

PILOT BUTTE STATE SCENIC VIEWPOINT



MASTER PLAN



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1 INTRODUCTION

Chapter 1: Introduction 1





WHY DO THE PLAN?

Pilot Butte State Scenic Viewpoint (Pilot Butte) became part of the State of Oregon's public lands in 1927 when it was donated to the State Highway Commission in memory of Terrance Hardington Foley. Its value to the public began primarily as a location to view the region and the Cascade Mountain Range to the west, and its views continue to draw statewide visitors. It has also become a vital urban park for the City of Bend. The 114 acre park has become one of OPRD's most popular parks for a variety of recreational uses.

In the almost 100 years since it became a park, Pilot Butte has experienced considerable change around its boundaries. The change has accelerated in the last quarter century, since the last master plan was completed in 1995. What began as a topographic landmark and scenic viewpoint has become a vital public greenspace and area of nature in the middle of the city. Intensification of use has put pressure on the facilities and natural resources and made it necessary to re-examine how we balance the natural, scenic, cultural, historic and recreational use of the park for both local and statewide visitors. This is important for the current situation, as well as for the continually changing region.



OPRD MISSION AND VISION

This guiding document is rooted in the agency's mission and vision.

OPRD Mission: The mission of the Parks and Recreation Department is to provide and protect outstanding natural, scenic, cultural, historic and recreational sites for the enjoyment and education of present and future generations.

OPRD Vision: To take the long view to protect Oregon's special places and provide the greatest experience while creating stable future funding.

OPRD defined their strategic focus for 2017-2019. The strategic focus helps to steer the planning process. It creates a consistent and focused set of sideboards that help us plan for the future of our parks. The strategic focus defines four priorities: Inclusion, Service Delivery, Succession Planning and Commemorating our Heritage.

MASTER PLAN SUMMARY

The Pilot Butte State Scenic Viewpoint Draft Master Plan includes an analysis of the current and changing context in which the park finds itself. This is the most influential driver of the plan update. This requires a more urban and contextual approach to understanding park needs and development than many of OPRD's more remotely located parks.

The public outreach process was guided by an Advisory Committee made up of statewide and local stakeholders that included local agency partners; schools and the school district; local neighborhood associations; local businesses; medical and health stakeholders; access and disability organizations; active transportation organizations; and LatinX and Hispanic families through established outreach organizations.

OPRD initially reached out to a statewide audience but planners realized quickly that this is a locally loved park above all. The outreach approach then focused on local advocate and stakeholder groups, while remaining open and engaged with statewide partners. OPRD also reached out to communities in the city and region that are typically less active in public processes yet are important user groups in the park, such as the LatinX community. In alignment with OPRD's goal of providing inclusive universally accessible experiences and spaces, planners sought out involvement with the disability community. The public outreach process is further described in Chapter 3.





PILOT BUTTE STATE SCENIC VIEWPOINT MASTER DRAFT PLAN

The plan analyzes the natural, socio-cultural, scenic and historical background and recreational use of Pilot Butte. It also examines local, regional and state context and trends. The plan leans heavily on the 2016 *Visitor Survey of Day-use Visitors at Pilot Butte State Scenic Viewpoint*. Over 400 people participated by informing OPRD of activities, demographic characteristics and opinions regarding conditions and management at the park. The survey provided recommendations for maintaining or improving conditions at this park. Description of context, park resource, and recreation assessments are found in Chapters 2, 5 and 6.

The goals of the plan result from public input from the Advisory Committee, public open houses and meetings, and a public survey. The goals focus on improving and maintaining the well-loved existing scenic, natural and recreational aspects of Pilot Butte, and recognize that maintaining these elements is contingent upon existing and new uses and needs, even as they change over time. The plan recognizes Pilot Butte as a vital urban park that offers a natural recreational experience in the city. The goals are further defined in Chapter 8.

The plan area is divided into four geographic areas, further described in Chapter 9. These include the east base, west base, summit viewpoint and the slope terrain. Development concepts and interventions are organized and proposed under the categories of visitor experience; access; trails; natural resources; wayfinding and interpretation; facilities and utilities; and management.



PILOT BUTTE STATE SCENIC VIEWPOINT MASTER DRAFT PLAN

2 CONTEXT

Chapter 2: Context 7

CONTEXT

BACKGROUND

Pilot Butte was gifted to State Parks in 1927 in honor of Terrence Hardington Foley, a Bend resident and businessman. At the time the park existed on the periphery of the city, surrounded by farms and ranches. It was a popular viewpoint for tourists and locals alike, as well as a regional topographic landmark.

A state parks master plan was done for all parks in Deschutes County in 1986, which included Pilot Butte. A more specific updated Pilot Butte State Scenic Viewpoint Master Plan was created in 1995. At that time the city boundary hugged the north and east edge of the park and development had expanded to the western edge of the butte and was beginning to wrap around its base. Visitors came for the views and the protection of the historic access road as well as preservation of the natural appearance of the cinder cone are important to maintaining the park as a scenic resource.

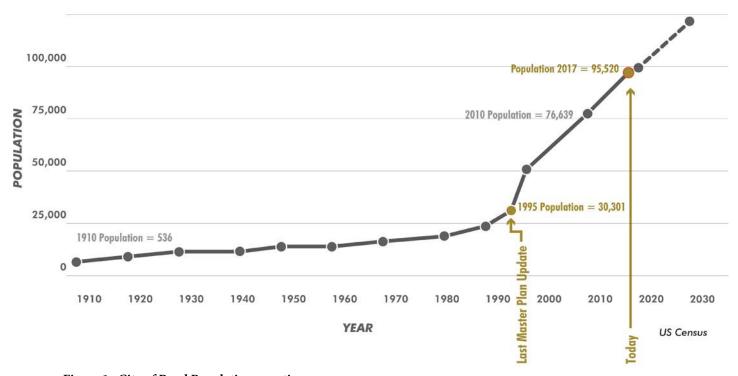


Figure 1: City of Bend Population over time

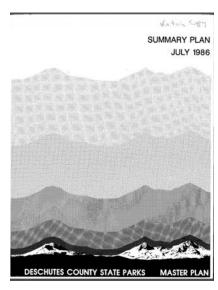
In the 25 years since the last plan was completed, the population of Bend has more than tripled from 30,301 to 95,520 in 2017. Development and change now define Bend's evolution, and these dynamics are likely to continue. This can be seen in the growth of the city, the intensity of development within its urban growth boundary (UGB), shifts in demographics that include a growing elderly population as well as a quickly growing Latino population. Recreation trends have also shifted as Bend continues to become an epicenter for outdoor recreation in Oregon.

As a result, Pilot Butte is a small, urban state park that receives intense and diverse use. Although the summit viewpoint is still a popular destination in the park and important to its legacy, considerable increase in use comes from local walkers, hikers and bikers. These visitors often use the park habitually, as part of their daily commute to and from work or school, or as part of their exercise regime. In fact, Pilot Butte is part of a network of public greenspaces within the city mostly made up of parks managed by Bend Park and Recreation Department (BPRD). Although the park is owned and managed by OPRD, BPRD helps to co-manage the Neighborhood Park at the east base. The Larkspur Trail, which runs along the east base, was constructed and is managed by BPRD. This is an important relationship for the park, both for its maintenance, as well as for other aspects of management and local partnership.

WHAT MAKES PILOT BUTTE UNIQUE?

Although the majority of state parks in Oregon are located in rural areas, Pilot Butte is among a small number of urban parks with predominantly local use.

Pilot Butte (officially named Pilot Butte State Scenic Viewpoint) was conceived as a public amenity to tourists based on its summit views when acquired in 1927. It has



1986 Deschutes County State Parks Master Plan

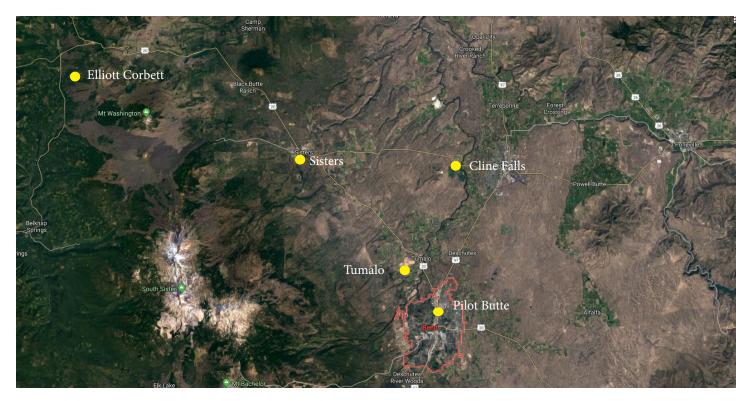


Figure 2: Tumalo Management Unit Oregon State Parks within the Tumalo MU

since evolved to become a locally important park. The park blends into the network of quality, public greenspaces within the city of Bend and is valued by local residents as a natural area park on the east side of Bend.

A 2016 survey of visitors to the park showed that the most popular activity at the park is walking and hiking (75%) indicating the importance of the park for health and fitness. More than two-thirds of visitors come from 30 miles or less, the majority of visitors come alone, and 84% of visitors visit the park for approximately one hour. These findings indicate that these visits are likely shorter and more frequent than those at many of OPRD's parks.

Pilot Butte now sits in the core of Bend's urban fabric. The west boundary abuts single family residential homes. The east edge connects to relatively high density multifamily residential homes and apartments. Two public schools

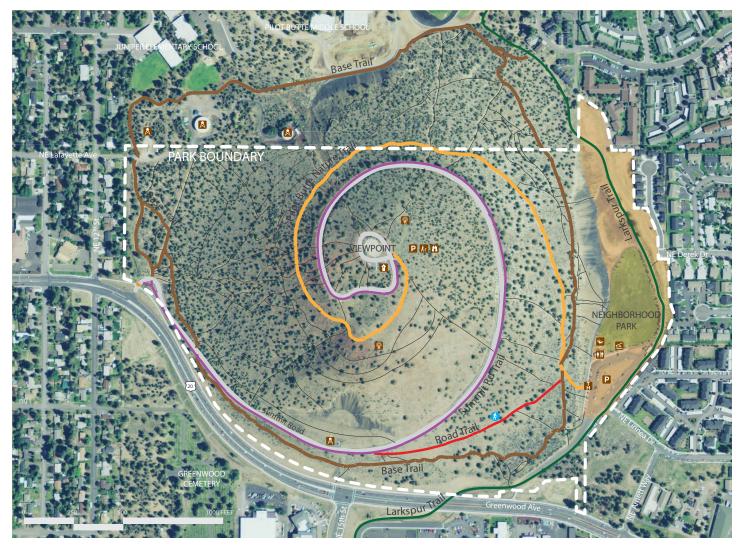


Figure 3: Existing Conditions and Amenities



border the park to the north and share the topographic north of the butte. A heavily trafficked commercial highway forms its southern edge. Dual roles as an urban park with habitual users and as a tourist destination pose unique challenges for park managers. They oversee management and maintenance of a Park Management Unit spanning over 50 miles.

LOCATION AND ACCESS

Pilot Butte is in the Tumalo Management Unit of the Central Management District of the Mountain Management Region in Oregon Parks and Recreation Department.

Pilot Butte is located in the city of Bend, Oregon and within Deschutes County. It is approximately one mile east of Highway 97, bound by Highway 20 to the south,

PARKS AND SIZE

- 1 Pilot Butte State Scenic Viewpoint 116 acres
- (2) Hollinshead Park 16.5 acres
- 3 Juniper Park 22.3 acres
- (4) Ponderosa Park 19 acres
- 5 Providence Park 4.3 acres
- 6 Orchard Park 3.7 acres
- 7 Al Moody Park 16.7 acres

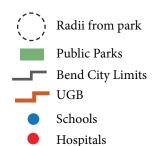




Figure 4: Local Greenspace Network

residential neighborhoods to the east and west and the Bend-La Pine School District to the north. The butte is a topographic landmark in the city with an elevation of 4,142 feet at the summit.

There are currently two vehicle access points and a variety of pedestrian access points. Vehicles are able to enter and park at the large lot at the eastern base. Vehicle access from Highway 20/Greenwood Avenue brings people up the Summit Road to the viewpoint. The Larkspur Trail passes through the east edge of the park and is a major access for pedestrians and bicyclists. There is pedestrian access from Highway 20 at the east and west edges. There are informal access points from eastern and western neighborhoods. The Base Trail connects around the entire base of the cinder cone providing pedestrian access from the north.

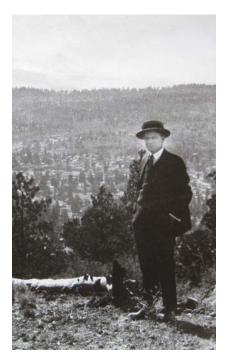
GREENSPACE NETWORK

Pilot Butte functions as part of an extensive green space network within the city and county. Bend Park and Recreation Department (BPRD) manages 81 park and natural areas and 70 miles of trail. Deschutes County, the U.S. Forest Service and the Bureau of Land Management manage larger tracts of public open space outside of the city.

Pilot Butte provides unique large acreage park space (114 acres) to residents on the central east side of the city and compliments the smaller neighborhood parks (Orchard, Al Moody, Mountain View, Providence and Stover Park), and mid-size community parks (Juniper, Hollinshead and Ponderosa Park) which exist within approximately one mile of Pilot Butte.

HISTORY AND CULTURE

Pilot Butte has been an important topographic icon and cultural landmark for centuries. Native people used it as a lookout to track herds. Emigrants scouted wagon routes



Terrance H. Foley



Foley family descendants



from its summit. Many generations of Bend residents have memories of spending time on the summit to take in the views.

At the turn of the century the butte sat outside of the town of Bend, surrounded by ranches, farms and dairies. The road was built between 1922-1924 by the U.S. Forest Service to be used as a fire lookout.

In 1927, the state received 100 acres on Pilot Butte donated in memory of Terrence Hardington Foley, a prominent resident of Bend. The summit was developed with an improved road, a monument to Mr. Foley, a mountain locator and an Osborne Fire Locator (no longer there). It became a local and tourist destination.

The butte has served a variety of functions since. The U.S. War Department used it as an airplane observation post during the second World War. Radio towers were built on the summit. A ski jump was constructed on the northwest slope for the National Junior Championships in 1965.

Throughout its history the park has been a defining and well-loved public space in the city and region. In 1886, the Bend Postmaster championed changing the name of the post office from Bend to Pilot Butte. Although it was approved, the new name did not stick. An October 8, 2016, Oregonian newspaper article¹ reported, "Pilot Butte is a viewpoint of the people" reiterating the importance of the feature for which the park was named. Although the park's use has become diversified to include more trails and urban park functions, public vehicle access to the top of the butte remains important to its historic value and is a tangible connection to the past.

1. "Pilot Butte is the community's viewpoint", Jan 9 2019. www.oregonlive.com/travel/2016/10/pilot_butte_is_the_communitys.html

Pilot Butte is located in the Ceded Lands (given up as part of a treaty) of the Warm Springs (primary tribe) and within the usual and accustomed lands of the Burns. The Confederated Tribes of the Warm Springs Reservation of Oregon, the Burns Paiute Tribe and the Klamath Tribe were invited to participate in the master plan update process. Christian Nauer, Archaeologist with the Confederated Tribes of the Warm Springs Reservation of Oregon participated.

REGIONAL AND LOCAL TRENDS

The general summary of trends in central Oregon can be defined by growth and change, both demographic and economic. Although much of this is acutely experienced in the city of Bend, other towns and cities generally in central Oregon are also undergoing versions of this change. Pilot Butte serves a statewide audience, however, its recreational significance has shifted towards habitual use for health and fitness.

DEMOGRAPHIC TRENDS

The population of Bend has grown 23% from 2010 to 2017 and Deschutes County has grown 16% in the same time period. In comparison the population of Oregon grew only 8.1%¹. This is a result primarily of migration into the city and region for a strong and continually growing job market. The Bend-Redmond area had the 2nd fastest job growth in the country in 2017 (5.9%)².

As part of the Statewide Comprehensive Outdoor Recreation Plan (SCORP), Portland State University's Population Research Center analyzed demographic and social trends in Oregon, identifying recreational priorities for different urban growth boundaries. The four prioritized

- 1. US Census Bureau
- 2. Economic Development for Central Oregon, 2018. https://edcoinfo.com/wp-content/uploads/2018/09/2018_EDCO_Economic_Profile.pdf



Early 20th century



1960



1980





Oregon Parkland Mapping shows that higher density housing developments to the east have a high number of families with children.

demographic groups within Bend's urban growth boundary identified the following needs:

- 1. Elderly population (aged 75-84):
 - Picnic areas and shelters for small groups
 - More restrooms
 - Security cameras
 - More places and benches to observe nature
- 2. Latino population:
 - Nature play areas **
 - More restrooms
 - More shaded areas
 - More places and benches to observe nature and others
 - Security cameras
- 3. Asian population:
 - Security cameras
 - More restrooms
 - Soft surface trails and paths
 - More places and benches to observe nature and others
 - Picnic areas and shelters for small groups
- 4. Households with children:
 - Nature play areas **
 - Children's playgrounds built with manufactured structures
 - Soft surface trails and paths
 - More restrooms
 - Picnic areas and shelters for small groups
- ** Nature play areas are designed in a natural setting using existing elements like tree stumps, boulders, slopes and built from natural element like wood, sand and other movable parts.

