



2040 SHERWOOD COMPREHENSIVE PLAN

HEALTHY AND VALUED ECOSYSTEMS DRAFT BACKGROUND REPORT



FEBRUARY 16, 2021

I. Introduction

Context

In past years, Sherwood has been one of the fastest growing cities in Oregon. While a bedroom community in the Portland/Vancouver Metropolitan Region, Sherwood's population grew from about 3,000 residents in 1990 to nearly 20,000 residents in 2019. Despite this record growth, Sherwood maintains an exceptional quality of life, driven by access to renowned schools, quality medical services, high level of public safety, a unique park and recreation system, a revived central business district, and excellent cultural facilities and community events.

Community Vision and Goals

In 2018, the City conducted a visioning process for the Comprehensive Plan Update, and the community identified the desire for *"healthy and valued ecosystems."* This theme will constitute a section of the City's updated Comprehensive Plan. The vision states:

"In 2040, Sherwood is a leader as a steward of its natural environment. Vegetated corridors are protected and weave through the city providing habitat, safe passage for wildlife, clean water and air, and a place for people to connect with nature. The city actively preserves mature trees and natural areas."

Four goals accompany the vision statement for *"healthy and valued ecosystems."* They are as follows:

1. Pursue the expansion and enhancement of the city's trail system and greenways that connect people to nature and their destinations.
2. Plan, develop and enhance recreation opportunities and recreation facilities for Sherwood residents of all ages and abilities.
3. Promote natural resources as a shared and critical community asset by being good stewards of Sherwood's natural resources, ecosystems, and urban forest and protecting and enhancing their function, quality and diversity.
4. Develop a funding strategy and pursue funding sources for land acquisition, parks and recreation facility development, operations and maintenance.

Purpose

The City of Sherwood is preparing a series of background reports intended to inform community conversations about Sherwood's future. The topic of *Healthy and Valued Ecosystems* encompasses the sixth block of Sherwood's Comprehensive Plan Update.

This report explores the topic of parks, recreation, natural resources and environmental quality. These topics relate to Statewide Planning Goal 8 (Recreation Needs) and Goal 6 (Air, Water and Land Resource Quality), as well as portions of Goal 5 (Natural Resources), and Goal 13 (Energy Conservation) not already covered in prior comprehensive plan blocks.

III. Regulatory Context

Goal 8 (Recreation Needs) requires local governments to plan for the recreation needs of their residents and visitors. The goal places priority on non-motorized forms of recreation, and recreation areas that serve high-density populations with limited transportation options and limited financial resources. It also places priority on recreation areas that are free or available at a low cost to the public.

Local, state, and federal agencies and the private sector must coordinate their plans for recreation facilities and activities to protect recreation resources and to help nearby communities prepare to meet the demand these recreation destinations place on public services and facilities such as roads.

Currently, the City of Sherwood is updating its Parks and Recreation Master Plan (PRMP), which is slated for adoption in early 2021. The PRMP is Sherwood's guide for providing parks, facilities, and recreation services. The City's 2006 Parks and Recreation Master Plan led to improvements such as the Arts Center, the Cannery Square spray ground, and the skate park. The updated PRMP provides a framework to guide the City in setting priorities and making decisions about the provision of parks, trails, open space, natural areas, recreation facilities, and programs as well as providing design guidelines for parks and facilities. The PRMP was developed under the framework of the Sherwood's visioning process for the Comprehensive Plan Update. It is an implementation tool for the *Healthy and Valued Ecosystem* block and supports the other five comprehensive plan blocks where they intersect with parks and recreation services. The PRMP identifies eight overarching strategies to provide direction for Sherwood's parks and recreation system. Each of these strategies has accompanying actions, setting policy-level guidance for the recommended improvements. These will be incorporated directly into the Comprehensive Plan Update (Appendix A).

Goal 6 (Air, Water and Land Resource Quality) instructs local governments to consider protection of air, water and land resources from pollution and pollutants when developing comprehensive plans. The pollutants addressed in Goal 6 include solid waste, water waste, noise and thermal pollution, air pollution, and industry-related contaminants. The goal asks cities and counties to designate areas suitable for use in controlling pollution. It calls on them to use a variety of market, zoning and management tools in creating these outcomes.

