SHORELINE

ghosts
of the Sammamish —
morning lake mist

Painting by Anna Macrae
Haiku by Michael Dylan Welch
Introduction

The goals and policies of the Shoreline Element are taken from, and must be consistent with, the City’s Shoreline Master Plan (SMP), a set of goals, policies, and regulations developed by the City as required by the state’s Shoreline Management Act (SMA). The SMA addresses shoreline use, environmental protection of shoreline areas, and public access to these areas. In Sammamish, our SMP sets goals and policies pertaining to the shores of Lake Sammamish, Pine Lake, and Beaver Lake.

The SMA was established in 1972 to protect specified water bodies (marine waters, streams and rivers, and lakes over 20 acres), as well as lands 200 feet landward from the edge of these waters, and wetlands and floodplains associated with them. Current standards for SMPs require that there be “no-net-loss of shoreline ecological functions”, meaning that impacts from shoreline development should be avoided or minimized. The Shoreline Element supports this by including policies to acquire, preserve and enhance shoreline areas, improve and restore shoreline function, and to ensure new development is consistent with the state Shoreline Management Act and the City’s Shoreline Management Program.
Shoreline Goals

Archaeological, Historical and Cultural Resources

The following goals address protection and restoration of buildings, sites and areas having historic, cultural, scientific, and/or educational value.

1. Designate, retain and protect shoreline areas having archeological, historic, cultural, scientific or educational value, locally, regionally, statewide or nationally.

2. Maintain finite and irreplaceable links to the past by identifying, preserving, protecting, and restoring archaeological, historic and cultural sites.

3. Protect historic and cultural sites and buildings that are listed on county, state or national historic registers, or are eligible for such listing, from destruction or alteration and from encroachment by incompatible uses.

4. Acquire archaeological, historical and cultural sites through purchase or gift.

5. Foster a greater appreciation for shoreline management, environmental conservation, natural history, and cultural heritage using signage and other interpretive tools as appropriate.

6. Ensure that tribal governments and the State Department of Archaeology and Historic Preservation are involved in the review of projects that could adversely affect such resources.

7. Protect from intrusion or harm any newly discovered or suspected significant sites until their value for retention is determined.

8. Ensure that the educational and scientific values of archeological, historic, and cultural resources are considered when evaluating proposed shoreline developments and uses.

9. Participate in cooperative restoration programs between local, state, and federal public agencies, tribes, non-profit organizations, and landowners.
Conservation

The following goals address the preservation of natural resources, scenic vistas, aesthetics, and vital shoreline areas for fisheries and wildlife and for the benefit of present and future generations.

1. Acquire (i.e., through purchase, easements, donation or other agreement), and maintain as open space, shorelines with unique or valuable natural attributes for public benefit.

2. Preserve, enhance and/or protect shoreline resources (i.e., wetlands and other fish/wildlife habitats) for their ecological functions and values, and aesthetic and scenic qualities.

3. Maintain natural dynamic processes of shoreline formation and sustainability through effective stewardship, management, and use of shorelines.

4. Where feasible, enhance or restore areas that are biologically and/or aesthetically degraded while maintaining appropriate use of the shoreline.

5. Maintain or enhance shoreline vegetation to protect water quality, fish and wildlife habitat, and other ecological functions and processes.

6. Implement policies that can help reverse impacts caused by existing or past development activities that adversely affect ecological or shoreline functions such as untreated stormwater discharges.

7. Manage the City’s programs, services, and operational infrastructure in a manner that achieves no net loss of ecological or shoreline functions.

8. Achieve no net loss of ecological functions of Sammamish shorelines.
Public Access

The following goals address the ability of the public to reach, touch, view, and travel on the shorelines of the state and to view the water and the shoreline from public locations.

1. Provide opportunities for physical and visual public access to public shorelines when such access can be reasonably accommodated without human health, safety, and/or security risks, while minimizing adverse effects on shoreline functions and processes, private property rights, and/or neighboring uses.

