

IMPORTANT: Any citizen may orally address the Parks Commission on non-agenda items during the Public Forum. Any citizen may submit written comments to the Commission on any item on the Agenda, unless it is the subject of a public hearing and the record is closed. Time permitting, the Presiding Officer may allow oral testimony. If you wish to speak, please out the Speaker Request Form located near the entrance to the meeting room. The chair will recognize you and inform you as to the amount of time allotted to you, if any. The time granted will be dependent to some extent on the nature of the item under discussion, the number of people who wish to speak, and the length of the agenda.



MEETING AGENDA

ASHLAND PARKS & RECREATION COMMISSION Trail Master Plan Update Committee April 27, 2018 The Grove, Otte-Peterson Room—1195 E. Main Street

10:00 a.m.

- I. CALL TO ORDER
- II. APPROVAL OF MINUTES FROM APRIL 20, 2018 (if available)
- III. PUBLIC PARTICIPATION & GUEST SPEAKERS
 - a. Open Forum
 - b. Review Any Public TMP Comments Received Since Last Meeting (All)
- IV. ADDITIONS OR DELETIONS TO THE AGENDA
- V. UNFINISHED BUSINESS
 - a. Continue Coordinating May 2 Open House for TMP Public Document Review (McFarland)
 - b. Continue Reviewing Chapter 10: Cemetery-Clay-Hamilton Creek Corridors (Heycke)
 - c. Continue Reviewing Chapter 13: "Trail Standards & Basic Design Elements" (Heycke/McFarland)
- VI. NEW BUSINESS
 - a. Committee Review of Chapter 11: Tolman Creek Trail Corridor (Chapman)
 - b. Committee Review of Chapter 18: Indigenous Peoples (Jensen)
 - c. Committee Review of Appendix C: Geology of Ashland: The Foundation of our Trails (Jensen)
 - d. Committee Review of Appendix D: Flora and Fauna in the Ashland Trails Area (McFarland)
 - e. Roundtable Discussion (All)
- VII. UPCOMING MEETING DATE
 - a. May 4, 2018
 - Siskiyou Room, Community Development Building—10:00 a.m.
- VIII. ADJOURNMENT—11:30 a.m.

CEMETERY-CLAY-HAMILTON CREEK CORRIDORS ROUTE DESCRIPTION

Cemetery Creek, Clay Creek, and Hamilton Creek are parallel streams less than one-half mile apart. A single trail system would serve a majority of the same users, with the goal to provide one multi-use trail to serve as a main corridor that may switch back and forth between the three subsidiary corridors. Additional linking to neighborhood routes would be needed to bring users to the main route. While a continuing goal is to provide a trail experience separated from automobiles, many sections of the main route may need to use bike lanes and intermittent widened sidewalks due to much of these corridors having been consumed by development occurring without securing public rights-of-way along the creeks. This main corridor would extend from the Bear Creek Greenway at the north end to the Ashland Canal, Oredson-Todd Woods, and Siskiyou Mountain Park at the south end. The distance is approximately two miles but this may increase as the trail necessarily weaves through the constraints of the existing urban routing.

Traveling south from the proposed Bear Creek Greenway, the trail route could follow Cemetery Creek assuming an easement could be obtained across the large property in the lower flood plain. The entire area along Cemetery Creek all the way to East Main Street is located in unincorporated Jackson County. Crossing East Main Street, the trail would insert directly into the planned Normal Neighborhood. Of note, all of the property from East Main Street to the railroad tracks is only within Ashland's urban growth boundary and not yet within the actual city limits. This corridor offers significant opportunities for trail easements and rights-of-way to be secured as a function of impending development. An additional benefit to routing through the Normal Neighborhood is the existing railroad crossing on Normal Street. Traveling south, this route would follow the Central Bike Path adjacent to the Ashland Cemetery, cross under the Ashland Street overpass and proceed to Tolman Creek Road and the cross-arm railroad crossing. Much of Tolman Creek Road has been widened to include bike lanes along its central portion from the railroad crossing to Siskiyou Boulevard. Trail users would use Tolman Creek Road on-street trails to continue south to Siskiyou Boulevard. Alternatively, after crossing the railroad tracks, a secondary route could follow Takelma Way to Jacquelyn Street and up Clay Street to Siskiyou Boulevard.

