



Hundred Acre Wood Master Plan

City of Bellingham, Washington

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ACKNOWLEDGMENTS

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CHAPTER 1: INTRODUCTION

HUNDRED ACRE WOOD

The City of Bellingham's (City) Hundred Acre Wood Park (Park) is an approximately 112-acre forested park located in south Bellingham, Washington. The Park consists of an 82-acre conservation easement area, known as the Chuckanut Community Forest (Community Forest), a 16.5-acre conservation easement area known as the Interurban Wetland Conservation Easement, and surrounding open space and trails referred to as the Interurban Greenway. Figure 1 depicts the Park boundary.

The Park hosts a web of forested trails that connect surrounding parks and neighborhoods. Neighbors and other park visitors use the Hundred Acre Wood trails for recreation and multi-modal transportation purposes. Additionally, the property has critical ecological functions. Much of the Hundred Acre Wood is covered by native, coniferous forest intermixed with wetlands. Native plant and wildlife species rely on the area for habitat and use the forested corridor to migrate through the surrounding urban setting to other open space in the area.

Purpose of the Master Plan

The Hundred Acre Wood has seen a variety of uses over time. Past uses and increased visitation in recent years have put pressure on the ecological functions of the area, including the wetlands, native plant species, and resident and migratory wildlife.

This Hundred Acre Wood Master Plan (Master Plan) will guide future activities within the Park that serve to restore and preserve the natural environment while providing appropriate educational and low-impact recreational opportunities to a diverse group of users.

Improvements should be designed for compatibility with healthy ecosystem functions in mind, and human activities managed in a manner to reduce and limit potential harmful impacts on the natural environment. This could include avoiding or restricting human activities in some locations altogether. Natural functions should be given priority in identified environmentally sensitive areas whenever feasible.

The City of Bellingham Parks and Recreation Department acknowledges that the land of the Hundred Acre Wood today is the traditional, ancestral and unceded territory of the Lummi people and the Nooksack people who have lived in the Coast Salish region Since Time Immemorial.

The Parks and Recreation Department honors our shared responsibilities to their homeland. We are grateful for the opportunity to learn from indigenous wisdom and ways of creating relationships that will sustain us all on this land for future generations.

The core planning goals of the Hundred Acre Wood Master Plan are to:

1. Restore and protect ecological function.
2. Improve user experience and safety.
3. Provide educational opportunities.
4. Plan for climate resiliency.

The Master Plan aligns with the City’s 2020 Parks, Recreation, and Open Space Plan (PRO Plan). Most notably, Goal 4 of the PRO Plan aims to preserve and integrate nature, natural systems, and ecological principles throughout the City’s Park system (City of Bellingham, 2020). The Plan defines clear priorities and serves as a reference for future improvements and projects planned within the Hundred Acre Wood.

The Master Plan is non-regulatory, and the standard permitting process is required for any project that occurs within the Park boundaries. Major capital improvements within the Park must be approved in the City’s budget.

Planning Process

The City developed the Master Plan over a year-long master planning period. The planning process combined guidance from the Hundred Acre Wood Steering Committee, the Chuckanut Community Forest Park District Board, and the public. Additionally, City staff used existing resources and reports to compile information about the Hundred Acre Wood, including available documents from the Chuckanut Community Forest Park District. Final adoption of the Master Plan requires Park and Recreation Advisory Board review and City Council approval. For more information on the review and approval process see Chapter 4.

Contents of the Master Plan

The contents include:

- ◇ **Chapter 2** provides a brief overview of the history of the Hundred Acre Wood, including early indigenous presence, historic land uses, public protection efforts, City acquisition, and the development of the conservation easements.
- ◇ **Chapter 3** describes the existing conditions within the Hundred Acre Wood including both natural and human-made elements.
- ◇ **Chapter 4** summarizes the master planning process, including opportunities for public participation, and highlights key insights from stakeholders.
- ◇ **Chapter 5** describes the goals for the future of the Hundred Acre Wood, including recommended improvements.
- ◇ **Chapter 6** serves as a guide for the implementation of this Master Plan.
- ◇ **Appendices** provide additional reference and resources.

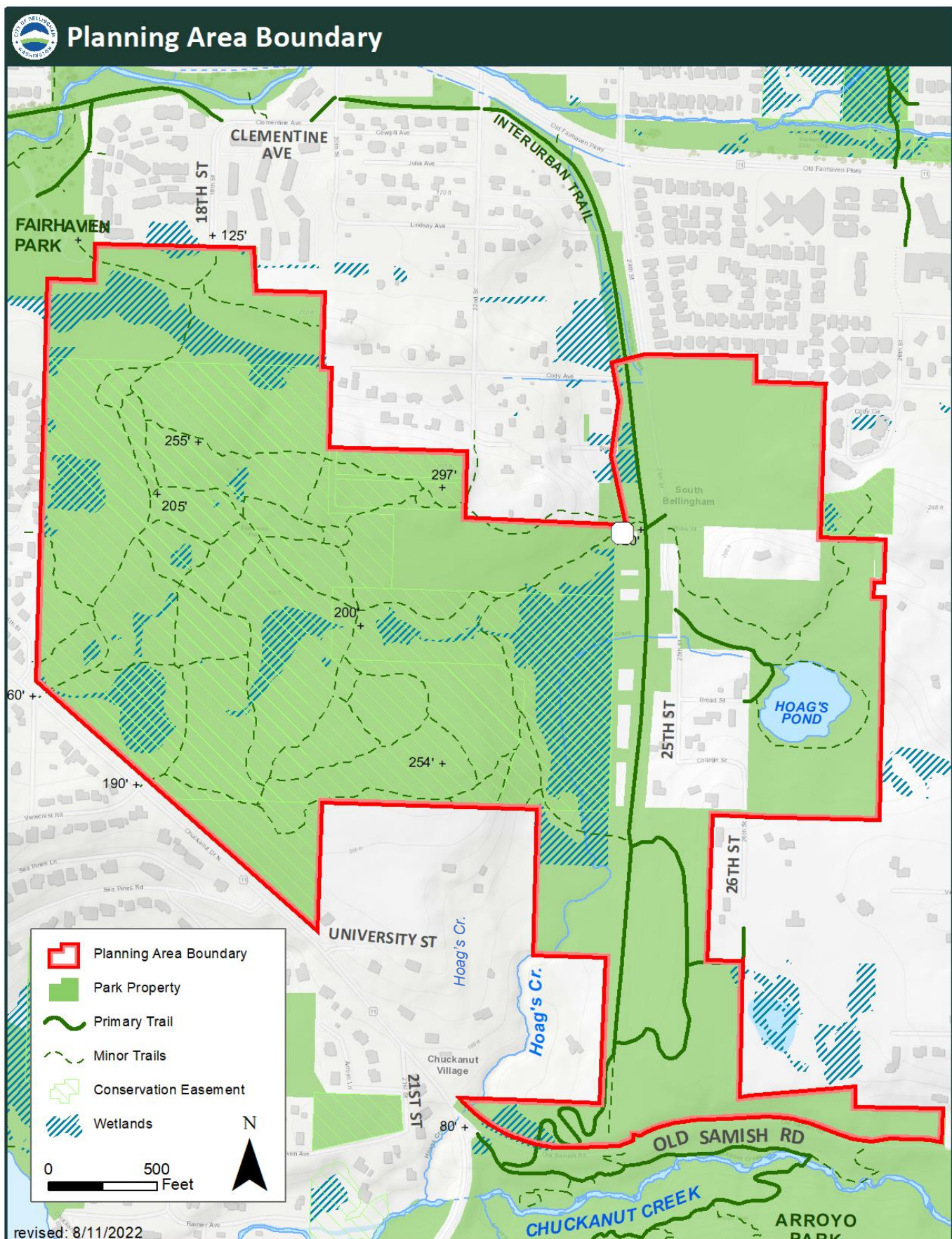


Figure 1. Hundred Acre Wood Park boundary

CHAPTER 2: BACKGROUND

History

Indigenous groups have inhabited the area of the Hundred Acre Wood since time immemorial. The Nooksack peoples maintained early indigenous camps around Chuckanut Bay for seafood harvesting, and the Lummi, Samish, and Nuwaha groups also visited Chuckanut Bay (City of Bellingham, 1997). Please see Section 3.2 of the [Chuckanut Community Forest Baseline Report](#)¹ (Baseline Report) for more information on the history of this site.



