Flourishing Natural Environment

Authentic Public Participation

Arts & Cultural Awareness

Healthy Community

Innovation

Welcome to All Ages

Gateway to Sea, Gateway to Land

Protect & Preserve the Natural Integrity

Draft Date: 6/10/2016

DRAFT

CITY OF MUKILTEO

Japanese Gulch Master Plan Draft

Friends of Japanese Gulch,
Japanese Gulch Group,
Mukilteo Dog Park,
Mukilteo Community Garden,
Previous Elected Officials, and
Anyone who spent time in Japanese Gulch,

Thank You!

Acknowledgments:

Special thanks to all those who have helped and participated in the Japanese Gulch Master Plan.

2016 Elected Officials:

Mayor: Jennifer Gregerson

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Steve Schmalz, Council Vice President
Christine Cook
Richard Emery
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Demaree Clay, Mukilteo Dog Park Representative
Christine Cook, City Council Alternate
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Richard Emery, Japanese Gulch Group
Susan Gearheard, Avid Japanese Gulch Hiker
Kristin Kohorst, Neighborhood Representative
Thomas Little, Parks & Arts Commission Representative
Randy Lord, City Council Representative
Chris Mueller, Senior Parks Planner
Tyler Thompson, Japanese Gulch Group
Ely Klem, Mukilteo Youth Advisory Committee Representative
Dustin Weller, Citizen-at-Large

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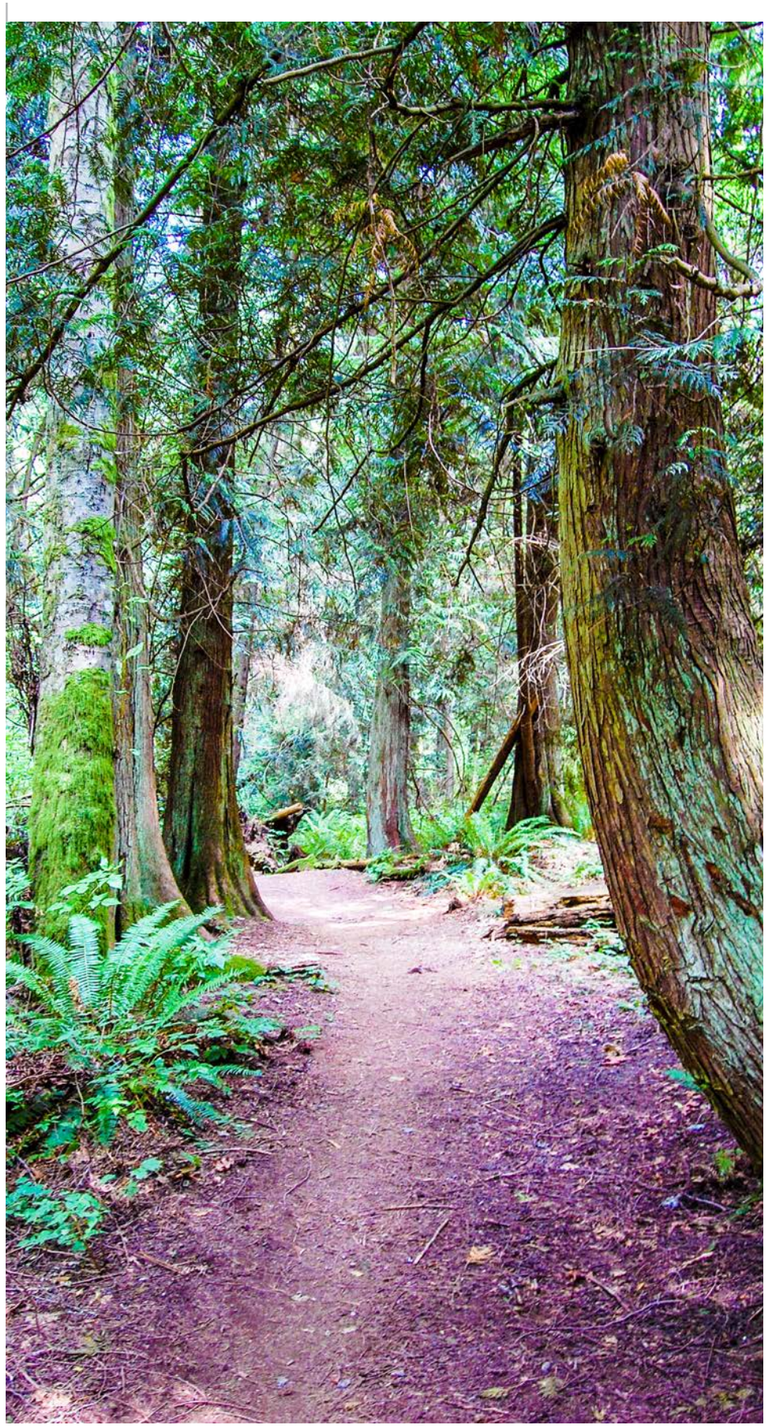


Japanese Gulch

Note to Reader

Like many entrances to Japanese Gulch, individuals have the opportunity to tailor their journey throughout the park. This document is no different. It is designed to provide readers a 'choose your own adventure' with direct access to the years of hard work by residents, elected officials, city staff, and countless others to preserve Japanese Gulch. Divided into three elements, this document incorporates a park master plan, an implementation & volunteer plan, and an inventory of natural, physical, and public outreach data regarding Japanese Gulch in an appendix. The three elements provide future direction for implementation of the vision established in this process.

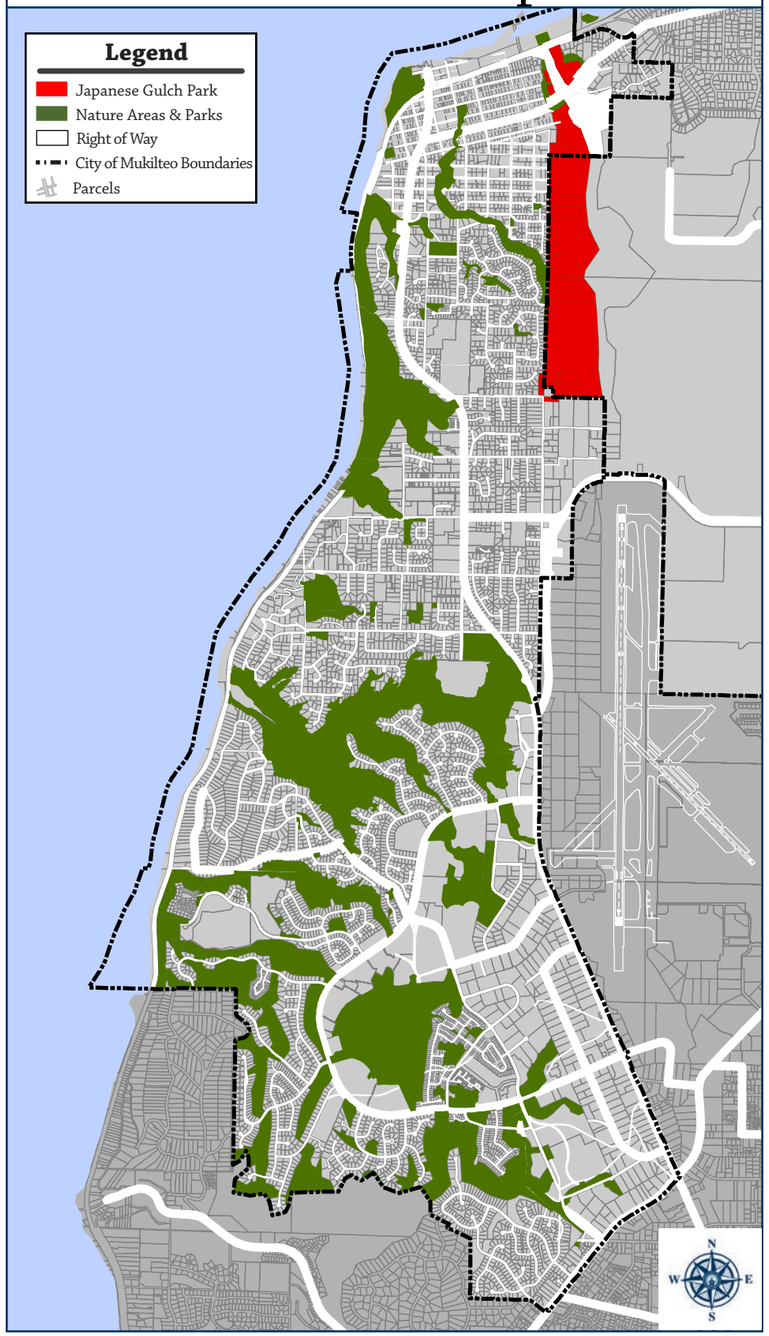
The Japanese Gulch Master Plan introduces the preferred alternative immediately within the Executive Summary of Part I located on page 2. The Executive Summary identifies page numbers to further explain the decision making within the subareas. Subarea planning is identified at the beginning of the master planning process to better visualize the variety of characteristics within niche areas of Japanese Gulch. The subareas include the following:

- Tank Farm/Japanese Gulch Creek pg. 14
- Lower Japanese Gulch pg. 15
- 5th Street pg. 16
- Dog Park pg. 17
- Upper Japanese Gulch pg. 18
- 76th Street Trailhead pg. 19
- Mukilteo School District Property pg. 20
- *Overall Trail Layout pg. 21 (Not a Subarea)*

The subareas unite to form the area to be called Japanese Gulch Park. As the reader, you are able to tailor your reading of this master plan by focusing on the subareas that interest you most. Enjoy!

Japanese Gulch Park is located in northeastern Mukilteo at 76th Street SW and connects to the waterfront. The map to the right illustrates Japanese Gulch Park in red in relationship to the rest of Mukilteo.

Locator Map



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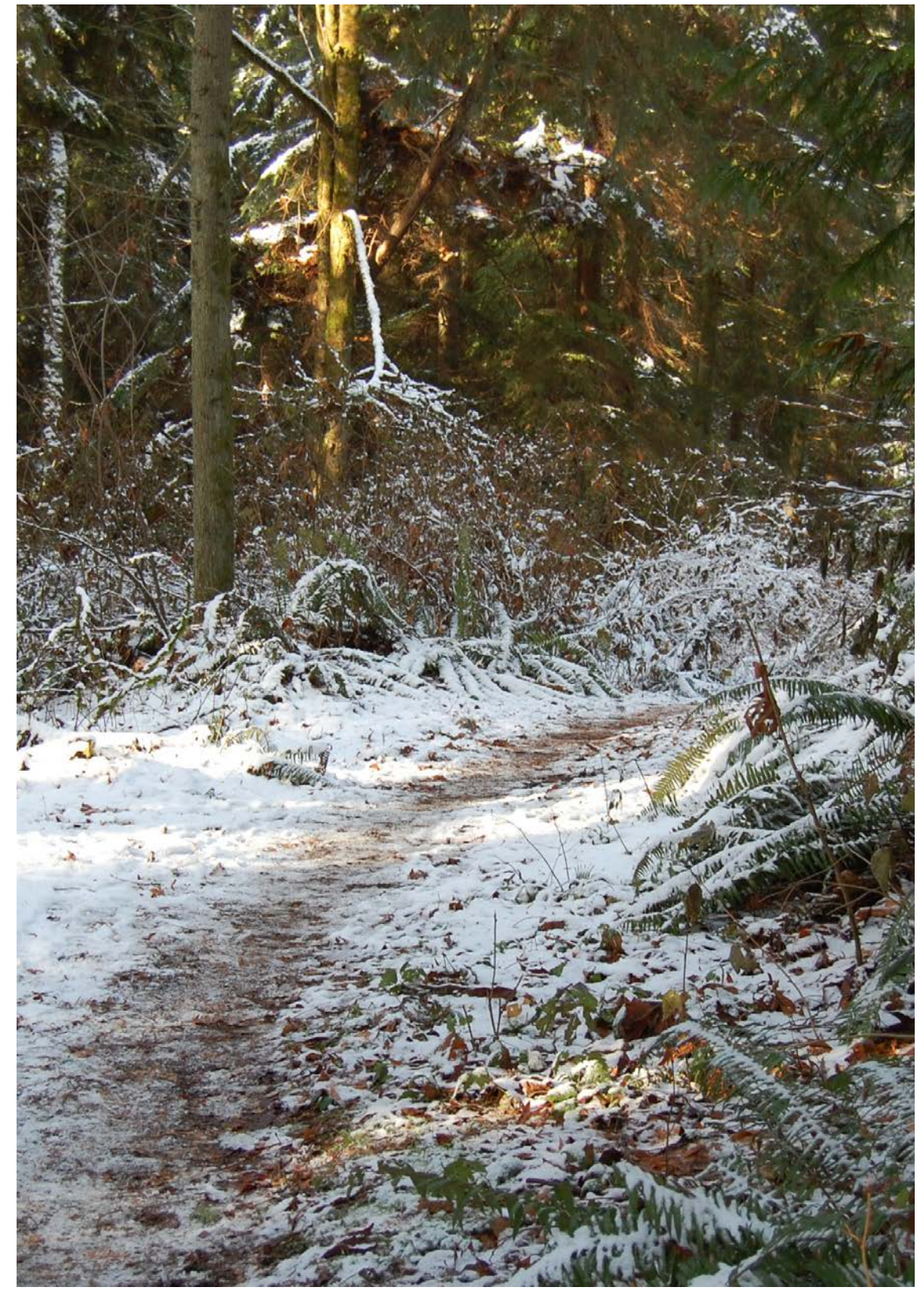


Japanese Gulch

Glossary:

A

Active Use means improvements that are aren't classified as a passive use such as ball fields, swimming pools, recreation centers, and dirt jump bike courses.

ADA means Americans with Disabilities Act references the 1990 Americans with Disabilities Act that was passed by US Congress, though also commonly used to reference design standards.

ADA Oriented means a design approach to incorporate as many ADA features that are most reasonably suited to create an area that is accessible for various individuals with limited mobility.

Arboretum means a botanical garden devoted to trees.

B

Bicycle Oriented means trails that are primarily designed for bicyclists as single-track paths with a various amount of skill levels.

Bioswale means a landscape element designed to remove silt and pollution from surface runoff water.

BNSF means the Burlington Northern Sante Fe Railroad Company.

Boardwalk means an elevated walkway designed for high accessibility to have less impact on the landscape than a traditional trail. Proposed projects are located at the 76th Street Trailhead and Lower Gulch.

Bulb-Out means a method of traffic calming that extends the sidewalk into the parking lane to narrow the roadway and provide additional pedestrian space at key locations, also known as curb extensions.

C

Comprehensive Plan means the state mandated by the Growth Management Act of 1990, a methodology of planning to assess future growth of the area to ensure capital facilities are adequate as well as provide policy regulations for future actions.

Conservation Easement means the easement established in the purchase of 98 acres that restricts any improvements to the protected property shall be limited to those which are passive in nature and meet the requirements and intent of RCW 84.34.200-220. Passive improvements include, but are not limited to, trails, interpretive centers, viewpoints, picnicking facilities, access, restrooms, playgrounds and restoration projects. Active recreational improvements are prohibited. Such improvements include, but are not limited to ball fields, use by motorized vehicles, swimming pools, and recreation centers.

Consensus means the decision-making technique to identify an alternative that does not generate objections or dissents from the decision makers.

CPTED means Crime Prevention Through Environmental Design: a multi-disciplinary approach to deterring criminal behavior through environmental design. CPTED strategies rely upon the ability to influence offender decisions that precede criminal acts.

Critical Area means ecologically sensitive areas due to geology (slopes greater than 40%, unstable soil, or other geologic hazards), proximity to wetland, streams and/or significant wildlife habitat, natural drainage ways, flood hazard areas, and shorelines of Mukilteo, the state, or of statewide significance.

Cultural Planning means a planning practice to recognize the culture within the area to make planning decisions including architectural inspirations, themes, interpretive signage, and other similar characteristics.

D

Demolition & Clearing means the costs of clearing and grubbing sites.

Dirt Jump Bicycle Course means an area for non-motorized bicyclists of many a variety of skill levels to exercise with a variety of features including jumps, skinnies, elevated boardwalks, and return routes.

Drainage & Stormwater means the costs of implementing required stormwater controls.

F

FTE means Full Time Equivalent referring to an employee who works 2080 hours per year.

G

Grading & Erosion Control means the costs associated with preparing a site for paving and enhanced trail development.

H

High Accessibility - See ADA Oriented.

M

Maintenance Path means a wide trail that is suitable for a utility vehicle and is designed for high accessibility.

Mixed-Use Oriented means trails that include design for both pedestrians and bicyclists.

Mobilization means 10% of Subtotal I with additional 3% for performance bonding as well as additional costs associated with traffic control, surveying and similar pre-development requirements.

Must - See Shall.

Glossary Continued:

N

Natural Inventory: Refers to an analysis of the environment performed by EarthCorps in October 2014 to assess the health of Japanese Gulch.

Natural Meadow means an area of low maintenance grasslands.

Natural Play Ground means an area that incorporates 'playing in the woods' into a designated area that promotes creativity with dirt, sticks, logs, and non-traditional playground items.

P

Passive Use means improvements that are passive in nature and meet requirements of RCW 84.34.200-220 including, but are not limited to, trails, interpretive centers, viewpoints, picnicking facilities, access, restrooms, playgrounds and restoration projects.

Park Amenities & Architecture means common features within a park such as benches, pathways, water fountains, trash cans, and other similar amenities.

Paths means the construction of pathways including staircases and basic trail development.

Paving means the costs associated with the Paving of formal parking areas.

Pedestrian Oriented means trails that are primarily designed for pedestrians either as high accessible paths that are most reasonably constructed for ADA principles, or limited pathways that are not suitable for sustained bicycle use as a preferred route.

Planting & Restoration means Landscape planting including the Natural Meadow as well as additional restoration efforts of preserving the forest.

Pragmatic Architecture means a vision recommended by the Subcommittee to support a theme that 'everything has a place' and to provide functional design with limited frills.

Primary Trailheads means entrances of the high accessibility for the 'general' public the highest amounts of physical improvements including parking lots, map kiosks, and trash cans. These entrances are typically accessed by car.

R

Raised-Crosswalk means a method of traffic calming where the crosswalk is elevated above the roadway pavement in the form of an elongated speed hump with a flat section in the middle and at-grade with adjacent sidewalks.

S

Secondary Trailheads/Neighborhood Entrances means entrances that located within neighborhoods that provide a moderate amount of improvement and arrival is typically by walking or bicycling.

Shall means implementation of the policy is mandatory and imparts a higher degree of substantive direction than 'should'.

Should means implementation of the policy is expected but its completion is not mandatory. The policy is directive with substantive meaning, although to a lesser degree than shall, because shall policies are subjective; hence, it is not possible to demonstrate that they have been implemented it.

Signage means trail signage including wayfinding and map development.

Single-Track means a narrow mountain bike trail that is approximately the width of the bike.

T

Tertiary Trailheads means formalized entrances with the lowest improvements are for residents living within the immediate vicinity only.

Traffic Calming means the ability to slow a vehicle through either physical or psychological constraints on the roadway.

U

Utilities means water, sewer, and electrical connections for restrooms and necessary lighting.

V

Vision means a strategic planning process that identifies the communities desires, intentions, and limitations into a cohesive statement to guide the development of the strategic planning process.

W

Wayfinding means spatial problem solving through knowing where you are in a building or an environment, knowing where your desired location is, and knowing how to get there from your present location. Common items include maps, trail markers, and unique land marks.

Western Property means property located with Japanese Gulch that is north of 5th Street and west of BNSF Railroad.

"And as countless years went, Japanese Gulch became a wilderness of bushes and giant trees. However long we [Japanese Americans] had been gone from our birthplace, the Mukilteo spirit still lingered in our hearts and minds. Wherever we and our children settled down, we never found another environment as perfect as our childhood homes in Mukilteo."

Mas Odoi, 1920's Mukilteo Resident, WWII Veteran of the 442nd Regimental Combat Team

Part One

Park Master Plan

I. Executive Summary & Preferred Alternative
II. Foreward
III. Master Planning Process
IV. Design Alternatives
V. Project Costs
VI. Welcome to All Ages

I. Executive Summary

Tank Farm Property/Japanese Gulch Creek Park: Page 12

1. Concurrency with Downtown Waterfront Master Plan;
2. Cultural recognition of the proverb 'Gateway to Sea, Gateway to Land';
3. Safe and clear crossing at the Mt. Baker Railroad to Lower Japanese Gulch potentially through the use of wayfinding, artwork, and signage.
4. Cultural transition from a waterfront district to an area inspired by the Japanese immigrants of Mukilteo.

