital facilities element and goals and policies of this comprehensive plan.

Capital Improvement Plan

The Town of South Prairie 6-year Transportation Improvement Plan, adopted in 2024 is included in the following table. The primary outside funding source for Town transportation projects is the Washington State Transportation Improvement Board (TIB).

Goals and Policies

The transportation goals for the Town of South Prairie are to emphasize the movement of people and goods rather than vehicles in order to obtain the most efficient use of transportation facilities, and to establish a minimum level of adequacy for transportation facilities throughout the Town through the use of consistent and uniform standards.

The transportation goals contained in this element are:

- Consistency with Regional Growth Strategy
- Provision of transportation facilities;
- Parking and load/unload areas;

- Air quality; and
- Citizen participation.

Table 7-1 6-Year Transportation Improvement Plan

Project Number	Project Name	Year	Funding Source	Estimated Project Cost (2024)
T-1	SR-162 (Pioneer Way) & Emery Ave S Roundabout	2025	TIB	\$785,622
T-2	Sealing Gravel Roads – Seal gravel streets in public ROW throughout Town	2025	TIB Local	\$120,000 \$15,000
T-3	Town Wide Road Preservation – Crack seal streets throughout Town	2024	Local	\$3,130
T-4	Sidewalk Completion	2029	State Ped/Bike Program Local	\$130,000 \$20,000
T-5	S Prairie Carbon River Rd Extension – Extend South Prairie Carbon River Rd to SR 162 (Pioneer Way)	2029	TIB	\$400,000

Goal 1: Consistency with Regional Growth Strategy

South Prairie shall adopt, maintain and implement goals, policies, regulations and programs as necessary to ensure consistency with VISION 2050 Multicounty Planning Policies and Pierce County Countywide Planning Policies.

Policies:

- 1.1 South Prairie should promote a sustainable transportation system that assures the ability of future generations to provide transportation infrastructure and services in an effective, efficient, clean, and cost-effective manner.
- 1.2 South Prairie should improve safety in the transportation system by working toward the state’s “zero death and disabling injury” target.
- 1.3 South Prairie should strive toward including the following facilities and system components in its multi-modal network and supporting the inclusion of such facilities in adjoining networks.
 - roads, including major highways, arterials and collectors;

- public transit, including bus, vanpool, paratransit, and park and ride lots and other emerging concepts;
 - nonmotorized facilities;
 - parking facilities;
 - facilities related to transportation demand management.
- 1.4 South Prairie should consider the impacts of its planning activities on neighboring jurisdictional roadway facilities, including HWY-162 (Washington State Department of Transportation), when developing and administering its level of service standards.
- 1.5 South Prairie should adopt LOS standards for streets and other transportation facilities that are set below existing levels, thereby allowing reserve capacity for growth and minimizing the need for new capital investment. This includes the arterial LOS as defined in the 2016 Pierce County Comprehensive Plan Update Transportation Element and the rural highway LOS set by the Washington State Department of Transportation for HWY-162. To maintain its existing rural and small-town character, South Prairie adopts Level of Service standard for “D” for its Town roadway facilities and services, and Level of Service of C for Highway 162.
- 1.6 South Prairie should determine the adequacy of transportation facilities taking into account existing development, approved but unbuilt development, current and future roadway conditions, and multiple modes of transportation through utilization of capacity-to-demand LOS, the availability of capacity based on current and future demand, and appropriate standards of design across jurisdictional lines.
- 1.7 South Prairie should address substandard LOS for existing facilities by:
- designating funding mechanisms;
 - prioritizing facility needs in capital improvement and transportation improvement programs to correct existing deficiencies;
 - using transportation demand management;
 - using transportation systems management to promote cost effective methods of moving people and goods;
 - promoting nonmotorized travel.
- 1.8 In the event that regional transit or other transportation services become available to the community, South Prairie should work in cooperation with the appropriate transit or transportation agency to establish policies and/or regulations for park and ride facilities, and parking requirements for public facilities, so as to encourage public transit use.
- 1.9 South Prairie should address concurrency through the following methods:
- providing transportation facilities needed to accommodate new development within six years of development approval;
 - limiting new development to a level that can be accommodated by existing facilities and facilities planned for completion over the next six years;

- encouraging new and existing development to implement measures to decrease congestion and enhance mobility through transportation demand and congestion management.
- 1.10 South Prairie should address compatibility of land use and transportation facilities by:
- Requiring new transportation facilities and services in areas in which new growth is appropriate or desirable to be phased within a twenty-year time frame consistent with six-year capital improvement programs;
 - Using development regulations to ensure that development does not create demands exceeding the capacity of the transportation system;
 - Using land use regulations to increase the modal split between automobiles and other forms of travel by requiring pedestrian-oriented design, encouraging mixed use development, and facilitating ease of access for physically challenged individuals;
- 1.11 South Prairie should plan and implement programs, as appropriate, for designing, constructing and operating transportation facilities for all users, including motorists, pedestrians, bicyclists, and transit users.
- 1.12 South Prairie should address environmental impacts of the transportation policies through:
- programming capital improvements and transportation facilities, such as bicycle/pedestrian facilities, that designed to alleviate and mitigate impacts on land use, air quality and energy consumption;
 - locating and constructing transportation improvements so as to discourage adverse impacts on water quality and other environmental resources.
- 1.13 South Prairie should use low-impact development practices or environmentally appropriate approaches for the design, construction and operation of transportation facilities to reduce and mitigate environmental impacts, including, but not limited to, storm water runoff from streets and roadways.
- 1.14 In cooperation with transit agencies, South Prairie should promote facilities and services to encourage alternatives to automobile travel and/or to reduce the number of vehicle miles traveled.
- 1.15 South Prairie should consider a number of financing measures including but not limited to:
- general revenues;
 - fuel taxes;
 - bonding;
 - grants;
 - public/private partnerships, and public/public partnerships; and
 - assessment and improvement districts, facility benefit assessments, impact fees, dedication of right-of-way and voluntary funding agreements.

- 1.16 South Prairie should protect transportation investments and the preservation of assets through proper operations and maintenance.
- 1.17 South Prairie should protect the transportation system against disaster, develop prevention and recovery strategies, and plan for coordinated responses by using transportation-related preparedness, prevention, mitigation, response, and recovery strategies and procedures adopted in applicable emergency management plans and hazard mitigation plans and the Washington State Comprehensive Emergency Management Plan.

Goal 2: Provision of Transportation Facilities

South Prairie shall plan for facilities for motorists, transit users, pedestrians, and bicyclists as required to meet levels of service and design goals established by this comprehensive plan.

Policies:

- 2.1 South Prairie should develop a network of safe routes for pedestrians and bicyclists to schools, parks, government buildings, and commercial mixed-use areas. Facilities may be developed in the same right-of-way as streets, but non-street alternatives such as a Foothills Trail extension may be developed in coordination with, and with connections to, facilities located within street rights-of-way. Pedestrian, bicyclist, and motor vehicle facilities should provide physical separations for the different travel modes wherever possible. South Prairie should employ traffic calming strategies where appropriate to maximize the mobility of pedestrians and bicyclists.
- 2.2 Utility infrastructure, lighting, and landscaping requirements should be addressed early in street design and redesign processes. Locations and configurations of utilities, street lights, and landscaping should be included in all street designs.
- 2.3 All transportation system improvements shall comply with the requirements of the Americans with Disabilities Act (ADA).
- 2.4 Where an existing right-of-way is not wide enough to accommodate transportation facilities in conformance with transportation goals and policies, South Prairie should seek to acquire enough additional right-of-way to enable conformance. No encroachment into the right-of-way should be granted and no right-of-way should be vacated if such action has the potential to interfere with current or future implementation of transportation goals and policies.
- 2.5 Streets should be landscaped in accordance with community character goal and policies and other applicable goals and policies of the land use element. Landscape design should ensure that visibility is not blocked at intersections or where there is limited sight distance. Plant species that do not damage pavement should be used. In addition, vegetation should be pruned on a regular schedule to ensure good visibility.
- 2.6 Street lights should be included as necessary to ensure the safety of motorists, pedestrians, and bicyclists. Streetlights should be designed and installed to ensure that motorists' and law enforcement officers' visibility is not impeded by glare.
- 2.7 South Prairie should address safety issues at locations where the number of accidents involving personal injury or significant property damage exceed the Washington State

Department of Transportation's threshold for governmental action. Traffic calming devices may be installed where appropriate. Where engineering changes are to be made, a traffic engineer should be consulted to assist with the design.

- 2.8 Street designs should minimize the paved area needed to achieve levels of service established in this comprehensive plan. Designs of parking lots and other paved facilities should use pervious pavement or other surface materials and design solutions that allow infiltration and minimize stormwater runoff to the extent practicable.
- 2.9 All new construction or reconstruction of streets shall include adequate provisions for sidewalks for pedestrian (non-motorized) travel. Arterial streets and collector roads shall also include provisions for sidewalks for pedestrian travel.

Goal 3: Parking and Load/Unload Areas

Parking and load/unload facilities shall accommodate all transportation modes.

Policies:

- 3.1 Maximum motor vehicle parking standards should be established for various types of development. Shared parking facilities should be encouraged. Parking areas should include plantings of vegetation appropriate for the setting. Adequate lighting and safe, handicapped accessible walkways should be provided in all parking areas. Parking lots and vehicle load/unload areas should not interrupt or block pedestrian and bicycle facilities that access or circulate through an area. Parking near intersections should be prohibited to ensure good visibility at the intersection. Motor vehicle parking lanes should be separate from bicycle lanes. Where a destination requires significant parking facilities, off-street parking should be required.
- 3.2 A minimum number of bicycle parking spaces should be established for different types of development. Bicycle parking facilities should include sufficient covered areas for bicyclists to load and unload packages, mount and unmount wheels, don rain gear, etc. The parking area should be conveniently located, well lit, and provide a method for securing bikes.
- 3.3 Development characterized by a high number of deliveries and pickups should provide a dedicated off-street area for delivery and pickup. Delivery and pickup areas for such destinations should not serve as parking areas. Travelers entering the destination should not be forced to cross the delivery and pickup area in order to reach the entrance of the destination.

Goal 4: Air Quality

South Prairie should support projects and programs that help to meet and maintain federal and state clean air requirements, as well as regional air quality policies and programs.

Policies:

- 4.1 The South Prairie transportation system should conform to the federal and state Clean Air Acts by maintaining conformity with the Metropolitan Transportation Plan of the Puget

Sound Regional Council and by following the requirements of Chapter 173-420 of the Washington Administrative Code.