There is a signaled, safe crossing of Siskiyou Boulevard at Tolman Creek Road near Bellview Elementary School. The trail would then continue south, following existing on-street systems along Black Oak Way, Bellview Avenue, Greenmeadows Way to Lupine Way to the existing Oredson-Todd Woods / Ashland Canal trailhead that serves as an integral hub connecting the Eastside Forest Lands Trails.

A trailhead exists at Lupine Way that includes dog waste station, trash receptacles, informational signage and parking. Just west of this corridor is the Park Street entry into Siskiyou Mountain Park. This route has been designated as part of the Creek to Crest Trail which connects Ashland heading south to the Pacific Crest Trail. Since upper Park Street is

very steep with limited parking, an alternate access point to gain entry on to the Creek to Crest Trail would be the trailhead at Lupine Way. This access point would relieve the congestion, parking, and safety issues that currently make the Park Street trailhead problematic. Appropriately placed signage could effectively direct users to the higher capacity trailhead at Lupine Way.

LINKAGES

Along the Cemetery-Clay-Hamilton corridor, there are several important existing and potential connections. The trail system crosses three main arterials: East Main Street, Ashland Street, and Siskiyou Boulevard, offering a vital connection to their respective bike lanes. These linkages would provide the opportunity for cycling connections to many important city features.

One of the significant future neighborhood-linking routes is the planned trail through the Croman Mill site that is already part of the subdivision design and development. In addition, the confluence of any of the Croman Mill site trails with the existing and future extension of the Central Bike Path is an obvious essential linkage.

A planned additional trail segment starts behind Bellview School and follows the Mistletoe Road right-of-way to the future extension of the Central Bike Path. This would offer an off-street alternative to school commuters.

CHARACTER

Portions of the northern end of the corridor are still undeveloped and remain in a relatively natural state. The central portion of the corridor has become urbanized and opportunities for a stand-alone trail are already limited.

EXPECTED USERS

Expected users throughout the corridor include bicyclists, pedestrians, runners, mountain bikers, and families with strollers. In the northern portion, users will likely be local residents accessing the Bear Creek Greenway and the Central Bike Path. The middle section of the trail would offer general commuting and provision of a safe route for children to Bellview Elementary School, Walker School, Ashland Middle

School and the Siskiyou School on Clay Street. In the southern portion, users are likely to be residents, hikers, and mountain bikers accessing the Ashland Canal and the Eastside Forest Lands Trails.

TYPICAL SECTION

The Cemetery-Clay-Hamilton corridor simply takes advantage of existing paved streets and sidewalks and is an on-street trail system with future extensions to be determined. New extensions or spoke connections would ideally be built to multi-use trail standards.

NATURAL AND CULTURAL RESOURCES

Oredson-Todd Woods is owned by the Southern Oregon Land Conservancy and managed by the Ashland Parks and Recreation Department. This parkland is over ten acres and is designed to provide "recreation, education, research, open space, a public park, a wildlife refuge, or such similar natural use purposes." The primary feature of the Oredson-Todd Woods is Clay Creek with its associated riparian landscapes running the length of the preserve.

Historical note: Hamilton Creek was probably named for early Ashland-area settler R. J. Hamilton, a Tennessean who farmed along the lower stretches of this stream. The upper portions of Hamilton Creek flow through steep granite terrain. The falls on upper Clay Creek are formed by a hard granite ledge and below the falls, for some distance above the end of Clay Street, the stream-bed exposes shale and sandstone of the Hornbrook Formation. The sandstone contains small marine fossil shells from the time when most of southwestern Oregon lay beneath a shallow sea. Some of the Hornbrook deposits have weathered into a reddish (and, when wet, very sticky) clay. In the early 20th century, a small brick factory located near Hillview Drive mined this clay for making bricks.