The demographic makeup of the region is diversifying, mirroring what is occurring in other parts of the state.

The Hispanic population is growing considerably, both in number and in percentage of overall population. The projected growth of the Hispanic community in Deschutes County from 2000 to 2020 is 1,885%. By comparison the projected growth of the general population in the county is 110%. Outreach sessions with Bear Creek Elementary School's PTA (a neighboring bilingual school) and discussions with BPRD's Latino Outreach Coordinator indicated that Hispanic families use spaces where they can host larger gatherings, and where amenities serve a variety of ages. For example, flexible seating or picnic tables near playing fields and playgrounds allows parents to supervise children while socializing. Creating a welcoming atmosphere for families from a variety of cultural background is an important element of inclusion in public spaces. This can happen by using a variety of languages (Spanish is an important one in Bend) on welcoming signs such as entry signs and major trailheads.

Additionally, the aging population of Bend has grown considerably. Currently 15.5% of the population is over 65. The population of adults ages 60-74 is projected to grow 29% between 2015 and 2030. Retirement and older adult residential communities are clustered on the eastern edge of Pilot Butte, and their residents are many of Pilot Butte's most dedicated supporters. Older adults at public meetings expressed strong sentiment around improving trails to be intuitive and safe for older visitors and replacing the exercise area, a popular amenity with older adults. Pilot Butte must continue to serve this population, and the master plan update recognizes the park's role in keeping older adults active and healthy.

To meet the needs of a diversifying population, Pilot Butte has the opportunity to create outdoor, recreational and community focused amenities and spaces that respond to socio-cultural needs and trends. Because of its central location in the city the public can access a natural, high desert environment easily, even those with less experience and opportunity interacting with native landscapes.







Higher density housing along the east side of the park, next to the Larkspur Trail

ECONOMIC TRENDS

Bend and Central Oregon suffered a sharp economic decline during the recession years of 2007 to 2009. However, the region has since recovered and continues to grow rapidly. In 2017 the Bend-Redmond area ranked number one in GDP growth in the country (8.1%). Diversifying job sectors have turned Deschutes County away from being a solely construction or tourism driven economy which adds resiliency to the region. Economic development has diversified bringing higher wage-earning industries coming to the region.

A negative outcome of the growth is an increase in the cost of living and decreasing availability of affordable housing. Currently, the east edge of Pilot Butte is adjacent to an area in Bend zoned as Residential Urban Medium Density and High Density. This is not common in a city where the majority of land is zoned as Residential Urban Standard Density (single family). City planners expect that infill and increased density will occur in the next 20 years along major corridors such as the Highway 20/Greenwood Avenue and Neff corridors. As urban densification occurs over time, access to quality greenspace will become even more important for residents with less personal greenspace. This is especially important for families with children and people with fewer resources for recreational and physical activity. In this way Pilot Butte can help address public health concerns and equity of access to routine physical activity.

SCORP population data shows that the area of Bend with the highest percentage of residents below poverty exists less than a half mile to the west of Pilot Butte. Although the aggregate of public greenspace does a good job of covering the majority of this area with a diversity of park options, Pilot Butte offers a centrally located, expansive, natural park experience. Other parks with similar natural landscape and trails exist on the edges of the city.

LOCAL AGENCY PARTNERS

OPRD shares public service responsibility for Pilot Butte with three local entities and one state entity with local presence. This consortium of partners is key to the natural and recreational functioning of the park. It is with their support and participation that the park is able to meet the needs of the public with high quality, safe amenities.

Bend LaPine School District

ORPD shares a portion of the north geography of the butte with two Bend-LaPine schools (Juniper Elementary and Pilot Butte Middle School). Trails that encircle the butte cross, imperceptible to the public, from OPRD to school district properties. To preserve the topographic unity of the butte, it is important to work with the school district as partners on these trails (the Base Trail and a small portion of the Nature Trail). Additionally, many students use Pilot Butte's trails to commute to and from school each day.



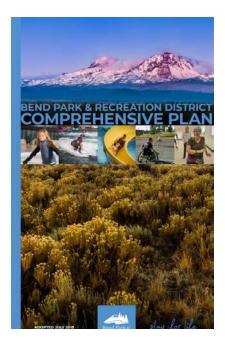
Pilot Butte Middle School track and football field sit against the north side of the butte.

City of Bend

 The City of Bend plans and manages zoning and transportation issues that intersect with the park. They also operate one water reservoir and lease access to two others on the butte.

OPRD also recognizes opportunity in coordinating with the city to improve active transportation to and around the butte. Two active transportation efforts currently affect Pilot Butte:

1. A proposed "Safe Route to School" route is planned along Neff Road, connecting into Juniper Elementary School property. The route brings kids safely from northern neighborhoods and connects to the western portion of the Base Trail. This is a critical linkage that crosses the highway/Greenwood at a flashing beacon crosswalk, connecting students that live south of the park safely to the schools.



BPRD adopted their Comprehensive Plan in 2018

2. Bend's "Low Stress Bicycle Network" is part of the city's updated Transportation System Plan. It aims to connect "islands" within the city where people feel comfortable cycling. At Lafayette Avenue and Derek Drive the plan proposes bicycle racks and trailhead amenities to support visitors arriving by bike.

Bend Park and Recreation District (BPRD)

• BPRD is a sister park and recreation agency that serves the city of Bend. Pilot Butte operates in the ecosystem of parks and open spaces managed by BPRD. The agency owns and manages 81 parks, six within a mile of Pilot Butte. For locals (especially inner east side residents), Pilot Butte compliments the collection of smaller neighborhood and community parks by offering a close-to-home, large, natural recreational opportunity that is mostly found in parks and public lands on the periphery of the city or beyond.

OPRD and BPRD have cultivated a partnership in the Neighborhood Park on the eastern flank of the butte. This area of Pilot Butte was developed in conjunction with BPRD and contains amenities that BPRD develops and maintains at other local parks. This includes a playground, playing field, picnic shelter, as well as the Larkspur Trail, a multi-use path. The Larkspur Trail passes through the park, linking locations north and south of Pilot Butte. BPRD maintains these amenities while OPRD maintains the parking lot and restrooms adjacent to the Neighborhood Park.

Oregon Department of Transportation (ODOT)

 ODOT owns Highway 20/Greenwood Avenue on the southern boundary of the park and works with OPRD to improve access and safety issues associated with the entrance to the Summit Road and the right-of-way along the highway. ODOT also owns a small parcel on the southeast side of park that they use for stormwater

containment. This parcel is infrequently accessed via a road from the main parking lot.

Bend Fire and Rescue

 OPRD collaborates with Bend Fire (and other local partners) on the annual 4th of July fireworks display.
 The two agencies work together to prevent and respond to safety and fire incidents on the butte.

LOCAL VOLUNTEER PARTNERS

OPRD and local park management collaborates with local volunteer partners. They can help the park fill financial gaps in a more direct manner (i.e., fundraising for desired amenities); offer physical assistance (i.e., maintenance or trail building person-hours); and provide a highly valuable link between park advocates and park management. There are two primary types of volunteer organizations.

Cooperative Associations:

In order to be a Cooperative ("Friends") association, the group must be a 501(c)3, have its own board of directors and commit to the goals of a five-year cooperative agreement focused on interpretation and education.

Adopt-a-Park Program:

Groups who wish to volunteer their labor to improve the park can participate in the Adopt-a-Park program. A one-year agreement is drawn up between the group and the park manager, outlining priority projects for the year, agreeing on timelines and budget to accomplish those projects.

Volunteer work groups that come on separate occasions over the course of the year must sign a group agreement to assure that the park's Liability and Volunteer Injury Coverage is applicable.



The July 2018 fire at Pilot Butte

LEASES

OPRD operates four leases on Pilot Butte, to three different entities. The City of Bend leases use of an entry road through the northwest portion of the park, and access to and the use of their water facility on the south side. OPRD leases land and access to T-Mobile for their communication equipment, including cell towers near the summit. The cell towers are visually unobtrusive and access vehicles have not negatively impacted the visitor experience. New Cingular has a permit that allows them to install and maintain the lines that serve their communication equipment on the city's property. This is primarily underground lines, most of which is within the city's easement along the park's north boundary.

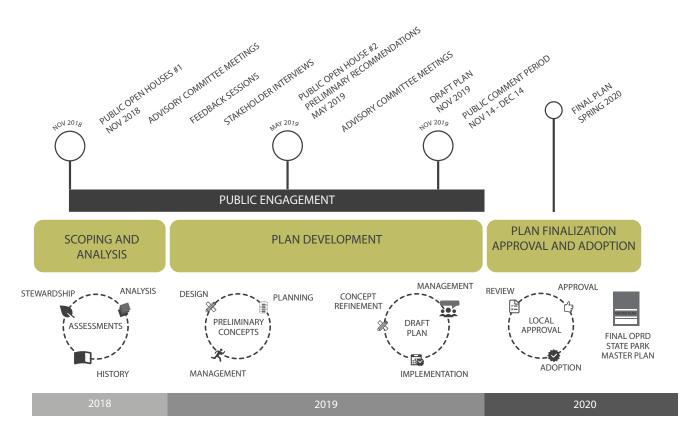


City of Bend water facility on north boundary of the park.

3 PLANNING APPROACH AND PROCESS

PLANNING APPROACH

The approach to update the Pilot Butte Master Plan focused on understanding major changes in the Park and its context over the past 20 years, and is centered around efforts to incorporate inclusivity both in process and outcome. Initially, OPRD convened two separate advisory committees consisting of statewide and local representatives, but as it became clear that the majority of the Park's use is local, the committees coalesced into a single, locally-focused committee with statewide representation as needed (participants listed below). Throughout the process OPRD sent regular updates to regional, tribal and statewide stakeholders.



Public Outreach Schedule

OPRD MASTER PLANNING PROCESS

OPRD follows the master planning process outlined in Oregon Administrative Rules, Parks and Recreation Department, Chapter 736, Division 18. The process includes assessing the occurrence and importance of natural and cultural resources; performing recreation; resource and suitability inventories and assessments; convening a steering committee to inform the plan development; reaching out to the public; and coordinating with local governments and agencies.

The public outreach process included public open houses and meetings held in Eugene and Bend. OPRD held targeted outreach meetings with organizations and groups. OPRD also set up a website (www.pilotbuttemasterplan.com) to inform of public of meetings, collect comment, and archive materials for those who were unable to attend meetings.

The public outreach process comprised:

- One statewide public open house
- One local public open house
- Two local public meetings
- Two Advisory Committee meetings

Additionally, OPRD conducted interviews and individual outreach meetings to involve the following stakeholders:

- City of Bend Planning Department (Brian Rankin and Allison Platt)
- City of Bend Transportation Engineer (Robin Lewis)
- Chamber of Commerce (Talena Barker)
- Local business neighbors
 Staffing Solutions NW (Cindy Bene)
 Carlson Sign (Peter Carlson)
 Deschutes Property Management (Tiffany Lehey)
- Central Oregon Coalition on Access (COCA)
- Sharlene Wills (Disability advocate)
- Bend Park and Recreation Latino Outreach (Kathya Choquez)
- Bear Creek Elementary School Bilingual PTA







Interactive boards at public open houses and outreach sessions.

OUTCOMES

The following emergent themes came out of the public process:

- 1. Partnerships: Pilot Butte is a park highly connected to its larger context. These partnerships are opportunities for collaboration, sharing of resources and a platform for addressing issues and concerns. OPRD partner groups and agencies became strong participants and allies during the outreach process. They are integral to the functioning of the park as a woven element of recreation and open space in Bend.
- 2. Inclusion: The demographics of visitors to Pilot Butte are expected to continue to diversity over time. As a small park, OPRD's goal is not to add quantity of experiences, but rather to enhance existing amenities experiences, to draw diverse populations including Latino people, people with disabilities, and aging communities. This includes adding signage in Spanish and to help orient visitors and provide clear expectations (i.e. trail gradients and length), as well as incorporating universal access design elements into all improvements.



Interactive values board at public open house

- 3. Trails: Trails are the most commonly used and popular recreation asset on Pilot Butte. Public comment indicated concern for their upkeep, the impact of user-created trails on the landscape of the butte, a desire to see a greater variety of types of trails and improved conditions of trails.
- 4. Landscape and environment restoration and protection: Protecting the butte's fragile landscape is of paramount importance to the public. Priorities include protecting the butte from erosion and non-native plants including juniper encroachment.



Public open house Bend Park and Recreation

4 SCOPING ISSUES

The issues summarized in this chapter were compiled with input from the Advisory Committee, OPRD staff, interviews with the City of Bend and BPRD staff, local stakeholders and the general public.

ISSUE SCOPING SUMMARY

OPRD used a variety of tools and methods to understand the major issues and concerns at Pilot Butte.

First, staff conducted a community survey at statewide and local public open houses and online through the Pilot Butte Master Plan website. The top five areas of concern were:

- 1. Erosion caused by user-created trails
- Over-use
- 3. Increased development around the park
- 4. Dog impact
- 5. Auto / pedestrian conflicts

Discussion at the Advisory Committee meetings were widereaching and covered many of the issues presented by the public. Additionally, Advisory Committee members discussed the following issues:

- User created trails and the natural resource impact:
 Advisory Committee members identified a variety of concerns related to user-created trails. Some expressed concern for invasive plant migration and damage to existing grass and shrub cover. For others user-created trails signified overuse and indicated a lack of care of the park by land managers and visitors alike.
- Accessibility for all: Although Pilot Butte meets minimum requirements with ADA standards, there are few quality trail experiences for people with mobility constraints.
 The Advisory Committee recommended creating more diversity in accessible trails and considering other aspects of universal access such as improving experiences for people with visual or cognitive impairment.
- Access to the Park: There are numerous informal entry points from roads and neighborhoods surrounding the

park, but only a few official access points. Consequently, users create their own. To create a park that is threaded into the neighborhoods and better connected to the schools, OPRD needs to focus on simple, safe and well signed pedestrian and bicycle connections to schools and neighborhoods.

- Summit Road: Accidents, near-accidents and the
 perception of lack of safety and wellbeing on the Summit
 Road Trail was mentioned by many. The committee feels it
 is important to address safety concerns between pedestrian
 and vehicular traffic on the road while maintaining a quality
 trail experience on this very popular trail.
- **Fire Restoration:** A major fire burned a significant portion of the south side of the butte in July 2018. The fire impacted the southern portion the Base Trail, burning the vegetation in this area as well as park infrastructure. The committee would like this plan to address fire-related natural resource concerns, visual effects from the fire and replace loved and well-used infrastructure such as the exercise area.
- Maintenance: This is a small park that receives a lot
 of visitor use. The public and Advisory Committee
 communicated their concern of a lack of maintenance to
 critical infrastructure (i.e. the water line to the summit,
 which is inoperable) and asked for continued upkeep and
 enforcement of trail use rules.

The top five concerns having to do with management expressed in the 2016 Pilot Butte Day-Use Survey were:

- 1. More opportunities for hiking
- 2. More opportunities for viewing wildlife
- 3. More opportunities for escaping crowds of people
- 4. Require all dogs be kept on leash at all times
- 5. More information and educational programs

The survey also identified parking as a secondary concern. Vehicular summit visitors often stay for short periods of time. However, currently there is limited, unmarked parallel parking at the summit. This sometimes creates a chaotic and inefficient parking situation.

Although the majority of visitors arrive at the park by vehicle, the parking lot at the base generally does not fill up. The Advisory Committee voiced concerns about people using the base parking lot to access the apartments on the east side of the park. However, since the parking lot has rarely exceeded capacity, all parties generally agreed that parking should be a shared issue amongst land owners, given Pilot Butte's urban location. There is currently ample parking in and around the park. As parking needs change in the future the following strategies can be employed:

- Install parking signs on neighborhood streets limiting parking time visitors can park
- Work with the middle school and the commercial businesses to the south to share parking lot space. This strategy "flexes" parking space during times when primary users are not needing it.
- Install a gate/parking arm at the base lot to help the park regulate when, and for how long, visitors can park.
- Work with the local transit agency and Bend's Active Transportation team to encourage alternative means to the park.

RESOURCE ASSESSMENTS

PLAN AREA

The geography of the butte incorporates two land owners, however, the topography and natural space is experienced often as one merged park. The plan will encompass all lands within the Pilot Butte State Park boundary. Although the plan does not have jurisdiction over adjacent properties, the trails plan will consider certain trails as contiguous sections as they connect onto adjoining land. This is important specifically with the Base Trail as it passes through Bend-La Pine School District property on the north side of the butte. The district and OPRD recognize that the trail experience should be cohesive and partnership with our neighbors will help coalesce resources and leverage efforts to meet shared goals.

