



Part 3: Table of Contents

- Part 3: Future Improvements 40
 - Improvement Themes 41
 - Proposed Improvements by Opportunity Zone 45

Part 3: Future Improvements

Purpose

Parts 1 and 2 of this assessment explored the factors that will drive future improvements that will be implemented over the coming years in Lake Padden Park. Part 3 will provide a framework to identify improvements, analyze their merit, which will in turn help BPRD and City staff prioritize and plan for their implementation. Of note, the improvements that are proposed in this section are thematic and do not comprise a final design per se, but rather will inform future design and construction processes in the Park.

Lake Padden was organized into a series of Opportunity Zones, described in Part 2. These zones share similar programmatic and physical characteristics. Improvements within these zones must be evaluated in their ability to address community input, programmatic, operational and environmental factors. To that end, a series of criteria were developed to help assess and rank the proposed improvements.

Improvement Themes

Improvement Themes are general categories of proposed improvements intended to guide future design, and provide a framework by which Lake Padden Park is developed in the coming years. These themes are interrelated and complementary, and consist of numerous subsets. Four major themes guide the proposed improvements. They are:

Connectivity



Connections to and within the park were issues that were repeatedly voiced in public survey comments. Some of the most important access issues to be addressed are:



• Access to the park

1. Better access to the park- improve bike lanes and pedestrian pathways into and across Samish Way
2. Improve entrances to the park with more signage that allows drivers to anticipate and slow down for entry into the entry drives



• ADA access:

1. Improve trail material transitions and general access and drainage
2. Install dock safety elements, such as railings and toe-kicks
3. Install ADA-complaint parking stalls and connections to amenities
4. ADA compliant pathways and ramps to various areas within the park
5. Enlarge picnic table platforms to accommodate wheelchair circulation and ADA compliant picnic tables



Figure 33: ADA compliant picnic table



• Water access:

1. Improve abrupt eroded bank edges at existing beaches
2. Provide easier localized access steps to the water while protecting the bank from erosion
3. Install swimming platforms to increase capacity to accommodate swimmers and thereby reducing swimmer/fishing conflicts on existing docks
4. Upgrade existing and install new fishing docks
5. Upgrade boat launch ramp and dock



Figure 34: Potential shoreline protection with localized water access



Figure 35: Fishing dock with railings



Figure 36: Floating swimming platform



• Functional Connections:

1. Make it easier for park users to be aware of and connect to complimentary park amenities, such as sports and food venues (such as the restaurant at the Lake Padden Golf Course)



Figure 37: Wayfinding example



- Trails:
 1. Improve trails by installing erosion control measures, route enhancements such as run-off bars, switch backs or stairs on steep sections, and improve drainage in low areas to prevent water-inundated sections.
 2. Improve drainage in specific locations along the main limestone trail. This could include some of the following options:
 - o Create trail segments with permeable ballast beneath that allows water to pass under the trail.
 - o Create a ditch adjacent to wet trail sections with culvert outfall.
 - o Install various culverts under wet trail sections.
 3. Improve backcountry trail conditions and reduce erosion south and southeast of the lake where access is challenging during the wet season due to steep switchbacks and poor drainage (See Figure 16). Potential improvements could include:
 - o Add limestone to sections of steep trails in Zone 15 where extremely muddy.
 - o Improve or re-do switchback segments in Zone 14.
 - o Improve drainage on a steep trail section in Zone 13.



Figure 38: Trail waterbars to control path erosion



Figure 39: Wood stairs for steep trail sections



- Destination play area(s)
 1. Nature-based play structures and themes can entice users and also reinforce the natural theme of Lake Padden Park.



Figure 41: Nature-based play examples



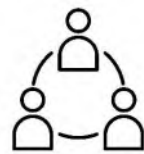
- Community gathering spaces/ shelters
 1. Picnic shelters are popular amenities in the Park and generate revenue. Adding more shelters that are capable of accommodating various-sized gatherings will allow more equitable opportunities for users that have varying income levels and entertaining needs.
 2. Enhancing shelter amenities to include sinks and electrical outlets will enhance user experience, but will have added infrastructure and maintenance costs.



Figure 42: Large picnic shelter at Cordata Park



Figure 43: Enhanced shelter amenities at Cordata Park



Active Community

Providing amenities that allow park users to gather, play, and socialize in areas of the park that are appropriate to support those activities is an important need. In the 2020 PRO Plan, Lake Padden is classified as a community park, which are designed to serve a broader range of activities and users. They offer more diverse recreation opportunities while also preserving unique landscape, open space or environmental features. The following are general proposals to provide for the active recreational and programming needs of the park:



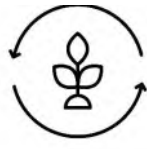
- Support event hosting/ varied programming, such as races and outdoor classes
 1. Enhanced bathrooms, shelters, wayfinding and signage, and circulation can all support and improve the ability of Lake Padden Park to host events.



Figure 40: Lake Padden Triathlon

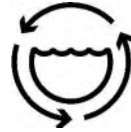


- Sporting amenities
 1. Sporting amenities can provide active programming for users, both for organized sports leagues that can generate revenue, as well as for casual users. Existing facilities such as the basketball and tennis courts should be retained and enhanced; other activities such as pickle ball, beach volleyball, and others can be accommodated.
 2. An upgraded multi-use field, if desired, should be carefully designed to accommodate the desired sports at the levels of play of organized sports to be supported. Field surface (artificial or high-performance natural turf), field lighting, bleachers and pathway improvements could potentially involve significant cost.
 3. Because the current field is located within the 200 foot shoreline buffer, mitigation costs and considerations must be added into the calculus of any improvements.



Environmental Considerations

The natural character of much of Lake Padden Park is clearly cherished by Bellingham residents, evidenced by comments in the 2023 survey. Protecting the environment within the park not only benefits natural areas, but higher-use areas as well. Steps taken to enhance the environmental conditions within the park also have a positive benefit in other Theme areas. General categories of environmental enhancements include the following:



Enhance and Protect Lake and Stream Water Quality

1. Add treatment for stormwater and/or dog park runoff to improve water quality. See stormwater section below. Protecting shorelines from erosion with vegetation enhancement and select boulder placement to identify single access points.
2. Add an outdoor shower or restore the existing showers to remove algae toxins and reduce “swimmers itch” (cercarial dermatitis).
3. Conduct a lake study to determine contributing nutrient sources of algae blooms to inform recommendations for lake water quality improvement. Water quality monitoring results indicate that the primary source is the recycling of sediment phosphorus historically deposited in the lake, which can be effectively controlled by phosphorus inactivation or oxygenation techniques. Grant funding from the Department of Ecology is available for these types of studies to prepare a Lake Cyanobacteria Management Plan, with applications due in December.



Shoreline Erosion

1. Select portions of the shoreline are designated “natural” under the SMP and are showing signs of erosion could be restored with native vegetation and larger stone armoring to limit further shoreline riparian degradation. The SMP designates the northeast and southwest shorelines as “natural” zones. Restoration/mitigation of degraded and eroded areas could be concentrated within the “natural” designation zones.



Figure 44: Vegetated and armored shoreline



Manage Aquatic Invasive Species

1. Invasive species management protocols have been established by WDFW (2022) that include decontamination protocols for preventing the spread of aquatic invasive species (AIS). Level 2 protocols are required for cleaning boats and equipment when leaving known AIS-infested waters. These protocols include clean, drain, rinse, and dry procedures (Level 1), followed by decontamination with hot water or chemicals (Virkon or Formula 409). The Washington Invasive Species Council has partnered to offer Clean, Drain, Dry, Dispose (CD3) stations at several boat launches in Eastern Washington, as well as a mobile CD3 unit available for special events and fishing tournaments. CD3 stations could be added to the southeast and northwest ends of the lake where water access is frequent to prevent lake users from spreading New Zealand mud snails from Lake Padden to other lakes. Use of these stations prior to lake access would help prevent introductions of other animal or plant AIS to the lake. These stations would be similar to the boat inspection stations and associated decontamination and AIS awareness program being implemented by the Lake Whatcom Management Program but would be unstaffed, volunteer, and less costly.



Stormwater

1. Stormwater management for the non-forested areas should prioritize infiltration and dispersion into forested areas with shallow slopes. Where those strategies are not feasible, treatment for pollution-generating areas such as parking lots and driveways could be provided by bioretention, media filter drains, filter strips, or proprietary stormwater treatment devices. Enhance erosion control on slopes and trails
2. One specific stormwater treatment strategy that may be well suited for some areas of shoreline around Lake Padden is a media filter drain (MFD) beach treatment. MFD is a stormwater treatment strategy that allows runoff to filter through a mixture of sand, perlite, dolomite, and gypsum, providing a reduction in total suspended solids, heavy metals, nutrients, and bacteria before reaching the lake. This strategy was successfully implemented at Bloedel Donovan Park along the shoreline of Lake Whatcom.