At a federal level, the elements within Goal 6 correspond broadly to the Clean Air Act and Clean Water Act. At a state level, Goal 6 covers many areas regulated by the Oregon Department of Environmental Quality (DEQ) through its permitting actions. DEQ ensures its permitting decisions comply with the plan and zoning regulations of the affected local government and coordinates with DLCD and other agencies to be sure that city and county plans comply with state and federal laws.

Goal 5 (Natural Resources) is broad statewide planning goal that covers more than a dozen resources. The resources range from wildlife habitat, to historic places, and gravel mines. To protect and plan for them, local governments are asked to create a number of inventories. The inventories in a local plan may address only a portion of the resources included in Goal 5. In Sherwood, this includes riparian corridors, wetlands, wildlife habitat, cultural areas and historic areas.

When a local governments first developed its Goal 5 plan, they looked at the Goal 5 resources that occurred locally and were important to address. Cities and counties reviewed land uses allowed on or near each resource site that might have a negative impact on the resource. They then decided on a level of protection appropriate for each resource site and adopted codes to put their policies into effect. State rules for implementing Goal 5 have been adopted and amended over the years. As cities and counties update their plans and codes they have the opportunity to adopt policies and codes that are consistent with the current state rules for Goal 5.

The "Goal 5 Process" starts with an inventory of Goal 5 resources. Resource sites are assessed and significant sites are protected. Rules for some Goal 5 resource categories rely on inventories and assessments that have been conducted by state or federal entities. There are six Goal 5 resource categories that rely on state or federal inventories: wild and scenic rivers, state scenic water ways, ground water resources, Oregon recreation trails, Sage Grouse habitat, and wilderness areas. Three categories require local inventories. Initiating an inventory and completing the Goal 5 process for and the remaining resource categories is optional.

There are separate state rules for each Goal 5 resource category. Many of the rules have not been revised since 1996 and rely on periodic review as a trigger for compliance. Since many jurisdictions are no longer required to enter into periodic review, many local plans and codes are not consistent with the current Goal 5 standards.

The portion of Goal 5 that relates to cultural and historic resources is covered in the *Strong Community, Culture and Heritage* block. Other natural resources found in Sherwood, including riparian corridors, wetlands and wildlife habitat, are covered in this block, *Healthy and Valued Ecosystems*.

Goal 13 (Energy Conservation) Many land use decisions have a direct effect on the energy we consume. For example, high-density uses along major streets improve the efficiency of public transportation systems, make it easier to walk or bike to a variety of locations, and thereby reduce gasoline consumption. Goal 13 requires local governments to consider the effects of its comprehensive planning decision on energy consumption.

Goal 13 encourages communities to look within existing urban neighborhoods for areas of potential redevelopment before looking to expand, to "recycle and re-use vacant land." The goal also directs cities and counties to have systems and incentives in place for recycling programs.

At the time this goal was enacted, Oregonians were particularly concerned by development of new homes that blocked neighbors' sunlight, which can have impacts on passive heating and availability of natural light. These concerns are expressed in the goal language.

Today, concerns about renewable energy sources are seen through a different lens. Innovation in the areas of solar and wind energy have made them increasingly popular in Oregon. Concern about climate change has resulted in an increase in public and private interest in and development of alternative energy sources. Goal 13 was not written to govern or direct the production of energy, but its conservation.

Many Goal 13 guidelines were addressed in the policies and objectives of prior comprehensive plan blocks, such as *Coordinated and Connected Infrastructure* and *Strategic and Collaborative Governance*. The discussion of energy in this comprehensive plan block is focused on energy impacts to natural resources and ecosystems (such as climate change mitigation and adaptation), to the extent there is interest in expanding the topic area beyond what the draft goals and policies proposed in Block 5, *Coordinated and Connected Infrastructure*.

II. Current Assets, Practices and Conditions

Parks and Recreation

Sherwood's park system includes developed parks (67 acres in total) and the City's network of trails. The City also has an expansive network of greenways, although many of these corridors have not yet been developed with public access.

Recreation Facilities

Sherwood residents have access to a variety of facilities that provide spaces for recreation, community gatherings and events, and arts and culture. Within its parks and recreation system, Sherwood has outdoor recreation facilities, including playgrounds, picnic areas, water features, a dog park, amphitheater, skate park, outdoor sports courts, and sports fields for baseball, softball, and soccer. However, most sports fields are located at schools, and are managed and operated separately by the School District due to a change in the Intergovernmental Agreement in 2020.

