





# TRADITION PLATEAU & TIGER MOUNTAIN

OPPORTUNITIES FOR THE GATEWAY TO THE GREENWAY

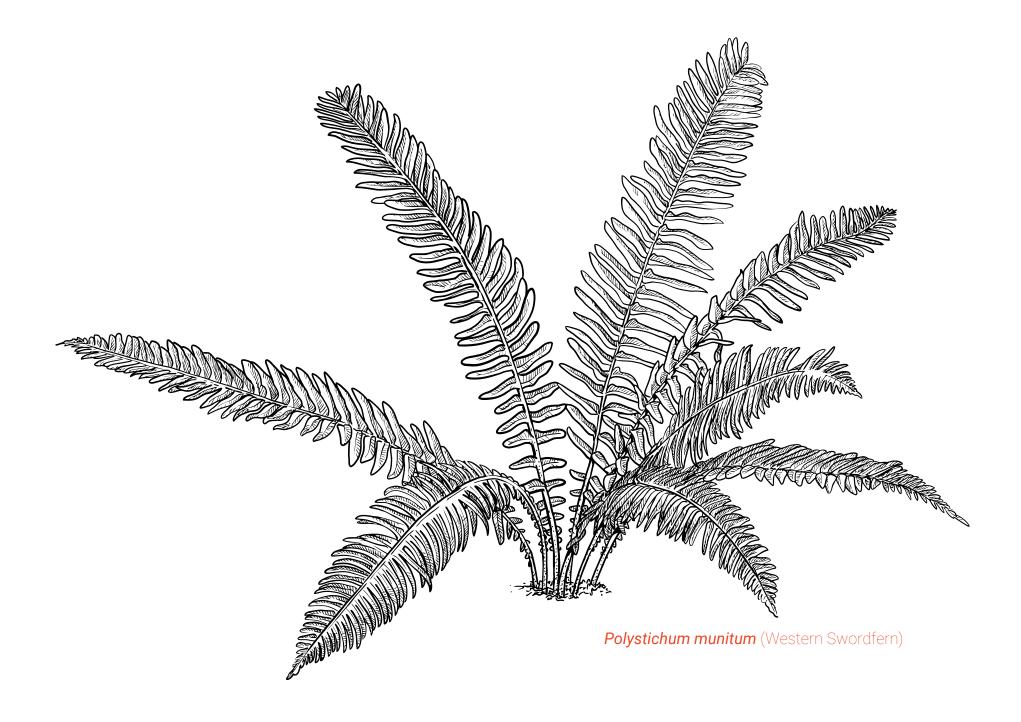


Image from Adobe Stock

This report was prepared by Ilsa Barrett and Lauren Iversen, University of Washington Masters of Landscape Architecture Candidates working with the WA Department of Natural Resources as UW Green Futures Lab Interns. Field work was conducted in Summer 2019 and the final mapping and Report prepared in Summer 2020.

We would like to acknowledge that Tiger Mountain is located within the ancestral lands of the Coast Salish People, who have lived here and cared for these lands since time immemorial and who continue to live here, continuing to honor and bring to light their ancient heritage.

Thank you to the many individuals and organizations that volunteered their time and wisdom to compile this report. Their cumulative years of time spent on the trails of Tiger Mountain proved invaluable in assessing and understanding the complex layers of this landscape.









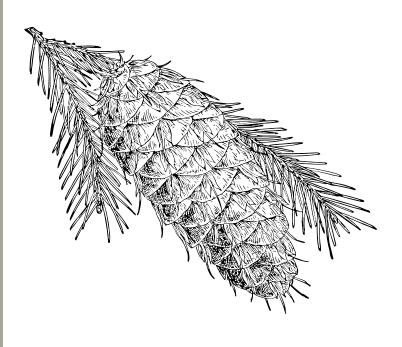
#### A view of licorice and sword ferns on a trail at Tiger Mountain. Image from Lauren Iversen

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#### Introduction

Situated to the south of Interstate 90, twenty miles east of Seattle is Tiger Mountain. Darkly forested, the rising mountain frames the town of Issaguah, representative of the vast forests that once covered the entire Puget Sound. Tiger Mountain is a part of the locally named Issaguah Alps, a series of three mountain peaks that include Tiger, Squak and Cougar Mountains, Cougar Mountain rises 1,598', Squak's peak sits at 2,028', and the tallest is Tiger Mountain at 3,005'. This tongue-in-cheek name, however, conjures the history of local hiking enthusiasts' efforts to retain this mountain area as natural space and prevent development from encroaching up the slopes. With the rise of Tiger Mountain marking the entry to the foothill landscape, partnerships between the WA State Department of Natural Resources and the City of Issaguah and advocacy by the Mountains to Sound Greenway Coalition played a significant role in the development of Tiger Mountain as an innovative working forest and conservation area of regional significance.



Douglas fir cone. Image from Adobe Stock.

#### **Project Description**

This report was written and created by Ilsa Barrett and Lauren Iversen, interns at the University of Washington Green Futures Lab, advised by Professor Nancy Rottle, for the Washington Department of Natural Resources (DNR). The project was funded in part by a grant from the Washington Recreation and Conservation Office (RCO). The DNR, King County Parks, and the City of Issaguah partnered together in 2017 to obtain the grant to plan improvements to trails and facilities in the public forestlands located east of Issaguah, including West Tiger Mountain Natural Resources Conservation Area (NRCA), Tradition Plateau NRCA, Grand Ridge Park and Mitchell Hill. The City of Issaguah's 2018 Park Strategic Plan supports this work and connections from the forest to city. As part of this project, DNR worked with the University of Washington's Green Futures Lab to envision West Tiger and Tradition Plateau as a "Gateway Forest", exploring ways to make it more welcoming, easy to navigate, and to enhance facilities and trails for environmental education and nature play, while working with respect for the preservation of tribal treaty rights. The project funded by the RCO grant sought to uncover the characteristics of Tiger Mountain and Tradition Plateau that make them a valuable community amenity, exploring the physical and experiential stories of place and asking the following questions:

What are the physical characteristics of the landscape that are unique, and bring users to visit the forest time and time again?

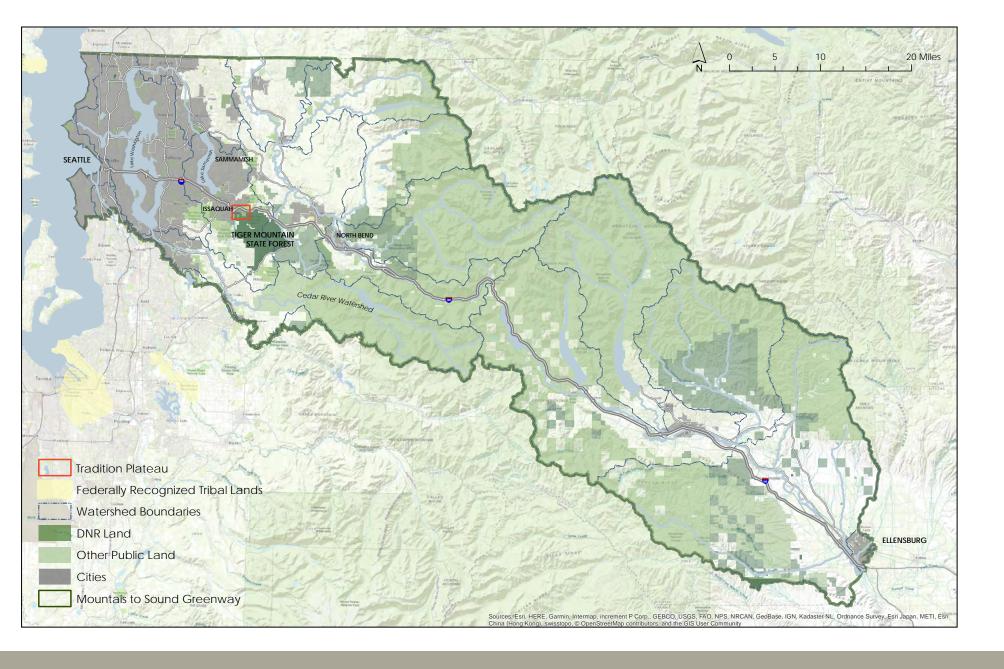
What experiences are possible that would educate the user about the ecological, geologic, historic, and indigenous uses of the area?

What opportunities might improve the user experiences of this area?

How might the Highpoint Trailhead and Tradition Plateau be developed as a 'gateway' to the outdoors?

How does High Point Trailhead and Tradition Plateau enhance the vision of the Mountains to Sound Greenway National Heritage Area?

This project did not evaluate the possible cumulative impacts of recreation on wildlife and tribal hunting rights.



## Mountains to Sound Greenway

The Mountains to Sound Greenway is a federally recognized land trust, highlighted for its contribution to preserving natural areas in the Puget Sound, Cascade Mountains, and beyond. Within the boundaries lie multiple watersheds, public land, private land, cities and tribes. Tiger Mountain and Tradition Plateau are located nearby the city of Seattle and to the south of Interstate 90.

## **Methods for Documenting Landscape, Trails and Stories**

Methods for research were conducted largely on-site. On-site investigations included mapping existing amenities, identifying missing amenities, wayfinding, physical and experiential characteristics of the site, and the connections of Tradition Plateau to Tiger Mountain and surrounding natural areas. In addition, several people from community organizations as well as local educators and historians joined the DNR and Green Futures Lab on site to share their knowledge and insights. Additional resources were located with the assistance of the Gilman Town Museum and University of Washington libraries.

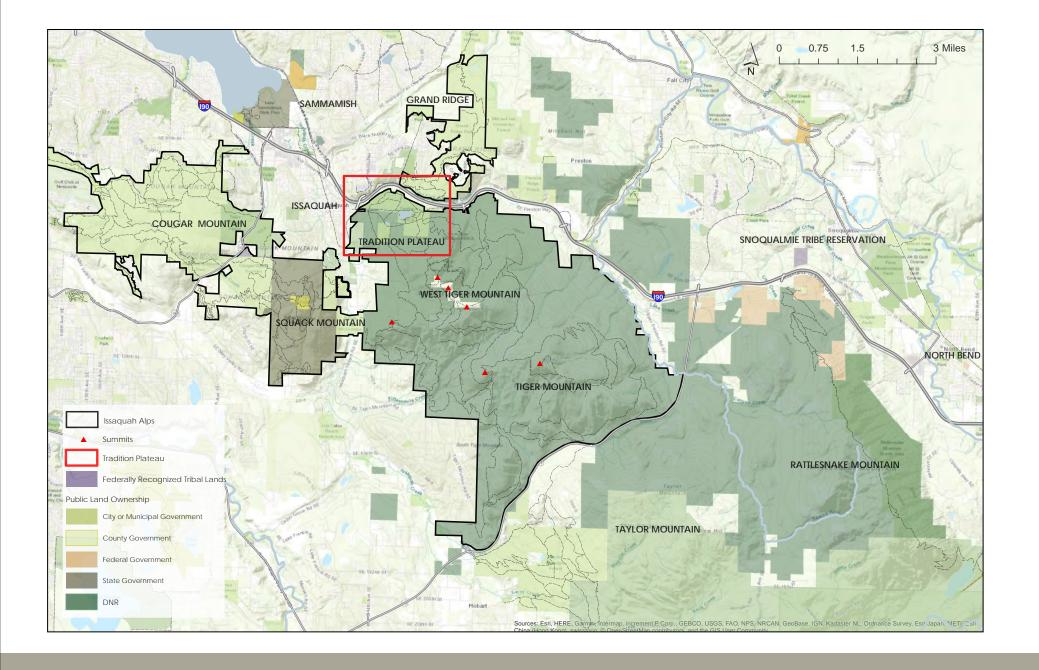
#### Goals of the "Gateway"

Tiger Mountain has been valued by people since time immemorial. Coast Salish People have lived in the region for millennia and continue to exercise their cultural practice and to hunt and gather on the landscape. More recently, since the first arrival of European settlers, Tiger Mountain has been especially valued for its abundant timber and mineral resources as well as for environmental conservation and outdoor recreation. Its proximity to metropolitan Seattle makes it the site for many people living in urban areas to relax and recreate in a natural environment. As the metropolitan and surrounding areas grow with people moving from out of state and out of the country, the history and stories of the mountain remains unknown to these visitors without proper interpretation. This project looks at ways of increasing accessibility of Tiger Mountain and Tradition Plateau while capturing the stories and experiences to share with visitors through interpretation and experience.

Further development of the High Point Trailhead provides an opportunity to increase access to nature and recreation for new users. Outdoor environments can present barriers to entry, but this location can offer amenities that provide easy directions, levels of difficulty of activity, and signs full of important knowledge on outdoor ethics and preparation. In addition, the new Trailhead Direct bus system is an increasingly popular way to bring new users from the Seattle area that may not have access to a car to drive to the trails.

The following goals were developed to reflect the desire to increase accessibility to a diversity of people, enhance the user experience at Tiger Mountain and Tradition Plateau while holding respect for treaty rights and to promote meaningful interactions with nature and a connection to the region.

- Welcoming to users of all abilities (increase diversity of users)
- Fun for kids
- Positive trail experience
- Safe
- Informative
- Accessible
- Connected to City of Issaquah (wayfinding)
- Inspires and incites wonder
- Affecting stewardship
- Increase perceptions and value of nature close to the city
- Increasing awareness of the historical and current tribal uses of these lands.
- Introduction to the Mountains to Sound Greenway



## The Issaquah Alps

The Issaquah Alps is a tongue-in-cheek name given to three natural areas surrounding the City of Issaquah. Tiger Mountain is the largest of the areas and one of the main areas of study as part of the grant. Within Tiger Mountain is Tradition Plateau, highlighted with the red bounding box. This box represents an area of further study and discussion in this report.

report.

#### **Analysis of Existing Area**

Tiger Mountain is a unique public forest because it is made up of state trust lands, natural areas, and the City of Issaquah protected open space land. Current management of Tiger Mountain includes:

#### DNR-managed Tiger Mountain State Forest

(Herein referred to as the "State Forest"): 9,426 acre state trust land established in 1981 and located on the south and eastern part of Tiger Mountain. State forests are managed to sustainably produce income for schools, universities, state institutions and county services while providing a continuous supply of wood products and non-wood products and forest ecosystem services such as carbon sequestration, water filtration, and habitat for flora and fauna. In addition as directed by the Multiple Use Concept (RCW 79.10), DNR provides recreation and public access opportunities on state trust lands.¹ The state forest represents a creative solution for a landscape that generates income for public services, creates jobs, offers recreation opportunities and enhances and protects ecosystem benefits at the same time.

## DNR-managed West Tiger Mountain Natural Resources Conservation Area (NRCA)

(Herein referred to as "West Tiger" or "West Tiger NRCA"): 3,881 acre natural area established in 1989 and occupying the northwest corner of Tiger Mountain. NRCAs are managed to protect natural and cultural resources including, but not limited to, high quality native plant communities, suitable habitat for sensitive, threatened and endangered species, examples of natural ecosystems, archeological and culturally significant sites and resources, and exceptionally scenic landscapes. NRCAs also provide opportunities for sustainable, low impact recreation and environmental education where such uses do not detract from the area's long term ecological processes.<sup>2</sup>

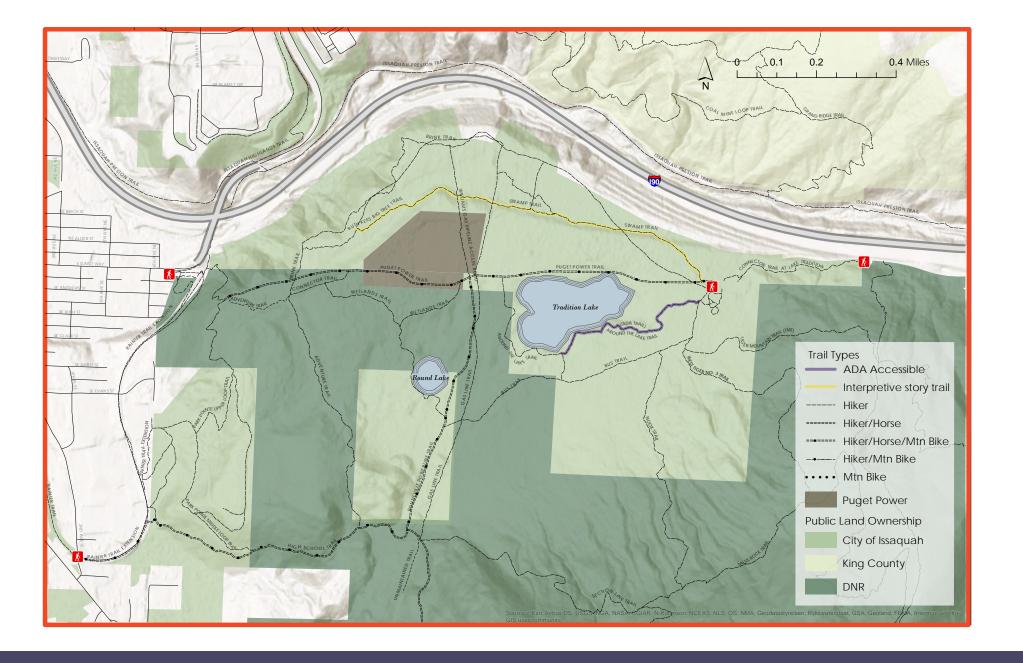
#### City of Issaquah-managed Tradition Plateau Natural Resources Conservation Area (NRCA) and Park Pointe

Located at the base of Tiger Mountain at the NW corner within city limits and the regional growth boundary are two protected natural areas managed by the City of Issaquah. Tradition Plateau is comprised of 434.38 acres of north facing land that is managed as a NRCA in cooperation with DNR. Park Pointe is 101 acres on a western slope with trailhead access directly from the City of Issaquah. Both open space areas have trailheads within the city limits (see opposite page map).

#### **Coordination of Management**

Together the three areas coalesce to provide over 90 miles of trails for hiking, mountain biking and horseback riding, a launch point for hang gliders at Poo-Poo Point, accessible interpretive trails, and an education shelter. At the same time, tribes continue to hunt and gather on "open and unclaimed land", rights that they retained in treaties that predate the establishment of Washington State.

Multiple trailheads provide access to Tradition Plateau, Park Pointe, and West Tiger NRCA. These trailheads are located on city and county managed lands and include Highpoint Trailhead, Park Pointe Trailhead, Issaquah School District Trailhead, Sunset Way Trailhead, and Chirico/Poo-Poo Point Trailhead. Tradition Plateau is easily accessed from I-90 and the gradual topography of the plateau offers easier trails for walking or running. Amenities at this location include over 20 miles of hiking trails through different types of forests and wetlands, an education shelter, and an accessible interpretive trail around Tradition Lake. Its location provides access for many users to the larger trail systems on Tiger Mountain. DNR and the City of Issaquah work closely together to manage the interconnected trails and access points on West Tiger Mountain and Tradition Plateau NRCAs, to provide a unified recreational experience.



## Tradition Plateau: Trail Uses

This map demonstrates the types of trails and trail users that are found on Tradition Plateau. Most of the trails are hiking only, however the Puget power trail and the Bonneville Powerline Trail allow biking and horses as well. Other trail types include an ADA accessible trail located on the first half of the Around the Lake Trail while the Swamp Trail has a series of interpretive signs that tell a children's story.

Tiger Summit Trailhead, accessed from SR 18, provides access to over 50 miles of trails in the state forest, including hiking trails, mountain-biking focused trails in the eastern part of the mountain, equestrian-focused trails in the southern part of the mountain, and an ADA Interpretive loop in small patches of conservation land.

In addition to the DNR and City of Issaquah, there are other stakeholders involved in visioning the future of the mountain. Tiger Mountain is one of the three mountains that make up the Issaquah Alps. The Issaquah Alps Trail Club has played a significant role in conserving Tiger Mountain State Forest and developing it into a public space for outdoor recreation, community events, stewardship and education. The State Forest also lies within the Mountains to Sound Greenway. The Mountains to Sound Greenway Trust played a large role in the conservation of Tiger Mountain and continues to work to enhance and conserve the I-90 corridor greenway from Seattle to Central Washington. The Mountains to Sound Greenway Corridor was designated a National Heritage Area (NHA) in 2019, becoming the first NHA in the Northwest.

Many user groups take advantage of opportunities on Tiger Mountain and Tradition Plateau. The Issaquah Alps Trails Club offers guided hikes around the forest focusing on ecology and logging history, and the Mountains to Sound Greenway leads trail work and stewardship-based activities and fourth grade field trips that focus on environmental education. Issaquah Middle School offers an environmental science elective that consists of a series of educational hikes through the forest. Organized activities that occur around recreation include high school cross country practice, mountain bike races and trail running events

In land management it is often thought that a choice must be made between conserving ecosystems or having a natural resource based industry. Tiger Mountain is an example that proves that with creative and forward thinking land management strategies, conservation, recreation and resource based industries can co-exist.