TRAIL STANDARDS AND BASIC DESIGN ELEMENTS

OVERVIEW

The City of Ashland and the Ashland Parks and Recreation Commission (APRC) strives to be a responsible and collaborative neighbor when determining locations for trails and maintenance of existing trails. The APRC will work with property owners to create long-term solutions for landowners who are concerned with trails on or near their property. Through the rigorous use of existing public processes, owners whose properties lie next to or near trail developments will be apprised of the benefits and legal implications of trail easements and rights-of-way across their property including the legal implications of trespass on or near private land. Trail development will occur on private property only with owner consent and all trails crossing private property should be constructed only after trail easements have been legally acquired and recorded. The APRC will continue to work with adjacent property owners to reduce possible undesirable impacts of trails. Trail corridors that come close to existing residences could be mitigated through fencing, screening, signage and other buffering measures.

The design, construction and maintenance of the city trail systems should be an integral component in the planning of future projects: building, roadway, infrastructure. The trail enhancement opportunities identified in the TMP should be given full and intentional consideration by City planning staff from initial planning to project completion.

All trail construction and maintenance will consider aquatic ecosystems, vegetation suitability, and wildlife habitat. Trail development should conform to City riparian ordinances and regulations such as erosion control and setbacks.¹ When appropriate, a geologist or geotechnical engineer will be consulted in areas of steep terrain, unstable soil conditions, or severe erosion areas.

Other considerations should include possible impacts on water quality, archaeology, and native plant species. When appropriate, a riparian specialist should be consulted when designing trails in these areas. Trail improvement or development can provide coordinated opportunities for broader environmental enhancement projects in addition to improved maintenance.

ACCESSIBILITY

Trails will be designed and constructed to applicable accessibility standards, best practices, and current professional guidelines at the time of implementation. Reasonable attempts will be made to comply with the Americans with Disabilities Act (ADA) trail grade requirements and other important safety features. However, this may not always be practical. Trails may be exempt from certain ADA requirements if “reasonable accommodation” cannot be met.² This is most typical in areas of steep terrain.

TYPES OF TRAILS

Current and future trails in the city of Ashland fall into three general categories: *multi-use*, *on-street*, and *natural area trails*. Any of these may be used as interpretive trails for purposes of natural, historical, and cultural offerings. Width, surfacing, and other trail standards may vary from accepted standards based upon issues around available land, adjacent development, site-specific concerns, appropriate uses, and wetland/riparian preservation.

Trails and trail street crossings should be designed to meet applicable standards such as ADA, Oregon Department of Transportation (ODOT), American Association of State Highway and Transportation Officials (AASHTO), the Manual on Uniform Traffic Control Devices (MUTCD) standards, and other State and Federal guidelines.

MULTI-USE TRAILS

Paved multi-use trails are generally trails that are separated from parallel streets. Trails that have regional or community-wide significance will usually be of this type. They are designed to provide safety for each user group and be ADA compliant. *Multi use trails* are designed to assure that the trail will accommodate two-way wheelchair navigation, stroller, bicycle, skater, pedestrian, and possibly others, as well as maintenance, security, and emergency vehicles. Motorized vehicles including gas-powered scooters, carts, motorcycles, and others shall not be allowed on *multi use trails* unless specifically designated.

Design considerations should include, but not be limited to, site lines, grade, erosion, and local regulations. The surfacing of *multi use trails* should be asphaltic concrete or concrete over a compacted crushed rock base (impervious surfaces are preferred). The paved trail tread width should be a minimum of six to ten feet, with two to four foot-wide crushed rock shoulders or planted strips.

Soft shoulders of crushed rock or wood chips may be provided for runners and equestrians

should space and approved use allow.

ON-STREET TRAILS

On-street trails are generally trails that are attached to a parallel street with no separation. An *on-street trail* would typically appear as a designated bike lane, wide shoulder, sidewalks or protected bike lane. *On-street trail* surfacing should be asphaltic concrete or concrete over a compacted crushed rock base. The tread width should be a minimum of three feet to a maximum of eight feet wide (preferred width) with three foot, crushed rock shoulders.

NATURAL AREA TRAILS

In the placement of *natural area trails*, first consideration should be given to environmental impacts. *Natural area trails* have two categories: *native* and *native improved*.