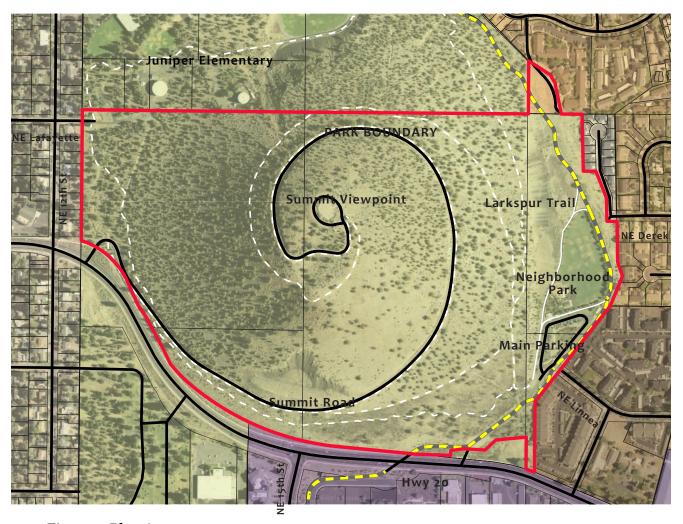


Figure 5: Plan Area







Original basalt steps at the summit viewpoint

LANDSCAPE CHARACTER

Pilot Butte is an ancient cinder cone that covers approximately 153 acres within the City of Bend. It rises to form a naturally vegetated cone in the middle of the city. OPRD owns and manages114 acres. The remaining acreage belongs to the Bend-LaPine School District and the City of Bend. The regular topography crosses the boundaries, and this description looks at the butte as a whole.

The park contains steep cinder slopes with a mix of native and invasive "naturalized" vegetation character. The northern side is more densely vegetated with juniper while the southern side has more grassland area and more sparse juniper growth. All slopes are laced remarkably uniformly by user-created trails throughout. A major slough occurs on the east side of the butte. The school district property is similarly made up of steep slopes with one major sloughing cinder slope along the north side of the butte. A former quarry forms a sizable scar along the south side.

The human-built features include basalt walls, rustic timber fencing, metal fencing (semi-permanent), asphalt roads and an urban park. A single road winds from the base to the summit.

CLIMATE

The climate in the region is typical of the semi-arid high desert. Bend receives 11 inches of rain and 21 inches of snow, on average, per year. There are 162 days of sunshine and 72 days of precipitation on average per year. Precipitation peaks in December with a smaller peak in the May. The annual temperature average is 46 degrees. The summer temperature high is 82 degrees (July) and the winter low is 24 degrees (January).

HYDROLOGY

Pilot Butte is composed mostly of the steep slopes and the well-draining soils of the cinder cone. For this reason, the butte does not have any predominant flowing hydrological features (rivers, creeks or streams). Historically a canal ran along the south and east side of the butte and caused flooding especially when warm rains would fall on winter snow on the butte. A berm sits along the east side of the Larkspur Trail to control flooding of neighborhoods.

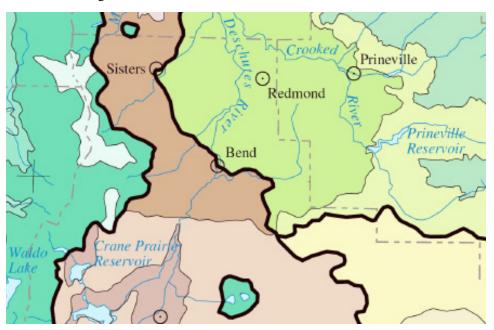


Figure 6: Eco Regions

Eco-Regions



GEOLOGY

The park has a low point of 3,652 feet. The summit sits at 4,139 feet. The majority of the park is made up of volcaniclastic rocks (cinder deposits) from multiple eruptions of Mount Mazama approximately 7,000 years ago. The soil type is described as Tetherow-Clovkamp Complex soils. Tethrow soils cover the majority of the butte and are "excessively drained" volcanic ash over cinders. Clovkamp soils are less excessively drained and located mostly at the base of the slopes. There are no wetlands on site.

NATURAL RESOURCES VEGETATION AND HABITAT

Ecoregions describe areas of similarity in a larger region's mosaic of ecosystems. They help guide decisions for development and conservation of natural resources. Pilot Butte is at the southwest edge of the Blue Mountains Ecoregion, about one air mile from the boundary with the East Cascades Ecoregion, and about 20 air miles northwest of the Northern Basin and Range Ecoregion. The site does not succinctly fit the definition of any one ecoregion, but rather, has elements of the Blue Mountains Ecoregion but more closely resembles the Northern Basin and Range Ecoregion where western juniper woodlands are common. Pilot Butte is dominated by western juniper woodlands and savannas.

The Paiutes, the indigenous people who inhabited the area pre-Europeans, likely routinely burned the landscape to encourage growth of plants they harvested. Euro-American settlers arrived in the 1870s and grazed their cattle and horses on the abundant bunch grasses. They stopped using fire to manage the land. Their livestock also transferred invasive plants. Fire suppression and invasive plants changed the landscape considerably. The establishment of cheatgrass significantly altered the plant communities on the butte.

Since the park's establishment in 1927, the active grazing stopped (or slowed). However, disturbance continued as



Cheatgrass



Dalmatian Toadflax



Rye

quarries were established on the south side; Bend built water reservoirs on the south and northwest side; and spotted knapweed was introduced with the fill material used to bury the south side reservoir in 2000. Generally, invasive species colonize disturbed soils more readily than natives. Other disturbances include trails, roads, and fire as well as naturally-caused wind erosion and sloughing.

AT RISK PLANT SPECIES

No formal rare plant surveys have been conducted at Pilot Butte and no at-risk plants were sited during a vegetation analysis performed in 2017 by Salix Associates. No plants are listed as Endangered Species and there is no Critical Habitat on the site according to the U.S. Fish and Wildlife Service.

The following vascular plant species have suitable habitat on the butte, and three other at-risk species possibly exist on the site, but their presence is very unlikely. Threats to potential at-risk species are competition by invasive species, trampling from user-created trails, and shading from juniper canopy.

- 1. Astragalus conjunctus var. conjunctus
- Astragalus misellus var. misellus
- 3. Astragalus peckii
- 4. Castilleja chlorotica
- 5. Nama densum var. parviflorum
- 6. Boechera cobrensis
- 7. Camissonia pusilla
- 8. Diplacus jepsonii

Peck's Milkvetch (Astragalus peckii) and Green-tinged Paintbrush (Castilleja chlorotica) are listed as Threatened by the State of Oregon. A local botanist believes these two species have the most likelihood of occurring on the butte. The remainder have no federal or state listing status.

PLANT COMMUNITIES - PAST AND PRESENT

Historically the butte had a strong juniper community on the south side of the butte and a healthy grass community on the

north side. This is because the north side had more productive soils and higher moisture due to less solar exposure. Low intensity fires would routinely burn through, killing young juniper but allowing for the fire tolerant ponderosa to survive. This is the reason that historically ponderosa and juniper did not occupy the same area. As settlers practiced fire suppression and their cattle grazed on the grasses, the butte changed.

Today we see almost the opposite condition. Juniper have colonized the northern aspects while the southern aspects have become annualized grasslands (much of it invasive cheatgrass) due to the prevalence of unmanaged fires. Due to direct competition for resources, larger shrub species are outcompeted by the juniper. Deep rooted grass species also diminish with increased juniper canopy, increasing erosion on steep slopes.

The *Vegetation Cover* map on page 42 shows plant communities classified into cover type classes.

Left alone without management or human use, the butte would host woodlands or forests dominated by relatively dense western juniper. Understories are more difficult to predict, but it is possible and even likely that over time and with no management, existing and new invasive species would become dominant in more areas.

INVASIVE SPECIES

Invasive weeds are widespread on the butte. They arrived as "hitch hiking" seeds and via pack animals. However, in more recent times invasive seeds arrive by wind, blown from adjacent properties; are tracked in by visitors; or planted inadvertently, as was the case with Rye (Secale cereale) which was planted to reduce trailside erosion. Consequently, the butte is overrun with invasive plant species. The biggest offenders are cheatgrass, rye (also called cereal rye and feral rye) and Dalmatian toadflax which are widespread and having the largest impacts on plant communities on the butte. Spotted knapweed and Dalmatian toadflax are the only one listed by the Oregon Department of Agriculture.



Bitterbrush Communities



Rocks



Snags and Logs

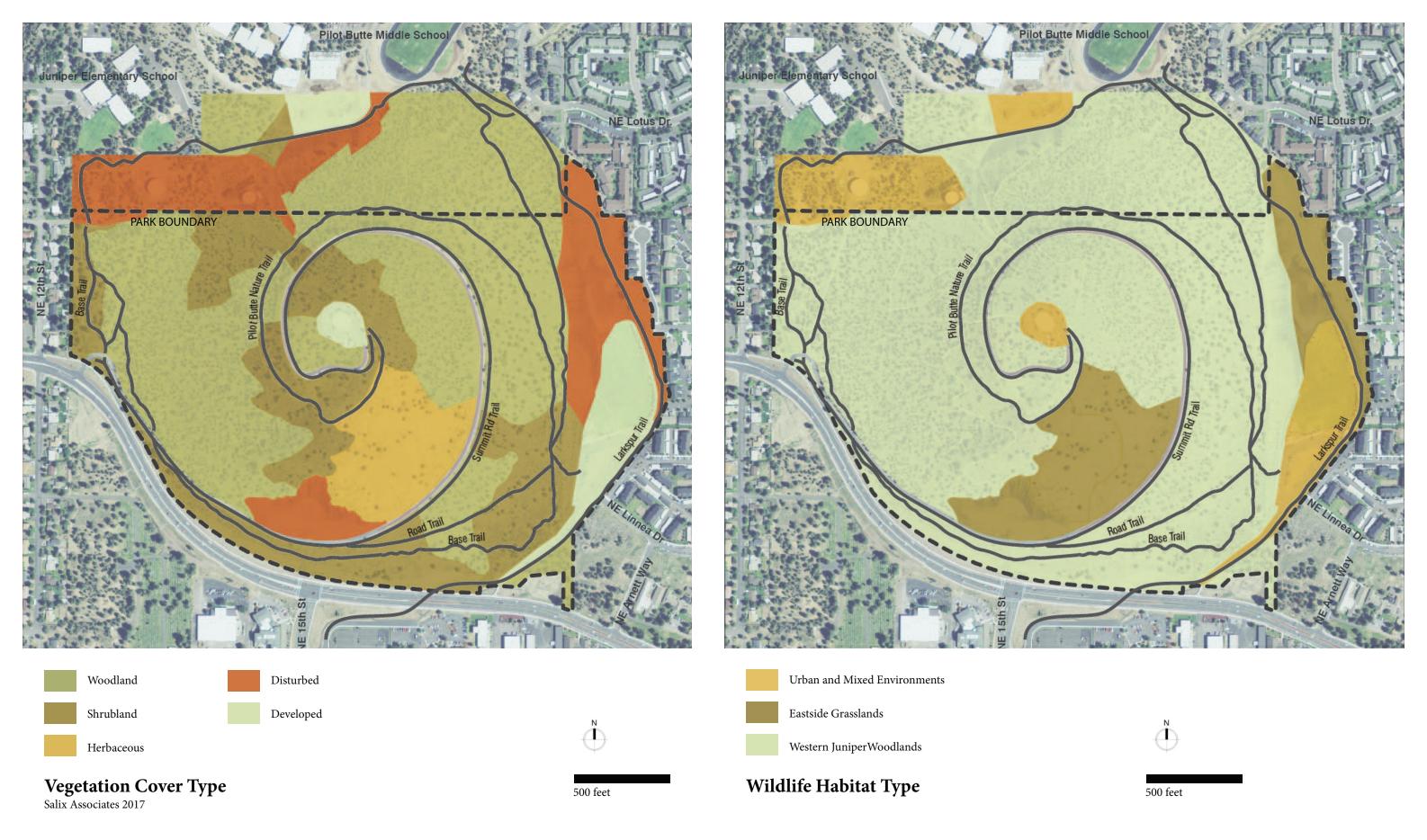


Figure 7: Vegetation Cover Type

Figure 8: Wildlife Habitat Type

The following are confirmed on the butte:

- 1. Cheatgrass (bromus tectorum): This plant is on the Deschutes County Noxious Weed List and is very successful at using water and nutrients early in the season to out compete native species. It colonizes rapidly after fire and dominates in disturbed patches. Cheatgrass is nearly ubiquitous on the south and east sides of the butte, some or all of which probably burned at some point, and is present on many other parts. Elimination of cheatgrass on southerly slopes is particularly problematic.
- 2. Rye (secale cereale): Rye acts as either an annual or a biennial and is an aggressive colonizer, especially in dry, sandy soils like those on Pilot Butte. Since it was seeded for erosion control along trails it has spread, primarily over much of the lower east, south, and west sides of the butte. Annual weed-whacking of rye should continue until a better strategy is developed.
- 3. Dalmatian toadflax (Linaria dalmatica): Dalmatian toadflax is most common on the butte on the southeast side, but can be found in disturbed areas around the butte. Although conventional knowledge discourages pulling because the rhizomes are tough and break off, the loose, volcanic soils of the butte allow effective pulling.

4. Other common invasive species

- Spotted Knapweed (Centaurea stoebe)
- Russian Thistle (Salsola spp.)
- Filaree Redstem (Erodium cicutarium)
- Bur Buttercup (Ranunculus testiculatus)
- Common Mullein (Verbascum thapsus)



Peck's Milkvetch



Green-tinged Paintbrush

JULY 4, 2018 FIRE

Pilot Butte suffered a fire from illegal fireworks on July 4, 2018, that burned approximately 10 acres. The fire primarily burned through grassland, shrubland and woodland habitats and incinerated some infrastructure. The fire also destroyed city fencing along the southern boundary.

Immediately after, the burned area was fenced off to reduce off-trail traffic and protect the bare landscape. OPRD contracted arborists to fell burned trees, selecting 38 trees to remain for aesthetics and habitat. Contractors also thinned small junipers and limbed trees on a 0.75 acre parcel of OPRD property near an apartment complex.

The fire primarily affected grassland, shrubland and woodland habitat, including western juniper (juniperus occidentalis), bitterbrush (Purshia tridentate) big sagebrush (Artemisia tridentata), gray rabbitbrush (Ericameria nauseosa), bluebunch wheatgrass (Pseudoroegneria spicata), Idaho fescue (Festuca idahoensis), Sandberg's bluegrass (Poa secunda), Thurber's needlegrass (Achnatherum thurberianum), common western needlegrass (Achnatherum thurberianum) and a variety of forbs. Known non-native species are primarily cheatgrass (Bromus tectorum), yellow and dalmation toadflax (Linaria spp) and cereal rye (Secale cereale) the upland areas and Canada thistle (Cirsium arvense) and knapweed species near wetter areas.

WILDLIFE

The butte is composed of primarily three habitat types including western juniper woodlands, Eastside grasslands and Urban and mixed environments. See the Wildlife Habitat Map on page 42.

HABITAT TYPES:

Western juniper woodlands: The butte is comprised mostly of western juniper woodlands, with small, intermixed areas of savanna and some small inclusions of bitterbrush and mountain big sagebrush shrublands, and bluebunch wheatgrass, Sandberg's bluegrass and Idaho fescue grasslands within the woodlands. On the northerly slopes, younger ponderosa pines are scattered in the juniper woodlands. Larger ponderosa pines were likely planted along the road.

Habitat characteristics of western juniper woodlands are scattered large juniper trees and snags. Mature and old-growth junipers are widely scattered on Pilot Butte. In the woodland areas many smaller, young trees are encroaching, resulting in much higher tree density and younger average stand age.

Eastside grasslands: Four areas were classified as Eastside grasslands on the butte. Two of the very disturbed areas (the southside quarry and the meadow north of the Neighborhood Park) are highly disturbed. The City of Bend has treated the quarry/water tank area for Dalmatian toadflax and cheatgrass grows throughout. The areas east of the quarry and north of the road are in a more natural condition, although still heavily degraded by invasive species. This makes native plant communities difficult to establish and thrive.

Urban and mixed environments: These areas have been significantly impacted by human development.

IMPORTANT HABITAT FEATURES:

Bitterbrush Communities: Bitterbrush provides forage, cover and nesting habitat for a variety of wildlife. It appears in a mosaic with sagebrush and rabbitbrush, often in places with more moisture. Because of a lack of water or water trapping features on the butte, the bitterbrush community is small in area.

Rocks: Although the quarry sites are not significant habitat, rock outcroppings (natural and man-made) offer valuable habitat for reptiles and small mammals.

Snags and logs: Snags are used by invertebrates, nesting and foraging birds and roosting bats. Snags are uncommon at Pilot Butte, but there are a few western juniper and ponderosa pine snags that add great wildlife value. Logs are even less common, so they should be protected from disturbance.



Western juniper woodlands



Eastside grasslands



Urban and mixed environment



Lewis's woodpecker



Olive-sided flycatcher

Pilot Butte is an "island" of native habitat surrounded completely by development. It is comprised of habitat patches that considered as an isolated unit. There is no natural, undeveloped habitat adjacent or nearby. There are small, parklike areas with trees about a half mile away, but it is a much farther distance to any natural habitat.