#### **Opportunities**

Tiger Mountain is one of the most popular recreation destinations within its general area. Due to its close proximity to a dense urban area, many access points, and high quality natural environment, many people find a reason to visit. Future planning may highlight and enhance this invaluable amenity. One goal for the grant project was to better understand potential improvements to the land that improve the user experience while preserving tribal treaty rights and maintaining principles of the land management strategies. The opportunities portion of this document discusses ideas in greater detail. However, some initial opportunities to be explored included improved trail signage, wayfinding, public land connections, increased interpretation, and educational opportunities. Educational interpretation to be explored at Tradition Plateau and West Tiger includes the history of land use, conservation, ecology and geology. Tiger Mountain is also a great educational resource that can be expanded for nearby schools. Issaguah High School and Mountains to Sound Greenway Trust lead field trips using Tradition Plateau and the State Forest as a resource. The middle school leads a yearly environmental education course that utilizes the landscape for immersive lessons on local ecology, history, and land management. Finally, improved wayfinding and interpretation opportunities were evaluated to lead to improved experiences in outdoor recreation, stewardship, and educational programming for the various user groups.





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## Physical and Experiential Characteristics

#### Transition from Tradition Plateau to Tiger Mountain

Taking a walk around the relatively flat Tradition Plateau can be a mellow stroll, however once you venture further South or East into Tiger Mountain, the transition to the steeper, forested trails make it evident that you are walking in the foothills of the Cascade Mountains. The small lakes and the wide power line trail on Tradition Plateau provide a few locations that are open and exposed while the trails on Tiger Mountain are often more densely wooded.

#### Sound

The north side of Tradition Plateau has very loud road noise due to its proximity to the I-90 corridor. As you venture further inland towards Tiger Mountain State Forest the sounds from the highway begin to disappear and it is easier to observe the sounds of the forest.

#### Forest Type Experience

Tradition Plateau and Tiger Mountain offer opportunities to travel through a few different forest types, each with a different feeling and experience. The second growth Douglas fir forests are dark and the canopy provides shelter from rain. The character of the forest changes with the ecology, geology, topography, and forestry management techniques. Older forestry plantings were close together and dense, preventing much understory growth. More recent cuts were replanted more sparsely and maintained some trees on site. These areas have a range of tree sizes and dense understories filled in with ferns and shrubs. A transition to a Big Leaf Maple forest is evident as the canopy brightens. The leaves and swaying branches add rustling sounds not heard in the conifers.

#### Lake and Water

Tradition Lake is the largest water body, most easily accessed from the High Point Trailhead. The views are mostly blocked by plants, but reeds and sedges line this lake. Nearby, Round Lake offers more intimate proximity to the water, and is somewhat seasonal - nearly drying up in the heat of summer. Traveling along Ruth Kee's Big Tree Trail, the feel of the forest changes as you decline in slope. The canopy becomes a bit taller, and the air a little denser. This spot is the location of the area's few old growth trees. Loggers considered this wetland area too swampy to log, thus preserving some spectacular trees and providing a glimpse into what the old growth forest might have felt like. The Big Tree is thought to be over 1000 years old. Nearby is the Swamp Trail which provides an opportunity to explore the swamp wetland by boardwalks and trail.

#### People and Animals

If you hike on the trails at Tradition Plateau today, most likely the most wildlife you will encounter are people and their dogs. However, this forest is home to many other forest species. Evidence of pileated woodpeckers is obvious by observing wood chips on the forest floor. On a quiet day, garter snakes will slowly slip across the trail in front of you. Although they often stay away from such heavily human trafficked areas, black bears and cougars may occasionally leave evidence of their visitation.

#### **User Interest Groups**

#### Tribal Interests and Uses

Coast Salish People have lived in the region for millennia, and tribal members continue to visit these lands to exercise their cultural practice and treaty rights.

#### Private Land Management

Along with the public land managers (DNR Trust and NRCA, Issaquah NRCA) West Tiger Mountain contains small parcels of land that are privately owned and managed, although many of them still allow public access. Puget Sound Energy (PSE) has a facility on Tradition Plateau and owns and manages the land where the power lines run. Bonneville Power Administration (BPA) manages the land around the gasline trail where a natural gas pipeline exists. Communication towers critical to the regional businesses of Washington are located on several of the peaks.

#### Recreational User Groups

Due to its vast trail system and accessibility Tiger Mountain receives a variety of recreational users. The primary hiking trailheads are located closest to Issaquah at Park Pointe, Sunset Way, Chirico Trail, and High Point. Chirico Trail to Poo Poo Point is a highly trafficked trail used by hikers, runners and para-gliders, with a landscape vista of Issaquah, Bellevue, Lake Sammamish, and Squak Mountain. West Tiger Mountain is mostly utilized by hikers but is also used by trail runners, bird watchers, dog walkers, picnickers as well as organized groups participating in educational tours, environmental restoration, or social gatherings. Tiger Summit Trailhead is the primary access point for mountain bikers accessing mountain biking trails on East Tiger, but is it also popular with hikers. DNR maintained designated biking

trails are built for varying abilities, and enthusiasts host mountain bike festivals and races. Equestrian trails exist on the southern end of Tiger Mountain but are not as heavily trafficked due to lack of horse-trailer parking. Plans to renovate Tiger Summit Trailhead include providing a designated parking area for equestrians wishing to access the equestrian trails.

#### **Guided Educational Tours**

West Tiger NRCA and Tradition Plateau is utilized by multiple groups as the site for outdoor environmental education. The close proximity to suburban and urban areas makes Tiger Mountain an excellent destination to teach about Pacific Northwest forest ecology, history, and environmental stewardship. The Mountains to Sound Greenway leads trips for grade school children, and Issaguah Middle School offers a course on environmental education that tours Tradition Plateau as an educational outdoor classroom. The Issaguah Alps Trails Club leads trips and stewardship opportunities for groups of all ages to learn plants, have a guided tour, or improve trail conditions. Tradition Plateau currently offers a covered shelter utilized by the educational tours. The ADA accessible portion of the Around the Lake Trail offers gravel platforms for groups to gather. The MTS Greenway trips often utilize a forest clearing with logs for benches as an eating and classroom space on the west side of Tradition Lake. Discussions with these groups emphasize the need for adequate numbers of toilets for field trips and a place to gather in the sun close to the trailhead.

#### **Issues and Opportunities**

Signage is often confusing in the State Forest and NRCA, with few maps and inconsistency in the trail labels. This provides an opportunity to develop new wayfinding systems, maps, and trail signs that highlight the destinations. Trail signs do not direct you to destinations. Currently, there is one ADA accessible trail on Tradition Plateau (see map on page 11). This trail offers interpretation and an immersive forest experience. With the gentle topography of Tradition Plateau, there is opportunity to expand accessible trail options to those with differing abilities. Views of the lake are obstructed by overgrown willows and the rest of the access restricted to protect the lake shoreline. Here there is opportunity to develop creative solutions to improve views of the lake while protecting the sensitive environment around it.

The top destinations are West Tiger #3 summit and Poo Poo Point.

**Tradition Plateau** has over 100 miles of trails accessible to different types of recreation.

Coast Salish people have hunted and gathered on the land since time immemorial.

**Tiger Mountain State** Forest maintains trails specific to equestrian and mountain bike users.

The most popular type of recreation within the three \_\_ management areas is hiking.

Teachers leading school field trips suggested several

areas where education infrastructure could be improved

at the Highpoint Trailhead including the need for a school

bus drop-off area, additional sheltered or unsheltered

gathering space, and possible storage space for education

materials. They also suggest that the existing trailside

education stops would be more comfortable if they

were enlarged and provided bench seating for parental

chaperones. As recreational use increases across the

I-90 corridor, tribes express concern that even low impact

recreation impedes the ability to exercise cultural practice

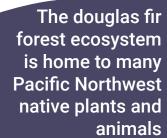
and tribal treaty rights on open and unclaimed lands. This

issue needs further study.

#### **Survey Data**

A survey was designed and collected in July 2019. A group of stakeholders including the Washington DNR, Mountain to Sound Greenway Trust, and University of Washington Green Futures Lab developed guestions to ask visitors at trailheads to better understand the user demographics and experiences. Questions included where they came from, how they got there, where they went on the landscape, what they liked best, and what they thought could be improved. The survey was administered by DNR staff interns at the Sunset Way trailhead, High Point Trailhead, Chirico Trail, and Park Pointe Trailhead.

A total of 163 people responded to the pilot survey or a revised version. Across the survey, some common trends include users' favorite moments as the views from the top of the trail and the most common destinations as the peak of West Tiger #3, Tradition Lake, and Poo Poo Point, Common improvement requests included improved bathroom conditions at the High Point Trailhead and more signage from all trailheads. All results are located in Appendix B.





#### **Gateway to the Greenway**

Driving east from Seattle on I-90, it is just past Issaquah that the developed urban landscape transitions to the green forested foothills of the Cascades. Tradition Plateau is directly off of I-90 and is one of the first opportunities upon leaving Seattle to be in a non-urban landscape, the forest zone of King County. The easy access, educational and recreational opportunities, and location on the I-90 corridor make Tradition Plateau an ideal gateway to the Greenway that spans across the Cascades into Eastern Washington.

#### **Trail Connection/Recreation**

Tiger Mountain is one of the three mountains that make up the Issaguah Alps. There is potential to increase the connection between Cougar, Squak and Tiger Mountain with a more cohesive network of trails to create a peak to peak experience and a habitat corridor. Tradition Plateau offers an alternative trail to Poo Poo Point, which is one of the most iconic Seattle hiking destinations more popularly accessed by the heavily trafficked Chirico Trail. There is also potential to connect Tradition Plateau with the nearby regional trail network that connects the east side of the Cascades and Washington with Lake Sammamish and Burke Gilman rail trails to the west. The existing and potential connections to larger trail systems and the easier trails located on the Tradition Plateau make it a perfect place to be introduced to outdoor recreation, with opportunities for varied levels of trail runs, hikes, off road biking and long distance runs.

#### **Watershed Education**

Tiger Mountain has many smaller watersheds; the majority of them are part of the larger WRIA 8 (Lake Sammamish) watershed. Many fish bearing creeks exist around the base of Tiger Mountain including the East Fork of Issaquah Creek, just north of Tradition Plateau which hosts several species of salmon. The Cedar River Watershed, from where the city of Seattle receives two-thirds of its drinking water, is located

east of Tiger Mountain. Tradition Plateau has the potential to provide educational opportunities about our threatened Salmon populations, the importance of salmon to Coast Salish People, where Seattle and surrounding municipalities get the majority of their water, and the importance of maintaining healthy watersheds.

#### **Additional Educational Opportunities**

Tiger Mountain as a whole offers many opportunities for education and interpretation of past and present uses of the landscape. The diversity of forest types with stands of different ages, lakes, and wetlands provide a rich environment for learning about plant and wildlife ecology. The present day working forest of Tiger Mountain State Forest and evidence of past logging in the conservation lands of West Tiger and Tradition Plateau provide some insight into past and present forestry methods and sustainable resource extraction. Because of its diverse ecological features and relatively flat topography, Tradition Plateau is ideally suited for interpretative trails and environmental education for a wider range of ages and abilities. Tradition Plateau is easily accessed from the Highpoint Trailhead and the City of Issaguah and is already used by some educators and non-profits, but it is currently mostly underutilized as an educational and recreational resource for the public schools in the area. There is also an opportunity to work with tribal partners to communicate the cultural and spiritual significance of ancestral lands and promote present day respect and stewardship. The mix of state, county and city-managed lands is an opportunity to connect and expand the gateway concept across different landscapes. The large number of community, recreational, and environmental advocacy groups in the area can bring ideas and programming to connect people to Washington's forests, helping to build the next generation of stewards who protect and value these public lands.



(Opposite) View from West Tiger #1 Summit. Image by Lauren Iversen

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Sign dedicated to the work of an IATC trail crew member. Image by Lauren Iversen

#### **Locating Stories**

Tiger Mountain is a landscape that is full of stories, ranging from the formation of the landscape, the existing and previous ecology to the use of the land and how it has changed and developed over time. Although many of the narratives overlap, the stories can be broken up into five major themes: Tribal History and Interests, Stewardship and Stakeholders, Ecology, Geology, and Logging and Mining History. These categories were fleshed out based on the existing information surrounding Tiger Mountain's history and current use and through the narratives that are embedded in the landscape and can be seen in the form of vegetation types, trails, land formations or artifacts. See the entire matrix in Appendix C.

#### **Interpretive Matrix**

The matrix on the opposite page represents a small piece of a comprehensive interpretive matrix. The categories were developed by considering the stories, opportunities, and resources for each theme. These categories may be used to gather further information and utilize when planning for future projects on the landscape.

#### **Uncovering Landscape Themes**

The following themes emerge from the diverse stories of the landscape. These categories categorize the past, present, and future of the land. Capturing the current moment in time on the land, the stories can be shared for others to learn and appreciate the land.



**Stewardship & Land Stakeholders** 



**Native Peoples** 



**Ecology** 



**Geology & Hydrology** 



**Logging & Mining** 

\* Full interpretive matrix located in Appendix C.

Story Themes	Stories	Education Opportunity	Recreation Opportunity	Physical Existing Resource	Destinations	Potential Opportunities	Resources: People & Institutions
Stewardship & Stakeholders	First MTS Greenway     Hike     Forming the Issaquah     Alps Trails Club (IATC)     Transfer of land from     Weyerhauser to DNR     Building of Mountain     Bike Trails to suit     multiple user groups     Continued in     appendix	Mountains to Sound Greenway     DNR     City of Issaquah Parks/Community     Issaquah Alps Trails Club     Conservation Efforts     User Groups     Continued in appendix	Mountain Bike, Trail Running, Hiking, Equestrian, Hang- gliding Communities     Issaquah sports teams     Trail building and maintenance volunteers	Classrooms/Facilities Trails Views Increased access to nature Education opportunities and programing Mental and physical health benefits Continued in appendix	Named locations (Ruths cove), Peaks (E tiger, W Tiger 1, Poo Poo Point), border between city and DNR (Kurt's tour), Car, Adventure Trail, Potential for connection to Squak and Grand Ridge	Increased connection to Issaquah, Squak, Grand Ridge Facilities at High Point: more classrooms, picnic area, improved bathrooms, bridge over 190 Continued in appendix	Issaquah Alps Trails     Club     Mountains to Sound     Greenway     DNR- North Bend     City of Issaquah     Issaquah School     District     Tribes
Native Peoples	Harvesting and plant usage     Seasonal movement from Lake Sammamish     Relationship with settlers     Place Names	Land usage     Plant identification and use (medicinal, food, physical Regional history and locations     Migration from Lake Sammamish to Tiger Mountain     Original names and stories	Plant identification and foraging	Shared knowledge     Plants, animals     Museums and cultural centers	Names of features offered in Lutshootsed language Highlight regional locations- current location of tribes, and previous settlements	Traditional plant uses interpretative trail	Snoqalmie Tribe     Sammamish Tribe     Tullalip Hibulb Cultural Center
Ecology	A working forest next to conservation land     Old growth groves     Invasive species-disturbances     Restoration projects     Forestry practices in different forest types     Continued in appendix	Native plants vs invasive Wetlands Unique plant communities: Issaquah Creek: Salmon Continued in appendix	Plant hikes Access to unique plant communities Birding Foraging Fishing (If Tradition Plateau becomes permitted for fishing) Continued in appendix	Water     Salmon     Trees/Lumber     Plants and animals as food sources (not permitted within NRCA's)	Spruce trees in the wetlands     The Big Tree     Wetlands     Big cottonwood     Tradition Lake     Madronas (Yaher Wall)     Continued in appendix	Platform of wetlands and spruces Canopy platform Free house Bridge over 190 for wildlife crossing	David Kaplar, IATC     Becca Kedenburg, MTS Greenway Trust     Doug and Kristi     McClellan, MTS     Greenway Trust     Kurt Wieland,     Issaquah Middle     School
Geology & Hydrology	Glaciation     Underground springs as water source for Issaquah     Coal mining     Watersheds     Fish bearing streams     Land formation	Land Formation Glacial Till/Moraine Coal Seams Gravel Deposits Ocean Beds Talus Rocks	Geologic Tour     Prospecting     Connection to Grand     Ridge mines	Gravel Deposits     Coal     Water     Views	Talus Rocks Coal mine at 15 Mile Creek Glacial moraine Grand Ridge coal mines Tradition Plateau Water springs (various locations) Grand Canyon of 15 Mile Creek	Connection across 190 to coal mining at Grand Ridge Re-opening of 15 Mile Creek Trailhead Connection or access to lakes Geology interpretive trail	Aaron McMichael,     DNR     DNR Geology dept.
Logging & Mining	Logging     Coal Mining     People of the town of High Point     Homesteading on Tiger Mountain     Hop farming in Issaquah     Continued in appendix	Logging Towns     Artifacts (washtub, wheel, powerlines, cable, photos     Demographics and groups involved in the trades     Railroad grade trails and tram trail     Continued in appendix	RR Grade     Accessibility     Artifacts Tour     Trails through different types of tree stands/ planting techniques	Lumber Income (jobs) Water (City of Issaquah) Railroad Grades/Access Trust Land money from timber sales	Homesteads     Wash wbin and steel wheel artifacts on Highpoint Trail     Old bus     Round Lake (logging pond)     Corduroy road     Tramways and trains     Continued in appendix	Logging history interpretive trailviewing of artifacts     Old photographs incorporated into interpretation on trails or at trailheads	Tom Anderson, City of Issaquah resident Kurt Wieland, Issaquah Middle School Gilman Town Hall Museum Issaquah Library



## Stewardship & Land Stakeholders

Public and private coalitions have played a crucial role in protecting and conserving the public lands and open space we all value today. The approximately 900,000 acres of

public lands we have today in what has recently been designated by the United States Congress as the Mountains to Sound Greenway Heritage Area was the result of more than 30 years of advocacy by a coalition of public and private partners to protect and conserve public lands and open space along the I-90 Corridor.<sup>3</sup>

In particular, as the land around Lake Sammamish urbanized in the late 20th century due to industry in Seattle and surrounding cities, pressure to develop housing led to large neighborhoods that leave the lowlands and climb the mountains closest to Issaquah. As neighborhoods were built, groups of outdoor enthusiasts advocated the open space land to be preserved for future generations to enjoy. Without their efforts, and coordination with the logging industry and Washington DNR, Tiger Mountain could have looked more like the dense hills of homes in Seattle than a healthy, Washington forest. Agreements with the timber company Weyerhaeuser and the DNR have led to an unprecedented effort to maintain the land around Tiger Mountain as a working forest with exceptional recreational access.

#### Issaquah Alps Trails Club

The Issaguah Alps Trails Club (IATC) started in the late 1970's as a hiking club and eventually turned into an advocacy club working to protect and maintain trails and open spaces through which they run. Harvey Manning, founder and long-time president of the IATC was responsible for naming the Issaguah Alps, while original club member Bill Longwell was the leader in constructing the 16-mile long Tiger Mountain Trail.<sup>4</sup> The IATC generated movement for conservation and restoration of Tiger Mountain, started trail building, involved high schoolers in the construction of the Adventure Trail and provided many of the place names, including several named for key members. 5 Along the Tiger Mountain Trail old signs can be found that label Ruth's Cove, Wally's Glen, Paul's Cove, Denny's Bulge and Charlies Reach, all named after people who were significant in the conservation and trail building efforts. The trails club currently organizes conservation projects and hikes on the three Issaguah Alps, and accepts new members of all ages to join.