Native trail width should be a minimum of 18 inches to a maximum of four feet wide. *Native* trail surfacing should be compacted native soils. Occasional crushed granite and/or wood chip surfacing to limit erosion could be allowed in areas associated with environmental need, safety, or other circumstances identified by APRC staff. Trails in undeveloped open spaces that provide a natural outdoor experience will often be of this type.

Native improved trail width should be a minimum of 32 inches to a maximum of eight feet wide (preferred width) with six inch native soil shoulders. *Native improved* trail surfacing should be a compacted crushed rock base with screened granite and/or wood chip surfacing to limit erosion. Surfacing material should be fine decomposed/screened granite from the local area. Trails in developed and undeveloped open spaces that provide a natural outdoor experience will often be of this type.

Natural area trails will be developed using Forest Service standards as a model. APRC currently uses “USFS National Design Parameters” as a model for

the development, construction, and maintenance of City trails.³

SAFE ROUTES TO SCHOOL

Safe Routes to School programs are sustained efforts by schools, parents, concerned citizens, local governments, and other community organizations to improve the health and safety of children by enabling and encouraging them to walk, skate, and bicycle to school. Supporters often organize school teams to examine the existing conditions, identify projects, and implement solutions to address active-transportation barriers for students. Through a combination of traffic engineering, focused education, broad encouragement, and traffic enforcement activities, cities have successfully promoted these programs.

Communities nationwide are increasing programs to improve the safety and ability of children to walk, bike, or skate to school. Ashland has recently been the recipient of Federal and State funding for several *Safe Routes to School* projects. In the future, more funds may be available for such projects and opportunities to enhance the urban trail system should include *Safe Routes to School* cooperative planning and design. This plan recommends a trail connection to every school in Ashland.

STREET CROSSINGS

In compliance with City standards, engineering studies will continue to establish the suitable level of traffic control and design. The TMP may suggest appropriate crossing options which must be verified and refined through traffic engineering and City transportation planning processes. Urban trail user improvements for major intersections and mid-block street crossings could include:

- median refuges
- a curved path approach to the crossing
- slow-down techniques
- user stop signs
- high visibility “ladder” type crosswalks
- other striping specific to crossings
- signage
- overhead lighting improvements,
- user-activated or pedestrian/bicycle detection systems
- curb ramps with widths matching the trail width
- specialized paving

- bollards
- curb extensions

TRAILHEADS

Trailheads provide access for citizens arriving by auto or other means. Depending on the level of development, a trailhead site may include off-street parking, information kiosks, signage, garbage receptacles, drinking water, benches, lighting, bike parking, a restroom or “porta-potty” facilities, and dog litter bags.

Trailheads may be stand-alone facilities or integrated within existing or proposed park properties, parking lots or other community centers. Some trailheads could exist as cooperative agreements with schools to increase trail use and to reduce duplication of support facilities (restrooms, parking, ADA access). In natural areas or areas with slope or environmental constraints, trailheads should be placed in such a way to allow for maximum off-street parking where possible.

PARKING

An urban trail system is analogous to a mass transit system in that there are multiple access points along a system of linked corridors as opposed to the traditional trailheads in the more remote trail systems. These urban access points are intended to be within a reasonable walk from home or destinations. If access to the urban system via private vehicle is necessary, it will be necessary for the individual user to find nearby, legal street parking. In some cases, existing or future parks can also serve as urban trailheads with parking, restrooms, litter collection, dog waste stations, and appropriate signage already in place. Stand-alone, full-service urban trailheads are not features that are in current development plans within the city of Ashland trail system.

SIGNAGE

Effective signage will play a crucial role in ensuring successful trail use. Local residents and visitors

alike may value guidance about permissible trail uses. The following types of signage will be considered:

- Directional and regulatory signage
- Continuous route signage for route identification, way-finding, and direction to recommended safe crossings of busy streets
- Periodic information regarding distance to areas of interest
- Interpretive information regarding ecological, historical, and cultural features found along and in proximity to trails

The APRC will continue to develop comprehensive yet minimal trail signage with particular attention given to curtailing visual impact due to unnecessary or inappropriate signage. A consistent sign motif should be implemented along the trail routes. Part of trail signage could delineate private and public lands.