Lower Japanese Gulch Park: Page 13

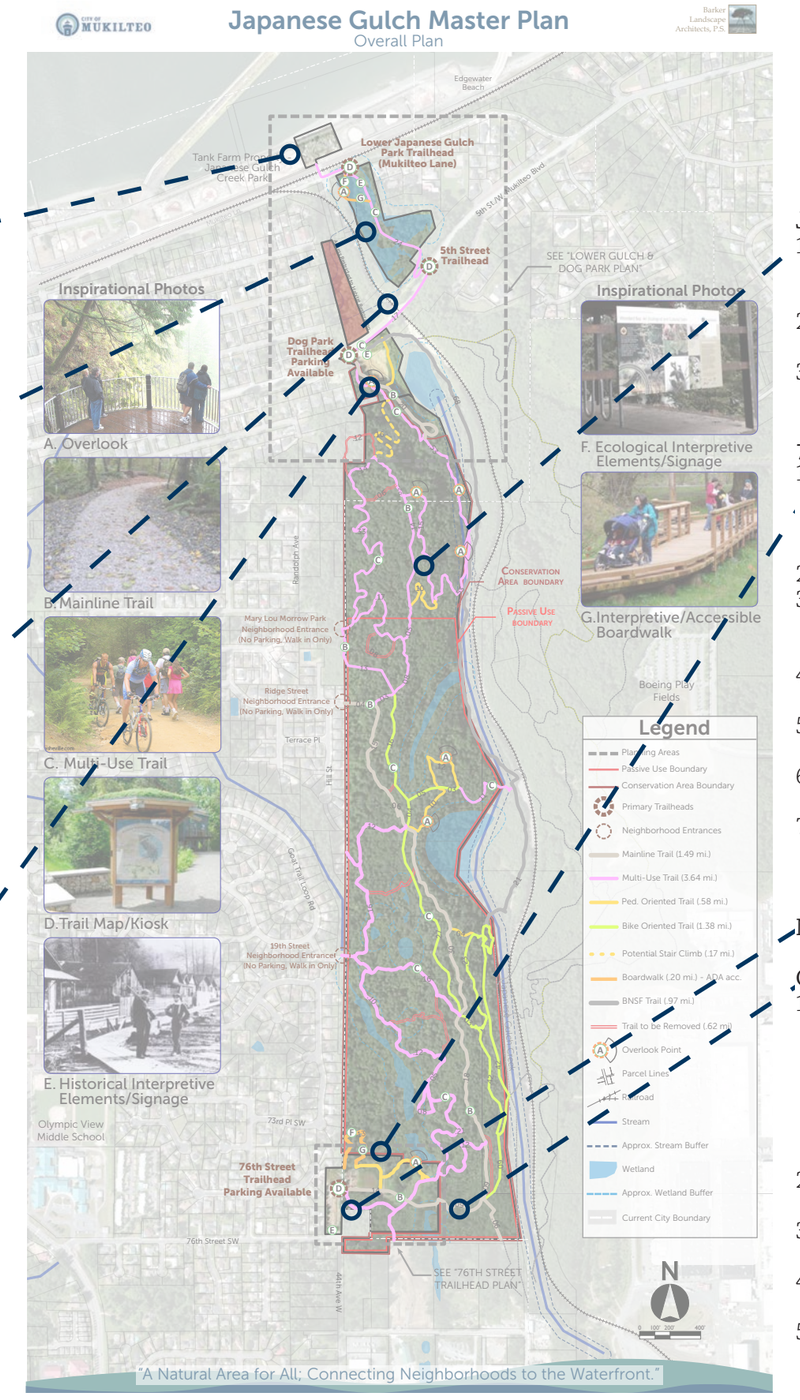
1. Cultural recognition of the Japanese Immigrant History, but balanced within the natural beauty of the environment.
2. Trail design and layout must be highly accessible including a boardwalk loop trail connecting to the Fish Ladder.
3. Western Property shall be designated as 'Habitat Restoration' with access limited only for vegetation management and monitoring.
4. Lower Gulch will be Pedestrian-Oriented with allowances for bicyclists and encourage speed control.

5th Street: Page 14

1. Introduce Traffic Calming through a diverse range of techniques that may include flashing crosswalk, bulb-outs, raised crosswalks, on-street parking, and artwork.
2. Provide cultural history of the 'Road to Everett', development of 5th Street Bridge, and railroad up to Boeing.
3. Improve safety through implementation of CPTED principles.
4. Reduce illegal usage of BNSF property and improve railroad safety.
5. Reduce speed limit to 25 MPH at Eastern City Boundaries.

Tails & Trails Dog Park: Page 15

1. The Tails and Trails Dog Park should provide pragmatic architectural characteristics to embrace 'Everything Has a Purpose'.
2. A restroom facility should be located at the Dog Park with interim facilities until water and sewer services are available. Additional facilities such as water fountains, dog wash stations, and dog fountains should be considered and use only potable water.
3. Parking facilities should be formalized and maximized to support use as a Primary Trailhead.
4. Additional signage or branding should be installed to highlight the Dog Park and improve the location as a functional place of recognition.
5. The Dog Play Area renovations should include drainage amendments such as bioswale, and a shade structure(s) to encourage year-round usage of the park.
6. A fenced linear dog run should be utilized within a maintenance path with a gate at both ends.
7. Trailhead Structure and Kiosks should identify entrance to Japanese Gulch Conservation Area.



Japanese Gulch Preservation Area: Page 16

1. Entire area of Upper Japanese Gulch should be referred to as the Japanese Gulch Conservation Area and have the same restrictions as the Conservation Easement.
2. Conservation, Preservation, and Passive Use should be inspiration for any permitted uses and design implementation.
3. Preservation, protection and the wetlands should be prioritized with site improvements and maintenance.

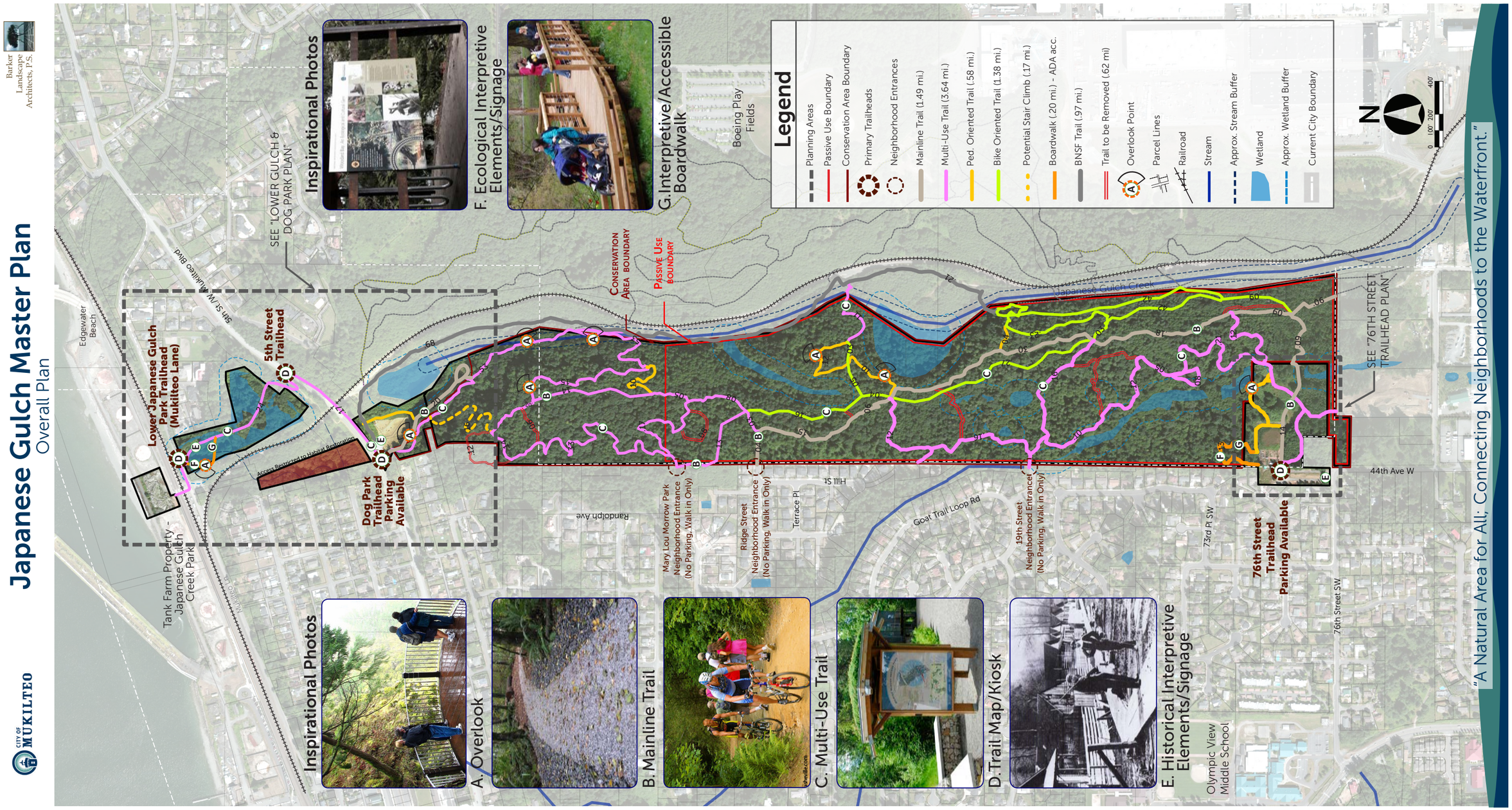
76th Street Trailhead: Page 17

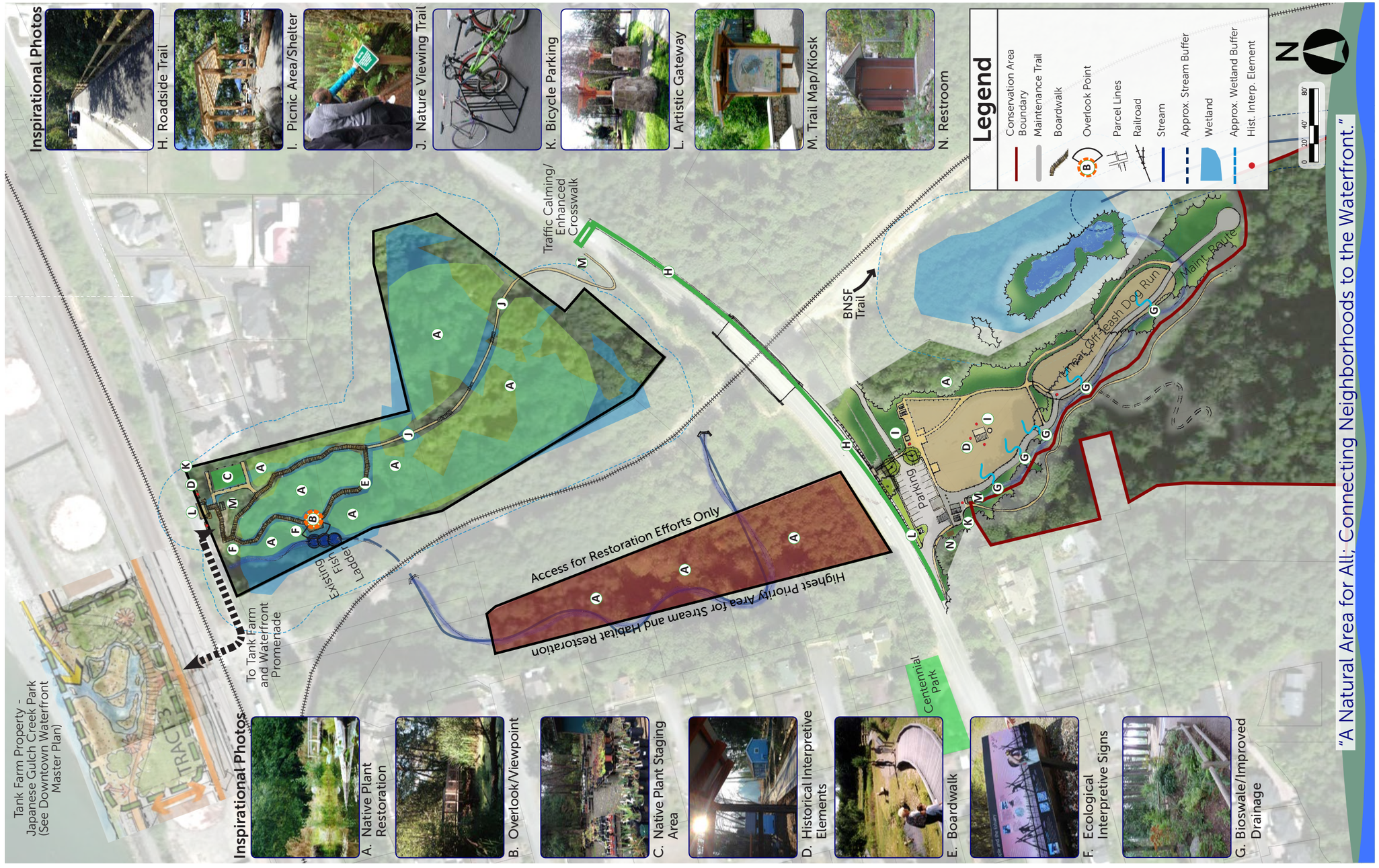
1. Culturally, the history of the site should be recognized as the orchard, community hall, cemetery, police station, and now the park. 76th Street Trailhead should be an area that expresses conservation within design elements.
2. Parking should be flexible and expanded based on demand.
3. The 76th Street Trailhead should incorporate low maintenance park design features such as a Natural Play Area and Natural Meadow which focus on native plant species and interaction with nature.
4. The Community Garden is identified as a permanent use and should be expanded.
5. A permanent restroom facility with tool storage should be provided for daily users and park volunteers.
6. A Dirt Jump Bike Course should be included within the design at an area that is easily accessed from the parking lot.
7. Partnerships with neighboring properties including the Slavic Church and Mukilteo School District should be further explored for mutually beneficial projects and collaboration.

Mukilteo School District Property - Arboretum: Page 20

Overall Trail Network: Page 19

1. Trailhead locations should be designated as Primary, Secondary/Neighborhood, and Tertiary to provide appropriate levels of access and limit adverse impacts to the surrounding area. The designations of trailheads are as follows:
   A. Primary Trailhead – 76th Street, Dog Park, and 5th Street to Lower Gulch.
   B. Secondary/Neighborhood – 19th Street, Ridge Street
   C. Tertiary – Mary Lou Morrow Park
2. Trail layout should maintain historical configuration in recognition of the volunteer effort to establish and maintain the trails.
3. Trail orientation should provide pedestrian, bicycle, and a multi-use/maintenance designation to provide adequate facilities for all user groups.
4. Trail improvements such as signage should be integrated into the landscape to maintain natural beauty while providing wayfinding.
5. Dog walking should be limited to on-leash only throughout the park.


Japanese Gulch Master Plan
Overall Plan
Barker Landscape Architects, P.S.
CITY OF MUKILTEO
Inspirational Photos
A. Overlook
B. Mainline Trail
C. Multi-Use Trail
D. Trail Map/Kiosk
E. Historical Interpretive Elements/Signage
F. Ecological Interpretive Elements/Signage
G. Interpretive/Accessible Boardwalk
Legend
Planning Areas
Passive Use Boundary
Conservation Area Boundary
Primary Trailheads
Neighborhood Entrances
Mainline Trail (1.49 mi.)
Multi-Use Trail (3.64 mi.)
Ped. Oriented Trail (.58 mi.)
Bike Oriented Trail (1.38 mi.)
Potential Stair Climb (.17 mi.)
Boardwalk (.20 mi.) - ADA acc.
BNSF Trail (.97 mi.)
Trail to be Removed (.62 mi)
Overlook Point
Parcel Lines
Railroad
Stream
Approx. Stream Buffer
Wetland
Approx. Wetland Buffer
Current City Boundary
N
0 100' 200' 400'
Conservation Area Boundary
Passive Use Boundary
Japanese Gulch Creek
Boeing Play Fields
SEE "LOWER GULCH & DOG PARK PLAN"
SEE "76TH STREET TRAILHEAD PLAN"
Edgewater Beach
5th St / Mukilteo Blvd
5th Street Trailhead
Lower Japanese Gulch Park Trailhead (Mukilteo Lane)
Access Restricted to Habitat Restoration
Dog Park Trailhead Parking Available
Tank Farm Property - Japanese Gulch Creek Park
Mukilteo Lane
Randolph Ave
Mary Lou Morrow Park Neighborhood Entrance (No Parking, Walk in Only)
Ridge Street Neighborhood Entrance (No Parking, Walk in Only)
Terrace Pl
Hill St
Goat Trail Loop Rd
19th Street Neighborhood Entrance (No Parking, Walk in Only)
73rd Pl SW
76th Street Trailhead Parking Available
76th Street SW
44th Ave W
Olympic View Middle School
"A Natural Area for All; Connecting Neighborhoods to the Waterfront."


Barker Landscape Architects, P.S.
CITY OF MUKILTEO
Japanese Gulch Master Plan
Lower Gulch & Dog Park Plan
Inspirational Photos
H. Roadside Trail
I. Picnic Area/Shelter
J. Nature Viewing Trail
K. Bicycle Parking
L. Artistic Gateway
M. Trail Map/Kiosk
N. Restroom
Legend
Conservation Area Boundary
Maintenance Trail
Boardwalk
Overlook Point
Parcel Lines
Railroad
Stream
Approx. Stream Buffer
Wetland
Approx. Wetland Buffer
Hist. Interp. Element
0 20' 40' 80'
N
Tank Farm Property - Japanese Gulch Creek Park (See Downtown Waterfront Master Plan)
TRACT B
To Tank Farm and Waterfront Promenade
Existing Ladder Fish
Traffic Calming/ Enhanced Crosswalk
BNSF Trail
Access for Restoration Efforts Only
Highest Priority Area for Stream and Habitat Restoration
Parking
Maint. Route
Off-Leash Dog Run
Centennial Park
"A Natural Area for All; Connecting Neighborhoods to the Waterfront."
Inspirational Photos
A. Native Plant Restoration
B. Overlook/Viewpoint
C. Native Plant Staging Area
D. Historical Interpretive Elements
E. Boardwalk
F. Ecological Interpretive Signs
G. Bioswale/Improved Drainage

Barker Landscape Architects, P.S.
CITY OF MUKILTEO
Japanese Gulch Master Plan
76th Street Trailhead Park
To Boardwalk Loop
To Conservation Area
To Conservation Area
Flex Space
(47 Stalls)
Bike Jump Overlook
Mukilteo School District Property
Potential Trail Connection to Local Church (Community Based Effort)
Inspirational Photos
A. Trailhead Structure
B. Parking with Bioswale
C. Natural Meadow
D. Restroom/Storage
E. Picnic Area
F. Bike Dirt Jump Area
G. Natural Play Area
H. Bike Rack/Kiosk
I. Community Garden/ Native Plant Restoration Nursery
J. Arboretum Loop
K. Wetland Interpretive Area
Legend
Planning Areas
76th Street Trailhead Boundary
Wetland
Conservation Area Boundary
0 25' 50' 100'
N
"A Natural Area for All; Connecting Neighborhoods to the Waterfront."

II. Foreward

History of Japanese Gulch

Pre-European Settlement & Lumber Industry

Prior to the European Settlement of Mukilteo, the area was recognized as an area rich with natural foods. With excellent fishing waters, and abundant forest life, Mukilteo was a congregating place of inter-tribal conferences. As George Vancouver's Rose Point became the home to signing of the Point Elliott Treaty of 1855, Mukilteo would see within 50 years a drastic change to the landscape and industry.

With the abundant forests and deep water shores, Mukilteo soon became home to lumber and milling operations. To meet high demand for workers, the Crown Lumber Mill welcomed Japanese Immigrants to the Mukilteo area. Crown Lumber Mill built many houses for their workers including a village area for the Japanese workers. The immigrants embraced their home and built a community center, store, and athletic fields. The Japanese Town was nestled into the north portion of the gulch which led to the name Japan Gulch, now known as Japanese Gulch. The Japanese population of Mukilteo was welcomed into the schools, and many residents worked with the Japanese in reading, and writing. By 1905, Mukilteo saw a population of 200 whites, and approximately 150 Japanese. Eventually the timber within Japanese Gulch was harvested and shipped off.