As discussed in Block 2, *Community, Culture and Heritage*, Sherwood has four major indoor recreation facilities, in addition to the Sherwood Public Library:

- Marjorie Stewart Senior Community Center: operated by the City since 2018 and offering lunch and programming for seniors as well as rental space.
- Sherwood Center for the Arts: a purpose-built facility which offers a variety of programs, events, and classes and serves as Sherwood's main event venue.
- Sherwood Field House: a converted warehouse building with an indoor turf arena that hosts a wide array of sports activities and is also available for rentals.
- Sherwood Regional Family YMCA: a city-owned facility operated by the YMCA, which provides indoor sports courts, exercise equipment, and an indoor pool. The YMCA site is also home to the newly constructed Sherwood Skate Park, opened in October 2019 and designed by renowned skatepark designer Dreamland.

Recreation Programs

The City of Sherwood takes a partnership approach to providing recreation programs and services. The City is a direct provider of arts and culture programming as well as a partner to other arts organizations, who use the Sherwood Center for the Arts for their activities. The City is also a direct

provider of events, organizing events in parks such as the popular summer Music on the Green and Movies in the Park series. The City is responsible for scheduling sports programming at City facilities, operating the Sherwood Field House, and maintaining the sports fields in City parks. The City also facilitates fitness and social activities by providing facilities and spaces, such as sports courts, running trails, and reservable facilities. The City has a formal agreement with the YMCA to operate the Sherwood Regional Family YMCA, which offers aquatics and fitness programming to Sherwood residents.

Trails

Sherwood has an existing inventory of off-street trails and planned off-street trails, many of which are in parks or in City-owned natural areas. There has also been significant planning for bike and pedestrian routes in Sherwood within the Transportation System Plan (TSP). In addition to sidewalks and bike lanes, Sherwood's TSP proposes a comprehensive network of off-street trails, many of which are categorized as aspirational projects for which funding has not yet been identified.

Regionally, there are planned trails connecting Sherwood to the Tualatin River National Wildlife Refuge and to the cities of Tualatin and Wilsonville. These include the Ice Age Tonquin Trail, a 22-mile trail connecting Sherwood, Tualatin and Wilsonville. As part of the regional trail network, the Ice Age Tonquin Trail will also provide connections with the Westside and Fanno Creek trails. There may also be a link to Champoeg State Park, if the proposed French Prairie Bridge is built over the Willamette River in Wilsonville. As of 2021, five miles are complete. The remaining 17 miles will be built as funding is identified – beginning with the Cedar Creek Greenway section, which traces its namesake creek through Sherwood. Metro is securing remaining sections of the trail with funds from a voter-approved natural areas bond measure. Working with willing sellers, Metro pays market value to buy land or the right to build a trail on it.

Natural Resources

The Sherwood UGB has three major natural resource categories:

- Rock and Cedar Creeks and their associated tributaries, flood plains, wetlands and ponds.
- The Tonquin Scabland Geologic Area (TSGA)
- Miscellaneous open spaces and scenic views.

Natural resources which are governed by Goal 5 but are not present within the City include developed energy sources, wilderness areas, Oregon Recreation Trails, Wild and Scenic Waterways, and Mineral and Aggregate sites.

Sherwood last updated its Open Spaces and Natural Resources Inventory and Natural Resources and Recreation Plan Map in 1990. Metro completed an inventory of regionally significant fish and wildlife habitats in 2002. In 2005, Sherwood took part in the Tualatin Basin Program, a three year project undertaken by all the jurisdictions in urban Washington County to develop a basin wide approach to natural resource protection.

In addition, Sherwood is committed to preserving, enhancing and maintaining its urban forest. Sherwood has been a Tree City USA community for the past 15 years. To be a Tree City, the community must meet four standards set by the National Arbor Day Foundation and the National Association of State Foresters, which includes having a tree board or department, an ordinance for tree care, a community forestry program with an annual budget of at least \$2 per capita, and an Arbor Day observance and proclamation.