Development Proposals and Public Protection

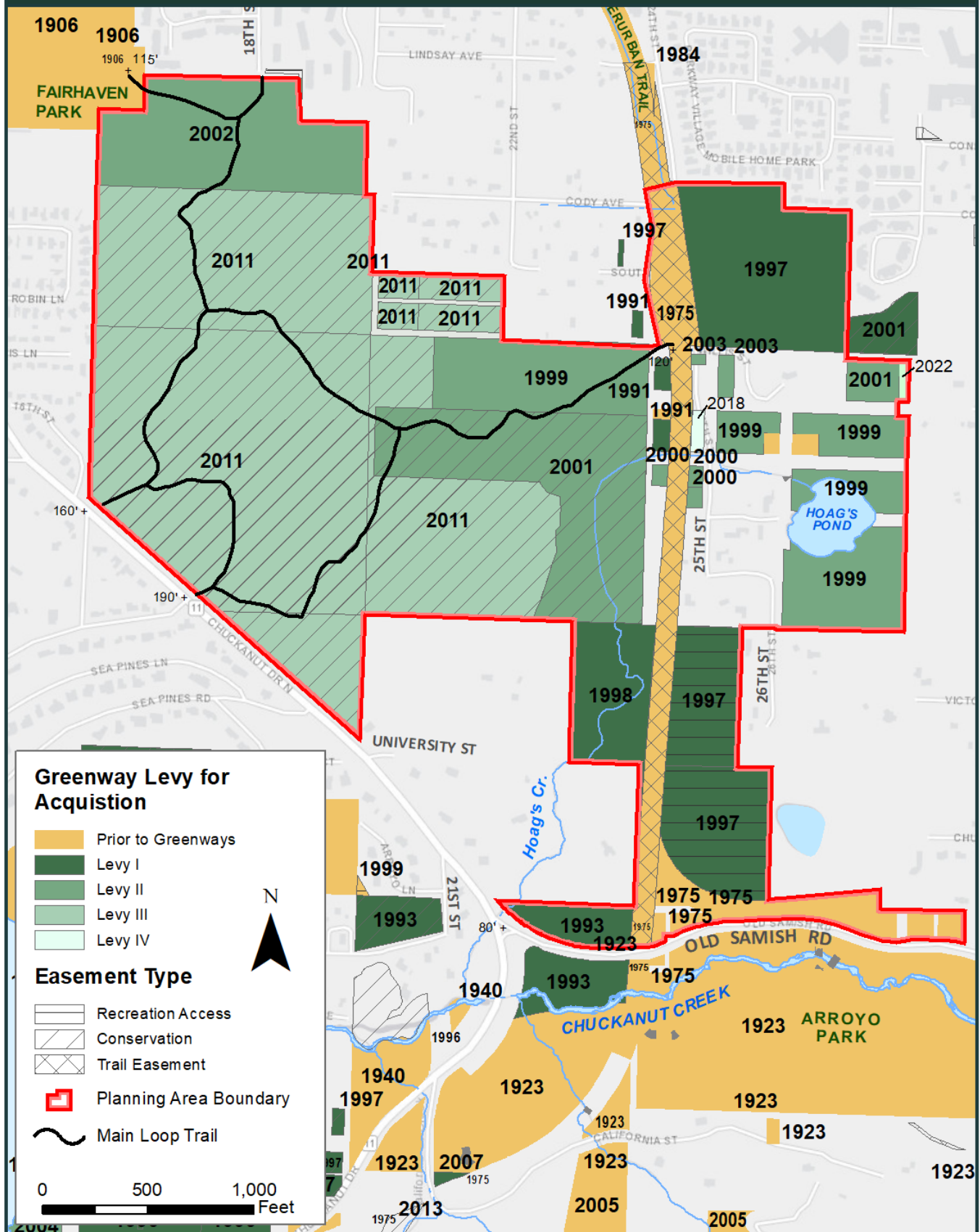
Between the 1980s and 2011, several proposals were submitted to develop the Hundred Acre Wood area. These proposals were met by considerable opposition from concerned community members. Ultimately, each development proposal failed to obtain approval after extensive environmental review. Following the failure of the development proposals, project financier, Horizon Bank, faced foreclosure and sold the parcel to Washington Federal Savings Bank (Washington Federal).

¹ <https://cob.org/wp-content/uploads/CCF-Baseline-Documentation-Report-Final-5.8.17.pdf>

Acquisition History and Development of the Conservation Easements

The Park consists of multiple parcels acquired by the City over the course of several decades. Specific parcel acquisitions and the Greenway Levy funds used to purchase them can be found in Figure 2. Key milestones in the development of the Park include:

- ◇ The City acquired the Interurban Greenway parcels between 1991 and 2003 (see Figure 2).
- ◇ In 1997, the City received grant funding from the Washington State Recreation and Conservation Office (RCO) to purchase approximately 11.7 acres of the North Chuckanut Bay Greenway and the property was permanently deed restricted “forever for outdoor recreation purposes” (Auditor’s File No. 1971101710).
- ◇ Approximately 13 acres around Hoag’s Pond, headwaters to Hoag’s Creek, were first purchased in 1999. The City continues to acquire additional open space around Hoag’s Pond and the Interurban Greenway, with recent acquisition of 0.36 acres in 2018 and 0.23 acres in 2022.
- ◇ In 2001, the City and Whatcom Land Trust established a conservation easement to permanently protect 16.5-acres in the southeast corner of the current Park (Auditor’s File No. 2011203959).
- ◇ In 2011, the City purchased the Chuckanut Community Forest property (82-acres) from Washington Federal for \$8.23 million using a combination of Greenway Levy funds, City Park Impact Fees, and a loan from the Greenway Maintenance Endowment Fund.
- ◇ In 2013, voters approved the formation of the Chuckanut Community Forest Park District (Park District) to protect the 82-acre forest property from future development and manage the repayment of the Greenway Maintenance Endowment Fund loan. The mission of the Park District is “to ensure the entirety of the property is protected in public ownership in perpetuity, with respect for its ecological, recreational, and educational functions and to serve as a fiscal mechanism through which the District, via a tax levy, will repay the City of Bellingham for the Greenways Endowment Fund loan.”
- ◇ In 2014, the City and the Park District established a conservation easement to permanently protect the Chuckanut Community Forest property (Auditor’s File No. 2140100259). The conservation easement protects the property in perpetuity and ensures that future projects to enhance recreation and education in the Park do not negatively impact conservation values. Existing conditions at the time of recording are found in the Baseline Report.
- ◇ In 2014, the City and Park District entered into an Interlocal Agreement to define the terms and conditions under which the Park District will repay the City’s Greenways Endowment Fund Loan in exchange for a conservation easement (COB Contract # 2013-0624).
- ◇ In 2014, the City rezoned 111 acres, including the Community Forest parcel, the Whatcom Land Trust easement, and the surrounding acreage, from Residential Multi, Planned to Public, Open Space.



CHAPTER 3: EXISTING PARK CONDITIONS

This chapter describes the existing conditions within the Park at the time the Master Plan was written. It includes notable features within the Park, current uses, and adjacent land uses.