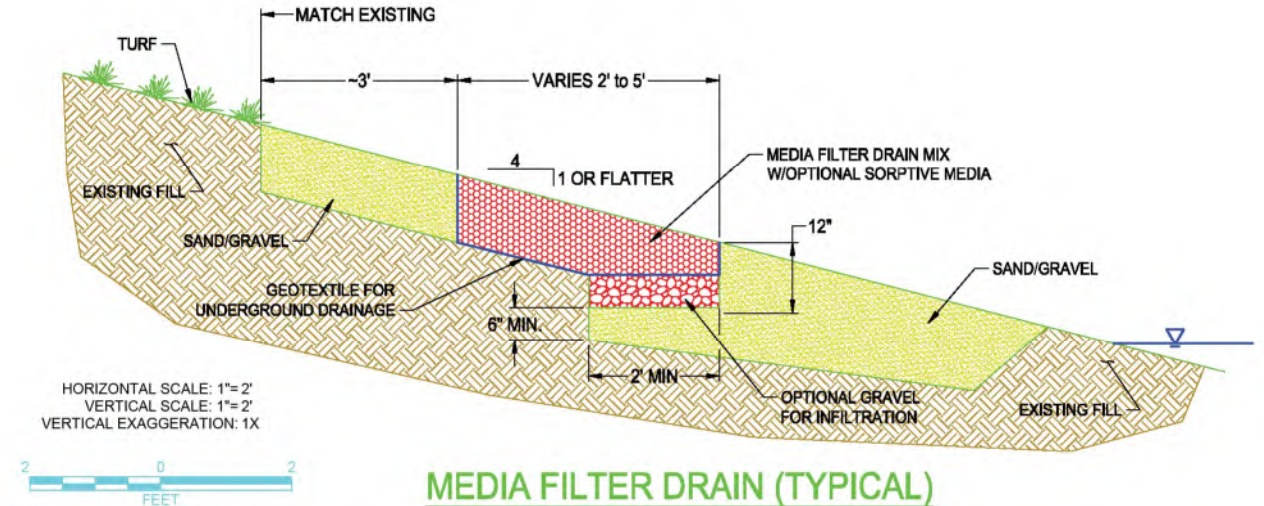


Figure 45: Cross-section of MFD Beach at Bloedel Donovan Park (GeoEngineers, 2013)

3. The dog park is a likely source of sediment, bacteria, and nutrients to be carried downstream in stormwater runoff. The dog park is shallowly sloped to the south/southwest, directing runoff to enter Padden Creek. Stormwater treatment strategies such as sand filters, MFD, or bioretention coupled with infiltration would help reduce the amount of pollutants being carried into Padden Creek from this area. These systems, and all stormwater management systems, need to be accessible for maintenance and be maintained routinely to retain their pollutant removal effectiveness.
4. Some areas of the park have shallow slopes and poorly drained soils where stormwater accumulates and creates wet, soggy conditions that can become muddy during the wet season. These areas could be regraded to allow for positive drainage, or their use could be reconsidered to allow wetland and/or forested conditions to prevail.
5. To couple stormwater management and water conservation, rainwater from roof surfaces could be collected in cisterns to be reused for toilet flushing and/or washdown water for maintenance.



Sand Beach

1. Designate a “beach” or multiple “beaches” on the shoreline that are predominantly sand or a sand/gravel mix. These beaches could be enhanced to be more functional and user-friendly with a gentle slope that will also function to reduce shoreline erosion. The beach could have a dual function with stormwater treatment functions and providing public access, as described above. The City of Bellingham Shoreline Master Program (SMP) designates “urban conservancy” along the north shore and southeast shore, where potential beaches could be improved for users. Other select portions of the shoreline that are designated “natural” under the SMP and are



showing signs of erosion could be restored with native vegetation to limit further shoreline riparian degradation. The SMP designates the northeast and southwest shorelines as “natural” zones. Restoration/mitigation of degraded and eroded areas could be concentrated within the “natural” designation zones.

Operations and Infrastructure

The ability to maintain improvements is critical to the future success and longevity of Lake Padden Park. Current challenges with staffing, equipment availability and storage have a detrimental effect on the ability of BPRD to successfully maintain current park amenities. Future enhancements will likely increase Operations and Maintenance (O+M) requirements; it is critical that adequate infrastructure and resources are in place to support O+M staff. By doing so, capital dollars spent will achieve longer operational life terms, thus getting the most out of capital investments. Two enhancements were identified that could help achieve this goal:

- Transition upper two bathrooms off of forced main sanitary line
 1. The intent of transitioning to a gravity-fed system is to reduce the maintenance effort to keep the sewage system operational.
- Add a satellite maintenance shop
 1. The facility should support the following capacities:
 - o Provide an administration and break area for 2-4 maintenance personnel
 - o Bathroom
 - o Space to store riding mower, tools, and materials
 - o Charging station for electric maintenance vehicle
 2. Other potential facility upgrades:
 - o Replace aging bathroom structures
 3. Staffing:
 - o Add one seasonal employee (see Part 2)



Figure 46: Maintenance facility at Cordata Park



Figure 47: Charging station

Proposed Improvements by Opportunity Zone

- The following pages present improvement scenarios that combine multiple improvement themes within the same zone. These scenarios are not designs per se, but show potential improvements whose realization needs to be developed in future projects.

