ENVIRONMENTAL ELEMENT

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ENVIRONMENTAL ELEMENT

INTRODUCTION

This element addresses the natural environment of Bainbridge Island. The Environmental Element includes goals and policies for all lands considered critical areas under the Growth Management Act, such as wetlands, streams, aquifer recharge areas, fish and wildlife habitat, frequently flooded areas, and geologically hazardous areas. This element also addresses natural resources such as forests, agricultural lands, and mineral resources and provides goals and policies concerning air quality and the retention and development of the Greenways trails and open space system.

Preserving and protecting the environmental resources and natural amenities of the Island is an important component for the vision of our city. Bainbridge Island contains interconnected forests, meadows, wetlands and stream systems, and saltwater shorelines, all of which provide wildlife habitat and scenic value, and some of which are protected as public parkland. The Island also contains agricultural lands and land areas that are sensitive due to geological conditions, slope and/or soil types.

As our Island grows and develops, continued protection of varied open space areas and environmentally sensitive landscape is necessary to maintain the quality of life that is currently enjoyed on Bainbridge Island.

Citizens of Bainbridge Island enjoy and value the Island's natural environment. The public parklands, open spaces, and other natural areas contribute to the quality of life on the Island. The Bainbridge Island Community Values Survey – 2000, indicates that the citizens' support for preservation of environmentally sensitive areas and agricultural lands remains high. It also indicates that the community is supportive of providing pedestrian and bicycle trails and increased public access to shorelines.

Understanding the functions of the Island's valuable natural systems and what types of activities may impact these functions is key to protecting these lands and natural resource areas. Retaining the viability and ecological functions of our natural systems and protecting those areas that are sensitive to development is paramount to maintaining a healthy natural environment and a high quality of life.

The goals and policies of the Environmental Element attempt to guide future action such that the quality of the Island's natural environment is protected and maintained, and when possible, restored and improved. Future actions will incorporate the best available science as required by RCW 36.70A.172.

GOALS AND POLICIES

Environment

GOAL 1

Preserve and enhance Bainbridge Island's natural systems, natural beauty, and environmental quality.

EN 1.1

Land use decisions shall be made seriously considering the overall goal of the Comprehensive Plan in protecting the Island's natural environment.

EN 1.2

Taking into account the need to reduce the potential for personal injury, loss of life, or property damage due to flooding, erosion, landslides, seismic events, or soil subsidence, properties adjoining or adjacent to critical areas must be developed in observance of the following principles in descending order:

- Avoid the impact, if possible.
- Minimize or limit the degree or magnitude of the action and its implementation by using appropriate technology to avoid or reduce impacts.
- Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action.
- Rectify by repair, rehabilitation, or restoration of the affected environment.
- Compensate for unavoidable impacts by replacing, enhancing or providing substitute resources or environments.

Discussion: Critical areas are intended to flag concerns in the review process and to make applicants aware of potential hazards or areas which may be damaged by unsound development decisions. The designations are not intended to eliminate all development. Development in these areas may be constrained. Compatible development will be allowed which avoids designated critical areas, minimizes the impact, or mitigates potential problems through engineering, siting, design, or other techniques. Proposals will be examined on a case-by-case basis to allow for creative solutions and to assure that the special combinations of factors in a particular case are addressed.

EN 1.3

Protect and enhance the natural systems and environmental quality of Bainbridge Island by building a cooperative relationship between the City, citizens, landowners, and other public and private agencies.

EN 1.4

Encourage community land use plans and development patterns that maintain, enhance, or restore natural systems, and protect wildlife, fish resources and open spaces.

EN 1.5

The City shall create overlay maps which show the location of critical aquifer recharge areas, geologically hazardous areas, floodplains, streams, wetlands, and fish and wildlife habitat.

EN 1.6

The City will use the City's Shoreline Management Master Program to address and protect marine fish and marine shoreline habitat.

GOAL 2

Encourage sustainability in City Government operations.

EN 2.1

In managing City government operations, take reasonable steps to reduce impacts to the environment and ecosystems upon which we depend.

EN 2.2

Seek to minimize the quantity and toxicity of materials used and waste generated for City facilities and operations through reduction, reuse, and recycling.

EN 2.3

Use, where feasible, new technologies that demonstrate ways to reduce environmental impacts.