Connectivity is important in that it links habitats together forming larger habitat blocks. Some flying (volant) animals (birds, bats, some insects) likely are less affected than species that do not fly. For example, the butte can provide adequate nesting and reproduction habitat for butterflies and songbirds with limited home ranges. Others seeking larger areas may not inhabit the butte. Migrant songbirds are known to use the butte as a temporary stop. Terrestrial wildlife that can tolerate human presence and development can survive as residents on the butte. However, if there is no influx of "outside" animals with which they can breed, populations may eventually show signs of inbreeding depression, which may lead eventually to extirpation from the site. Inbreeding depression develops over time as deleterious traits become more common in an isolated gene pool.

Most terrestrial wildlife species move at night, and some may travel through residential areas, but the farther the distance between habitats, the less likely they are to pass through residential areas to find isolated habitats. For many wildlife species, the distance between Pilot Butte and other natural habitats is likely already too much to foster significant movement.

Certain native and non-native wildlife species are tolerant of residential development. For example, native California scrubjays move easily between residential areas and butte habitats. Introduced rock doves, Eurasian collared-doves and European starlings are associated with adjacent development.

Priority Habitat

There is no "priority habitat" on the butte according to OPRD's methodology, which involves calculating wildlife value ratings based on disturbance information and the condition of the landscape. Disturbance information includes human impact on wildlife based on recreation impact, wildlife type, season and location.

The largest reason why wildlife is less prevalent than in the past is its severed connectivity to other patches of habitat. Human use is heavy on the butte, which makes it difficult for sensitive species. Pilot Butte currently is not known to provide habitat for any wildlife species listed under the state or federal Endangered Species Acts. Although OPRD biologists conducted a general wildlife assessment, formal wildlife studies of specific species were not conducted.

Informally, the following at-risk bird species have been observed on the butte and were reported on eBird:

- Lewis's woodpecker
- Pinyon jay
- Bald eagle
- Brewer's sparrow
- Chipping sparrow
- Golden-crowned kinglet
- Olive-sided flycatcher
- Sagebrush sparrow and western bluebird

All were likely foraging and would not be expected to nest on the butte (except the bluebird). Lewis's woodpecker is a federal Species of Concern, rated Sensitive-Critical by ODFW, and is a Strategy Species in the Oregon Conservation Strategy. Some common migratory birds stop on the slopes of Pilot Butte although most follow the Deschutes River corridor and the foothills of the Cascades.

Mammals that either use the butte or could potentially use them are the western gray squirrel, gray wolf (endangered), the

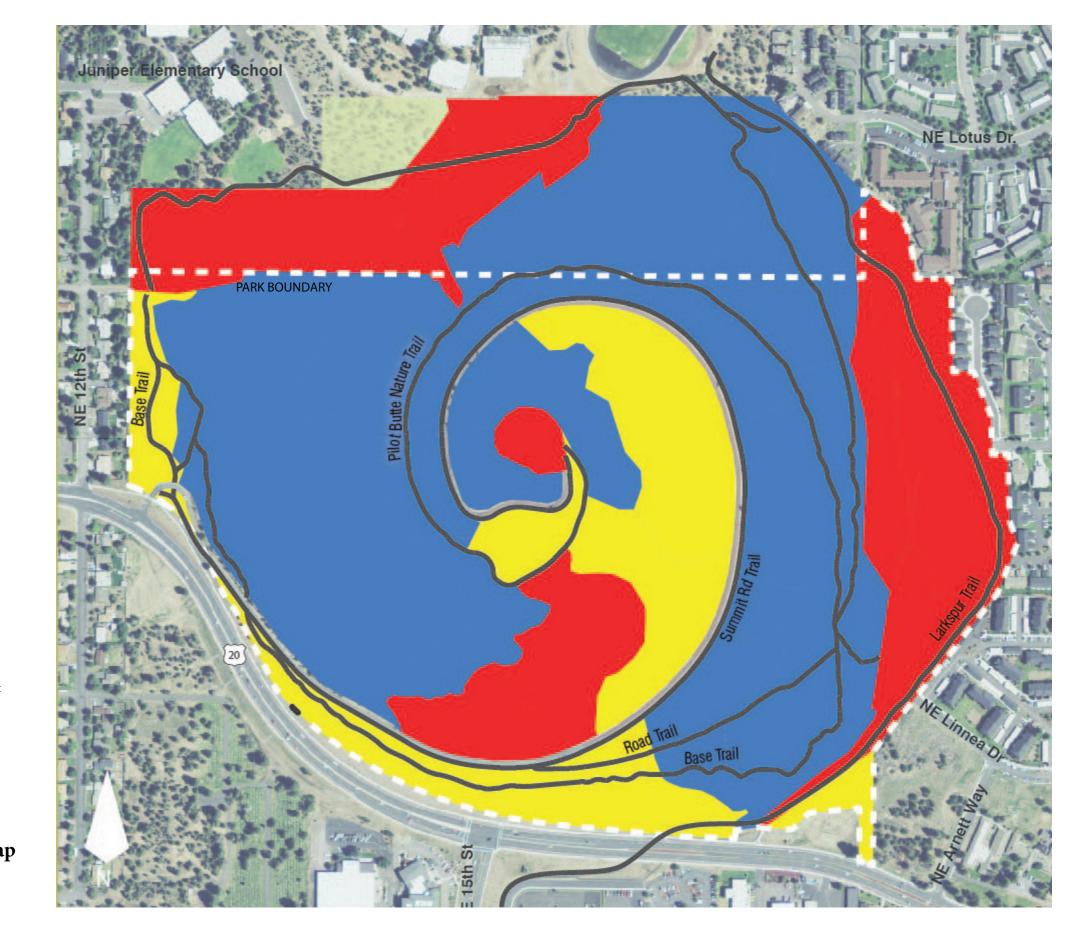
yellow-billed cuckoo (threatened), mule deer, yellow bellied marmots, mountain or eastern cottontail rabbits, and possibly snowshoe hares and yellow pine chipmunks.

DEVELOPMENT SUITABILITY

The assessment of "Composite Natural Resource Values" on page 49 is based upon a merging of the vegetation values and wildlife habitat values (page 42). For each site in the park, the composite ratings represent the highest of the two ratings assigned in the botanical and wildlife assessments. Value 1 represents the most valuable natural resource areas. It often has federal legal protection, such as for wetlands or endangered species habitat, and does not allow for any development. Value 2 allows for low impact recreation development such as trails. Values 3 and 4 allow for moderate to higher intensity development. Value 4 represents the least valuable natural resource areas under current conditions, and is most suitable for development.

There are no Value 1 areas at Pilot Butte. However, Value 2 covers a predominant area of the butte indicating large swaths of landscape that are suitable for conservation.





Most Suitable for conservation (none on map)

More suitable for conservation, less suitable for development

Intermediate for conservation and development

Least suitable for conservation, most suitable for development

0.1 miles

0.2 miles

Composite Natural Resources Map

Salix Associates 2017

Figure 9: Composite Natural Resources Map

SCENIC ASSESSMENT

Pilot Butte's original primary use was as a location to view the Cascade front range. The summit viewpoint remains an important location both for tourists and local residents.

Although hiking or walking has surpassed sightseeing as the most popular activity in the 2016 Visitor Survey (75% participate in the former; 56% participate in the latter), the scenic qualities of the summit make it a unique location to visit in Bend and distinct among other parks in the region.

The busiest time at the summit viewpoint is around sunset. The summit contains a plaza, interpretive panels, historic elements, parking, vault toilet and water fountain (not operational currently). Although anecdotally this area often feels crowded, especially around sunset, visitors stay for a short amount of time at the summit. Eighty-four percent of all day-users spend



Iconic view west to the Cascade Range



Internal view of wildflowers on the butte

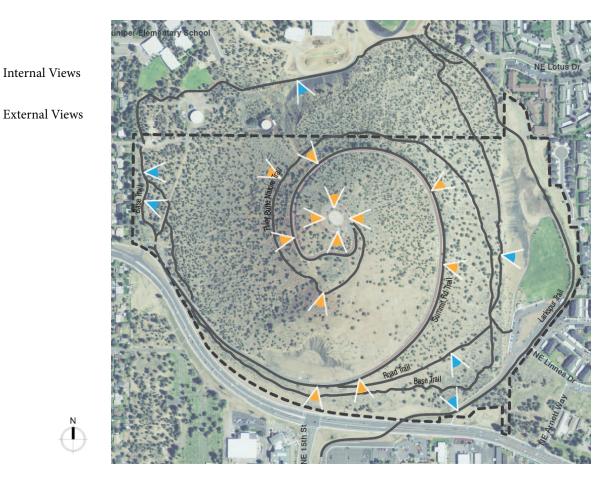


Figure 10: Viewshed Analysis



North view from the Summit



Internal view of fire restoration area offers educational opportunties

less than one hour at the park per visit. Most of the visitors who come to Pilot Butte for the views arrive by vehicle and drive to the summit.

However, due to the open nature of the landscape, there are spectacular views of the mountains, city and region from many other locations on the butte. Most notably, the Summit Road allows for open vistas in all directions from a variety of elevations.

Internal views of the landscape exist as well. Although the landscape is degraded in many areas and interrupted by past and current development (mining scar and water reservoirs), there are locations where the feeling of being in an intact natural landscape exist due to views of natural desert landscape, juniper cover and the seasonal wildflower bloom. Although the burn scar on the south side of the butte feels unattractive to some, there is educational value in the views of the recovering landscape.

TRAILS

Public Use and Perception

Trail use is the highest reported activity on the butte according to a 2016 Day-Use Survey of Pilot Butte. Three-fourths of visitors report walking or hiking in the park. The park provides a unique experience of natural surface trails in the middle of the city on a relatively large amount of acreage, an attribute more typical of parks found in peripheral locations. Still, 70% of respondents felt that there should be more opportunity for hiking and viewing wildlife. One third of respondents to a public survey said that a major concern at Pilot Butte is the poor conditions of trails. In particular, the survey identified the proliferation of user-created trails as the top-ranking concern.

Quantity and Condition

There are approximately five miles of sanctioned trails on Pilot Butte and 11 miles of unsanctioned user created trails. This shows that there is a slightly higher percentage of unofficial trails (58%) overall.

More than half of visitors prefer a dirt trail surface (56%); less than a quarter prefer concrete or asphalt (22%). Although the majority of trails are soft surface, the Larkspur Trail is a popular paved trail that was developed and is maintained by BPRD on park property. This trail serves as an important intra-city connection for cyclists and walkers.

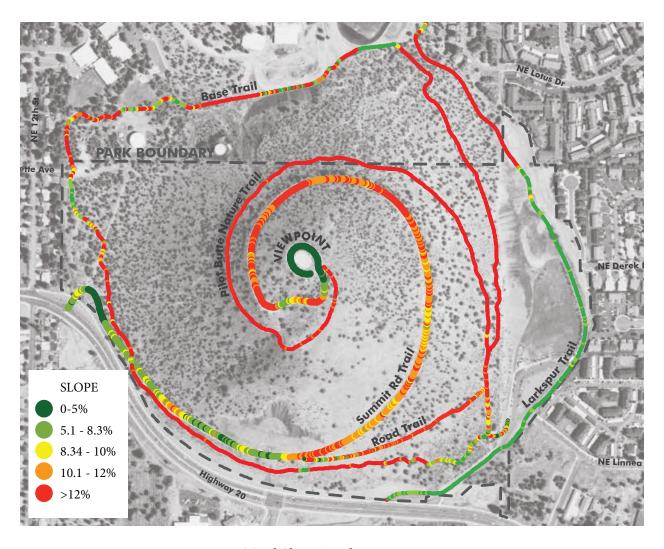


Figure 11: Existing Trail Slope Analysis

The majority of the trails have relatively challenging gradients as they climb the topography of the butte. The Base Trail has several steep sections along the north. The Larkspur is relatively flat.

The condition of the trails varies, but the comments were consistent: all trails need improvements and more maintenance. Three specific needs were identified:

- 1. Fire restoration of the south portion of the Base Trail
- 2. Pedestrian safety on the Summit Road Trail
- 3. Environmental degradation caused by user created trails

ACCESS AND CONNECTIVITY

As described in Chapter 2, Pilot Butte can be accessed by vehicle from two parking areas (at the SE base and the summit). Cyclists and pedestrians access the park via the Larkspur Trail from both the north and south. There is a formal trailhead for pedestrians at the Neighborhood Park. Less formal but well used pedestrian access points exist off of Lafayette Avenue, Derek Drive and from the school district property along the Base Trail.

Pilot Butte is a topographic barrier in the city for vehicles, cyclists and pedestrians. BPRD identified a need for more connectivity "around/near Pilot Butte" in their master plan (www.bendparksandrec.org/wp-content/uploads/2018/07/ BPRD-Comp-Plan-Appendices-Adopted.pdf). An analysis of the City of Bend's Transportation System Plan (2020) shows that there is relatively good cycling connectivity from urban networks to and through Pilot Butte via bike lanes on Highway 20/Greenwood Ave running east/west along the south boundary of the park. Planned improvements for a low stress bicycle network will further enhance safe connections to Pilot Butte. The Larkspur Trail also offers a safe and direct route to the park from the north and south. Accessing the park as a pedestrian can be indirect. Approaching from the neighborhood streets on the east requires walkers to go up to a quarter mile to find an official, accessible trailhead.

Coordination with the city, BPRD and schools identified an opportunity to improve safe and quality access for all, improving neighborhood walkability and connectivity. It is important to recognize that neighbors living near the informal but well used access points along Lafayette Avenue and Derek Drive expressed concern with increased traffic and parking. Solutions should look at incentivizing cycling and discouraging parking on neighborhood streets.

Existing access points

Taxlots accessible from existing access points

New access points

Taxlots now accessible within a 1/2 mile due to new access point

Orange and yellow taxlots indicate locations that can be reached by traveling 1/2 mile.

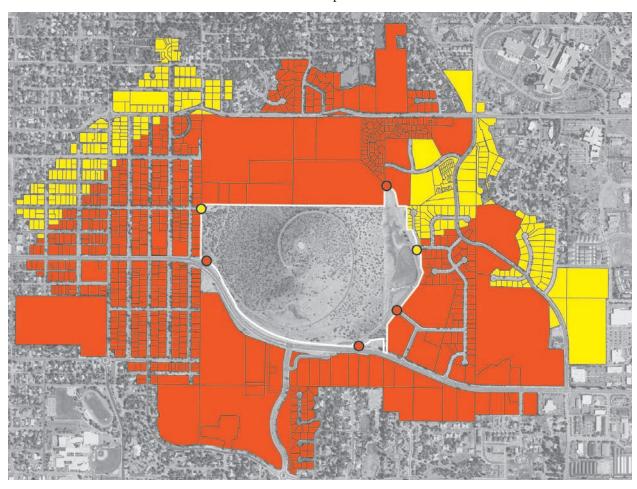


Figure 12: Walkability Analysis

6 RECREATION ASSESSMENT

VISITOR ATTENDANCE

Annual visitor numbers are tabulated from data recorded from an Eco-Visio Road Counter on the Summit Road and Trail. The counter records pedestrian, car and cyclist visitors. From 2017-2018, it indicated that 51% of the visitors using the Summit Road and Trail were pedestrians, 45% came by car, and 4% were on bicycle. It is clear, however, that the actual day-use visitor numbers are much higher because of the many other locations where visitors can enter the park.

Attendance at Pilot Butte has increased significantly over the past 10 years (2008-2017). In fact, the average annual rate of growth has been slightly faster than that of the population of Bend. The average annual growth rate of Bend during this time is 2.24% while for Pilot Butte it is 2.27%. From 2002 to 2018, attendance has increased 25% overall. In 2018, Pilot Butte recorded just under 950,000 day-use visitors. These attendance numbers make Pilot Butte one of the most visited of OPRD's park (ranking 10th).



Panoramic views from the summit viewpoint

Though the Summit Road closes in the winter, Pilot Butte is accessed year round. Although pedestrian and cyclist numbers dip slightly in the winter, they remain notably constant through the seasons.

The 2016 Pilot Butte Day-Use survey indicates that the perception of feeling crowded at the park is relatively low. However, anecdotal accounts and comments at the public meetings point to a feeling of over-use of the park. This is evidenced by the high number of user-created trails. Although it is difficult to assess carrying capacity and crowding precisely, the growth trends and public sentiment of over-use indicate that plan strategies must address increasing use and intensity on the natural resource.



The 2016 survey showed that the most popular activities on the butte were hiking and walking (75%), sightseeing (56%), and outdoor photography (27%). The least popular activities were using the playground (9%) and picnicking and barbecuing (4%). Although these activities rated low in popularity in the survey, public meeting feedback and outreach to the Latino population in Bend indicated that these activities, which are focused in the Neighborhood Park, are very important to some communities.

Respondents were asked which activity was their primary reason for visiting Pilot Butte. The top four were hiking and walking (61%), sightseeing (24%), running or jogging (4%) and dog walking (3%).

Most visitors came by themselves (41%) and spent approximately one hour in the park (84%). Local residents from less than 30 miles away represented 69% of visitors. They visited the park on average 40 times in the last 12 months. Approximately two-thirds of visitors reported that this park is their main destination for recreational activities indicating that this is an important local location for repeated recreation.







Hiking, walking and running are popular activities on the butte





The health benefits of recreation at Pilot Butte are also indicated by the survey. Park visitors reported their visit helped to reduce stress (87%), improve mental health (85%) reduce anxiety (80%), improve their physical health (78%), and improve their level of physical fitness (76%).