- 4.2 South Prairie should work with the Puget Sound Regional Council, the State Department of Transportation, Pierce Transit, and other jurisdictions in the development of transportation control measures and other transportation and air quality programs where warranted.
- 4.3 South Prairie should promote and support public education efforts aimed at reducing activities that result in air pollution, especially transportation-related pollution.
- 4.4 To promote the reduction of criteria pollutants for mobile sources (WAC 173-420-080) South Prairie should reduce the community's reliance on the automobile as the primary method of transportation by encouraging alternative modes of transportation through the policies outlined in Goal 1 of this element and other complementary strategies as appropriate.

Goal 5: Citizen Participation

South Prairie shall facilitate the involvement of interested citizens in planning transportation system improvements.

Policies:

- 5.1 Where major improvements are planned, interested citizens should be asked early in the design process to provide their input concerning the improvements. Some or all of the following techniques may be used: citizen advisory committees, citizen workshops, public hearings, and public bulletins. Where minor improvements will affect a specific neighborhood, neighborhood residents should be provided with an opportunity to provide their input and comment on designs.

Chapter 8 Capital Facilities Element

Overview

Introduction

The Town of South Prairie is located in east-central Pierce County southwest of the City of Buckley, southeast of the City of Bonney Lake and northwest of the City of Orting. The small town has a rich history strongly influenced by agricultural activity but in more recent years has been home to a smaller population of residents who value the natural beauty of its setting, its affordability, and small-town atmosphere.

The purpose of the Capital Facilities Element is to set policy direction for determining capital improvement needs and for evaluating proposed capital facilities projects. The element also establishes funding priorities and a strategy for utilizing various funding alternatives. It represents the Town's policy plan for the financing of public facilities for the next 20 years and includes a six-year financing plan for capital facilities.

The Capital Facilities Element promotes efficiency by requiring the Town to prioritize capital improvements for a longer period than a single budget year. It also requires coordination between other government bodies to ensure that all levels of government are working together to help the Town achieve its community vision. Long range financial planning presents the opportunity to schedule projects so that various steps in development logically follow one another, regarding relative need, economic feasibility, and community benefit. In addition, the identification of funding sources results in the prioritization of needs and requires that the benefits and costs of projects are evaluated explicitly.

The Capital Facilities Element is concerned with needed improvements that are of relatively large scale, are generally nonrecurring high cost, and may require multi-year financing. Day-to-day operating items such as paper, desks, and shovels are not included. The list of facilities and improvements has been limited to major components to analyze community needs at a level of detail that is both manageable and reasonably accurate.

For purposes of this Capital Facilities Element, capital improvements are those major facilities or items which cost \$5,000 or more and which require the expenditure of public funds over and above annual operating expenses. These facilities and items will generally have a life or use expectancy of more than ten years and will result in an addition to the Town's fixed assets and/or extend the life or usefulness of existing capital improvements. The cost of capital improvements may include design, engineering, permitting, environmental work, land acquisition, construction, landscaping, initial furnishings, and equipment.

Facilities and improvements which cost less than \$5,000, routine maintenance (e.g. painting and reroofing), and the Town's rolling stock (e.g. public works trucks) will be addressed in the Town's annual budget and not within this Capital Facilities Element. The element will also not include the capital expenditures or improvements of private or nonprofit organizations that provide services or facilities to the public.

Relationship to Other Elements and Facility Plans

Most information about facilities is contained in other elements and documents. To avoid redundancy, this capital facilities element provides references to information contained in other elements and documents instead of repeating information.

Utilities and Transportation Elements

The Utilities and Transportation Elements (chapters) of the Comprehensive Plan are concerned with many of the same public facilities as the capital facilities element. To improve readability of the Comprehensive Plan, all topics related to South Prairie-owned public utilities and streets are consolidated in the Utilities and Transportation elements except the capital improvement program. Specifically, those elements contain facility inventories, existing demand and capacities, levels of service, and future needs for electric, water, sanitary sewer, stormwater, and transportation facilities. Where an improvement will result in capacity changes in a utility, capacity information for the improvement is included in the Utilities Element. The Utilities Element contains additional references to other utility or facility plans as necessary for more detailed information. Detailed project descriptions are available for future projects in the South Prairie Town Clerk.

Parks, Recreation and Open Space

The Parks, Recreation and Open Space Element of this Comprehensive Plan is concerned with public parks, trails and recreation facilities and contains facility inventories, existing demand and capacity, levels of service, future needs, and project information for South Prairie's parks and recreation facilities.

Organization of the Capital Facilities Element

The capital facilities element is organized into the following sections:

- Overview
- Public schools, Land, and Buildings
- Goals and Policies
- Level of Service Standards
- Current and possible Funding Sources
- Six-year Capital Improvements Program

Planning Requirements

Washington State Growth Management Act

Washington State's Growth Management Act (GMA) requires municipalities to ensure that public facilities and services necessary to support development are adequate to serve development at the time development is available for occupancy and use without decreasing current service levels below locally established minimum standards (RCW 36.70A.020(12)).

Section RCW 36.70A.070(3) of the GMA requires that all comprehensive plans contain:

A capital facilities element consisting of:

- 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.*

The GMA requirement is frequently referred to as “concurrency”. Comprehensive Plans must be internally consistent documents (RCW 36.70A.070), meaning all plan elements must be consistent with the future land use map prepared as part of the required Land Use Element (RCW 36.70A.070). Therefore, the Capital Facilities Element has bearing on other constraints such as utility availability, environmental constraints from wetlands, shorelines, slopes and other critical areas, the availability of a variety of motorized and non-motorized transportation facilities, housing and land uses.

VISION 2050 Multicounty Planning Policies (MPPs)

Education

VISION 2050 contains policies related to education obtainment, services, and the siting of education facilities. It calls for ensuring accessible and high-quality education and skills-training programs to all of the region’s residents and integrates the provision of education facilities and services with care for the environment. VISION addresses the provision of educational facilities and services that are provided to both urban and rural populations by calling for the siting of schools, institutions, and other community facilities that primarily serve urban populations within the urban growth area in locations where they will promote the local desired growth plans. It also calls for locating schools, institutions, and other community facilities serving rural residents in neighboring cities and towns and designing these facilities in keeping with the size and scale of the local community.

Environment

VISION 2050 provides numerous policies for protection of the environment, all aimed at implementing the stated Environmental Goal - *“The region cares for the natural environment by protecting and restoring natural systems, conserving habitat, improving water quality, and reducing air pollutants. The health of all residents and the economy is connected to the health of the environment. Planning at all levels considers the impacts of land use, development, and transportation on the ecosystem.”*

Urban Services

Urban services addressed in VISION 2050 include wastewater and stormwater systems, solid waste, energy, telecommunications, emergency services, and water supply. An overarching goal of VISION 2050 is to provide sufficient and efficient public services and facilities in a manner that is healthy, safe, and economically viable. Conservation is a major theme throughout VISION 2050.

Pierce County Planning Policies

Pierce County updated its Countywide Planning Policies (CPPs) in 2022 (Pierce County Ordinance No. 2022-46s). The major focus of the CPPs with respect to capital facilities is compliance with the GMA with respect to urban growth areas, siting educational facilities and protecting the environment. The following are CPPs related to capital facilities:

- UGA-12: Capital facilities plans shall identify existing, planned, and future infrastructure needs within Urban Growth Areas.
 - 12.1: The County and each municipality in the County should identify appropriate levels of service and concurrency standards that address schools, sewer, water, and parks.
 - 12.2: The County and each municipality in the County shall identify appropriate levels of service and multimodal concurrency standards that address roads.
- UGA-13: Within the delineated urban growth areas, the County, and each municipality in the County, shall adopt measures to ensure that growth and development are timed and phased consistent with the provision of adequate public facilities and services.
 - 13.1: "Adequacy" shall be defined by locally established service level standards for local facilities and services both on the site and off-site. For facilities and services provided by other agencies, adequacy shall be defined by level of service standards mutually agreed upon by the service provider and the jurisdiction served. The definition of levels of service standards may allow for the phasing-in of such standards as may be provided in the capital facilities element of County or municipal comprehensive plans.
 - 13.2: "Public facilities" include:
 - 13.2.1: Streets, roads, highways, sidewalks, street and road lighting systems, and traffic signals;
 - 13.2.2: Domestic water systems;
 - 13.2.3: Sanitary sewer systems;
 - 13.2.4: Storm sewer systems;
 - 13.2.5: Parks and recreational facilities; and
 - 13.2.6: Schools.

- 13.3: "Public services" include:
- 13.3.1: Fire protection and suppression;
 - 13.3.2: Law enforcement;
 - 13.3.3: Public health;
 - 13.3.4: Education;
 - 13.3.5: Recreation;
 - 13.3.6: Environmental protection;
 - 13.3.7: Access to broadband internet; and
 - 13.3.8: Other government services, including power, transit, and libraries.
- 13.4: Public Sanitary Sewer Service. The following policies shall be applicable to the provision of public sanitary sewer service in the County and its municipalities:
- 13.4.1: Relationship of Sewer Interceptors to Comprehensive Plans. The timing, phasing and location of sewer interceptor expansions shall be included in the capital facilities element of the applicable municipal or County comprehensive plans and shall be consistent with Countywide Planning Policies, the Urban Growth Area boundaries and the local comprehensive land use plan. The phased expansions shall be coordinated among the County and the municipalities therein and shall give priority to existing unserved urbanized areas within the Urban Growth Area except as provided in 13.4.2 a. and b. below.
 - 13.4.2: Public Sewer Interceptor and Service Extensions/Expansions.
 - a. Public sewer interceptors shall only extend or expand outside of Urban Growth Areas where:
 - (i) Sewer service will remedy ground water contamination and other health problems by replacing septic systems;
 - (ii) A formal binding agreement to service an approved planned development was made prior to the establishment of the Urban Growth Area; or
 - (iii) An interceptor will convey wastewater originating within a designated Urban Growth Area to sewerage facilities in another designated Urban Growth Area.
 - b. New sanitary sewer service inside Urban Growth Areas must follow phasing of capital facilities as provided in the municipality's adopted comprehensive plan or any adopted Sewer Master Plan unless:

- (i) Sewer service will remedy ground water contamination and other health problems by replacing septic systems and community on-site sewage systems;
 - (ii) A new municipality incorporates;
 - (iii) A formal binding agreement to service an approved planned development was made prior to the establishment of the Urban Growth Area; or
 - (iv) An interceptor will convey wastewater originating within a designated Urban Growth Area to sewerage facilities in another designated Urban Growth Area.
- c. New sanitary sewer service connections from interceptors shall not be made available to properties outside the Urban Growth Area except as provided in (a) above.
 - d. Sanitary Sewer service shall not be provided in areas designated "rural," except as provided in 13.4.2(a)(i)(ii).
 - e. A sewer interceptor or trunk line constructed or planned for construction through a rural area to convey wastewater from a designated Urban Growth Area to sewerage facilities in a designated Urban Growth Area shall not constitute a change of conditions that can be used as the basis for a change in land use designation or urban/rural designation, either for adjacent or nearby properties.