TRAIL ART

Approved art installations along trails provide aesthetic appeal and certain trail corridors can offer unique potential for community art installations and interpretive signage.

1. Ashland Municipal Code, Water Resources Protection Zones
<https://ashland.municipal.codes/LandUse/18.3.1>
2. ADA Draft Final Accessibility Guidelines For Outdoor Developed Areas
<http://atfiles.org/files/pdf/draft-final-accessibility-guidelines-2009.pdf>
3. [National Design Parameters PDF \(September 2016\)](#)

THE TOLMAN CREEK CORRIDOR

ROUTE DESCRIPTION

The Tolman Creek Corridor can be confusing to trail patrons because only in the uplands at the south end of the corridor does Tolman Creek follow Tolman Creek Road before the creek veers sharply to the northeast where it crosses under Siskiyou Boulevard to the east of Crowson Road. From there it crosses under both the railroad tracks and Interstate 5 and follows Crowson Road through extensive private properties crossing under Crowson Road adjacent to the Oak Knoll Golf Course. Emerging from a corner of the golf course, Tolman Creek crosses under Highway 66 and then crosses private property to its confluence with Neil Creek. The Tolman Creek corridor would be the easternmost trail in a future loop surrounding the city.

Little of an actual trail exists in this corridor and currently consists of making the best of existing streets, crossings, underpasses and sidewalks. The proposed route is approximately two miles long and roughly parallels Tolman Creek. The corridor, as previously outlined, begins at the confluence of Tolman Creek with Neil Creek, would follow Crowson Road to Siskiyou Boulevard, and then follow the creek all the way up to its end at the junction of the TID Ditch with the Ashland Canal.

Existing barriers to any future stand-alone trail are Highway 66, Interstate 5, the railroad tracks, and Siskiyou Boulevard thus obviating the need to use existing street system crossing infrastructures to complete this loop and connect to the important linkages. The long term plan for the southwestern portion of the corridor above Siskiyou Boulevard is to follow the creek more closely and provide a less urbanized experience. This would require an extensive and forward-looking acquisition of trail easements through a considerable expanse of private property. Most of the route is outside the urban growth boundary in unincorporated Jackson County. However, a small section is within the urban growth boundary, from just east of Tolman Creek Road running northeast to the intersection of Siskiyou Boulevard at Crowson Road.

Because of the trail's relationship to and dependence upon roadways in the corridor, the route should be coordinated with the Bicycle and Pedestrian Commission.

LINKAGES

This route offers connections to the Oak Knoll neighborhood and APRC-owned golf course. It also connects to the proposed extension of the Central Bike Path as it extends through the Croman Mill site. This corridor currently crosses many private properties that do not provide public access, therefore linkages other than the citywide "loop" concept are limited. **Should loop**

concept be more clearly delineated elsewhere?

CHARACTER

Other than paved roads with marked bike lanes, the area is sparsely developed in small farms and pastureland and generally opens onto a few wooded areas. Narrow shoulders and higher speed traffic can make this route problematic for pedestrians.

EXPECTED USERS

Expected users include bicyclists, pedestrians, runners, and equestrians.

TYPICAL SECTION

Existing trail sections are mainly on-street trails with future sections consisting of a mix of multi use and nature trails.

NATURAL AND CULTURAL RESOURCES

This five-mile-long tributary of Neil Creek flows directly off of the northern flank of Mt. Ashland and joins Emigrant Creek whose confluence with Neil Creek eventually forms Bear Creek. This creek was named for Oregon Surveyor General and Jackson County judge, James C. Tolman, who settled a large farm near the mouth of the creek in the early 1850s. Tolman's grave in the Ashland Cemetery is marked by a prominent obelisk carved from the same Hornbrook Formation sandstone that underlies much of lower Tolman Creek.

INDIGENOUS PEOPLES: A LOOK BACK

A Trails Master Plan for Ashland and the surrounding areas would be incomplete without acknowledging the first trail users: the indigenous inhabitants who have lived in the immediate area for over 10,000 years.