Three of four visitors indicated that they participated in moderate physical activity while at Pilot Butte, while almost half indicated participating in vigorous physical activity. Visitors who indicated participating in moderate and vigorous physical activity spent about an hour participating in those activities during each visit. By contrast, the U.S. Department of Health and Human Services reports that less than 5% of adults participate in 30 minutes of physical activity each day. These results show Pilot Butte is an important part of maintaining strong physical activity practices for those who use it.

Public meeting feedback echoed the survey's findings: Pilot Butte is often used habitually for exercise, namely walking and running on trails. One survey respondent reported that his doctor "prescribed" that he walk the Summit Road at Pilot Butte numerous times a week. Public meeting feedback also indicated strong importance of the exercise area (burned in the 2018 fire), especially for seniors. It is an area used habitually for stretching and exercising, as well as meeting others for social interaction and connecting for social hiking. The butte is a public, outdoor gym for many.

Oregon's 2019-2023 Statewide Comprehensive Outdoor Recreation Plan (SCORP) identified the percent of the population that participates in an activity at a state scale. The most frequent outdoor recreation activities statewide include:

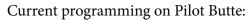
- Walking on local streets
- Walking on local trails
- Relaxing/hanging out
- Dog walking and dog parks
- Taking children to playgrounds
- Sightseeing
- Cycling on roads

- Day hiking on non-local trails
- Jogging/running on pavement
- Bicycling on paved trails

By far the activity most practiced statewide involved walking: 83% on sidewalks and local streets and 74% on local trails and paths. Walking and hiking prove to be a popular activity that can be practiced in different circumstances and by a wide range of people (ages and abilities).

PROGRAMMING

Programming is managed by OPRD park staff within the Management Unit (MU). The majority of programming occurs in the summer when the park employs a seasonal interpretive ranger.



Park Led:

- Seasonal Interpretive Ranger
 (1-2 times per week in the summer)
 - Guided hike and programs at the summit
 - Roving interpretation
- Topic-driven Series (4 times during the summer)
 - Hike and interpretation series. A recent series focused on Geology
- Roving interpretation

Partner Led or Collaboration:

- Trail races / Pilot Butte Challenge (External partners requiring Special Use Permit)
- Fireworks display (collaboration with Bend Bulletin, Bend Fire, USFS, ODF, BRPD, OPRD, ODOT)

Overall most users (96%) were satisfied with their experiences and the conditions at this park. Satisfaction, however, was consistently lower for the number of information and educational programs (59%), quality of information and educational programs (62%), and group facilities (68%).





Managers may wish to evaluate these services to users to ensure they are meeting visitor needs.

The 2016 Pilot Butte survey indicates that visitors would support expanded programming in the park. More than half of day-users would consider participating in an entry level, "how to" programming (such as the Let's Go programs) that provide equipment, instruction, opportunities for skill development and safety instruction. These programs are designed to help communities with less or limited access to recreation and the outdoors discover parks and new outdoor activities. Respondents indicated strong interest in hiking (34%) and stargazing (30%). The least supported programs were geocaching (15%), and bicycling on roads (4%). The most popular "other" programs were natural history, and programs to learn plant and flower identification.

FACILITIES

The park maintains a mix of facilities that have been constructed (and reconstructed) over the park's history. Although many facilities and amenities are in good condition, especially those constructed in concert with the Neighborhood Park and Larkspur construction, facilities and the landscape suffer from high use, vandalism, high impact incidents such as fire damage, and delayed maintenance due to funding and staff time deficits.

RECREATIONAL TRENDS

Recreational trends that focus on more urban park amenities came up in the Pilot Butte outreach process. For example, some participants asked for a splash park and an off-leash dog park or "dog trail". OPRD must consider its core purpose, staff and funding constraints when evaluating the feasibility of implementing these proposals. OPRD recognizes that these types of amenities are more appropriate park where a higher degree of maintenance can be supported (BPRD is currently constructing a splash park at Ponderosa Park, less than one half mile to the south of Pilot Butte).

This is where OPRD looks to collaborate with our local park agency partners. BPRD completed a Comprehensive Plan in 2018 that included a public outreach process to define future recreational needs in the city. Based on the resulting policy direction, key areas where Pilot Butte's Master Plan can complement BPRD's goals are:

- Trails for exercise and wellness
- Trails as active transportation routes
- Natural Area parks
- Focus on neighborhood and community parks
- Diversity and flexibility in park use
- Connections into and between parks / active transportation / walkability

Increasingly, technology is changing how visitors understand and interact with parks. Although these trends may not have direct implications for the master plan, it is important to track and be responsive to technology that can positively impact park functions. This includes (but is certainly not limited to) beacon counters, geo-fencing, drones, trail information and interpretation.

NEEDS AND OPPORTUNITIES

The planning team identified statewide needs based on an analysis of the SCORP, surveys, public meeting and online discussion and discussion with the Advisory Committee. They developed the following list of recommendations to address needs and opportunities:

- Improve Pilot Butte's extensive trail and path network to provide a variety of quality experiences, accessibility, maintenance.
- Improve safe connections to the park and trail network by working with the city and schools.
- Improve access for people of all abilities, given that 28% of surveyed visitors were over the age of 60 and 9% had disabilities. Assure that facilities and amenities are ADA compliant and focus improvements on overall universal accessibility standards.



FACILITY	CONDITION	MATERIAL
OVERALL		
Summit Road	Poor	Asphalt
Traffic Counters (2)	Moderate	Vandalized often
Retaining wall along Summit Road	Moderate	Basalt rock
Retaining wall along Hwy 20	Good	CMU block
Park benches (9)	Varies	Wood and metal
Cell Towers (3)	Varies	Metal
Water Reservoir	Unknown	Concrete
Water line under road	Poor - not functional	Consists
Irrigation Systems (5 locations)	Varies	
SUMMIT	Variou	
Summit Plaza	Good	Concrete paver
Summit Retaining wall	Moderate	Concrete block
Vault Toilet - CXT	Good	CXT
Drinking Fountain	No functioning	Concrete and metal
Lava rock steps	Good	Volcanic rock
Communications vault	Moderate	Volcanic rock and metal
Mountain Identifier	Good	Brass on stone base
Foley Monument	Good	Stone and bronze
Interpretive Panels (5)	Poor - vandalized	Plastic and steel
Drinking Fountain	Poor - not functional	Concrete and metal
EAST BUTTE	Poor - not functional	Concrete and metal
Larkspur Trail	Good	Acabalt
Exercise Area	Demolished in fire	Asphalt Wood stretching apparatus
		Wood stretching apparatus
Exercise Area Retaining Wall	Good Domelished in fire	Stone and concrete
Interpretive Exercise Kiosk Host site	Demolished in fire	Plastic and wood
	Good	Asphalt pad and utility hookups
Host site storage shed	Good	Wood shed, asphalt shingle roof
Bathroom - plumbed	Good	CMU block
Playground	Good	Prefabricated structure
Gazebo/Picnic Shelter	Good	Mixed
Picnic Tables (12)	Good	Wood and metal
Bob Bristol Trail Monument	Good	Bronze and stone
Interpretive Kiosk	Good	Wood
Flagpole	Good	Anodized Aluminum
Triangle Post and Rail Fence	Good	Wood
Entrance Gate to Parking Lot	Good	Metal
Drinking Fountain/dog bowl at Trailhead	Good	Concrete and metal
Drinking Fountain w dog watering at Park	Good	Concrete and metal
Host Post and Rail Fence	Good	Wood
WEST BUTTE		
Access Road to water facilities	Good	Asphalt
SOUTH BUTTE		
Post and Rail Fence along Hwy 20	Good	Wood
Entrance Gate to Summit Road	OK	Galvanized metal
NORTH BUTTE		
Gate	Poor - fallen down	Chain link

Figure 13: Facilities Inventory

- Improve amenities for seniors by making trails more accessible, replacing the exercise area and providing amenities in locations that seniors use often that encourage social interaction (the highest proportion of survey respondents were between 50 and 69).
- Enforce dog leash rules and consider building an off-lease area, as respondants both desired more dog friendly areas; and more dog control. Future improvements must balance these needs.
- Provide better wayfinding and information on-site and online. For local visitors, this need was clarified as better trail signs, distance markers and better website information for access and trailhead markers/amenities.
- Look for opportunities to expand programming by partnering with groups that have a stake and specific interest in the butte, such as trail running, health and natural history.



The playground in the Neighborhood Park

7 LAND MANAGEMENT

LAND MANAGEMENT

OPRD considers the relationships between State Parks and adjacent land owners, property owners and stakeholders to determine what is the best use of the park property. Adjacent property could be important for future use for recreation, resource or environmental conservation or to enhance the current or future use as a state park.

Because of the dense development surrounding the park, OPRD has identified no open property adjacent that makes sense for future recreational or natural resource use. However, there are four main land management/property owning entities to consider when thinking about the future of Pilot Butte: BPRD, Bend-LaPine School District, City of Bend and ODOT.

AGENCY INTERESTS

OPRD appreciates that Pilot Butte aligns with the agency's goals of providing and protecting outstanding natural, scenic, cultural, historic and recreational sites.

The opportunities in improving recreational function or park value lie in linking to other projects such as the city and BPRD's Larkspur Trail system, the city and school district's efforts to create "Safe Routes to School" paths, and the city's "Low Stress Bicycle Network".

OPRD also recognizes that Pilot Butte will continue to operate like a city park, especially as the city densifies as predicted along Highway 20/Greenwood. OPRD predicts increased use and maintenance of all facilities, increased desire for more urban recreational amenities such as splash parks, dog parks, pump tracks and playing fields. Collaboration and partnerships will be essential in providing a quality level of service that meets desired needs.

BEND PARK AND RECREATION DISTRICT

BPRD owns and manages 81 parks in the city of Bend, six within a mile of Pilot Butte. For locals, Pilot Butte park compliments the collection of smaller neighborhood and community parks.

Because of its location within BPRD's network of parks, Pilot Butte is often assumed to be another city park. Visitors can be frustrated by the relative lack of attention, oversight, enforcement and maintenance. As OPRD has different resource allocations for park management and upkeep, it can be difficult to keep up with city park levels of attention. For this reason, a strong collaboration between BPRD and OPRD has resulted in shared maintenance for elements of the Neighborhood Park and the Larkspur trail. This is essential, as aspects of Pilot Butte such as maintenance of the fields at the Neighborhood Park require different care and upkeep equipment, expertise and regimens than other parks within the state parks portfolio.

BPRD's 2018 Comprehensive Plan identifies a need within their "Needs/Unmet Needs Analysis" for natural area parks. In this context, preserving the natural park aspect of the butte is key to being a good partner to BPRD, helping to serve the local community's park needs.

OPRD would like to continue collaborating with BPRD on development and management of the Neighborhood Park.

OPRD sees opportunity to collaborate more with BPRD community programming, events, offering natural open space in the inner east side of the city where demographic data shows the percentage of poverty is highest in Bend.

BEND / LA PINE SCHOOL DISTRICT

The School District operates two schools directly north of the park: Juniper Elementary and Pilot Butte Middle School. This area includes some of the most challenging terrain in the park including a sloughing area of the cinder cone. It also contains a length of the Base Trail, which connects into the park and creates an important contiguous circuit trail.

Although the property lines divide the topographic area of the butte, Pilot Butte reads as a single land form and the two agencies have been managing it as such. Rangers monitor all trails encircling the butte, working with the school department in the case of issues that arise on school department land.

There is willingness on the part of the school district to participate in improvement of existing trails that would benefit students' "commute" to/from school. This work could coincide with renovation plans that are planned for the Juniper Elementary campus.

They have also approved the the proposal to construct an official trail that would connect the northeast portion of the Base Trail into the park. To date, how funding and construction efforts will be shared has not been defined. This work would be done almost fully on school district property. This would greatly benefit the Pilot Butte trail system by aleviating pressure on user created trails by building a well needed connection from school property to the summit.

CITY OF BEND

The City of Bend plans and manages zoning and transportation issues that intersect with the park. In 2002 the city exchanged approximately 19 acres of land along the east edge of the park with a private developer. The acquired land must be used for public recreation and serves as a natural space buffer between the active recreation functions of the Neighborhood Park and the neighborhoods. The city operates one water reservoir and leases access to two others on the butte.

Partnership with the City is key to keeping the reservoirs functioning safely within the public realm. This master plan recognizes opportunity in coordinating with the city on transportation efforts that improve active transportation to and around the butte.

Bend's Transportation System Plan aims to integrate the Plan's proposed access points at NE Derek and NE LaFayette into their network, reducing Pilot Butte as an active transportation barrier within the City.

OREGON DEPARTMENT OF TRANSPORTATION (ODOT)

ODOT's interest with Pilot Butte focuses on the safety of users of Highway 20/Greenwood Ave, and the right-of-way it maintains along the north side of this route. This primarily focuses on park signage from the roadway, stormwater, and vegetation maintenance.

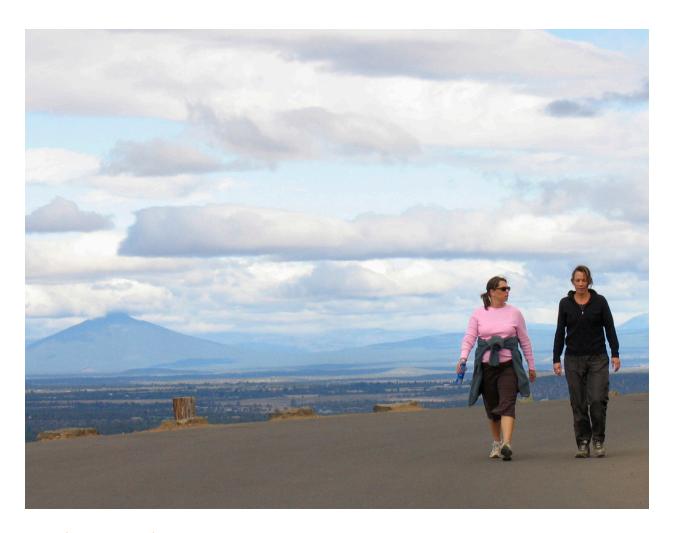
There are currently no large efforts planned with ODOT in regards to land management.

8 GOALS & STRATEGIES

GOALS AND STRATEGIES

Pilot Butte is a small park that serves two distinct purposes and offers two distinct experiences. It is both "nature in the city" and an "urban park."

The goals of this plan aim to tie together these two functions. Although visitors often come to use both aspects of the park with imperceptible distinction, they each are developed, managed and maintained with different lenses. Many visitors come to spend time solely at the sports fields or ride the Larkspur Trail while others come to bird watch, see the spring wildflowers or experience the vista. This is to say that neither function is primary. This plan aims to maintain these two well-loved aspects of the park while weaving them together as a contiguous whole.



Nature in the City: Plan elements focus on ecology and environment. They include the rock, soil, flora, fauna and views. The plan elements that address 'nature in the city' involve observing the landscape and wildlife. They encourage learning about the high desert eco-system, valuing and/or participating in restoration and conservation.

Urban Park: Plan elements focus on community and recreation with an emphasis on physical and mental health and social cohesion. The plan elements involve getting exercise, playing, gathering, and "commuting" to school and work.

The Master Plan Goals support OPRD's mission to provide and protect outstanding natural, scenic, cultural, historic and recreational opportunities. They do this by focusing efforts on the amenties, landscapes and values that are already cherished by visitors.

Pilot Butte Master Plan Goals:

- Build upon what works
- Enhance and improve what we value
- Restore and protect natural resources
- Be open and inclusive to diverse and developing visitor groups

Build upon what works

This goal builds on well-loved amenities and strong partnerships. This goal focuses on maintenance and improvement of well-loved trails and facilities. Pilot Butte's trails are the recreational skeleton of the park. The summit viewpoint is the historic origin of the park continues to define its relevancy. The Neighborhood Park and Larkspur are strong local connectors and amenities. This goal also aims to build and maintain partnerships with local volunteer groups and agencies by cultivating and participating in synergistic goals and efforts.









Enhance and improve what we value

The public resoundingly informed us that Pilot Butte is valued for the nature and ecologies it supports in the city; the related recreational activities that support social and physical health; and the scenic nature of the park with views from the butte, as well as views to the iconic landform. The public also pointed towards the importance of Pilot Butte as a shared community space that offers opportunities to improve the equity of access to the outdoors and participate in positive and progressive community development such as improving active transportation networks and safe routes to school. This is clear in the partnerships with local public institutions. Its connection to residents is clear by the profound and diligent involvement of local citizens and neighborhood associations. This plan keeps these values at the forefront when proposing improvements and making recommendations.



Restore and protect natural resources

Pilot Butte is at risk of being 'loved to death.' The impact of increasing visitorship on the butte is a challenge that this plan aims to address. Although it is difficult to regulate access to this park, this plan proposes approaching this goal from two angles: by explicitly addressing and directing visitor impact, and repairing and restoring existing natural resources.