13.4.3: On-Site and Community Sewage Systems.

- a. In order to protect the public health and safety of the citizens of Pierce County and of the municipalities in the County, to preserve and protect environmental quality including, but not limited to, water quality and to protect aquifer recharge areas, to work toward the goal of eliminating the development of new residential and commercial uses on on-site and community sewage systems within the urban areas in the unincorporated County or within municipal boundaries consistent with the Countywide Planning Policies, the County and each municipality shall adopt policies on the use of on-site and community sewage including:
 - (i) The most current Tacoma-Pierce County Board of Health Land Use Regulations for On-Site and Community Sewerage Systems.
 - (ii) Policies which require connection to sanitary sewers when they are available in the following circumstances:
 - a. If a septic system fails;

- b. For all new development except existing single-family lots; and
 - c. For development with dry sewer systems.
- (iii) If sewer service is not available, dry sewer facilities shall be required unless the local jurisdiction has adopted criteria that otherwise must be met.
- b. New industrial development on community or on-site sewage systems shall not be allowed in urban areas in the unincorporated County or within municipal boundaries. Sanitary facilities necessary for recreation sites may be exempt from this policy.
- c. It is not the intent of these policies to require any individual property owner on an existing, properly permitted and functioning septic system to connect to a public sewer unless:
 - (i) The septic system fails;
 - (ii) The system is not in compliance with the most current version of the Tacoma-Pierce County Board of Health Land Use Regulations or the current use of the property changes;
 - (iii) The density of development on the property increases;
 - (iv) The existing septic system was originally permitted as an interim system to be abandoned when sewers became available; or
 - (v) A municipality has a mandatory policy.

13.4.4: Achieving an adopted Level of Service.

- a. The County, each municipality, and sewer providers shall work together to achieve adopted levels of service for sewers. All sewer service providers shall work with municipalities to process sewer permits in a manner that allows municipalities to comply with timelines imposed under RCW 36.70B.080(1).
- b. The County, each municipality, and their sewer providers shall work to secure funding sources to achieve the adopted levels of sewer service such as:
 - (i) Grants;
 - (ii) Public Works Trust Fund;
 - (iii) State Revolving Fund;
 - (iv) Centennial Clean Water Fund; or

- (v) Municipally imposed surcharges to fund sewer improvements in the jurisdictions where the surcharges are collected.

13.4.5: The availability or potential for availability of sewer treatment plant capacity shall not be used to justify expansion of the sewer system or development in a manner inconsistent with the Countywide Planning Policy, Urban Growth Area boundaries and the applicable municipal or County comprehensive land use plans.

13.6: Urban government services shall be provided primarily by cities and urban government services shall not be provided in rural areas.

13.7: Public facilities and services will be considered available "at the time of development" as follows:

13.7.1: As to all public facilities and services other than transportation, if the facility or service is in place at the time demand is created, or if the County or municipality has made appropriate provision to meet the demand for the public facility or service through one or more of the following techniques:

- a. Inclusion of the public facility or service in the applicable County or municipal capital facilities plan element and specification of the full source of the funding for such project;
- b. Impact fees;
- c. Required land dedication;
- d. Assessment districts;
- e. User fees and charges;
- f. Utility fees; or
- g. Other.

13.7.2: As to transportation facilities, if needed transportation improvements are within the then existing 6-year capital facilities plan element and program, but only if a specific financial commitment to the transportation improvement project has been made.

13.7.3: Public facilities and services will not be considered available at the time of development unless they are provided consistently with the applicable level of service standards adopted in the capital facilities element of the Comprehensive Plan.

13.8: Public facility and service adequacy shall be determined by the County, and each municipality in the County, based upon:

13.8.1: The specific public facility or service;

- 13.8.2: The adopted or established level of service standard;
 - a. Established by each municipality for local facilities and services;
 - b. By mutual agreement between provider and municipality served for other facilities and services; or
 - c. Established through interlocal agreements for cross-jurisdictional facilities and services.
- 13.8.3: The current usage of the existing public facilities and services, existing development commitments and obligations, the vested or non-vested status of pipeline approvals or existing lots of record, and new development applications; and
- 13.8.4: Where development projects partially meet adequacy of public facilities and services standards, development approval may be authorized for that portion of the project that meets the adequacy standards or the project may be phased to coincide with the phasing of future availability of adequate public facilities and services.
- 13.9: Facility and service provision/extension to new development areas shall be subject to the following:
 - 13.9.1: Imposition of requirement for payment of the full, but fair, share of costs of needed facilities and services on the new development through:
 - a. Impact fees;
 - b. Assessment districts;
 - c. User fees and charges;
 - d. Surcharges;
 - e. Dedication;
 - f. Utility fees, or
 - g. Other, as appropriate.
 - 13.9.2: Consideration of the total impact of the facility or service extension on the achievement of other policies, goals and objectives, in addition to the impact on the area being served.
 - 13.9.3: If necessary to minimize off-site impacts, specify that such service extensions (e.g., sewer, water) are not subject to connection by intervening landowners.
- ED-5: Determine specific siting requirements for all public and private educational facilities and meet specific educational facility needs by:

- 5.1: Locating schools in a manner that is consistent with the local comprehensive plan, including the capital facilities element;
 - 5.2: Deciding all facility locations, types and sizes with consideration for the provision of other necessary public facilities and services and the compatibility and effect of the provision of such facilities on land use and development patterns; and
 - 5.3: Working toward standards that would prioritize the location of these facilities to be in urban areas, with consideration to existing facilities in rural areas.
- ENV-23: Coordinate watershed planning and land use planning activities and implementation activities within a watershed boundary by undertaking actions such as:
- 23.2: Recognizing that watershed planning may be useful in analyzing changes in stream hydrology, flooding, water quality and capital facilities under different land use scenarios;

South Prairie-Owned Capital Facilities

Introduction

Capital facilities in South Prairie that are not associated with utilities, transportation, or parks and recreation consist of South Prairie-owned land and buildings. This section provides basic information about those facilities. All of the facilities discussed in this element are owned and operated by South Prairie except school facilities.

South Prairie Owned Land and Buildings – Excluding Utilities

South Prairie owns several tracts of land for the purpose of delivering urban services. The table below summarizes information about South Prairie's land and buildings, except those associated with utilities (See Chapter 6 Utilities Element).

Location, Size and Use	Improvements
<p><u>121 Washington Street</u></p> <p>Approximately 8,000sf lot</p> <p>Town Hall Building and associated parking</p>	<p>Existing: This one-story 772sf building is the Town Hall. It was constructed in 1925 and is a wood framed building with a shingle composite roof in low quality condition.</p> <p>Planned: The Town Plans to perform a full renovation of the interior and exterior of the Town Hall in phases beginning in 2026 using local funds and loan funding at an approximate cost of \$250,000.</p>

Location, Size and Use	Improvements
<p data-bbox="264 300 610 331"><u>350 to 354 SR 162 Hwy E</u></p> <p data-bbox="264 359 626 464">Approximately 40,382sf lot Fire Station and Veteran's Park</p>	<p data-bbox="667 300 1432 478">Existing: This is the Town's Fire Station and Community Hall. The building is 6,204sf and was constructed in 1986. It is a masonry building with a metal roof in average condition. The Town has an interlocal agreement with the East Pierce Fire and Rescue District for EMS services.</p> <p data-bbox="667 552 1432 657">The land is also home to Veteran's Park. Veteran's Park contains a newer big toy play structure, a jungle gym, a swing set, a picnic shelter and several picnic benches.</p> <p data-bbox="667 730 1432 909">Planned: The Town plans to perform extensive interior, exterior and parking lot renovations to increase energy efficiency and safety in phases using a combination of local funds, grants and loans beginning in 2025-2030 for a current estimated cost of \$1,000,000.</p>
<p data-bbox="264 930 573 961"><u>SR 162 and Emery Ave</u></p>	<p data-bbox="667 930 1432 1003">Existing: The town owns a 0.42-acre vacant lot (APN 0619182065) adjacent to SR 162 and the Foothills Trail.</p> <p data-bbox="667 1077 1432 1255">Planned: The town would like to create an open-air market with vendors at this location. No costs or timeline have been identified yet because this lot may be affected by the WSDOT roundabout project at this intersection. (See Chapter 7 Transportation Element).</p>

Capital Facilities Goals and Policies

This section contains the goals and policies that will guide the design, construction, operation, maintenance, renovation, removal, cost management, and financing of capital facilities in South Prairie for 20 years following adoption of the comprehensive plan update. Goals and policies are organized into the following categories:

-
- Service standards
 - Environmental impacts
 - Facility and service providers
 - Costs and financing
 - USA and annexations
- Interjurisdictional coordination
- Consistency with other comprehensive plan elements
- Concurrency

Goal 1: Service Standards

South Prairie shall ensure that adequate urban facilities and services are provided to all citizens and residences, businesses, and other establishments within South Prairie's boundaries. Where South Prairie's service area for a particular facility or service extends beyond South Prairie's boundaries, extensions shall be planned and built to a master plan that will ensure adequacy for the entire service area.

Policies:

- 1.1 **Facility Plans.** Facility-specific plans shall be prepared as needed to define South Prairie's approach to achieving adopted levels of service within South Prairie's current boundaries. These plans shall be consistent with South Prairie's comprehensive plan and should include projects and programs that upgrade substandard facilities within 20 years of the adoption of the comprehensive plan.
- 1.2: **Service Levels for New Development and Redevelopment.** All new development and redevelopment shall be required to conform to service standards, the comprehensive plan, and facility plans.
- 1.3: **Evaluating Improvement Projects.** When prioritizing improvement projects, South Prairie should consider if the project is needed to correct existing deficiencies, replace needed facilities, or extend the life or usefulness of facilities; increase public health and safety; reduce long-term maintenance and operating costs; coordinate with other providers' projects; meet state facility requirements; and improve the environment. Financial feasibility and the impact on South Prairie's budget should also be considered.

Goal 2: Environmental Impacts

Capital facilities and services shall be designed and managed to minimize and mitigate adverse environmental impacts resulting from construction, use, operation, maintenance, renovation, and removal of the facilities.

Policies:

- 2.1: **Minimizing Pollutants and Protecting Critical Areas.** Facilities, services, programs, and procedures should be structured to prevent or minimize pollutants entering the air, water, and soil and to protect the environmental integrity of critical areas.
- 2.2: **Immediate and Cumulative Impacts.** During facility planning and implementation, the cumulative adverse environmental impacts of all projects should be considered as well as immediate adverse impacts.
- 2.3: **Resource Conservation and Demand Management.** Facilities, services, programs, and procedures should be designed and managed to conserve resources and reduce demand for facilities with significant adverse environmental impacts. Similarly, procedures, programs, and rate structures

should encourage citizens to conserve resources and to minimize the negative environmental impacts of their use of facilities and services.