To the Native American tribes that lived here, the Rogue Valley was not just their home, it was what defined them as a culture and a people. The stories they told, the food they ate, the clothing they wore, and the objects they crafted, were all connected to the surrounding environment.

(from "An introduction to the Native Americans of the Rogue Valley with a Focus on the Ashland Area")

The above quote is from an illustrated booklet prepared by Kari Gies, former manager of the North Mountain Park Nature Center, who under the auspices of the APRC, collaborated with the Confederated Tribes of Grande Ronde to write a very thorough, readable cultural history of local Native American inhabitants. Because it can be so difficult to characterize a culture from the outside, it is reassuring that all the statements in this booklet have the seal of authenticity from several tribal contacts. The entire booklet is available on the web:

<https://www.ashland.or.us/Files/Native%20American%20booklet%20PDF%20for%20web.pdf>

Several more excerpts are offered below to honor and learn about the original trail users, where today, we often walk in their footsteps. The below excerpts were selected because they offer direct reference to extensive tribal seasonal movement suggesting the substantial use of trails. Often, their trails have become our trails.

For at least as long as 10,000 years, Native Americans were part of the landscape of the Rogue Valley, travelling from the valley floor to the high mountains in a seasonal round pattern that allowed them access to available resources. They moved throughout the valley hunting deer, gathering willow, burning oak stands, celebrating the return of the salmon, raising families, and mourning the loss of loved ones. Although they did not farm, tribes of the Rogue Valley managed the vegetation they relied upon in a variety of significant ways, including the use of fire, selective harvesting, pruning, transplanting, and, in the case of tobacco, cultivation and fertilization.

The Shasta, or kahosadi, people were among the original managers of the land surrounding the Ashland Creek Watershed and what is now the town of Ashland. Anthropologists commonly call this group the Oregon Shasta because of their geographical separation from their kinsmen to the south in present-day California. To fully understand the influences of the Shasta and other tribes on this land (and visa-versa) it is important to acknowledge the elaborate inter-tribal network that existed. This network provided not only for the sharing of resources during times of scarcity, but also for the exchange of critical information related to long-term land management practices. Intertribal exchanges also allowed for cultural sharing and growth.

With the arrival of European-American settlers to southern Oregon in the mid nineteenth century, the local environment underwent a radical change in how it was used and cared for by the human population. The transition from the native hunter-gatherer economy to an imported European-derived agricultural one happened almost overnight and is arguably the most drastic shift in humans' relationship with the environment in over 10,000 years of human occupation of this land.

During this tumultuous period the native tribes fought to keep their land and their livelihood but after years of sporadic fighting and the placement of local tribes onto a temporary reservation near Table Rock, treaty tribes of southern Oregon were removed to two reservations both located near the northern Oregon coast.

One of the most significant differences between the Native Americans of the Rogue Valley and the Euro-Americans who came to "settle" the region had to do with the acquisition of food. The settlers were an agricultural people in contrast to the indigenous tribes whose hunter-gatherer lifestyles were based on moving throughout the region as wild food resources became available and abundant (1). This subsistence pattern, commonly known as the seasonal round, required access to a large tract of land, extensive knowledge of the cycles of the native plants and animals that lived and grew there and a belief system that prevented the overuse of these limited resources (9). The seasonal round began in early spring when families or extended families would leave their permanent winter villages and travel to prime root-gathering and fishing sites.

Summer was a time for moving to the higher elevations of the valley in search of big game, bulbs and a variety of berries. By early fall, families returned to mid elevations where they would be busy catching and drying salmon, burning tarweed fields for easy collection of the seeds, and for gathering the enormously important acorn crop. Late fall was a time for communal deer and elk drives and the processing of the resultant venison. By early winter it was time for families to return to their permanent village locations in the lowlands where they would complete the processing of acorns and other foods that were needed to last throughout the cold, wet winter months.