2. Acquire (i.e., through purchase, easements, donation or other agreement) property to provide public access to the water’s edge in appropriate and suitable locations.

3. Ensure that public utility and transportation rights-of-way, including street ends that abut the shoreline, are made available for public access and use where appropriate (see RCW 35.79.035).

4. Ensure that public shoreline recreational facilities and other public access points are connected by trails, pathways, waterways, and other access links where public access and use will not interfere with private property rights.
Public Recreation

The following goals call for providing and expanding water-oriented public recreational opportunities including, but not limited to, parks and ecological study areas.

1. Provide additional public water-oriented recreation opportunities that are diverse, convenient, and adequate for people of different ages, health, family status and financial ability.

2. Locate public recreational uses in shoreline areas that can support those uses without risks to human health, safety, and/or security, while minimizing effects on shoreline functions and processes, private property rights, and/or neighboring uses.

3. Plan for future public shoreline recreation needs, and to acquire (i.e., through purchase, donation or other agreement) shoreline areas that provide active and/or passive recreation opportunities.

4. Support other governmental and non-governmental efforts to acquire and develop additional shoreline properties for public recreational uses.

Shoreline Use

The following goals address the general distribution, location, and extent of all uses within shoreline jurisdiction.

1. Give first preference to water-dependent use including public recreational uses that provide public access to shorelines. Preference should also be given to water-related and water-enjoyment uses.

2. Ensure that shoreline use patterns are compatible with the ecological functions and values, and with the surrounding land use, and that they minimize disruption of these functions and values.

3. Encourage uses that allow or incorporate restoration of shoreline areas that have been degraded as a result of past activities.

4. Ensure that all new development in the shoreline jurisdiction is consistent with the Program, the City’s Comprehensive Plan and the Washington State Shoreline Management Act RCW 90.58.

5. Ensure that shoreline uses satisfy the economic, social, and physical needs of the citizens of Sammamish.
Shoreline Restoration and Enhancement

The following goals address re-establishment, rehabilitation and improvement of impaired shoreline ecological functions and/or processes.

1. Improve and restore shoreline functions and processes over time through regulatory, voluntary and incentive-based public and private programs and actions.
2. Encourage cooperative restoration programs between local, state, and federal public agencies, tribes, non-profit organizations, and landowners.
3. Integrate restoration efforts with other parallel natural resource management efforts including, but not limited to, salmon conservation, basin management, and water cleanup plans.
4. Restore natural ecological or shoreline functions, to the extent reasonable, while pursuing shoreline use goals set forth in sections SMC 25.03.040 and 25.03.050.

Transportation and Public Facility

The following goals address the general location and extent of existing and proposed thoroughfares, transportation/circulation routes, as well as other public utilities and facilities.

1. Develop efficient circulation systems in harmony with the topography and other natural characteristics of the shoreline and in a manner that assures the safe movement of people and goods while minimizing adverse effects on shoreline use and development or on shoreline ecological functions and processes.
2. Provide and/or enhance physical and visual public access to shorelines along public roads (i.e. turnouts and viewpoints) in accordance with the public access goals.
3. Limit circulation systems in the shoreline jurisdiction to those that serve permitted and/or preferred shoreline uses.
4. Limit transportation infrastructure in shoreline jurisdiction to the minimum necessary to accomplish its purpose.
Shoreline Policies

General Policies

Archaeological, Historic and Cultural Resources

a  The City should work with tribal, state, federal and other local governments to identify significant local historic, cultural and archaeological sites consistent with applicable state and federal laws protecting such information from general public disclosure. Such sites should be protected, preserved and/or restored for study, education and/or public enjoyment to the maximum extent possible.

b  When a new use or development is proposed adjacent to an identified historic, cultural or archaeological site, it should be designed and operated to be compatible with continued protection of the historic, cultural or archaeological site.