Goal 3: Facility and Service Providers

South Prairie may contract with other facility and service providers to ensure adequate urban facilities and services. All providers serving South Prairie should conform to South Prairie's service standards.

Policies:

- 3.1: **Evaluating Facility and Service Providers.** When selecting facility and service providers, potential providers should be evaluated with respect to cost, South Prairie's service standards, and environmental responsibility. Additional evaluation criteria may be established as appropriate. South Prairie should select the provider offering optimum conformance with evaluation criteria.
- 3.2: **Nonconforming Facility and Service Providers.** Existing facility and service providers that do not conform to South Prairie's service standards should be informed in writing of nonconformance issues.

Goal 4: Costs and Financing

South Prairie shall ensure that cost-effective facilities and services can be available indefinitely.

Policies:

- 4.1: **Cost Containment and Reduction.** Facility plans should estimate the impact of new or upgraded facilities on annual operating and maintenance costs. Operation, maintenance, project, and replacement costs should be considered when making facility planning decisions. In addition, the Town should periodically assess operation, maintenance, and replacement programs and procedures with respect to efficiency. Plans, programs, and procedures should be updated as necessary to ensure maximum efficiency.
- 4.2: **Immediate and Cumulative Impacts.** Facilities operation and maintenance programs should be structured to maximize the useful life of facilities. In addition, facilities should be designed and constructed to meet projected cumulative demand.
- 4.3: **Resource Conservation and Demand Management.** Each future development shall be responsible for facility improvement costs necessitated by that development.
- 4.4: **Fees and Service Charges.** Fees and service charges should be evaluated periodically to ensure that they reflect the cost to South Prairie of providing utility hookups, facilities, and services.
- 4.5: **Additional Local Funding Sources.** South Prairie should consider as needed new sources of local funding such as impact fees and a street utility for capital facilities.

- 4.6: **Other Funding Sources.** South Prairie should aggressively seek conventional and innovative funding sources necessary to achieve its capital facilities goals, policies, and service standards. South Prairie should make efforts to secure grants and similar sources of funding and should explore other funding mechanisms when such sources will provide needed funding for capital improvements.
- 4.7: **Providing for Deferred Environmental Costs.** If proposed facility plans, projects, operating procedures, and maintenance procedures will cause cumulative adverse impacts to the natural environment, future costs of mitigating cumulative adverse impacts should be estimated. When decisions are made to implement such plans, projects, or procedures, funding programs should be established concurrently to ensure funds sufficient for future restoration and mitigation programs. Funding programs should be designed to ensure availability of funds when restoration or mitigation programs are expected to be needed.

Goal 5: UGA and Annexations

South Prairie shall take steps to ensure smooth and efficient post-annexation transitions for provision of urban facilities and services in areas that may eventually be annexed.

Policies:

- 5.1: **Pre-Annexation Planning.** South Prairie should assume an active role in facility planning for existing and new development and for redevelopment within its USA. South Prairie should encourage and, where possible, require adherence to its goals, policies, and service standards for all development within its UGA.
- 5.2: **Post-Annexation Transitions.** During annexation processing or within two years of annexation, South Prairie should revise facility plans as necessary to describe in detail the approach to achieving South Prairie's levels of service throughout the annexed area within 20 years of the annexation. Revisions shall be consistent with this comprehensive plan.

Goal 6: Inter-jurisdictional Coordination

South Prairie shall participate in joint planning with other jurisdictions to ensure achievement of capital facilities goals, policies, and service standards and to ensure consistency among jurisdictions.

Policies:

- 6.1: **Equitable Allocation of Costs.** South Prairie should seek inter-jurisdictional agreements allocating costs equitably for improvements, operations, and maintenance of facilities that are shared by other jurisdictions.
- 6.2: **Sharing Resources.** South Prairie should explore opportunities to share facilities and services with nearby jurisdictions to achieve mutually beneficial

increases in services or overall reduction in costs to the citizens of South Prairie and those of other jurisdictions.

- 6.3: **School Districts.** South Prairie shall inform affected school districts (South Prairie Historical School District and White River School District) early in the permit application review process for any residential developments that will significantly increase demand for school facilities. Permit applications may be denied if the school district is unable to provide educational services at the time that development is available for occupancy. Impact fees may be imposed to compensate for the school facilities' impact of new developments.

Goal 7: Consistency with Other Comprehensive Plan Elements

All elements of the comprehensive plan shall be consistent with the capital facilities element.

Policies:

- 7.1: **Siting of Capital Facilities.** Capital facilities shall be sited and buffered in accord with the land use element goal and policies for siting public facilities.
- 7.2: **Consistent Plans, Projects and Financial Planning.** Plans and projects described in other elements shall be consistent with the financial plan of the capital facilities element and with the capacity of the Town to fund facility operations and maintenance. If probable funding falls short of meeting needs, affected elements and the capital facilities element shall be reassessed and revised as necessary to ensure an achievable comprehensive plan. Levels of service may be adjusted if other reconciliation measures do not achieve consistency.

Goal 8: Concurrency

South Prairie shall ensure that public facilities and services necessary to support new development are adequate and available to serve the development within the time period specified by this plan.

Policies:

- 8.1: **Implementation.** South Prairie shall apply its concurrency management regulations to new development to support the implementation of this comprehensive plan.
- 8.2: **Re-evaluating Total Cumulative Future Demand.** Re-evaluation of total cumulative future demand for capital facilities shall be a requirement prior to issuance of any permits for future development. No development shall be permitted if such development allows services to fall below standards established in this comprehensive plan, unless the developer provides the compensating facilities and improvements at the time of development or provides funds to South Prairie to make the necessary facilities improvements when they become necessary to maintain levels of service.

Goal 9: Power and Heating

Puget Sound Energy has goals for the provision of electricity and natural gas in an environmentally sustainable and safe and equitable manner. The following are the Town and PSE's joint policies with respect to power and heating.

Policies:

- 9.1: **Energy Equity.** Partner with PSE to promote financial assistance and discounted billing programs for income qualified residents in order to ensure that the most vulnerable are not disproportionately impacted by the State's clean energy transition.
- 9.2: **Electric Vehicles.** Support EV charging infrastructure throughout the community in order to support the decarbonization of our transportation sector.
- 9.3: **Energy Efficiency.** Partner with PSE to promote energy efficiency programs and initiatives.
- 9.4: **Permitting.** Expedite permitting processes related to energy efficiency upgrades.
- 9.5: **Green Options.** Partner with PSE to promote local investments and customer enrollment in clean energy projects and programs in order to achieve clean energy goals.
- 9.6: **Peak Load Shifting.** Partner with PSE to promote and support programs designed to decrease load on the grid during times of peak use.
- 9.7: **New Carbon Free Electrical Generation and Energy Storage Systems.** Partner with PSE to effectively meet rapidly increasing electrical demand as the Town and region work to achieve a Clean Energy Transition by adopting codes that support siting existing and new technologies.
- 9.8: **New and Upgraded Transmission Lines, Substations, and Distribution Lines.** Expedite the local permitting and approval process in order to maintain grid capacity and reliability.
- 9.9: **Distributed Energy Resources (DER). Promote** and support the growth of customer owned distributed energy resources.
- 9.10: **Vegetation Management.** Support ongoing vegetation management in order to maintain system reliability.
- 9.11: **Public Funding.** Pursue public-private partnership to seek funding sources to accelerate clean energy projects.
- 9.12: **Wildfire Mitigation:** Support PSE's wildfire mitigation efforts including electric system upgrades, year-round vegetation management, and fire weather operational procedures. Work closely with utilities and local fire departments to lessen the risk and impact of wildfires.

9.13: **Gas Decarbonization.** Evaluate the potential for renewable, recoverable natural gas in existing systems.

Goal 10: Communication

Though the Town itself is an urban area, it is situated in a largely remote and rural setting. Getting broadband, high-speed internet, and cable to these areas can be a challenge.

Policies:

10.1: **Communication Services.** The Town will partner with communication service providers to bring fiber internet into the community.

Level of Service Standards

Level of Service Standards are required to determine existing capacity and future capital improvement needs. Level of service (LOS) standards are an indicator of the extent or degree of service provided by, or proposed to be provided by, a facility or improvement. These levels of service, the land use vision, or the capital facilities program may need to be modified in the future in response to changing community expectations or vision, revenue shortfalls, or unforeseen or emergency expenditures.

It is important to note that the level of service standards listed should be considered minimums. Future capital improvements are not limited to meeting these standards, and in some cases the Town may choose to exceed these standards.

For additional detailed information on existing and proposed levels of service and LOS standards, please see the Transportation and Utility Elements, and specific facility plans referenced in this comprehensive plan.

Facility or Improvement	Level of Service Standard
Utilities	
- Water (supply)	348 gallon per day/equivalent residential unit - maximum
- Water (fire flow)	Fire flow service shall be provided to insurance services office (ISO) standards for Class 6 fire protection facilities.
- Sanitary Sewer	The Level of Service (LOS) for the sewage treatment plant was established from the Criteria for Sewage Works Design, DOE, 2008. The WWTP is currently permitted for a maximum month flow of 38,200 gallons per day (GPD), average monthly dry weather flow of 28,680 GPD, maximum month BOD load of 68 pounds per day (lbs/day), and maximum month TSS load of 17.5 lbs/day.
- Stormwater	Most recently adopted Department of Ecology Stormwater Management Manual for Western Washington
- Power (electric)	Underground for new facilities. National Electric Code and Washington State Electric Code
Facilities	
- Streets (arterial)	LOS C
- Streets (collector)	LOS B
- Parks, Recreation & Open Space	5.2 acres/1,000 population
Services	
- Fire/EMS	4-minute response time
- Law Enforcement	1.33 uniformed commissioned officers/1,000 population
- Schools	As adopted by the White River School District

Current and Possible Funding Sources

The possible funding sources listed within this element are subject to change and should be periodically reviewed for applicability and appropriateness for the Town. Additional sources in other funds will also be used in the Six-Year Capital Improvement Program.