While northern Mukilteo was developing for the milling and harbor operations, up the hill maintained rural farming characteristics. The site of the 76th Street Trailhead was no exception. At the top of the hill, residents built a Grange Hall on the Einar Enga Family farm to serve as a community center for the rural residents. At this point in history, Mukilteo had three community centers: the Grange Hall, Hawthorne Hall (on 2nd Street which became the Boys & Girls Club), and the Japanese Community Center.

As the Great Depression hit, the Crown Lumber Mill was forced to shut down. Japan Town saw a mass exodus as many sought work elsewhere. Following this mass exodus, Japan Town deteriorated and was eventually reclaimed by nature.

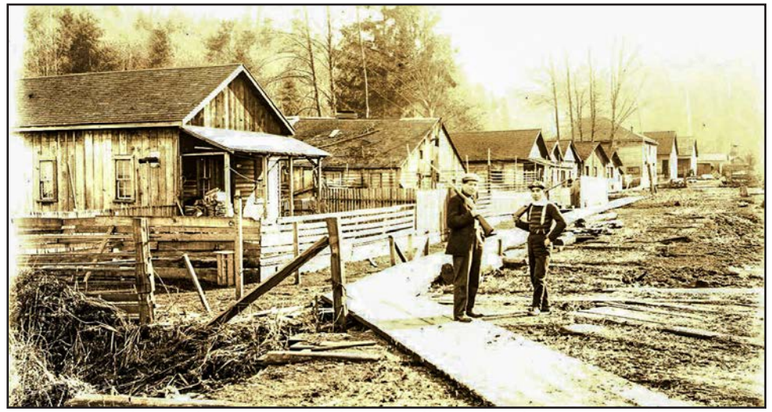
Militarization & External Threats

The militarization of World War II included Paine Field and Japanese Gulch. Paine Field was a critical defense location to protect Bremerton Shipyards as well as the Boeing plant in Seattle. This militarization ultimately led to development of the U.S. Air Force Tank Farm in 1950 for the fighter squadron stationed at Paine Field during the Korean War. As Paine Field's role in militarization faded and Boeing developed, Japanese Gulch would see a significant change with construction of the railroad during the 1960's.

This railroad line continues to supply goods and materials to and from the Boeing factory. At nearly 4.8% grade, this railroad line is some of the steepest railroad in the country. Not only did the construction of Boeing lead to the construction of the railroad bisecting the gulch into two halves, stormwater revisions altered the direction and rate of flow of Japanese Gulch Stream. This redirection later led to salmon habitat restoration improvements that restored the historic stream channel and added a fish ladder located within the Lower Japanese Gulch portion.

For many years, Japanese Gulch seemed destined to be used for an alternative bypass connection to the waterfront. Designed as a ferry access route, Japanese Gulch would have functioned as a highway for individuals traveling to and from the waterfront alleviating pressure on the constrained Mukilteo Speedway. The alignment connected SR 526 to a relocated ferry terminal. Identified for many years in Mukilteo Comprehensive Plan from 1970 through 2010, the policy was eventually abandoned with the adoption of the 2011 Comprehensive Plan Update.

While some property was privately owned and poised for industrial development, many individuals explored the area and created trails, bike routes, and recognized the area as a critical park for Mukilteo and the region. The last era of Japanese Gulch's fate was reached following a grassroots effort for the preservation of Japanese Gulch.



The image above showcases the linear village development with a wooden boardwalk providing easy passage.

The structures of the village utilized local materials, including most likely cedar roof milled at Shingle Mill Beach now known as Edgewater Beach.

Japanese Gulch and City of Mukilteo

During the economic boom of the 2000s, an external threat of an industrial development sparked a grassroots movement to preserve Japanese Gulch. The City at the time only owned approximately 20 acres of Japanese Gulch. Over the course of five years, the City purchased an additional 123 acres to the current size today, 140 acres. The last purchase of 98 acres may be considered the most important purchase to date due to the connectivity provided and the land use easement placed on the property.

The purchase history of Japanese Gulch represents two distinctive possibilities for Japanese Gulch, the first being the development of the alternative ferry highway and the second being for recreation and preservation. The initial purchases prior to 2001 were strategic to leverage funding for the construction of the alternative ferry highway. These purchases were an attempt to demonstrate the City's commitment to this alternative access project.

The next round of purchases began in 2009 with the purchase of the 'Precht' property or the 76th Street Trailhead. This property was purchased by the City to develop ball fields for improved organized recreation programming. Interestingly enough, this would be the second time that the City of Mukilteo would utilize this land. Following the closure of the Highland Memorial Park, the site would be occupied by the Mukilteo Police Department. Shortly after the purchase of the property, a group of avid gardeners petitioned the City to allow a Community Garden to be established. This was agreed to on a 'temporary' basis.

In 2012, the City was approached by another group of interested individuals to establish the Tails and Trails Dog Park located in the present location at 5th Street. Unlike the Community Garden, this park was to remain permanent. During the initial conversation about the maintenance and operations, the volunteer group identified that it would be a volunteer park. Over the years, the volunteer group dwindled and the City took over the maintenance and operations of the park. This is an important historical note to consider as the Japanese Gulch area is focused on utilizing the support from volunteers.

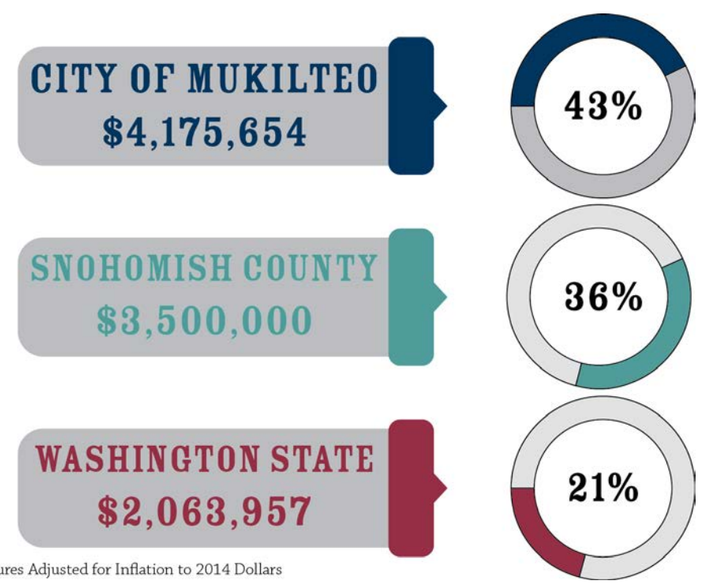
Purchases & Financial Support

The initial Japanese Gulch purchases were started as fully funded purchases by the City of Mukilteo. But as the direction of an alternative ferry highway moved towards recreation and preservation, additional funding agencies contributed to assist in the preservation of this land.

The support to raise awareness to preserve 'The Gulch' was led by a strong community grassroots effort which developed into the Japanese Gulch Group. The grassroots effort led by Japanese Gulch Group continued to raise the awareness for external funding which concluded in the preservation and conservation of Japanese Gulch.

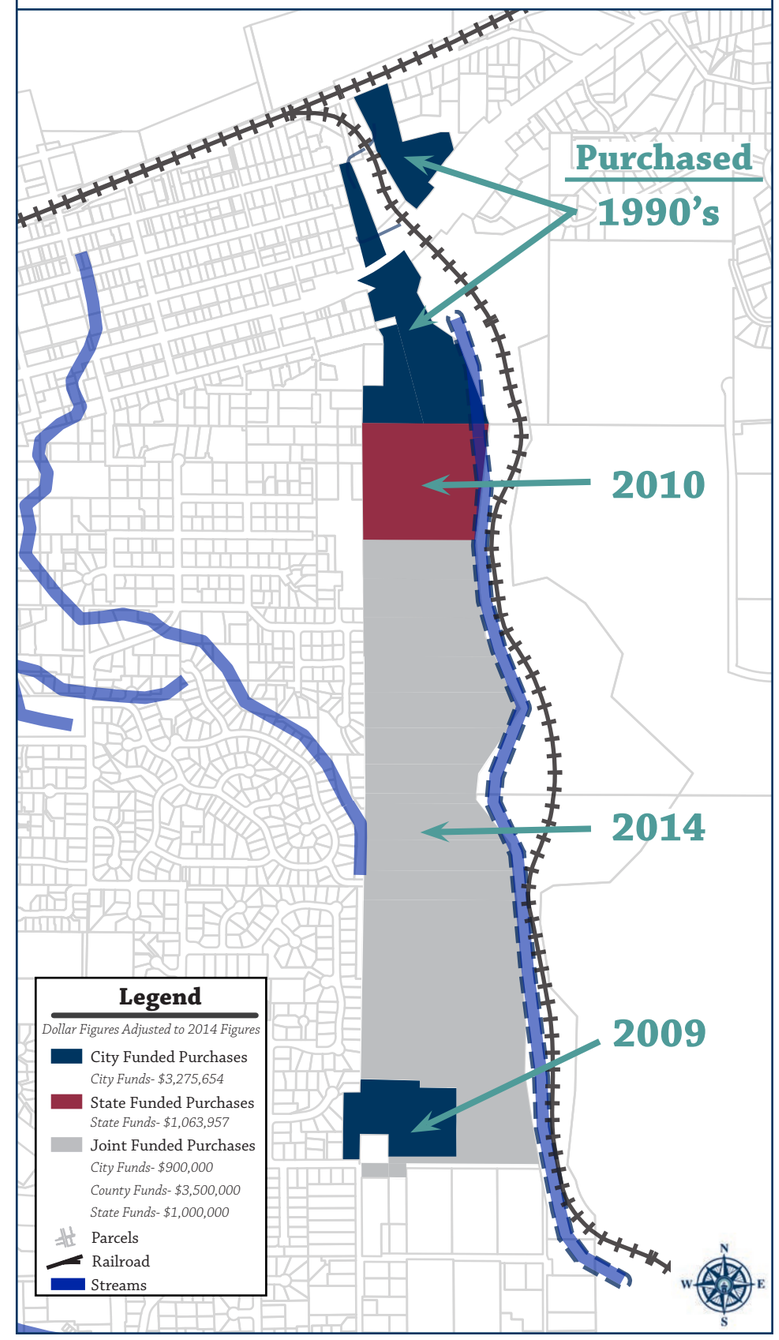
The last purchase of 98 acres created the continuous connection between the 76th Street Trailhead, and the 5th Street Area parcels. This last purchase was made possible by the Snohomish County Conservation Futures and Washington State. This contribution included a land use restriction designation to be placed on the property to ensure the property be used for passive recreation uses only. This limitation is further discussed on page 18.

Below is a breakdown of the financial contributions from City, County, and State in 2014 inflation adjusted figures. It is important to recognize that while Japanese Gulch is owned by the City of Mukilteo, there were many contributing tax payers beyond Mukilteo that made the purchases and preservation possible.



*Figures Adjusted for Inflation to 2014 Dollars

Map 1: Park Land Purchases



III. Master Planning Process

Master Planning Process & Vision

The process of developing a master plan is a holistic and comprehensive process. The Japanese Gulch Master Plan incorporates public outreach, vision, preferred alternatives, critical areas, design, historic significance, public safety, maintenance and operation costs, park uses, and parking into a cohesive document that is approved by City Council. Due to the complexities and depth of information associated with this project, the City of Mukilteo contracted with Barker Landscape Architects of Seattle to provide assistance in drafting the Master Plan.

Why Are We Here?

Japanese Gulch has very significant cultural ties to the community. Ranging from the Japanese Town of the Crown Lumber Mill to the Community Grange Hall, Japanese Gulch provides an opportunity for our vibrant community to have an 'urban escape' and experience nature within minutes of the neighborhoods. In order to collectively reach a long-term vision for how the area should function in the future, the City of Mukilteo utilized a master plan process. This process included several key stages to reflect the community's values that were identified through various forms of public outreach that included focus groups, surveys, community meetings, and other forms of outreach.

Vision

To establish a well-rounded demographic of the different user groups of Japanese Gulch, Mayor Gregerson appointed a Japanese Gulch Subcommittee to assist City Staff. The Subcommittee ensured the master plan was developed to reflect the community values as well as provide a depth of perspective regarding the plan development.

At the initial meeting, the Subcommittee identified that due to the lack of formalization of trails, many users found it easy to get lost within Japanese Gulch. Also, because these trails and bike facilities were constructed organically, there were portions that cut through critical areas. The Subcommittee also identified that Japanese Gulch must be an area preserved for sustainable use for generations to come.

The basis of sustainable use for future generations is reflective of the Japanese Gulch Master Plan Vision Statement that focused on the protection & preservation of Japanese Gulch while allowing human interaction with nature. By using a vision statement, the Subcommittee members were able to reflect and ensure that each decision was implementing the identified vision. This allowed the Subcommittee to rationalize decision making when two or more parties disagreed.

Japanese Gulch Master Plan Vision Statement

Protect & Preserve the Natural Inventory of Japanese Gulch;

Formalize Access and Uses within Japanese Gulch;

Provide Safe and Enjoyable Experience for the Public;

Produce a Sustainable Development Strategy;

Provide for a Wide Range of Users; and

Encourage Stewardship and Collaboration Between All Parties

While the vision statement provided a basis for the preliminary design, the preferred alternative must also be concurrent with the Goals to Achieve a Livable Mukilteo as identified in the 2015 Mukilteo Comprehensive Plan. Following the initial design phase, City Staff and Barker Landscape revisited the Vision Statement and introduced the Goals to Achieve a Livable Mukilteo to the Subcommittee which provided additional context to generate the Preferred Alternative.

Natural Inventory

The master planning process is predicated on understanding the nature of the environmental limitations and constraints. In order to understand these environmental limitations, a natural inventory was collected to establish a plan that maintains environmental suitability. Environmental suitability is used to analyze physical limitations and contributing factors that include wetlands, waterways, vegetation habitats, soil types, and topography. Through the identification of the environmental constraints and limitations that exist in Japanese Gulch, the master planning process identified where and how visitors to the gulch can interact with nature in a sustainable fashion.

Wetland & Hydrology

Japanese Gulch has several types of wetlands including depressional and sloped wetlands. As evident within a macro-perspective, the wetlands within the Japanese Gulch provide clear linkage to the waterways downstream including Brewery Creek as well as Japanese Gulch Creek. While both of these waterways were significantly altered with the surrounding development, the wetlands within Japanese Gulch provide significant filtration and habitat for the environment.

As noted in the 2009 Wetland Report by Wetland Resources, these wetlands appear to be supplied by high groundwater in combination with precipitation and overland flow. Due to the organic development of the existing trails, some trails cut through portions of wetlands and/or wetland-buffers. Measures may be needed to ensure that the wetlands are protected. While some may see certain wetlands as a 'mud hole', wetlands protection was incorporated into the overall design to recognize the beauty of the habitat.

Habitat & Vegetation

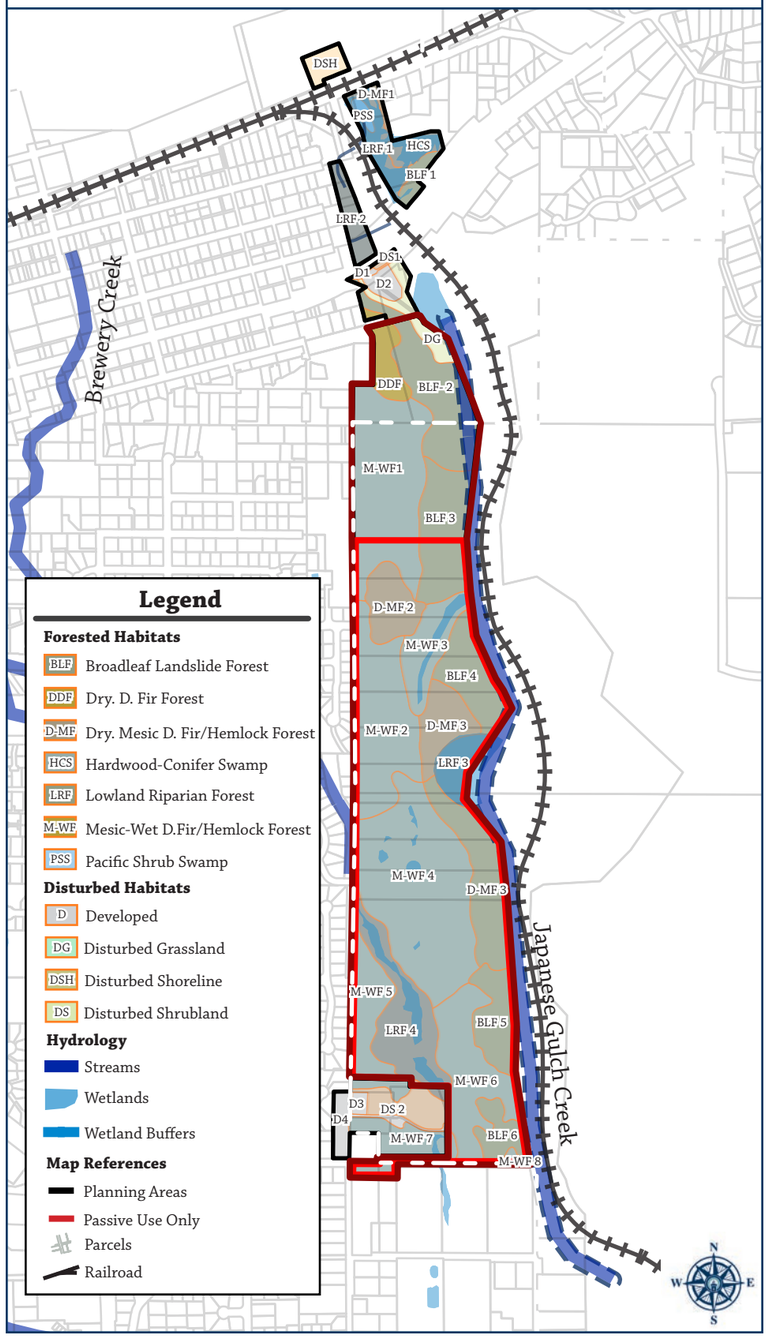
In October 2014, the City of Mukilteo contracted with EarthCorps to conduct a natural resource inventory. This report provides specific information regarding the current health, structure, and function of the forests and natural areas that make up the Japanese Gulch Property. This thorough understanding of the existing conditions provides the City with baseline information that can be used to track and monitor changes to the area over time and provides information to help make informed decisions about the area. This report identified several important takeaways, but three key items stand out above all else:

1. Japanese Gulch generally represents a very healthy urban forested system.
2. The biggest threat to the health and function of these forests is the continued spread and introduction of non-native invasive plant species.
3. Western Lower Gulch (LRF 2) should be prioritized for restoration and maintenance.

The Natural Inventory identified non-native invasive plant species as the biggest threat to the health and function of the forest. Areas with non-native invasive species are primarily located near the trailheads and within areas of disturbance as identified in the map to the right and include the former Highland Memorial site and the Dog Park. The three main areas that have significant concentration of invasive species include: Dog Park, Lower Japanese Gulch, and the 76th Street Trailhead. Through mitigation efforts, these areas can limit the overall threat to rest of forest. One opportunity to eradicate the invasive species at the 76th Street Trailhead is to 'redevelop' the area of concentration of invasive species to support a park.

This report also identified habitat areas of slide activity that included the Broadleaf Landslide Forest (BLF) that encompasses much of the eastern slope of the upper gulch area. This area is less suitable for sustained trail development that would be consistent with the use of a Mountain Bike Oriented network. Through the habitat analysis, a separate area the Dry-Mesic Douglas Fir/Hemlock Forest area was identified as more stable. This area can naturally support and is more suitable for a trail network oriented towards Mountain Biking. See Map 2: Hydrology & Habitat to the right, or the Natural Inventory in Part Three: Appendix XII.