Site Description

The Hundred Acre Wood consists of approximately 112-acres of forest and open space, including the 82-acre [Chuckanut Community Forest Easement](#)², the 16.5-acre [Interurban Wetland Conservation Easement](#)³, Hoag's Pond, and all contiguous forest and open space parcels acquired as part of the Interurban Greenway. Six public access points provide entry to the forest (see Figure 3), including access from the Interurban Trail, Fairhaven Park upper shelter, Chuckanut Drive at 16th Street, Chuckanut Drive at Viewcrest Road, the end of 18th Street, and the end of 22nd Street.

Natural Features

A native coniferous and mixed forest covers the property. Numerous wetlands, Hoag's pond, and Hoag's Creek are situated across the planning area on an uneven landscape with various grades (See figure 4). The study area drains to two watersheds, lower Padden Creek and Chuckanut Creek. These forest and wetland environments are important headwater areas in these watersheds and provide habitat for native plant and wildlife species. They also serve as an essential habitat corridor for wildlife that relies on the area for migration through an urban setting. More information on wetlands, flora and fauna, and hydrologic connectivity can be found in the Chuckanut Community Forest Stewardship Plan (Herrera, 2022), including an update to the 2009 wetland ratings based on the 2014 Washington State's Wetland Rating System for Wetlands in Western Washington.



² <https://cob.org/wp-content/uploads/Conservation-Easement-12-26-2001-COB-to-WLT.pdf>

³ <https://cob.org/wp-content/uploads/Conservation-Easement-12-26-2001-COB-to-WLT-1.pdf>



Figure 3 Park access points and wayfinding to be added

The 2015 Habitat Restoration Technical Assessment (ESA, 2015) describes ecosystem functions and identifies potential for restoration or protection by sub-watersheds. The assessment says the following with regards to forest and associated wetlands in the study area:

This very large forest block extends north to include a portion of the Padden Creek drainage, but the majority of the block is located within the drainage basin of Hoag's Creek and Chuckanut Creek. The majority of the block is well forested with a large stand of native moderate-aged mixed forest, located east of Chuckanut Drive. In addition to high functioning forest, which provides excellent wildlife dispersal, nesting, and roosting habitat, this large block also contains

palustrine scrub-shrub and forested wetlands. These wetlands, which help support baseflow in Hoag's and Chuckanut Creeks and provide wildlife habitat, are identified as appropriate for protective actions (Action CHC-WP1). This block also contains a corridor of City owned undeveloped property, which provides a key forested wildlife corridor between the large forested lands of Chuckanut Mountain to the south and the Padden Creek corridor to the north.

Block 006 consists primarily of City-owned land, much of it associated with Fairhaven Park, the Chuckanut Community Forest, and the Interurban Trail. However, there are numerous private parcels, many of which are undeveloped and zoned residential. It is recommended that the City holdings should continue to be managed as undeveloped open space, while acquisition or establishment of conservation easements is explored for key private forested parcels along the edges of the block, to help maintain existing functions (Biodiversity and Habitat Maintenance) into the future.

The native species of plants, animals, fungi and other biota within the forest and wetlands rely heavily on the habitat provided by the Hundred Acre Woods. A list of native and non-native wildlife species that have been observed or are expected to exist in the park is available in the Baseline Report⁴ (Eissinger, 2017). The Report provides a record of the relevant conditions and conservation values of the property subject to the [Chuckanut Community Forest Conservation Easement](#) and forms the basis for future monitoring and enforcement of the easement. The report describes allowed uses within in the conservation easements, existing physical, human-made, and biological conditions, as well as site disturbances. Appendix A of this Master Plan includes a summarized list of the species identified in the Baseline Report.

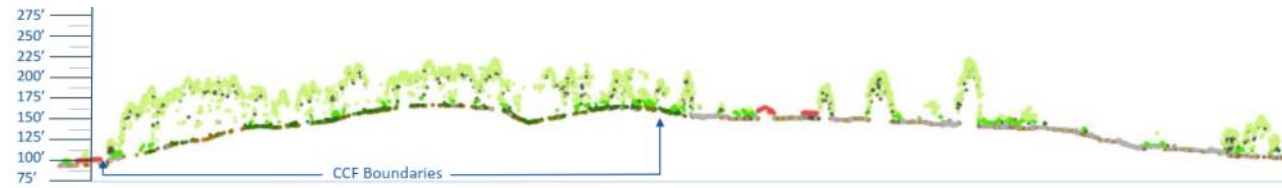
Section 6.2 of the Baseline Report describes the topography, geology, soils, hydrology, and wetlands within the Hundred Acre Wood. The City's Urban Forestry Management Plan Canopy and Forest Structure Analysis includes information about the canopy cover, riparian areas, and forest structure and composition (City of Bellingham, TBD; Diamond Head, 2021). A sample of the LiDAR used in this study can be seen in the profile cross sections shown in Figure 4. LiDAR is the foremost remote sensing technology used today to understand vegetation height and surface types.

The goals of this Plan, included in Chapter 5, are in line with the stated terms and conditions of the conservation easements. The milestones included within the goals and strategies section will be the means by which the City can adaptively manage as needed to fulfill easement requirements or Comprehensive Plan goals and policies.

⁴ <https://cob.org/project/chuckanut-community-forest-master-plan>

LiDAR Point Cloud, East – West Cross Section Profiles of Trees and Wetlands in the Study Area

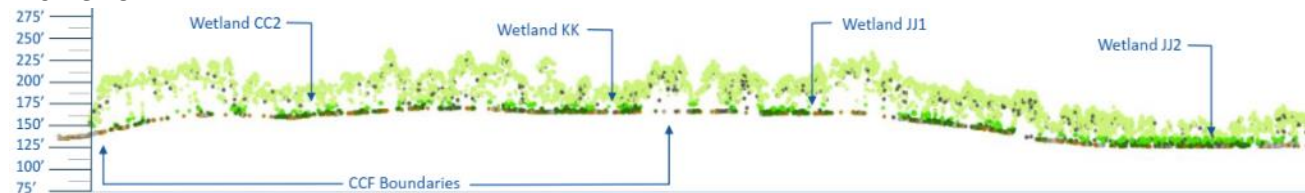
Profile 5



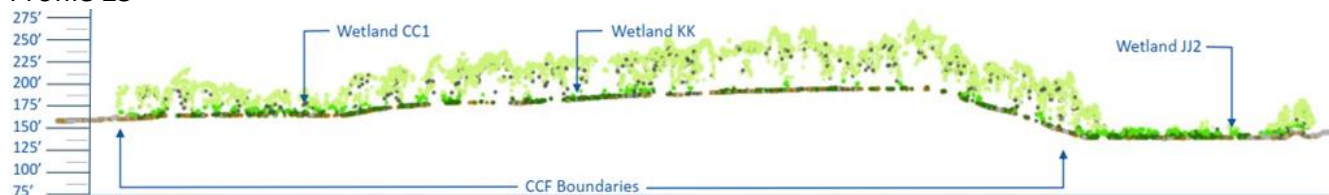
Profile 10



Profile 19



Profile 25



Profile 30



Profile #

5

10

19

25

30



- High vegetation
- Medium vegetation
- Low vegetation
- Ground
- Buildings
- Unclassified

Figure 4 LiDAR Cross sections showing landforms and tree height in 2013

Human-made Features

The Park has been mostly undisturbed following the last logging and gravel extraction activities. Remnants of old roads, borrow pits, several groundwater monitoring wells, old fencing, and scattered signage are some of the only human-made features that remain on the property from historical land uses. Twenty-fourth Street cuts north to south between the Interurban Trail and Hoag's pond. Within this area are ten privately owned homes that make up approximately ten acres on a dozen parcels.