Town of South Prairie FY 2024 Final Budget Summary

Fund	Fund Name	Anticipated Beginning Fund Balance	Anticipated Revenues/Resources	Anticipated Expenditures/Uses	Increase/ Decrease	Expected Ending Fund Balance
001	General Fund	\$300,000.00	\$419,810.00	\$618,330.00	\$(198,520.00)	\$101,480.00
101	Street Fund	\$30,000.00	\$9,650.00	\$27,500.00	\$(17,850.00)	\$12,150.00
104	Grant Fund	\$-	\$5,000.00	\$5,000.00	\$-	\$-
110	Veterans' Fund	\$570.13	\$100.00	\$-	\$100.00	\$670.13
190	EMS Fund	\$8,000.00	\$23,245.00	\$29,700.00	\$(6,455.00)	\$1,545.00
301	Capital Improvement Fund	\$45,000.00	\$5,125.00	\$-	\$5,125.00	\$50,125.00
302	Capital Project Fund	\$55,000.00	\$5,125.00	\$-	\$5,125.00	\$60,125.00
401	Water Fund	\$400,000.00	\$252,400.00	\$600,900.00	\$(348,500.00)	\$51,500.00
402	Sewer Fund	\$300,000.00	\$302,000.00	\$494,550.00	\$(192,550.00)	\$107,450.00
Total		\$1,138,570.13	\$1,022,455.00	\$1,775,980.00	\$(753,525.00)	\$385,045.13

Possible Funding Sources

The following are major sources of funding that could be explored to meet existing and projected capital improvement needs. These funding sources are divided into the following categories. Funding sources within each of these categories are described in greater detail in the following pages.

- Debt Financing
- Local Multi-Purpose Levies
- Local Single Purpose Levies
- Local Non-Levy Financing Mechanisms
- State Grants and Loans
- Federal Grants and Loans
- Utility Rates

Debt Financing

Short-Term Borrowing: The extremely high cost of many capital improvements requires local governments to occasionally utilize short-term financing through local banks.

Revenue Bonds: Bonds financed directly by those benefiting from the capital improvement. Revenue obtained from these bonds is used to finance publicly owned facilities. The debt is retired using charges collected from the users of these facilities. In this respect, the capital project is self-supporting. Interest rates tend to be higher than for general obligation bonds, and issuance of the bonds may be approved without a voter referendum.

Industrial Revenue Bonds: Bonds issued by a local government, but assumed by companies or industries which use the revenue for construction of plants or facilities. The attractiveness of these bonds to industry is that they have comparatively low interest rates due to their tax-exempt status. The advantage to the jurisdiction is the private sector is responsible for retirement of the debt.

General Obligation Bonds: Bonds backed by the value of the property within the jurisdiction. Voter-approved bonds increase property tax rates and dedicate the increased revenue to repay bondholders. Councilmanic bonds do not increase taxes and are repaid with general revenues. Revenue may be used for new capital facilities, or maintenance and operations at existing facilities. These bonds should be used for projects that benefit the Town as a whole.

Local Municipal Levies

Ad Valorem Property Taxes: Tax rate in mills (1% of true and fair value). The maximum rate is \$3.60 per \$1,000 assessed valuation. The Town is prohibited from raising its levy more than 1% of the highest amount levied in the last 3 years, before adjustments for new construction and annexation. A temporary or permanent excess levy may be assessed with voter approval. Revenue may be used for new capital facilities, or maintenance and operations of existing facilities.

Business and Occupation Tax: Tax of no more than 0.2% of gross value of business activity. Assessment or increase of the tax requires voter approval. Revenue may be used for new capital facilities, or maintenance and operations of existing facilities.

Local Option Sales Tax: Retail sales and use tax of up to 1%. The local governments that level the second 0.5% may participate in a sales tax equalization fund. Assessment of this option tax requires voter approval. Revenue may be used for new capital facilities, or maintenance and operations of existing facilities.

Real Estate Excise Tax (REET): The original 0.5% was authorized as an option to the sales tax for general purposes. An additional 0.25% was authorized for capital facilities, and the Growth Management Act authorized another 0.25% for capital facilities. Revenues must be used solely to finance new capital facilities, or maintenance and operations of existing facilities, as specified in the capital facilities element.

Utility Tax: Up to a 6% tax on the gross receipts of electric, gas, telephone, cable TV, water, sewer, and stormwater utilities. Up to an 8.5% tax on gross receipts of cable TV and solid waste services. Revenue may be used for new capital facilities, or maintenance and operations of existing facilities.

Local Single Purpose Levies

Emergency Medical Services Tax: Property tax level of \$0.25/1,000 assessed valuation for emergency medical services. Revenue may be used for new capital facilities, or maintenance and operations of existing facilities.

Motor Vehicle Fuel Tax: Tax paid by gasoline distributors. Local jurisdiction receives 11.53% of total tax receipts. State shared revenue is distributed by the Department of Licensing. Revenues must be spent for highway construction, maintenance, or operation; policing of local roads; or related activities.

Local Option Fuel Tax: A Countywide voter approved tax equivalent to 10% of statewide Motor Vehicle Fuel Tax. Revenue distributed to Town on a weighted per capita basis. Revenues must be spent for highway construction, maintenance, or operation; policing of local roads; or related activities.

Commercial Parking Tax: Tax on commercial parking businesses based on gross proceeds, the number of parking stalls, or on the customer rates. Tax imposed by local referendum. Revenues must be spent for highway construction, maintenance, or operation; policing of local roads; highway related activities; public transportation planning and design; and other transportation related activities.

Local Non-Levy Financing Mechanisms

Conservation Futures Program: The funding for this program is generated by all property taxpayers of Pierce County. Six and one-quarter cents per thousand dollars of assessed value of each taxpayer's property provides these funds. The Pierce County Council reviews all project proposals and decides which projects will be awarded Conservation Futures Funds for acquisition.

Fines, Forfeitures, and Charges for Services: This includes various administrative fees and user charges for services and facilities operated by the jurisdiction. Examples are franchise fees, sales of public documents, permits, sale of public property, and all private contributions to the Town. Revenue from these sources may be restricted in use.

Impact Fees: These fees are paid by new development based upon its impact to the delivery of services. Impact fees must be used for capital facilities needed by growth, not for current deficiencies in levels of service, and cannot be used for operating expenses. These fees must be equitably allocated to the specific entities that will directly benefit from the capital improvement, and the assessment levied must fairly reflect the true costs of these improvements. Impact fees may be imposed for public streets, parks, open space, recreational facilities, school facilities, and fire protection facilities.

Lease Agreements: Agreements allowing the procurement of a capital facility through lease payments to the owner of the facility. Several lease packaging methods can be used. Under the lease-purchase method the capital facility is built by the private sector and leased back to the local government. At the end of the lease, the facility may be turned over to the Town without any future payment. At that point, the lease payments will have paid the construction cost plus interest.

Privatization: Privatization is generally defined as the provision of a public service by the private sector. Many arrangements are possible under this method ranging from a totally private venture to systems of public/private arrangements, including industrial revenue bonds.

Reserve Funds: These are also known as “sinking funds”. Revenue that is accumulated in advance and earmarked for capital improvements. Sources of funds can be surplus revenues, funds in depreciation reserves, or funds resulting from the sale of capital assets.

Special Assessment District: District created to service entities completely or partially outside of the jurisdiction. Special assessments are levied against those who directly benefit from the new service or facility. Includes Local Improvement Districts (LIDs), Road Improvement Districts, Utility Improvement Districts and the collection of development fees. Funds must be used solely to finance the purpose for which the special assessment district was created.

Special Purpose District: District created to provide a specified service, such as the Transportation Benefit District created in 2013 for South Prairie. Often the district will encompass more than one jurisdiction. Includes districts for fire facilities, hospitals, libraries, metropolitan parks, airports, ferries, parks and recreation facilities, cultural art/stadiums/ convention centers, sewers, water flood control, irrigation, and cemeteries. Voter approval required for airport, parks and recreation facilities, and cultural art/ stadiums/convention center districts. The district has authority to impose levies or charges. Funds must be used solely to finance the purpose of which the district was created.

Street Utility Charge: Fee up to 50% of actual costs of street construction, maintenance, and operations charged to businesses and households. The tax requires local referendum. The fee charged to businesses is based on the number of employees and cannot exceed \$2.00 per employee per month. Owners or occupants of residential property are charged a fee per household that cannot exceed \$2.00 per month. Both businesses and households must be charged. Revenue may be used for activities such as street lighting, traffic control devices, sidewalks, curbs, gutters, parking facilities, and drainage facilities.

User Fees, Program Fees, and Tipping Fees: Fees or charges for using park and recreational facilities, solid waste disposal facilities, sewer and water services, surface water drainage facilities. Fee may be based on measure of usage, flat rate, or design features. Revenue may be used for new capital facilities, or maintenance and operations of existing facilities.

State Grants and Loans

Centennial Clean Water Fund: Grants and loans for the design, acquisition, construction, and improvement of water pollution control facilities, and related activities to meet state and federal water pollution control requirements. Revenues distributed by the Department of Ecology with a 25 - 50% match. Use of funds limited to planning, design, and construction of water pollution control facilities, stormwater management, ground water protection, and related projects.

Community Development Block Grants: Grant funds available for public facilities, economic development, housing, and infrastructure projects that benefit low and moderate-income households. Grants distributed by the Department of Commerce. Primarily to applicants who indicate prior commitment to a project. Revenue restricted in type of project and may not be used for maintenance and operations.

Community Economic Revitalization Board: Low interest loans and occasional grants to finance infrastructure projects for a specific private sector development. Project must create or retain jobs. Funds distributed by the Department of Commerce primarily to applicants who indicate prior commitment to a project. Revenue restricted in type of project and may not be used for maintenance and operations.

Drinking Water State Revolving Fund (DWSRF): The Drinking Water State Revolving Fund loan is an agreement entered into between the Town and the State of Washington, and the Public Works Board, acting through the Department of Community Trade & Economic Development. Funds for the loan are provided by the United States Environmental Protection Agency, CFDA No. 66.468, Title: Safe Drinking Water State Revolving Fund. The loan funds local improvement projects that further the goals and objectives of the Washington State Drinking Water State Revolving Loan Fund Program.

Interagency Committee for Outdoor Recreation: Administers several grant programs for outdoor recreation and habitat conservation purposes. Each grant program requires that monies be spent for specific types of projects. The program requires sponsors to complete a systematic planning process prior to seeking IAC funding. IAC has grant limits on most of its programs, and also encourages and often requires sponsors to share in the project's cost. Grants are awarded by the Committee based on a public, competitive process that weighs the merits of proposed projects against established program criteria.

Public Works Trust Fund: Low interest loans to finance capital facility construction, public works emergency planning, and capital improvement planning. To apply for the loans, the Town must have a capital facilities element in place and must be levying the original .25% REET authorized for capital facilities. Funds are distributed by the Department of Commerce. Loans for construction projects require matching funds generated only from local revenues or state shared entitlement revenues. Public works emergency planning loans are at 5% interest rate, and capital improvement planning loans are no interest loans with a 25% match. Revenues may be used to finance new capital facilities, or maintenance and operations of existing facilities.

State Parks and Recreation Commission Grants: Grants for parks capital facilities acquisition and construction. Distributed by the Parks and Recreation Commission to applicants with a 50% match.

Transportation Improvement Account: Revenue available for projects to alleviate and prevent traffic congestion caused by economic development or growth. Entitlement funds are distributed by the State Transportation Improvement Board subject to a 20% match. Revenue may be used for capital facility projects that are multimodal and involve more than one agency.