Based on Metro's Regionally Significant Fish and Wildlife Habitat Inventory Map, Sherwood has a mix of riparian areas, wetland areas and fish and wildlife habitat (Appendix B). A defined 100-year floodplain exists for a portion of Chicken, Cedar and Rock Creek, and National Wetland Inventory (NWI)-mapped wetlands are most prominent along the riparian corridor of these creeks. Wetlands, streams, and natural waterbodies would also have a buffer regulated by Clean Water Services (CWS). These buffers generally extend up to 50 feet from the boundary of the sensitive area, but may extend farther in areas where slopes greater than 25% occur adjacent to the sensitive area.

Endangered and threatened species may occur within Sherwood if suitable habitat is present. Data from the Oregon Biodiversity Information Center (ORBIC) indicates that one federally listed fish and one state-listed plant have been documented within a few miles of City limits. Steelhead (*Oncorhynchus mykiss*), which is federally listed as threatened, is known to occur in Chicken Creek and Cedar Creek. White rock larkspur (*Delphinium leucophaeum*), which is state-listed as endangered, is known to be sighted near Sherwood. The U.S. Fish and Wildlife Service (USFWS) lists nine additional federally listed endangered, threatened, and candidate species that are known or suspected to occur in Washington County. None of these species are known to occur within Sherwood, but they could occur if suitable habitat is present.

There are no developed energy sources within the Sherwood UGB. All fossil and wood fuels, and electricity generated by hydro and nuclear power, come from sources outside the city. There are however, unconventional energy sources available within Sherwood, such as solar and wind energy. Solar energy, in particular, holds promise as an alternative form of energy which could meet a significant amount of the energy demand for domestic uses.

Environmental Quality

The air, land and water quality of Sherwood is generally good; there are no airports, wastewater treatment facilities, sludge or solid waste disposal sites or motor sports facilities in the Sherwood UGB. However, there is evidence of land contamination in parts of Sherwood that require remediation prior to development, including multiple sites in SE Sherwood (such as the former Ken Foster Farms site) and on Oregon Street.

Air Quality

Sherwood occupies a portion of the Portland-Vancouver Interstate Air Quality Maintenance Area (AQMA). Planning of air quality control programs within the AQMA is the designated responsibility of the State Department of Environmental Quality (DEQ) and Metro. Air quality standards designed to

protect the public from the adverse effects of air pollution are established by the state and federal governments. Two major air pollution categories are considered in the regulations: point source (such as smokestacks) and area source pollution (such as auto emissions). Both point and area pollution sources emit a variety of contaminants, and the DEQ monitors and sets standards for these various sources of air pollution. Nevertheless, the Portland-Vancouver AQMA does not always meet all federal and state air quality standards; air quality standards for carbon monoxide, ozone and total suspended particulates have been exceeded on several days, during each year since 1982.

Because the AQMA encompasses an entire metropolitan area, peaks and valleys of air pollution concentrations and sources exist within its boundaries. The area sources of pollution spread fairly evenly throughout the AQMA, with concentrations occurring along heavily traveled streets and highways. Most point source emissions originate in the traditional industrial areas bordering the Willamette and Columbia Rivers. Sherwood does not directly contribute to the point source pollution, but does add to the overall air pollution problem through its area sources, such as building exhausts and vehicle emissions. Future protection of the City's air quality is largely the responsibility of the regional AQMA agencies, Department of Environmental Quality and METRO. For example, the siting of any major air contaminant discharges in Sherwood would have to be done in compliance with state and federal air quality regulations. The City is only involved in the siting of point source dischargers through its process of issuing statements of compatibility for the proposed use. Such statements of compatibility must be issued by Sherwood before DEQ will issue the required permits.

Water Quality

The quality of Sherwood's surface water, governed by State Department of Environmental Quality (DEQ) regulations, is generally "good," although surface waters are not used for consumption, and rarely for active recreation. The quality of groundwater underlying the Sherwood area is considered "good." While the quality of this groundwater presently meets both state and federal drinking water standards, there is potential pollution from either point sources (directly, from sewage outfall pipes, for example), or non-point sources (indirectly, from septic tanks or cesspools). Sherwood has no point-source water polluters. Sherwood is in a large sensitive aquifer area, particularly in the southeast sector of the UGB. However, this area is all planned for low or very low density residential use and will be connected to sewer.