Remnants of an old road used for logging and gravel extraction on the property have been repurposed as trails. Wildlife and human use have created a web of additional informal trails, captured with GPS in 2015, as seen in Figure 6. Limited, unimproved parking exists in two locations along Chuckanut Drive. Recreation Northwest, a Bellingham-based non-profit organization, established a northwest native plant garden, boardwalk, and outdoor classroom close to the Park's boundary with Fairhaven Park.

Current Uses

Visitors use the Park's trail network, and the connections to other nearby parks and neighborhoods, for various passive, non-motorized recreational activities, and multi-modal transportation purposes. A public survey conducted during master planning identified walking, recreational biking, dog-walking, wildlife viewing, and running as the top five uses by park visitors (Public Survey, 2021). Several organized groups also use the area for outdoor activities and learning opportunities.

Adjacent Land Use

The Park connects contiguous forested lands within the urban setting of Bellingham. The northern boundary of the Park is bordered by multifamily and single-family residential development. A trail connection to Fairhaven Park is located at the northwestern corner of the Park. To the west of the Park are parcels of mostly single-family homes with some multi-family residential. Chuckanut Drive, also known as State Route 11, runs along the southwestern edge of the Park. A portion of land east of Chuckanut Drive and west of the Interurban Trail at the southern boundary of the Park is zoned for single-family residential with some undeveloped lots. The southern Park boundary extends to Old Samish Road and Arroyo Park, providing a connection to the Chuckanut Mountains. There are some single and multifamily residential lots inside the Park boundary along the Interurban Trail near Hoag's Pond. This Master Plan is not applicable to private property. More single and multifamily residential lots are located along the eastern boundary and extend to I-5.

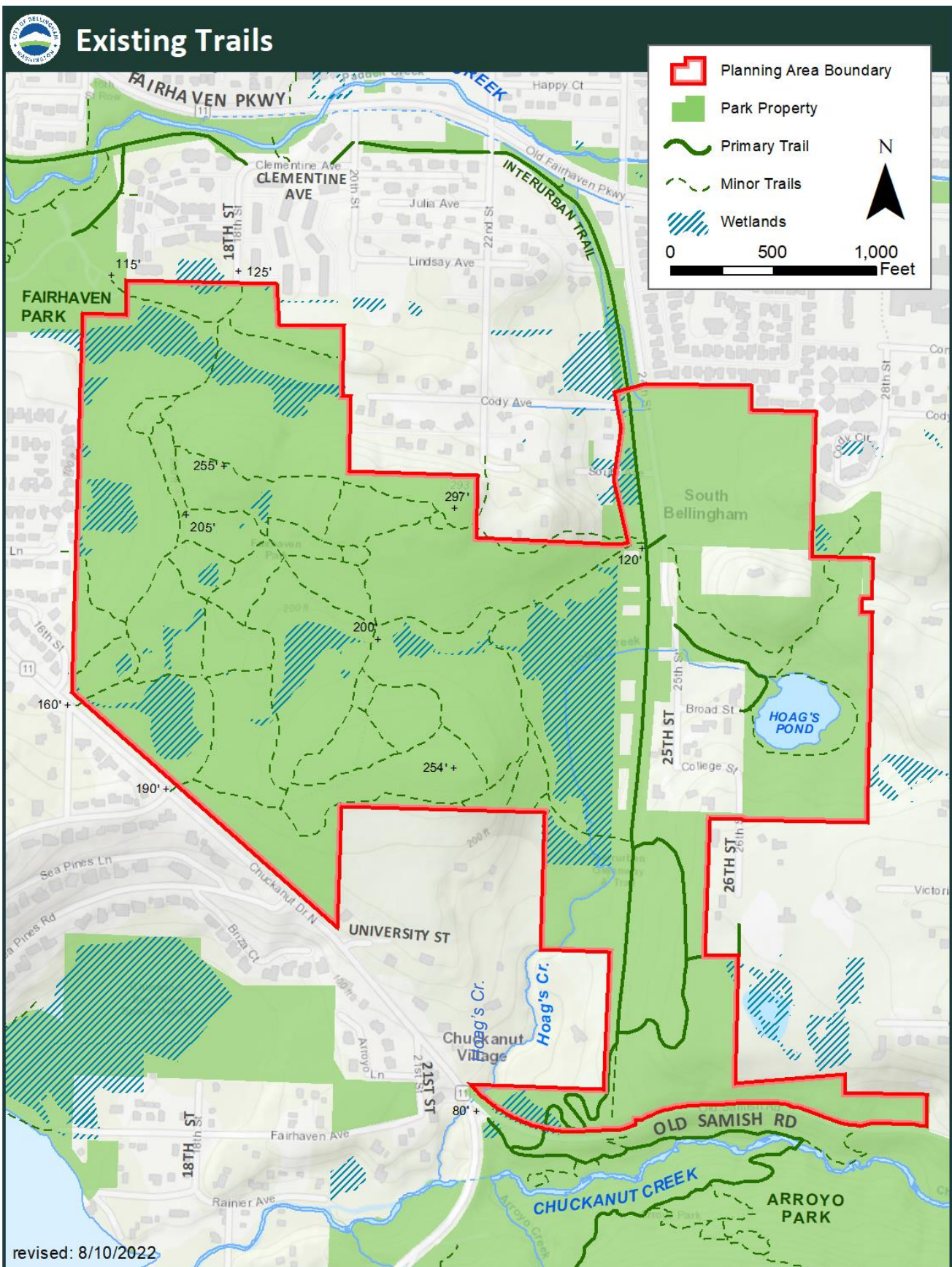


Figure 5. Existing trails within the Hundred Acre Wood.

CHAPTER 4: PLANNING PROCESS

This Master Plan sets forth the goals and guides current and future decision-making within the Hundred Acre Wood. This chapter describes key steps in the planning process and includes a list of relevant reference documents.

Naming Process

The formal naming of the Park followed the requirements outlined in [PAR 01.00.01](#)⁵. Consistent with this policy, potential names were evaluated through the public outreach described in this chapter, including the use of public surveys. The Parks and Recreation Board recommended the name “Hundred Acre Wood” on August 10, 2022.

Steering Committee

A steering committee consisting of representatives from surrounding neighborhoods, Chuckanut Community Forest Park District board members, City staff, and recreational user groups informed the master planning process. The steering committee met monthly from June 2021-May 2022 to discuss use of the Park, evaluate public input, and determine key components of the Master Plan. Steering committee engagement and input played a crucial role in establishing a planning framework and identifying priorities for the Park.

Chuckanut Community Forest Park District (Park District)

The Park District held public meetings throughout the process and provided valuable feedback regarding planning goals, trail designs, and public process. In addition to the public input, a number of Park District board members provided cross representation with the Master Plan steering committee. The Park District provided technical information to help steer the protection and improvement of the park into the future and was valuable in encouraging public input used in the development of this Master Plan.

Public Input and Engagement

A variety of opportunities for public input were provided throughout the planning period, including:

- An online community survey (August 5-September 15, 2021)
- Community led on site survey and data gathering (Oct. 9 and 11, 2021)
- A project [website](#) (ongoing)
- Engage Bellingham online updates and engagement (ongoing)
- A live online Open House (March 16, 2022)
- An Open House follow up survey (March 18-April 1, 2022)
- Two public meetings with Greenways Advisory Committee (June and July 2022)
- Public meetings with Parks & Recreation Board (June, July, and August 2022)
- City Council public hearing August 29, 2022
- Final City Council action on (date TBD).

⁵ <https://cob.org/wp-content/uploads/PAR-01.00.01.pdf>

Public input informed key components of the master planning process, including naming of the Park, allowed uses, and the goals and strategies included in Chapter 5.