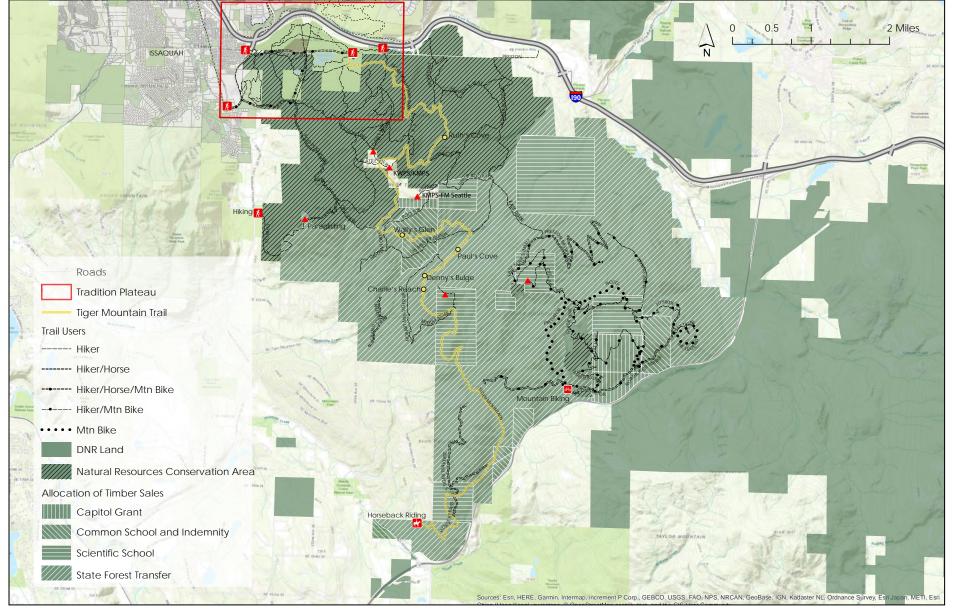
#### Mountains to Sound Greenway

In 1990 the Issaquah Alps Trails Club organized the first Mountains to Sound march from Snoqualmie Pass to Elliott Bay to promote conservation efforts. With the help of civic leaders and elected officials, the Mountains to Sound Greenway Trust was born. The Trust is made up of a coalition of environmentalists and timber companies; developers and farmers; federal and state agencies; cities and counties; nonprofits and businesses all working together to conserve and enhance the landscape from Seattle to Central Washington. With a 60 member board the Mountains to Sound Greenway Trust is currently involved in efforts from policy making to education. The education program offers field trips and curriculum for 4th-12th grade starting at the High Point Trailhead

### DNR and City of Issaquah Land Management of Tiger Mountain

In the early 1980's, led by State Land Commissioner Brian Boyle, the Department of Natural Resources traded forest lands with Weyerhaeuser to create Tiger Mountain State Forest.<sup>6</sup> This piece of land is on the south and east sides of the mountain, adjacent to Tiger Mountain Conservation Area, and was successful in the preservation of this area to remain undeveloped. The State Forest is managed by the DNR to provide income for the State Trust and forest products while offering opportunities for outdoor recreation.

In 1989, West Tiger Mountain, (which includes Tradition Plateau) was established as a Natural Resource Conservation Area. The area is managed by the DNR to protect and restore threatened habitat, endangered and sensitive species (TES), scenic landscapes and outstanding examples of native ecosystems, as well as providing public access and recreational opportunities. The City of Issaquah owns, manages and stewards most of the Tradition Plateau which it has designated as a Natural Resources Conservation Area, and collaborates with the DNR to manage and restore the landscape.<sup>7</sup>



Tiger Mountain: Land Management and Stewardship Represented on the map is the designation of Tiger Mountain State Forest Trust Land and the allocation of income from forestry along with the West Tiger Natural Resource Conservation Area. The Tiger Mountain Trail and the locations named after prominent people from the Issaquah Alps Trails Club is shown in yellow to highlight potential for interpretation about the history of conservation and trail development. Trails symbolized by use show the user groups and the dynamic use of the landscape as a logging resource and for recreation and conservation.



1. Outdoor seating nearby Tradition Lake doubles as a classroom and offers views of Tiger Mountain. *Image by Lauren Iversen* 



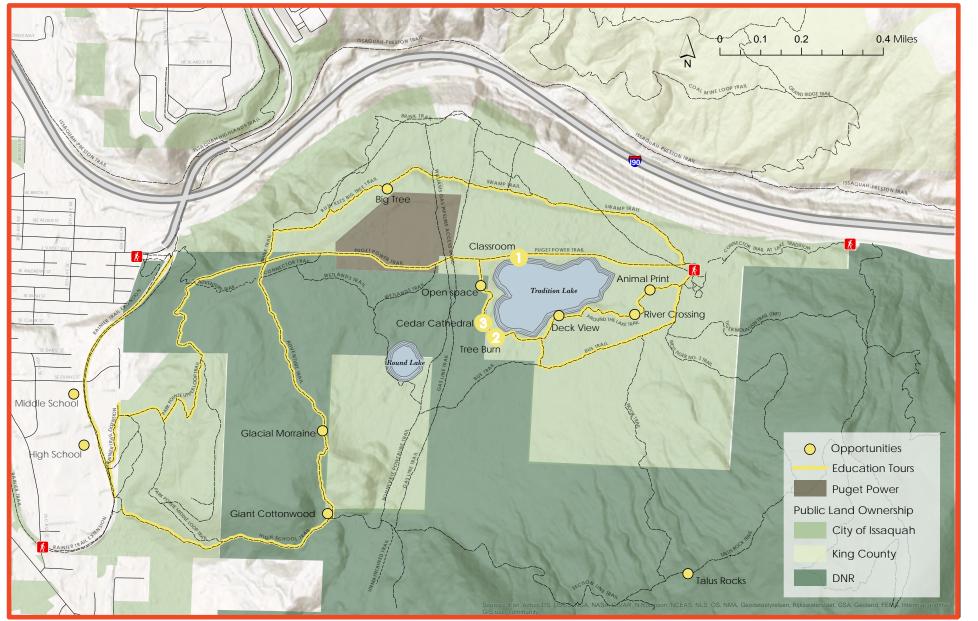
**3.** A shady clearing provides seating for families and large groups on the west side of Tradition Lake. *Image by Lauren Iversen* 



2. Fire has burned much of the base of this large tree. It offers lessons in forest resiliency for hikers looping Tradition Lake. *Image by Lauren Iversen* 

#### **Environmental Education**

The Tradition Plateau map shows the complexity of land ownership in and around Tradition Plateau. It also highlights the trails used for education tours by the Issaquah Middle School and the Mountains to Sound Greenway. The close proximity to the Issaquah High School, Gibson Ek High School, Issaquah Middle School, and Clark Elementary School demonstrate that Tradition Plateau is a great opportunity to use the landscape as an educational resource. Yellow dots represent educational opportunities that are utilized by the two education tour groups and open spaces that could be enhanced for educational gatherings. The purple trail is the designated ADA trail, which has the opportunity to be expanded into a loop.



## Tradition Plateau: Stewards and Trail Users

Highlighted on the maps are areas that could be enhanced to include a shelter, a picnicking area, signage or seating to enjoy a view. The small classroom seating area located off of the Power line trail is the only place with a view of Tiger Mountain. It could be improved with an enhanced viewing opportunity, signage, increased seating or a shelter. The viewing platform of the lake is a method used by the DNR to preserve the sensitive habitat of the lake while providing sustainable access, which could be improved with seating, signage or a raised platform to gain a better view of the canopy and the lake.



### **Native Peoples**

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#### **Ecology**

The ecology of the area includes the story of the planning efforts to conserve land, as well as a representation of significant ecological value. The forest is a resource that provides clean air, drinking water, habitat, and

ecological diversity, and offers opportunities to see old growth and species such as Sitka Spruce and Madrona that are not usually found in this area. West Tiger Mountain and Tradition Plateau's Natural Resource Conservation Areas (NRCA) are managed to protect ecological systems and encourage natural successive processes. In addition, active restoration efforts by agencies and partners are undertaken to control invasive species and restore degraded areas.

#### **Wetlands and Aquatic Resources:**

West Tiger Mountain is within two major drainage basins: the East Fork of Issaquah Creek and the main stem of Issaquah Creek. Several sub-drainages are within these two major basins.

Three major streams are found within and adjacent to the NRCA: East Fork of Issaquah Creek, High Point Creek and the streams of Many Creek Valley. The NRCA also has several seasonal and perennial stream systems classified into different types depending on channel width and range. Type 1 (shown on map) are characterized as navigable, fish-bearing waters. Downstream from the NRCA in the Many Creek Valley is spawning habitat for Coho populations and for Lake Sammamish Kokanee, a diminishing population that once served as an important resource for local tribes.

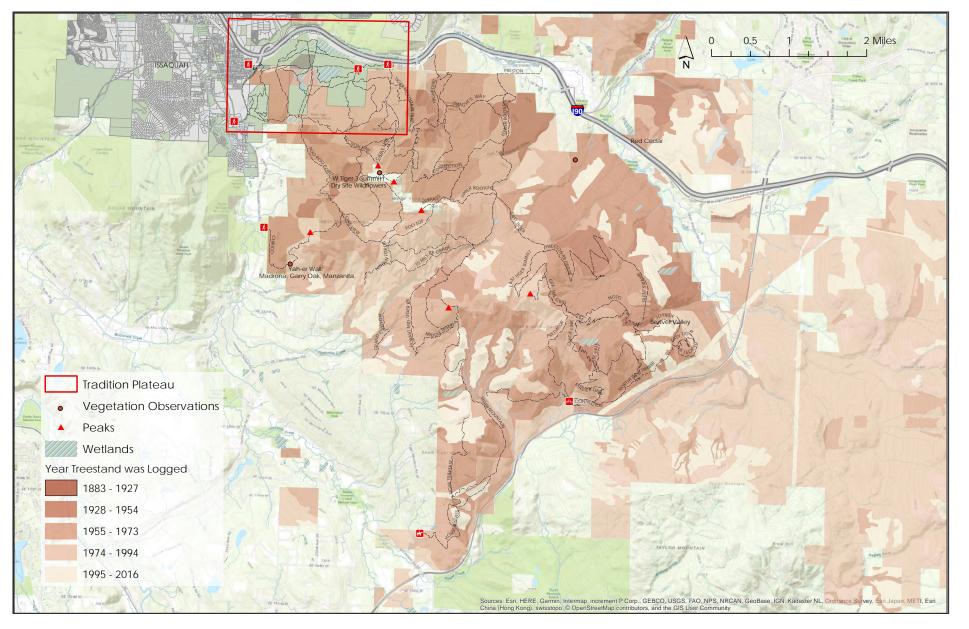
The streams in the NRCA are found within older, second-growth forests. Field observations noted that the riparian zones are generally dominated by salmonberry and devils club among other native species. Aside from erosion due to trail crossings the riverbanks are stable.

Tradition Lake and Round Lake are located on Tradition Plateau. Tradition Lake is fed by two unnamed streams that collect runoff from a 533-acre drainage basin running north by northwest from West Tiger Mountain. From Tradition Lake water flows underground to Round Lake. Both lakes host water lilies, sedge meadows, spirea, willow and red-osier dogwood. Local expert Doug McClellan notes that invasive plant species such as Reed Canary Grass (Phalaris arundinacea) as well as invasive bullfrogs, trout and bass are well established in the Lakes.

Wetlands exist on the Tradition Plateau, around the lakes, along the north end of the plateau and in depressions on the southwestern portion of the NRCA. The Wetlands support trees such as Oregon Ash and Black Cottonwood, as well as understory species including Snowberry, False Lily of the Valley and Slough Sedge. In several areas on the plateau the wetlands support Western Hemlocks. Off the Wetland Trail on the northwest quadrant a grove of Sitka Spruce can be found.<sup>8</sup>



Native blueberries found in a second growth forest near West Tiger Peak #1. Image by Lauren Iversen



### Tiger Mountain: Stand Age and Ecologic Observations

Displayed above are the DNR tree stands symbolized by the year they were last logged. The features are divided into classes whose boundaries are set where there are relatively big differences in the data values. The red stars represent areas with unique vegetation. These include wetland areas such as Beaver Valley, The Yah-er wall, a dry area where madronas, manzanitas and garry oak can be found, the Big Tree and surrounding old growth that is up to 1000 years old, a grove of Sitka Spruce-- a tree rarely found this far away from the coast-- and the dry alpine vegetation such as kinnikinnick found on the summit of West Tiger 3.

#### **Forest Structure and Composition**

based on the slope, aspect, soil types and moisture

Different forest structure and composition reflect the history of how the forest has been managed as well as the ongoing ecological processes. Tradition Plateau includes a mosaic of forest types, dry-sites and wetlands. The diversity of the area can be attributed to the micro habitat conditions that exist

content that provide areas that are hospitable to different types of species. The wetland area, for example, exists below Tradition Lake where the water table is near the surface, providing an ideal location for wetland species and trees that prefer a wetter soil.

Forests made up of mixture of Cedar, Big Leaf Hemlock Douglas Fir represent areas that naturally regenerated after logging, while areas that were replanted after logging can be seen in the form of more densely planted coniferous forests primarily made up of Douglas Fir. The iconic Big Tree, which is thought to be over 1000 years old, exists off of the Wetland Trail and is still standing because the wetland created an environment that was too difficult to log in when the surrounding tree stands were logged.

An ecological hike with local conservationists Dave Kappler identified some key disturbances in the forest. Laminated root rot, a root disease caused by a fungal pathogen, can be seen in stressed conifers. Although root rot can sometimes lead to concerning rates of mortality, the disease can also provide

ecosystem benefits by creating snags and nurse logs that provide habitat while opening up areas for other plants to be established. Young cedar trees that are dying can be seen in several locations on the plateau, which can be representative of dry site conditions or insufficient water due to climate change.

the Bonneville gas-line trail are permanently managed to have no trees, turning the area into a sunny meadow with forest edge habitat. Parts of the trails are dominated by invasive Himalayan Blackberry and Scotch Broom that do well in sunny areas with frequent disturbance.

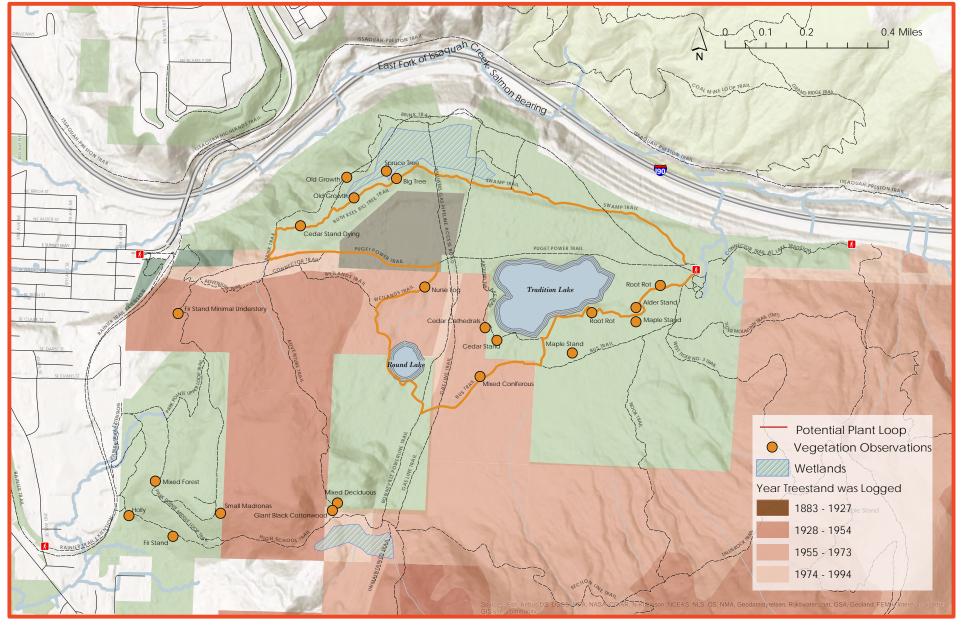
#### Wildlife

The Power line Trail, the Puget energy station and

West Tiger Mountain NRCA hosts a variety of birds. mammals. amphibians and fish. Large mammals that have been observed there include black-tail deer, black bear, cougars, bobcats, coyote and occasionally elk. Osprey, barred awls, pygmy owls, northern owls and pileated woodpeckers have been sighted and it is suspected that Great horned owls and screech owls inhabit areas with older forest structures. Tradition and Round Lakes may be used by migratory birds such as the Western Tanager, Yellow Warbler, Townsend's Warbler, and Red-eyed Vireo. Salmonids and Cottids

inhabit the High Point Creek and Many Creek Valley Stream systems that drain from West Tiger Mountain.9

(Center image) A barred owl rests in a tree on the West Tiger #3 Trail during a summer afternoon. Image by Lauren Iversen.



Tradition Plateau: Stand Age and Ecologic Observations

This map contains vegetation and ecology based observations that may provide opportunities for interpretation. These include locations with a healthier mixed forest- where the forest grew back naturally after it was logged, to be compared with dense douglas fir stands with minimal understory which came to be in the 1950's when a replanting policy was passed and the value of timber increased. The boundaries between the city and the DNR land, as well as the boundaries between the tree stands that were logged at different times provide opportunity for observing changes in logging practices and planting policies. Differences in forest composition and health can be observed at many of these borders.



#### Geology

Millions of years of geologic history can be found in the hills of the Tradition Plateau and Tiger Mountain. Evidence of glaciers, the Seattle fault, and resource deposits are just some of the interesting aspects on the trails. The hydrologic

system consists of multiple small creeks that flow into Tradition Lake and eventually Issaquah Creek.

#### Glaciation and Formation

The present day Tradition Plateau owes much of its landscape panorama to the work of the Vashon glacier and the region of the glacier known as the Puget Lobe which shaped much of Seattle. From the Tradition Plateau, Tiger Mountain and the Issaquah Highlands rise around this flat landscape. Tiger Mountain is a part of the Issaquah Alps, a low elevation mountain range that leads towards the Cascade Mountains, raised during the Miocene era (5-15 million years ago). During the Ice Age, this portion of the mountains were at one point covered by the Puget Lobe, and subsequently diminished in size compared to the larger Cascades. The "Alps" sit along the Seattle Fault, an active fault line, which raises the alps during an earthquake event. The higher elevations are made up of primarily sedimentary and volcanic rock.

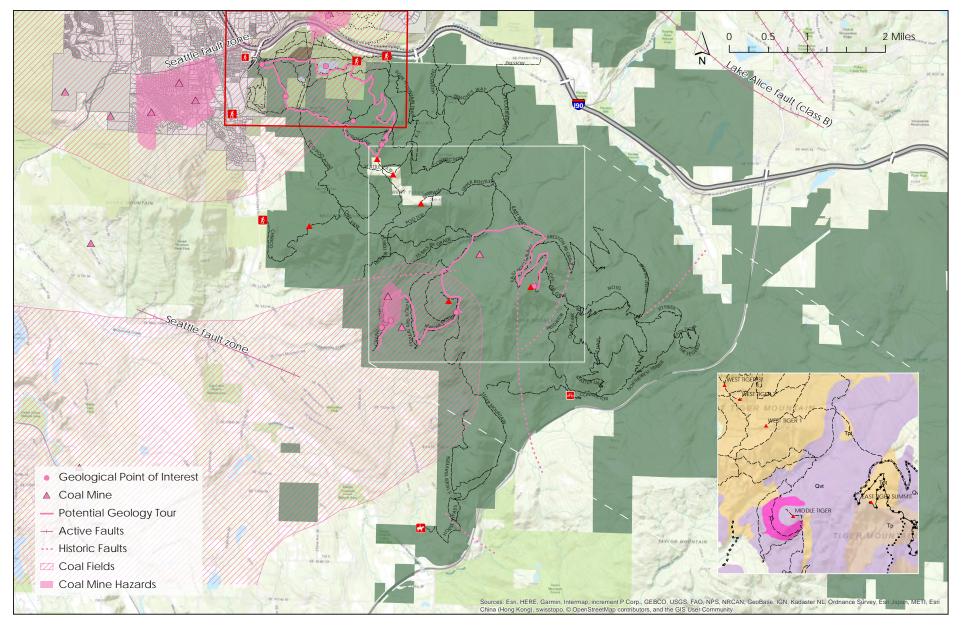
Tradition Plateau is a flat formation to the east of Issaquah that sits around 500 ft above sea level, approximately 400 feet above the town. This formation was once a glacial delta, and made up of sediment deposits as the outwash of the glacial lake. The Issaquah Highlands and gravel mining pit were formed during this period of sediment and gravel build up. Tradition Lake was also formed during the glacial recession period.<sup>11</sup>

## The Geologic Story of East Tiger Summit and Middle Tiger

Millions of years of change contribute to the formation of Tiger Mountain topography. On the south side of the mountain, the East Tiger Summit and Middle Tiger Summit are two high points located near one another. This story was interpreted based upon the Washington DNR geological maps and the work of a UW graduate student in geology. The story is told in four parts.