Noise

In Sherwood, noise sources fall roughly into two categories; noises that occur intermittently, such as construction projects, and those which occur on a continuous basis, such as traffic. The first group includes unusual, occasional noises, which often prompt police complaints when they reach a disruptive level. The second group includes noises which are continuous contributors to the ambient noise levels that are present throughout the city. These noises are nearly always present, and specifically include motor vehicle traffic on Hwy. 99W, industrial and commercial noises. Sherwood has no commercial or industrial businesses in violation of state noise standards.

V. Current Trends and Drivers of Change

Parks and Recreation

In addition to Sherwood's current population, annexation and development of the Brookman Area and Sherwood West is projected to add up to 5,406 households in Sherwood, driving the need for expanded parks and recreation services and facilities. While the mix and provision of services facilities is contingent on available space, there are opportunities to rethink the mix of what's provided, as well as consider changing trends, demographics, and community priorities that affect needs. Throughout the PRMP process, community members and stakeholders provided their input and ideas for the future of parks and recreation in Sherwood. Trends emerged, resulting in themes that describe priorities and needs from the perspective of Sherwood's residents. These include:

- **Access to Nature, Wildlife, and Scenery.** In keeping with national trends regarding connecting with nature, Sherwood residents would like more opportunities to connect with nature in parks and throughout the community.
- **Connected Trails for Walking, Biking, and Running.** Sherwood residents are active and make frequent use of existing trails. They are interested in completing the trail and pathway network and in increasing access to community destinations such as parks and schools.
- **Enhancing the Existing System.** Sherwood residents prioritize investing in existing parks and facilities.
- **More Amenities.** Community members would like more amenities in parks such as restrooms, reservable shelters, and dog parks. They are also interested in interactive water features and splash pads as well as additional unique and engaging play environments and settings.
- **Activating Places with Community Events.** People in Sherwood appreciate the availability of events and activities and would like to continue and expand on these.
- **Expanded Programming.** Community members are interested in a greater variety of recreation programs, including more opportunities for specific demographic groups.
- **Spaces and Programs for All.** Community members prioritize inclusiveness, so that people of all ages, abilities, and recreation interest can find a place in parks, recreation facilities, and programs. They are also interested in multi-generational programming.
- **Aquatics.** Community members are interested in swimming and aquatic recreation and would like more aquatics opportunities in Sherwood. Many head to nearby community pools in other cities, citing the lack of capacity at the Sherwood Family YMCA.
- **Park Design.** There is an interest in elevating park and facility design, and in integrating local art, character and identity.

Environmental Quality and Natural Resources

Sherwood's growth will continue increasing demands on its environmental resources, creating conflicts between the competing values of conservation and development. Environmental resource planning in Sherwood must include recognizing the limits to the natural resource base, the carrying capacity of the environment and the availability of non-renewable energy resources. These impacts are described below:

- **Increasing conservation of Significant Natural Resources.** The loss of habitat to various types of development has resulted in a fractured landscape and increased need for intervention in order to conserve basic resources. Soil, water, fish, and wildlife can often be conserved most effectively in corridors where resources such as stream, forest, and habitat are interconnected.
- **Reducing impacts from development activity.** The rapid increase in population and rate of development can place significant stress on native wildlife populations. Land that was once habitat for wildlife species is being converted into residential and commercial subdivisions, roads, and other uses. The development of land and related activities impact both the quantity and quality of wildlife habitat. Roads in particular can be destructive to habitat as they disrupt passage, provide entrances for non-native species and predators, and increase unnatural disturbances from sources such as pollution and fire. Impervious surfaces impact aquatic habitat by increasing runoff, reducing groundwater recharge, and increasing pollution. Loss of vegetation near stream banks not only reduces habitat for wildlife and fish, but increases stream temperature beyond the point of optimal habitat conditions.
- **Restoration and enhancement of Significant Natural Resource Areas.** Over time, the impacts of human activity have taken their toll on the landscape and degraded some of the natural features in the community. Wetlands have been lost due to draining and conversion to agricultural uses or urban development. Constructed irrigation and drainage systems commonly associated with agricultural uses can significantly alter water tables and, ultimately, affect the baseflow to streams, which in turn affects riparian areas. Removal of native vegetation and forests to make way for urban development or agriculture tends to decrease evapotranspiration (the movement of water to the air from sources such as soil and vegetation), increase storm runoff and soil erosion, and decrease infiltration to ground water and base flow of streams.