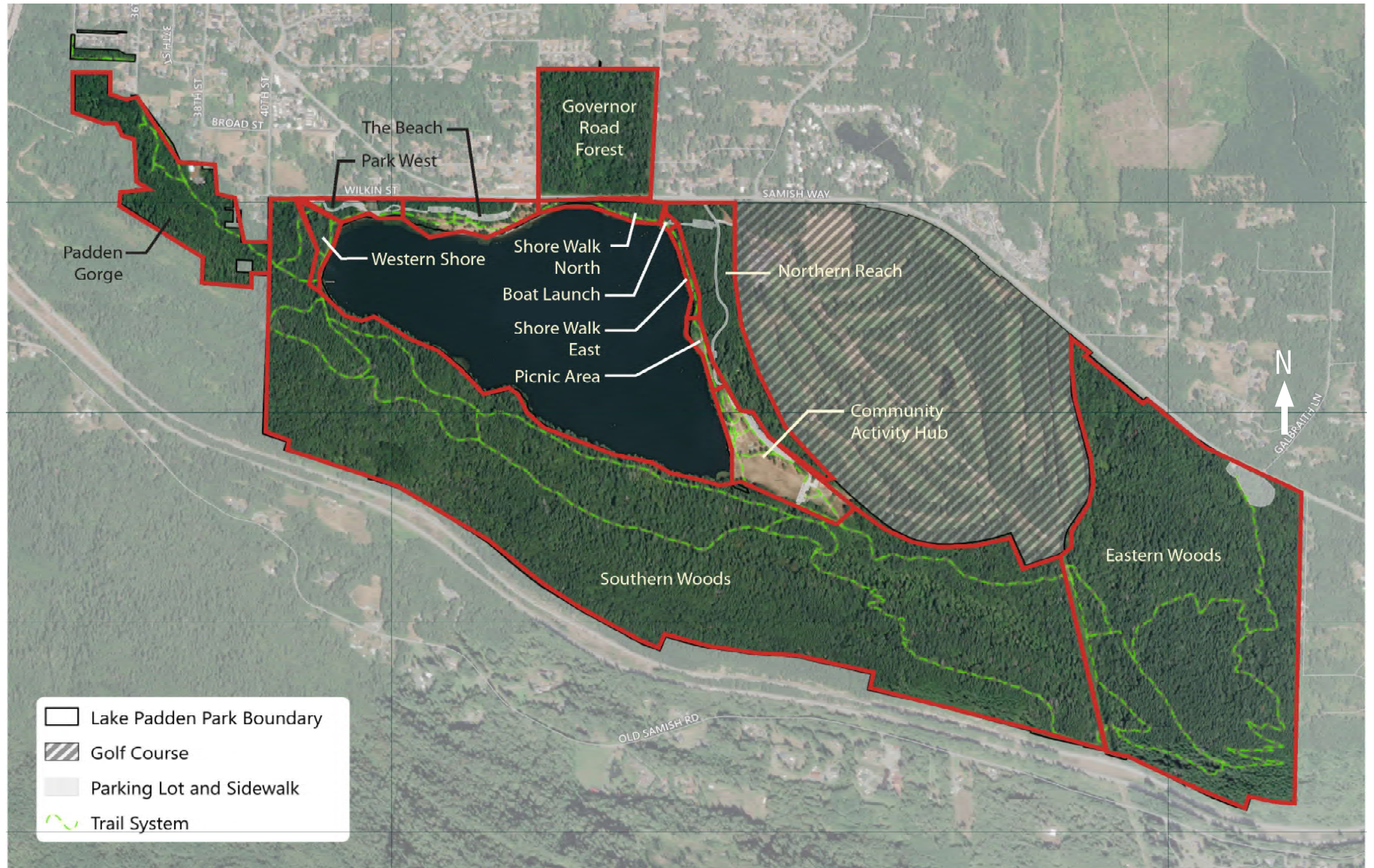


Figure 48: Lake Padden Opportunity Zones

Padden Gorge

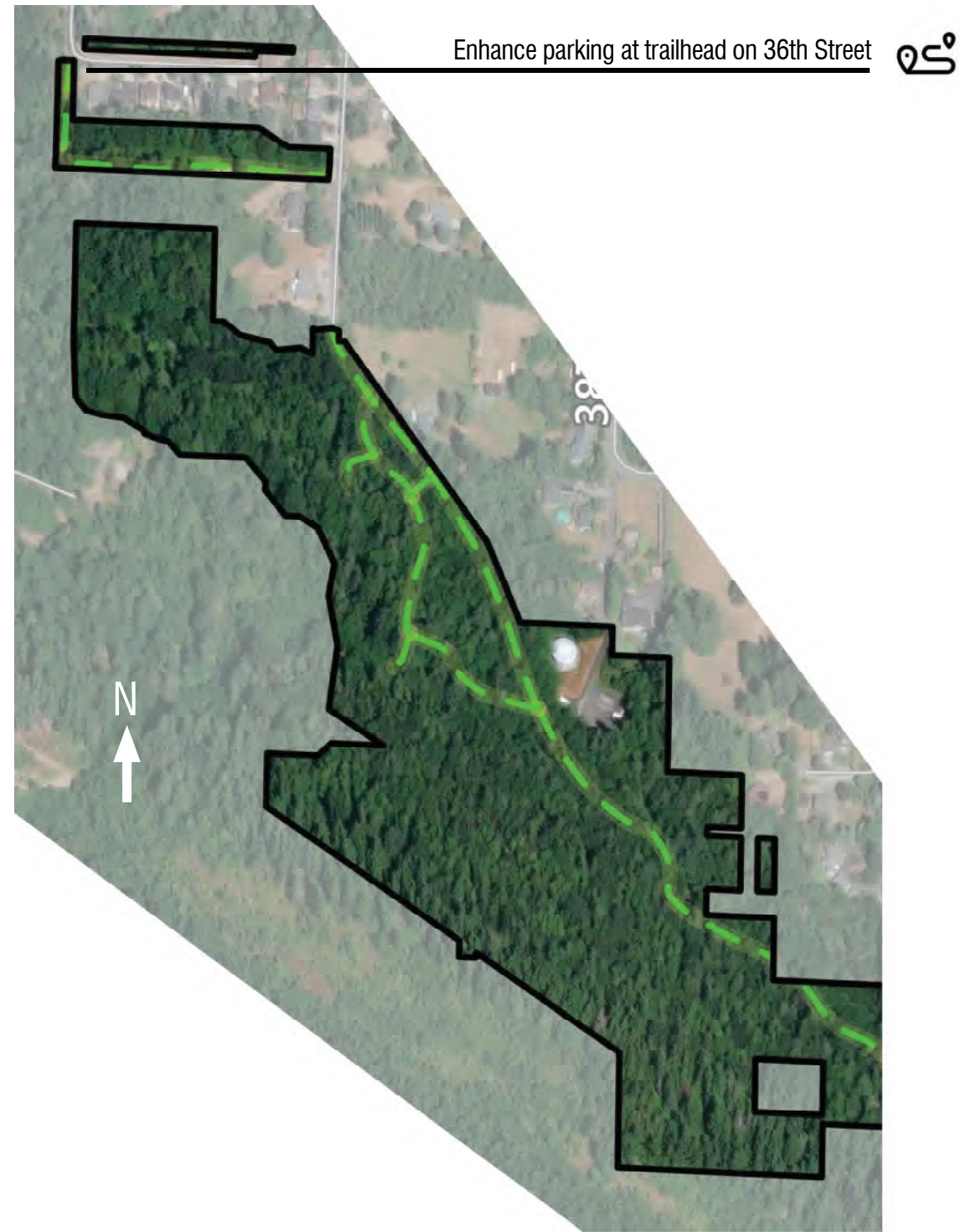


Figure 49: Padden Gorge Opportunity Zone

Western Shore

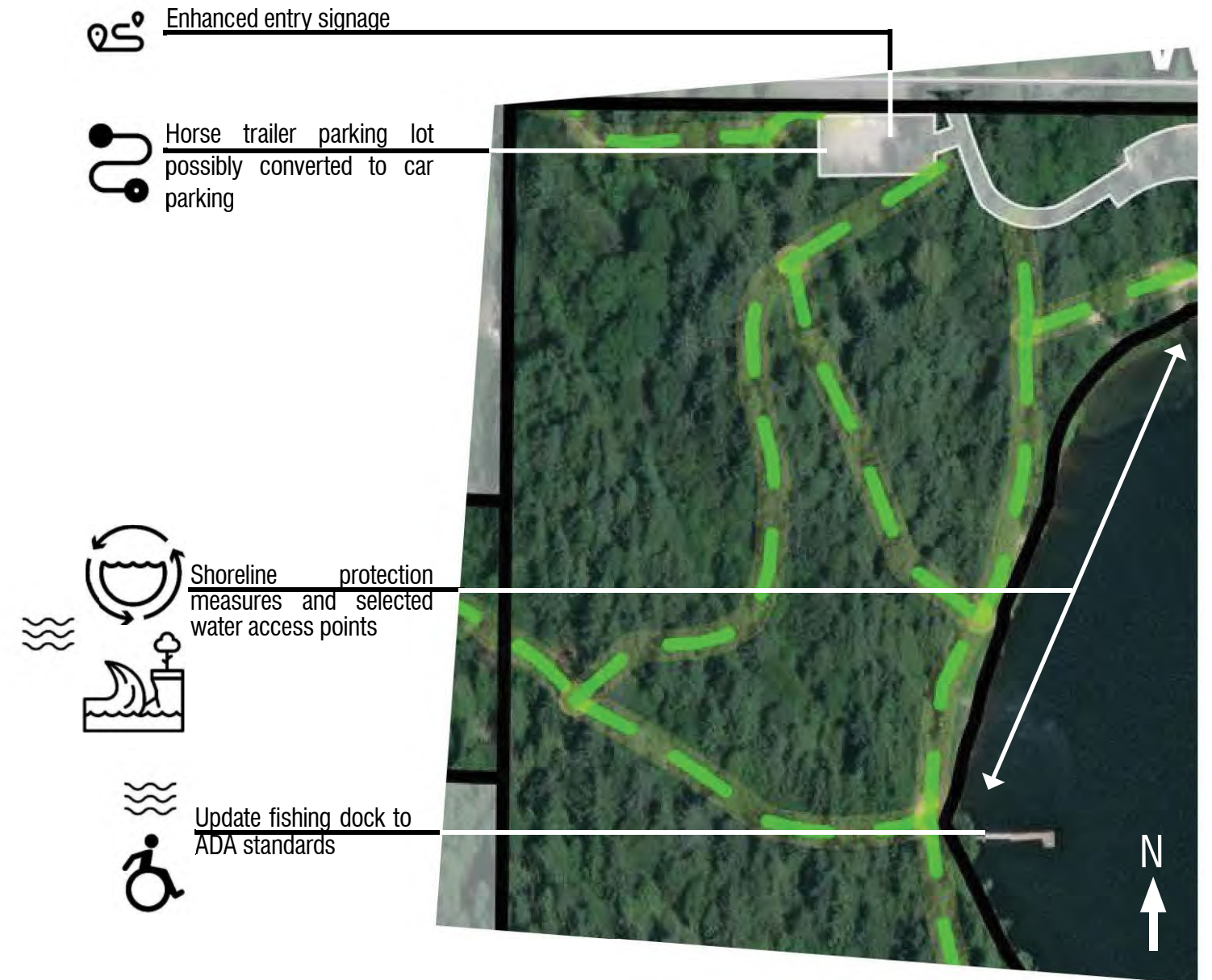


Figure 50: Western Shore Opportunity Zone

Park West

See Figure 52 for enlargement



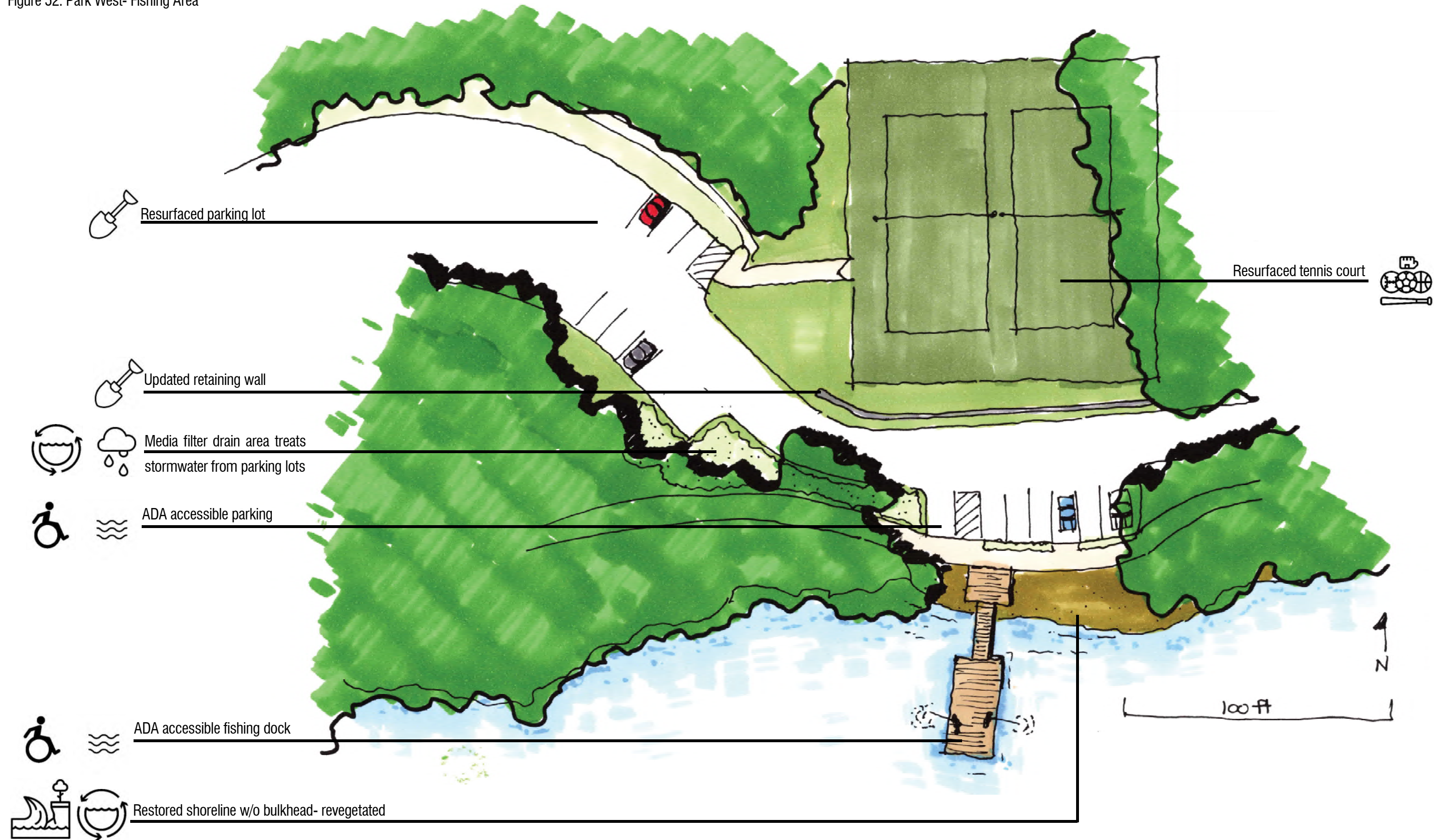
  Resurfaced parking lots with enhanced sidewalk access