Although the tribes of the Rogue Valley traveled seasonally, each had a permanent village, usually located near a stream or river, which was utilized during the winter by the entire band. The location of the winter village defined a tribe's "homeland" and was surrounded by the plant and animal resources that were "theirs" and were not to be taken by other tribes or bands without permission.

The gathering and processing of plant materials was primarily the work of women who could do so while caring for young children. Men, however, worked with a number of specific plant materials in the making of bows, arrows, and cordage for fish nets and deer snares, items that women were often not “allowed” (by social custom) to craft.

The timing as to when the needed plant materials were available helped dictate the movement of the tribes throughout the valley. Shoots of willow that grew along the streambed, for example, had to be gathered in early spring, while berries that grew in the higher mountains were not available until later in the summer. During the fall, tribal members came to read the signs that signaled it was time to travel back to the lower elevations to gather the falling acorns and to burn fields of yellow tarweed to collect the roasted seeds.

Because the tribes of the Rogue Valley were very mobile, moving from the valley floor into the high mountains and back each year, their inventory of household items was fairly small.

Some items that were critical and in use at all times included baskets, made of willow and other plant materials, sleeping and sitting mats, woven from tule or cattail, metates (grinding stones) and manos (hand tools) used to process seeds and nuts, spoons made of wood or antler, and the all-important cordage which was used to lash together any number of items.

GEOLOGY OF ASHLAND AREA: THE FOUNDATIONS OF OUR TRAILS

The city of Ashland and surrounding area sits on a geologic scramble sometimes defying interpretation yet remaining uniquely interesting and always challenging for trail building and maintenance. The town sits on the northern edge of the Siskiyou Mountains which extend west to east from the Pacific Ocean and eventually abuts into the north-south running Cascade Range. Thus, the geologic history of Ashland is the story of two mountain ranges, both of which are major players in the geologic history of Oregon in general.

Prior to 200 million years ago, Oregon lay under a shallow sea and the western shore of North America was located roughly where Oregon and Idaho meet today.

This situation began to change when the North American continental plate began to drift westward resulting in the first of a succession of subduction zones where each new subduction zone marked a place where the Pacific plate slid beneath the North American plate. Two consequences of this subduction process helped to create the terrestrial Oregon we know today.

The first consequence: Several times between 200 and 50 million years ago, fragments of the eastward drifting Pacific plate, including volcanic islands and thick deposits of sediment, collided and subducted under the North American plate. At times however, rather than subducting, these fragments stopped subducting and became welded onto the North America plate, such that Oregon grew westward, ultimately reaching its present size. Some of these welded-on, accreted terranes are among the oldest and are now exposed at the surface in the Bear Creek Valley characterized by gneiss and metamorphosed sedimentary rocks. *The second consequence:* Subduction processes often cause melting of the earth's upper mantle. This developing magma was hot and buoyant, and it rose, melting and pushing its way upward through the overlying crust, erupting and creating volcanoes, lava flows and volcanic ash. In some instances, the magma never rose all the way to the surface and instead cooled and solidified within the crust and the result was a collection of slow-cooling granite and diorite plutons often many miles wide. These plutons formed beneath southwestern Oregon and several of them make up much of the base rock of Mount Ashland and Wagner Butte. Rock debris from the Mount Ashland pluton is common in the stream gravels of North Mountain Park and along the Bear Creek Greenway.

Other very ancient subduction processes have had a major role in creating the Siskiyou Mountains. These are very geologically complex mountains existing here a long time and they have also been eroding for a long time, depositing significant quantities of clay, silt, sand, pebbles, and cobbles into low-lying areas at their base. The result of this erosion and layered deposition is the formations that comprise most of the surface rocks of our area.

The older of these formations were marine deposits on the bottom of the Cretaceous sea that covered much of Oregon roughly 90 million years ago. These sedimentary beds, called the Hornbrook Formation, consist mostly of sandstone and shale. They contain fossils of ammonites, clams, snails, and sharks' teeth. Many trails in Ashland are built on Hornbrook rocks, which erode easily, often crumbling into piles of grayish or greenish rock debris.

The younger of the two formations, the Payne Cliffs Formation is mostly terrestrial conglomerate and sandstone and emerges just east of Bear Creek and includes Pompadour Bluff.