Urban Arterial Trust Account: Revenue available for projects to alleviate and prevent traffic congestion. Entitlement funds are distributed by the State Transportation Improvement Board subject to a 20% match. Revenue may be used for capital facility projects to alleviate roads that are structurally deficient, congested with traffic, or have accident problems.

Water Pollution Control State Revolving Fund: Low interest loans and loan guarantees for water pollution control projects. Loans distributed by the Department of Ecology. Applicant must show water quality need, have a facility plan for treatment, and show a dedicated source of funding for repayment.

Federal Grants and Loans

Congestion Mitigation/Air Quality: Established under the ISTEA Section 1009. The purpose of the program is to fund transportation projects and programs that will contribute to attainment of National Ambient Air Quality Standards. Federal participation for most CM/AQ projects is 80 percent, which increased to 86.50 percent due to public lands adjustments. Federal participation can be 90 percent for some activities that are on the Interstate system. Pedestrian and bicycle activities are limited to 80 percent federal participation.

Department of Health Water Systems Support: Grants for upgrading existing water systems, ensuring effective management, and achieving maximum conservation of safe drinking water. Grants distributed by the State Department of Health through intergovernmental review and with a 60% local match.

Federal Aid Bridge Replacement Program: Funds available with a 20% local match for replacement of structurally deficient or obsolete bridges, including ferry landing bridges. Funds are distributed by the Washington State Department of Transportation on a statewide priority basis.

Federal Aid Emergency Relief: Revenue available for restoration of federal aid system roads and bridges that have been damaged by extraordinary natural disasters or catastrophic failures. Local agency declares an emergency and notifies the Division of Emergency Management of the Washington State Department of Transportation, upon approval entitlement funds available with a 16.87% local match.

Federal Aid Safety Program: Revenue available for improvements at specific locations which constitute a danger to vehicles or pedestrians as shown by frequency of accidents. Funds are distributed by the Washington State Department of Transportation on a statewide priority formula and with a 10% local match.

Transportation Efficiency Act of the 21st Century (TEA-21): Revenue available for construction and reconstruction improvements to arterial and collector roads that are planned for by the Puget Sound Regional Council and the Federal Highway Administration. Funds may also be used for non-highway public mass transit projects. Funds are distributed by the Washington State Department of Transportation with a 16.87% match.

Surface Transportation Program: Funds may be used by the states and localities for any roads that are of a higher federal functional classification than local access or rural minor collectors. The formula for distribution of funds is based on each state's FY share of total national funding with appropriate adjustments for Interstate Maintenance and Bridge apportionments. Basic 80 percent/20 percent funds matching requirements adjusted due to federal lands to 86.5 percent federal and 13.5 percent local. Pedestrian and bicycle facilities remain unadjusted at 80 percent federal and 20 percent local.

Surface Transportation Program Enhancement Projects: Provision of Facilities for Bicycles and Pedestrians; Acquisition of Scenic Easements and Scenic or Historic Sites; Scenic or Historic Highway Programs; Landscaping and other Scenic Beautification; Historic Preservation; Rehabilitation and Operation of Historic Transportation Buildings, Structures or Facilities; Preservation of Abandoned Railway Corridors; Control and Removal of Outdoor Advertising; Archaeological Planning and Research; Mitigation of Water Pollution due to Highway Runoff.

Utility Rates

The Town of South Prairie operates two public utilities, providing water and sewer service to local residents. These Town-owned utilities are self-supported financial entities, financed through the revenues generated by the utility customers and responsible for operations, maintenance, and capital improvements. Capital improvements can be funded, either on a pay-as-you-go basis, or through the issuance of revenue bonds. The pay-as-you-go approach requires that revenues in excess of operating and maintenance costs be held in reserve for capital improvements until enough funding capacity is available for project development. This makes sense for many smaller projects, which can be funded out of cash flow.

For larger projects, where cash requirements are substantially greater than is available, the utility can issue tax-exempt revenue bonds to fund the improvement. This provides the utility with a large capital budget and allows the cost of the facility to be repaid from future operating revenues. One of the advantages of this approach, besides allowing for larger projects, is that the cost of the facility is shared by both the existing ratepayers and future ratepayers. For facilities with lengthy useful lives this provides a more equitable distribution of costs to the beneficiaries of the improvement.

Financial data for the Water and Sewer Utility, Capital financing capacity, whether it is pay-as-you-go or debt financed, is determined by the net cash after operations. These figures imply that without a rate increase the utilities face limited capital financing opportunities. As a result, a utility rate study should be undertaken after the Water and Sewer Comprehensive Plan, and Natural Gas System Plan are completed. The study would determine the necessary rate schedule required to fund the improvements called out in these studies.

Utility Rates: Revenues for replacement and repair of existing capital improvements and for new capital improvements can be collected through utility rates. Portions of rates collected to pay for the future replacement of existing facilities that wear out over time are frequently referred to as "Depreciation Funds."

Capital Facilities Financing Strategy

In keeping with the incremental approach undertaken in this comprehensive planning effort, this Plan of Finance is not intended to be a detailed six-year capital facilities plan. Since many of the

capital facility needs are yet to be identified and prioritized, an attempt to produce a project level CIP was not reasonable at this time. In its place, the following Capital Facilities Finance Strategy will provide the Town with a framework strategy to help with capital financing decisions during the next couple of years as the detailed engineering work is completed. It will also allow the Town to put into place the requisite capital finance mechanisms, which will fund the identified priority projects as well as address the longer-term growth-driven capital needs.

To ensure that the Town of South Prairie has the necessary financial capacity to fund current and future capital improvements, while maintaining an equitable balance between the burden of providing new facilities and the beneficiaries of those facilities the Town should:

- Expand the existing revenue base where it is deemed practical
- Add new revenue sources primarily for capital funding
- Maintain financial policies which will ensure future population pays its fair share of the cost of capital improvements
- Actively pursue state financial assistance for capital projects which will allow for the leveraging of local funds (i.e., Transportation Improvement Board)

Expanded Revenue Base

The Town should explore possible avenues for expanding the current revenue base. Toward this end the following should be analyzed.

Adjust Utility Rate Structure

In keeping with the overall strategy of ensuring that new development is paying a fair share of the costs of development, the utility rates should be structured such that new connections are assessed at a level approximating the marginal cost of infrastructure development.

New Revenue Sources

The other way to expand current financial capacity is to begin to levy new taxes or impose new fees. The following available new taxes or fees should be explored as a means of raising additional funds for capital improvements.

Impact Fees

One of the better mechanisms available to the Town is to try to equitably allocate the cost of new infrastructure among the existing residents and the new population is through the establishment of impact fees. The Town should explore the reasonableness of setting up impact fee schedules to help defray the costs of transportation improvements, parks and recreation facilities, and fire protection services.

Local Improvement Districts

When a particular improvement will benefit only a portion of the population, the Town should consider the formation of an LID to fund the necessary improvements. This is especially relevant in the case where a new development is proposed and seeking to be annexed, the Town could require that an LID be in place which funds the appropriate capital improvements. This way the value of the land can support the infrastructure development without affecting the Town's ability to use general obligation debt or special levies supported by property tax revenues and the costs will be borne by the beneficiaries of the improvements.

Six-Year Capital Improvement Program

This section of the Capital Facilities Element determines whether sufficient revenue will be available under the current budgeting assumptions to fund needed capital improvements. It provides an analysis of revenue sources available for capital improvements and balances these revenues against anticipated expenditures for capital improvements. Using this process, the Town can estimate annual revenue surpluses and shortfalls. Proposed funding sources for currently unfunded capital projects have also been provided.

Improvement schedules are included for the following facilities:

- Water:
- Sanitary sewer
- Transportation
- Parks and recreation

The Capital Improvements Plans (CIP) for Town-Owned facilities described earlier in this chapter. The CIP related to each of the other elements are more fully described in those elements including:

- Chapter 5 – Parks, Recreation and Open Space Element,
- Chapter 6 – Utilities Element, and
- Chapter 7 – Transportation Element.

Chapter 9 Economic Development Element

Purpose

This Economic Development Element provides the policy basis for supporting economic development that would improve the tax base and create local jobs that are compatible with the character of the town.

South Prairie Community Profile

South Prairie's History

The prairie that would become known as South Prairie, Washington was first inhabited by Native Americans. A tribal village, Do'tiuq, was located on the shores of the South Prairie Creek. The first non-native settlers arrived in 1855 and established farms and cattle ranches. The farming community remained small until the discovery of coal in 1874. This discovery led to the extension of the railroad through South Prairie to Wilkeson and Carbonado. The railroad expanded the economic vitality of the community by providing transportation for people, goods and services to the urban centers of Tacoma and to the thriving communities of Wilkeson and Carbonado. Much of the coal was used for the railroad and to drive pig iron mills in Tacoma.



The area prospered, reaching a population of 500 in 1889. The Town of South Prairie stabilized at a population of approximately 325 around 1900. The Town contained two churches, a waterworks system, a hotel and several stores. The Town of South Prairie was incorporated as a 4th Class Town in Washington in 1909.

In the 1920s the demand for coal began to decline, along with the population of Wilkeson and the other coal producing areas surrounding

that community. The economic decline was felt in South Prairie. The extension of State Highway 162 and the better transportation available after the turn of the century brought better access to the residents and further decline of South Prairie.

South Prairie Today

Today, only a few of the early commercial and other non-residential structures remain. Those still standing include the South Prairie Hotel (founded 1900, the earliest remaining building was constructed 1928). South Prairie was a “company town” and many of the homes were constructed for miners and their families during the period 1890-1930. Today, South Prairie is a small residential community. The majority of the people in the workforce commute to jobs in Tacoma, the Port of Tacoma area, Puyallup or up the Auburn-Kent Valley. Population growth in South Prairie has been slow and decreasing due to shortage of wastewater treatment capacity at the wastewater treatment plant.