Figure 51: Park West Opportunity Zone

Park West- Fishing Area

Figure 52: Park West- Fishing Area



The Beach

See Figure 54 , 55 and 56 for enlargements



Figure 53: The Beach Opportunity Zone

The Beach- Update Scenario

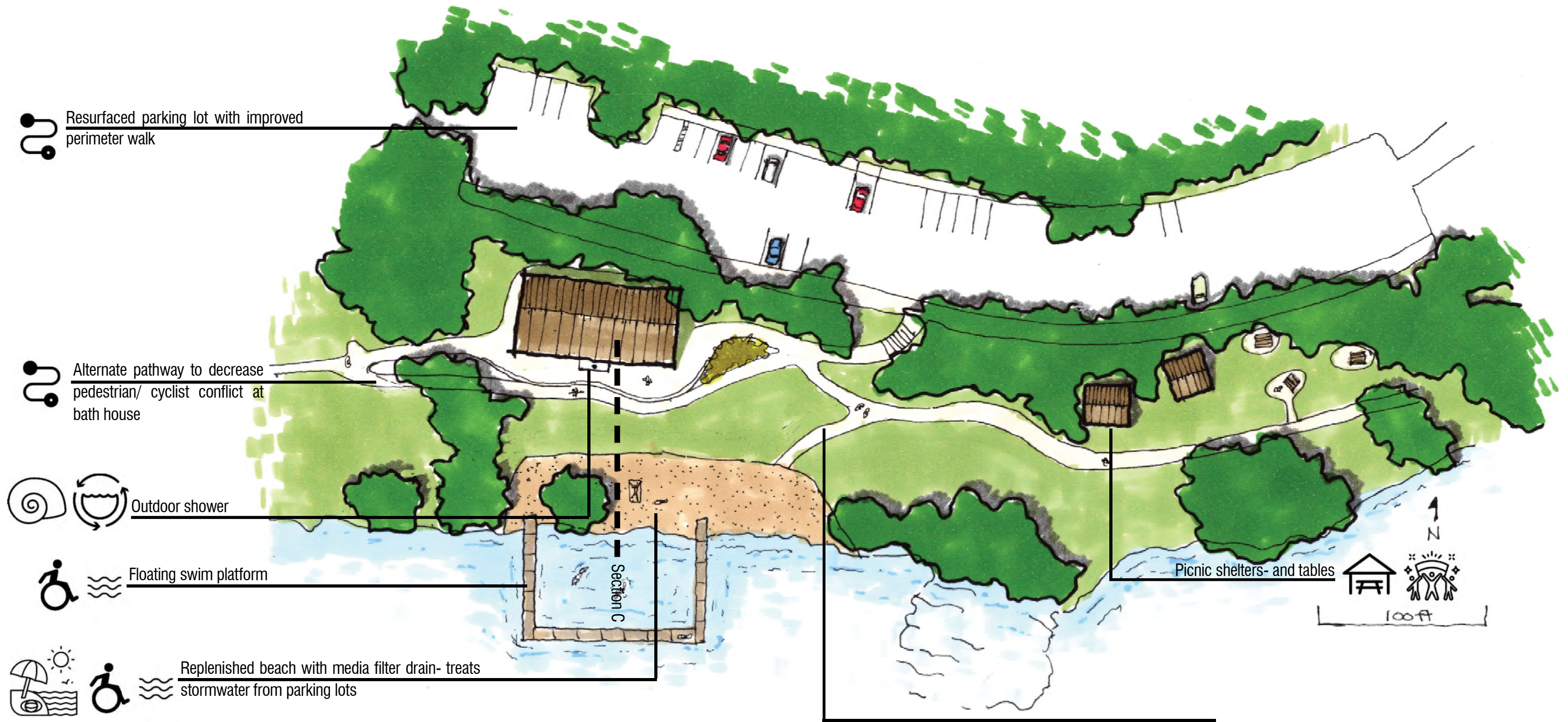


Figure 54: The Beach Update Scenario

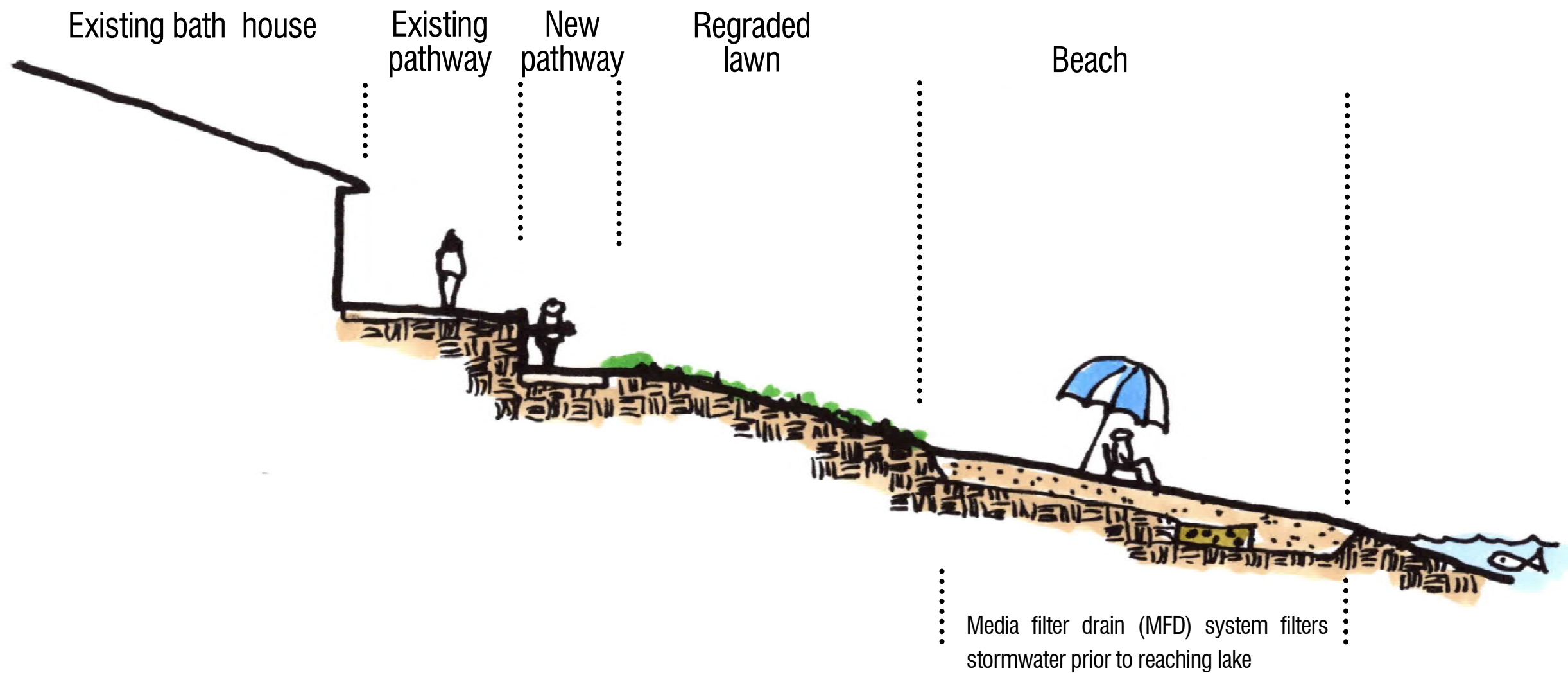


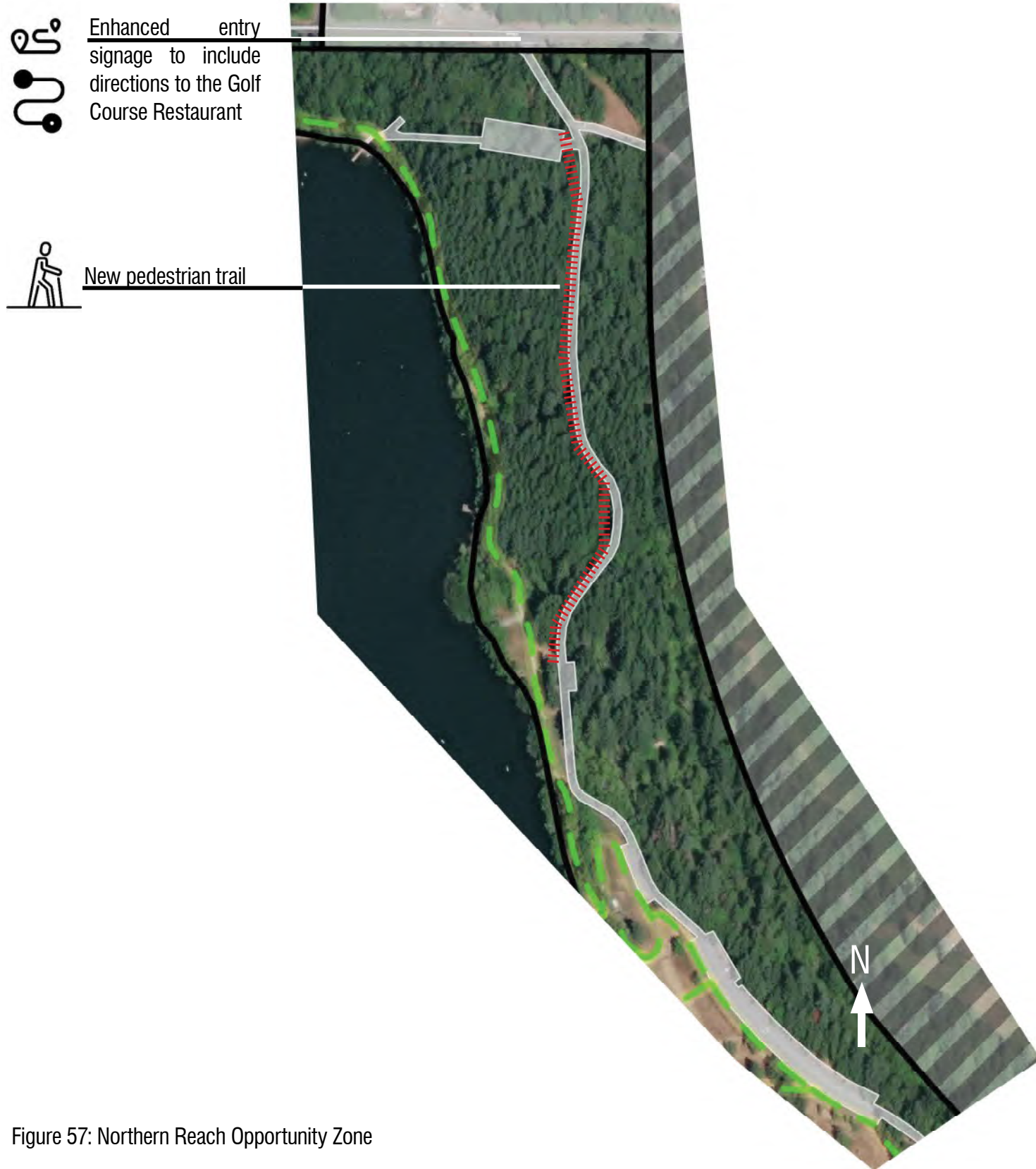
Figure 55: Section C- Beach

The Beach - Southern Section



Figure 56: The Beach - Southern Section

Northern Reach



Shore Walk North

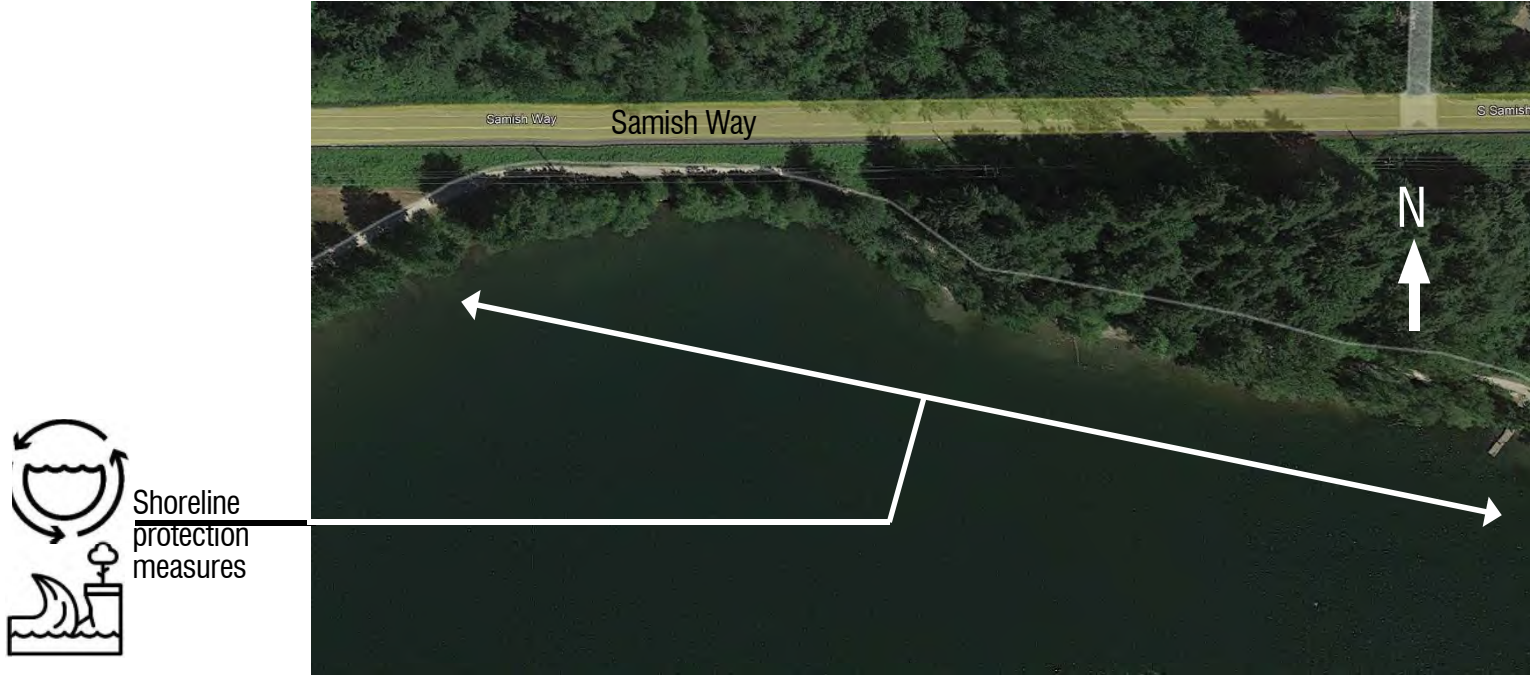


Figure 57: Northern Reach Opportunity Zone

Figure 58: Shore Walk North Opportunity Zone

Boat Launch

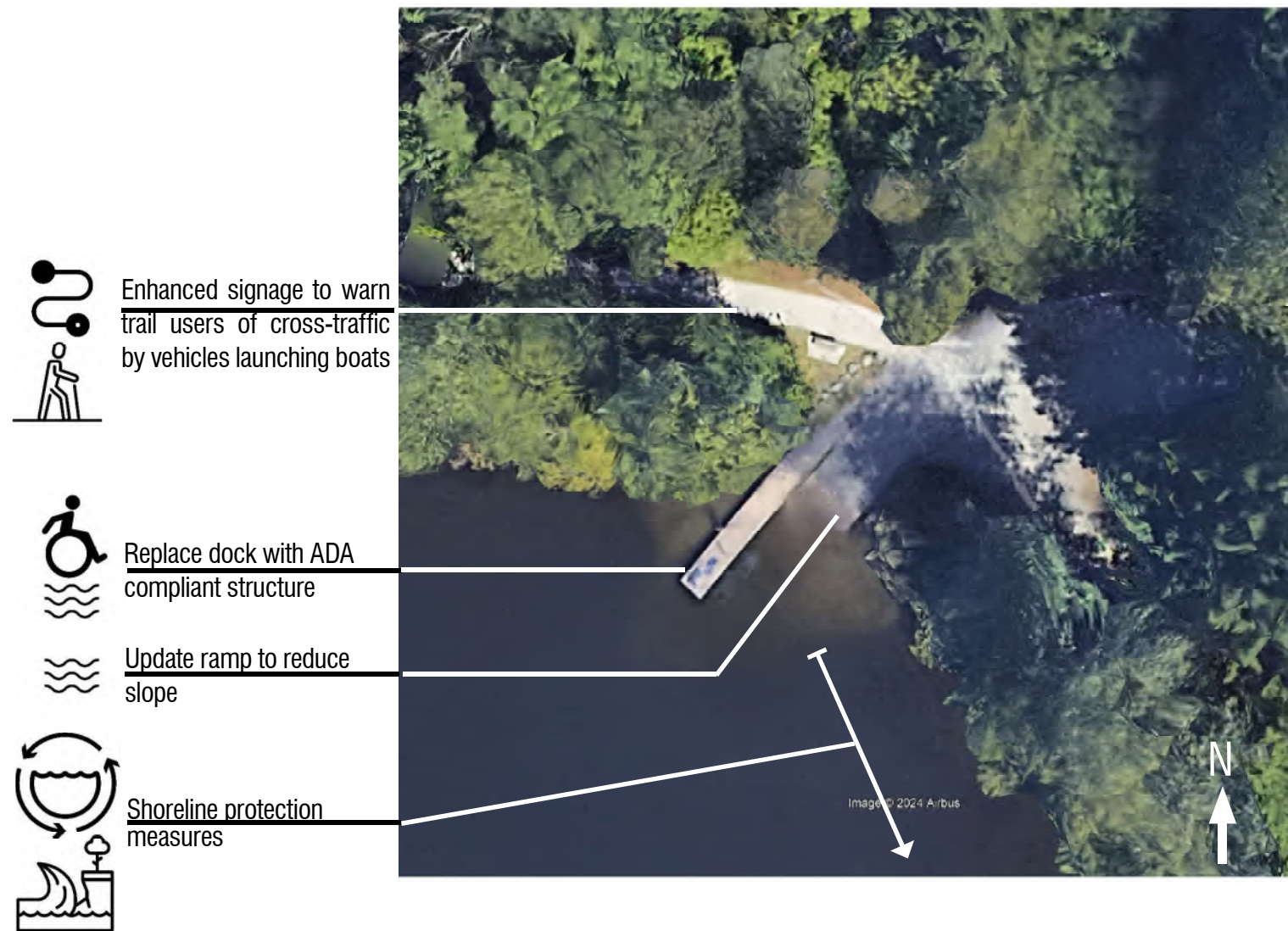


Figure 59: Boat Launch Opportunity Zone

Shore Walk East

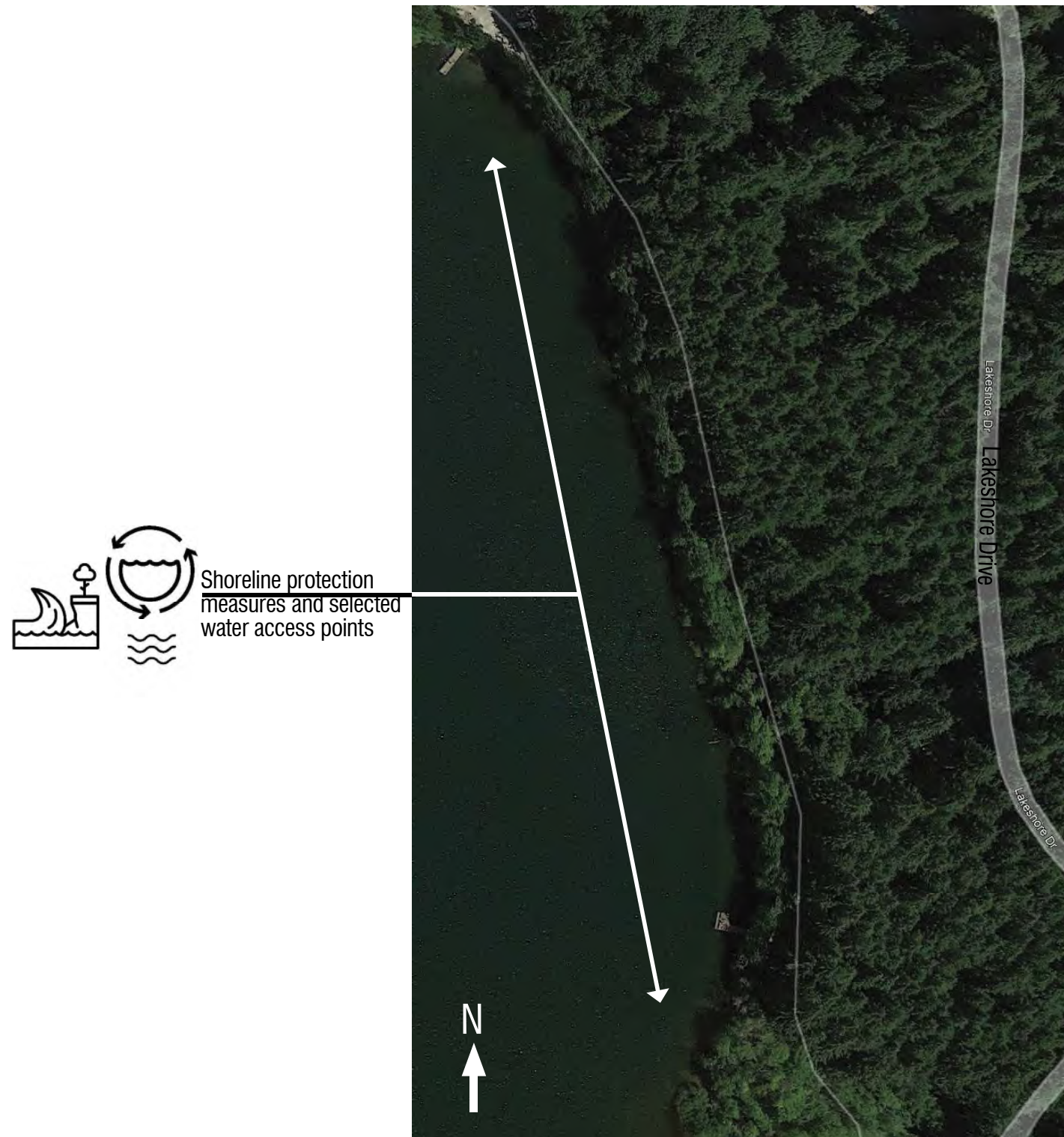


Figure 60: Shore Walk East Opportunity Zone

Picnic Area

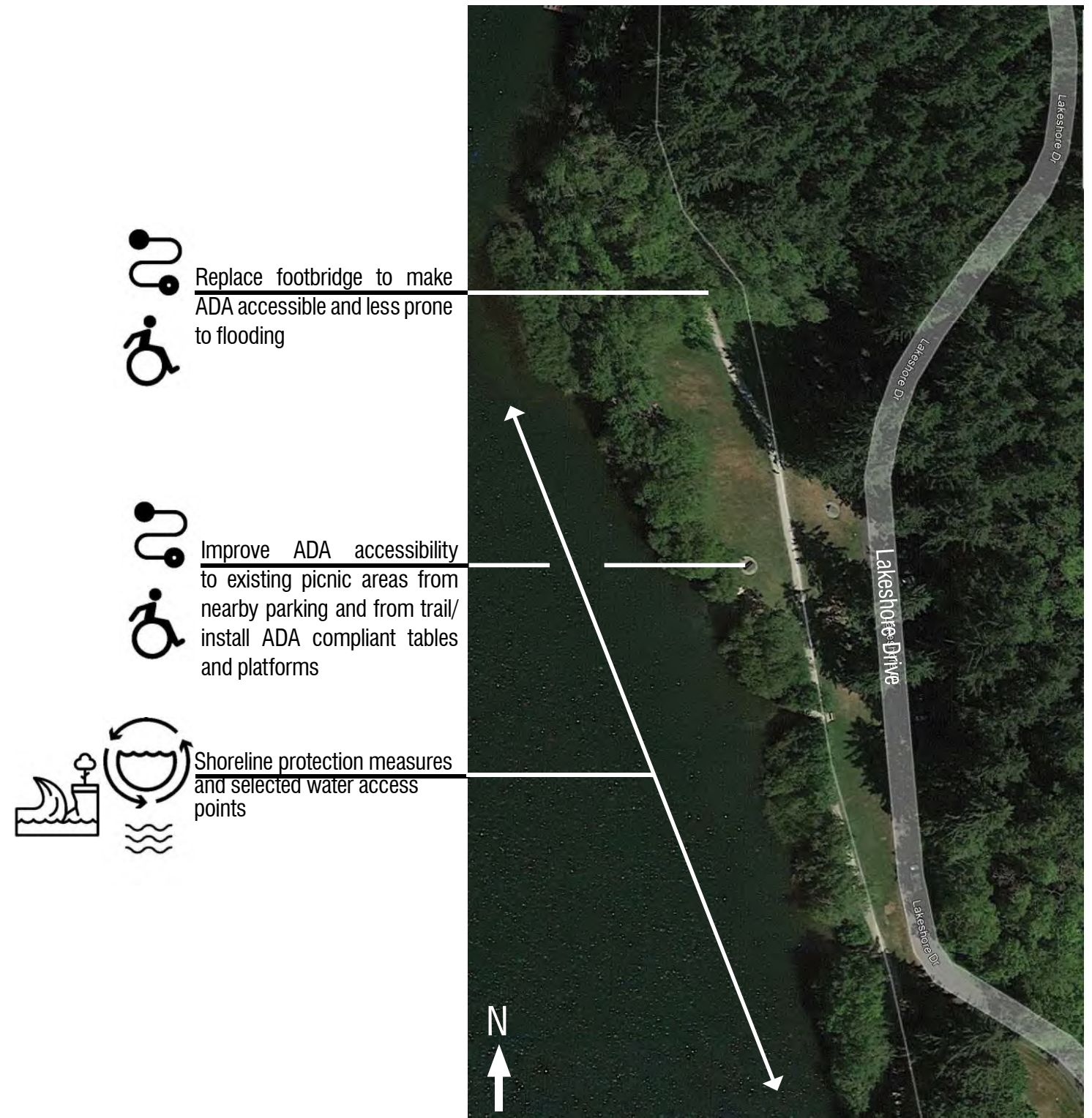


Figure 61: Picnic Area Opportunity Zone

Community Activity Hub

See Figures 66 and 67 for enlargements

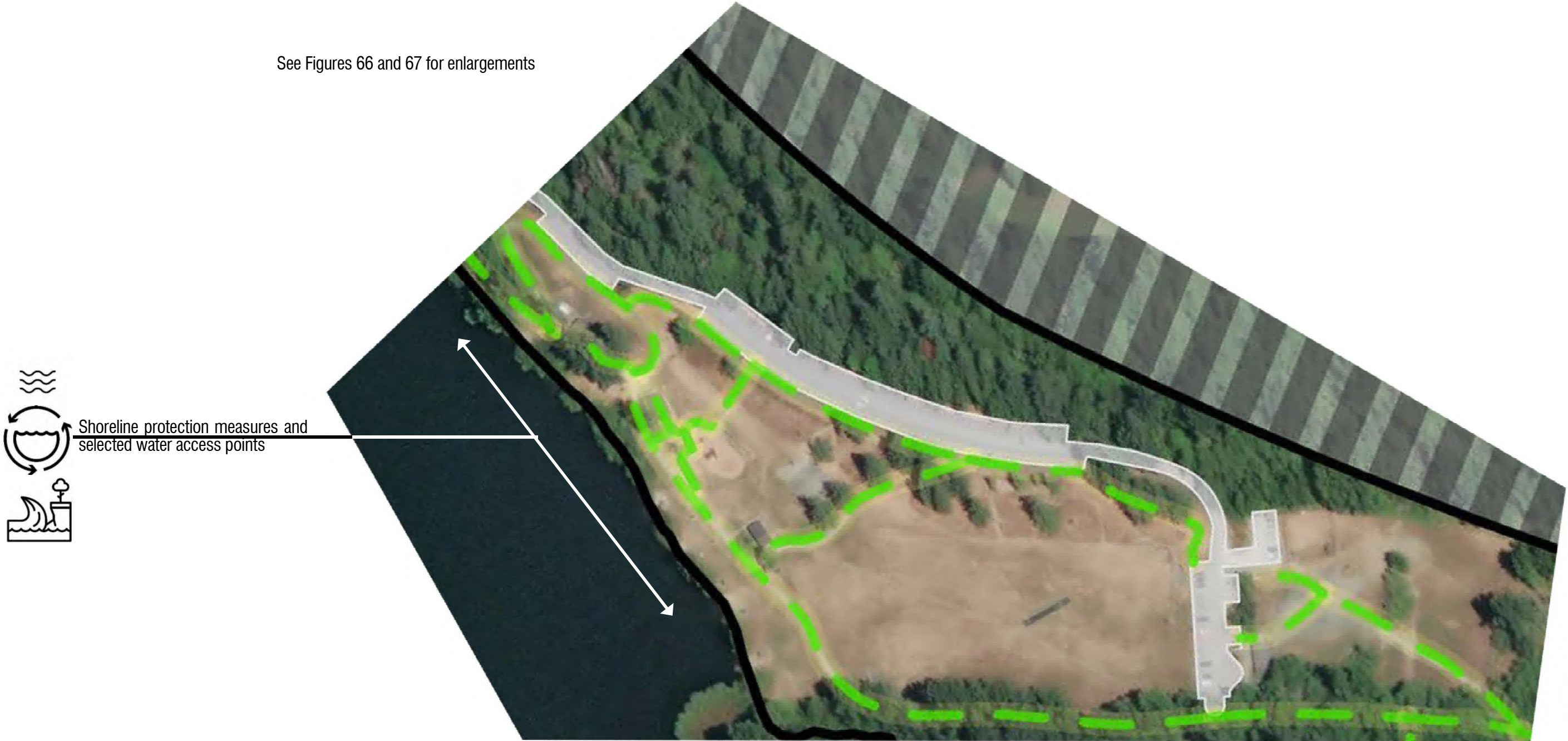


Figure 62: Community Activity Hub Opportunity Zone

Community Activity Hub



Figure 63: Activity Hub and Beach

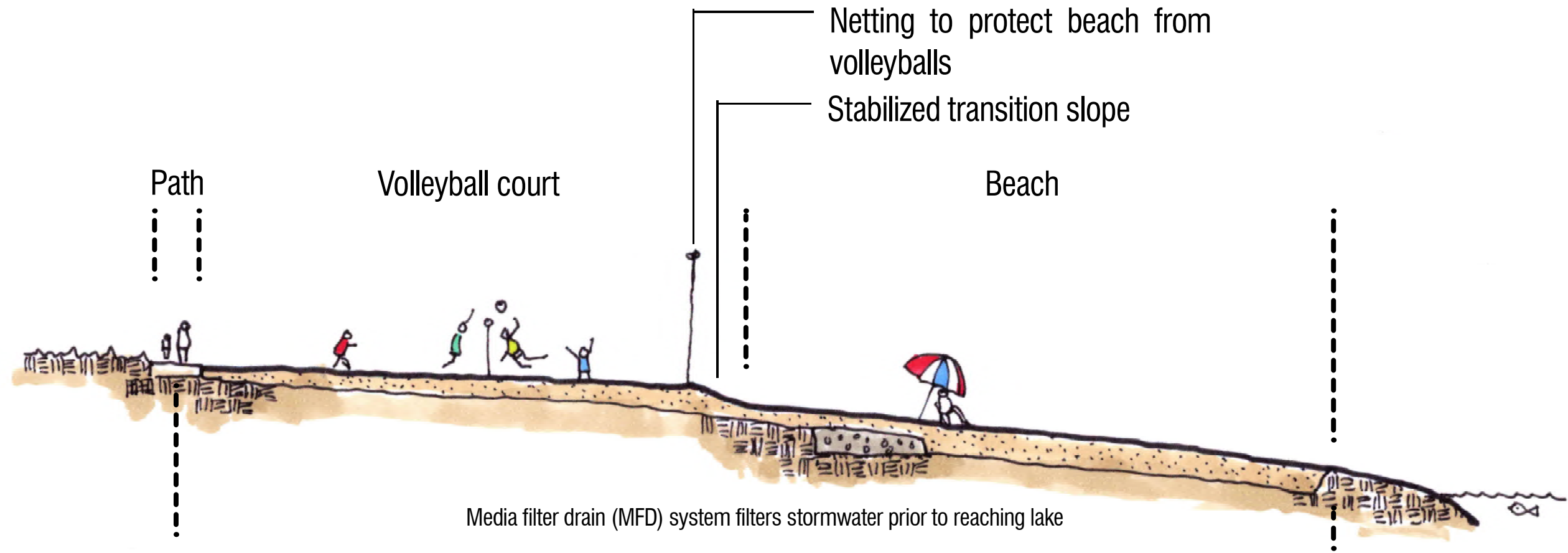


Figure 64: Section A- Southern Beach