Public Survey (Fall 2021)

In fall 2021, the City published a public survey on Engage Bellingham to gather input on the current and future uses of the Hundred Acre Wood, the proposed planning area boundary, and what improvements the community would like to see in the area. The survey was advertised through social media posts, flyers on and off site, and a press release sent to residents within 500 feet of the Park.

HOW DO PARK VISITORS USE THE HUNDRED ACRE WOOD?

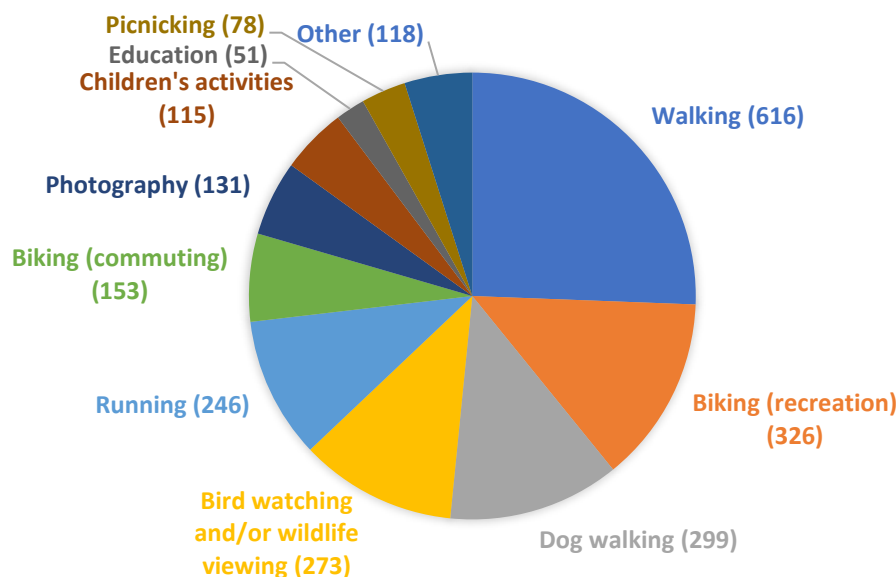


Figure 6. The chart indicates the number of public survey (Fall 2021) respondents (#) who use the Hundred Acre Wood for various activities.

A total of 716 respondents completed the survey. Ninety-nine percent (99%) of respondents visit the planning area, and 64% visit the planning area at least once a week. Respondents reported primarily using the area for walking, dog walking, recreational biking, bird watching, and/or wildlife viewing, and running (see Figure 6).

The majority of respondents agreed:

- With the proposed master plan boundaries (88%)
- That the planning area should be named Hundred Acre Wood (63%)
- That dogs should continue to be only on-leash in the planning area (67%)

Respondents wanted to see the following improvements in the planning area:

- Directional signs (71%)

- Boardwalks and bridges (69%)
- Native plant garden (62%)

Open House and Follow-Up Survey

Staff members from the Parks Department hosted a live, virtual public Open House on March 16, 2022. The event included a presentation by Parks Department staff followed by a public question and answer session. Verbal comments, comments in the chat, and questions were collected as input for the final Master Plan. The event was recorded, and the recording was posted on Engage Bellingham for the public to review.

Key themes from the input collected during the Open House include:

- Attendees shared both support for and considerable opposition to limiting bike usage in the Park.
- Participants voiced concern over additional development of the area, and indicated a preference for maintaining the area in its existing natural state.
- Several participants noted that various types of trail users seem to get along in the Park.
- Attendees voiced both support for and concerns about the on-leash requirement proposal.
- Participants shared specific feedback on the trail plan.
- Several participants urged the City to move quickly in wetland protection.
- Participants also advocated for wildlife conservation and noted the carbon storage value of the forest within the Park.

A follow-up survey was open to the public from March 18-April 1, 2022. The follow-up survey provided an additional opportunity for the public to respond to the proposed Master Plan elements covered in the Open House.

A total of 670 respondents completed the Open House Follow-Up Survey. Highlights from the survey include:

- Ninety-five percent (95%) of respondents agreed with the name Hundred Acre Wood.
- Approximately 78% of respondents agreed with the dog on-leash requirement and the installation of dog waste stations and signage to remind people of on-leash requirements. Several respondents advocated for locating waste stations at Park access points, but not within the Park. Several respondents commented that they would like an area of the Park to be designated as an off-leash area for dogs.
- Approximately 86% of respondents disagreed with improving the existing trail from Fairhaven Park to the Interurban Trail with limestone and limiting bikes to this trail (with park users walking their bikes on other trails). Based on other survey feedback, the negative response to this question was largely related to limiting bike use. Several respondents commented that families use this area for biking with their children. Of the 576 text responses related to that survey question, 522 (or 91%) of the answers included either the word “bike” or “bicycle.” Others noted that there are not many reports of trail user conflicts in this Park.

Relevant Documents

The following documents helped shape the Master Plan. These documents should be reviewed in the development of specific projects, as applicable. Links to documents can be found in the Reference section of this document.

- Whatcom Land Trust Conservation Easement
- Chuckanut Community Forest Conservation Easement
- Chuckanut Community Forest Baseline Documentation Report, May 8, 2017 (Eissinger, 2017)
- Urban Forestry Management Plan - Canopy and Forest Structure Analysis Summary Report, August 23, 2021 (Diamond Head, 2021)
- State of the Urban Forest Report (Diamond Head, May 2022)
- Habitat Restoration Technical Assessment, November 2015 (ESA, 2015)
- Chuckanut Community Forest Stewardship Plan (Herrera, 2022).



CHAPTER 5: THE FUTURE OF THE HUNDRED ACRE WOOD

This chapter outlines the goals of the Master Plan and their link to the Bellingham Comprehensive Plan through the [PRO Plan](#)⁶, and summarizes strategies to achieve those goals.

Master Plan Goals

This master plan aims to achieve the following four goals for the Park:



Goal 1: Restore and protect ecological function.

Promote stewardship of the Park, protect and enhance wetlands, improve plant and wildlife habitat, and regenerate natural systems for a range of plant and wildlife species. PRO Plan Goal 4, Preserve and integrate nature, natural systems and ecological principles throughout the park system.



Goal 2: Improve user experience and safety.

Provide safe, high-quality recreational opportunities to a diverse group of park users. PRO Plan Goal 3, Create environments that encourage regular active and passive recreation activities to support health, sense of safety, wellness and social connections.



Goal 3: Provide education opportunities.

Support educational opportunities within the Park regarding wildlife, vegetation, history, and other natural features. PRO Plan Goal 4, Preserve and integrate nature, natural systems and ecological principles throughout the park system.



Goal 4: Plan for climate resiliency.

Build climate resiliency within and around the Hundred Acre Wood. PRO Plan Goal 4, Preserve and integrate nature, natural systems and ecological principles throughout the park system.

Strategies

The following strategies aim to fulfill the Master Plan goals.

Goal 1: Restore and protect ecological function.

Strategy 1.1: Realign and Improve Select Trails

Realign trails and/or improve trail segments to reduce trail-induced soil erosion, wetland impacts, dangerously steep trail segments, and circumvent muddy areas.

⁶ Parks, Recreation, and Open Space Plan, 2020. <https://cob.org/wp-content/uploads/2020-pro-plan.pdf>

Strategy 1.2: Remove Select Trails

Remove select existing trails to restore habitat, enhance wetlands, and promote other ecological functions. Trail removal will also serve to eliminate trail redundancy and reduce visitor confusion. Decommissioning criteria are included in Appendix B.

Strategy 1.3: Restore hydrologic connections

Identify barriers to historic hydrologic flows and reestablish hydrologic connections. Aerate compacted soils in these areas and improve connectivity with culverts, bridges, or boardwalks.