Map 2: Hydrology & Habitat



Trails & Topography

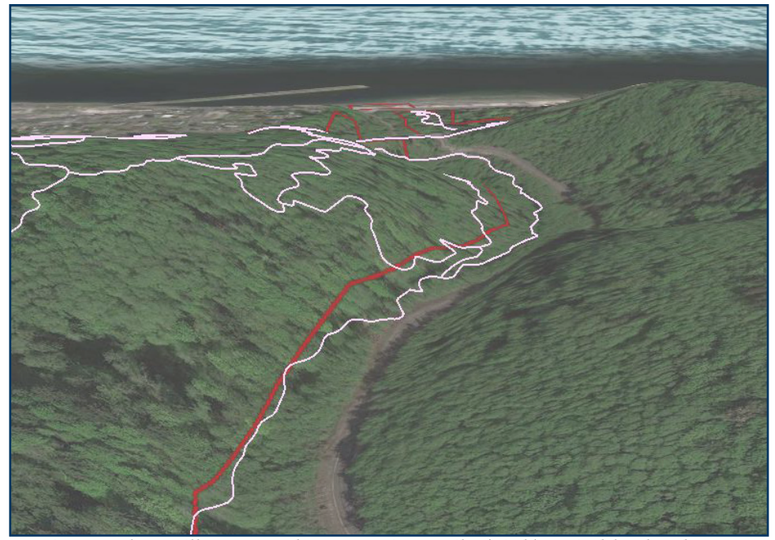
Japanese Gulch Users were exploring the area for many years, even as the property was privately held. The area began to see the development of trails that ultimately allowed users to connect (down) to 5th Street. The majority of these trails developed as a reaction to topography in the area, and this inventory recognized that the trail development and topography must be reviewed together. The inventory was completed by combining two different datasets from City Staff and from an avid hiker.

The topography of Western Japanese Gulch exhibits a large area of relatively flat portions within the Upper Japanese Gulch area that is bordered to the east by a steep slope. As many of the trails within this flat portion weave across the area, the 'ridge' trail borders the top of the slope. Towards the northern portion of this area, additional gullies and ravines exist that forced the trails to develop additional switch backs. The vast majority of the existing switch back trails ultimately cross property lines to the BNSF Roadway. While the BNSF Roadway is on private property, many users continue to utilize this trail connection.

In general, the trails are composed of organic matter and some trails have altered the natural drainage flow of the site. Some trails act as 'the path of least resistance' and water flows on these trails during the rainy season. This led to some significant erosion due to prolonged water-cutting. Naturally, users attempted to walk around mud puddles, and over time, these puddles expanded to encompass much larger locations. Ultimately, long term trail maintenance will aid significantly in the reduction of erosion and provide locations for additional trails consistent with the topography.

In the middle of this page is a three-dimensional depiction of the existing trails utilizing Google Earth. This image illustrates the steep topography and the switchback trails that resulted through organic-exploration.

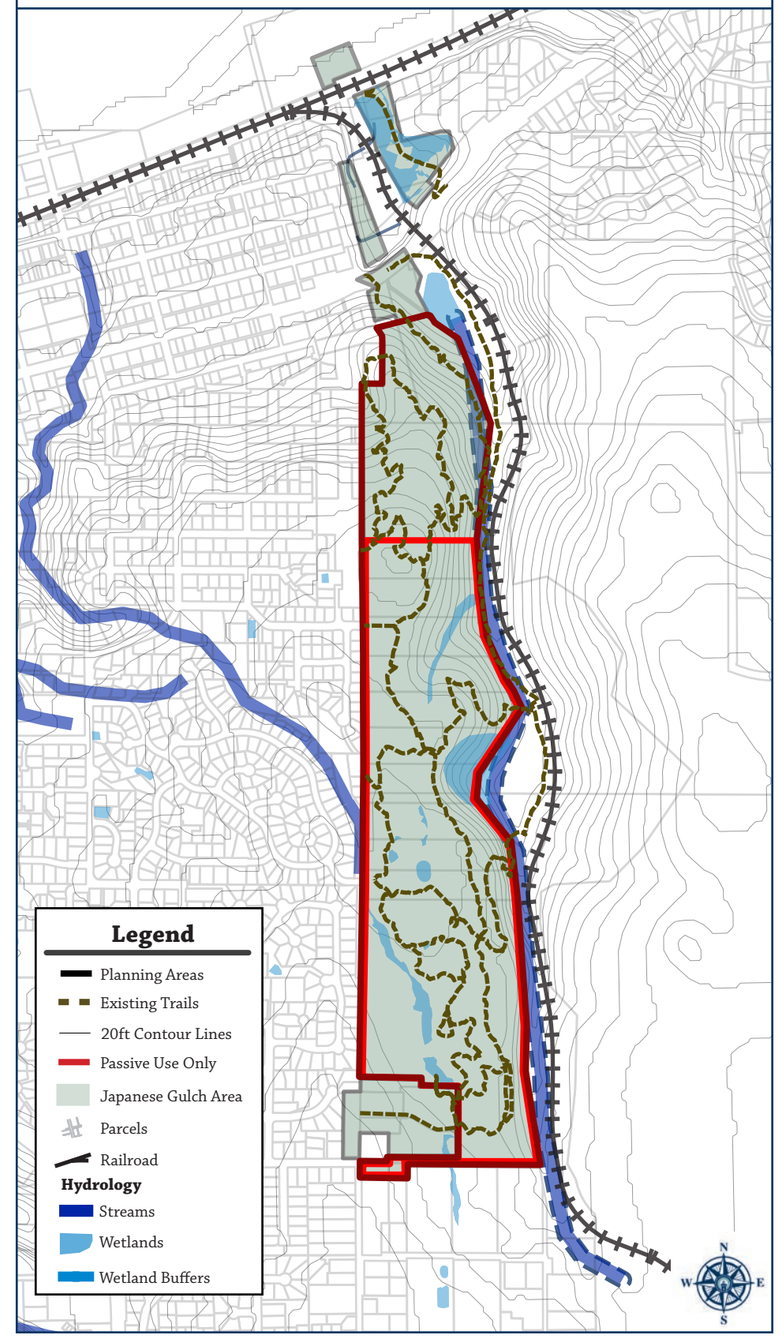
The right side of the page includes an existing trail map of Japanese Gulch with contour lines further illustrating the top of the steep slope.



The image above illustrates the extensive trails (pink) switchbacks that were created due to the steep slope of the gulch and that also lead off property (red).

The image above is of a trail of switch backs that is in relatively good shape. Constructing and maintaining trails on a hillside that experiences landslides is extremely challenging and must recognize design limitations.

Map 3: Trails & Topography



IV. Design Alternatives

Design Development

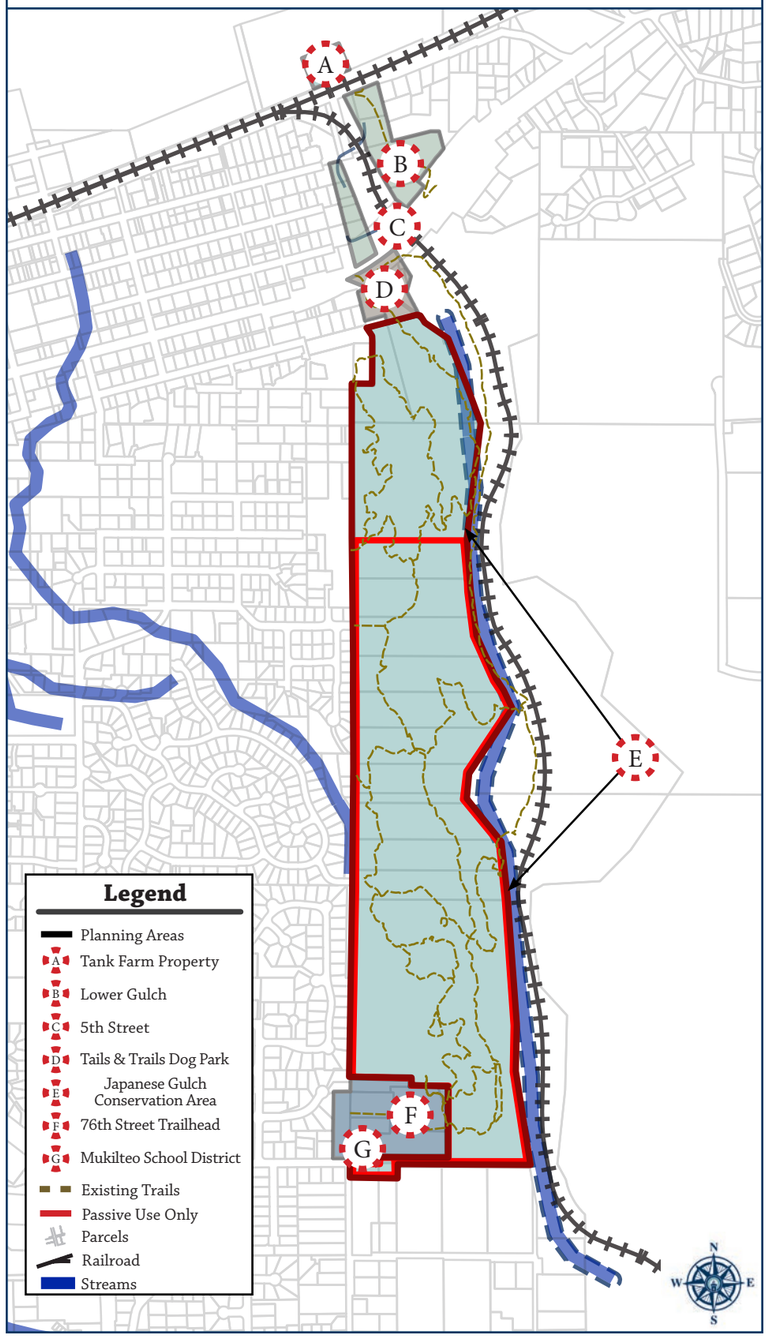
One common practice in the planning process is to search for any and all alternatives and understand the community's reactions. In order to proceed with this process, Barker Landscape P.S. led the Subcommittee through a design game that allowed the Subcommittee to identify what activities should be included in Japanese Gulch. The Subcommittee constructed collaborative plans based on options such as bridges, amphitheaters, community gardens, promenades, daylighting, and many other features. Through this activity, the Subcommittee identified that some game pieces such as Frisbee Golf, were not characteristic of the gulch and shouldn't be included as an alternative. The Design Game was repeated with the general public at the first Open House in December, 2014.

Concurrent with the first Open House, an online survey was conducted to further define the desired outcomes of the Japanese Gulch Master Plan. This online survey showcased that the majority of users were most interested in the trails for hiking and biking with most respondents concerned about mud and erosion (additional information on public outreach available in Appendix XI). Through the Design Game's results and online survey, two concepts were created for the 76th Street Trailhead with single concepts for the Lower Gulch & Upper Gulch.

These design concepts were then tested in a second online survey where many respondents noted that the designs were 'too developed' at the 76th Street Trailhead. In order to ensure that the preferred alternative would correctly match the public opinion, an intensive set of work sessions were organized with the Subcommittee. Over the course of five work sessions, the Subcommittee identified the project concepts that must be included within the preferred alternative. This section presents the findings of these work sessions as well as the survey responses from the public regarding the topics. The section elements include:

A. Tank Farm Property - Japanese Gulch Creek Park
B. Lower Japanese Gulch
C. 5th Street
D. Tails and Trails Dog Park
E. Japanese Gulch Conservation Area
F. 76th Street Trailhead
G. Mukilteo School District Property
H. Overall Trail Layout

Map 4: Preliminary Planning Areas



Tank Farm Property - Japanese Gulch Creek Park

The adoption of the Downtown Waterfront Master Plan identified the Tank Farm Property and provided project concepts. The Japanese Gulch Master Plan recognizes that the connection to this area of the Tank Farm, or Japanese Gulch Creek Park, is a vital connection to the waterfront from Japanese Gulch. The adopted Downtown Waterfront Master Plan identified that the project concepts should include:

- 15' wide promenade with softer natural materials
- Beach Access
- Daylighting of Japanese Gulch Creek
- Cultural[ly] Themed Viewpoint
- Estuary
- Beach Enhancement[s]

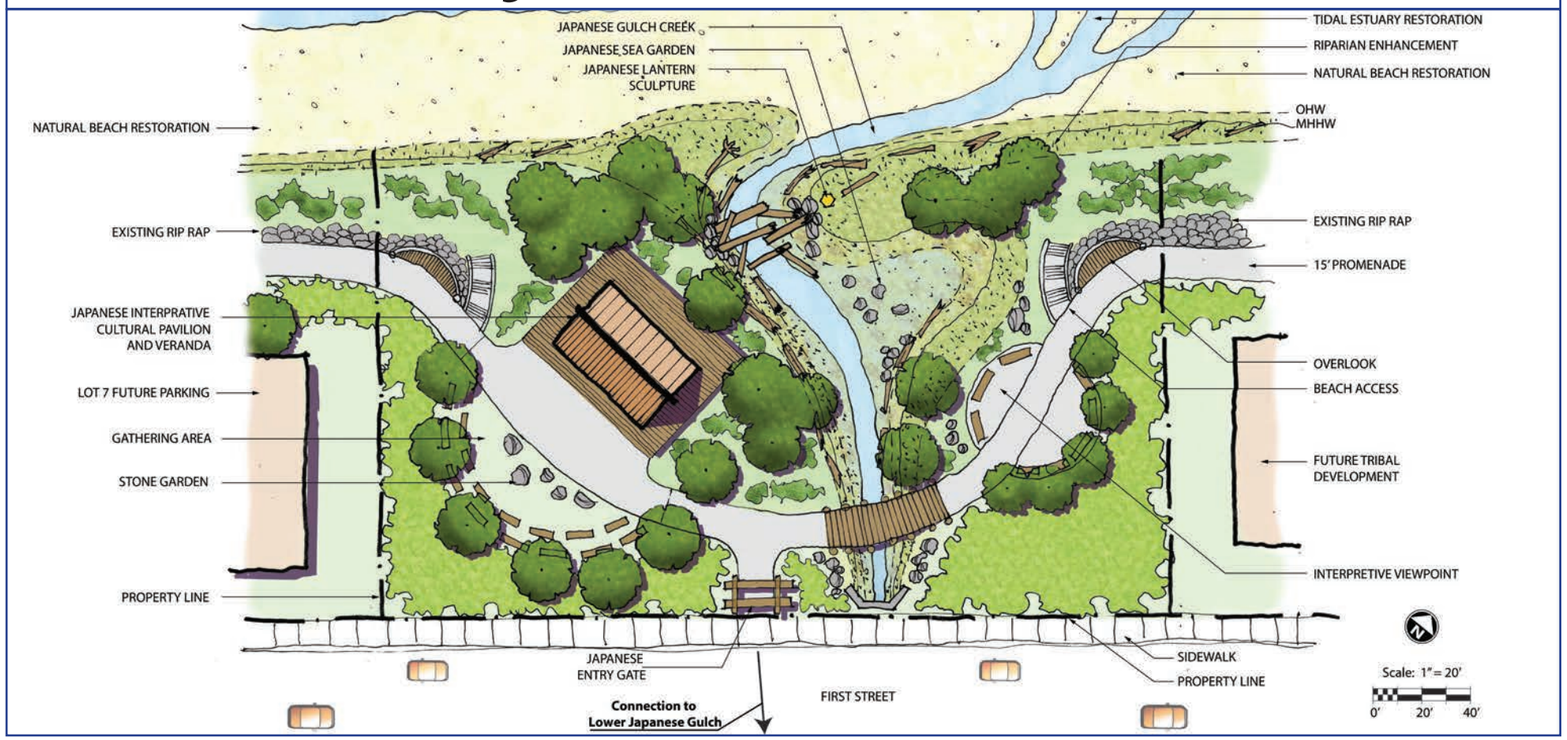
Decision Making Process

Through the Cultural Planning approach of the Japanese Gulch Master Plan, the Subcommittee identified that the Japanese Gulch Creek Park is consistent with the significance of the 'Gateway to Sea, Gateway to Land' concept. This proverb correctly represents the historical significance of the location related to the Native Americans, logging industry, militarization, industrial manufacturing, and connecting neighborhoods to the waterfront. Perhaps the greatest representation of the gateway is the salmon traveling to and from this habitat for spawning.

To ensure that this gateway and path to and from the waterfront district is not inhibited by the barrier of the railroad, the preferred alternative for Japanese Gulch Master Plan must ensure a clear and safe pathway to the trailhead of Lower Japanese Gulch. This clear pathway may be complemented by integrated artwork or other simple wayfinding opportunities to provide users a safe route at the Mt. Baker railroad crossing.

The public opinion of the Tank Farm Property was addressed in the Downtown Waterfront Master Plan process and was confirmed through the clear desire of the daylighting of Japanese Gulch Creek in the Dot Exercise. Additional information on Public Outreach can be found in Appendix XI.

Map 5: Japanese Gulch Creek Park



Project Concepts

The Preferred Design Alternatives for the Tank Farm Property - Japanese Gulch Creek Park should include the following project concepts:

1. Concurrency with Downtown Waterfront Master Plan;
2. Cultural recognition of the proverb 'Gateway to Sea, Gateway to Land';
3. Safe and clear crossing at the Mt. Baker Railroad to Lower Japanese Gulch potentially through the use of wayfinding, artwork, and signage.
4. Cultural transition from a waterfront district to an area inspired by the Japanese immigrants of Mukilteo.

One example of pathway definition & wayfinding.
Riverfront Park, Spokane, WA

Lower Japanese Gulch Park

The area known as Lower Japanese Gulch is an area of historical significance and has significant environmentally critical areas. This area has some of the first properties purchased by the City with BNSF bisecting the area. The primary focus of proposed improvements is on the eastern portion of the property to provide connection from Japanese Gulch Creek Park & Mt. Baker Railroad Crossing to 5th Street. Culturally, this area provides opportunities for reflection of the Japanese Immigrants and the cultural importance of salmon within the Puget Sound.

Decision Making Process

As Lower Japanese Gulch provides connection between the Japanese Gulch Creek Park and 5th Street, the Subcommittee determined that this area must be an area of 'high accessibility'. To ensure that the area is utilized by as many user groups as possible including those who have limited mobility. The Subcommittee confirmed that a long-term boardwalk project, to provide a loop to the existing Fish Ladder will provide a suitable walking path for several users as well as provide opportunity for educational outreach. The boardwalk concept received 65% 'Like It' with an additional 21% as 'Neutral' from the April, 2015 Online Survey.

One of the dichotomies that existed within the public opinion included the concept of mixed use trails and separate use trails. The differing opinion on this matter expanded into the Lower Gulch's trail where a larger variety of users may be present than in the Upper Gulch. The Subcommittee determined that this area should be a pedestrian-oriented area with bike allowances. This would include utilizing trail design to control speed. By utilizing the pedestrian-orientation concept, the trail would not restrict bicyclists from using the path, but provide environmental controls to mitigate user-conflict.

The Subcommittee was concerned with the possibility of over pronunciation of the Japanese Culture that could remove the natural beauty of the Lower Gulch. The Subcommittee identified that the integration of the Japanese Immigrant history must be focused on minimal design for high impact such as branding within trail markers and similar 'touches' of character. When implementing the branding pieces and contributing elements of the Japanese Cultural, the boundaries of the interpretive work should extend beyond Lower Japanese Gulch and include Japanese Gulch Creek Park.

The Western Property of Japanese Gulch is the area of the 'biggest bang for the buck' with regards to habitat restoration. The Natural Inventory Report, October 2014, identified that this area has some of the highest invasive species concentrations. "Because of the high value in-stream habitat, this area should be prioritized for restoration and maintenance in order to both increase and maintain the habitat but also to maximize the value of the recently completed restoration efforts" (EarthCorps, 2014). Additional considerations in the future may require some area for native plant restoration staging area in an effort of support the Western Property.