#### Geologic Layers Story Map

- The majority of the mountain, including all of West Tiger Peaks 1, 2, and 3, is made up of sediment layers. The Tp series (Tpt, Tp, Tptm, and Trr) are sedimentary rock layers formed during different stages of the Eocene. These layers were laid down over time and compressed, forming the sedimentary rock layer.
- 2. At Middle Tiger, a band of igneous rock forms a distinct C shape around the conical topography. This band of dense hard rock may have been formed from underground lava cooling as it rose towards the earth's crust. Never formally erupting into a volcano, the rock cooled underground. As other movements happened over time, likely part of this rock was shifted upwards or exposed by erosion of other layers.
- 3. A few historic faults are noted on the Tiger Mountain map. One fault forms a Y shape around the East Tiger Summit. Earthquakes shifted the layers around, generally uplifting the land to form the high points.
- 4. Glaciation and rivers have also contributed to the land formations. The glaciation period left enormous tracts of deposits found on the mountain (Qvt). This glaciation period carved the valley that allowed for I-90 and the gravel deposits (Qvr) found on Tradition Plateau and the Issaquah Highlands area. On the south side of Tiger Mountain, a large portion of the land is covered in the nutrient rich glacial sediment deposits. Water flow also plays a role in forming the land. Between Middle Tiger and East Tiger Summits, a significant creek flows south, potentially demonstrating the role of water in carving the slim valley between the peaks. Other slim valleys carved by creeks can be noted by looking at the V shape in the topography where the creeks run towards lower elevations.



## Tiger Mountain: Geologic Formations

This map shows the presence of coal formations in the area, along with current and historical faults. The presence of coal contributes to the historic use of the landscape. The faults and geologic layers (shown in the inset) tell the story of millions of years of change that resulted in the present day landscape. The solid pink line represents interpretive trails that link the interesting geologic features that share the story of Tiger Mountain.



Over millions of years, water has carved into the mountainside creating a complex watershed system, such as the cascading waters at 15 mile creek.

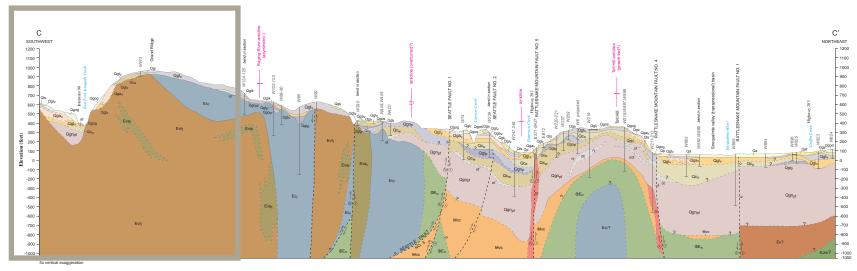
This section was cut by the Washington DNR Geologic Survey. The highlighted section cuts through Tiger Mountain north to Grand Ridge. It shows deep layers of sedimentary and volcanic rock (EVT). As the elevation slopes towards Issaquah Creek, the surface layers (starting with Qg) are layers from the glaciation period. Deposits and till from the Vashon and Fraser glaciers are found in this channel where I-90 now runs. <sup>12</sup> For more information, refer to the Washington DNR Geologic information.

#### **Talus Rocks**

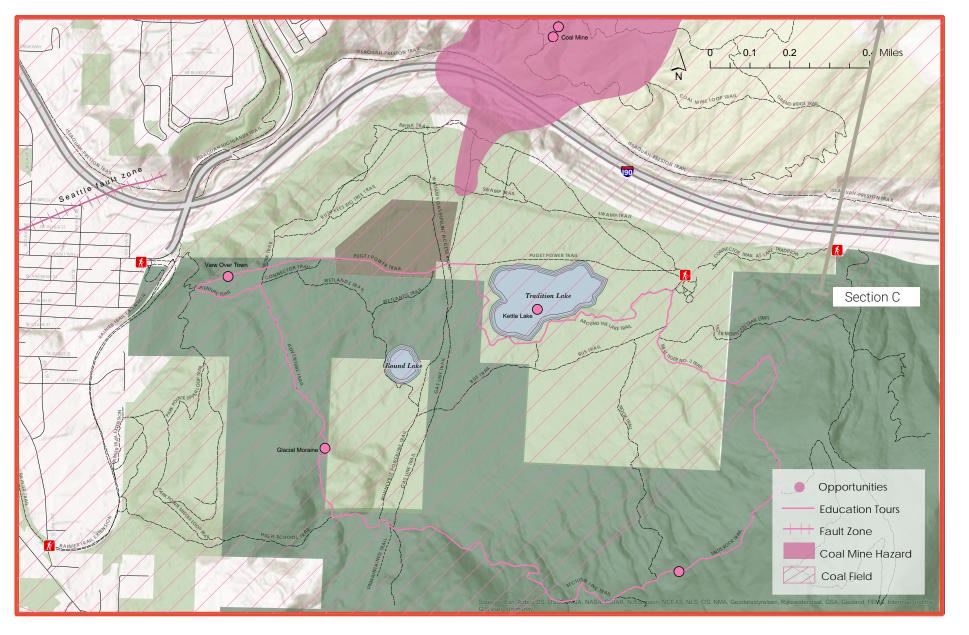
The Talus Rocks are a grouping of rocks found on the northern slope of Tiger Mountain. This formation of rocks makes up a complex cave system with a unique habitat. The rocks are likely a result of an earthquake event causing a slide from a higher elevation. The area is fenced off at cave entrances to protect the habitat of sensitive species such as bats, but can still be enjoyed by taking the narrow and scenic Talus Rocks trail that crosses multiple creeks before arriving.

#### Coal

Layers of coal can be found under Tiger Mountain, Squak Mountain, and Grand Ridge. A cross section drawn by Washington geologists for a 1984 report demonstrates the angle of the seams under Tiger Mountain. The coal seams formed now lie at a 45° angle, thrust upwards from an earthquake event along the Seattle fault. Walking along Grand Ridge trail towards the Issaquah-Preston trail, small flecks of black coal are mixed into the trail stone. Further description of coal mining in the area can be found in the following section.



© 2007 Washington Division of Geology and Earth Resource



## Tradition Plateau: Geologic Formations

This map highlights opportunities to see and learn about geologic history in the Tradition Plateau. The pink loop demonstrates trail connections between multiple points of geologic interest. The view over town demonstrates the effects of glacial recession from the Issaquah Highlands towards Lake Sammamish. Tradition Lake offers lessons of glacially carved lakes. The trail also passes through the Talus Rocks and a glacial moraine. Noting the changes within the forest, one can imagine time and energy to change the land.



#### Logging and Mining

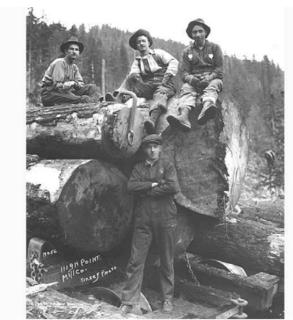
Resource extraction has a long history in the state of Washington. European settlers realized the abundance and value of the large old growth douglas fir forests. Deep under the hills was coal, an energy source vital to the innovation of many 21st century industries.

Many of the methods of resource extraction have changed in efforts to be more sustainable to the landscape. Early logging efforts did not realize the environmental degradation large clear cuts would cause. Coal has polluted the air and water all over earth. While the methods for energy and material continue to change in more sustainable ways, a reflection on the history of these industries can connect people to their past and provide lessons for the future.

#### **Timber Harvesting**

Timber harvesting began in the 1870's and peaked between 1910 and 1930. Old railroad grades are still evident on the mountain; several of the railroad grades have been made into the existing trails found around the mountain. They connect the popular trails such as the High School Trail, 15 Mile Trail, Middle Tiger Trail, Sunset Trail, Tiger Mountain Trail and West Tiger Mountain Trail. and evidence of other railroad grades can be seen in parts of the hillside. Mills at High Point, Kerriston, Preston and Hobart processed logs brought down the mountain by railroads and tramways. Flumes were also used on the creeks to transport logs, especially at the High Point Mill. 13

Artifacts from these logging operations can be found throughout the NRCA, including remnants of a corduroy rode on the north portion of Tradition Plateau, an old school bus found off of the Bus Trail on the south side of Tradition Lake, a tram wheel and a junction box along the Highpoint Trail, and old growth stumps with springboard notches cut out from them can be seen in several locations. A final piece of evidence representing the logging history on the plateau is Round Lake. The small pond was previously a wetland that was dredged for use as a mill pond. Loggers collected and floated the large logs at this location before loading them on a train that went towards Seattle.

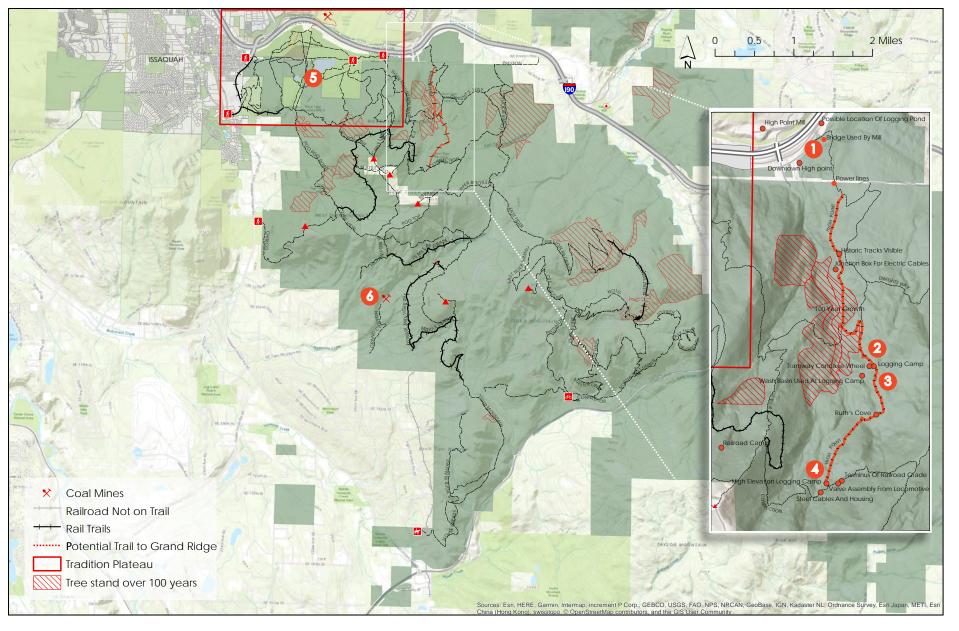


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Loggers from the High Point Mill Company stand in front of recently cut trees. Image from University of Washington Special Collections.



Many rail tracks were laid on Tiger Mountain for use by the High Point Mill Company. Loggers pose for the camera at one rail station. Image from University of Washington Special Collections.



## Tiger Mountain: Logging & Mining

A combination of existing historical artifacts from the logging and mining history on Tiger Mountain as well as locations derived from historical maps of where railroads, railroad camps, railroad trestles and mills may have been are represented on this map. The black railroads symbolize present day trails that exist along historical railroad (or tram) grades and the light grey railroad lines represent where additional railroads may have been. The Highpoint Trailhead is highlighted in red as a trail with potential for interpretation of logging history. It has many existing artifacts mapped out along it and crosses through a tree stand that was logged well over 100 years ago, providing many opportunities for education and observations.

#### Tom's Logging History Tou

Local resident and historian Tom Anderson was curious about the High Point Mill that once harvested timber from Tiger Mountain. After an in-depth study and on-site investigations, he has located specific locations used by the mill and places documented in historic images. He takes groups on tours up the High Point Trail, just east of Tradition Plateau, to share this knowledge about the industry that defined the mountain in the early 20th century. For long time residents, this tour may point to clues about the industry of their own ancestors. New residents may gain a deeper understanding of the history and changes the landscape has gone through to define its current uses today as a NRCA. The entire historic trail is marked on the map inlay. It is an opportunity to expand the interpretation to other hikers with signage and markers of the artifact locations. <sup>15</sup>



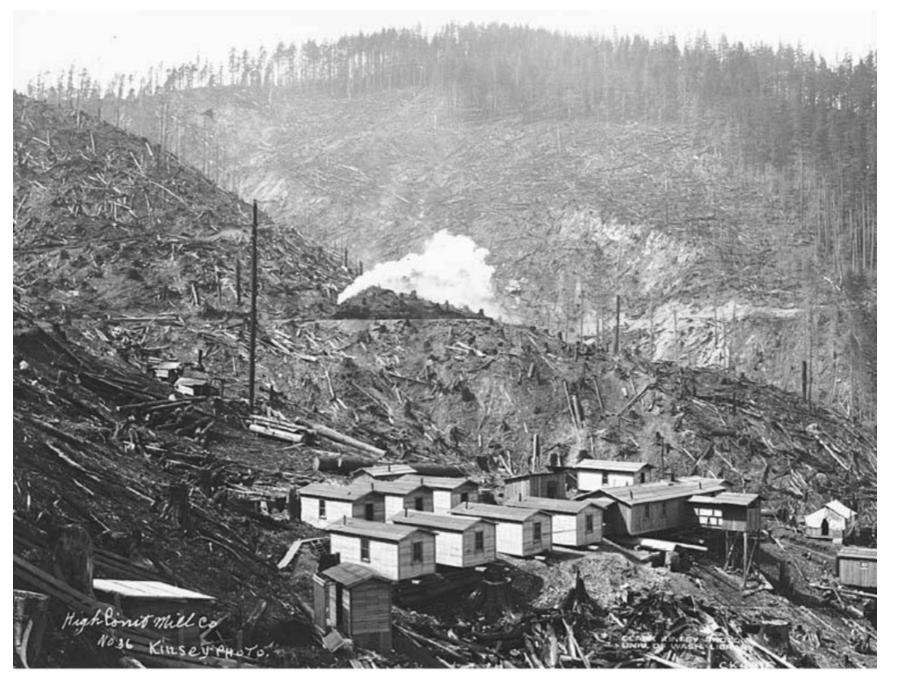
**2.** A concave wheel was used on wooded rail tracks that hauled recently cut logs up and down the mountain.



1. The old Sunset Highway bridge crosses over a creek. Grooves left in the bridge indicate cables were likely carts transporting carts of logs.



**3.** A washbin left to rust in the forest is likely left from a logging camp of the High Point Mill Company.



**4.** This image depicts what was likely a high logging camp on Tiger Mountain. Over 100 years later, the forest looks and feels very differently than the era of heavy logging. Image from the University of Washington Special Collections.

#### **Living on the Mountain**

Existing fruit trees and maps from the Issaquah History Museum contain evidence that there were at least two if not three homesteads located on Tradition Plateau in the 1800's. Tradition Plateau also contains artifacts from Issaquah's original water system, which tapped into the springs from Tradition Lake and piped water down to the city. Invasive holly plants along Sunset Trail are evidence of a holly farm that once existed on the hillside. Additionally, oral histories are located at the Issaquah History Museum from people describing their lives living on Tiger Mountain. Many of the areas described are near the southwest corner of the mountain, where development of housing is the most dense. Irving Petite wrote a book about growing up on the mountain titled *Life on Tiger Mountain*.

#### **Coal Mining**

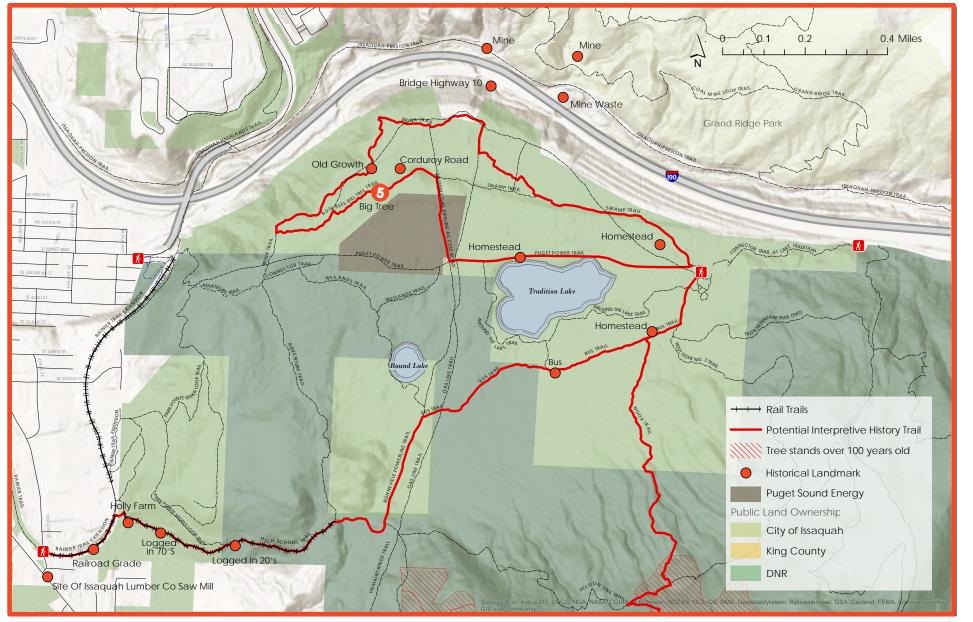
Coal in the Issaguah area was discovered by white settler L.B. Andrews and the Snoqualmie Tribe. Disputes between the settlers and the tribe along with difficult extraction conditions made these undesirable sites. However, in 1887, Seattle Coal and Iron formed and started extraction from Squak Mountain. In 1909, Grand Ridge Mine opened. The last of the mines closed in the 1960's.14 Coal remains in deep seams, but extraction is unlikely as the difficulty of mining outweighs the quality of coal available. Evidence of mining can be seen in many locations in the area. Grand Ridge Trail offers an interpretation describing some of the history of the coal mines, and careful inspection reveals the location of a former mine entrance, now covered by earth and rock. Signs indicate dangerous conditions past the trail as the earth could sink where the mining took place. The Issaguah-Preston trail provides further clues about the history of coal. According to local expert Dave Kappler, two large hills block the trail from the I-90 corridor. These hills are waste piles, the discards of unusable coal and rock next to the tracks that took the coal towards Seattle. Near 15 mile creek on Tiger Mountain, two former mine entrances are covered with steel gates set into the soft sandstone. The Rainier Trail Rail Road is mostly converted into a rail trail system, but a remnant of the trains that hauled the coal, and timber, from the mountain into the city.



**5.** The Big Tree (or Ruth Kee's Big Tree) is thought to be over 1000 years old. This large old growth tree survived logging by rooting into a wet, muddy area too difficult to log in.



**6.** Evidence of a coal mine found at 15 mile creek. These mine entrances are dangerous and sealed shut.



### Tradition Plateau: Historic Landmarks

Evidence of logging and mining on Tradition Plateau is plentiful. The map displays the potential location of homesteads based on historical maps and vegetation, remnants of an old holly farm and evidence of an old corduroy road. Round Lake is evidence of a wetland dredged to be a pond to store logs before they were milled. A potential connection to Grand Ridge leads to markers of historic coal mining and the piles of rock waste from the active mines.

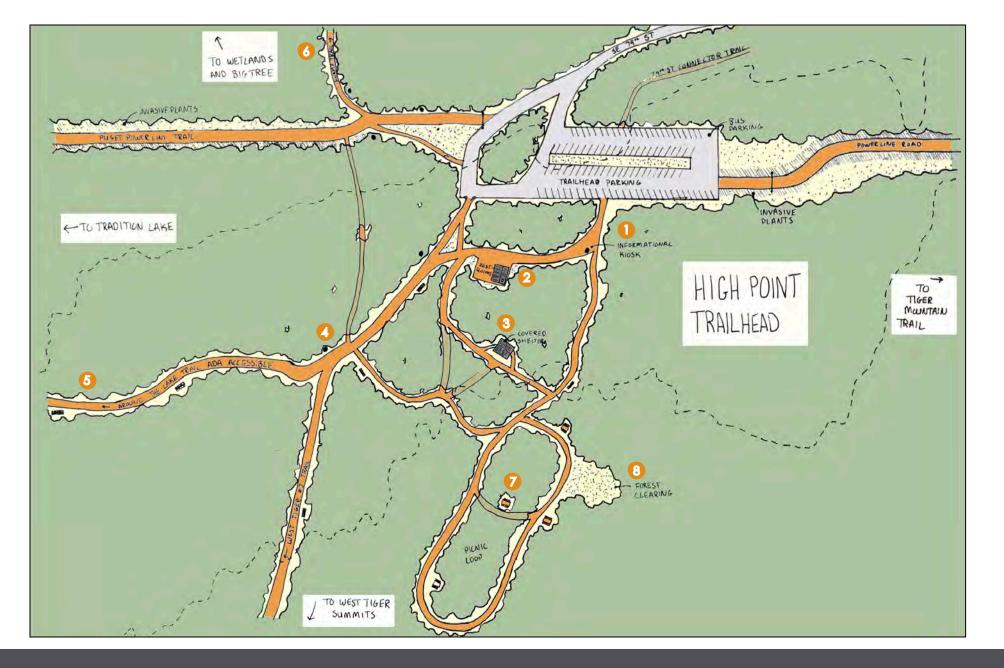
#### Introduction

The High Point Trailhead is located off I-90 Exit 20 and is the first non-urban landscape leaving the greater Seattle/Bellevue Metro. This location currently contains a parking lot for over 80 cars, educational shelter, vault toilet, and wayfinding/informational kiosk. It is aligned with the PGE power line corridor that leads to a power substation. As a rural location, the trailhead and exit have potential to become the future gateway location for the Mountains to Sound Greenway. To better understand the potential of this site, the current conditions and uses are examined and analyzed in this section.