Strategy 1.4: Invasive Plant Removal

Replace invasive plants with suitable native species.

Strategy 1.5: Restore Vegetation

Restore soil structure and native vegetation. Utilize established Park restoration best management practices.

Goal 1 Milestones:

- Hold at least one volunteer work party per year
- Decommission unsafe trails in Stage 1
- Restore soils and replant impacted areas
- Improve hydrologic connectivity at impacted sites
- Build Boardwalks in Stage 2

Goal 2: User safety and experience

Strategy 2.1: Install wayfinding and signage

Signage and wayfinding are important to help park users navigate the trails safely. Signage welcomes the public, directs and manages impacts, and educates and informs Park visitors. The following wayfinding and signage improvements aim to improve user safety and experience:

- ◇ Install area trail map at primary entrances and key trail intersections. (See Figure 7)
- ◇ Explore low impact wayfinding design standards. (See Figure 8)
- ◇ Add signage to mark public access points. (See Figure 9)
- ◇ Add park rules and dog on-leash requirement signage.



Figure 7. A map indicating "You are here."



Figure 8. A low impact wayfinding post with trail markers and no fire signs

Strategy 2.2: Manage pet and other waste.

Install garbage cans and pet waste stations at main access points.

Strategy 2.3: Improve vehicle parking and add bicycle parking at upper Fairhaven Park

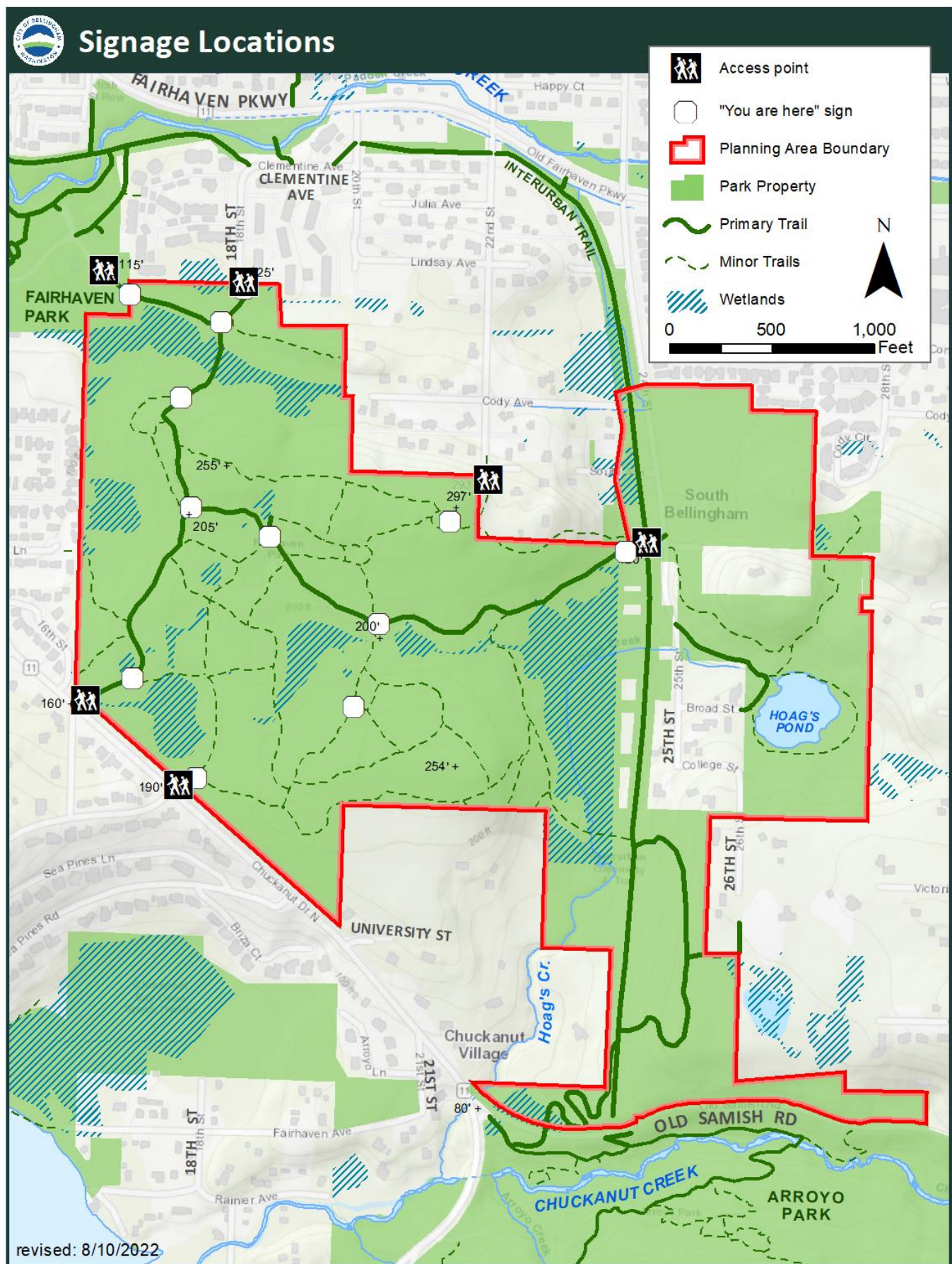
Improve existing vehicle parking along Chuckanut Drive, provided there are no significant negative impacts on conservation values. Add bicycle parking at the entrance to the Park from Fairhaven Park.

Strategy 2.4: Benches

Install benches in key locations along the main loop trail.

Goal 2 Milestones:

- Install wayfinding signs and trail markers
- Improve access to community in Phase 2 of Implementation



Goal 3: Education and Interpretation

Strategy 3.1: Create an outdoor learning space

Create an outdoor learning space such as an outdoor classroom. Figures 9 and 10 include initial concepts for learning spaces considering existing conditions within the Park. Figure 13 shows the location of the outdoor classroom.

Strategy 3.2: Native plant interpretation

Install native plant identification signage at approved locations within the Park. Figure 10 includes initial concepts for native plant signage.

Goal 3 Milestones:

- Install plant identification signs
- Hold volunteer work parties in the park
- Improve outdoor learning space in Phase 1 of Implementation

Goal 4. Climate Resiliency

Strategy 4.1: Promote climate resiliency consistent with the City's PRO Plan.

Consistent with Goal 4 of the City's PRO Plan, take action to reduce the impacts of climate change and enhance the natural carbon sequestration functions by restoring denuded areas and encourage bike and pedestrian access to the park.

Strategy 4.2: Install fire warning signage.

Add no fire symbols to signage at primary access points and wayfinding markers.

Strategy 4.3: Consider climate change when making decisions

Consider climate change when making decisions about improvements, conservation, and restoration efforts. For example, use climate-tolerant native plants in restoration efforts.

Goal 4 Milestones:

- Reforest existing impacted areas
- Install fire signs during times of increased fire risk in accordance with City Fire Department.

CHAPTER 6: IMPLEMENTATION STRATEGY

The implementation strategy for this master plan seeks to guide, identify, and prioritize efforts over time. The implementation strategy is not meant to be prescriptive, but rather, to offer direction in determining next steps. Efforts will be further prioritized according to input from topic-specific studies and other City planning efforts, public input, available funding, and schedule constraints.

Phased Action Plan

The improvements and other actions identified in this master plan will be implemented in two primary phases, described below, and depicted in Figure 12. These improvements are in addition to ongoing maintenance and restoration activities. Priorities will be reassessed periodically to consider new data and input.

Each project will have unique permitting requirements based on critical areas, maintenance versus new trails, and impervious surfaces. The Parks & Recreation Department will follow relevant regulations and obtain necessary permits and environmental review for each project, as needed.