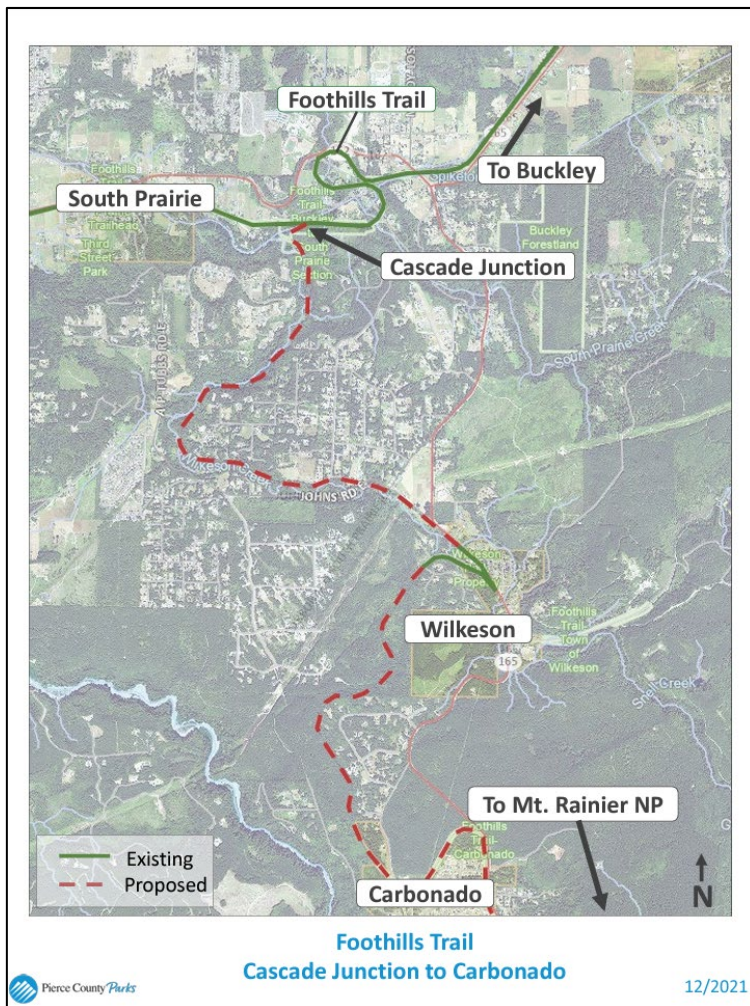
The scale and character of the homes and the streets on which they are located retain much of the flavor of the earlier mining era. South Prairie is now a stable bedroom community for the greater Tacoma-Pierce County area and retains its historic small-town character.

South Prairie’s Setting

The Town is situated in a beautiful part of Pierce County, bordered by forested hills to the south and north, with greenbelts and valleys below. South Prairie Creek, a stream full of fish, flows through downtown South Prairie. State Highway 162 runs through the Town connecting Buckley from the east and Orting from the west. The Foothills Trail, a popular pedestrian and bike trail winds through town. Farming and other resource industries are the predominant industries in the area.



South Prairie Creek

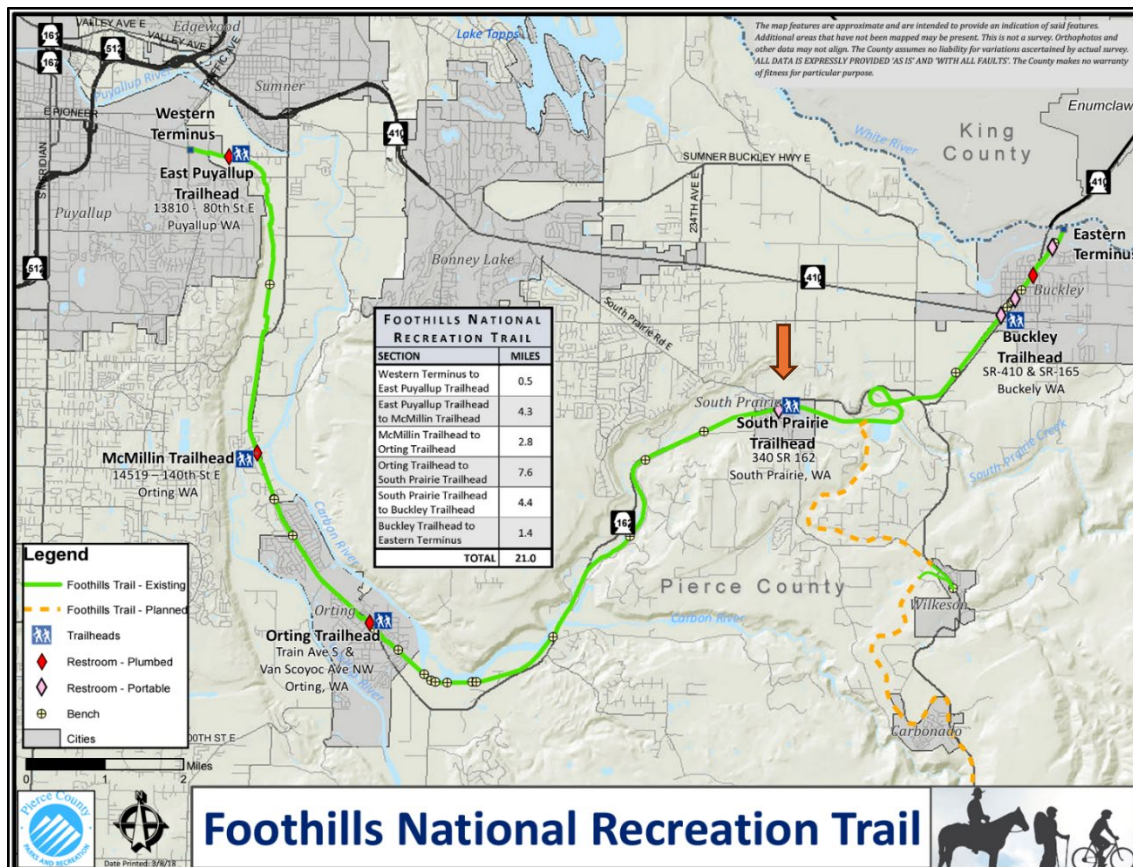


The Foothills Trail

The Foothills National Recreation Trail is a rail to trail that extends from the East Puyallup Trailhead at 13810 80th Street in Puyallup to east of the Town of South Prairie (Cascade Junction) where it splits into northern and southern sections. The northern section continues to Buckley. Construction of the eastern terminus in Enumclaw is planned with a bridge over the White River construction in 2024. The section between Puyallup and the White River is 21 miles.

The southern branch extends from Cascade Junction to the east of South Prairie through Wilkeson to Carbonado and eventually towards the Carbon River entrance of Mount Rainier National Park. Wilkeson has paved the section within their Town limits. The section between South Prairie and Wilkeson is unpaved as is the section after Wilkeson through Carbonado to the Fairfax Bridge over the Carbon River and south to the National Park.

The unpaved trail between Wilkeson and Carbonado is three miles. The unpaved trail past Wilkeson is 2.25 miles to the Fairfax Bridge.



Current Economic Profile

According to the 2020 US Census, there are currently 80 jobs in town. There is one Restaurant and lounge, a gas station, a convenience store and two coffee stands. Almost all other non-residential facilities are publicly owned including the Town Hall, Post Office, Fire Department, sewer facilities, and the Veteran’s Park. The town is almost entirely single-family residential.

Recently the town residents have begun to embrace the idea of more economic activity. They are exploring ideas to create retail opportunities to serve the residents and the tourists who drive through South Prairie to Mt. Rainier National Park or ride along the Foothills Trail. The Town is also considering the creation of street markets and community fairs along the Foothills Trail during the summer months.

South Prairie’s Assets and Opportunities

South Prairie has a number of assets including:

1. Its multiple trailheads on the regionally important Foothills Trail which could promote tourist activities and local commerce.
2. The Cascade Junction portion of the trail near South Prairie will one day lead to the Towns of Wilkeson and Carbonado and eventually on the Mount Rainier. This will make South Prairie an important jumping off point for cyclists heading northeast to Buckley and

Enumclaw or southeast to Mount Rainier National Park. Once the trail is complete, South Prairie will be an important rest stop and destination location for trail users.

3. The business district is compact, has historic buildings, and has abundant space available for new retail stores. It is a well-defined area on State Route 162, the major transportation route through the Town.
4. The main streets are adequate for traffic.
5. South Prairie has a small-town quality of life and is in a desirable, picturesque location.

South Prairie has many opportunities.

1. **Tourism.** South Prairie could sponsor summer events located in Veteran's Park and the Fire Station and oriented towards the Foothill Trail such as crafts fairs, Saturday markets and community get togethers. South Prairie could also support the completion of the Foothills Trail towards Wilkeson, Carbonado and eventually Mount Rainier National Park and recreational development in the Carbon River Canyon. These new attractions could bring in tourists. With new tourists, the demand for lodging, dining and shopping increases.
2. **New Businesses.** South Prairie could seek grants to restore its business district and provide more attractive space for new businesses that serve the existing residents. South Prairie could incentivize businesses that cater to local needs such as a convenience store, a small grocery store, a butcher shop, a bakery, a deli, a drive-thru coffee shop, dry goods and sporting goods stores and restaurants. Artist venues would also serve to promote tourism while supporting local artists.
3. **Code Enforcement.** Many citizens stated they felt that code enforcement is lacking, and that the town would be improved if eyesores and dangerous buildings were brought to code.



Foothills Trail at South Prairie's Veteran's Park (2009)

Planning Regulations

GMA Economic Development Goal

The GMA encourages local comprehensive plans to contain economic development elements (RCW 36.70A.070(7) and RCW 36.70A.070(10)). Specifically, local comprehensive plans should contain:

“An economic development element establishing local goals, policies, objectives, and provisions for economic growth and vitality and a high quality of life.”

Further, the GMA states (RCW 36.70A.020(5)):

“Encourage economic development throughout the state that is consistent with adopted comprehensive plans, promote economic opportunity for all citizens of this state, especially for unemployed and for disadvantaged persons, promote the retention and expansion of existing businesses and recruitment of new businesses, recognize regional differences impacting economic development opportunities, and encourage growth in areas experiencing insufficient economic growth, all within the capacities of the state's natural resources, public services, and public facilities.”

Puget Sound Regional Council Vision 2050 Multicounty Planning Policies

The Puget Sound Regional Council has adopted the Multicounty Planning Policies in VISION 2050 for a regional context. VISION 2050 recognizes that a robust economy is integral to our environmental, social, and financial well-being. It acknowledges that a healthy and diverse economy is vital for paying for public services, supporting arts and cultural institutions, and building our communities. There are 23 Multicounty Planning Policies for economic development in VISION 2050. An emphasis is placed on enriching the region’s businesses and employment market through job retention, growth, and diversification. Importance is also placed on small and locally owned businesses, because they create jobs, can offer family-wage jobs, and make vital contributions to the sustainability of the region’s economy and prosperity. VISION 2050 recognizes the region’s economic well-being is also dependent upon the safe and reliable movement of people, goods and services, and information and includes provisions for prioritizing economic development and transportation funding to centers.

VISION 2050 Economic Development policies most applicable to South Prairie are:

- MPP-EC-1: Support economic development activities that help to recruit, retain, expand, or diversify the region’s businesses, target towards businesses that provide living-wage jobs.
- MPP-EC-2: Foster a positive business climate by encouraging regionwide and statewide collaboration among business, government, utilities, education, labor, military, workforce development, and other nonprofit organizations.
- MPP-EC-7: Foster a supportive environment for business startups, small businesses, locally owned and women- and minority-owned businesses to help them continue to prosper.
- MPP-EC-9: Promote economic activity and employment growth that creates widely shared prosperity and sustains a diversity of living wage jobs for the region’s residents.