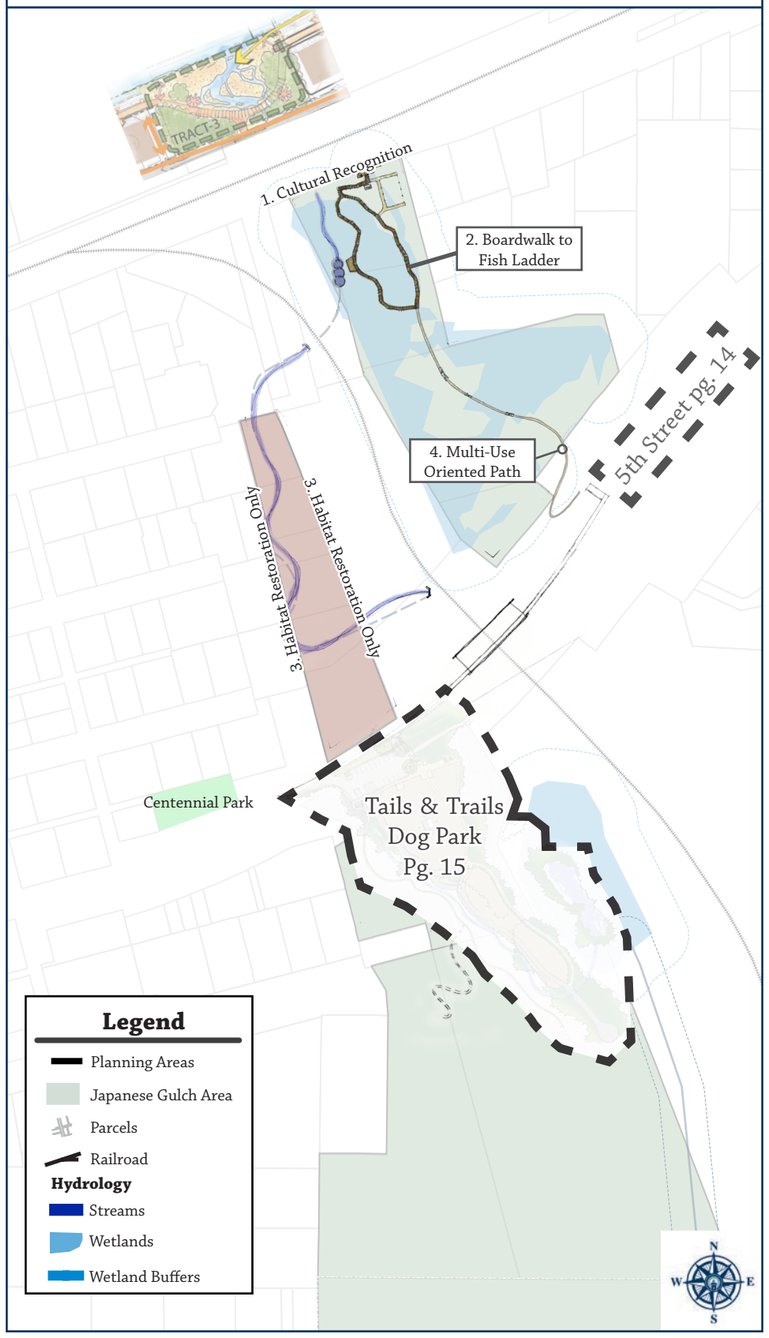
Project Concepts

The Preferred Design Alternative for the Lower Japanese Gulch should include the following Project Concepts:

1. Cultural recognition of the Japanese Immigrant History, but balanced within the natural beauty of the environment.
2. Trail design and layout must be highly accessible including a boardwalk loop trail connecting to the Fish Ladder.
3. Western Property shall be designated as 'Habitat Restoration' with access limited only for vegetation management and monitoring.
4. Lower Gulch will be Pedestrian-Oriented with allowances for bicyclists and encourage speed control.

Existing Fish Ladder in Lower Japanese Gulch

Map 6: Lower Japanese Gulch



5th Street

5th Street is a primary gateway into Mukilteo. This street segment has the opportunity to provide a safe route over the railroad to connect the Tails and Trials Dog Park to Lower Japanese Gulch Park. Currently, the railroad appears to most users as the natural pathway to connect to the Lower Gulch which results in trespassing on the railroad property as well as putting users at risk. To provide a safe and long term connection away from the railroad, 5th Street must have pedestrian improvements to naturally encourage users away from the underpass. It is a vital link to ensure safety along our railways.

Decision Making Process

The intent of this Master Plan is not to design or evaluate the design of 5th Street, but rather support concepts that should be reviewed when the Transportation Plan or other roadway improvements are designed or reviewed. The outcomes necessary for the linkage between the Lower Gulch and Dog Park include:

1. Safe mid-block crossing to Lower Japanese Gulch and Centennial Park.
2. Provide traffic calming to naturally enforce a 25 MPH speed limit.
3. Introduce CPTED (Crime Prevention through Environmental Design) to increase safety and security.
4. Pathway improvements including potentially adding bike lanes, sidewalks, landscape buffers, and art.

Several of the components listed above are interrelated and ultimately improve the safety of people traveling along 5th Street between the Lower Gulch and the Dog Park. Providing a mid-block crossing with bulb-outs creates a visual constraint for drivers and can naturally slow drivers. CPTED principles of natural surveillance are achieved by creating on-street parking as well as sidewalks and pedestrian pathways. Other components the Subcommittee felt were important to provide additional traffic calming included the opportunity for roadside artwork that reflects the heritage of Old Mukilteo and the Lumber industry, and extension of the 25 MPH speed zone to the Mukilteo City Limits. The public opinion of a roadside-trail was supported as 69% 'Like It' with an additional 19% 'Neutral' from the April, 2015 Survey.

5th Street may also have capacity for on-street parking that can provide traffic calming, and increase available parking opportunities for users of Lower Japanese Gulch, the Dog Park, and Upper Japanese Gulch. The roadway width and configuration provides many opportunities for traffic calming for little cost.

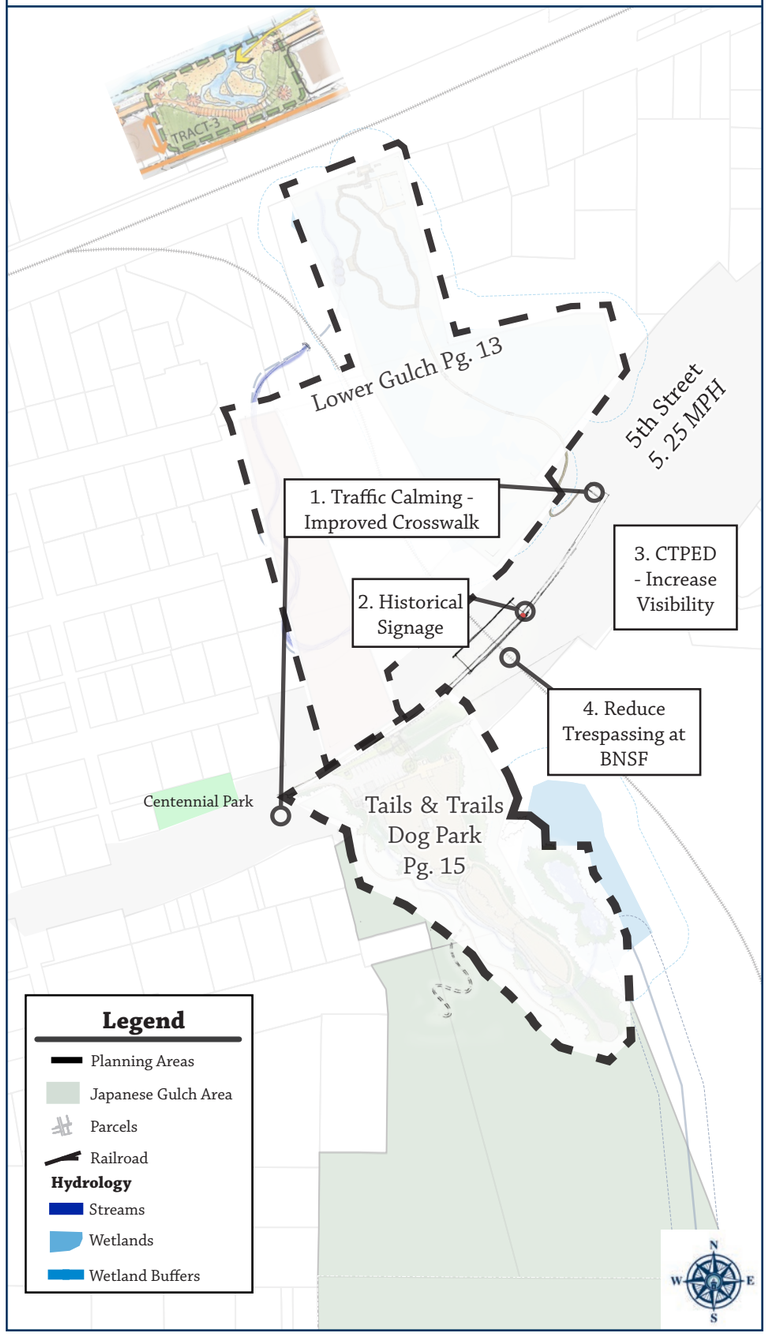
Project Concepts:

The Preferred Design Alternative for the 5th Street Connection should include the following Project Concepts:

1. Introduce Traffic Calming through a diverse range of techniques that may include flashing crosswalk, bulb-outs, raised crosswalks, on-street parking, and artwork.
2. Provide cultural history of the 'Road to Everett', development of 5th Street Bridge, and railroad up to Boeing.
3. Improve safety through implementation of CPTED principles.
4. Reduce illegal usage of BNSF property and improve railroad safety.
5. Reduce speed limit to 25 MPH at Eastern City Boundaries.

The image above includes a simple and inexpensive implementation of a bike-lane with on-street parking that provides connection to bike lanes within City of Everett while providing a buffer for pedestrians along 5th Street. Additional projects could include a raised walkway or landscape planters.

Map 7: 5th Street



Tails & Trails Dog Park

The Tails & Trails Dog Park is one of the two Primary Entrances to Japanese Gulch. This entrance provides access to the dog park, but also allows hikers and bikers to access the trails in the Upper Gulch portion. Located along 5th Street, this site has the opportunity and capabilities to buffer and transition higher impact park uses from the passive uses located in Upper Japanese Gulch.

Decision Making Process

As a primary entrance, the Dog Park design included practical and pragmatic elements such as parking, restrooms, and other park amenities to ensure the area can sustain year-round use. The practical and pragmatic design reflects the Japanese Culture and emulates the proverb 'Everything has a Purpose'. To demonstrate the Cultural Story of Japanese Gulch, the influences within the Dog Park should transition from a Japanese History of the Lower Japanese Gulch to the Lumber Industry culture. Such design aspects may include continuing heavy timber construction for architectural inspiration.

The Subcommittee identified that restroom facilities should be located at the Dog Park location and not at neighboring Centennial Park for convenience. While water and sewer facilities are limited at the site, the Subcommittee identified that other opportunities such as 'pump and dump', or compostable toilets should be pursued until water and sewer services are available. A restroom facility at this location, the 76th Street Trailhead, and Edgewater Beach will provide three restroom facilities over approximately 2 miles of distance.

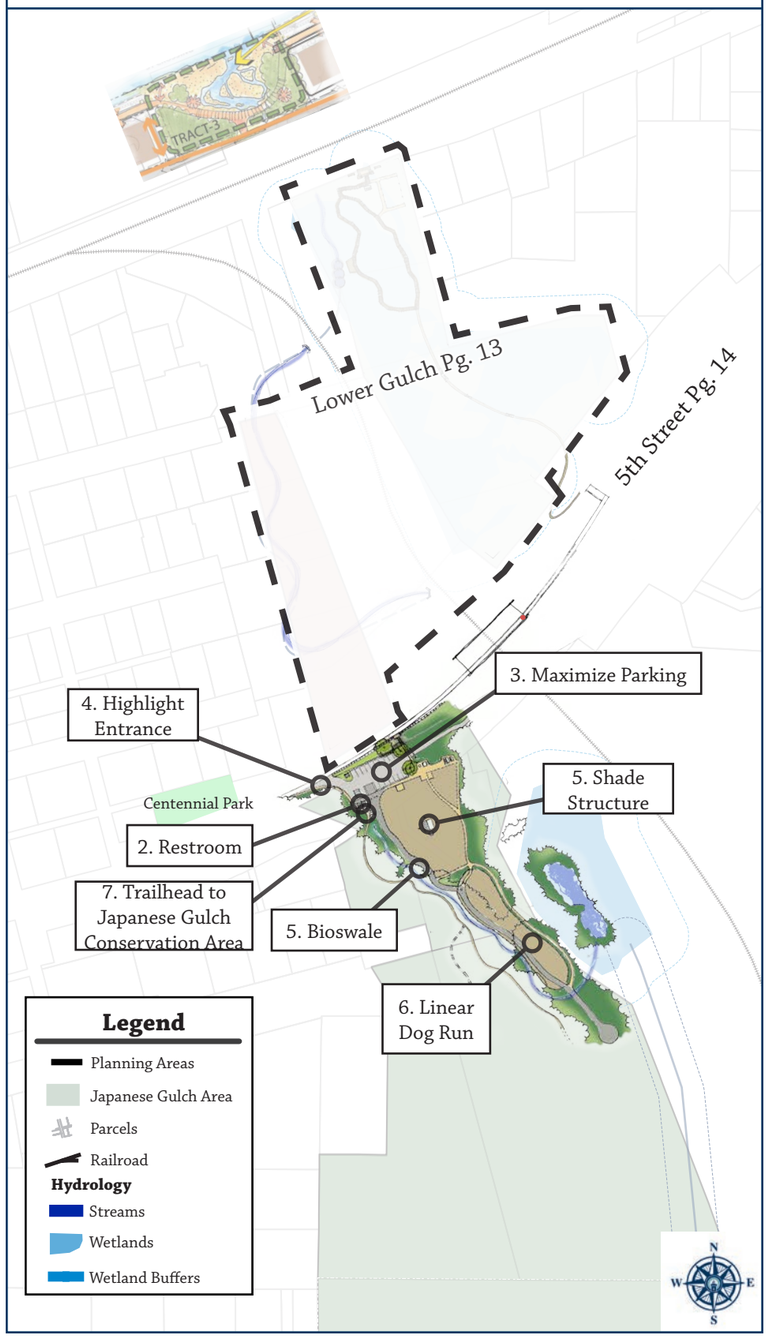
The major modifications of the Dog Park identified by the Subcommittee include the addition of a linear dog run and improved drainage to the dog play areas. The linear dog run will provide longer distances for throwing and fetching. Maintenance access to and from the linear dog run can be accomplished by gates at either end. Drainage amendments will help prevent the 'mud hole' that currently exists during the rainy season. The ultimate goal is to allow the Tails & Trails Dog Park to be a year-round facility.

Project Concepts:

1. The Tails and Trails Dog Park should provide pragmatic architectural characteristics to embrace 'Everything Has a Purpose'.
2. A restroom facility should be located at the Dog Park with interim facilities until water and sewer services are available. Additional facilities such as water fountains, dog wash stations, and dog fountains should be considered and use only potable water.
3. Parking facilities should be formalized and maximized to support use as a Primary Trailhead.
4. Additional signage or branding should be installed to highlight the Dog Park and improve the location as a functional place of recognition.
5. The Dog Play Area renovations should include drainage amendments such as bioswale, and a shade structure(s) to encourage year-round usage of the park.
6. A fenced linear dog run should be utilized within a maintenance path with a gate at both ends.
7. Trailhead Structure and Kiosks should identify entrance to Japanese Gulch Conservation Area.

The image above is a rendering of existing conditions with a paved parking lot. Additional projects include formalizing ADA parking, adding a Fire Truck Turnaround, and connection to a maintenance path.

Map 8: Tails & Trails Dog Park



Japanese Gulch Conservation Area

Upper Japanese Gulch is a literal name of the area up the hill from the Dog Park. The area is comprised of 125 acres with various terrains and borders several neighborhoods. Trails, wetlands, and steep slopes make this area a destination for local hikers, bikers, and dog walkers. With the recent purchase of 98 acres, this area includes a conservation easement that limits the development of the site. Much of this area is restricted to only 'Passive Uses' which played a significant role in the vision of the Upper Japanese Gulch. 'Passive Uses' refer to the impact of the use. Uses such as single track mountain biking, dog walking, running, hiking, and similar activities have a relatively low impact on the environment and are considered 'Passive'. Uses such as a BMX Pump Track, Frisbee Golf, or Ball Fields are not considered 'Passive Uses' and are prohibited in the 98 acre tract. This portion of the Master Plan is dedicated towards the Upper Japanese Gulch, but additional information on trails, trail uses, and off-leash dogs can be found under 'Overall Trail Plan'.

Decision Making Process

The story of Japanese Gulch within the upper portion is mixed with the Native American, logging and Japanese Immigrant cultures. The appropriate reflection of the different cultures should be further researched, but could include some interpretive signage to explain the rich history of the area. The history of logging is an example of limited implementation as many existing stumps still show cuts for the spring boards used years ago to harvest the lumber.

Upper Japanese Gulch provides refuge from urban life and allows individuals to experience nature quickly and easily. This was one of the many reasons that funding from Snohomish County Conservation Futures was available and created the Conservation Easement establishing the 'Passive Use'. In order to continue this focus, the Subcommittee identified that this is the area of Japanese Gulch for solitude and preservation. The Subcommittee identified that the Upper Japanese Gulch should be subject to the restrictions of the conservation easement ('Passive Use'). This action maintains regulatory authority to prohibit park uses that may not promote conservation, as well as clearly designates the entrances to the Conservation Area.

The uses in Upper Japanese Gulch provide pathways for users to bike, walk, run, and hike to and from the waterfront. In order to further provide for greater accessibility, a regional trail for commuting purposes may be necessary. The Subcommittee identified the goal to have natural trail surfaces. These trails are explained within the trail layout on page 21. In Upper Japanese Gulch, certain uses such as a Dirt Jump Bike Course are prohibited. While a previous pump track existed in the Upper Gulch, no 'grandfathering' existed with regards to the establishment of the conservation easement. The previous location of this track was partially located within a wetland buffer, and restoration efforts have begun.

'Take Nothing but Photos, Leave Nothing but Footprints' is the best representative statement for users to embrace with this area.

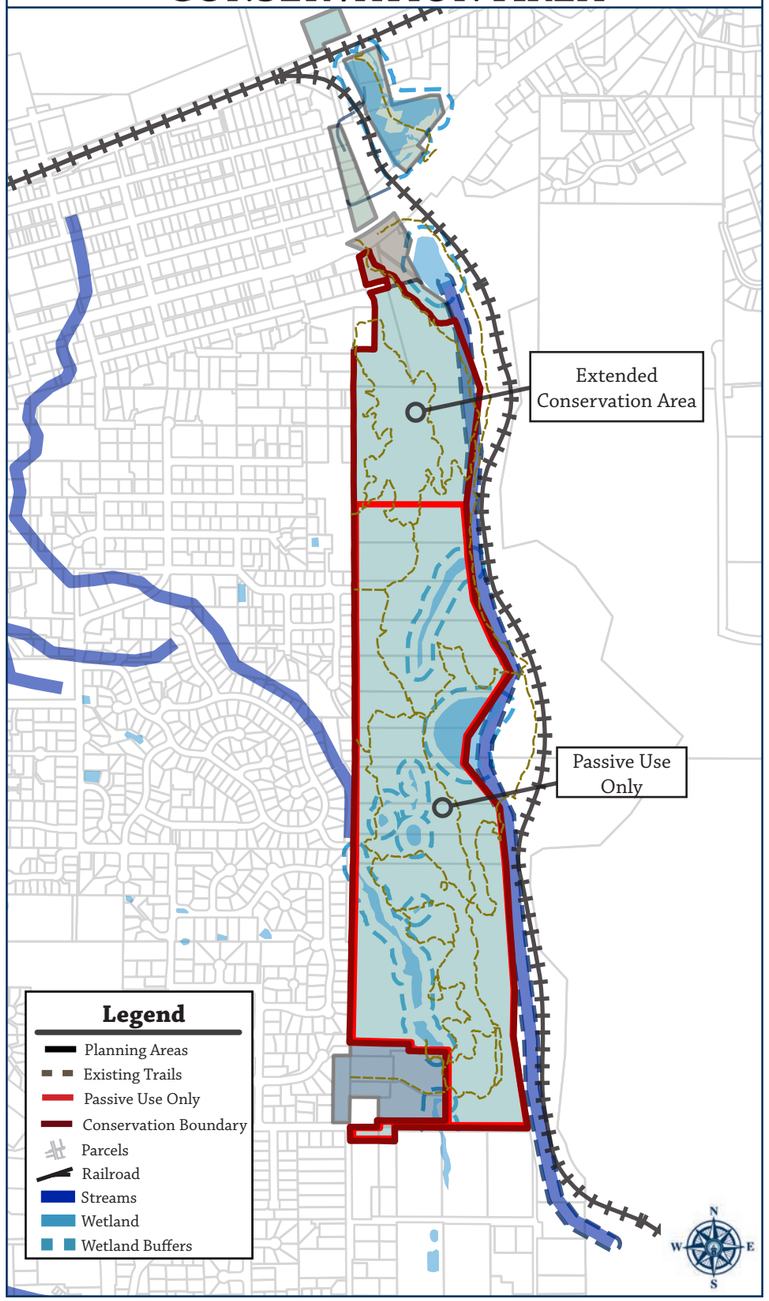
Project Concepts:

1. Entire area of Japanese Gulch should be referred to as the Japanese Gulch Conservation Area and have the same restrictions as the Conservation Easement.
2. Conservation, Preservation, and Passive Use should be inspiration for any permitted uses and design implementation.
3. Preservation, protection and the wetlands should be prioritized with site improvements and maintenance.