GOAL 3

Whenever there is a subdivision of land, the City shall consider the impact on critical areas.

EN 3.1

The number and design of lots shall be based on avoiding or minimizing the impact to critical areas and protecting natural systems. Development shall be consistent with the objectives of the Critical Areas policies rather than maximizing the number of lots. In order to protect critical areas, the full density permitted under the zoning ordinance might not be achieved.

Discussion: Although it may be possible to obtain maximum density on a site which has one or more critical areas, there may be sites which do not have the capacity to obtain maximum density and protect critical areas.

EN 3.2

Creative solutions (such as flexible lot design, TDRs, and PDRs), which may allow the maximum number of lots while protecting critical areas, should be explored.

EN 3.3

Any lot created by subdivision of land shall include sufficient area to accommodate a building site not in a critical area.

GOAL 4

Encourage sustainable development that maintains diversity of healthy, functioning ecosystems that are essential for maintaining our quality of life and economic viability into the future.

EN 4.1

Encourage planning and land development using conservation design methods and principles such as, low impact development techniques, green building materials and mitigation that offsets impacts to biodiversity.

EN 4.2

Create a program with effective mechanisms intended to offset development impacts to biodiversity, including developing a priority lands map that identifies areas with a high level of biodiversity and considering establishing a habitat bank on the Island.

EN 4.3

Provide incentives for developments to offset unavoidable impacts to biodiversity in areas where high-quality natural habitats exist.

Fish and Wildlife

GOAL 1

Protect and enhance wildlife, fish resources and natural ecosystems on Bainbridge Island.

FW 1.1

The protection and enhancement of wildlife habitat shall be an integral component of the land use planning process. Land uses and developments shall minimize the impacts to priority habitat and priority species as defined by the Washington Department of Fish and Wildlife, and to species or habitat determined to be locally significant.

FW 1.2

The identification of priority habitat shall be based on an evaluation of the species of wildlife on the Island and the habitat requirements of these species.

FW 1.3

The protection and enhancement of priority habitat shall be one of the criteria used when evaluating the preservation of open space as part of development techniques, such as clustering, flexible lot design subdivisions, and transfer of development rights (TDRs).

FW 1.4

The City shall protect priority habitat and limit fragmentation of habitat that isolates wildlife populations (physically and genetically) by identifying an interconnected system of corridors which will provide continuous links east to west and north to south, connecting larger tracts identified as priority habitat.

FW 1.5

Wetlands and riparian areas shall be protected.

FW 1.6

The City shall undertake appropriate, adequate, and timely actions to protect and recover state priority species, species listed under the federal Endangered Species Act, local species of concern, and their habitats located within the City to 1) avoid local extirpation of such species from the lands or fresh waters or nearshore of the City and 2) contribute to the protection and recovery of such species throughout the greater region in cooperation with federal, state, and other local agencies.

Discussion: Local extirpation means the elimination of self-sustaining residential populations from the entire Island and its waters, or adequate habitat to sustain use of the Island's lands and waters by transitory or migratory populations.

FW 1.7

The City shall work closely with the Washington State Department of Fish and Wildlife (the agency with expertise to "preserve, protect, and perpetuate" wildlife resources of the state) in matters involving wildlife.

FW 1.8

The City, in coordination with the Department of Fish and Wildlife and the Bainbridge Island Parks District, shall develop a program to educate the citizens of the Island, particularly those citizens who reside adjacent to priority wildlife habitat, on ways to utilize private property in a manner which will help to protect and enhance priority wildlife habitat.

Aquatic Resources

GOAL 1

Preserve and protect the Island's remaining aquatic resources' functions and values.

Discussion: Aquatic resources include marine nearshore, wetlands, streams, lakes, creeks, and associated vegetated areas.

Over the past decade, awareness has grown of the importance of aquatic resources, particularly wetlands, in our natural and built environment. Aquatic resources have a number of important ecological functions and values. These functions vary from wetland to wetland, stream to stream, but include providing water quality protection, flood plain control, shoreline stabilization, contributions to groundwater and stream flows and wildlife and fisheries habitat. Wetlands and streams also have values as natural areas providing aesthetic, recreational and educational opportunities that need to be preserved for future generations.

AQ 1.1

Achieve no overall net loss of the City's remaining, regulated, aquatic resources.