#### Existing Amenities

- 1. Welcome and interpretive sign
- 2. Restrooms
- 3. Covered shelter
- 4. Trailhead signage
- 5. Ecological interpretive signage
- 6. Children's Swamp Trail interpretive signage
- 7. Picnic loop
- 8. Forest clearing





High Point: Trailhead, Trails, and Amenities

Amenities at this location include a central parking area with room for over 100 cars and space for bus parking. The parking directs users past an informational kiosk spot with maps of the trail network. The main trail continues past the rest rooms and splits for the West Tiger #3 Trail and Around the Lake Trail. Several amenities and trailheads are found from this central location.



1. An informational kiosk directs trail users to information on Tradition Plateau and welcomes them to the recreational area. It is utilized as a meeting spot, a return for lost items, and provides a feeling of threshold into the forest.



**3.** A shelter with electricity protects from rain in a shady, secluded spot nearby the trailhead. The dense trees make the space very cool, even during warm sunny days. The shelter is hidden from the informational kiosk, so many users do not realize it is there.



**2.** All users and field trips share the two vault toilets located off the parking area. Field trips and new users to the forest express the desire for more toilets and hand-washing capabilities. A less shady location would reduce odor.



**4.** Wooden signs direct users to the many trail spurs from the High Point Trailhead parking area. The same style of signs are located throughout the West Tiger NRCA.



**5.** The Swamp Trail offers children an interpretive story about the forest ecosystem. While the boardwalk has been recently renovated to improve trails in wet areas, the interpretive trail signs are sometimes illegible due to dirt accumulation.



**7.** The picnic loop has seen damage to a few of the picnic tables. It seems underutilized and cold, even on a nice warm day. While there is seating available, many users to do seem to realize the picnic table option is there. Many users prefer to sit closer to Tradition Lake.



**6.** Interpretive signs on the ADA trail describe the ecosystem within the forest and Tradition Lake. The signs are 24"x36" boards on a 36" posts. They are stopping points for interested hikers along the trail.



**8.** A small space near the picnic loop offers less dense tree canopy, providing access to sun that is rare within the forest environment. Dense shrubs have filled the understory.

All images from Ilsa Barret, Laura Cooper, and Lauren Iversen

#### High Point, Then and Now



Property of MSCUA, University of Washington Libraries. Photo Coll 516



Property of Museum of History & Industry, Seattle



#### Images (Clockwise from the top left)

- 1. The town of High Point, located at the existing trail head exit from I-90. The town was populated by loggers and their families, as well as other small town needs such as a church and school. Image from University of Washington Special Collections.
- 2. The town church is located north of the interstate. It survived flooding and continues to operate today. Image from Washington
- 3. A classroom of students that attended school in High Point, Washington. Image from University of Washington Special Collections.

## Recalling the highs and the lows of High Point's history

#### By Thomas N. Anderson

What's so "high" about High Point? Many have won-

Well, you have to think about traveling to High Point from Issaguah a hundred years ago by rail. The tracks left Issaquah in the vicinity of the Sunset on-ramp to Interstate 90 (Exit 18) at an elevation of about 200 feet. It's a steady climb from there to High Point (Exit 20) at 450 feet — about a 2 percent grade. It then flattens between High Point and Preston before heading downhill into the Raging River valley between Preston and Fall City. So, if you were on the train the grade flattened out, the train picked up speed and the high point." So there you in 1957 the widening of go — "High Point."

tion many have pondered: The valley floor is narrow "Why does High Point even in that vicinity and a wide school and many houses.

What happened? In short, two things happened: deple-



Courtesy of the Eric Erickson Collection

The High Point School is shown in 1926.

heading east out of town, you the last tree it had the rights schoolhouse. A second classwould have noticed that the to cut on Tiger Mountain locomotive was working hard in 1928. The mill closed in on the climb, and then when 1929, but later reopened under new ownership, milling logs brought from elsewhere. you would say to yourself — So the mill lingered on, but Oh, we must have made it to the heyday was over. Then, Highway 10 necessitated the And here is another ques- complete removal of the mill. have a name — it's not even a road consumed most of it. wide spot in the road?" True The hotel survived and was enough today, but a hundred converted to the Sparkling years ago it was a bustling Brook service station. It, too, little town with a shingle mill, sawmill, hotel, store, church, around 1975.

tion of trees and our insais the old schoolhouse, now tiable appetite for roads. The used as a church. It was

High Point Mill Company cut built in 1911 as a one-room room was added as the community grew. With the depletion of the timber, the growth land in the Preston area stopped, and then reversed. By the mid-1930s, only one classroom was needed again. The High Point Mission Church at that point in time was looking for a new meeting place as it had been using a building owned by the mill, which now was needed for other purposes. And so the tenure of the church in the schoolhouse began, using the room no longer needed by the school. In 1940, the High Point School District merged with the Issaguah School District, and the school was closed. The church bought the building and it has been used for church purposes

Today, the only nonresidential building that remains



the church in Preston was

John had closer affinity to the

Mission Covenant Church of

denomination under the ban-

ner of the High Point Mission

Church. The word "Mission

the church as a mission, but

SEVERAL LOCATIONS INDOORS & OUT: DEDESTRIAN BARK.

a Baptist church. Brother

in High Point joined that

The church has interesting roots. The brothers John and August Lovegren emigrated from Sweden with Sweden, and so the church their families. August bought and formed the Preston Mill Company, while his brother John bought land in the High in the name did not denote Point area and formed the High Point Mill Company.
August was a Baptist, and so that the congregation had a mission to spread the word.

The churches, although of different denominations, had close ties and friendly relations over the years.

Eventually the church withdrew from the denomination. and officially changed its name to "Trinity Evangelical Church" in 1974. It continued under that banner until 2013 when it merged with the nearby "I-90 Community Church" which was meeting in the Preston business park. Today, it continues as an adjunct campus of that church.

Over the years the building has gone through many remodels and revisions. Happily, the distinctive bell tower remains, keeping watch over what remains of the oncebustling community.

Thomas N. Anderson is a volunteer for the Issaguah History Museums.

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ANY KIND OF LANDSCAPING

Issaquah resident and local historian Tom Anderson digs into the history of High Point, including sharing the story of the I-90 Community Church that was built for use by the town of High Point. Image from Washington DNR.

#### Introduction

While considering the potentials for the land around Tradition Plateau, we visited sites that may provide direction and inspiration. Developing categories of the examples were focused on perceived immediate needs for the site such as wayfinding, while others considered more broad ideas for interpretation centers and nature play. Our sites ranged from local, nearby examples in Washington to ideas abroad in Scandinavia and New Zealand. A set of inspiring precedents for enhancing experience, education and play are presented in a separate document (Appendix D).

#### **Utilizing Precedents**

The precedent document contains inspiring examples of outdoor spaces that feature indigenous knowledge, habitat restoration, infrastructure, art, interpretation, outdoor shelters and classrooms, wayfinding, and nature play. After broad research and exploration, these precedents were chosen based on their illustration of thoughtful planning and creative design that focuses on ecological health, user accessibility, and experiences that promotes a deeper connection with the landscape through play, education, art, wildlife viewing, and recreating.

These successful local and international precedents can provide inspiration for conceiving and funding future projects for our parks and open spaces. They may also help to inform the development of innovative and impactful designs that contribute to the understanding, stewardship, enjoyment, and preservation of our most valued places.

- Indigenous Knowledge
- Habitat Restoration & Management
- Infrastructure
- Ar
- Interpretation
- Signage
- Shelters & Outdoor Classrooms
- Wayfinding
- Topographic Maps & Models
- Nature Play

















 $5^{\circ}$ 

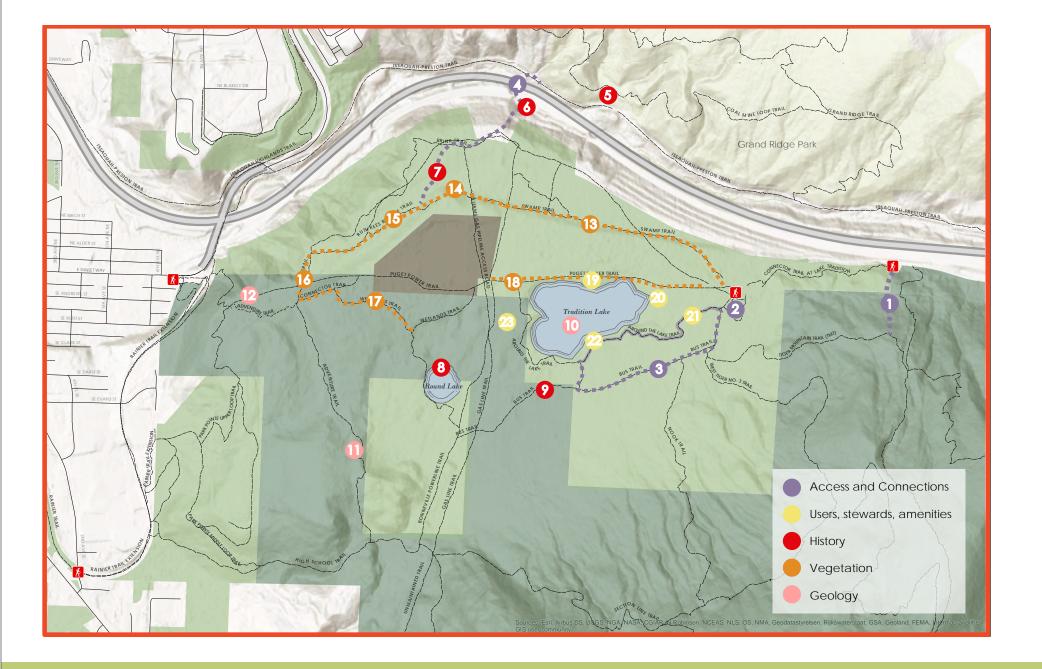
#### **Future Directions**

The future for Tiger Mountain and Tradition Plateau will provide nature access, ecological habitat, and recreation for generations. In addition tribal people continue to access "open and unclaimed lands" for purposes of cultural practice and to exercise treaty rights. With this analysis and exploratory effort, we aim to highlight ways to improve and expand the opportunities for people, wildlife and plants. Advocacy for conservation in the 1980's and 90's resulted in natural land accessible for all. It would be beneficial if future projects incorporated more information about history, ecology, conservation, and environmental etiquette. Planning efforts will be conducted by the City of Issaquah, Washington DNR, and King County to formalize future changes, but we will highlight a few suggested improvements that could be implemented sooner.

#### **Opportunities on Tradition Plateau**

The suggested trail connections and additional ADA trail have the potential to increase accessibility and improve the user experience. Interpretation about vegetation, geology, indigenous knowledge and presence, and mining and logging history on Tiger Mountain could make Traditional Plateau more of an educational asset. Built elements that could be incorporated into the landscape include outdoor classrooms, platforms for viewing tree canopy and or the lake, as well as nature play elements that encourage children to interact with the natural elements found in the landscape without going off trail.

- 1. Connector trail
- 2. High Point Trailhead improvements
- 3. ADA trail extension
- 4. Trail connection under I-90
- 5. Coal mine
- 6. Old highway bridge
- 7. Reminants of corduroy road
- 8. Round lake log pond
- 9. Old bus
- 10. Tradition Lake a kettle lake
- 11. Glacial morraine
- 12. View of I-90 corridor
- 13. Wetland plants
- 14. Grove of Sitka Spruce
- 15. Old growth
- 16. Different logging years
- 17. Nurse log
- 18. Open space under powerlines
- 19. Gathering place improvements
- 20. Potential lake viewing or access
- 21. Open space for nature play element
- 22. Lake viewing platform expansion potential
- 23. Open space for nature play element



Tradition Plateau: Locating Future Opportunities

This map locates potential opportunities on Tradition Plateau based off of research and findings around local vegetation, geology, logging and mining history, indigenous expression, users, stewards and education usage on the plateau.

#### **Access and Connections**

- 1. A trail connecting the Highpoint Trailhead to the Tiger Mountain Trail once trailhead improvements have been made could improve accessibility and circulation. It could also act as the entrance to a historical interpretation trail that tells the story of logging on Tiger Mountain
- **2.** Improvements to the Highpoint Trailhead could be made to increase accessibility. (See page 60-61)
- **3.** The ADA accessible trail currently is a small out and back trail that is not clearly marked at the trailhead. Here there is opportunity to create a loop trail using the evenly graded Bus Trail. It would run through a variety of forest types and could include interpretive signage. If clearly marked on maps and at the entrance, an ADA trail has the potential to encourage a more diverse user group to utilize Tradition Plateau as a resource.



Example of an unpaved ADA trail in a natural area..lmage from Adobe Stock



Location under 190 where a connector trail could go. Image from Ilsa Barrett



Wildlife corridor bridge on 190. Image from Lauren Iversen

**4.** A trail underneath I-90 or a pedestrian bridge over I-90 to connect Tradition Plateau with Grand Ridge could improve accessibility to both parks. It would also provide an opportunity for a historical interpretation trail that incorporates landmarks from logging and coal mining in the region. Additionally, a wildlife corridor over I-90 could improve the habitat and ecological function of Tradition Plateau and Grand Ridge as well as pedestrian access between the two natural areas.

#### Wayfinding

One of the draws to West Tiger Mountain and Tradition Plateau is the vast network of forested trails to explore. There is room for wayfinding improvement at West Tiger and Tradition Plateau to provide a stress free experience for users and avoid people getting lost in the trail system. The similar trail names (West Tiger 1, 2 and 3, East Tiger Summit, Middle Tiger), the complex intersections and inconsistent signage can lead to confusion from users. Both Trailheads located off of the highway exit are labeled as High Point Trailhead, which is unclear. Effective trail signage, locator maps, symbology and color coded trails are all methods that could be used to improve user experience at Tiger Mountain State Forest.



Existing signage at Tradition Plateau provides basic direction using arrows, trail names and distance. Image from Ilsa Barrett

At the base of Tiger Mountain, Park Pointe is a city of Issaquah owned park with its own signage network. Similar to the Little/Big Si trail signs, they are located at each intersection in the trail. The signs are laminated plastic with a printed map of the area. In addition to trail distance markings, each intersection includes a symbol to mark where the user is on the map. A key factor in improving wayfinding for Tiger Mountain will be coordinating signage with the various land managers of the area. Coordination of the trail network names, map orientation and scale, and symbology can greatly improve the user experience and ease user confusion while on the trails. Additionally, marking maps along each intersection with various destinations highlighted may ease pressure on the most heavily trafficked trails and bring users to locations throughout the mountain.



Park Pointe has clear maps with all trails, destinations, trailheads, and distance between intersections posted at each intersection. Image from Ilsa Barrett

#### Interpretation

**5-8 Logging and Mining History.** Interpretation opportunities of the logging and mining history could be incorporated by highlighting existing artifacts and adding interpretive signage and old photographs in relevant locations.

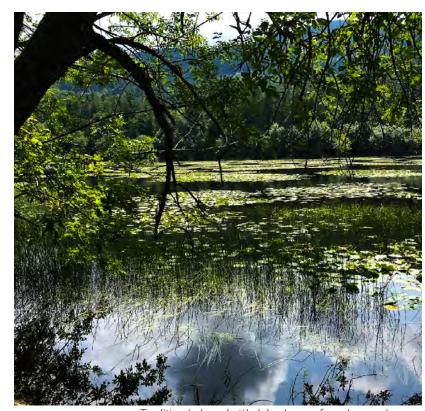
- 5. The coal mine on Grand Ridge.
- **6.** The bridge from old highway before I-90.
- 7. Remnants of a corduroy road used to move logs.



Coal mine found on 15 mile trail on Tiger Mountain. Image from Lauren Iversen



Historical photos such as this one of a corduroy logging road could be used on interpretive signage. Image from Timberlake Collection, UW Libraries



Tradition Lake, a kettle lake. Image from Lauren Iversen

- **8.** Round Lake which is a man made lake constructed as a log pond.
- 9. Old bus used to get to logging camps.

**10-12 Geology.** Interpretation of significant geological features could be done through improved views, interpretive signage and maps.

- **10.** Tradition Lake: a kettle lake formed from a depression made in a glacial outwash.
- **11.** The high point on this trail is the top of a glacial moraine.
- **12.** View of the I-90 corridor valley which was carved out by glaciers.

**13-17 Vegetation.** An interpretive plant trail along the Wetland Trail is an opportunity to highlight elements of the local ecology, native plant uses and names, and results of logging practices.

- 13. Wetland plants along trail.
- **14.** A grove of Sitka Spruce, a tree not commonly found in this region.



Large Sitka Spruce found at Tradition Plateau. Image from Ilsa Barrett



Interpretive sign from Indigenous Knowledge Trail. Image from Ilsa Barrett

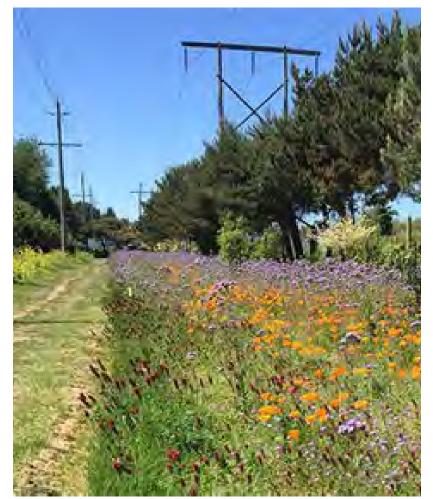


Creative interpretive signage example. Image from the City of Wellington

- **15.** Old growth exists today because the area was too wet to be logged.
- **16.** The edge between two forests logged in different decades with different planting policies, resulting in different forest ecology today.
- **17.** Other opportunities on the Wetlands Trail include a nurse log, and woodpecker shavings.

#### **Habitat Enhancement**

18. Creative solutions to enhance the habitat under the power line corridor on Tradition Plateau might include removing invasive species and planting native wildflowers and flowering shrubs to create a pollinator corridor. This would also be a lower maintenance landscape that utilizes the exposure to sunlight. The corridor exists as a utilitarian road for Puget Power, habitat enhancements may significantly improve the user experience as it is one of the heaviest use trails from the High Point Trailhead.



Pollinator corridor under power lines in Richland BC. Image from BC Hydro

#### Art

18. The open space provided by the power line corridor and the gasline corridor could be the location for exciting outdoor art. An interactive outdoor sculpture park or art walk could utilize and engage community. It could include indigenous art, interactive instillations, or interpretive pieces that provide information about the region. In addition to habitat improvements, the art corridor could become interpretive education and destination for users seeking varied outdoor recreation experiences.



Sculpture hidden in the woods of Denmark. Image from Thomas Dambo



Interpretation and art at the Cedar River Watershed. Image from Nancy Rottle.

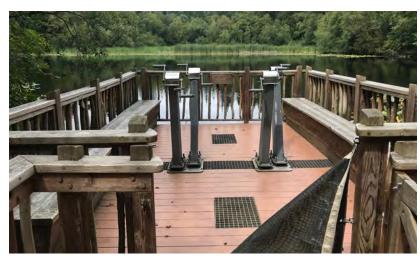
#### **Built Features**

19. The clearing located on the northern edge of Tradition Lake is an asset that could be enhanced as an outdoor classroom and destination. Increasing the view of the lake or Tiger Mountain, adding picnic tables, or a small shelter are ways that this area could be improved upon.



Bench circle clearing nearby Tradition Lake. Image from Lauren Iversen.

**20.** Around Tradition Lake, viewing platforms, or carefully constructed boardwalks could allow for interaction or views of the lake while discouraging going off trail to explore the fragile shoreline. The moveable floating dock at Islandwood (pictured below) is an example of a built feature that allows users to go on the lake without damaging vegetation or eroding the shoreline.



Floating dock on the lake at Islandwood. Image from Lauren Iversen.



Downed wood turned into a playful bridge on the Matairangi Nature Trail.

Image from Nancy Rottle

**21-23.** The open spaces along the Around the Lake trail provide opportunity for nature play elements. Those could include, a canopy viewing platform, or natural features set up to be played on to promote children interacting with their surroundings. A platform or gathering area that represents the size of old growth trees once found in the region is an example of something that could be an interactive feature with an educational component.



Stronghold by Brian Tolle found on the UW campus. Image from UW.

#### **Opportunities at High Point**

The exisiting High Point Trailhead is heavily utilized by all types of recreational users. It serves as excellent access to Tradition Plateau and beyond to Tiger Mountain. Improvements at the trailhead can improve the overall user experience and help in creating this moment as a destination and "Gateway to the Greenway".