Additional Project Concepts Related to Trail Design & Maintenance located on page 29.

Japanese Gulch

Map 9: Japanese Gulch Conservation Area



76th Street Trailhead

The 76th Street Trailhead was originally purchased by the City of Mukilteo for use as ball fields. A few years later with the latest purchase of the 98 acres, the 76th Street Trailhead became consolidated within the Japanese Gulch Master Plan as opposed to a separate park master plan. Through this consolidation and public outreach, the vision of the 76th Street Trailhead transitioned from active ball fields to a transitional passive park. The passive park will provide park users the experience of entering a nature park, and then transitioning the vast forest of the Japanese Gulch Conservation Area.

Decision Making Process

This property witnessed some of the largest differences in public opinion. Some expressed that the property should remain untouched, whereas some viewed the property as a prime location for typical active city park development. One of the findings of the Natural Inventory indicated that the invasive plants that are located at the 76th Street Trailhead threaten the overall integrity. In order to eliminate the invasive species, some form of change must occur.

Following the design game and the initial online survey of December, 2014, two design concepts were drafted in reflection of the various opinions. These two drafts were an attempt to hone in on a generally accepted vision. While providing subtle differences, both plans focused on the variety of community users including a community garden expansion, a basketball court, a dirt jump bike course, play area, an area of open space, and a multi-use center.

As these two plans were reviewed by the public, Parks & Arts Commission, and City Council, a third design concept was required to meet the public opinion. Uses such as the Amphitheater (35% Like It) and Basketball Court (24.5% Like It) scored low approval ratings and many decision makers believed that the site was not conducive to those uses. Another use that was determined to be inconsistent with the vision was a multi-use center or a senior center. The April Survey indicated a less than supportive opinion of a Senior Center (14% Like It) or a Multi-Use Center (24% Like It). While the Subcommittee determined that a Senior Center was not suitable at this site, the Subcommittee identified that alternative recreation options were suitable and included an area for a dirt jump bike course.

Prior to purchase of the Upper Japanese Gulch portion of property, a dirt jump bike course was built in an area which is now part of the Conservation Easement. The dirt jump bike course was removed and habitat restoration projects began to rehabilitate the area back to a natural state. The City Council, Parks & Arts Commission, as well as the Subcommittee stated that while the previous site was inappropriate for the pump track, the use was a value to the community. This was confirmed in the April Survey with the public opinion of 'Like It' ranging from 55% to 66% (average 60.5%) depending on the size of the course. The Subcommittee decided that the location of a dirt jump bike course in the south portion of the 76th Street Trailhead was appropriate. This location was based on the lack of conifer vegetation, slope, visibility and easy access to the road for emergency response.

Consistent with providing opportunity for many forms of biking, the goal of this Master Plan is to engage users to arrive by foot or bike, not by car. This area is a regional destination however, and some users will drive to Japanese Gulch. Currently, the 76th Street Trailhead provides the highest volume of parking spaces and is conveniently accessible from SR 526. The Subcommittee identified that parking is necessary, but too much unused parking takes away from the beauty of the area. The Subcommittee identified that number of parking spaces should be prioritized over landscaping to make the most efficient use of the area for parking. In order to ensure that parking demand is flexible, and available, the Subcommittee also suggested parking expansion opportunities as well as future partnerships with neighboring properties should be identified (see Neighboring Property Alternatives on page 20).

To the right is an estimated parking demand based on current future improvements. Due to the lack of information related to certain uses, parking studies may be necessary to better understand the parking demand associated with individual park use.

The results of April, 2015 Survey of the initial two design concepts provided the necessary feedback to create a third concept. This third concept represented a softer approach to the 76th Street Trailhead to better represent the conservation focus and low maintenance design. This concept incorporates

Chart 1: 76th Street Trailhead Parking Requirements

Project Parking Requirement	Low Implementation	Medium Implementation	Fully Implemented
Community Garden & Expansion *15 plots per Parking Space**	7 Spaces	8 Spaces	10 Spaces
Trailhead Access *25 spaces per Primary Trailhead*	10 Spaces	25 Spaces	25 Spaces
76th Street Passive Area & Arboretum *1 Space for first two acres plus 1 space per acre following*	6 Spaces	5 Spaces	4 Spaces
Picnic Tables in Natural Meadow *1 Space per Table*	0 Spaces	2 Spaces	3 Spaces
Dirt Jump Bike Course *10 Spaces per Acre**	0 Spaces	5 Spaces	10 Spaces
Total	23 Spaces	47 Spaces	52 Spaces

Sources: Parking demand calculations are based on adopted codes from City of Mukilteo, City of Houston, as well as park standards from the California Public Outdoor Recreation Plan. Standards for other uses not defined were identified by City Staff as estimates noted as '*'.

76th Street Trailhead Continued

a Natural Play Area, Natural Meadow, Picnic Areas and an expansion of the Community Garden into a low maintenance park that exhibits conservation and preservation. This park area also acts as a buffer for park users to experience moving from an urban environment into a conservation area, Upper Japanese Gulch.

The project concept shown to the right provides multi-generational interactions throughout the park. The opportunities for these interactions are enhanced to promote community development through the close proximities of the community garden, natural play area, and dirt jump bike course.

Project Concepts:

The Preferred Design Alternative for the 76th Street Trailhead should include the following Project Concepts:

1. Culturally, the history of the site should be recognized as the orchard, community hall, cemetery, police station, and now the park. 76th Street Trailhead should be an area that expresses conservation within design elements.
2. Parking should be flexible and expanded based on demand.
3. The 76th Street Trailhead should incorporate low maintenance park design features such as a Natural Play Area and Natural Meadow which focus on native plant species and interaction with nature.
4. The Community Garden is identified as a permanent use and should be expanded.
5. A permanent restroom facility with tool storage should be provided for daily users and park volunteers.
6. A Dirt Jump Bike Course should be included within the design at an area that is easily accessed from the parking lot.
7. Partnerships with neighboring properties including the Slavic Church and Mukilteo School District should be further explored for mutually beneficial projects and collaboration.

Map 10: 76th Street Trailhead

Overall Trail Network

The overall trail layout encompasses the vast majority of the Japanese Gulch Property. With the exception of the 'Western Portion of Preservation' located within the Lower Japanese Gulch, this layout controls the extent of conservation of the property. This section of decision making and design determined that the property should have formalized access points, wayfinding, trail standards, and also identified trail use orientation. For more information about trail maintenance and implementation, see page 29.

Decision Making Process

The overall trail design and layout recognized that trail locations and configuration should remain relatively the same as then are now. The small changes made to certain trails were supported by the Subcommittee for situations such as conflicts with wetlands or protected areas. One addition to the existing layout is the creation of 'side'/bump out trails for mountain biking. These 'swoop' trails will provide for different grade of skill riding within the constraints of a passive use area.

The Subcommittee recommended trails should be mixed use. This was reflected in comments during public meetings, and open commentary on the surveys including statements such as 'the system currently works'. The concept behind identifying the orientation (pedestrian, bicycle, mainline/maintenance) is to promote safe use among all users. This includes signage for user identification so that mountain bikers understand that the path they are on is primarily a pedestrian path and to use caution, and vice versa for pedestrians to know when they are on paths that are primarily for mountain biking. Additional information on the implementation of trail orientation can be found on page 30.

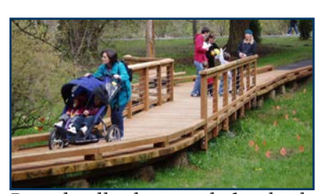
Access to Japanese Gulch is an asset. Several neighborhoods connect directly to the trails and have established accesses that provide residents quick and easy access into the Gulch. While there are many access points, the Subcommittee identified the need to limit the exposure of the 'neighborhood entrances' while entrances such as the 76th Street Trailhead and the Dog Park should be more formalized. This led to the creation of three different trailhead designations based on location. These trailhead designations include primary trailheads, secondary/neighborhood trailheads and tertiary trailheads. For more information on the design specifics of the trailheads please see page 29.

Independent of the Japanese Gulch Master Plan is the decision making for updating the Park Rules as recommended by the Parks and Arts Commission and adopted by City Council. Some updates may include revising park hours.

Preferred Design

The Preferred Design Alternative for the Overall Trail Layout should include the following Project Concepts:

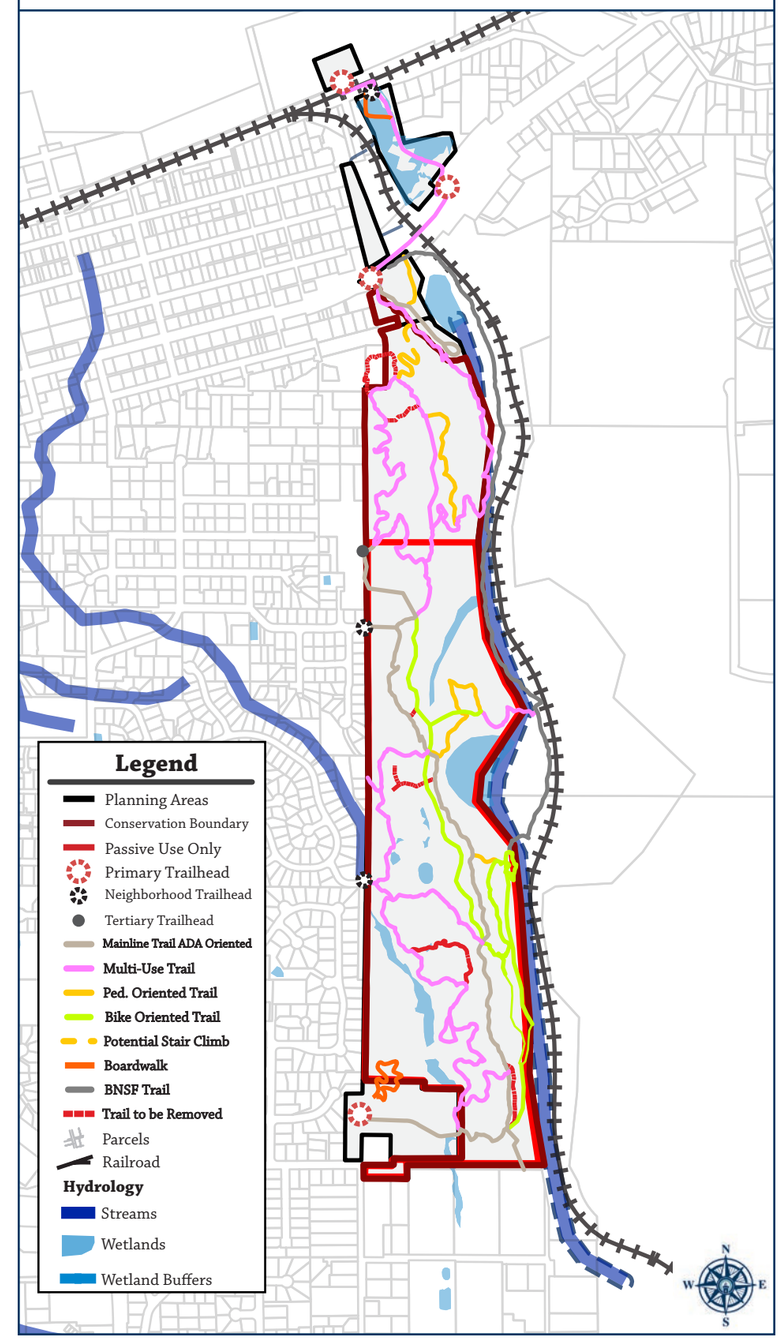
1. Trailhead locations should be designated as Primary, Secondary/Neighborhood, and Tertiary to provide appropriate levels of access and limit adverse impacts to the surrounding area. The designations of trailheads are as follows:
   A. Primary Trailhead – 76th Street, Dog Park, Mukilteo Lane, and 5th Street.
   B. Secondary/Neighborhood – 19th Street, Ridge Street
   C. Tertiary – Mary Lou Morrow Park
2. Trail layout should maintain historical configuration in recognition of the volunteer effort to establish and maintain the trails.
3. Trail orientation should provide pedestrian, bicycle, and a multi-use/maintenance designation to provide adequate facilities for all user groups.
4. Trail improvements such as signage should be integrated into the landscape to maintain natural beauty while providing wayfinding.
5. Dog walking should be limited to on-leash only throughout the park.



Boardwalk designed for high accessibility to be located at the 76th Street Trailhead & Lower Gulch

Maintenance trail built for high accessibility and vehicle use

Map 11: Overall Trail Layout



Neighboring Partnerships

Several different properties neighbor Japanese Gulch Park and provide great opportunities for future growth. Not only do some neighboring properties have the opportunity to expand the limits of Japanese Gulch, but some of these neighboring properties have the opportunities to grow recreational programing and conservation efforts. Below discusses some of the adjacent opportunities for connections. Future efforts to grow the boundaries of Japanese Gulch Park will require vetting and public participation to ensure the vision of Japanese Gulch Park is maintained.

Mukilteo School District Property

The Japanese Gulch Master Plan recognizes that the Mukilteo School District property is not included within this plan, but due to the proximity and deed restrictions, it is important to note. Deeded to the Mukilteo School District, this 1.01 acre property is surrounded by the City of Mukilteo's property at the 76th Street Trailhead. The terms of the deed included that the property must be utilized as an arboretum which is not to include a parking lot. Planning efforts for this property were not included as part of this Master Plan, but the Subcommittee recognized that this master plan must be flexible and take into account planning for the future arboretum. In general, the Mukilteo School District is a vital community partner in the long-term success of the 76th Street Trailhead and efforts to foster this partnership should be explored.

Pine Crest North - Tract A

Pine Crest North is a smaller subdivision the is located near the Mary Lou Morrow Park. This subdivision includes a tract of land (Tract A) of 3.3 acres that was dedicated to the City of Mukilteo as a Natural Growth Protection Area (NGPA) and Public Trails. While this plan did not include this portion of land within the boundaries of Japanese Gulch, this portion of land could provide an alternative connection to the Mary Lou Morrow Park and 9th Street. The portion of property does include steep slopes, so trail design may include a slope cut trail to provide adequate access to the trails within Japanese Gulch Conservation Area.

First Clavich Church Awakening

Neighboring properties such as the Slavic Church on 78th Street SW could provide ample parking during non-church events with the construction of a connection trail. While this partnership requires additional vetting, the opportunity is an example of creative thinking to reduce the construction of parking spaces.

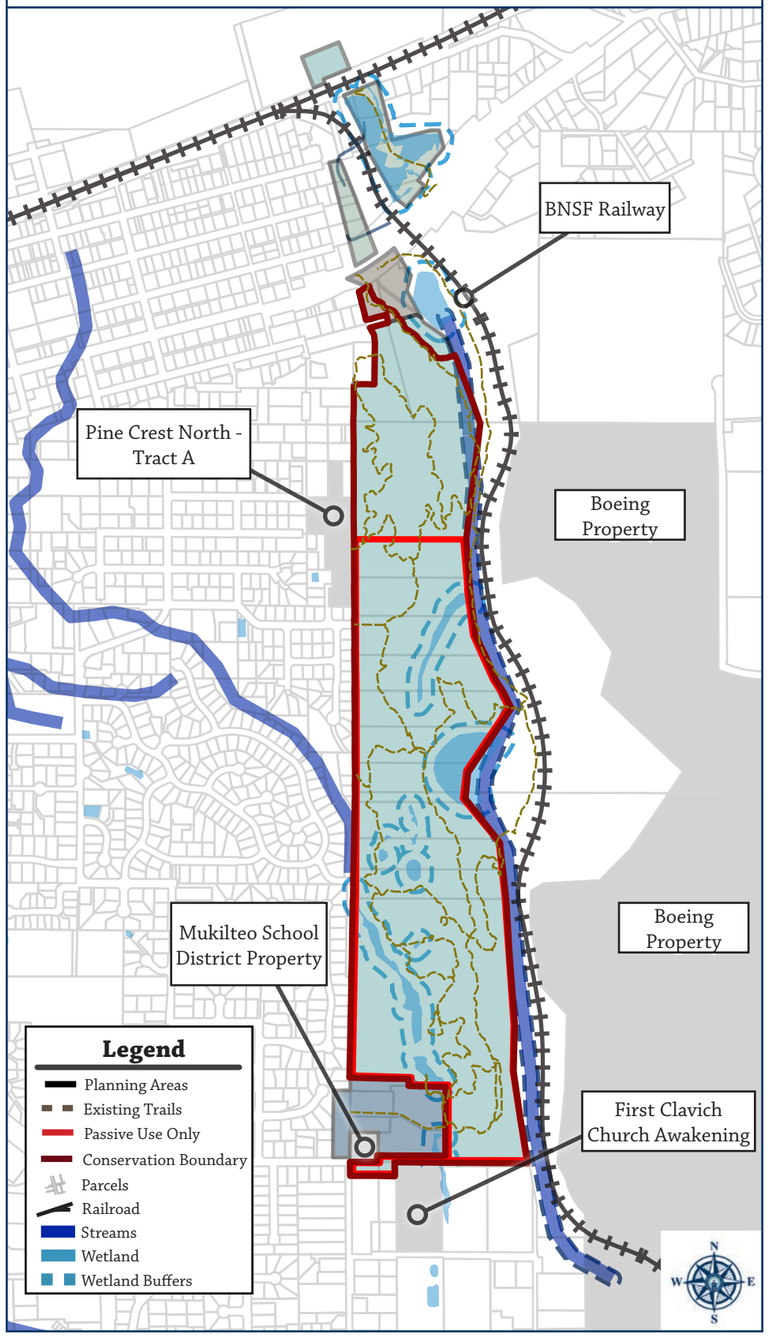
BNSF Railway

One physical characteristic that Japanese Gulch property lacks is a long steady grade trail that is more suitable for cruiser bikes and strollers or gentle uphill walking. The BNSF access road is the best option for this type of use. The City will continue to actively pursue a partnership with BNSF regarding the use of the access road by park users. Many park users currently use the BNSF access road which creates safety concerns that have been communicated to BNSF. An opportunity lies within a partnership with BNSF to provide park users, railroad operators, and police with the ability to safely use and patrol the area of Japanese Gulch. By creating a partnership with BNSF to jointly use and patrol this access road, more park users will be able to provide natural surveillance and reduce trespassing across the railroad tracks. Pending conversations with BNSF, additional safety measures may need to be implemented to allow park users access to the BNSF property. In addition to this opportunity, a joint partnership with BNSF is needed to provide appropriate abilities for monitoring the vegetation, habitat restoration, and stormwater pollution control within the Lower Japanese Gulch portion.

Boeing

A partnership with Boeing may provide increased recreational opportunities for Boeing Employees, as well as better connection for Boeing Commuters. While currently much of Japanese Gulch has limited legal connection from the Boeing Property, a joint partnership could be used to develop those connections. More importantly, a joint partnership could eventually lead to the formalization of Japanese Gulch East which would provide several more miles of recreational trails on both sides of Japanese Gulch. The formalization of Japanese Gulch East as a higher potential for improved bike & pedestrian connection from Boeing to the relocated ferry terminal.

Map 12: Neighboring Partners



V. Project Costs

The Summary Budget shown in Chart 2 represents an estimate of total costs of fully implementing the Japanese Gulch Park Master Plan. These cost estimates are a long range planning tool for City Staff to use in order to plan project implementation through phases and secure grant funding including match dollars. While these costs may seem daunting, these are opportunity based expenses for a period of over 20 years. The important trait with these projections is to consider the multiplying effect that certain projects include. Projects such as Boardwalks include cost estimates based on value for mobilization, contractor overhead, sales tax, construction contingency, design, and city project management. These projections identify a material cost of $ 344,750 for Boardwalks, but the total costs can reach over $ 710,000 without permits or associated mitigation costs.

As grant opportunities become more available, City Staff must not only identify the initial costs of the grant agreement, but also the recurring costs associated with the agreement (maintenance and operations). This will require City Staff to work interdepartmentally to identify these contractual agreement costs prior to City Council action. To limit these contract costs, community partnerships may be used to minimize maintenance and operations costs.

Project Descriptions:

Mobilization: 10% of Subtotal I with additional 3% for performance bonding as well as additional costs associated with traffic control, surveying and similar pre-development requirements.

Demolition & Clearing: Costs of clearing and grubbing sites.