c  Owners of property containing identified historic, cultural or archaeological sites should coordinate with appropriate tribes, and agencies such as the King County Cultural Resources Division for locally-held information and the Washington State Department of Archaeology and Historic Preservation. Ample time should be allowed to assess the site and make arrangements to preserve historical, cultural and archaeological values.

d  Shoreline use and development should not significantly and negatively impact, destroy, or damage any site having historic, cultural, scientific or educational value.

e  Development plans for public open spaces, trails, or recreation lands should incorporate measures for historic, cultural and archaeological resource preservation, restoration, and education whenever compatible and possible.

Critical Areas and Environmental Protection

a  This Program should provide a level of protection to critical areas within the shoreline jurisdiction that is at least equal to the protection provided by the City’s critical areas regulations (SMC 21A.50) adopted pursuant to the Growth Management Act and the City’s Comprehensive Plan.
New shoreline uses and developments should occur in a manner that maintains existing natural shorelines, assures no net loss of shoreline ecological functions and processes and protects critical areas and associated buffers within the shoreline jurisdiction as designated in SMC 21A.50.

New shoreline uses and developments should be designed and conducted in accordance with the regulations of this Program to avoid, minimize and mitigate damage to the ecology and environment. These regulations are designed to protect shoreline ecological functions and processes. Shoreline ecological functions that should be protected include, but are not limited to, fish and wildlife habitat, conservation and recovery of threatened or endangered species, food chain support and water temperature maintenance. Shoreline processes that should be protected include, but are not limited to, water flow; infiltration; groundwater recharge and discharge; sediment delivery, transport, and storage; organic matter input; and nutrient and pathogen removal.

In assessing the potential for net loss of ecological functions, both project-specific and cumulative impacts should be considered in accordance with WAC 173-26-186(8)(d).
Flood Hazard Reduction

a. Flood hazard reduction should be managed through the City’s Stormwater Management Plan, Comprehensive Plan, and development regulations in SMC 25.05, SMC 15.10 and frequently flooded areas regulations in SMC 21A.50.

b. New development within the floodplains associated with the City’s shorelines that would individually or cumulatively increase the risk of flood damage should be discouraged.

c. Non-structural flood hazard reduction measures should be given preference over structural measures. When necessary, structural flood hazard reduction measures should be accomplished in a manner that assures no net loss of ecological functions and ecosystem-wide processes. Non-structural measures include setbacks, land use controls prohibiting or limiting development in areas that are historically flooded, stormwater management plans, or biomechanical measures.

d. Where possible, public access should be integrated into publicly financed flood control and management facilities on public lands.

Public Access

a. Physical and/or visual access to shorelines should be incorporated into all publicly sponsored shoreline development projects when public health and safety concerns can be adequately addressed and when shoreline ecological functions and/or processes can be adequately protected.

b. The design of all public shoreline access areas should attempt to minimize potential impacts to private property.

Restoration and Enhancement

a. The City should participate in cooperative restoration efforts and programs between local, state, and federal public agencies, tribes, non-profit organizations, and landowners to improve shorelines with impaired ecological functions and/or processes.

b. Restoration actions should improve shoreline functions, processes and/or features that meet the needs of important plant, wildlife and fish species such as kokanee and other native salmonid species.
c Restoration should be integrated with and should support other natural resource management efforts in King County, Water Resource Inventory Area 8, and in the greater Puget Sound region.

d Priority should be given to restoration actions that meet the goals contained in the restoration element of this Program.

Shoreline Use

a The following uses/developments should be given preference consistent with the priority listed below for locating within the shoreline jurisdiction when they are consistent with City zoning regulations and located, designed, and maintained in a manner that is consistent with this Program:

i Water-dependent and water-related use/development; and
ii Public uses and developments that provide physical and/or visual access to the shoreline for substantial numbers of people, and

iii Single-family residences developed consistent with the policies of 25.04.030(1).

b The City should reserve areas for protection and restoration of ecological functions to control pollution, protect public health, and prevent damage to the environment.

c Non-water-oriented uses/developments should be limited to those shoreline locations where water-oriented uses are inappropriate.

d Non-water-oriented uses/developments should be allowed only when they demonstrably contribute to the objectives of the Shoreline Management Act.