Be open and inclusive to diverse and developing visitor groups

The local, regional and statewide demographics are dynamic and developing, and are projected to continue to change into the future. This plan aims to help Pilot Butte be responsive to this changing human landscape. By focusing on inclusivity we better serve the public overall by creating a place that meets the needs of many. Inclusive public park space encourages social mixing, civic participation, recreation and a sense of belonging and responsibility to place.

This plan recommends the following actions to improve inclusivity and support diversity:

- Reaching out to diverse groups for input on the plan and for subsequent public outreach endeavors.
 Diversity, by definition, is an encompassing term. It considers age, race, sexual orientation, ability/disability, religion and socio-economic status (among others).
- Improving all access points to accessible infrastructure as universally accessible.
- Improve required areas to meet ADA standards if not already up to standard.
- Improve trails to meet ABA standards where topographically possible.
- Improve signage to be more universally welcoming, graphic and easily interpreted.
- Improving gathering spaces to meet the needs of diverse cultures.



9 PLAN COMPONENTS

PLAN AREAS

For the purposes of the plan, the park is divided into four areas: The west base, the summit, the east base and the slope terrain. The east base is broken into its northern portion, which includes the meadow, playing field, playground and picnic shelters. The southern portion contains the parking lot and trailhead.



Figure 14: Plan Areas

SUMMIT

vault toilet

6 Construct new universally accessible

Create summit trailhead adjacent to

8 Implement parking improvements

9 Improve interpretive signage

summit plaza and trail

EAST BASE - NORTH

development

Derek Drive

Zone meadow for future recreation

Formalize access to the Park at NE

Increase flexible gathering space

around picnic shelter

EAST BASE - SOUTH

18 Replace Trailhead

17 Reconstruct the Exercise Area

500 feet

10 Restore native landscape around

11 Bore new water line to summit

loop trail ringing summit

WEST BASE

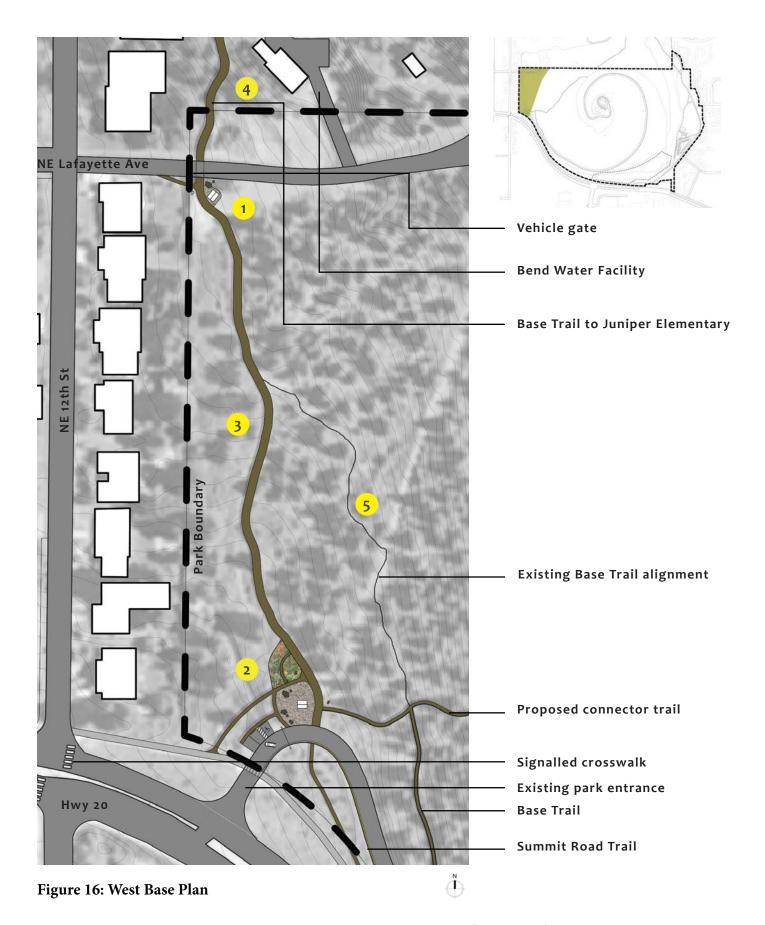
- 1 Create new trailhead at entrance at Lafayette
- Create new trailhead at Greenwood/Summit Road entrance. Create trail connection from Greenwood crosswalk and sidewalk to trailhead and Base Trail
- 3 Re-align and improve Base Trail from Greenwood to northern boundary, continuing to Juniper Elementary gate.
- Improve trail to meet universally accessible guidelines for a shared use path (Access Board Trail Guidelines)
- 5 Continue trail improvements across northern boundary until Juniper Elementary gate (see Trail Plan)
- Obliterate and revegetate existing Base Trail alignment and associated user created trails

KEY

- Formalized Ped/Bike Entrance
- H New / Improved Trailhead
- P Public Parking
- ADA Parking
- Development Zones
- Fire Restoration Zone
- Greenspace

PILOT BUTTE MIDDLE SCHOOL JUNIPER ELEMENTA ity of Bend Water Facilities PARK BOUNDARY NE Summit Road and Trail Summit Viewpoint 2 ADA Spaces 2 ADA Parking Spaces 3 Adult Exercise Area and 4 ADA Spaces Base Connector Trail Fire Restoration Highway underpass

Figure 15: Development Plan





Nature-play elements can be integrated into the Base Trail on the west side where it becomes an important trail for students commuting to school.

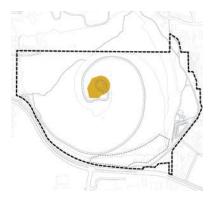
Recommendations

- Create new trailhead at entrance at Lafayette.
 - Install directional signs at Lafayette and 12th Street.
 - Connect base trail to pedestrian trail around city gate.
 - Add kiosk with trail map, bicycle rack, trash can, dog waste bags.
- **2** Create new trailhead at Greenwood/Summit Road entrance.
 - Add kiosk with trail map, seating, bicycle rack.
 - Work with natural resource partners to plant an interpreted butterfly garden along trail children walk to school.
 - Create 2 ADA parking stalls + one staff vehicle space.
- 3 Re-align and improve Base Trail from Greenwood to northern boundary.
 - Create new trail connection from Greenwood sidewalk to new trailhead at Summit Road entrance.
 - Realign official trail to route along western edge of park.
 - Improve trail to meet universally accessible guidelines for a shared use path (Access Board Trail Guidelines including a 5 foot minimum width).
- 4 Continue trail improvements across northern boundary until Juniper Elementary gate (see Trail Plan).
 - Create nature play trail from Summit Road trailhead to north boundary.
- Obliterate and re-vegetate existing Base Trail alignment.

SUMMIT

The summit has been a loved destination on the butte since its inception as a park. The view of the city and region is the star of the show at the summit. It is also one of the easiest and most dramatic places to get to on the butte. For this reason, people of all ages and abilities come to the summit.

OPRD has the opportunity to improve the summit to include



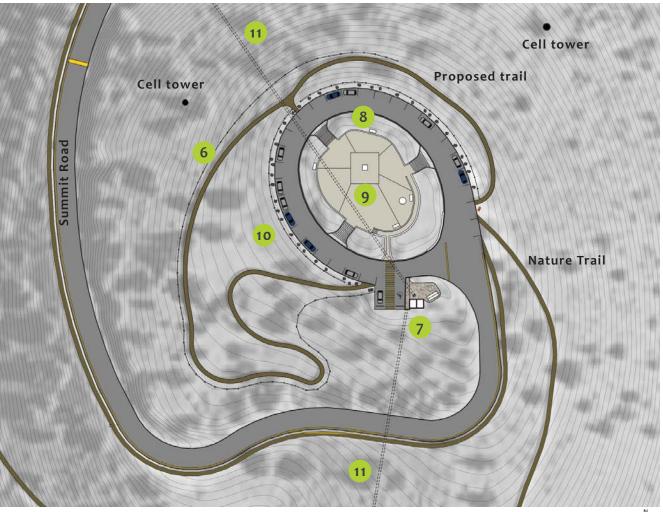


Figure 17: Summit Plan



Integrated interpretive art similar to that at Bybee Lakes Park, Portland can be used at the Summit.

more diversity of experience for all, while protecting the natural resources that are degraded by visitors by guiding them to quality experiences and viewpoints. This occurs by:

- Capitalizing on the views in a greater diversity of locations around the summit via a new trail that meets universal accessibility standards.
- Improving summit infrastructure, namely water access and a trail map.
- Adding fencing, boulders and native shrubs to direct visitors and consolidate impact to predetermined areas.
- Improving/replacing interpretive elements.

Recommendations

- 6 Construct new universally accessible loop trail around the summit.
 - Construct fence to guard against further landscape degradation against parking area.
 - Construct fence along down slope of trail to prevent user trail creation to road.
- 7 Create summit trailhead adjacent to vault toilet.
 - Install kiosk with universally accessible trail information and parking time limitation.
- 8 Implement parking improvements.
 - Stripe spaces to encourage efficient use of space.
- 9 Improve interpretive signage.
 - Replace four panels.
 - Enhance and integrate interpretive facilities into the built environment through public art and educational elements.
- Restore native landscape around summit plaza and trail.
 - Restore native vegetation around summit plaza.
 - Plant native vegetation (shrubs) in areas where user created trails are likely to form.
 - Replace boulders around parking area.
- Bore a new water line from the summit to city water supply. Location of line to be determined (2 options shown).

EAST BASE / NORTH

This area has been deemed a location with high suitability for development because of its low natural resource value, flat topography and proximity to existing park amenities. The space can be reached by the Larkspur Trail and the parking lot, accessible to people with disabilities. It is adjacent to Pilot Butte Middle School and the eastern neighborhoods. It is a connective, people-oriented space.

The southern portion of this space currently includes the playground, covered picnic space, bathrooms and sports field. These amenities were installed in the last decade and are in good condition.

The north meadow is currently undeveloped. It contains many invasive species and is of low natural resource value. Expansion into the northern meadow is the intuitive location for future development. It is prime for active recreation, focusing on health, wellbeing and gathering. This may include (but is not limited to) a dog park, a bicycle pump track, a skate park or a gathering space.

During the public process no pressing or conclusive need arose for developing new amenities in the north meadow. The programming of undeveloped space should be considered in relation to active recreation needs in the local community and shall consider what nearby parks have and need. In order to prepare for future development, this plan proposes a universally accessible figure-8 trail that connects with the Neighborhood Park; outlining and preparing for future development; and planting of native trees that will take time to grow while providing native habitat in the meantime. A natural space corridor sits on the east side of the park, providing buffer space between the Larkspur Trail and the park with the neighborhoods. This should be maintained and managed for invasive species as it is a natural space "gateway" to the park.



The east base playground, field and picnic area are a popular destination.



The degraded north meadow is an intuitive location for future development.

The playground and sports field are high quality amenities installed by BPRD and maintained in partnership with them. Along with the bathroom and picnic shelter, this area is a central gathering space for the park and is used by a diversity of visitors who range in age, family size, socio-economic and cultural background. The plan proposes expanding this successful space by adding flexibility in how spaces are used.

Recommendations

- Target the meadow for active recreation in the future.
 - Work with BPRD to plan for and develop future needs of the local community; A dog park has been leading idea.
 - Construct asphalt path around meadow connecting to Larkspur Trail.
 - Plant native shade trees along path edges.
- Formalize access to the Park at Derek Drive.
 - Install mountable curb.
 - Install universally accessible trail connecting Derek Drive to the Larkspur Trail.
 - Install wayfinding that welcomes and orients.
- 14 Increase flexible gathering space around picnic shelter.
 - Construct seat walls that allow for people to participate in various park activities simultaneously such as viewing the sports field, informal gatherings and supervising the playground.
 - Expand picnic space with universally accessible picnic tables.
- Reconstruct the Exercise Area Location Option 1

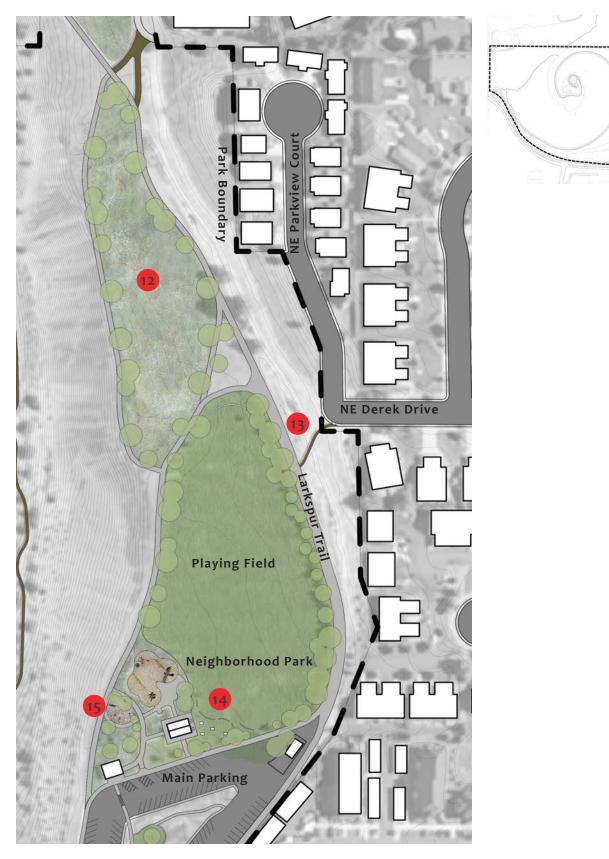


Figure 18: West Base - North Plan

EAST BASE / SOUTH

This area includes Pilot Butte's parking lot and the southern connection of the Larkspur Trail to the passage under Greenwood, thus making it an important access point and movement corridor. This area is an important jumping off location for a variety of experiences including hiking on trails, working out in the exercise area, and visiting the playground and sports fields.

The plan proposes to improve multi-modal and active transportation by focusing on improvements around the Larkspur Trail. Parking area will not be expanded in this plan. Future parking needs shall be evaluated when the need arises and will be analyzed in conjunction with adjacent parking opportunities (lots south of the butte) as well as in partnership with the residential apartments to the east.

Recommendations



Reconstruct the Exercise Area - Location Option 2

- Replace with similar manufactured exercise equipment.
- Consider equipment tailored towards senior citizens as that is the predominant user group.
- 18

Replace trailhead.

- Rebuild the kiosk to include community board and wayfinding.
- Provide shade and seating.

SLOPE TERRAIN (including fire area)

The slope terrain includes the majority of the butte's acreage (approximately 100 acres of the 114 acres). It includes a diversity landscapes including high resource value areas along the north, east and west slopes (see Development Suitability Map – pg #), as well as areas highly impacted by human use thus having low resource and conservation value (the mining scar and water resource facilities). It also includes the area damaged by the July 2018 fire, as well as the Summit Road and Trail.

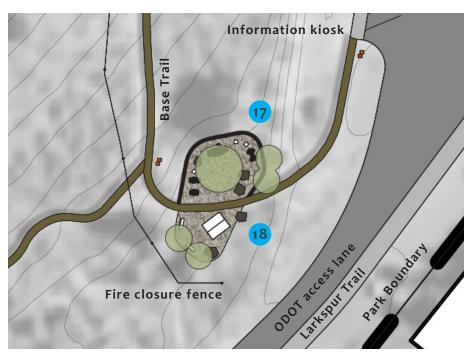




Figure 19: East Base - South Plan

The majority of the visitor experience opportunities in these areas aim to reduce natural resource impact and restore trails and landscapes. Interventions that address the trails specifically are found in the Trail Plan (see pg #). Interventions that address natural resource issues on the slope are found in the Natural Resource Plan (see pg #).

Recommendations

Fire restoration area (near-term)

- Install a semi-permanent fence around impacted zone.
- Install interpretive signage to be placed at closed sections of the base trail that educate on restoration efforts and the role of fire in the ecosystem.
- Implement *Fire Rehabilitation Project Plan* to address natural resource issues (see Natural Resource Plan).

Fire restoration area (long-term)

- Repair the Base Trail through the burn area (see Trails Plan)
- Once the burn area has recovered to a point where it can withstand visitor impact, add interpretation of the recovering landscape.

ACCESS PLAN

Although Pilot Butte is a valuable large area of public greenspace, it also acts as a barrier to urban connectivity. The west side of the Butte abuts the city grid. The east border abuts a more suburban street network. With approximately 1.8 miles of edge, there are only two universally accessible entry points. In locations where the street network intersects with the park, users have already made their own trails and entry points.

OPRD has the opportunity to aid in efforts to bring more pedestrians and cyclists safely through the city using Pilot Butte's trails. Ultimately this means more visitors arriving on foot and by bicycle and less parking pressure.

Two local non-motorized transportation planning efforts are relevant to Pilot Butte:

- City of Bend Low Stress Bicycle Network
- BPRD's City Trails (Larkspur Trail and Big Sky Trail):
 BPRD has identified 63 miles of planned trails within the city that connect people to their parks. The Larkspur Trail is an excellent example of one of these trails that links communities north and south of Pilot Butte to and through the park. The Big Sky Trail is a proposed trail that will link Big Sky Park on the east boundary of the city to the Larkspur Trail where it intersects with Pilot Butte Middle School.