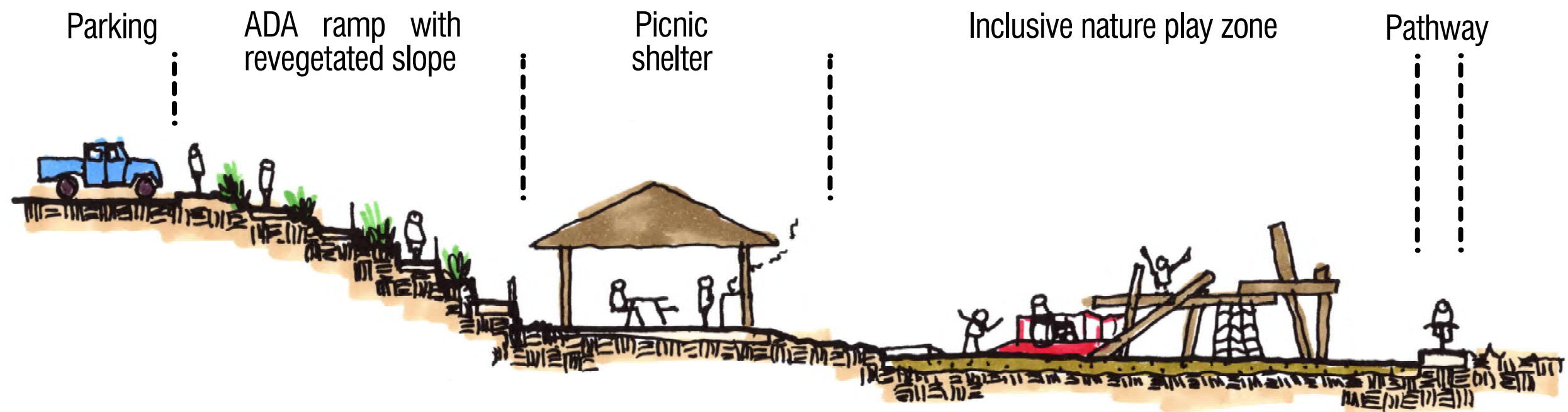


Figure 65: Section B- Community Activity Hub

Community Activity Hub- Multi-use Field and Dog Park



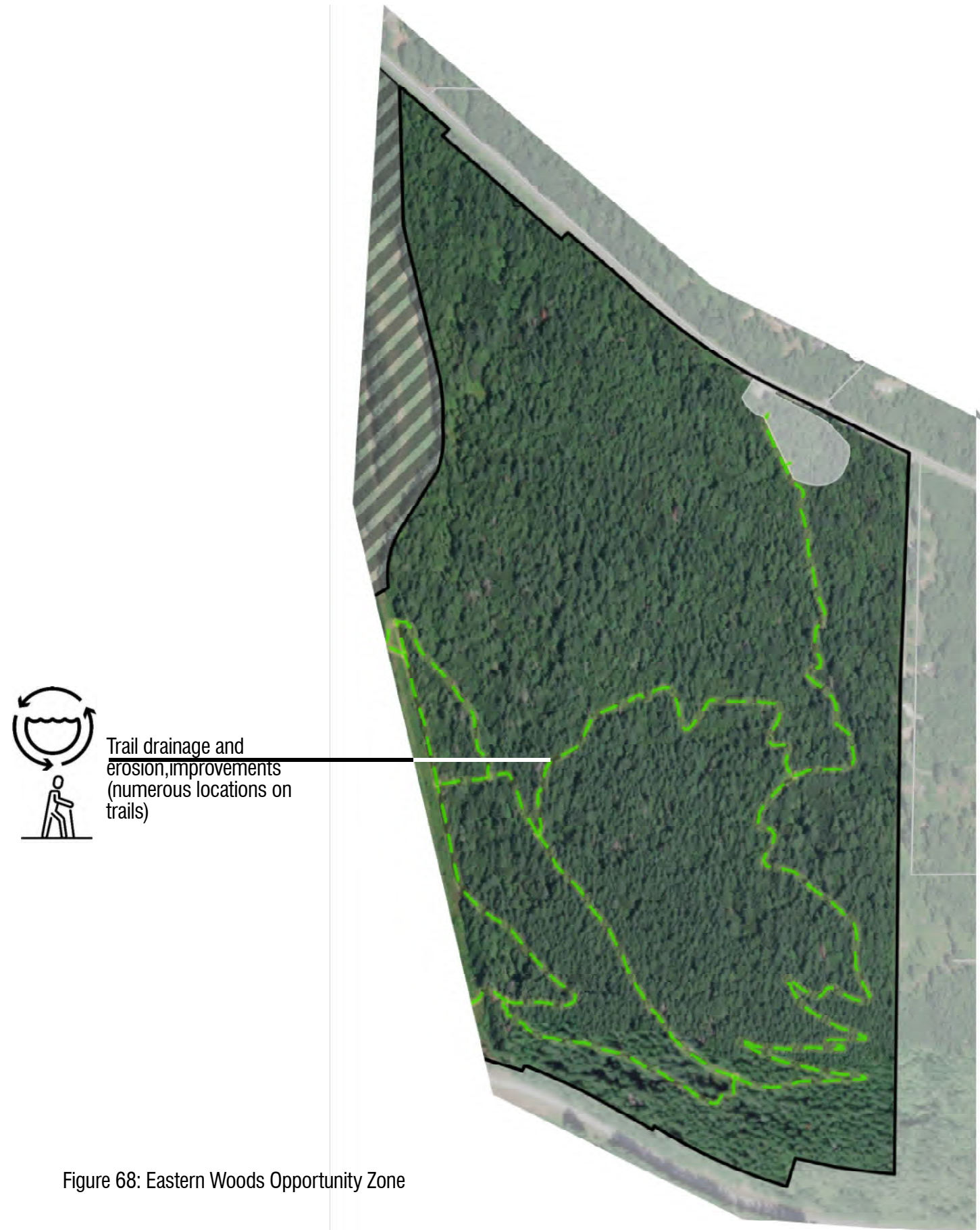
Figure 66: Multi-use Field and Dog Park

Southern Woods



Figure 67: Southern Woods Opportunity Zone

Eastern Woods



Assessment Criteria

Improvements within the Park should be evaluated in their ability to address community input, programmatic, operational and environmental factors. To that end, a series of criteria were developed to help assess and rank the proposed improvements.

- Does the improvement incorporate public desired outcomes? (Y, N, NA)
- Does it promote equity? (Y, N, NA)
- Does it support current and future programming? (Y, N, NA)
- Does it address environmental considerations? (Y, N, NA)
- Does it address Operations and Maintenance (O+M) needs and capabilities? (Y, N, NA)
- Does it fulfill the 2020 PROS plan Levels-of-Service requirements? (Y, N, NA)
- How does it effect staffing? (Increase, decrease, neutral, assumed to be BPRD staff)
- What are the capital costs of the improvement? Cost= (\$: 0 - \$499,000; \$\$: \$500,000 - \$999,999, \$\$\$: > \$1,000,000)

The following table lists improvements by Opportunity Zone, and indicate ratings for those potential improvements by assesemnt criteria.