Shoreline Vegetation Conservation

a New shoreline uses and developments should be planned and designed to retain or replace shoreline vegetation with the overall purpose of achieving no net loss of the ecological functions performed by the vegetation. Important functions of shoreline vegetation include, but are not limited to:

i Providing shade necessary to maintain water temperatures required by salmonids and other aquatic biota; and

ii Providing organic inputs necessary for aquatic life, including providing food in the form of various insects and other benthic macro invertebrates; and

iii Stabilizing banks, minimizing erosion and sedimentation, and reducing the occurrence/severity of landslides; and

iv Reducing sediment input into lakes by minimizing erosion, aiding infiltration, retaining runoff, and managing stormwater from roads and upland areas; and

v Improving water quality by preventing wind mixing, and facilitating infiltration and vegetative uptake of nutrients and pollutants; and

vi Providing habitat for wildlife, including connectivity for travel and migration corridors.
b  Clearing and thinning should be limited to minimize adverse impacts on ecological functions and values and protect slope stability. Vegetation conservation is encouraged to protect shoreline ecological functions and aesthetics.

Site Planning

a  New shoreline uses and developments should be designed in a manner that directs land alteration to the least sensitive portions of the site to maximize vegetation conservation; minimize impervious surfaces and runoff; protect riparian, nearshore and wetland habitats; protect fish and wildlife and their habitats; protect archaeological, historic and cultural resources; and preserve aesthetic values.

b  Low Impact Development (LID) stormwater management practices are encouraged where site conditions allow in order to minimize impervious surface area and surface runoff in accordance with the Low Impact Development: Technical Guidance Manual for Puget Sound, by Puget Sound Action Team and WSU 2005, SMC 21A.85 and the city’s adopted stormwater management policies and regulations.

c  Where geologic conditions are conducive to infiltration, the City encourages infiltration systems for stormwater that mimic the natural infiltration and ground water interflow processes as long as the infiltration will not create or exacerbate slope instability or degrade water quality.

d  New shoreline uses and developments should not deprive other uses and users of reasonable access to navigable waters and/or restrict access of treaty tribes to their “usual and accustomed” areas.
Views and Aesthetics

a. New shoreline uses and developments should be encouraged to minimize obstructions of the public’s visual access to the water and shoreline from public lands, rights-of-way and other public property.

b. New shoreline uses and developments should not significantly detract from shoreline scenic and aesthetic qualities that are derived from natural or cultural features, vegetative cover and historic sites/structures.

Water Quality, Stormwater and Nonpoint Pollution

a. New shoreline uses and developments are encouraged to be located, constructed, operated, and maintained to prevent water quality and storm water quantity impacts that would adversely affect shoreline ecological functions, or cause significant impact to shoreline aesthetics or recreational opportunities.

b. New shoreline uses and developments should incorporate strategies to control phosphorus loading of lakes over the long term.

c. New shoreline uses and developments should be designed and operated to minimize the need for chemical fertilizers, pesticides or other chemical treatments to prevent contamination of surface and ground water and/or soils and minimize adverse effects on shoreline ecological functions.

d. New shoreline uses and developments are encouraged to minimize impervious surface and incorporate low impact development stormwater management techniques where reasonable to minimize surface water runoff and prevent water quality degradation.

e. Point and non-point source pollution should be managed on a comprehensive, basin-wide basis to protect water quality and support the efforts of shoreline property owners to maintain shoreline ecological functions.
Shoreline Modification Policies