MPP-EC-10: Ensure that the region has a high-quality education system that is accessible to all of the region’s residents.

MPP-EC-11: Ensure that the region has high-quality and accessible training programs that give people opportunities to learn, maintain, and upgrade skills necessary to meet the current and forecast needs of the regional and global economy.

MPP-EC-13: Promote equity and access to opportunity in economic development policies and programs. Expand employment opportunities to improve the region’s shared economic future.

MPP-EC-14: Foster appropriate and targeted economic growth in areas with low and very low access to opportunity to improve access to opportunity for current and future residents of these areas.

MPP-EC-17: Preserve and enhance the region’s unique attributes and each community’s distinctive identity and design as economic assets as the region grows.

MPP-EC-18: Develop and provide a range of job opportunities throughout the region to create a much closer balance and match between jobs and housing.

MPP-EC-19: Support economic activity and job creation in cities in the rural areas at a size, scale, and type compatible with these communities.

Pierce County Planning Policies

Countywide Planning Policy

Each City and Town in Pierce County is also guided by the Pierce County Countywide Planning Policies. The Countywide Planning Policies provide a framework for economic development and employment policies within Pierce County.

Policy EC-1.

Jurisdictions will work to achieve a prospering and sustainable regional economy by supporting business and job creation, investing in all people, sustaining environmental quality, and creating great central places, diverse communities, and high quality of life. This will involve assuring consistency between economic development plans and policies and adopted comprehensive plans by:

- 1.1 Providing within the areas designated for urban development, sufficient land to accommodate projected development including both housing and commerce;
- 1.2 Striving for a balance and match of local jobs and local housing;**
- 1.3 Providing adequate public facilities and services to employment centers and an adequate supply of housing with good access to employment centers;
- 1.4 Separating, buffering, or leaving natural buffers between residential development and areas of non-residential development where necessary, due to the type, characteristics and impacts of the development activity;
- 1.5 Evaluating federal, state, and local regulatory, taxing, facility financing and expenditure practices striving for equitable investment at appropriate locations;

- 1.6 Leveraging the region's and county's position as an international gateway by supporting businesses, ports, and agencies involved in trade-related activities;
- 1.7 Encouraging the private, public, and nonprofit sectors to incorporate environmental and social responsibility into their practices;
- 1.8 Maximizing the use of existing designated Manufacturing and Industrial by focusing appropriate types and amounts of employment growth in these areas and by protecting them from incompatible adjacent uses; and
- 1.9 Preserving industrial zoning where the appropriate infrastructure exists or is planned.

Policy EC-2.

Promote diverse economic opportunities for all citizens of the County, especially the unemployed, disadvantaged persons, minorities and small businesses. Where appropriate, the following measures are examples of actions that may be used to accomplish this policy:

- 2.1 Determining a reasonable "jobs/housing" balance and then coordinating land use and development policies to help achieve the designated balance of adequate affordable housing attainable to local workers and accessible to areas of employment, in a way that avoids the placement of incompatible land uses next to each other and does not lead to the fragmentation of existing communities;
- 2.2 Identifying urban land suitable for the accommodation of a wide range of non-residential development activities;
- 2.3 Utilizing state and federal programs and financial assistance to the maximum extent appropriate;
- 2.4 Encouraging redevelopment of underutilized commercial and industrial areas;
- 2.5 **Encouraging flexibility in local zoning and land use controls, such as performance-based zoning, to permit a variety of economic uses, but doing so without sacrificing sound performance, design, and development standards;**
- 2.6 **Encouraging programs, in conjunction with other public, quasi-public and private entities, to attract appropriate businesses and industries, particularly those that diversify the economic base and provide living-wage jobs;**
- 2.7 Encouraging the location of investment in areas served by public transit and adequate transportation facilities, with emphasis on connecting underserved populations with jobs;
- 2.8 **Maintaining and enhancing natural resource-based industries, including productive timber, agriculture, fishing and mining;**
- 2.9 Targeting the appropriate creation and retention of specific firms and industries within established and emerging industry clusters that export goods and services, import capital, and have growth potential;
- 2.10 **Promoting high-quality and accessible educational, job training, and cultural opportunities, particularly for those facing unique obstacles and/or those with special needs;**

- 2.11 Steering investments to community and economic development initiatives that elevate economic opportunity for those communities most marginalized and impacted by disinvestment and economic disruptions; or
- 2.12 Fostering opportunities and a supportive environment for business startups, small businesses, and women- and minority-owned businesses.**

Policy EC-3

Plan for sufficient growth and development balancing fiscal/economic costs and benefits derived from different land uses by:

- 3.1 Ensuring an appropriate mix and balance of land uses;
- 3.2 Reducing inefficient, sprawling development patterns;
- 3.3 Encouraging developments that include active transportation options and access to transit reducing pressures on transportation facilities with limited capacities;
- 3.4 Coordinating the provision of public facilities and services and/or ensuring that new development supports the cost of public facility and service expansions made necessary by such development;
- 3.5 Promoting development in areas with existing available public facility capacity;
- 3.6 Encouraging joint public/private development as appropriate;
- 3.7 Concentrating, and planning for, a significant amount of investment in designated Centers; and
- 3.8 Planning for the efficient flow of people, goods, services, and information throughout the region with infrastructure investments, particularly in and connecting designated Centers.

Policy EC-4

Work to strengthen existing businesses and industries and to add to the diversity of economic opportunity and employment by:

- 4.1 Assisting in maintaining a viable market for existing businesses;
- 4.2 Utilizing public financing mechanisms, where appropriate, to strengthen existing businesses;**
- 4.3 Making information, technical assistance, and loans available for business expansion, innovation, and job creation;**
- 4.4 Protecting existing viable businesses from incompatible neighbors and from displacement;
- 4.5 Streamlining permit processing;
- 4.6 Striving to maintain adequate public facilities and service levels;**
- 4.7 Evaluating regulatory and other constraints to business investment and operations and minimizing the effect of such constraints;
- 4.8 Supporting the contributions of the region's and county's culturally and ethnically diverse communities in fostering local businesses and helping the region and the county continue to expand its international economy;

- 4.9 Identifying, supporting, and leveraging the retention of key regional and local assets to the economy unique to our region's position as an international gateway, such as seaports, airports, educational facilities, research institutions, health care facilities, military installations, long-haul trucking facilities, and manufacturing facilities; and
- 4.10 Supporting the regional food economy including the production, processing, wholesaling, and distribution of the region's agricultural food and food products to all Pierce County communities. Emphasize improving access for those communities with limited healthy, affordable, culturally relevant food options.

Policy EC-5

Provide both the private sector and the public sector with information necessary to support and promote economic development by:

- 5.1 Coordinating the collection and dissemination of information with various local governments; and**
- 5.2 Cooperating with private and quasi-private entities and sharing information to attract new industries.

South Prairie's Economic Development Goals and Policies

The policies identified below are intended to satisfy the economic development requirements of the Growth Management Act, the Multicounty Planning Policies, and the Countywide Planning Policies. Economic development policies relate closely with other land use, infrastructure and environment policies and cannot be considered alone. Economic development should always be considered synergistically with other goals and policies.

- 1. Support economic growth through business retention, expansion, and formation consistent with the Comprehensive Plan vision and the other elements.**
 - 1.1 Coordinate Town investment in capital facilities projects with related business, employment, and economic development opportunities.
- 2. Promote the creation of family-wage jobs that will serve the residents of South Prairie.**
 - 2.1 Work with employers and social service providers to coordinate employment and training opportunities for disadvantaged persons, including support for transportation, dependent daycare, language, and access to housing.
 - 2.2 Maintain an ongoing dialogue with the local school districts, regional community colleges and vocational training schools to promote programs and curricula that prepare residents for jobs and ensure that the work force will support businesses considering locating in South Prairie.
- 3. Promote the installation of telecommunications technology throughout the Town in order to provide universal access to citizens, businesses, and institutions that is secure, reliable, and affordable.**

- 3.1 Participate in seeking grant funding for improvement of infrastructure to support economic development.
- 3.2 Identify long-term infrastructure needs that support economic sustainability.
4. **Create public-private partnerships that will nurture entrepreneurship, innovation, and business growth.**
 - 4.1 Encourage economic sectors that:
 - Pay higher-than-average wages;
 - Bring new capital into the local economy;
 - Can be sustained in the town;
 - Maintain sound environmental practices; and
 - Diversify the economic base.
 - 4.2 Ensure that Town licensing and permitting practices and procedures are coherent, fair and expeditious. Where specialized industry requirements call for the inspection by government agencies, coordinate with those agencies to eliminate duplication of efforts.
 - 4.3 Promote the development of a downtown to enhance the sense of community, encourage pedestrian/bicycle mobility, and reduce the number and length of motorized shopping trips by working with property and business owners to market South Prairie, provide parking solutions, create anchor projects with public gathering places, and support the development of mixed-use retail, office and residential projects.
5. **Encourage diverse job options and entrepreneurial opportunities for people interested in full-time and part-time employment or desiring to own their own business.**
 - 5.1 Home-based businesses that are compatible with the character of adjoining properties and neighborhoods will be accommodated.
 - 5.2 Cooperate with education providers and employer interests to ensure that availability of facilities and programs necessary to meet the needs of K-12, college, vocational and continuing education levels.
6. **Promote business practices that protect the Town’s natural beauty and environmental health.**
 - 6.1 Encourage the use of “green” materials and techniques in all types of construction.
 - 6.2 Encourage public sector solid waste reduction and recycling.
 - 6.3 Encourage existing and new commercial enterprises to become part of a linked cooperative whereby the by-products and waste of one enterprise become the raw materials of another.

7. **Provide a variety of affordable housing choices so that people who work in South Prairie can live here.**
 - 7.1 Continue to monitor the progress in implementing the Housing Element and evaluate new ways of providing affordable housing.
8. **Support the business district.**
 - 8.1 Create design guidelines to restore and preserve the business district.
 - 8.2 Encourage new businesses that cater to local residents' needs including grocery, restaurant, coffee stands and services such as architects, engineers and lawyers.
 - 8.3. Work with the Pierce County Economic Development Board and the local Chambers of Commerce to promote new and existing businesses.
 - 8.4 Develop a plan for the business district which provides shopping for residents and tourists and provides parking areas and walking areas. This area should promote the desirable qualities of South Prairie.
9. **Actively promote tourism.**
 - 9.1 Work to create or enhance tourist opportunities leveraging the natural beauty, open space and historic charm of South Prairie.
 - 9.2 Encourage businesses that cater to tourism – lodging, eateries, sporting goods stores and others.