#### **Additional Trailhead**

Located just to the south of I-90 Exit 20 for High Point is a recently acquired piece of land owned by the Washington DNR. With the increase in usage at Tiger Mountain, recent plans were developed to add an additional trailhead. The proposed plan includes parking, interpretive signage, and reuse of a home foundation as a location for events and interpretation. This location is a potential connection for the Issaquah-Preston rail trail, Grand Ridge mountain biking and hiking trails, and the High Point Trail trailhead.

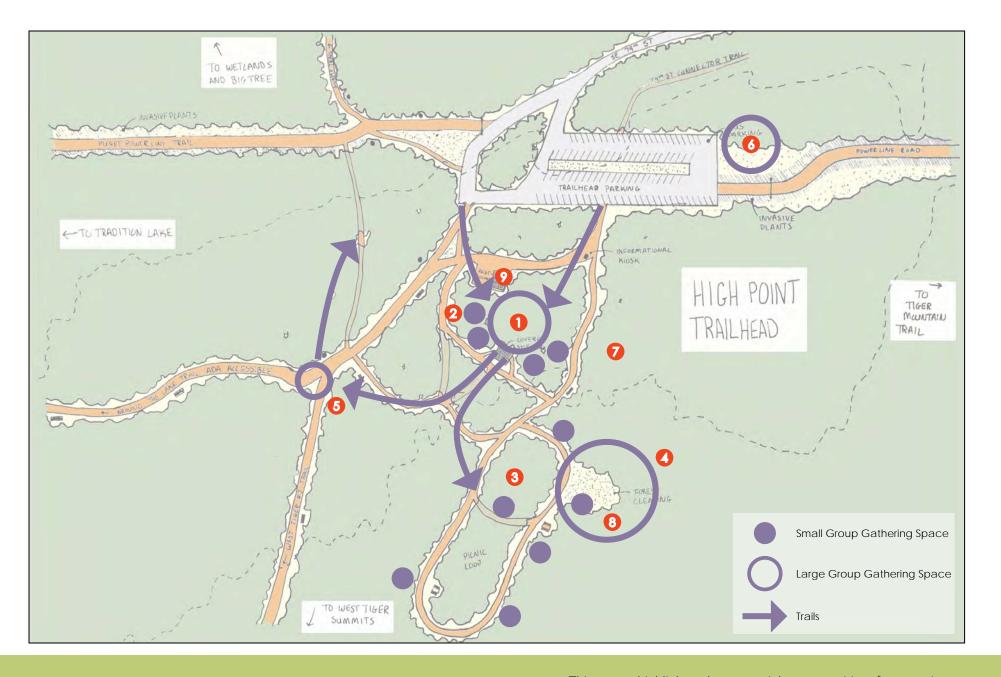


Proposed plan for the High Point Trailhead. Image from the Washington DNR.

#### Creating the "Gateway to the Greenway"

Listed below are descriptions of spaces noted on the High Point Trailhead map.

- **1. Central Gathering** A central gathering space would welcome users to the Mountains to Sound Greenway and Tiger Mountain/ Tradition Plateau. This central space could offer interpretation and maps to the area. The central gathering space would feel welcoming to all levels of users to the area.
- **2. Small Group Gathering** The existing shelter can be utilized by only one group. Additional small shelters tucked into the trees allow the space to be used by many groups at a single time, while still offering privacy and the feeling of being in the forest.
- **3. Picnic Loop** Repairs and ensuring ADA access to the picnic loop would aid in usage of the space. A trail from the central gathering with clear signage will help users know it is there.
- **4. Outdoor Classroom** The open space is the only space with sunshine found not on the powerline corridor. Clearing the understory brush could provide a space for sunny picnics, as well as an outdoor classroom for field trips. A stage, storage, seating, and tables would be useful features for that space. Additionally, meadow like plans growing can offer environmental education.
- **5. Central Trail Access** The many starting points for trails on Tradition Plateau make it confusing when searching for the right trailhead. Closing the multiple spurs and developing a central spur location will help users access the correct trail.
- **6. Restrooms** The vault toilets need the sun to prevent bad odors. Moving the vault toilets to a location under the Powerline Trail will be in a sunny spot, close to bus parking for field trips, improve visibility by maintenance staff to help reduce vandalism, and remove the restrooms as the main gathering spot at the trailhead.
- **7-9. Nature Play** These locations are examples of spots where nature play can be integrated into the trailhead. Dispersing the play opportunities allows for the feeling of discovery by children, and opportunity to take advantage of different types of forest characteristics.



Tradition Plateau: Developing the Gateway Experience

This map highlights the potential opportunities for creating a welcoming trailhead experience at High Point. The arrows represent trails that develop, improve, and to connect to existing trails. Some trails would be closed by developing the new trails. The large open circles represent large group gathering nodes. The closed circles represent small group gathering spaces.

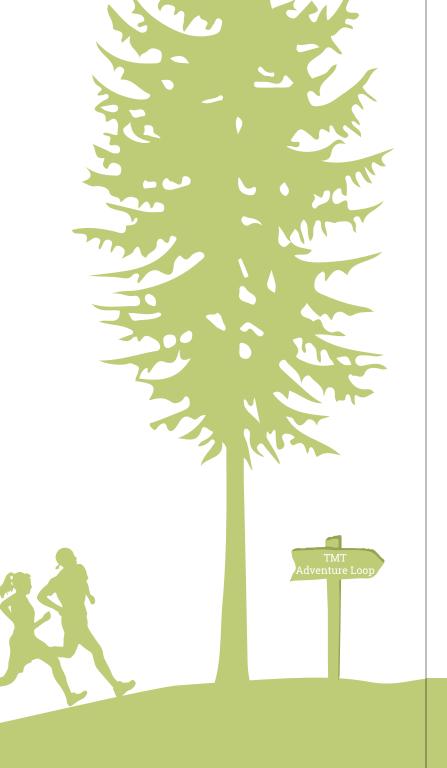
#### **Trail Running Loops**

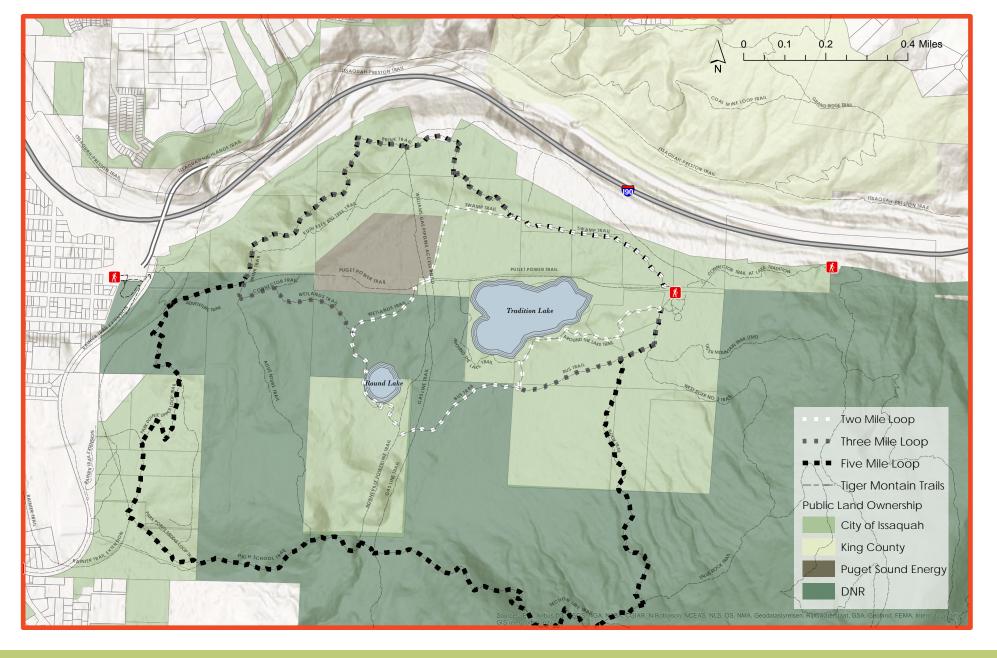
Tiger Mountain is a popular trail running destination that even offers annual trail running events. While most of the trails on Tiger Mountain are steep, Tradition Plateau offers trails with a mellower grade which could be ideal for people that are new to trail running or hiking. Currently, the trail system on Tradition Plateau is lacking adequate trail signage and or maps, making it a confusing destination for trail running.

Designated running (or walking) loops of different length and difficulty could increase the accessibility of trail running or hiking at Tradition Plateau. The loops could be highlighted on a map using different colors or symbology while the trail markers with corresponding colors as well as information on distances could be located at equal distances along the trail. This system would allow runners (or walkers) to stay on track and pace themselves based on how much longer they had to run.



Example of a color coded wayfinding marker. Image from Ilsa Barrett





Tradition Plateau: Trail Loops for Diverse Recreation

This running loop map provides an example of how trail loops could be color coded based on difficulty level and length to provide options for new users or trail runners or hikers who would like to have a pre-planned route. Providing pre-planned options may encourage use of less busy trails than the popular trails used to access peaks.

#### **Gateway Charrette**

On November 19, 2019, a group of stakeholders from agencies representing the Washington DNR, City of Issaguah Parks and Community Services, Mountain to Sound Greenway Trust, Issaguah Alps Trails Club, University of Washington Green Futures Lab The Wilderness Society, King County Parks, King County Trailhead Direct, and the Washington Trails Association gathered for a morning of analysis and shared brainstorming for visions of the land. The charrette was primarily led by Washington DNR staff, presenting the scope of the grant, summer 2019 survey data collection, and updates on the analysis conducted by the UW Green Futures Lab. After presenting the project goals and familiarizing the participants with the landscape, the group engaged in a series of activities to uncover shared visions and desired goals for the land. Issues discussed included wayfinding, bathroom accessibility, overcrowding on Chirico Trail, illegal dumping of trash on DNR land, and improving opportunities for differently-abled users. Participants imagined themselves as different users such as a child, parent, first time hiker, experienced hiker, hang glider, etc. to consider infrastructure improvements and desired experiences for the various demographics. After a list of experiences and infrastructure was compiled, participants were split into groups to document their ideas onto a map of the area. While stakeholders typically had different opinions about exact changes to the landscape, the entire group was positive about the future for this landscape.

#### **Key Takeaways**

#### Creation of a Gateway

Development of Tiger Mountain and the High Point Trailhead as the gateway to the Mountains to Sound Greenway means passing through the threshold of urban to wilderness. To create this feeling, participants express the need for the following experience within the gateway.

Wildness

Guidance

Beginning

Memorable

Iconic

Symbolic

A place to gather and

then proceed

- Educational and instructional
- Transitional
- Passageway to something special
- Accessible
- Welcoming
- Staffed
- Portal

### User Experience Activity

Taking the position of a variety of users (experienced outdoor enthusiast, new to the outdoors, families, kids) meant stepping outside individual identities and considering the needs of others. A few themes emerge for visioning trailhead, forest management, and user needs.

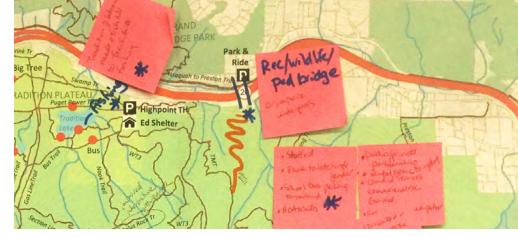
- Clear maps are needed at each trailhead, as well as reassuring signage (wayfinding) along the trails
- Amenities that make it welcoming to all types of users such as multi-lingual signs and bus stops allow more groups to enjoy the benefits of the natural environment
- Amenities and interactive elements at trailheads improve the experience, but it should be built to maintain a feeling of being in nature
- All types of users could benefit from a variety of recreation opportunities, including expanded trail types, picnic areas, art, and events
- Children need area to be allowed to play, discover, dig, swing, and explore. These elements can be built as nature play or allowed through open space in the forest.
- Safety on the trails and at the trailhead is a priority

#### Photographs, top row to bottom row

- 1. A group of stakeholders draws and annotates on a map of Tiger Mountain. Their notes indicate future opportunities and visioning at specific locations on Tiger Mountain.
- 2. Building a foundation of shared values for outdoor spaces, the groups present and discuss ways Tiger Mountain and nearby nature areas are improved for equitable outcomes by taking the perspective of a variety of user types.
- 3. Participants included various work sectors, interests, and generations. These conservationists, planners, and leaders met at the same table to discuss expanding diversity in the forest area, as well as other vision and goals. Cooperation and coordination with the various groups, as well as community input, is vital for equitable long-term planning.

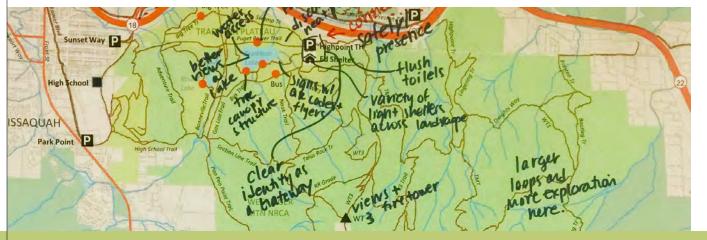
Images from Laura Cooper and Nancy Rottle













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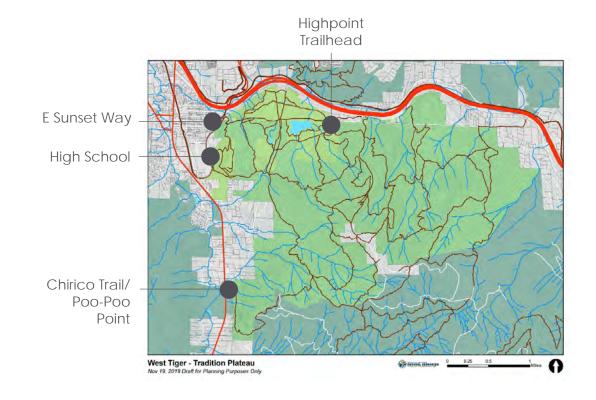
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## Outdoor Experience Survey Questions and Results



Survey 1 (Pilot) 86 Respondents - July 12 + 14

Survey 2 (Revised) 77 Respondents - July 18, 19, 20, 21 - Aug 1

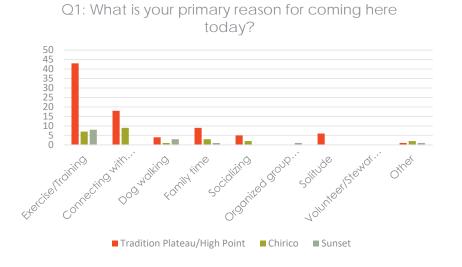
### SURVEY 1 (Pilot)

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□1co	me here regula	rly			
How experie	nced are you in	the outdoors?			
	experienced	THE PRINCE OF			
	ewhat experie	nced			
	perienced	144.6			
□ Firs					
What plants	did you visit to	Purcha			
1000					
	o learn more a ural history	boulir	this landscape (Select a	all that apply)	
	ural history ural history				
	its and animals				
		n (logging/mining)	Y-4-		
		and conservation ef	TOITA		
□ Not					
- 500		La san			
My favorite	moment here to	oday was			
Something t	hat would impr	ove my experience h	ere Is		
O CAND W	e you would lik	r Day You			

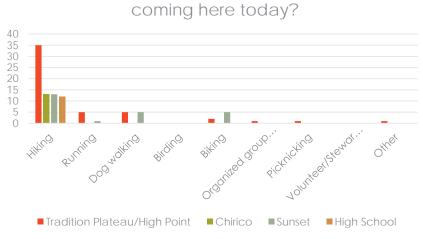
## SURVEY 2 (Revised)

	n) 🗇 High I	Point/Tradition Plateau	DE Sun	set Way	Date  High School		oo Trail/Poo Poo
	Out	door I	Expe	rience	e Surv	ev	
□ Hikir □ Runi □ Dog □ Birdi □ Bikir □ Orga □ Pien	u doing here to ng ning walking ing ng nized group a	oday? (selectione)				GREENWAY	DS 1 QUAR
	ou travel from	today?					
How did you Car		□ Bus	o Bi	ke	□ On foot		
Your age?	□0-18	п19-24	□ 25-34	□ 35-44	O 45-55	□ 56-64	□ 65÷
How many p	eople did you	come here with?	Kids	_	Adults —	_	
	ne here regula	arly Tiger Mountain St	ate Forest toda	y7 (Paa Paa Paint,	West Tiger 3 Summit.	Tradition Lake, etc.	)
My (and/or r	ny kids') favor	ite moment here t	oday was				
Imagine this	place in the fo	uture, what would	you like to see	here/improved?			

### SURVEY 1 (Pilot)

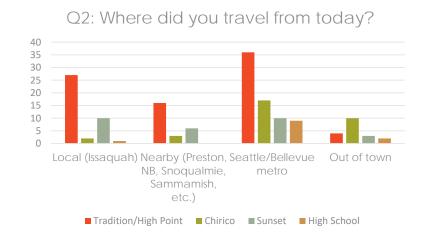


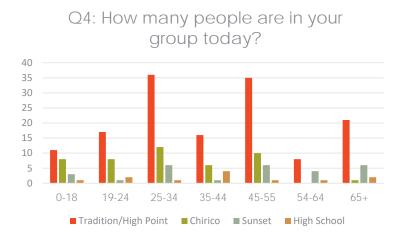
SURVEY 2 (Revised)

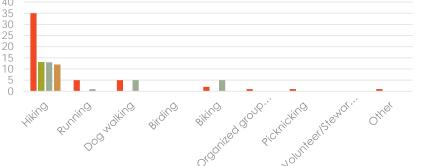


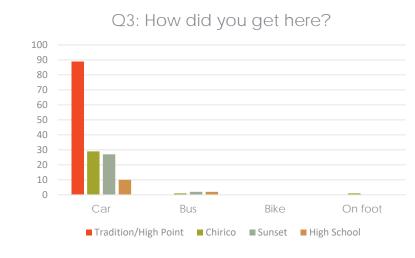
Q1: What is your primary reason for

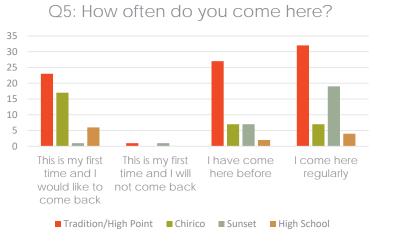
### SURVEY 1 & 2 Combined



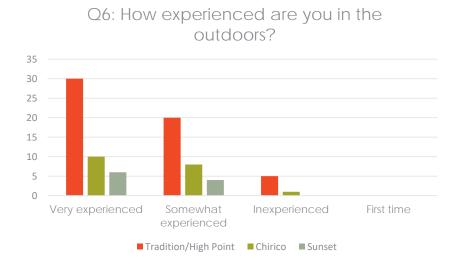




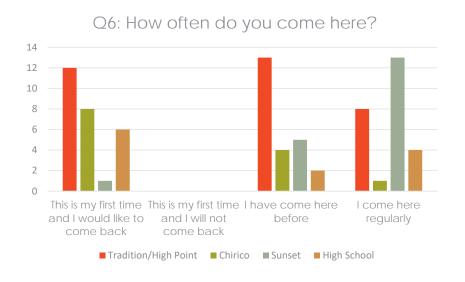




SURVEY 1 (Pilot)

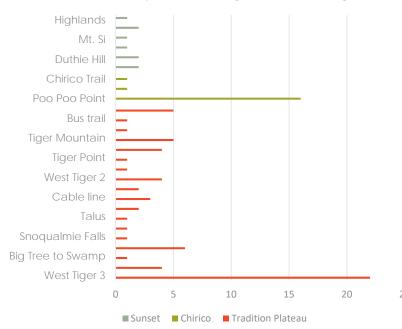


SURVEY 2 (Revised)



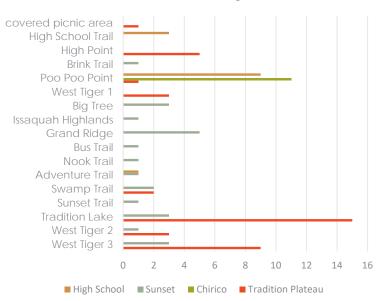
### SURVEY 1 (Pilot)

Q7: What places did you visit today?