V. Key Policy Considerations

The following are examples of key policy considerations that the City may want to discuss with stakeholders and evaluate for the comprehensive plan. These policy considerations are primarily focused on natural resources and environment, as the goals and policies for parks and recreation have already been identified through the PRMP (Appendix A).

1. Address light pollution. “Dark Sky” policies limit light pollution have been linked to reduced energy consumption as well as provide benefits to wildlife and human health.
2. Place a greater emphasis on on-site and in-kind compensatory mitigation for development impacts.
3. Implement a standard process for updating SNRO mapping based on delineations performed as part of new development or small-area planning projects.
4. Plan for cohesive and connected network of open space or protected lands to maximize educational and recreational returns on protected lands, open space, and natural areas.
5. Plan for connected wildlife corridors within the City and connecting to corridors beyond the City limits.
6. Support site development and design practices that “design with nature,” by incorporating and promoting natural ecosystem elements, including native trees and vegetation, minimizing effects on natural resources, and avoiding the degradation or loss of wetland, watershed, and ecosystem services
7. Supporting Sherwood’s Urban Forest by preserving tree canopy, inventorying significant tree stands and working with partners to plant more native trees.
8. Create goals and policies to encourage habitat-friendly and environmentally sound development practices that:
 - a. Increase flexibility, create incentives, and encourage voluntary measures, volunteer support, incentives, training, and recognition for residents who voluntarily restore natural habitats; allow alternative or innovative approaches if they provide an equivalent or better level of environmental benefit.
 - b. Create incentives for habitat-friendly development practices in new development.
 - c. Streamline the application process, eliminating jargon, offering educational materials, and making available workshops for professional realtors and builders around habitat-friendly development practices.
 - d. Develop policy or practice to apply (or delineate) Habitat Benefit Areas (HBAs) rather than shifting these to SNRO, where they are available. (Or incentivize the delineation of HBAs even when it is not required).

- e. Encourage the development or application of best practices in environmental preservation, stabilization, restoration, and long-term management.
- f. Prevent degradation of Significant Natural Resources in new urban areas.
- g. Encourage or require applicant coordination with other permitting agencies at very early stages in the development process. Currently, applicants have to turn in a pre-screen application from CWS as part of their land use application. The pre-screen checks for mapped riparian/sensitive areas including wetlands, but could be expanded to tree canopy or other natural resources.

Strategies

1. Strategies to increase **conservation of significant natural resources** include preserving wildlife corridors, expanding/ establishing nature parks, connecting high quality habitat areas, preserving upland habitat areas, and prioritizing the protection of specific high value resources (e.g. a remnant oak savannah). Policies to support significant natural resource protection would include acquiring/ expanding nature parks, encouraging wildlife corridor linkages, and incentivizing the protection of prioritized natural resources.
2. Strategies to **reduce impacts from development activity** would include regulating development adjacent to natural resource areas, utilizing wildlife/fish friendly culverts and bridges with new or upgraded road crossings, and limiting the number of road crossings in significant natural resource areas. Policies to support this would include maintaining development standards restricting development activity in sensitive areas, allowing flexibility in development standards to encourage larger protection areas, requiring in-kind mitigation for unavoidable impacts, encouraging the protection of tree groves and native vegetation, and recognizing the value of wildlife passages.
3. Strategies to **restore and enhance significant natural resource** areas include restoring drained or modified wetlands back to their natural state, promoting tree and native vegetation planting campaigns, realigning streams back to their natural state, utilizing native habitats as reference sites for planting plans daylighting piped streams, and blending stormwater management with natural systems. Policies to support this would include recognizing the value of the natural functions of wetlands, streams, and floodplains, encouraging the use of natural systems for cleaning storm and waste water, and incentivizing the conversion of impervious surfaces to natural areas where feasible. More comprehensive approaches to mitigation banking to identify plans and funds for implementation may also be beneficial.

APPENDIX A. PRMP Principles and Strategies (2021)

APPENDIX B. Metro Regionally Significant Fish and Wildlife
Habitat Inventory Map (2005)