Pilot Butte's Access Plan aims to:

- Expand access locations to improve walkability/bikability from neighborhood locations.
- Assure that all access points are universally accessible where they connect to accessible facilities.
- Improve amenities and wayfinding at entry points to improve legibility, direct/consolidate impact, improve experience.
- Ensure development supports and coincides with local connectivity efforts.

500 feet

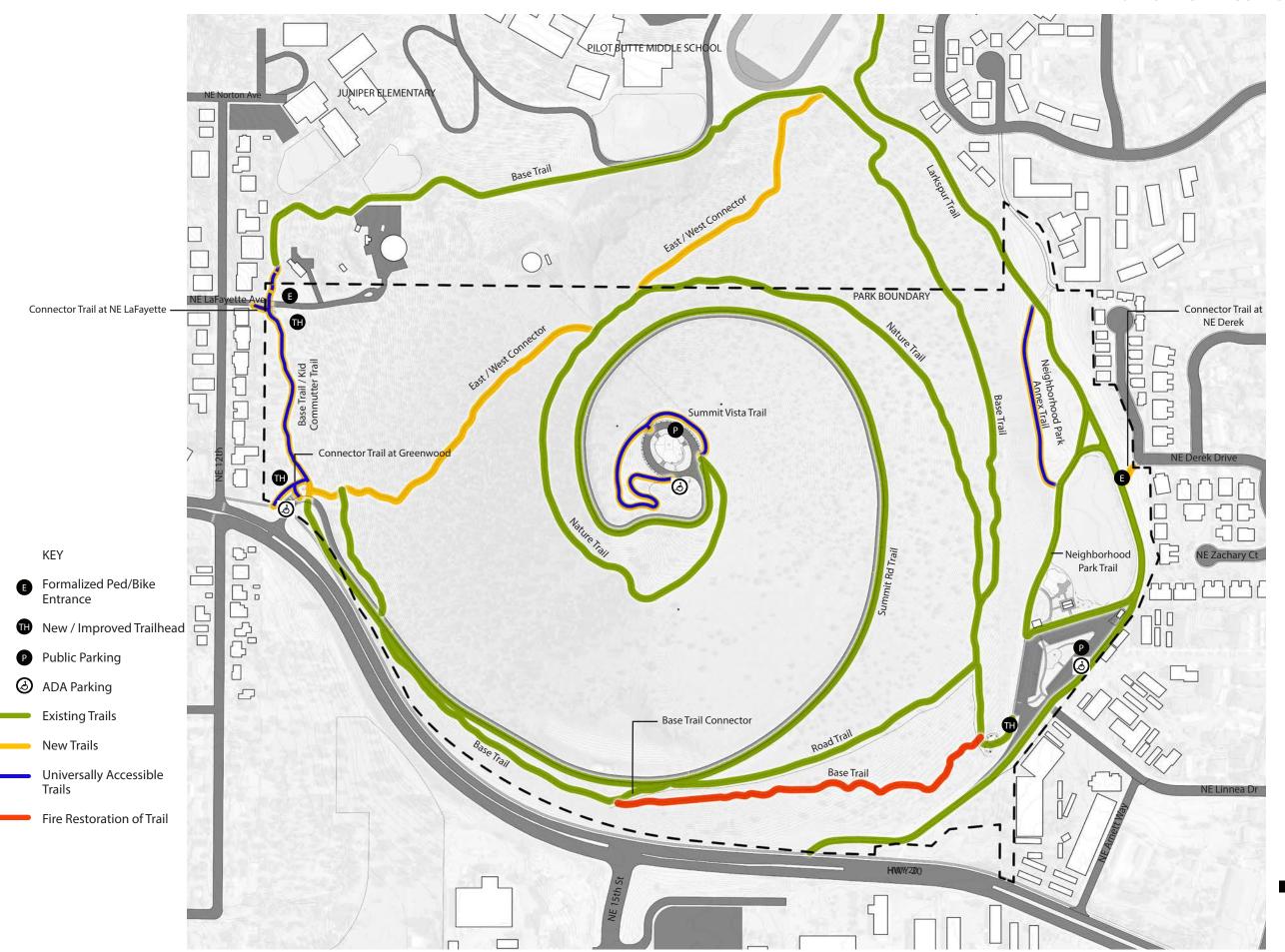


Figure 20: Access and Trail Plan

Recommendations

- Develop access at Derek Drive *
 - Install mountable curb from Derek to sidewalk.
 - Build compacted universally accessible trail that connects to the Larkspur Trail.
- Develop trailhead at Lafayette Avenue *
 - Develop a pedestrian connector trail around the vehicular gate; connect this to a new trailhead.
 - Install a trailhead with a kiosk with trail information, bike rack, trashcan, dog waste bags.
- Develop trailhead at Greenwood/Summit Drive entrance
 - Develop trail connection to trailhead from sidewalk on Greenwood
 - Install trailhead with a kiosk that has trail information, bike rack, trashcan, dog waste bags.
 - Add ADA parking.

^{*}Access points connect to the city's low stress bicycle network, giving people to option to safely access the park by bicycle.



Current entrance to Park off of Lafayette St will benefit from improved wayfinding and trailhead amenities.

TRAIL PLAN

The prevalence of user-created trails on the butte demonstrates that visitors are desiring more trail connections than exist currently. The key to reducing user created trail damage is by providing sanctioned, quality trail connections where needed. This includes visitors who are traversing the park as part of a larger connection through the city, as well as those who come to recreate in the park.



Pilot Butte's Trail Plan aims to improve existing trails for safety and sustainability through the following:

- Create new trails to link current key access points and destinations.
- Develop, modify or adapt trails to have more diversity of difficulty and experience overall at the Butte.
- Modify or augment trails for universal accessibility.
- Cut off, obliterate and restore user created trails to natural state.
- Improve the Summit Road Trail for safety and experience.



The Base Trail directly after the fire (top), and as restoration efforts began (middle).

NEW TRAILS

- Develop new trail to connect the Base Trail from the northeast side of the butte (on Bend LaPine School District property) to the Nature Trail.
- Connect the Base Trail on the southwest to the Nature Trail.
 - These new trail sections would replace a user-created trail.
 - Expand the diversity of trail type on the butte.
 Specifically, add low gradient loops where possible, in accessible locations.
- Develop a Summit Loop that encircles the flat summit topography
 - Develop trail section around proposed northeast active recreation site to create figure-eight universally accessible trail.
- Develop universally accessible linkages from Derek Street and Lafayette Avenue to established park trail system.
- Develop connector trail from Base Trail to Summit Road

Trail/Road Trail intersection on south side of the butte, to complete full trail circumnavigation of Base Trail while restoration efforts are underway.

- Decommission/obliterate/restore all others.
- Install signage to inform and educate.

EXISTING AND IMPROVED TRAILS

Slope and Summit

- Improve the Summit Road Trail
 - Use visual and tactile cues to keep vehicles and pedestrians in their lane.
 - Install sign to reduce speeds and add speed bumps on the Summit Road.
 - Create areas along the Summit Road for visitors to stop and enjoy 360° views of the mountains, city and region. This may include seating and view interpretation.
- Perform maintenance and upgrade trails to meet Forest Service trail standards and best practices on the Nature Trail, slope sections of the Base Trail and Road Trail to improve safety for visitors and environmental sustainability of the resource while maintaining a natural experience.

West

- Base Trail: Create an accessible, durable trail that connects Greenwood Avenue to Juniper Elementary School.
 - Incorporate nature play elements along the alignment.

East / South

- Remove excess asphalt on Larkspur Trail to constrict paved trail to 12' maximum from parking lot to underpass.
 Restore vegetation on disturbed edge.
- Decommission trail impacted by fire for period of five years to protect trail. Reinforce with fencing. Use fencing style found elsewhere in park.
- Reconstruct fire impacted section of the Base Trail.





Decades of use have caused serious erosion issues. Legitimizing two well used social trails will eleviate pressure on others.

Trails	Length (miles)	Surface	Universally Accessible
New Trails	(ITIIIes)	Surface	Accessible
New Summit Vista Trail	0.20	soft	X
Connector at Lafayette	0.02	soft	X
Connector at Derek	0.02	soft	X
Connector at Greenwood	0.02	soft	X
East to West Over Butte (on property)	0.47	soft	Λ
East to West Over Butte (total)	0.27	soft	
Neighborhood Park Annex Trail	0.13	asphalt	X
Base Trail Connector	0.04	soft	
West Base Trail / Kid Commuter Trail	0.13	soft	Х
TOTAL	1.31	3311	
	,,,,,		
Improvement of Existing Trails			
Base Trail	1.75	soft	Х
Nature Trail	0.90	soft	
Road Trail	0.23	soft	
Summit Road Trail	1.08	soft	
Larkspur Trail	0.58	asphalt	
TOTAL	4.54		
Decommissioned Trails			
Baseline through fire zone	0.28	soft	
User created trails	5.72	soft]
TOTAL	6.00		
Summary			

Summary			
New Trail length	1.31		
Improvement of Existing Trail length	4.54		
Decommissioned Trail length	6.00		

Figure 20: Trail Outcomes

UNIVERSAL ACCESSIBLE TRAILS

Three trails are proposed to be improved to be universally accessible. Each offer a different experience. The Summit Vista Trail has the potential to be a low gradient trail with 360° views of the region from a natural vantage point off of the Summit parking area. The west Base Trail could offer a short, meandering trail through more densely growing juniper forest. The Larkspur Trail on the east side of the butte offers an easily traversed paved trail experience through a more urban park setting. All universally accessible trails will follow United States Access Board standards (Chapter 1017) for ABA trails and have the following:

- Gradient maximum as defined by ABA standards;
- Resting intervals and passing spaces as defined by ABA standards;
- Clear tread width of 36" minimum;
- Firm and stable compacted and even surfacing (aggregate or paved);
- ADA parking



Improving this well used social trail at Derek Drive will help cyclists and pedestrians of all abilities access the park.

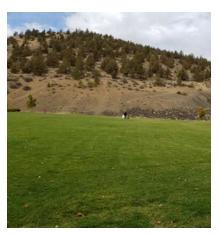


Existing trails are improved and new trails are designed to provide a variety of trail experiences for all users.

NATURAL RESOURCE PLAN

The natural resource plan aims to maintain the natural features that visitors value by focusing on restoring and maintaining the native systems and ecologies.





Compare the historically sparse juniper on the east side of the butte from the turn of the century (top) to today (bottom).

INVASIVE PLANT MITIGATION

Invasive and exotic plant species are common on the Butte. Humans have altered the landscape by bringing invasive seeds and altering fire cycles, which trigger soil erosion. These disturbances allow invasive weeds to overtake native habitat. The plan aims to control existing invasive plants that alter habitats, and prevent new introductions and establishment. This creates habitat for invertebrates, particularly species that are closely dependent on native plant species. The following is a list of actions to encourage native plants to again thrive:

- Use multiple methods to control invasive populations.
 (mechanical, chemical and biological).
- Emphasize prevention, risk assessment, early detection and quick control to prevent new invasive species from becoming established.
- Educate neighbors about invasive plants to avoid in home landscaping.
- Implement strategies to eliminate the use and creation of user-created trails to prevent weed seed transmittal and habitat restoration.
- Work with partners to control and educate about invasive weeds.
- In sage brush plant communities use "assisted succession" strategies that use low seed rates of non-invasive, nonnatives in conjunction with native plant seeds as an intermediate step in rehabilitation.

JUNIPER ENCROACHMENT

Thinning dense stands of juniper on the north side of the butte is critical for restoring habitat for native plants and wildlife. This will allow more sunlight for native plants and grasses to thrive. This plan recommends the following actions to improve habitat on the north side:

- Retain "habitat trees," defined as mature junipers and dead snags. Snags are used by cavity nesters - birds and bats, and can be left standing where they do not pose a risk to visitors or infrastructure.
- Continue young juniper thinning in western juniper woodlands habitats. Remove young juniper, keeping all trees over 16" in diameter. Prune saplings.
- Use chips on trail. Do not scatter chips so as to maintain native grasses.



The butte has been highly impacted by humans over time. Rapid urbanization and conversion of habitat to development threatens habitats and creates habitat fragmentation. Currently no "priority habitats" or protected species under the Endangered Species Act (ESA) exist on site. Some at-risk flora and fauna species have been documented or have potential to exist on site; ongoing resource management efforts prioritize these species. Mule deer winter range is particularly vulnerable in the region around Pilot Butte.

- At-risk species include three bird species and five vascular plant species. Vegetation transects have been done previously to assess plant diversity on the butte, while a variety of survey methods, mostly informal, have been used to identify fauna on/around Pilot Butte. Future monitoring will help us track these species over time and ensure that habitat conservation efforts are appropriately addressed.
- Work with partners to increase connectivity between habitat patches through the city, including Pilot Butte.
- Create education and interpretation opportunities of native ecologies on the butte.
- Work with local schools to use Pilot Butte as a "laboratory" for study of ecologies.
- Reduce user-created trails and keep hikers on established, official trails and decrease surprise interactions of humans and wildlife, which will increase habitat value.



Mature habitat tree.



Opportunities for increase native trees and shrubs along bike paths to decrease habitat fragmentation.





- Work with ODFW to identify wildlife issues and support wildlife programs. Reinstate songbird nest box program with ODFW involvement if possible.
- Create pollinator garden on the summit and create native milkweed garden near trailhead kiosk. This will provide native nectar and host plants to provide and/or enhance resident and migrant habitat for invertebrates, which also may have positive impacts higher up the food chain. It will also provide an opportunity for visitors to see to small wildlife.
- Consider working with city to explore moving fireworks display. This will increase habitat value by decreasing a large disturbance.
- Work with the city and BPRD to designate linear lands (bikeways or other corridors) that connect into Pilot Butte as wildlife paths. Plant native tree species in these corridors to encourage avian routes from the river and peripheral open spaces to Pilot Butte.
- Keep updated species records to track the presence, absence, and population health of species which can be used in management decisions and research.

OUTREACH AND EDUCATION

- Involve schools in projects including research, monitoring (with trail cams, etc.), pollinator and monarch gardens monitoring and maintenance, and growing native plants for restoration. This will build a sense of park ownership for children and in the neighborhood in general, and increase knowledge about the wildlife and plants in the park. The value of the park for wildlife increases when research leads to habitat enhancements.
- Nurture a habitat-oriented "friends" group to assist in education, restoration and monitoring. This will increase detection and control of invasive species and strengthen relationships between OPRD and community.

FIRE REHABILITATION AND MITIGATION PLAN

Since the major fire in July 2018, the major components of the rehabilitation include woody debris management, invasive annual grass suppression, additional noxious weed treatments, seeding of native species, and planting of shrub plugs.

Near-term fire rehabilitation interventions:

- Chip woody debris and use to prevent erosion and apply to trails.
- Pile woody debris for habitat.
- Retain downed logs for habitat.
- Treat affected area with post-emergent herbicide to control invasive annual grasses.

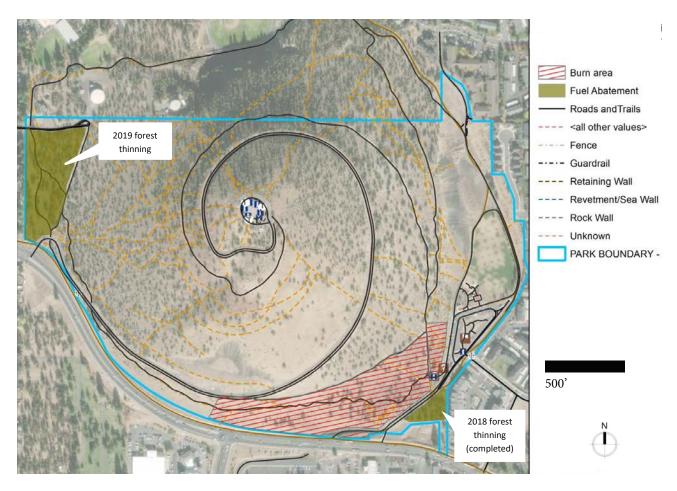


Figure 22: Fire Rehabilitation and Mitigation Plan



- Spot spray to control weeds.
- Broadcast seed with native grass mix.
- Supplement revegetation with planting plugs and shrubs to facilitate natural succession and deter off-trail foot traffic.

Mid and long term fire rehabilitation interventions:

- Perform ongoing weed control.
- Plant seeds and plugs of native vegetation to help establish mature plants more quickly.
- Perform fuel abatement work on four acres located at west boundary of park.

Future fire mitigation:

- Plan fuel reduction projects considering site specific conditions and goals.
- Work with homeowners to reduce the vulnerability of their property while maintaining quality habitat.

WAYFINDING, SIGNAGE AND INTERPRETATION

Compared to other parks in the area, Pilot Butte is relatively large and has a variety of entry/exit points as the park borders neighborhoods, schools and a major road. Because it is a natural park in the middle of the city, it serves to introduce people to the natural environment and a sense of wilderness. It may be the first place where they hike a trail through sage brush or see wildlife. It bridges activities of typical urban parks with activity associated with more remote locations and wilderness, allowing many visitors to "dip their toe" in a place that feels natural and wild yet is also easy to navigate and feels safe. Signage and wayfinding is key to forming this bridge.