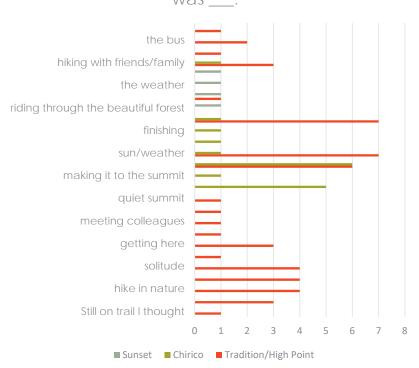






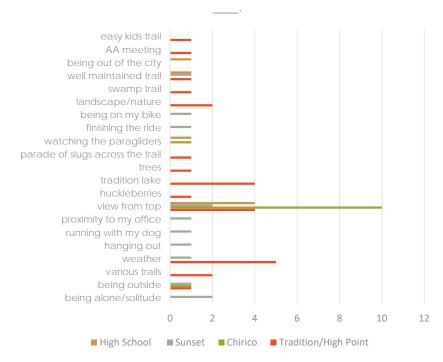
# SURVEY 1 (Pilot)

### Q9: My favorite moment here today was \_\_\_\_.

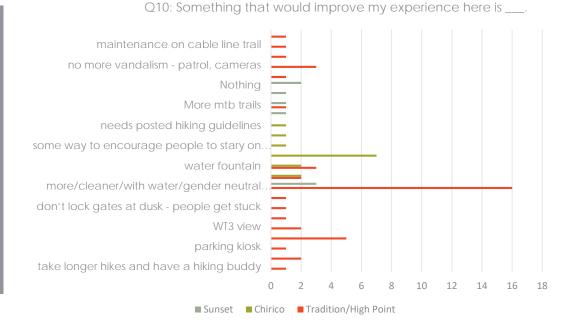


# SURVEY 2 (Revised)

Q8: My favorite moment here today was

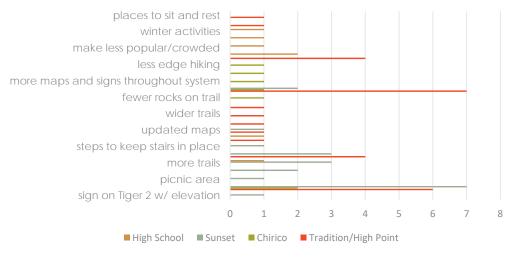


# SURVEY 1 (Pilot)



SURVEY 2 (Revised)





	Story Themes	Stories	Education Opportunity	Recreation Opportunity
	Stewardship & Stakeholders	<ul> <li>First MTS Greenway Hike         Forming the Issaquah Alps         Trails Club (IATC)</li> <li>Transfer of land from         Weyerhauser to DNR</li> <li>Building of Mountain Bike         Trails to suit multiple user         groups</li> <li>Building the TMT (and         naming spots for initial         members of the IATC)</li> <li>Establishing Natural Resource         Conservation Area</li> </ul>	<ul> <li>Mountains to Sound Greenway</li> <li>DNR City of Issaquah Parks/ Community</li> <li>Issaquah Alps Trails Club</li> <li>Conservation Efforts</li> <li>User Groups</li> <li>PSE/Gasline/Radio Towers</li> <li>Multi-organization cooperation to manage and preserve land</li> <li>Working landscape: Resource extraction, recreation, conservation in one landscape</li> <li>Urban forest labratory: goals and practices</li> <li>Past ownership and uses</li> </ul>	<ul> <li>Mountain Bike, Trail Running, Hiking, Equestrian, Hanggliding Communities</li> <li>Issaquah sports teams</li> <li>Trail building and maintenance volunteers</li> </ul>
	Native Peoples	<ul> <li>Harvesting and plant usage</li> <li>Seasonal movement from Lake Sammamish</li> <li>Relationship with settlers</li> <li>Place Names</li> </ul>	<ul> <li>Land usage</li> <li>Plant identification and use (medicinal, food, physical)</li> <li>Regional history and locations</li> <li>Migration from Lake Sammamish to Tiger Mountain</li> <li>Original names and stories</li> </ul>	Plant identification and foraging

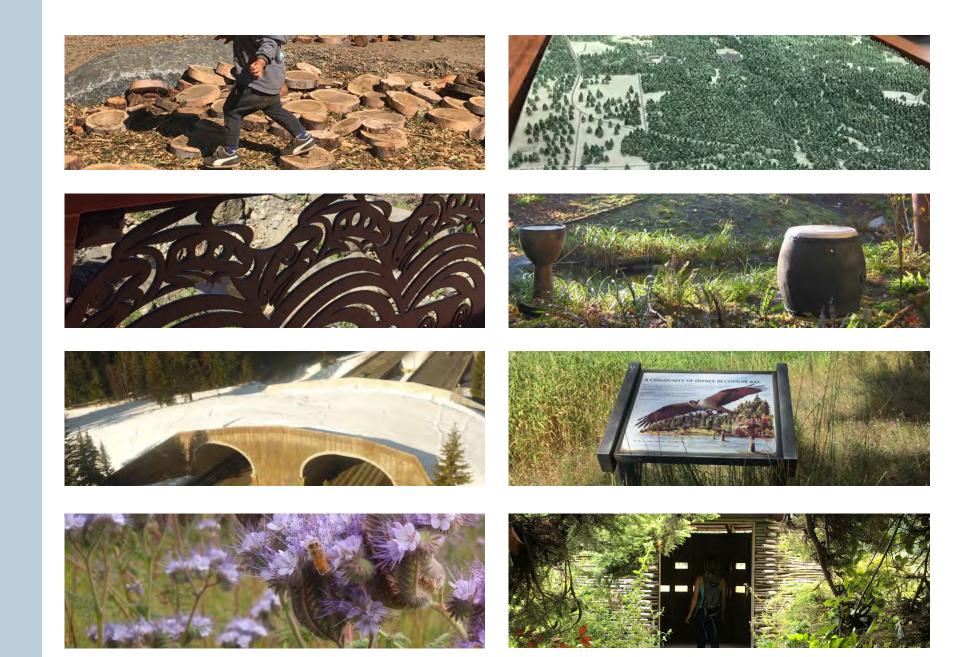
Story Themes	Physical Existing Resource	Destinations	Potential Opportunities	Resources: People & Institutions
Stewardship & Stakeholders	<ul> <li>Classrooms/Facilities</li> <li>Trails</li> <li>Views</li> <li>Increased access to nature</li> <li>Education opportunities and programing</li> <li>Mental and physical health benefits</li> <li>Recreation</li> </ul>	Named locations (Ruths cove), Peaks (E tiger, W Tiger 1, Poo Poo Point), border between city and DNR (Kurt's tour), Car, Adventure Trail, Potential for connection to Squak and Grand Ridge	<ul> <li>Increased connection to Issaquah, Squak, Grand Ridge</li> <li>Facilities at High Point: more classrooms, picnic area, improved bathrooms, bridge over 190</li> <li>Connection to larger trail networks</li> </ul>	<ul> <li>Issaquah Alps Trails Club</li> <li>Mountains to Sound Greenway</li> <li>DNR- North Bend</li> <li>City of Issaquah</li> <li>Issaquah School District</li> <li>Tribes</li> </ul>
Native Peoples	<ul> <li>Shared knowledge</li> <li>Plants, animals</li> <li>Museums and cultural centers</li> </ul>	Names of features offered in Lutshootsed language Highlight regional locations- current location of tribes, and previous settlements	Traditional plant uses interpretative trail  I I I I I I I I I I I I I I I I I I	Snoqalmie Tribe Sammamish Tribe Tullalip Hibulb Cultural Center

Story Themes	Stories	Education Opportunity	Recreation Opportunity
Ecology	<ul> <li>A working forest next to conservation land</li> <li>Old growth groves</li> <li>Invasive speciesdisturbances</li> <li>Restoration projects</li> <li>Forestry practices in different forest types</li> <li>Climate change</li> <li>Unique vegetation: Spruce trees, madronas, etc</li> </ul>	<ul> <li>Old growth</li> <li>Native plants vs invasive</li> <li>Wetlands</li> <li>Unique plant communities:</li> <li>Issaquah Creek: Salmon</li> <li>Past and present animals and ecologies (changing habitats of large mammals, food sources, plant communities)</li> <li>Types of logging and land use resulting in different forest types/health</li> <li>Climate change impacting ecology</li> </ul>	Plant hikes
Geology & Hydrology	<ul> <li>Glaciation</li> <li>Underground springs as water source for Issaquah</li> <li>Coal mining</li> <li>Watersheds</li> <li>Fish bearing streams</li> <li>Land formation</li> </ul>	Land Formation  Glacial Till/Moraine  Coal Seams  Gravel Deposits  Ocean Beds  Talus Rocks	

Story Themes	Physical Existing Resource	Destinations	Potential Opportunities	Resources: People & Institutions
Ecology	<ul> <li>Water</li> <li>Salmon</li> <li>Trees/Lumber</li> <li>Plants and animals as food sources (not permitted within NRCA's)</li> </ul>	<ul> <li>Spruce trees in the wetlands</li> <li>The Big Tree</li> <li>Wetlands</li> <li>Big cottonwood</li> <li>Tradition Lake</li> <li>Madronas (Yaher Wall)</li> <li>Cave ecology at Talus Rocks</li> <li>Maple Groves</li> <li>Issaquah Creek</li> <li>Old growth</li> <li>Transition zones from different forest management practices</li> </ul>	Platform of wetlands and spruces     Canopy platform     Tree house     Bridge over 190 for wildlife crossing	<ul> <li>David Kaplar, IATC</li> <li>Becca Kedenburg, MTS Greenway Trust</li> <li>Doug and Kristi McClellan, MTS Greenway Trust</li> <li>Kurt Wieland, Issaquah Middle School</li> </ul>
Geology & Hydrology	<ul> <li>Gravel Deposits</li> <li>Coal</li> <li>Water</li> <li>Views</li> </ul>	<ul> <li>Talus Rocks</li> <li>Coal mine at 15 Mile</li> <li>Creek</li> <li>Glacial moraine</li> <li>Grand Ridge coal mines</li> <li>Tradition Plateau</li> <li>Water springs (various locations)</li> <li>Grand Canyon of 15 Mile Creek</li> </ul>	Connection across 190 to coal mining at Grand Ridge • Re-opening of 15 Mile Creek Trailhead • Connection or access to lakes • Geology interpretive trail	Aaron McMichael, DNR DNR Geology dept.  I I I I I I I I I I I I I I I I I I

Story Themes	Stories	Education Opportunity	Recreation Opportunity
Logging & Mining	<ul> <li>Logging</li> <li>Coal Mining</li> <li>People of the town of High Point</li> <li>Homesteading on Tiger Mountain</li> <li>Hop farming in Issaquah</li> <li>Sunset Highway turns into 190</li> </ul>	<ul> <li>Logging Towns</li> <li>Artifacts (washtub, wheel, powerlines, cable, photos</li> <li>Demographics and groups involved in the trades</li> <li>Railroad grade trails and tram trail</li> <li>Homesteads/Farms (tradition lake homestead, Mirrormont</li> <li>Stages/Types of logging practices (natural reseeding and planting policies</li> <li>Interactions and relationships between tribes and settlers</li> </ul>	RR Grade Accessibility  Artifacts Tour  Trails through different types of tree stands/planting techniques

Story Themes	Physical Existing Resource	Destinations	Potential Opportunities	Resources: People & Institutions
Logging & Mining	<ul> <li>Lumber Income (jobs)</li> <li>Water (City of Issaquah)</li> <li>Railroad Grades/Access</li> <li>Trust Land money from timber sales</li> </ul>	<ul> <li>Homesteads</li> <li>Wash wbin and steel</li> <li>wheel artifacts on</li> <li>Highpoint Trail</li> <li>Old bus</li> <li>Round Lake (logging pond)</li> <li>Corduroy road</li> <li>Tramways and trains</li> <li>Holly farm</li> <li>Grand Ridge Coal</li> <li>Mines</li> <li>15 mile Creek Coal</li> <li>Mines</li> </ul>	<ul> <li>Logging history interpretive trail-viewing of artifacts</li> <li>Old photographs incorporated into interpretation on trails or at trailheads</li> </ul>	<ul> <li>Tom Anderson, City of Issaquah resident</li> <li>Kurt Wieland, Issaquah Middle School</li> <li>Gilman Town Hall Museum</li> <li>Issaquah Library</li> </ul>



# **PRECEDENTS**

Inspiration for Nature Education, Exploration, and Play

#### Introduction

This document contains inspiring examples of outdoor spaces that feature indigenous knowledge, habitat restoration, infrastructure, art, interpretation, outdoor shelters and classrooms, wayfinding, and nature play. After broad research and exploration, these precedents were chosen based on their illustration of thoughtful planning and creative design that focuses on ecological health, user accessibility, and experiences that promotes a deeper connection with the landscape through play, education, art, wildlife viewing, and recreating.

These successful local and international precedents can provide inspiration for conceiving and funding future projects for our parks and open spaces. They may also help to inform the development of innovative and impactful designs that contribute to the understanding, stewardship, enjoyment, and preservation of our most valued places.

This document was created by Ilsa Barrett and Lauren Iversen, interns through the University of Washington Green Futures Lab, with advising from Professor Nancy Rottle. Funding for this project comes from the Washington Recreation and Conservation Office obtained by Department of Natural Resource's (DNR) and the City of Issaquah. The grant-funded project supports analyses of existing conditions and opportunities for public lands in the I-90 corridor, including West Tiger Mountain Natural Resources Conservation Area (NRCA), Tradition Plateau NRCA, Grand Ridge Park and Mitchell Hill, based upon their ecological resources, experiential characteristics, and stories of the past, present, and future.

#### **Topics Explored**

- Indigenous Knowledge
- Habitat Restoration & Management
- Infrastructure
- Art
  - **,**
- Interpretation
- Signage
- Shelters & Outdoor Classrooms
- Wayfinding
- Topographic Maps & Models
- Nature Play

#### **Locating Precedents, Near and Far**

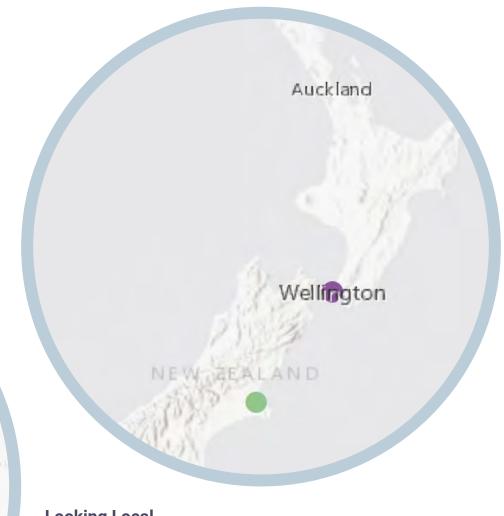
Inspiration comes from many places. Nearby forests in Washington offer local examples to learn from. Looking beyond the borders of Washington provides insight into ways of expressing indigenous culture, protecting and managing forests, and engaging people to learn about nature in different ways.



#### **Searching Abroad**

Study abroad trips attended by Green Futures Lab interns provided opportunities to visit and reflect on ways to incorporate indigenous expression, art, and play with nature. The perspectives of other cultures offers reflection on our own values and ways of communicating with nature. New opportunities can be found across every corner of the earth.





#### **Looking Local**

The state of Washington, and more specifically the Salish Sea, offers an immense amount of best practices for signage, trail infrastructure, and engaging people in nature. Utilizing the knowledge from practitioners around the state can provide insight into methods for building and expanding ideas on Tiger Mountain, as well as other local forests. The Puget Sound experience is unique and should be celebrated and cherished in its natural areas.



#### Local indigenous knowledge connects the native people of the northwest to the ecological world. Since time immemorial, the

Coast Salish people live and tend to the lands of the Pacific Northwest. Learning about the native communities by non-native colonists and immigrants acknowledges the complex skills, language, social interactions, rituals, community, and philosophies of the many tribes that were diminished by colonization. Washington's outdoor spaces are a place to utilize traditional ecological knowledge for restoration, education, and interpretation so that continued generations can share and enjoy the mountains, waterways, and forests of the Pacific Northwest.



Image from Lauren Iversen



Image from Lauren Iversen

#### Traditional Knowledge Trail Snoqualmie Tribal Reservation

A 0.25 mile trail built on sacred land by the Snoqualmie Tribe (sdukwalbixw). This trail shares ecological knowledge of over 20 native plants and their usage by indigenous people. Each sign along the route is small, easy to read, and provides access to additional information through a QR code. The interpretation includes artwork, photo imagery, and plant names in both English and Lushootseed, the native language of the tribe.



Images from Ilsa Barrett

### The Cicmehan Trail Port Townsend, Washington

The čičməhán Trail is made up of 18 sites throughout the city of Port Townsend that are divided into 3, 6 or 12-mile loops that use symbols (right) as a wayfinding tool. The goal is to educate the public on the relationship between the S'Klallam people and the European settlers who arrived in Port Townsend in the mid-19th century. Each sign on the trail touches on a small part of the story of historic and modern-day S'Klallam people.







Whāriki or welcome mat, in Victoria Square is one of 13 in the central city.

Image from David Walker



Albert Park Path - Gateway 1990, Chris Booth: Commissioned by AMP Society with assistance from ASB Community Trust, 1988; Collection of Auckland Art Gallery Toi o Tāmaki. Image from Patrick Reynolds



Pouwhenua on Mount Victoria carved by Rangi Hetet + Sonny Davis and their team. Image from Patrick Reynolds

#### Maori Art Aoteoroa (New Zealand)

This artwork study by University of Washington student Zoe Kasperzyk investigates sculpture of the Maori people embedded into their native land. To the Maori, human life and the natural world are one. Art that reflects these values can be found throughout urban and rural locations on their native land Aoteoroa, or New Zealand. Siting art along rivers, coasts, and mountains reflects different sacred spaces. While colonization has changed the landscape and way of life for the Maori, the presence of art shares their stories and values for future generations.



Images by Ilsa Barrett

### Jamestown S'klallam Tribe Tribal Headquarters Sequim, Washington

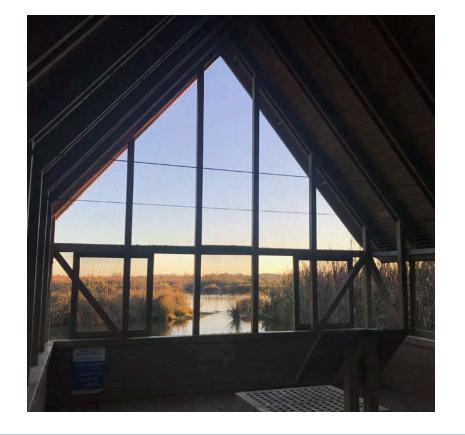
A dance plaza, a covered gazebo under a large red cedar tree, and a scenic bridge over a creek that filters stormwater from the parking lot can all be found around the Tribal Headquarters of the Jamestown S'klallam Tribe. The beautiful outdoor space that looks over Sequim Bay the also contains a covered classroom, totems, a play area, and a veterans memorial.







Habitat restoration and management can improve ecological health and ecosystem benefits, while also providing wildlife viewing opportunities. Managing landscapes with a focus on ecosystem health might include ecological enhancement through restoration efforts, intentional design that preserves fragile ecosystems while allowing public access, or conservation of greenways to create animal corridors and avoid fragmentation. Public green spaces with healthy habitats offer opportunities for wildlife viewing and, in some cases, hunting or harvesting.







View from the bird blind - Images from Nancy Rottle

### **Travis Wetland** Christchurch, New Zealand

Travis Wetland is the largest freshwater wetland in Christchurch and provides crucial habitat for plants and birds. It was purchased in 1996 by the Christchurch City Council, saving it from threats of development. To keep the habitat of the wetland healthy, invasive species are removed, native species planted, and predators are controlled. This Nature Heritage Park features boardwalks through the wetlands, a bird blind, interpretive signage, and a shelter offers beautiful views of the wetlands.



Linear meadows CCC flats management area. Image from Laura Cooper

### CCC Flats Elk Habitat Improvement Site North Bend, Washington

The CCC flats, named for the 1930's Civilian Conservation Corps camp that previously occupied the area, is now home to a herd of elk and other Cascade Mountains wildlife. The area contains strips of linear meadows and forests, which provide multiple types of habitat for foraging. Densely planted strips of meadows are important food sources, while the trees provide protection from predators. While planted and maintained to improve elk herds, other wildlife has been spotted including black bears and grouse.



A bear spotted along the habitat corridor. Image from Harold Erland



A grouse enjoying the linear meadows habitat. Image from Harold Erland



mages from BC Hydro

#### **Pollinator Pasture** Richmond, British Colombia, Canada

The Pollinator Pasture was built below the BC Hydro transmission power lines in Bridgeport Industrial Park. The project is part of a pilot program for the Border Free Bee Project and received the 2017 Pollinator Advocate Award for Canada. The project started after BC Hydro had to remove over 100 overgrown pine trees that threatened the safety of the power lines. BC Hydro and the City of Richmond developed a low maintenance land use solution for the powerline corridor that has ecological benefits. The site features a 'Bee Hotel' for interpretation and hosts public events like a pollinator picnic.