Restoration activities will be informed by the Chuckanut Community Forest Park District’s Stewardship Plan (Herrera, 2022). The Stewardship Plan provides additional technical information and helps prioritize this Phased Action Plan. Table 5 of the Stewardship Plan summarizes the priority areas as shown below:

Table 5. Ecological Priority Areas for Preservation and Restoration.				
Priority 1	Priority 2	Priority 3	Priority 4	Priority 5
Mature Forest Wetland	All Other Wetlands	Non-Wetland Drainages	Buffers	Upland Forest (non-buffers)

Figure 10. Table 5 of Chuckanut Community Forest Stewardship Plan Prioritization of ecological significance (Herrera, 2022)

Volunteer work parties will be hosted to help expedite trail restoration work and removal of invasive species. This phased action plan also considers the most impacted and heavily used areas of the park. A list of improvements by phase is included below and located on the map as shown in Figure 12.

The Parks and Recreation Department is proposing \$650,000 in the 2023-2024 Capital Budget for phase 1 improvements. Budgets are submitted by the Parks and Recreation Department to City Council based on the PRO Plan, equity goals, and level of service around the City. Mapped improvements indicated below are found on Figure 12, Implementation Map.

Phase 1: 2023 - 2026

- ✓ Improve hydrologic connections and reduce wetland impacts (through boardwalks, culverts, and raised, rerouted, or decommissioned trails) in the following locations:
 - (Mapped improvements #1) Improve Phase 1 trail from Interurban trail through wetland JJ2 and between wetland JJ1 and KK.
 - (Mapped improvements #2) Decommission trails that bisect wetland JJ1 and JJ2. Design and construct north-south trail connection that maintains connectivity.
 - (Mapped improvements #3) Decommission trail near wetland KK and restore.
 - (Mapped improvements #4) Decommission trail that bisects wetland AA and restore.
 - See the Stewardship Plan (Herrera, 2022) for methods and examples
- ✓ Install wayfinding signage and trail markers at key locations to minimize the use or expansion of side trails throughout Park.
- ✓ Improve trail from Interurban trail to wetland AA (Mapped improvements #1)
 - Add gravel to existing trail-bed where needed to provide restoration and maintenance access
 - Narrow and delineate existing trail to six feet where practical
 - Exposed soil areas outside of the improved trail to be mulched and revegetated with densely planted native shrubs and ground cover plants.
- ✓ Improve and/or add signage to primary park access points.
- ✓ Install dog on-leash signage.
- ✓ Install park boundary markers.
- ✓ Install dog waste stations and garbage cans at primary access points.
- ✓ Install native plant interpretation signage and/or area.
- ✓ Improve outdoor learning spaces.
- ✓ Coordinate with the Park District to transfer and update, if needed the 82-acre [Chuckanut Community Forest Easement](#)⁷ to a qualified Grantee.

Phase 2: 2026 - 2029

- ✓ Continue to block and revegetate select trails to be decommissioned.
- ✓ Reroute or remove trails to avoid wetland CC.
- ✓ Improve hydrologic connections and reduce wetland impacts (through boardwalks, culverts, and raised, rerouted, or decommissioned trails) in the following locations:
 - (Mapped improvements #5) Trail bisecting wetland KK
- ✓ Install other amenities such as benches.
- ✓ Complete restoration projects consistent with methods outlined in the Stewardship Plan (Herrera, 2022) and Urban Forestry Management Plan (City of Bellingham, TBD).
- ✓ Improve parking along Chuckanut Drive.
- ✓ Improve trail connection from Hoag's Pond to 28th Street.

⁷ <https://cob.org/wp-content/uploads/Conservation-Easement-12-26-2001-COB-to-WLT.pdf>

Trail Improvements

The Hundred Acre Wood trail improvements aim to improve the user experience while protecting and enhancing the natural environment. It prioritizes the Master Plan goals and considers input from the public and the steering committee. Figure 12 highlights key elements of the phased action plan.

Dogs must be kept on a leash to protect sensitive wildlife and their habitat.

Key trail improvements include:

1. Decommissioning of duplicative trails and those impacting priority critical areas. See Figure 12 for trails to be removed (any trails not shown on the map will be decommissioned over time).
2. Improvement of the hydrologic connectivity and wetland restoration along the trail bed and trails between Fairhaven Park, Interurban Trail, and Chuckanut Drive. (Figure 12)
3. All trail, boardwalk, or drainage improvements will be completed to adopted Park standards and permitting requirements.

A local example of these standards can be seen in the trail and boardwalk improvements completed through Recreation Northwest in 2017. Figure 11 below shows the mud and denuded trail section at the north end of the Study Area in before and after photos.

4. Costs for trail, boardwalk, and drainage improvements is site dependent and can significantly increase the cost of trail development. The current 2022 estimate of a new crushed gravel trail ranges from \$150 to \$300 per linear foot and current costs associated with boardwalk development can be as much as \$500 per linear foot.



Figure 11. Before and After Photos of limestone trail and boardwalk development in Study Area (Recreation Northwest 2017)