Signage and wayfinding is important to helping visitors navigate the trails easily and safely. It gives OPRD the ability to welcome people, to direct and manage impact, and to educate and inform.

Recommendations

- Integrate technology into wayfinding. For example, offer maps via a mobile app or code. This will help reduce or eliminate the need for paper maps which are wasteful, costly, and difficult to update promptly.
- Develop wayfinding themes that are graphic in nature to help communicate with visitors who speak different languages or have varying degrees of literacy.
- Use Spanish phrases on signage. At a minimum, use Spanish phrases on signs meant to welcome visitors.
- Locate a wayfinding sign at all trail intersections.
- Provide comprehensive trail maps at all trailheads.
- Develop universally accessible trail signage. Indicate length of trail, maximum slope and surface type to help visitors with disabilities understand trail options.

FACILITIES AND UTILITIES PLAN

Pilot Butte has a mix of aging and defunct infrastructure and new, well maintained infrastructure. For OPRD to maintain as high quality amenities as possible, emphasis will be on repairing, maintaining or finding new solutions for critical infrastructure such as water lines, roadways and restrooms. As these interventions often come with large capital costs, their implementation will occur over time, prioritized via an algorithm that takes into account urgency and cost evaluation.

Recommendations

Water Line to Summit: This improvement has been deemed critical for both health of visitors and maintenance of the summit viewpoint.

- Abandon the existing line under the Summit Road.
 Directionally bore a new water line directly from the south water reservoir to the summit.
- Re-pipe to water fountain.
- Create spigot for facility cleaning.

Summit Road Improvements: ORPD has decided that maintaining two-way vehicular access to the summit is a top priority, given its historic and current popularity. It also improves accessibility for all. Although re-grading the roadway to help drain stormwater from the road downslope would disperse stormwater more uniformly over the length of the road, this would be too costly for the added benefit. For this reason improvements to the summit road will be routine and minimally invasive, including improving green stormwater techniques along the existing alignment. The following are recommended actions:

- Improve stormwater drainage along upslope drainage corridor, using techniques that encourage on-site infiltration where possible. This may include culverts periodically under the roadway to infiltration basins where topography allows.
- Routine resurfacing to maintain a minimum 20' wide path of travel with two 10' lanes divided by painted line.
- Work with partner groups to accomplish discreet development projects such as:
 - Benches dedicated in memory to local citizens
 - Local trail running group kiosk development

MANAGEMENT PLAN

Pilot Butte is a park that with elements of shared management and decision making among partners. Leveraging what others do well and partnering on projects that impact a variety of stakeholders is an intelligent way to implement well woven solutions with buy-in and shared responsibility.

This plan proposes that OPRD form a local team of partners made up of the three major public stakeholders in the butte: OPRD, BPRD and Bend-LaPine School District. This team will be spearheaded by the Pilot Butte park manager who will organize meetings twice a year to discuss overlapping and larger issues of planning, management and implementation.

TYPE AND LOCATION

PLAN GOALS

VISITOR EXPERIENCE INTERVETIONS	Improvement	New	Area	Build upon what works	Enhance and improve what we value	Restore and protect natural resources	Be open and inclusive to diverse and developing visitor groups
Construct fence along down slope of trail							
to prevent user trail creation to road		x	Summit			х	
Create trailhead kiosk at summit		х	Summit	Х	Х		
Summit Parking Improvements	х		Summit	Х			
Improve interpretive signage at summit	x	х	Summit	Х	х		
Restore robust native vegetation at							
summit	x		Summit		х	X	
Realign and improve Base Trail from							
Greenwood to northern boundary	х		West Base		Х		х
Obliterate and revegetate existing Base							
Trail alignment	x		West Base			Х	
Zone NE base for active recreation							
development (to be defined in the							
future)		х	East Base				
Picnic Shelter Improvements (seat walls,							
added picnic tables)		х	East Base		х		Х
Reconstruct exercise area	х		East Base	Х	Х		
Replace trailhead at East Base	х		East Base	Х	Х		
NATURAL RESOURCE ACTION							
Chip woody debris and use on-site							
(erosion and on trail surface)	x		Fire affected slope			Х	
Pile woody debris and maintain downed							
logs	x		Fire affected slope			х	
Treat affected areas with herbicides	х		Fire affected slope			Х	
Broadcast native seed mix		х	Fire affected slope			Х	
Plug and shrub planting		х	Fire affected slope			Х	
Ongoing weed control	х		Fire affected slope			Х	
Ongoing seeding and plug planting		х	Fire affected slope			Х	
Fuel abatement work on 4 acres located							
at west boundary of park	x		Fire affected slope			х	
Fire fuel reduction projects	х		Fire affected slope			Х	
Work with home owners to reduce							
vulnerability	х		Fire affected slope			Х	
Ongoing weed control	x		All			Х	
Education with partners	x					Х	Х
Assisted succession project	x		Sage brush commun	nities		Х	
Retain mature juniper and dead snags as							
'habitat trees'	x		Slope			Х	
Remove young juniper and prune							
saplings	х					Х	
At risk species monitoring	х					Х	
Work with partners to create habitat							
patch connectivity		х			Х	Х	
					1		
Interpretation around native ecologies		x			X	Х	
School programs that use Pilot Butte as a					1		
laboratory	х				Х	Х	

Figure 23: Summary of Interventions Visitor Experience and Natural Resources

TYPE AND LOCATION

PLAN GOALS

	Improvement	New	Area	Build upon what works	Enhance and improve what we value	Restore and protect natural resources	Be open and inclusive to diverse and developing visitor groups
TRAIL							
Construct new trail from NE Base Trail to							
Nature Trail		х	Slope	Х		Х	
New trail from Nature Trail to SW Base							
Trail		х	Slope	Х		Х	
Develop Summit Loop Vista Trail		х	Summit		X		Х
Develop trail around proposed NE active							
recreation site		х	East Base				Х
Develop universally accessible linkage							
trail from Derek to Larkspur		х	East Base	Х			X
Develop universally accessible linkage trail from Lafayette to the Base Trail		x	West Base	x			x
Develop connector trail from Base Trail			West Buse				
to Summit Road Trail/Road Trail					1		
intersection		×	Slope	х		x	
Decommission and restore unsanctioned		^	0.000				
trails		v	Slope			x	
Install signage to inform and educate			0.000				
about damage of user created trails		x	All		x	x	
Improve Summit Road Trail	х		,	Х	X		
Upgrade existing trails to meet trail	n e						
standards and best practices	x		Slope		х	x	
Remove excess asphalt on Larkspur							
between parking lot and underpass	x		East Base		x		
Reconstruct Base Trail impacted by fire.	x		Slope		х	х	
ACCESS							
Develop access at Derek Dr		х	East Base	Χ			Χ
Develop trailhead at Lafayette Ave		х	West Base	Χ			X
Develop trailhead at							
Greenwood/Summit Road		x	West Base	Χ			X
WAYFINDING AND INTERPRETATION							
Create web and apps for trail maps.		x	All		Х		
Develop universally accessible trail							
signage.		х	All		Х		Х
Integrate Spanish language signs into		v	All				x
new signs and on welcoming signage Provide wayfinding signage at all		^	All		^	1	^
intersections.	V		All		x	v	
FACILITY / UTILITY	^		All		^	^	
Directionally bore water line from							
reservoir (Easement 1 with City of Bend)		1			1		
to summit		х	Slope and Summit		X		
Add spicket at Summit		х	Summit		Χ		
Improve Summit Road surface	х		Slope		X		
Improve Summit Road stormwater							
drainage	х		Slope		Χ	Χ	

Figure 24: Summary of Interventions Trails, Access, Wayfinding and Interpretation, and Facilities / Utilities

10 REVIEWS & APPROVALS

LAND-USE AUTHORITY

Development of the park uses and facilities described in this plan for Pilot Butte State Scenic Viewpoint is regulated by the City of Bend under the provisions of the Bend Development Code and the City of Bend Comprehensive Plan. The Comprehensive Plan policies provide a basis for coordinated action by enabling various public and private interests to undertake specific projects with a consistent understanding of community expectations. An agreement was created in 1978 to create the Joint Management of the Bend Urban Area. This agreement established formal procedures to implement the Bend Comprehensive Plan consistent with state planning laws. In 1998 a new management agreement allows for the city to administer all planning and building codes within the Urban Growth Boundary.

This plan for Pilot Butte State Scenic Viewpoint has been formulated through the planning process described under OAR 736 Division 18 and OAR 660 Division 34. The planning process includes procedures for coordinating with affected local governments to assure that planned park uses and facilities are compatible with local government comprehensive plans.

LAND-USE COMPATIBILITY REVIEW

Review of a park plan for compatibility with affected local government comprehensive plans is required prior to OPRD's adoption of the plan for the park. When a draft park plan is ready for OPRD's adoption, OPRD requests that a local planning official provides written confirmation that the draft park plan is compatible with the local comprehensive plan. "Compatible" means that development permits may be approved for all of the planned park projects without first amending the local government's comprehensive plan, or that the plan for the park specifically states that a local plan amendment will be needed prior to construction of any project that is not compatible. If the draft park plan is determined to be incompatible, it may need to be changed to achieve

compatibility before it is adopted by OPRD. The plan for Pilot Butte will be reviewed for local land-use compatibility by officials at the City of Bend Planning and Growth Management

CITY OF BEND ZONING

Pilot Butte is zoned under two zones: the Public Facilities (PF), and the Residential Urban Medium Density (RM) zone.

PF (Public Facilities – Chapter 2.6 Bend Zoning Code): This zone covers almost the entirety of the park. RM (Residential Urban Medium Density): This zone covers approximately two acres in the north-east side of the park. This area came to OPRD as an exchange / lot line adjustment in 2003.

The area around Pilot Butte has some of the most diverse zoning and land use in the city of Bend. Five different zoning categories touch the boundaries of the park indicating a diversity of neighbors. Along the east and west boundaries land use comprises residential zones including Residential Urban Standard, Medium and High Density zones. Along the northern boundary, the land is zoned Public Facility and Residential Standard Density with an Ordinance 2315 Opt Out which amends the zoning map as part of a map alignment project with the Comprehensive Plan. These are parcels owned by the Bend-La Pine School District. The southern boundary is comprised of Public Facility and Commercial General zones. The neighboring zoning does not affect implementation of the concepts of the plan.

DEVELOPMENT PERMITS FOR STATE PARK PROJECTS

Prior to doing any work, OPRD must consult the City Planning Department to determine whether permits are required. For example, it is expected that replacing the burned exercise equipment and completing infrastructure projects such as the new water line will require permitting. The specific

requirements for obtaining development permits for a project, and the kind of local permitting process required, may vary from one project to another. The time required for completing the development permitting process may also vary; so the project manager will consult with the local government planning department to assure the permitting process is completed prior to the target date for beginning construction. Prior to issuing development permits the local government will review the project plans and specifications to assure the project proposed for construction is consistent with the description of the project in the park plan and with any applicable development standards in the local government's development code.

VARIATIONS FROM THE PARK PLAN

Under the provisions of OAR 736-018-0040, OPRD may pursue development permits for a state park project that varies from a state park plan without first amending the park plan provided that the variation is minor, unless the park plan language specifically precludes such variation. Any specific elements of planned projects that cannot be changed by applying the "Minor Variation" rule are indicated in the plan.

The OPRD Director must determine that a proposed variation from the park plan is "minor" using the criteria in OAR 736-018-0040. A minor variation from the plan, which is approved by the Director, is considered to be consistent with the plan contingent upon the concurrence of the affected local government.

REHABILITATION OF EXISTING STATE PARK USES

State laws allow OPRD to continue any state park use or facility that existed on July 25, 1997. (See ORS 195.125 and OAR 660-034-0030(8).) The laws allow the repair and renovation of facilities, the replacement of facilities including minor location changes, and the minor expansion of uses and facilities.

Rehabilitation projects are allowed whether or not they are described in a state park plan. These projects are subject to any clear and objective siting standards required by the affected local government, provided that such standards do not preclude the projects.

Prior to applying for development permits for a project involving a minor location change of an existing facility or minor expansion of an existing use or facility, the OPRD Director must determine that the location change or expansion is "minor" using the criteria in OAR 736-018-0043. A determination by the Director that a proposed location change or expansion is minor is contingent upon the concurrence of the affected local government.

NATURAL RESOURCE REVIEW AND APPROVALS

In consultation and coordination with local, state, and federal agencies and partners, OPRD has determined the need for natural resource stabilization and restoration in the park. Under the authority of OPRD Commission Policy 20-0 Natural Resource, and OP 50-09 Invasive Species Management, natural resource projects will be undertaken to manage and restore the landscape to benefit the natural resources. OPRD staff work with conservation agencies and interest groups and surrounding land owners to implement specific resource projects. Projects are developed and implemented under OPRD management as budget and staff allow.

CULTURAL RESOURCE REVIEW AND APPROVALS

OPRD recognizes that preservation and protection of cultural resources are an important aspect of land management. Management of historic and archaeological resources is in accordance with OPRD Commission Policy 20-02. OPRD has worked with tribal interests and local heritage organizations to identify how proposed park development could potentially affect cultural resources. OPRD works with the State Historic

Preservation Office in determining measures needed to protect any important cultural resources. OPRD will continue to work with tribal and local interests to ensure the cultural resources of Brian Booth State Park are preserved and protected.

EMERGENCY MANAGEMENT

OPRD strives to provide a recreation experience that is safe for staff, visitors and the surrounding community. The life-safety aspects of facility and infrastructure development are reviewed during the local government land-use permitting process. OPRD has additional responsibility beyond the local planning jurisdictions. Park management is responsible for the development of an emergency management plan under OPRD policy 70-04. The development of this emergency management plan will occur after land-use review of the park plan has been completed. Development of the emergency management plan is done through consultation and coordination with affected emergency service providers.

11 IMPLEMENTATION

The implantation strategy for the Pilot Butte State Scenic Viewpoint Master Plan update seeks to guide park managers and staff in prioritizing efforts over time. As Pilot Butte is within a dynamic environment, it is impractical to build a prescriptive implementation plan. Flexibility and responsiveness is paramount. ORPD also realizes that funding and schedule constraints make it impossible to achieve all that is desired out of the plan in the near term.

OPRD and its partners will need to reassess priorities periodically to evaluate if they remain the same or if a course change is needed.

This plan aims to identify key projects and interventions in four categories:

- 1. Projects where implementation is critical to the functioning of the park. These are projects that address critical infrastructure, safety, natural resource security. The agency will be prioritizing these projects for funding, and preparing for their implementation in the near term (0-5 years).
- 2. Projects that have urgent public need. These are projects that the public identified as critically important to fulfilling the goals of the master plan and creating/maintaining a vital park. The agency will prioritize these projects for funding, to be accomplished in the near to mid term (0-10 years).
- 3. Projects that have high value and higher complexity. These are projects that the public supported strongly but do not have critical need or immediate urgency. They may involve larger funding sums and may be more complex in their implementation, requiring partnerships and/or other outside processes.
- 4. Ongoing efforts. These projects must be supported over time to be effective. They have less immediate urgency but the park must prioritize them in continued funding and effort in order to make them successful.

Projects whose implementation is critical to the functioning of the park:

- Bore new water line to the summit and restore water to fountain.
- Restore the fire-damaged landscape.
- Make Summit Road improvements.

Projects that have urgent public need:

- Replace the exercise area and fire impacted trailhead.
- Cut off and decommission larger and well used unsanctioned trails.
- Develop access trail at Derek Drive and Lafayette Avenue.
- Develop trailheads at Lafayette Avenue and at the base of the Summit Road Trail.

Projects that have high value and higher complexity:

- Make Base Trail improvements along the west side of the Butte.
- Build universally accessible trail at the Summit.
- Build universally accessible trail link north of the Neighborhood Park.

Ongoing efforts:

- Restore fire-damaged landscape (seed and plug planting).
- Control invasive plants.
- Cut off and decommission user-created trails.
- Integrate more inclusive language and graphics into wayfinding signage.

Periodic Management Evaluation

The plan defines the importance of working with partners to monitor change and need. OPRD partners have their fingers on different pulse points in the city and region. Through them the agency is able to gauge change, evaluate what is working and

where there is need. Collective goals are more easily achieved through partnerships. For example, trail work done in concert with the school district will more efficiently address the issue of unsanctioned user created trails that cross boundaries since both partners own considerable amounts of land on the butte. Addressing the issue will require building and maintaining trails throughout the topographic butte. Financial, volunteer and contractor resources can be shared, reducing the cost and effort for all partners.

One key proposal that has emerged from the planning process is the formation of the Pilot Butte Management Group. This group grows out of the Advisory Committee and will meet annually or bi-annually to discuss issues that affect Pilot Butte including construction ideas or efforts, issues that arise and events. The expectation is that the group will encourage the partners involved to inform one another, and reach out in their efforts to collaborate.

The meetings will be organized and led by the Tumalo Management Unit Park Manager.

This group includes the following partners:

- Oregon Parks and Recreation Department / Tumalo Management Unit
- Bend Park and Recreation Department
- Bend/La Pine School Department (including Juniper Elementary and Pilot Butte Middle School)
- City of Bend (this may include the Planning,
 Water or Transportation departments depending on the topics on a particular agenda)