Figure 68: Eastern Woods Opportunity Zone

Table 5: Improvements Assessment Results

	Improvement	Improvement Theme(s)	Criteria							
			In Public Feedback	Promotes Equity	Supports Programming	Env. Considerations	O+M Considerations	PRO LOS	Staffing Effects	Capital Costs
Padden Gorge	Improve signage and parking at trailhead	Access to park	N	Y	NA	NA	N	NA	NA	\$
Western Shore	Enhance entry signage	Access to park	N	NA	Y	NA	N	NA	NA	\$
	Convert horse parking to car parking	Functional connections	Y	NA	Y	NA	NA	NA	NA	\$
	Shoreline protection and access points	Enhance water quality/ water access	Y	Y	NA	Y	Y	NA	NA	\$
	Update fishing dock	Enhance water access	Y	Y	Y	Y	N	NA	NA	\$
Park West	Resurface parking lot	Functional connections/ ADA access	Y	Y	Y	Y	Y	NA	NA	\$
	Replace timber retaining wall	Operations and maintenance	N	NA	NA	Y	Y	NA	NA	\$
	ADA accessible fishing dock	ADA accessibility/ water access	Y	Y	Y	Y	NA	Y	NA	\$
	Add ADA parking stalls at fishing area	ADA accessibility	N	Y	Y	NA	NA	NA	NA	\$
	MFD for parking lot runoff	Stormwater/ water quality	N	NA	NA	Y	Y	NA	Y	\$
	Resurface tennis court	Sporting amenities	Y	NA	Y	NA	NA	NA	NA	\$
	Remove bulkhead/ restore/ revegetate shoreline	Water quality	Y	NA	Y	Y	Y	NA	NA	\$\$