Boat Launch Ramps, Boating Facilities, Docks, Floats, Mooring Buoys, and Boats/Watercraft Lifts

a. The City should assess regional needs for public boat launches so they can be co-located with other compatible water-dependent uses. The City should review proposals for new motorized boat launch facilities with regional recreation providers, including the Washington State Parks Department, adjacent cities, and King County, to avoid duplication and to minimize adverse impacts to shoreline ecological functions and processes. This policy is not intended to limit new locations for the public to launch human powered watercrafts (such as kayaks and canoes) as long as the developments do not result in the construction of additional launches as defined in (SMC 25.02.010(14)).

b. New or expanded public launch ramps and rails should only be sited where they have no negative impact on critical areas or habitat with which priority species have a primary association.

c. New private boat launch ramps and rails should be discouraged.

d. Private beach clubs, associations of five (5) or more residences with existing facilities, and jointly owned waterfront parcels may have docks, mooring buoys, and floats consistent with the Policies in this section.

Docks, Floats, Mooring Buoys and Boat/Watercraft Lift (including Boating Facilities)

a. New public and private docks, floats, mooring buoys and lifts should be designed and constructed with appropriate mitigation as required by this Program to ensure no net loss of ecological functions.

b. New private docks, floats, and lifts should not be placed in locations where they will impact critical habitats where alternative locations are available.
c  New shared or joint-use docks are preferred over single-user docks.

d  The type, design, and location of docks, floats, mooring buoys and lifts should be consistent with applicable state and federal regulations and compatible with the area in which they are located. The City should consider shoreline characteristics, shoreline functions and processes, wind and wave action, water depth, aesthetics, and adjacent land and water uses when assessing compatibility.

Dredging

a  Dredging should only be allowed in the following circumstances:

   i  When needed to facilitate ecological restoration or enhancement;

   ii When needed to construct facilities for public access or water-oriented public recreation.

b  New development should be sited and designed to avoid the need for maintenance dredging.

c  When allowed, dredging should be planned and operated to minimize adverse impacts to shoreline ecology, to existing shoreline uses, and to minimize interference with navigation.

d  Dredging for the primary purpose of obtaining fill material to create uplands is not allowed.
Filling and Excavation

a Fill and excavation should be allowed only in association with a permitted use/development and where allowed should be the minimum necessary to accommodate the proposed use.

b Filling and excavation should not be allowed where structural shoreline stabilization would be needed to prevent the fill from eroding.

c The perimeter of fill and excavation activities should be designed to avoid or eliminate erosion and sedimentation impacts, both during initial fill and excavation activities and over time.

d When allowed, filling and excavation should be conducted so that water quality, habitat, hydrology, and drainage patterns are not adversely affected.

e Excavation waterward of OHWM shall be considered dredging and shall be subject to the dredging policies and regulations of this Program.

Shoreline Stabilization

a New developments should be designed and located to avoid the need for new stabilization measures.

b Bulkheads and other forms of hard structural shoreline stabilization should be discouraged. Bulkhead alternatives that implement bioengineering and bio-stabilization methods should be used where reasonable.

c Shoreline stabilization including bulkheads and bulkhead alternatives should be located, designed, and maintained to minimize adverse effects on shoreline ecology, including effects on the project site and adjacent properties over time. Probable effects of proposed shoreline stabilization on ongoing shoreline processes and functions should be fully evaluated for consistency with this Program.

d Shoreline stabilization should be located and designed to fit the physical character of a specific shoreline reach, which may differ substantially from adjacent reaches.

e Shoreline stabilization should not interfere with existing or future public access to public shorelines or with other appropriate shoreline uses.

Logs and boulders protect the shoreline along Pine Lake (credit: Eric Willhite)
Shoreline stabilization projects on public lands should be designed to accommodate multiple use, restoration, and/or public access, provided that safety and ecological protection are fully addressed.