Drainage & Stormwater: Costs of implementing required stormwater controls.

Grading & Erosion Control: Costs associated with preparing a site for paving and enhanced trail development.

Park Amenities & Architecture: Common features within a park.

Paths: Construction of pathways including staircases and basic trail development.

Boardwalks: Boardwalks located at the 76th Street Trailhead & Lower Gulch.

Paving: Paving of formal parking areas.

Planting & Restoration: Landscape planting including the Natural Meadow as well as additional restoration within wetland buffers.

Signage: Trail signage including wayfinding and map development.

Utilities: Water, sewer, and electrical connections for restrooms and necessary lighting.

Additional information on the subarea budgets can be found in Appendix XIII.

Chart 2: Summary Budget

Description	Contracted Work	Volunteer
Mobilization	$ 269,700	
Demolition & Clearing	$ 411,186	$ 40,619
Drainage & Stormwater	$ 135,300	$ 14,400
Grading & Erosion Control	$ 166,157	$ 8,000
Park Amenities & Architecture	$ 277,990	$ 119,400
Paths	$ 145,525	
Boardwalks	$ 782,250	
Paving	$ 71,530	$ 3,440
Planting & Restoration	$ 38,800	$ 228,350
Signage	$ 6,200	
Utilities	$ 148,300	
Subtotal I	$ 2,454,938	$ 414,209
Volunteer Subtotal II	$ 414,209	
Contractor Overhead- 15%	$ 368,241	
Sales Tax - 9.5%	$ 267,202	
Construction Contingency- 15%	$ 463,707	
Subtotal III	$ 1,100,150	
Design/Engineering/Testing/Inspections 20%	$ 711,018	
Permits	$ 34,000	
City Project Management 5%	$ 177,754	
Subtotal IV	$ 922,772	
Total Project Cost:	***$ 4,892,069***	
Total by Subarea		
Tank Farm Property/Japanese Gulch Creek	Downtown Waterfront Master Plan	
Lower Gulch	$872,093	
5th Street Improvements	By The Way Plan (Active Transportation Plan)	
Dog Park	$620,476	
Japanese Gulch Conservation Area	$1,502,472	
76th Street Park	$1,897,027	
Mukilteo School District - Arboretum	Private Property	
Total by Subarea:	***$ 4,892,069***	

VI. Welcome to All Ages

"Welcome to All Ages" as listed on the cover page is one of the themes for providing a park for all users. As Mukilteo and Snohomish County continue to see changing demographics, our parks must be adaptive to ensure that all ages and abilities have opportunities to recreate within the community. When the lumber industry drew the Japanese Immigrants into our economy, they were also welcomed into our schools and our community. Japanese Gulch Park must be equally accessible and available to all people regardless of income level, ethnicity, gender, ability or age.

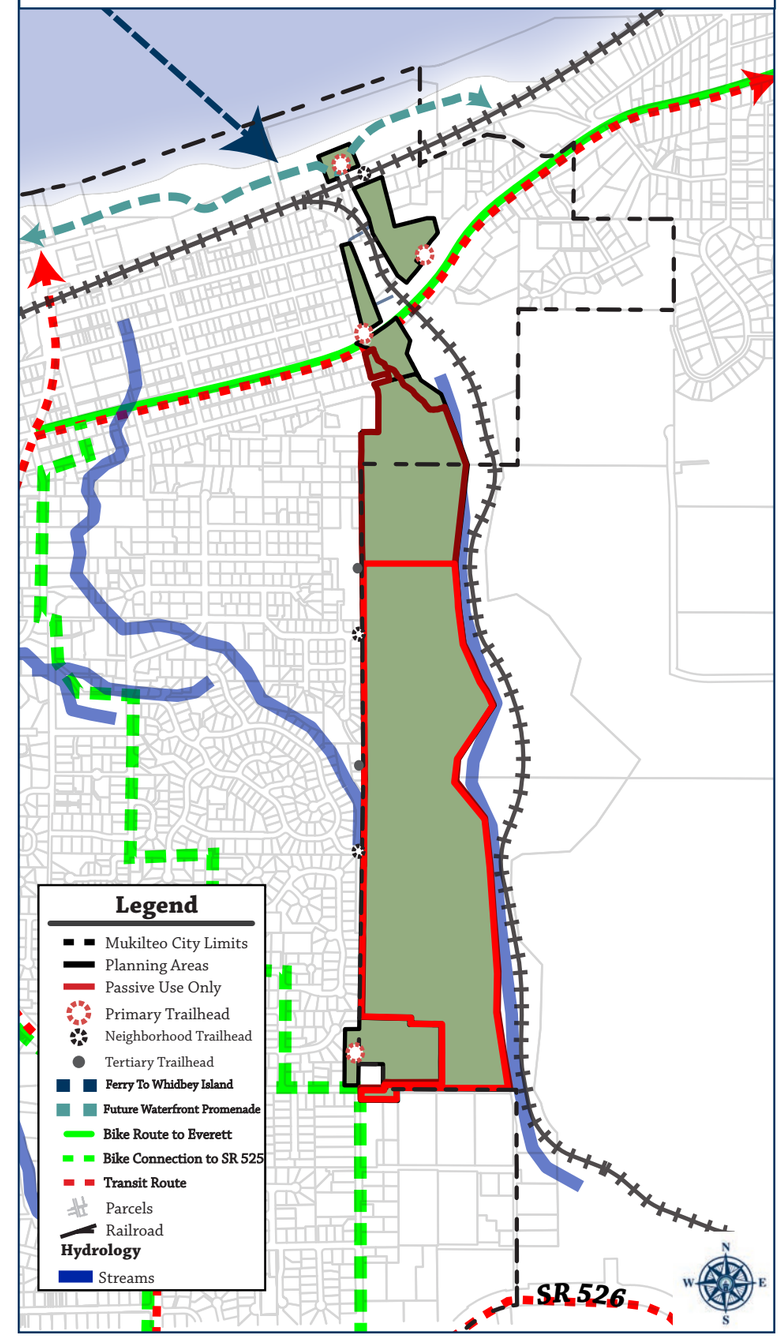
Japanese Gulch Park is a true gem for the community. The park currently offers a variety of recreational of opportunities such as gardening, hiking, biking, and running, for many age groups and abilities. Through the Master Plan process, modifications have been identified that will improve the accessibility with the implementation of boardwalks, wayfinding signs, maps, trail orientation and picnicking facilities. Additionally, Japanese Gulch Park has the necessary regional connections to the future Multi-Modal Center on the Mukilteo Waterfront and easy access from major roadways to provide greater access beyond the Mukilteo Community.

The benefits of community health, social equity, and universal access to public parks and trails are some of the many assets that have been incorporated into the preferred alternative, including:

- Quality recreation time with family and friends. Enjoying quality time, relaxation, and fun among family members and friends, strengthens social bonds that provide balance and satisfaction in life.
- Improvement of mental and physical health. Parks and recreation can reduce the impacts of chronic diseases, impacting populations such as children, seniors, and the under-served.
- Measurable decreases in rates of crime and other detrimental activities. Communities are safer as a result of a wholesome atmosphere created by well-managed parks and recreation services in communities through healthy activities and programming for all people.

As Mukilteo, Snohomish County, and Washington State continue to improve the equitable recreational opportunities, it is critical to continue our joint contributions. Japanese Gulch Park represents a variety of recreational opportunities for anyone regardless of age, income, race, or ability and these opportunities should not change based on residency. While Japanese Gulch Park is a City of Mukilteo Park, without the funding from Snohomish County, Washington State, and the countless hours of volunteers advocating for the preservation, Japanese Gulch Park would not exist today.

Map 13: Regional Connections



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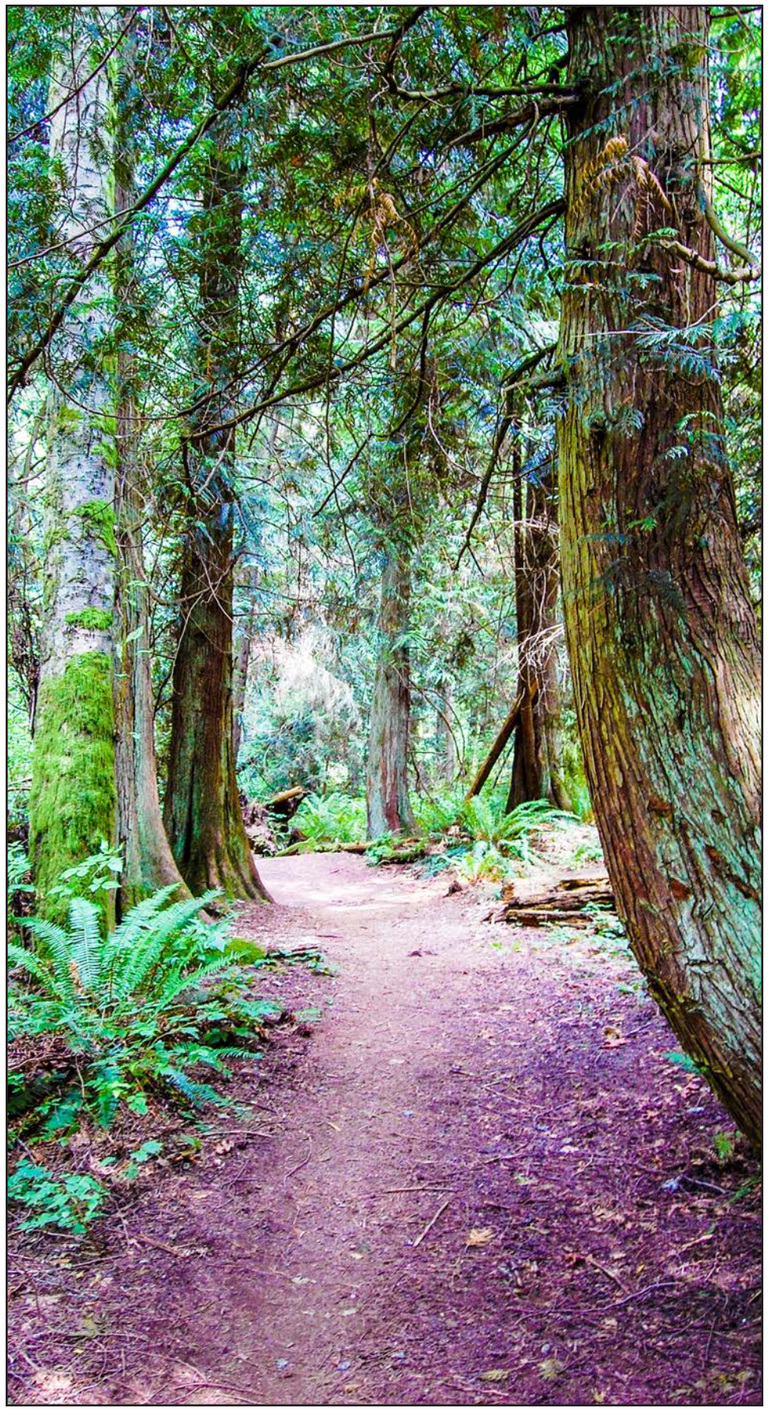
In 2014, Mukilteo officially became the proud owners of Japanese Gulch. Mukilteans can now be responsible stewards of this land, an expansive wood our families can hike, bike and play in for generations to come. This preservation of our own hundred acre woods was the culmination of many years of effort and leadership. This tremendous asset will now take careful stewardship. Our community worked hard to save the Gulch, and are now committed to work together to take care of it. This Master Plan outlines the vision for that care and preservation; paired with the devotion of community volunteers, city employees and our elected officials, we will successfully preserve Japanese Gulch for our children and grandchildren.

Jennifer Gregerson, Mayor, 2016



Part Two

Volunteer & Implementation Plan

VII. Stewardship Program
VIII. Public Safety
IX. Maintenance & Operations
X. Trail Design & Maintenance

VII. Stewardship Program

The Japanese Gulch Master Plan is the result of years of grassroots volunteerism to preserve an area that was once destined for development. To ensure this effort is continued, a stewardship program will be established to offer experiences in parks that create an appreciation for our natural and cultural resources. The Park Stewardship Program is designed to connect individuals with nature through volunteering, safe and healthy parks, and education. The stewardship program is intended to be a resource, provide training opportunities, organize work parties, and assist in project implementation. Not only will this stewardship program provide organized volunteerism in Japanese Gulch, but it will also extend to other parks in Mukilteo.

To assist the City with the development of a Park Stewardship Program additional professional support from an organization such as EarthCorps will be sought to set up the framework and help maintain the stewardship program. This type of leadership includes knowledge on volunteer leadership training, recruitment, best management practices for trail building and maintaining and invasive species removal. The Park Stewardship program will recruit members of the public for a representative group of broad interests in Mukilteo Parks. The City will connect with other organized groups such as the Japanese Gulch Group, Scout Troops and Evergreen Mountain Bike Alliance to recruit members for the new stewardship program.

The long term success of Japanese Gulch will be based on the continued support of volunteers to monitor the site, aid in habitat restoration, assist in trail maintenance, and help implement projects. Together with the City of Mukilteo, Japanese Gulch can continue to be our sustained urban forest.

The City Park Rangers, a branch of the Mukilteo Police Department, will assist with patrolling Japanese Gulch and other City parks and educate the public through environmental programming in order to make our parks safe and healthy for the community. It is important to educate the public and park users about the importance of sustaining the Japanese Gulch ecosystem where plants, animals and waterways interact and depend on each other for survival. Just like people, animals need a place to live that provides shelter, food, water and a place to raise their young. Teaching the community about the environment, park rules and how to be good stewards of the land helps keep park property safe and clean for everyone to enjoy.

Stewardship Next Steps:

1. Identify Staff Liaison for Stewardship Program – Recreation & Cultural Services, Planning,Police Department (Rangers).
2. Contract with a professional organization to initiate efforts in creating a local stewardship program.
3. Develop the framework for a City Stewardship Program to include policies and procedures, a training manual, volunteer contract, recruitment and implementation, and networking with existing organizations.
4. Advertise for, recruit, and train Park Stewards.
5. Identify volunteer projects for a variety of volunteer groups such as youth, large groups and small groups.
6. Set dates and advertise work parties; recruit volunteers from schools, churches, businesses, park users and citizens.

The Police Department's Community Service Officer - Rangers are a great opportunity to pair public outreach and education with the Stewards for positive partnerships and consistent communication.

For many years, the Japanese Gulch Group (pictured) has held monthly work parties to maintain the trails within Japanese Gulch. The Steward Program will provide additional resources, training, and support to continue the volunteerism.

VIII. Public Safety

One of the concerns discussed in the Japanese Gulch Master Planning Process was not only how to design for safety, but how will our emergency services will respond when necessary. In every response situation, the efficiency of our services comes down to equipment, access, mapping, coordination, and most importantly, public education.

Equipment for mobility within Japanese Gulch is different than that needed for other parks. Due to the restricted trail widths, the City may require some additional equipment or specialized replacement equipment. Below is a list of equipment that will provide emergency services and public works quick response to situations in Japanese Gulch.

Equipment	*Dept.*	*Cost Estimate*	*Funding Sources*	*Benefits*	*Priority*
Gator/ ATV & Trailer	Fire & Public Works	$25,000	Grants, General Fund, Early Replacement of Existing Equip.	Decrease Emergency Response Time, Multi-Purpose Tool	2nd
Brush Truck	Fire	$45,000	General Fund; Fire Prevention Grants	Fire Suppression	3rd
Police/ Ranger Bikes	Police	$800 each	General Fund; Crime Prevention Grants	Response Time, Patrolling Efficiency	1st

Access into Japanese Gulch is constrained by the limited width of many trails. Having normal vehicle access throughout the entire area defeats the purpose of preserving the gulch and is the intent behind a multi-use/maintenance trail. While the trail may not be built to 10-foot widths throughout, this trail should provide access for emergency response through the use of smaller vehicles including a 'gator'. While a brush truck (typically a one-tone pick-up with an in-bed apparatus) is needed for Mukilteo, the apparatus will primarily provide perimeter suppression abilities with regards to Japanese Gulch.

Mapping and wayfinding signs are the next important step to ensure public safety. In addition to having the equipment to perform a rescue, and access to the site, first responders must know where the site is located. Through the master plan inventory process, the trails were mapped, but they are unnamed and lack reference points. The City will institute a grid system within the trail map and identify coordinates within the grid for referencing. The grid system will also increase the efficiency of a missing persons search with search areas and parameters pre-instituted.

Due to the vast area of the entire Japanese Gulch, emergency responders must also be prepared to respond to the eastern portion of Japanese Gulch. In order to provide these additional services when needed, the city will be coordinating with the Paine Field Fire and Everett Police & Fire Departments. To further assist the first responders the City's goal is to develop an additional mapping grid of the eastern portion of Japanese Gulch. Another key component to public safety within Japanese Gulch is public education which can include workshops, recreational activities, social media outreach, and proper signage. The City's Ranger positions will play a key role in defining the public education element to reach all users and age groups. Another opportunity for the City to pursue is to intertwine a public education component related to park safety with the park stewardship program. These types of activities and outreach will increase the public visibility of the area and intentional damage and other illegal activities.

Public Safety & Support Next Steps:

1. Produce park maps with City GIS in coordination with emergency responders to determine mapping grid and wayfinding sign locations.
2. Determine trail names and color coding for trails.
3. Install park maps at designated Trailheads and key locations in Japanese Gulch.
4. Prioritize and schedule phases of implementation for the Mainline Trail with volunteer organizations.
5. Draft timeline and thresholds of major equipment purchases and identify additional external funding sources.
6. Organize Public Education Program in coordination with Police/Rangers, Fire, Recreation & Cultural Services, Planning, and the Stewardship Program for continued outreach regarding safety within Japanese Gulch and other parks.

The image above is a small trail sign that provides wayfinding within park areas. Signage like this can be installed through volunteer projects such as those of Eagle Scouts, but must be designed to be integrated into the landscape and not detract from the natural beauty.

IX. Maintenance & Operations

A critical element of ensuring a safe and financially sustainable park is to determine the level-of-service (LOS) for different areas within the park. An identified level-of-service is a controlling agent for time spent within project maintenance as well as a gauge for the required full-time equivalent employees to maintain an area at the agreed upon standards. After reviewing the City's current levels of service for park maintenance located in Appendix: XIV, the desired level for Japanese Gulch currently is Level-Of-Service C (LOS C).

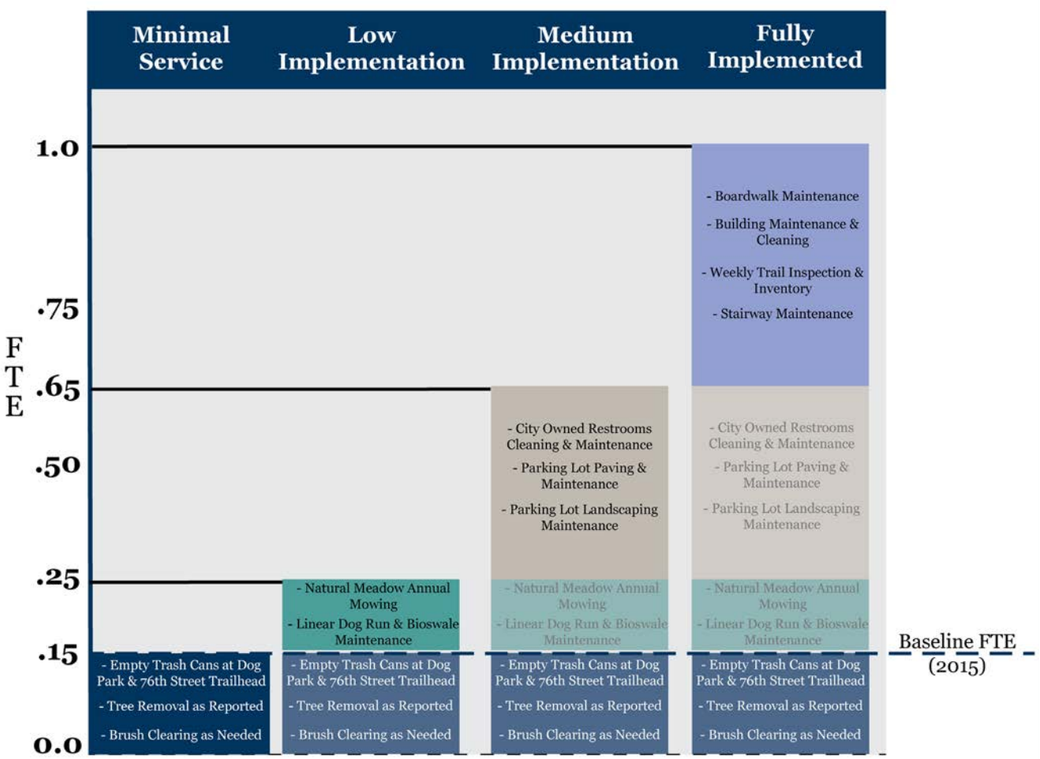
LOS C provides day to day basic maintenance, while performing higher levels of maintenance on an as-needed basis and will ensure that there is adequate staff time to identify and perform preventative maintenance. While LOS C is the desired level-of-service, as further development occurs, this level-of-service should be revisited when design features are added to the Dog Park and 76th Street Trailhead. Certain improvements may trigger a greater need for a higher LOS which will also have an increased demand on staff time. LOS C is a sustainable level of service provided that the stewardship program is successful. If the stewardship program and volunteerism declines, then additional maintenance funds may be required, or the level of service in Japanese Gulch Park may be reduced below LOS C to ensure that the other parks and city facilities are maintained.