The Beach	Resurface parking lot/ enhance pedestrian circulation	Functional connections/ ADA access	Y	Y	Y	Y	Y	NA	NA	\$
	Shoreline protection and access points	Enhance water quality/ water access	Y	Y	NA	Y	Y	NA	NA	\$
	ADA accessible paths to beach	ADA accessibility/ water access	Y	Y	Y	Y	NA	Y	NA	\$
	Add alternative path	Functional connections	N	Y	Y	NA	NA	NA	NA	\$
	Add picnic shelters and picnic tables	Community gathering spaces/ ADA accessibility	Y	Y	Y	NA	Y	NA	Y	\$
	Restore/ regrade beach/ MFD	Water access/ stormwater/ water quality	Y	NA	Y	Y	Y	NA	y	\$\$
	Outdoor shower	Control invasive species	Y	NA	Y	Y	Y	NA	NA	\$
	Improve trails from signaled crossing	Access to park	N	NA	Y	NA	N	NA	NA	\$
	Enhance entry signage	Access to park	N	NA	Y	NA	N	NA	NA	\$
Northern Reach	Enhance entry signage	Access to park	N	NA	Y	NA	N	NA	NA	\$
	New pedestrian trail from entrance to Picnic Area	Functional connections	N	Y	NA	NA	N	NA	Y	\$
Shore Walk North	Shoreline protection and access points	Enhance water quality/ water access	Y	Y	NA	Y	Y	NA	NA	\$
Boat launch	Replace dock with ADA accessible structure	ADA accessibility/ water access	N	Y	Y	Y	Y	NA	NA	\$
	Shoreline protection and access points	Enhance water quality/ water access	Y	Y	NA	Y	Y	NA	NA	\$
	Update ramp for more shallow pitch		N	NA	Y	NA	NA	NA	NA	\$