Failing, harmful, unnecessary, or ineffective shoreline stabilization structures should be removed, and shoreline ecological functions should be restored using bulkhead alternatives.

The City should facilitate voluntary enhancement and restoration projects that replace hard structural shoreline stabilization with bulkhead alternatives and bio-engineered approaches. The City should provide technical assistance, education, and regulatory incentives for hard structural shoreline stabilization removal and restoration.

Where existing legally established bulkheads are substantially repaired or replaced, property owners should make reasonable efforts to incorporate bioengineering and fisheries habitat enhancement design elements to minimize adverse effects on shoreline functions.

Residential Use

Single-family residences and their normal appurtenant structures including accessory dwelling units, are a preferred shoreline use when developed in a manner consistent with control of pollution and prevention of damage to the natural environment. New residential development in the shoreline jurisdiction should be located and designed to minimize adverse effects on shoreline process and functions. Residential development should not be allowed to result in a net loss of shoreline ecological functions.

New structures for uses accessory to residential development should minimize impervious surface and vegetation clearing, be visually and physically compatible with adjacent shoreline features, and be reasonable in size and purpose.

New residential developments should be encouraged to protect, enhance, and restore shoreline ecological functions using low impact development stormwater management techniques and other conservation measures.

Dwelling units should not occur over water.
Recreational Use

a Public recreational development should be located on public lands to facilitate the public’s ability to reach, touch, and enjoy the water’s edge, to travel on the waters of the state, and to view the water and the shoreline.

b Public recreational development should incorporate public education regarding shoreline ecological functions and processes, the effect of human actions on the environment and the role of the public in shoreline management.

c Public recreational development should be located where existing infrastructure (utilities and roads) is adequate, or may be provided without significant damage to shoreline features commensurate with the number and concentration of anticipated users.

d Public recreational development should use low impact development stormwater management techniques and other methods that protect, enhance, and restore shoreline ecological functions where reasonable.
Transportation Use Policies

a New public transportation uses and facilities should be located outside of the shoreline jurisdiction unless alternative locations are infeasible or the transportation facility is required to serve water-dependent public uses.

b When required, new transportation uses and facilities should be planned to fit the topographical characteristics of the shoreline and to minimize alterations to the shoreline environment.

c When existing public transportation uses and facilities located within shoreline jurisdiction require maintenance or other improvements to address public health and safety, the maintenance/improvement should be designed and implemented to minimize additional impacts on the shoreline environment and consideration should be given to correcting past impacts caused by the transportation facility.

d Public transportation development should use low impact development stormwater management techniques and other methods that protect, enhance, and restore shoreline ecological functions where reasonable.

Utility Use

a New public or private utilities should be located inland from the land/water interface, preferably outside of shoreline jurisdiction, unless:
   i They have a water-dependent component such as a water intake or outfall; or
   ii Water crossings are unavoidable; or
   iii Other locations are infeasible; or
   iv They are required for authorized shoreline uses consistent with this Program.

b Utilities should be located and designed to avoid public recreation and public access areas and significant natural, historic, archaeological or cultural resources.

c Development of pipelines and cables, particularly those running roughly parallel to the shoreline, and development of facilities that may require periodic maintenance that would disrupt shoreline ecological functions, should be discouraged except where no other reasonable alternative exists.
d When existing utilities located within shoreline jurisdiction require maintenance or other improvements to address public health and safety, the maintenance/improvement should be designed and implemented to minimize additional impacts on the shoreline environment and consideration should be given to correcting past impacts caused by the utility.

e Public utility development should use low impact development stormwater management techniques and other methods that protect, enhance, and restore shoreline ecological functions where reasonable.

f When new utilities are to be located within shoreline jurisdiction, they should be installed in such a manner to achieve no net loss of ecological function. City of Sammamish Shoreline Master Program

**Agricultural Use**

a New agricultural operations should be discouraged.

b Existing agricultural operations may continue consistent with the goals, policies and regulations of this Program.