Implementation Map

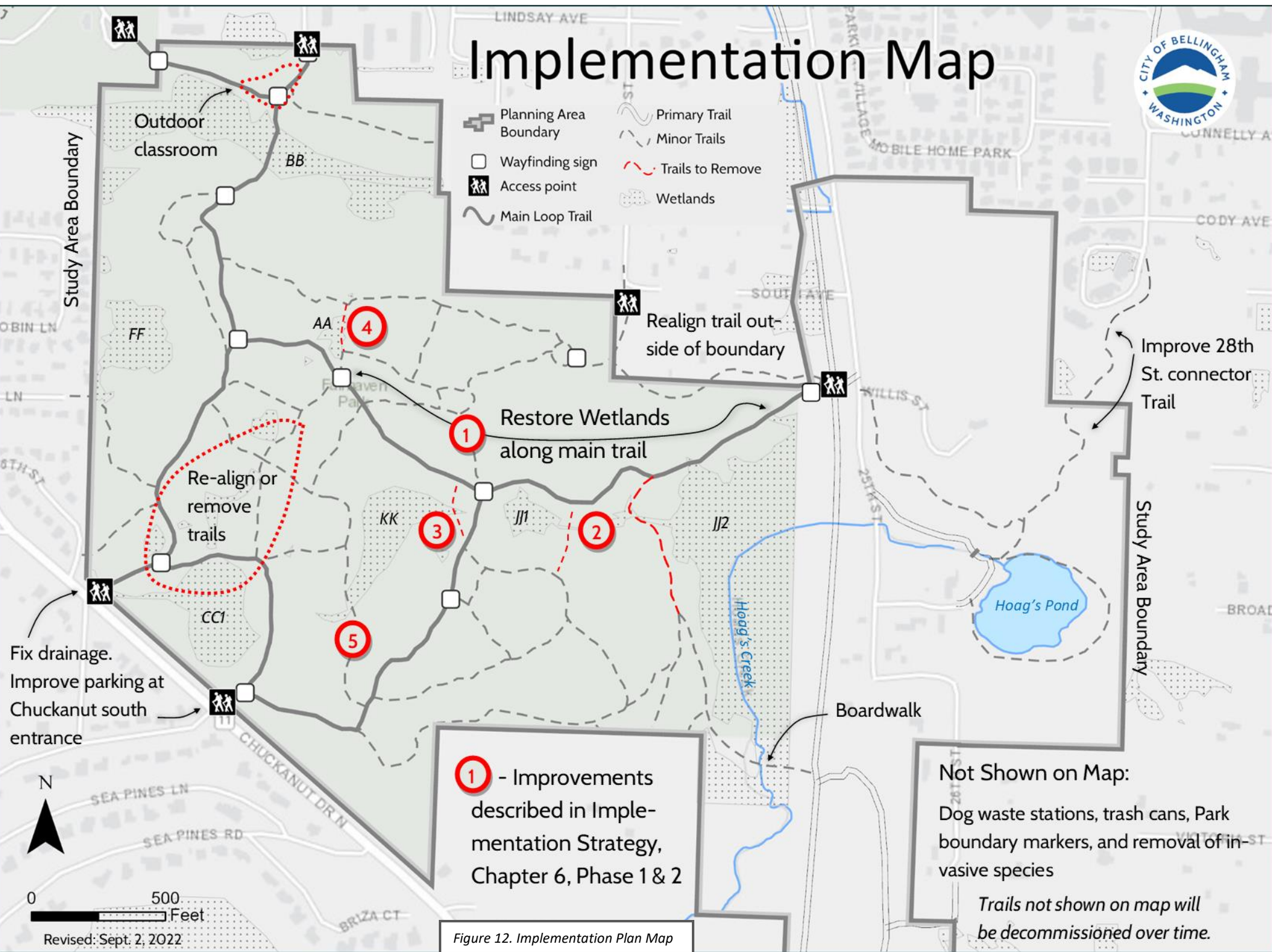


Figure 12. Implementation Plan Map

REFERENCES

City of Bellingham. (1997). Section 2. Additional Information, Archaeology Survey. Final Environmental Impact Statement for Chuckanut Ridge Planned Development, Bellingham WA.

City of Bellingham. (2020). Parks, Recreation and Open Space Plan.

Diamond Head. (2021). Urban Forestry Management Plan – Canopy and Forest Structure Analysis Summary Report. Vancouver, British Columbia, Canada. Available at: <https://cob.org/wp-content/uploads/210823-Bellingham-Canopy-and-Forest-Structure-Report-1acd.pdf>

Diamond Head. (May 2022). State of the Urban Forest Report. Vancouver, British Columbia, Canada. Available at: https://cob.org/wp-content/uploads/220428_Bellingham-State-of-the-Urban-Forest-Report_v2.pdf

Eissinger, A. (2017). Chuckanut Community Forest Baseline Documentation Report. Prepared by Common Futures LLC. Prepared for Chuckanut Community Forest Park District in cooperation with the City of Bellingham.

ESA. (2015). Habitat Restoration Technical Assessment. City of Bellingham Public Works, Bellingham, WA. Available at: <https://cob.org/wp-content/uploads/final-bhrta-12-15-15.pdf>

Herrera. (2022). Stewardship Plan Chuckanut Community Forest Prepared for Chuckanut Community Forest Park District, Bellingham, Washington. Herrera Environmental Consultants, Inc. Available at: <https://www.chuckanutcommunityforest.com/documents/>

APPENDIX A: CHUCKANUT COMMUNITY FOREST PLANT AND WILDLIFE INVENTORY

The following table includes a summarized list of the plant and wildlife species recorded within the boundaries of the Chuckanut Community Forest Conservation Easement, as reported in the Chuckanut Community Forest Baseline Documentation Report (Eissinger, 2017). See the report for the full inventory.

Table 1. Summarized list of plant and wildlife species recorded in the Chuckanut Community Forest.

Taxa		Species
Plants	Trees	Douglas fir, western hemlock, grand fir, Sitka spruce, western red cedar, western yew, big-leaf maple, red alder, black cottonwood, trembling aspen, western paper birch, bitter cherry, Scouler's willow, Pacific willow, vine maple, mountain ash, black hawthorn, Pacific ninebark
	Shrubs	Red-osier dogwood, Indian plum, salmonberry, red elderberry, black twinberry, thimbleberry, gooseberry, spiraea (hardhack), service berry, snowberry, oceanspray, Oregon grape, Salal, red huckleberry, devils club
	Herbaceous Plants	Orange honeysuckle, sword fern, spiny wood fern, lady fern, deer fern, bracken fern, licorice fern, fringed cup, western trillium, large-leaf avens, Pacific waterleaf, false lily of the valley, vanilla leaf, bleeding heart, piggy-back-plant, western starflower, foam flower, Creeping buttercup, tall buttercup, woodland strawberry, Watson's willowherb, stinging nettle, cut-leaf blackberry, trailing blackberry, cow parsnip, cinquefoil, spearmint, American brooklime, horsetail, Indian pipe, rattlesnake plantain, western coralroot, striped coralroot, Dewey's sedge, Henderson's sedge, slough sedge, managrass, soft rush, slender rush, common duckweed, water parsley, skunk cabbage, bent grass
	Non-native	English hawthorn, Scott's broom, reed canary grass, velvet grass, orchard grass, sweet vernalgrass, tall fescue, red-top, red clover, English plantain, Herb-Robert (stinky bob), hairy cats-ear, common tansy, Canadian thistle, cleavers, Himalayan blackberry, Evergreen blackberry, bloody British ivy, bloody British holly
Birds		Ruffed Grouse, Great Blue Heron, Bald Eagle, Red-tailed Hawk, Killdeer, Barred Owl, Anna's Hummingbird, Rufous Hummingbird, Belted Kingfisher, Red-naped Sapsucker, Downy Woodpecker, Hairy Woodpecker, Northern Flicker, Pileated Woodpecker, Willow Flycatcher, Pacific-slope Flycatcher, Hutton's Vireo, Steller's Jay, American Crow, Common Raven, Barn Swallow, Black-capped Chickadee, Chestnut-backed Chickadee, Bushtit, Red-breasted Nuthatch, Brown Creeper, Winter Wren, Bewick's Wren, Golden-

	crowned Kinglet, Ruby-crowned Kinglet, Swainson's Thrush, American Robin, Varied Thrush, European Starling, Cedar Waxwing, Orange-crowned Warbler, Yellow-rumped Warbler, Black-throated Gray Warbler, Wilson's Warbler, Spotted Towhee, Song Sparrow, Dark-eyed Junco, Western Tanager, Black-headed Grosbeak, Brown-headed Cowbird, House Finch, Purple Finch, Red Crossbill, Pine Siskin, American Goldfinch, Evening Grosbeak
Mammals	Pacific Water Shrew, Coast Mole, Eastern Cottontail, Townsend's Chipmunk, Eastern Gray Squirrel, Douglas' Squirrel, Coyote, Raccoon, Mule Deer

APPENDIX B: TRAIL DECOMMISSIONING CONSIDERATIONS

Hundred Acre Wood Trail Decommissioning Considerations

- ✓ Does the considered trail decommissioning action fulfill recommendations by the public?
- ✓ Does the trail impact a protected wetland, critical habitat and species, or impact hydrologic connectivity?
- ✓ Does the considered decommissioning action support goals and objectives from guiding document such as the City's Comprehensive Plan; Parks, Recreation, & Open Space Plan; Greenways Program Strategic Plan; Climate Action Plan; Bike & Pedestrian Master Plan; and Neighborhood Plans?
- ✓ Does the trail connect to a destination or point of interest?
- ✓ Is the trail a loop trail or part of a larger loop?
- ✓ Does the trail offer users a unique experience (it is not redundant to another nearby trail)?
- ✓ Will it be possible to maintain the trail over time?
- ✓ Does the trail support the City's conservation and restoration goals (does not negatively impact ecological or hydrologic function within the Hundred Acre Wood)?
- ✓ Is the trail safe?

APPENDIX C: OUTDOOR CLASSROOM CONCEPT



OUTDOOR CLASSROOM

TERRACED CLASSROOM SEATING



OUTDOOR STAGE & PRESENTATION SPACE



ACCESSIBLE PATHWAY

WAYFINDING



LITTLE FREE LIBRARY



FAIRHAVEN PARK | initial concepts

Recreation Northwest
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