To the right is an illustration of project groups based on a low to medium to full implementation of the master plan at LOS C. This graphic illustrates that as projects are completed, an increased level of staffing is required to maintain the improvements. It is important to note that certain projects not labeled within Chart 3 are because those projects would be 100% volunteer supported. If a project such as a Dirt Jump Bike Course is no longer maintained by volunteers, the Dirt Jump Bike Course will either require additional FTEs or cease to exist.

Public Works Next Steps:

1. Maintain the partnership in transition and formation of the stewardship group.
2. Continue communication within City Staff regarding development of Japanese Gulch related to the desired Level of Service C and the availability of existing staff time to prevent a service deficiency.

Chart 3: FTE Maintenance Demand LOS C



***FTE** means Full Time Equivalent referring to an employee who works 2080 hours per year.

Boardwalks may be completed by volunteers, but annual maintenance my still fall to the Public Works Department.

Currently the Public Works Crews remove fallen trees on an as-needed basis. This work should only be completed by Public Works due to the equipment required

Trash cans are important to keep the trails clean, but adding trash cans at certain locations require additional staff time to empty them on a consistent basis.

X. Trail Design & Maintenance

Trailheads

The overall trail layout encompasses the vast majority of the Japanese Gulch Property. With the exception of the 'Western Portion of Preservation' located within the Lower Japanese Gulch, this layout controls the extent of the park usage and should utilize positive language regarding the park rules. This section focuses on providing design considerations for trailhead design, trail design, and other considerations.

Trailheads

Access to Japanese Gulch is an asset. Several neighborhoods connect directly to the trails and have established accesses that provide residents with quick and easy entry points into the Gulch. While there are many access points, the Subcommittee identified the need to limit the exposure of the 'neighborhood entrances' while entrances such as the 76th Street Trailhead should be more formalized. This led to the creation of three different trailhead designations and based on location.

Primary Trailheads should be located at the Dog Park, 76th Street Trailhead, Mukilteo Lane, and 5th Street. These locations provide opportunities for parking and a higher level of development such as a gateway structure to transition from an urban area into a conservation area. These entrances are the 'general public' entrances and should be publicized. Kiosks should be considered for displaying park maps and safety information.

Secondary Trailheads/Neighborhood Entrances should be located at Ridge Street and 19th Street. These locations will serve those living in the nearby vicinity and should have a structure defining the start of the trail. These are not advertised or publicized locations to reduce parking congestion within the neighborhoods.

Tertiary Trailheads should be located at Mary Lou Morrow Park. These entrances are intended for the residents living in the immediate vicinity, and are purposefully the least-known access entrances. The purpose of formalizing these entrances is to protect the area. These locations should have a wayfinding bollard but no formal entrance structure.

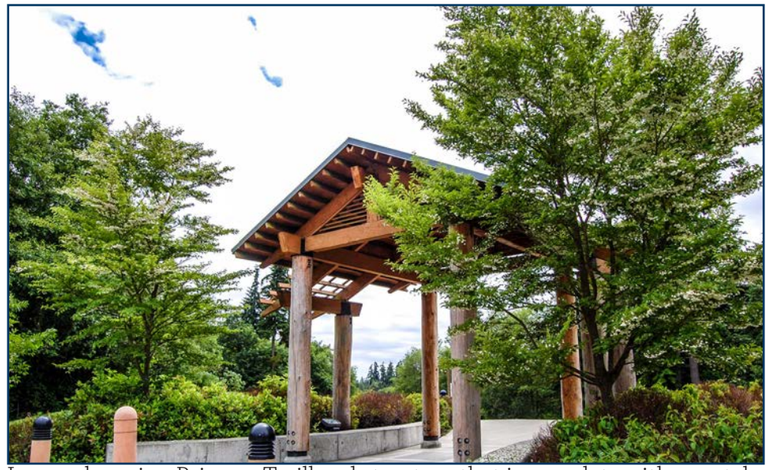


Image above is a Primary Trailhead structure that is complete with a metal roof and reflects the heavy timber construction patterns of early Mukilteo.

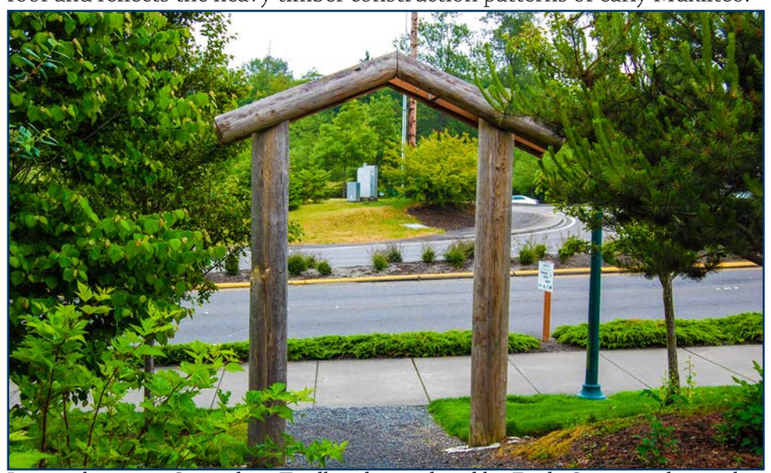


Image above is a Secondary Trailhead completed by Eagle Scouts utilizing the pulled log style. Additional considerations for kiosks should be considered.

Image above is a larger, three-sided kiosk example located at the Mercer Slough Nature Park. This kiosk would be appropriate at the Primary Trailheads. Kiosk design is flexible and should be designed for the neighboring space and audience.

Trail Design & Orientation

The Subcommittee recommended the trails should be 'multi-use' with use orientation identified. This was also reflected in comments brought to Staff either during public meetings, or open commentary on the surveys including statements such as 'the system currently works'. The concept behind identifying the orientation (pedestrian, bicycle, multi-use, mainline/maintenance) is to promote safe use among all users. In addition to orientation, trail challenge should be labeled in a manner similar to a ski run with green, blue, and black symbols.

Pedestrian Oriented trails included two different classes of pathways such as Highly Accessible and Limited Pathway.

- Highly Accessible Trails are most reasonably constructed to meet ADA principles. Not all trails sections may meet ADA standards due to site limitations, but these paths should be constructed as the most reasonable alternative to ADA standards. These trail sections include limited slope change, solid surfaces (hard packed gravel, boardwalk, or similar), width of at least 3-feet, and other principles to provide for a variety of users including wheelchair users, and people with strollers. The Map to the right illustrates ADA Access points within the Japanese Gulch Park and the Highly Accessible Trails.
- Limited Pathway Trails may range in width from 2'-5', composed primarily of organic materials except when gravel is necessary. These trails are not suitable for sustained bike use as preferred route. Other bike routes should be identified as alternative pathways. The intent of Limited Pathway Trails is to provide access to areas that otherwise would be inaccessible without trails.

Bike Oriented trails may include varied widths, minor signage for speed control, and some low-impact skill facilities such as skinnies and gravel as needed for erosion control. Bike Oriented Trails may also require areas for walking users to step aside as bike users pass through. Additional education on sustainable riding techniques may be needed either through signage, public outreach or recreational programs.

Multi-Use trails are a combination of user groups to ensure a safe interaction between bikers, hikers, runners, and dog walkers. These trails may require limited speeds and signage to promote safety, but also provide for high user group access. Additional information on signage can be found on page 27.

Mainline/Maintenance Oriented trails may include a 6'-10' wide pathway suitable for a utility vehicle such as a 'gator' to provide the access for Public Works and Volunteers to move materials, tools, and other necessities quickly and easily. Not only will this pathway be an ADA Oriented Trail, but this pathway also may be used in emergency situations including missing persons, medical emergency, or brush fire.

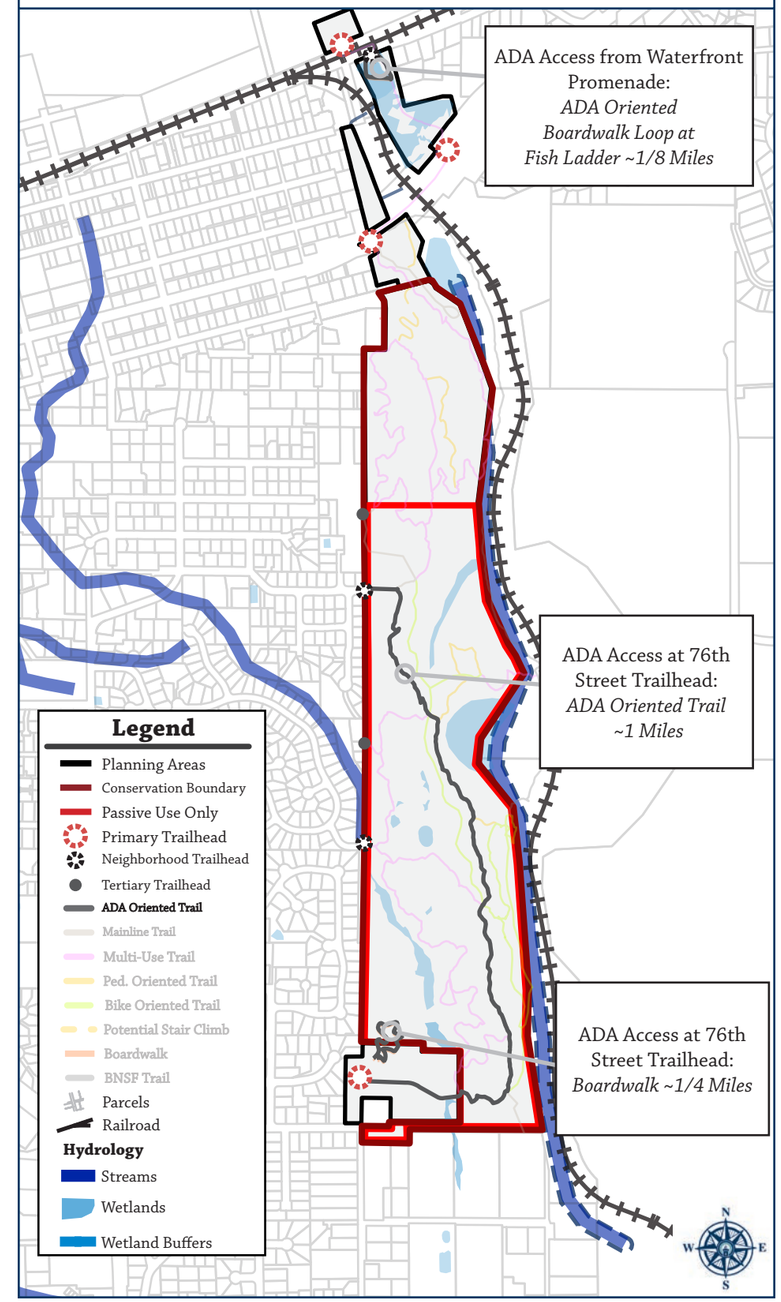
Limited Pathways are not suitable as a preferred bike route are preferred pedestrian routes. This provides opportunity for additional access up the steep slopes.

Multi-Use Trails are a combination of both pedestrian and biking with adequate width for passing and safe walking buffers.

Bike Oriented trails may range in width but should be single track design. This image illustrates the inclusion of a skinny in the path.

Maintenance Oriented trail that provides an area of High Accessibility for Pedestrians.

Map 13: ADA Access & Pathways



Trail Usage & Maintenance

Trail Usage & Etiquette

The original intent of moving towards segregated trail usage was to promote safety between the multiple user groups. While there are some respondents of the surveys that identified keeping bicyclists separately, ultimately the Subcommittee decided that the current system of mixed use provides the required level of trail etiquette within the gulch. Maintaining this current system recognizes the historical mix of users as well as provides the most amount of trails to all users. In order to ensure that trail etiquette is observed to maintain a safe area for all users, education will be required to bolster and continue the current trail courtesy system. Education will include use of phrases such as 'Call Your Pass', and 'Announce Yourself'. These phrases along with diagrams on signage displaying the right-of-way, can provide a cohesive mix of users within the shared space.

Trail Configuration & Maintenance:

In addition to the recognition of the historical mix of users in Japanese Gulch, the Subcommittee also recommended the area should utilize the current trail configuration as much as possible. Some additional trail opportunities include the addition of 'trail swoops' to add a mixture of mountain biking skills within the current trails. This integration is to prevent 'rogue development' by establishing bike challenges, such as 'skinnies' that are integrated into the landscape. Any such improvement should maintain consistency with the focus of conservation and passive design.

The Subcommittee noted some areas of original trails are no longer sustainable, or were routed through wetland areas. Some additional rerouting may be required and some criteria for the decisions for rerouting trails are shown below.

Good trail planning starts with research and a sustainable design to minimize future maintenance. Suitable trails mean creating and maintaining trails that will not erode away from water and use, will not affect water quality, will meet the needs of intended users, and will provide a positive user experience.

Mud & Natural Drainage Flow

Existing trails should be modified to ensure drainage is occurring through proper dispersion and not through pooling or 'mud pits'. The dispersion methods must review the natural drainage course of the site to ensure no water is being diverted from existing wetlands and downstream areas of the drainage path are not being impacted.

Trails should be constructed to avoid altering the natural drainage flow of wetlands or streams. If a trail must cross natural drainage flow, improvements should be made to cross the drainage path in the most sensitive manner by minimizing the distance and/or the width of the crossing. At times, the current trails have become the new path of least resistance for water and now acts as a drainage path. Trails should be examined by trail professionals for a sustainable design or to determine if the trail should be relocated with a new trail cut.

Retaining Walls & Shoring

Due to the natural constraints of the steep slopes, significant trail projects may be required in order to create a sustainable trail in some locations. The Mainline Trail appears to be in good condition in relationship to the stability and limited slope erosion, but some of the hillside trails and switchbacks are experiencing some significant trail erosion. Some trails may be repairable with retaining walls or trail shoring. These projects should be reviewed by the City and include appropriate geological engineering review. Some trail configurations, however, may require trail abandonment.

Abandoning Trails

Some additional trails may require abandonment because of specific considerations such as redundancy and sensitivity areas. To abandon a trail, a new pathway should be well-researched so that it is easier to travel and more convenient. The abandoned trail should be fenced, replanted, and marked allow regeneration of the local environment.

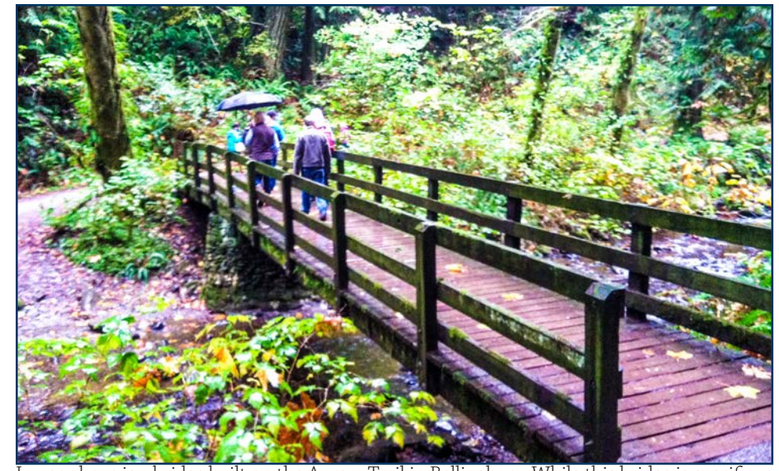
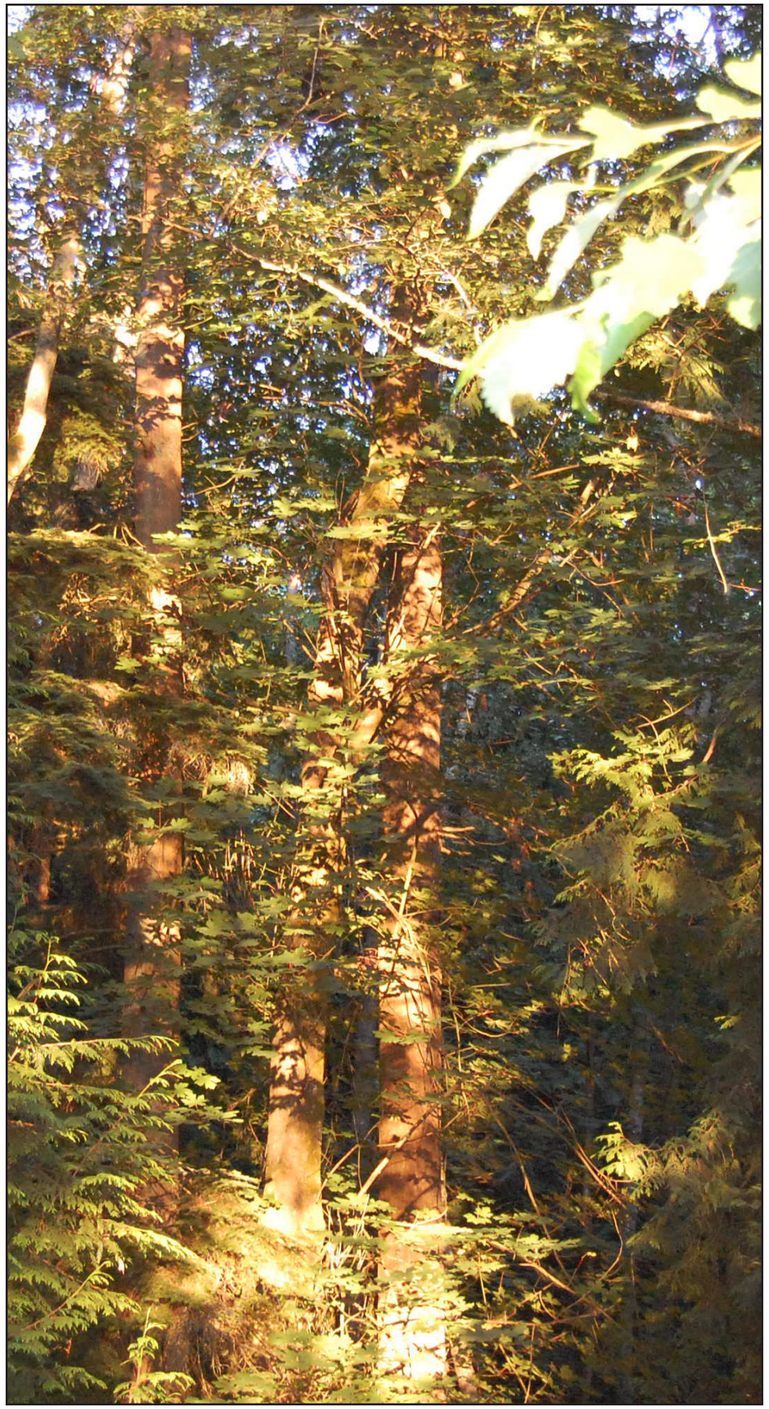


Image above is a bridge built on the Aurora Trail in Bellingham. While this bridge is specific for streams, it is a great example of preventing harm to the natural waterway.

Image above is the largest retaining wall in Big Gulch. This project was completed through the use of RCO Grant funding. Trail design specifics are available at City Hall and may be a valuable reference for design of the Japanese Gulch Park Trails.

"A Natural Area for All; Connecting Neighborhoods to the Waterfront."

Barker Landscape Architects



Part Three

Appendix

XI. Public Outreach Workbook
XII. Natural Inventory
XIII. Subarea Budget
XIV. Level of Service Standards