Smooth, very well rounded pebbles and cobbles of quartzite rock have eroded free from this formation and can occasionally be found in the stream gravels of Bear Creek Valley and on the shoreline of Emigrant Lake.

FLORA AND FAUNA IN THE ASHLAND TRAILS AREA

The design, construction and long-term use of both urban and natural area trails should include a quality understanding of the plants and animals that are impacted by trail activity. For purposes of this Trails Master Plan Update, the below listings and reports are offered as a framework of information. Specific flora and fauna interdictions or encouragements are not in the scope of this plan but an overall support for informed and active care of the flora and fauna in the trail zones is an overarching responsibility..

Native Plants in Ashland and Ashland Wildland Urban Interface:(USDA NRCS 2016)

For a list of Native Plants in Ashland and the Ashland Wildland Urban Interface area go to:

[2016 Ashland Forest Plan Table 8-1](#)

Problematic or Invasive Plants:(USDA NRCS 2016)

Invasive plants come in many varieties and sizes, from trees to vines to shrubs, and the damage they can cause is just as varied. If left unchecked, many invasive plants can cause the eventual demise of desired plant species, alter wildlife habitat or directly threaten animals, choke waterways, or increase the intensity of a wildfire.

For a list of problematic or invasive plants in the Ashland area go to:

[2016 Ashland Forest Plan Table 8-2](#)

Ashland Forest Plan Landscape Units:

For a list of Landscape Unit Vegetation types in the Ashland Watershed forestlands go to:

[2016 Ashland Forest Plan Table 8-5](#)

Imperatrice Property Plants - Cascade Foothills Area:

The geology of the Cascade Foothills, coupled with their southwestern aspect, provide unique habitat for flora and fauna that is distinctly different from the granitic north aspect of the Ashland watershed. Several rare plants and birds have been identified in the area. This area has sparse human population concentrated at the base of the foothills.

For a 2017 Biological Assessment conducted on the Imperatrice Property for the City of Ashland within the Cascade Foothills Area go here:

[Imperatrice Biological Assessment Report - Pacific Crest](#)

For a Vascular Plant list for the Imperatrice Property prepared by Southern Oregon Land Conservancy go here:

[Vascular Plant List Imperatrice](#)

Wildlife In The Ashland Creek Watershed

The below paragraph is excerpted from the *2016 Ashland Forest Plan*

City of Ashland forestlands contain a variety of wildlife habitats ranging from the Riparian Management Areas through the drier lowlands, to the forests above Lithia Park and on into the Reeder Reservoir area and the Winburn parcel in the upper reaches of the Ashland Creek watershed. These diverse wildlife habitat areas lie on the northern slopes of the Siskiyou Mountains, a range known for its significant biodiversity. Even with significant urbanization and the resulting mix of non-native trees, this area continues to provide nesting and foraging habitat for migratory songbirds, woodpeckers, owls and other raptors as well as browse for deer and smaller herbivores, and habitat for carnivores such as raccoons, bobcats and other animals.

For a more in-depth look at wildlife in our trails area, Chapter 4, Wildlife in the Ashland Creek Watershed of the *2016 Ashland Forest Plan* offers a range of useful information with further citations

[2016 Ashland Forest Plan](#)

Birds in the Trails Area

More than 200 species of birds have been observed in the Rogue Valley and its surrounding mountains in recent years, and there are several ways to categorize them. One is by occurrence and is determined by whether a species is a permanent resident, migrant, or visitor. A visitor may be a sporadic drop-in or one that comes for a season, usually winter or summer. The other principal division is by habitat. The valley contains diverse habitat types, and most species are associated with one or a few.

Habitats that are encountered on the trails are riparian, open-water, grassland, oak woodland, and mixed conifer-hardwood forest.

For a comprehensive look at the wide variety of birds in our trails area, the following work by Barbara Massey is a useful study developed under the auspices of the APRC North Mountain Park Nature Center staff.

Birds at North Mountain Park: Occurrence, Seasonality and Numbers over a 10 Year Period
[Birds in North Mountain Park](#)