	Improvement	Improvement Theme(s)	In Public Feedback	Promotes Equity	Supports Programming	Env. Considerations	O+M Considerations	PRO LOS	Staffing Effects	Capital Costs
	Enhance safety signage	Trail access/ functional connections	N	NA	Y	NA	NA	NA	NA	\$
Shore Walk East	Shoreline protection and access points	Enhance water quality/ water access	Y	Y	NA	Y	Y	NA	NA	\$
Picnic Area	Shoreline protection and access points	Enhance water quality/ water access	Y	Y	NA	Y	Y	NA	NA	\$
	Enhance ADA accessibility from parking lot and at picnic spots	ADA accessibility	N	Y	Y	NA	NA	NA	NA	\$
	Replace footbridge for ADA access and reduce flooding	ADA accessibility, water quality	N	Y	Y	Y	Y	NA	NA	\$
Community Activity Hub	Shoreline protection and access points	Enhance water quality/ water access	Y	Y	NA	Y	Y	NA	NA	\$
	Add picnic shelters and picnic tables	Community gathering spaces/ ADA accessibility	Y	Y	Y	NA	Y	NA	Y	\$\$
	Outdoor shower	Control invasive species	Y	NA	Y	Y	Y	NA	NA	\$
	Resurface basketball court	Sporting amenities	Y	NA	Y	NA	NA	NA	NA	\$
	Regrade beach/ MFD	Water access/ stormwater/ water quality	Y	NA	Y	Y	Y	NA	Y	\$\$
	Resurface parking lot/ enhance pedestrian circulation	Functional connections/ ADA access	Y	Y	Y	Y	Y	NA	NA	\$
	Install MFD in parking lot	Stormwater/ water quality	Y	NA	Y	Y	Y	NA	Y	\$\$
	Nature based play zone	Destination play area	Y	Y	Y	NA	Y	Y	Y	\$
	Pickleball courts	Sporting amenities	Y	NA	Y	NA	NA	NA	NA	\$
	Add ADA ramps from parking area	ADA access, functional connections	Y	Y	Y	Y	Y	NA	NA	\$\$
	Revegetate slopes above field and hub	Stormwater. Water quality	N	NA	NA	Y	Y	NA	Y	\$
	Enhanced multipurpose sports field	Sporting amenities, support event hosting	Y	NA	Y	Y	Y	Y	Y	\$\$
	MFD for parking lot runoff	Stormwater/ water quality	N	NA	NA	Y	Y	NA	Y	\$
	MFD for dog park runoff	Stormwater/ water quality	N	NA	NA	Y	Y	NA	Y	\$
Southern Woods	Shoreline protection and access points	Enhance water quality/ water access	Y	Y	NA	Y	Y	NA	NA	\$
	Replace, add trail seating	Trail access/ functional connections	Y	Y	Y	NA	NA	NA	NA	\$
	Trail drainage, erosion and accessibility improvements	Trail access/ water quality/ stormwater/ ADA accessibility	Y	Y	NA	Y	Y	NA	Y	\$
Eastern Woods	Trail drainage, erosion and accessibility improvements	trail access/ water quality/ stormwater/ ADA accessibility	Y	Y	NA	Y	Y	NA	Y	\$

References

Center for Disease Control and Prevention. 2023. Parasites – Cercarial Dermatitis. Accessed on December 13, 2023. <<https://www.cdc.gov/parasites/swimmersitch/faqs.html>>

Ecology, Washington State Department of. 2005. Focus on Fecal Coliform Bacteria. Publication # 02-10-010. Olympia, Washington.

Ecology, Washington State Department of. 2023a. Total Maximum Daily Load Process. Accessed on January 2, 2024. <<https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Total-Maximum-Daily-Load-process>>

Ecology, Washington State Department of. 2023b. Water Quality Atlas Mapper. Accessed on December 13, 2023. <<https://apps.ecology.wa.gov/waterqualityatlas/wqa/map>>

Ecology, Washington State Department of. 2024. Lakes Environmental Data. Accessed on January 12, 2024. <<https://apps.ecology.wa.gov/lakes/>>

EPA. 2024. Overview of Wood Preservative Chemicals. Environmental Protection Agency. Accessed on February 22, 2024. <<https://www.epa.gov/ingredients-used-pesticide-products/overview-wood-preservative-chemicals>>

Environmental Science Associates, Veda Environmental, and Northwest Ecological Services. 2015. Final Bellingham Habitat Restoration Technical Assessment. Bellingham, Washington

FEMA. 2024. FEMA Flood Maps. Federal Emergency Management Agency. Accessed on February 22, 2024. <<https://msc.fema.gov/portal/home>>

Matthews, R., J. Vandersypen, and L. Junge. 2012. Lake Padden Monitoring Project 2012 Final Report. Institute for Watershed Studies, Western Washington University. Bellingham, Washington.

Roberts, David. 2013. Final Report on Fecal Coliform Sampling at Lake Padden Park. People for Lake Padden Park.

Troon Golf. 2023. Summary letter and water quality laboratory results from sampling on April 11, 2023. Provided to Herrera Environmental Consultants, Inc., Bellingham, Washington by Peter Gill. February 13.

U.S. Geological Survey. 2024. Nonindigenous Aquatic Species. Accessed on January 12, 2024. <<https://nas.er.usgs.gov/queries/factsheet.aspx?SpeciesID=1008>>.

WISC. 2024. Priority Species. Washington Invasive Species Council. <<https://invasivespecies.wa.gov/find-a-priority-species/>>. Last accessed January 11, 2024.

Washington State Department of Fish and Wildlife. 2024a. Aquatic Invasive Species. Accessed on January 11, 2024. <<https://wdfw.wa.gov/species-habitats/invasive>>.

WDFW. 2024b. Priority Habitats and Species Mapper. Washington State Department of Fish and Wildlife. Accessed on February 22, 2024. <<https://geodataservices.wdfw.wa.gov/hp/phs/>>

WDFW. 2024c. Fishing and Shellfishing – Lake Padden. Washington Department of Fish and Wildlife. Accessed on February 22, 2024. <<https://wdfw.wa.gov/fishing/locations/lowland-lakes/lake-padden>>

WDFW. 2024d. Washington State Fish Passage Mapper. Washington State Department of Fish and Wildlife.

WDFW. 2023. 2023 Statewide Trout and Kokanee Stocking Plan, Appendix A. Washington Department of Fish and Wildlife. Accessed on February 22, 2024. <<https://wdfw.wa.gov/publications/02416>>

Washington State Department of Fish and Wildlife. 2022. Invasive Species Management Protocols, DRAFT Version 4. Washington Department of Fish and Wildlife, Aquatic Invasive Species Unit, Fish Program. September 2022. <<https://wdfw.wa.gov/sites/default/files/publications/01490/wdfw01490.pdf>>

Washington State Department of Health, Department of Ecology, and King County. 2023. Washington State Toxic Algae Freshwater Algae Bloom Monitoring Program. Accessed on December 13, 2023. <<https://www.nwtoxicalgae.org/Default.aspx>>

Washington State Noxious Weed Control Board. 2023. Accessed on December 13, 2023. <<https://www.nwcb.wa.gov/>>

WWU. 2021. New Zealand Mud Snail PowerPoint Presentation with data collected between 2018 and 2021. Provided to Herrera Environmental Consultants, Inc., Bellingham, Washington by Peter Gill. January 8, 2024.

Whatcom County Health Department. 2023. Lakes and Beaches. Accessed on December 13, 2023. <<https://www.whatcomcounty.us/3224/Lakes-Beaches>>

City of Bellingham. 2016. City of Bellingham 2016 Comprehensive Plan. Accessed on February 20, 2024. <<chrome-extension://efaidnbmnnnibpajpcglclefindmkaj/https://cob.org/wp-content/uploads/2016-comprehensive-plan.pdf>>

City of Bellingham. 2020. City of Bellingham Parks, Recreation and Open Space Plan. Accessed on February 20, 2024. <<chrome-extension://efaidnbmnnnibpajpcglclefindmkaj/https://cob.org/wp-content/uploads/2020-pro-plan.pdf>>

City of Bellingham. 2014. Bellingham Bicycle Master Plan. Accessed on February 20, 2024. <<https://cob.org/services/planning/transportation-planning/bike-master-planning>>

City of Bellingham, Shoreline Master Program, 2013. Accessed on February 20, 2024. <<https://bellingham.municipal.codes/BMC/22>>

City of Bellingham Parks and Recreations Department, Recreation program data (special events and permits, 2019-2023)

City of Bellingham Parks and Recreations Department, Trail Counter Data, 2023

City of Bellingham Parks and Recreations Department, Park ambassador logs (August 2023)

City of Bellingham Parks and Recreations Department, Park maintenance logs (2019-2023)

City of Bellingham, 2022 State of the Urban Forest Report. Accessed on February 20, 2024. <chrome-extension://efaidnbmnnnibpajpcglclefindmkaj/https://cob.org/wp-content/uploads/220428_Bellingham-State-of-the-Urban-Forest-Report_v2.pdf>