The 'Bee Hotel' interpretive signage. Image from BC Hydro





Views from Cougar Bay. Images from Ilsa Barrett

#### Cougar Bay Coeur d'Alene, Idaho

Cougar Bay Preserve is on Coeur d'Alene Lake and is comprised of land owned by the Nature Conservancy and the Bureau of Land Management. The wetland, forest, and meadow ecosystems provide habitat for migrating and nesting waterfowl, shorebirds, songbirds, moose, beaver, otter, and deer. Thirty-four rare species have been seen utilizing the site. The trails carefully wind through the ponderosa and jack pine forest, offering recreational opportunities, educational signage, and wildlife viewing, without damaging the fragile shoreline.





nages from Ilsa Barreti

## Infrastructure added to the landscape can provide better access for people and wildlife. Bridges and towers are just a f

and wildlife. Bridges and towers are just a few examples of ways a man-made structure in a wilderness area can make the wilderness more accessible. Bridge connections over the highway create safe passage for animals, and prevent habitat patches. Towers bring unique views of the geography below and habitats in the upper canopy. The connections that bridges and towers can provide for humans allows new perspectives on the ecological systems of an area. These perspectives educate users on important environmental systems, which can foster further care and value for preservation for natural areas.



View from the top of the tower. Image from Lauren Ive



Image from Lauren Iversen

### Islandwood Canopy Tower Bainbridge Island, Washington

The fire tower brings users up to canopy height. From this location, users can experience the different tree tops of the forest and nesting birds. The view from the fire tower is expansive in all directions, connecting the city, water, and mountains. This fire tower is situated within the topography, making the experience one of close contact with the forest. If situated on top of the slope, the view would provide more bird's eye experience of the forest canopy below.

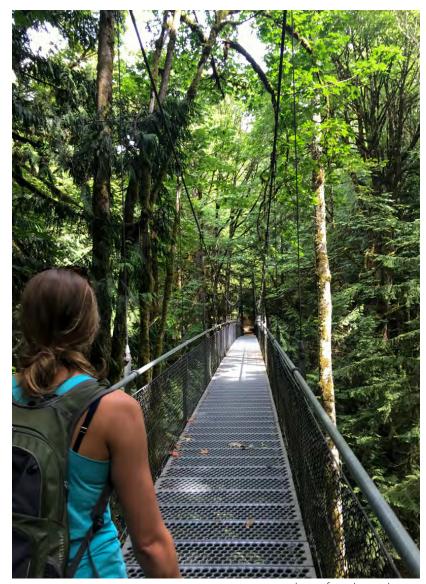


Image from Lauren Iversen

### Island Wood Suspension Bridge Bainbridge Island, Washington

The suspension bridge at Islandwood connects the user over a steep ravine. The bridge offers a unique way to view the ravine and canopy. From up high, users may challenge their fear of heights as the bridge sways.



image from wasnington D



Image from America's Transportation Awards

#### Wildlife Corridor Bridge Snoqualmie Pass, Washington

Bridges over highways can provide safe crossing corridors for animals and humans. The bridge located just east of Snoqualmie Pass, finished in 2019, is a wildlife only bridge crossing. Depending on the goals for the bridge, the infrastructure can be a connection for different types of recreation, wildlife, or an integrated use for both.

#### Art in the landscape can be a discovery or a **destination.** It offers users a chance to experience nature from a different point of view. Users of all ages and abilities can enjoy artwork, and each takes away their own ideas about its meaning. Human interactions with artwork that makes its way into the forest can be climbable, touchable, educational, or even playable. The artwork may be discovered by users while on a hike or picnic. It may be a delight to find for the unsuspecting trail runner or dog walker. The draw of interesting artwork makes it a destination, drawing users that would not normally spend time with the forest. The unique experience of the art may draw urban citizens unfamiliar with the natural resources so close to home, and be a way of first experiencing the humbling quietness of a walk in the woods.



Image from Thomas Dambo



Image from Thomas Daml

### Thomas Dambo Trolls Various Locations

This sculptural artist from Denmark tells stories with his large wooden trolls. Often hidden in forests outside the city, the giants encourage people to explore forests they may not typically visit. Each troll tells its own story, but allows users to help finish the narrative.



Image from Lauren Iversen

### Louisiana Museum Sculpture Garden Humlebaek, Denmark

Richard Sera's "The Gate in the Gorge" at the Louisiana Museum in Denmark changes the experience of the forest as you move through. The large artwork offers new views and is interactive as you walk through.





image from Nancy Ro

### Literary Sculpture Park FanØ, Denmark

This nature playground incorporates sculptural artwork as a playground. The carved wooden sculptures remind children of some famous stories of Denmark. The different scales and forms allow for many types of play by visiting children.

#### Interpretive elements tell stories of the

landscape. Signage, art, and interactive elements educate the public about natural processes, ecology, animals, the history of the people that once inhabited the area, or any other subject or narrative that is unique to the place. Generally interpretation is built in the form of signage that describes more information of the surrounding environment with text and images. However, interpretation is not limited to signage. Other examples of interpretation inlclude new and historic photographs, statues, audio tours, maps, or interactive elements.

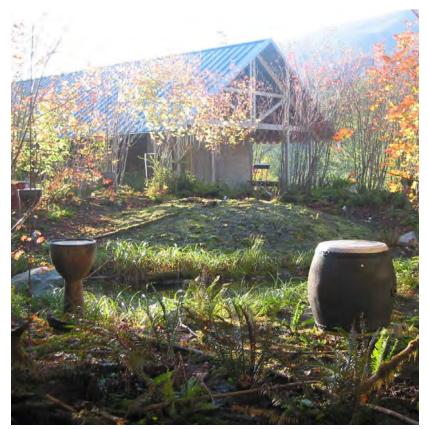


Image from Nancy Rottle







images from Lauren iversei

### **Cedar River Watershed Education Center North Bend, Washington**

The Cedar River Watershed Education Center tells the story of the source of Seattle's drinking water through signage, interactive games, and maps. Green-roofs, a rain drum art installation and a small creek that runs through the buildings highlight water and demonstrate how it interacts with the landscape. Old artifacts from previously existing infrastructure are incorporated throughout the building to tell the story of previous land use and conservation in the region.





Images from Lauren Iversei

### Japanese Exclusion Memorial Bainbridge Island, Washington

The Japanese Exclusion Memorial serves as a reminder of the forceful displacement of 276 Japanese and Japanese Americans from Bainbridge Island on March 30, 1942. A red cedar, granite and basalt wall honors the names of the people who were exiled and interned. The memorial also exhibits interpretive art and signage with origami art, old photographs and artifacts.









Images from Nancy Rottle

### Matairangi Nature Trail Wellington, New Zealand

The interpretive signage at the Victoria Park Adventure Trail in Wellington is mounted on tree rounds cut at a diagonal. The playful colorful signage offers information through text and illustration and works well with the nature play theme of the trail.

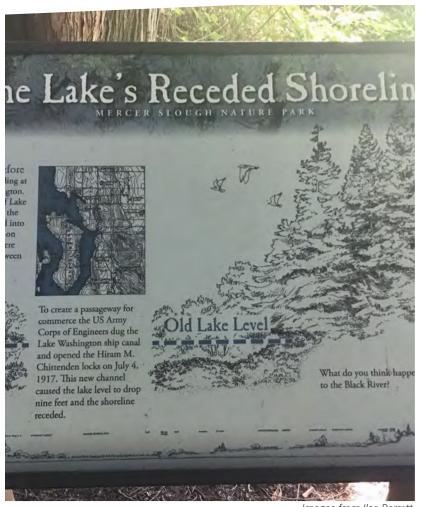




Images from Ilsa Barrett

#### **Cougar Bay** Coeur d'Alene, Idaho

The signage at this Nature Preserve offers information on the local ecology and ecosystem benefits. The illustrative signage is placed slightly off the trail in locations with views of the landscape.



#### **Mercer Slough** Bellevue, Washington

The Mercer Slough offers interpretive signage throughout the park. Hand drawn diagrams demonstrate the previous level of the lake. It is placed in a location that would have been underwater before the lake level was lowered so the user can visualize what the previous shoreline might have been. This sign also uses hand drawn topography maps to further demonstrate this information.

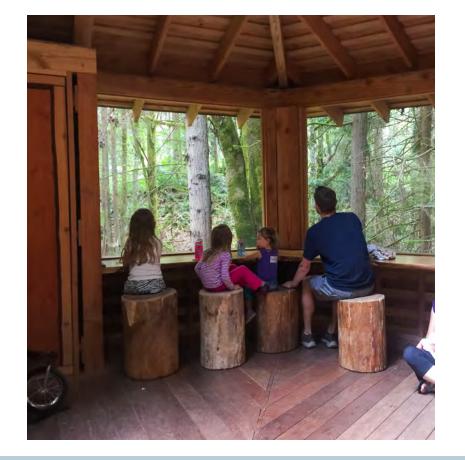


#### **Mountains to Sound Greenway** North Bend, Washington

Interpretive signage that can be found throughout the Mountains to Sound Greenway. This particular sign uses photos, illustration and text to tell a story about the history of the landscape. The sign is constructed with log rounds to represent logging in the area.

## Outdoor shelters offer opportunities for educational or social gatherings in unique

outdoor environments. Outdoor classrooms have the potential to increase the quantity, quality and benefits of outdoor experiences for children and adults. Outdoor shelters also provide a place to sit and observe the surrounding environment without being exposed to the elements. They can highlight specific features in the landscape, offer storage, seating, tables, educational tools, or provide interpretation. The shelters also draw groups of people together for celebratory events and gatherings.







Images from Lauren Iversen

#### Islandwood Bainbridge Island, Washington

Islandwood has many examples of immersive outdoor classrooms and shelters used for environmental education or hosting large events. Examples include a firepit gathering place with stadium seating and a covered shelter with views of the forest canopy.





images from Lauren iverser

#### Islandwood Bainbridge Island, Washington

A bird blind (above) offers opportunity for wildlife viewing at islandwood. Treehouses strategically placed throughout the landscape provide playful shelters that can be used as classrooms, wildlife viewing platforms, and solitude.









Images from Ilsa Barrett

### The North Cascades Institute Marblemount, Washington

The North Cascades Institute has a large outdoor amphitheater for larger events as well as a series of outdoor classrooms strategically spaced along a trail, specifically designed with natural light and viewing frames in mind.













Images from University of Washington

#### Strong Hold - Brian Tolle Seattle, Washington

Located on the University of Washington Campus, this gathering place created by Brian Tolle is created to look like an old growth stump, demonstrating how large the forest might have once been in this area. It is uncovered and offers a view of the lake.

### Wayfinding signs and markers help trail users navigate and stay safe in the

**outdoors.** Wayfinding can provide information for simple trail networks, large parks, and complex trail networks. Wayfinding signage could include maps with elevation, mileage, and 'you are here' indicators. Other helpful wayfinding elements might include color coded trail markers that ensure you are on the right trail, or trail signs indicating distance to destinations. Coordination with different land managers and natural areas helps make connections between trail networks and creates cohesive outdoor environments.



Image from Ilsa Barrett

#### Lake to Lake Trail Sammamish, Washington

This trail features color coded markers that provide information including distances to destinations.

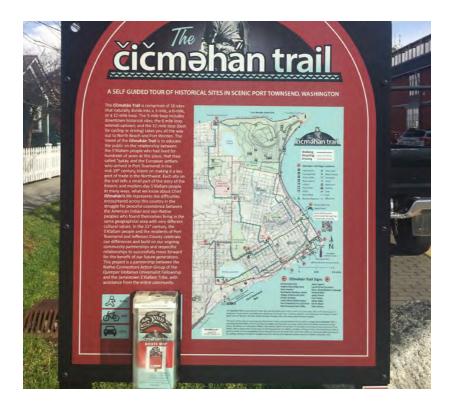






Image from Ilsa Barrett

### The Cicmehan Trail Port Townsend, Washington

The čičməhán Trail features maps along the trail as well as on brochures. Symbols in the sidewalk or road indicate the direction to the next destination.



Image from Lauren Iversen

### Park Pointe Issaquah, Washington

Park Pointe is a City of Issaquah open space park with its own signage network. Similar to the Little/Big Si trail signs, they are located at each intersection in the trail. The signs are laminated plastic with a printed map of the area. In addition to trail distance markings, each intersection includes a symbol to mark where the user is on the map.

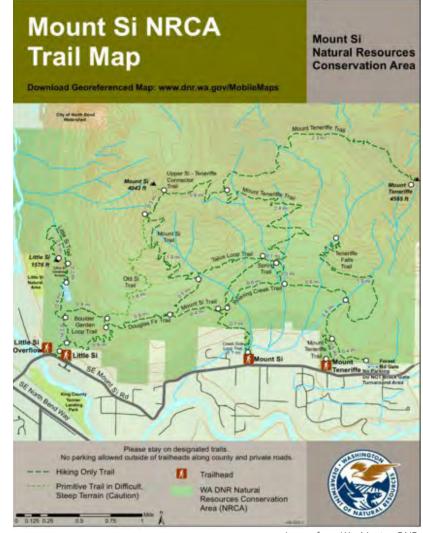


Image from Washington DNR

#### Mount Si North Bend, Washington

Mount Si Natural Resource Conservation Area contains several very popular hikes including Little and Big Si. The trail maps located at each intersection on the trails are very clear and easy to read and incorporate trail mileage and topography.

# Topographic maps and models offer accessible information about the physical space and the narratives that exist within

it. The model or map can represent the location, topography, size, features, vegetation along with any other stories that relate to the physical space such as the history or land formation. They can also be used as a way-finding tool to help the visitor better understand their location, the trails and how to navigate the park. Maps and models are a great educational tool and can be made interactive with elements such as lights or moving pieces.







Images from Lauren Iversen

#### Islandwood Bainbridge Island, Washington

Located in the entrance of Islandwood is a large scale topographic model. The model clearly shows the layout of the campus, the topography, density of forest, nearby waterways, and streets. It is the first thing a visitor is introduced to upon entering the campus to offer context and grounds the landscape.

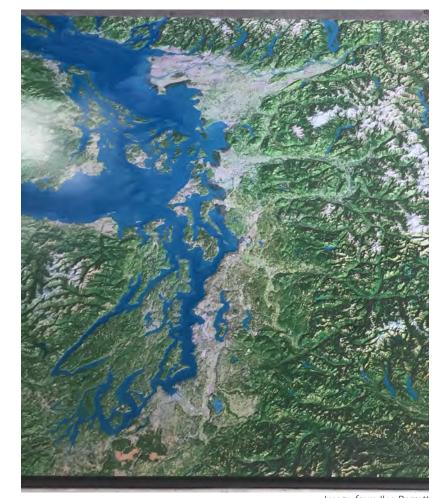
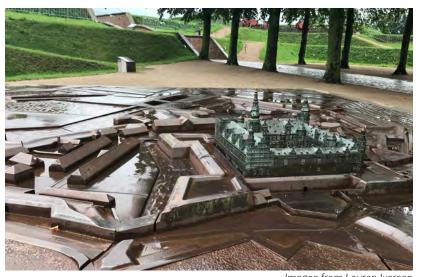


Image from Ilsa Barrett

### The North Cascades Institute Marblemount

On the wall of the visitor center of the North Cascades institute is a giant high resolution map of Washington State made of aerial photograph with topographic hill-shade. There are no labels or boundary lines but the map is easy to read and very informative in the level of detail provided. The map is an effective tool for teaching and enjoyed by visitors naming places they know.





images nom Lauren iver

### **Kronborg Castle Helsingor, Denmark**

This Bronze case model of Kronborg Castle located in Helsingor, Denmark represents how the castle and its surroundings have developed over time. Each model shows the growth of the castle grounds, expanding over time. The bronze material is sturdy enough for the wet and cold climate.

### Nature play can take many forms, but the primary goal is for children to have playful interactions with plants and natural

materials. This style of play can promote confidence in the outdoors, risk taking skills, creativity, improved sensory motor skills, and cooperation with others. The playground may include built elements using logs, sand, topography, or other local natural materials to create play structures. It provides an opportunity to touch and feel these different elements. Some nature play may have an educational component, while others are primarily meant for fun. Found all over the world, nature play is growing in popularity as it is resourceful of materials, may be less expensive, and educates children about their local environment.





images from Nancy Rottle

### Matairangi Nature Trail Wellington, New Zealand

The Victoria Park Adventure Trail in Wellington New Zealand is a nature play trail that incorporates colorful signage and illustrations with driftwood, logs and stumps that are intended to be played on. This nature playground integrates play and ecologic learning. Play features are embedded into the landscape, using trees, grass, and boulders as part of the play structures. Each movement educates children about an adaptation of a local animal. Children learn to climb like geckos, navigate dense reeds like a bittern, and fly around like dragonflies.

















Images from Lauren Iversen

#### Amagerfeldparken Copenhagen, Denmark

This park has an imaginative wooden ship with boulders for climbing, dead trees and wild plants define pathways, and a group gathering ring made with boulders. Play areas are found in forested, grassy, and swampy areas. Logs are used to create fitness equipment for both adults and children to balance, swing, and pull up on.







images nom Eddrem werser

### Valbyparken Copenhagen, Denmark

This natural play park is located in one of the largest urban parks in Copenhagen. The park has a wooden boardwalk winding through multiple tree houses. A wooded area stays cool for play on hot days, and grassy hills are warm on cool days. On the steep hillsides, logs offer different methods of climbing up and sliding down. Trees and long grasses make up the tops of the hills and offer shelter and views. This park offers many types of opportunity for creative play and interaction with nature and materials.









Images from Nancy Rottle

### **Suquamish Shores Natural Playground** Suquamish, Washington

Suguamish Shores Natural Playground is a culturally themed play area that connects the Suquamish Museum to the Veteran's Monument. The park incorporates tribal art, natural play features, and an orca inspired play area that contains a water feature. The park includes traditional play equipment but is built using natural materials like logs and sand.

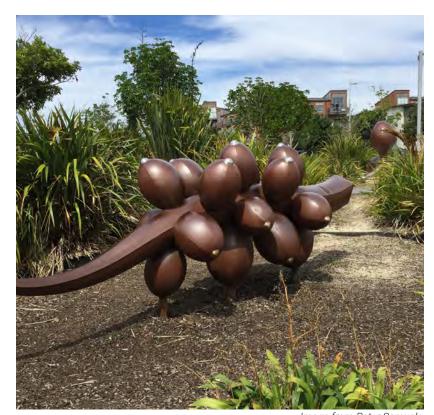


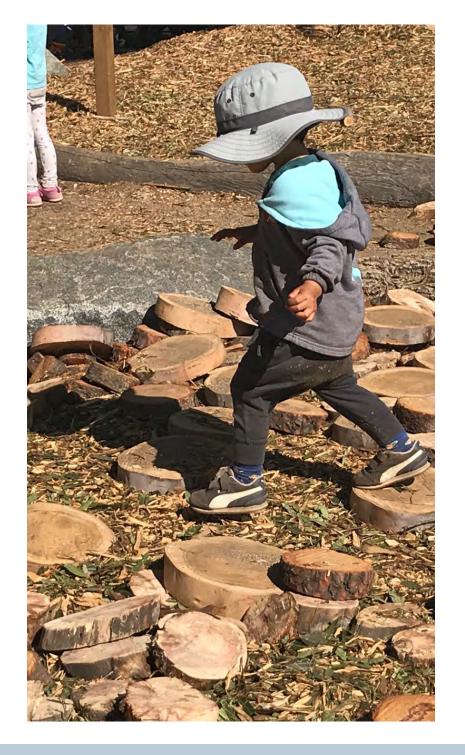


Image from Peter Samuels



#### **Hobsonville Point Park, NZ New Zealand**

Hobsonville Point Park is an award winning park in Hobsonville, New Zealand. Sculptural seed pods of plants native to New Zealand fashioned out of steel are scattered throughout the groves of Harakeke (the native flax). Kids can climb up, crawl through, or slide down the structures, or choose to read the bits of information about the native plant species welded into the steel.





Images from Nancy Rottle

### Balboa Park Nature Exploration Area San Diego, California

This playground emphasizes loose parts as a means for creative play by young children. The wood chips and wood cookies are an opportunity for stacking, organizing, and building with. Logs are used for seating, tables, and climbable structures. Signs at the entrance notify users they are coming into a natural play experience.





#### Conclusion

These are just a few examples of outdoor spaces around the Pacific Northwest, New Zealand and Scandinavia that can be used as inspiration for future landscape design and land management projects. This document is intended to be used as a starting point when looking for examples of indigenous knowledge representation, habitat restoration, infrastructure, art, interpretation, outdoor shelters and classrooms, wayfinding, and nature play. Incorporation of these elements becomes authentic to the natural environment by working alongside community members, tribes, and government agencies to highlight the needs and dreams for that place.











Images from Ilsa Barret and Lauren Iversen