AQ 1.2

Development shall not be approved in regulated wetlands, streams, or buffer areas, unless a property owner would be denied all reasonable use of property.

Discussion: In some cases, buffer configurations and widths can be modified to allow normal usage of legally established lots. In other cases, the development and implementation of a habitat management plan may provide resource protection to allow development. A variance process should be available to accommodate development in buffer areas. Reasonable use exception should be reserved for development in the critical area if no other process will allow for a reasonable use of the property. A Reasonable Use Exception (RUE) is a form of variance from regulations that allows some use of a legally established lot. A reasonable use must minimize the impact to critical areas. The RUE process is included in the critical areas regulations of the Bainbridge Island Municipal Code, which implements policies of this document.

AQ 1.3

Require that vegetated buffers be maintained between proposed development and the aquatic resource in order to protect the functions and values of such systems. Degraded buffers should be restored to enhance their function. Reductions in vegetated buffers shall be allowed only in areas where such reductions, if consistently applied, would not result in significant cumulative impacts to aquatic resources and fish and wildlife habitat.

AQ 1.4

Require that buffers be retained in their natural condition wherever possible, while allowing for appropriate maintenance. Where buffer disturbance has occurred, require revegetation with appropriate species, with a preference for native species, to restore the buffers' protective values.

Discussion: Vegetated buffers facilitate infiltration and maintenance of stable water temperatures, provide the biological functions of flood storage, water quality protection and groundwater recharge, reduce amount and velocity of run-off, and provide for wildlife habitat.

AQ 1.5

Ensure that development activities are conducted so that aquatic resources and natural drainage systems are maintained and water quality is protected.

AQ 1.6

Prior to any clearing, grading, or construction on a site, all wetlands, streams, and buffer areas should be specifically identified and accurately located in the field in order to protect these areas during development. After construction, permanent visual markers should be placed around the buffer areas.

Discussion: The purpose of this policy is to educate future home owners and users of aquatic resources (i.e. trail users) of the boundary of the aquatic resources.

AQ 1.7

New development using flexible lot design should include any wetlands, streams, or required buffers in separate tracts or easements to remain in common ownership.

AQ 1.8

Herbicides and pesticides should not be used in wetlands, streams, and buffer areas, and should be discouraged in the areas that drain into them.

Discussion: Encourage alternatives to the use of herbicide and pesticide in areas adjacent to buffer areas by providing technical information and educational programs including the use of native vegetation.

AQ 1.9

Develop a community-wide program to educate island residents about alternatives to using and disposing of herbicides, pesticides, and other household chemicals to reduce impacts to marine shoreline areas, wetlands, streams, and other environmentally sensitive areas.

AQ 1.10

Access to regulated wetlands by farm animals should be discouraged. Agricultural activities must be in conformance with Best Management Practices.

AQ 1.11

Restoration, creation or enhancement of wetlands, streams, and their buffers shall be required in order to offset the impacts of alteration of a wetland/stream or buffer area. Compensation for loss of aquatic resources should be determined according to function, acreage, type, location, time factors, and an ability to be self-sustaining.

Wetlands

AQ 1.12

Maintain the Island's wetlands in their natural state by:

- Preservation of native vegetation in and next to the wetlands.
- Restoration of areas that have already been degraded.
- Protection of areas that have not been disturbed.

AQ 1.13

The City should make every effort to purchase or obtain conservation easements for significant wetlands and areas of the shoreline critical to natural habitat.

Streams

AQ 1.14

Maintain the Island's streams and creeks in their natural state by:

- Preservation of their courses, their banks, and the vegetation next to them.
- Restoration of areas that have already been degraded.
- Protection of areas that have not been disturbed.

AQ 1.15

Allow stream relocation only where relocation would result in improved stream habitat and when a property owner would otherwise be denied all reasonable use of the property.

AQ 1.16

Degraded channels and banks should be rehabilitated by various methods (e.g. volunteer efforts, public programs or as offsetting mitigation for new development) to restore the natural function of the riparian habitat.

AQ 1.17

Anadromous fish streams and adjacent land should be preserved and enhanced to ensure the propagation of salmonid fish.

AQ 1.18

Require the construction of necessary roads and utility corridors to avoid wetland and stream crossings and disturbances.

Sand Spits

AQ 1.19

Development on sand spits shall be limited to protect aquatic resources. Newly proposed development on sand spit properties shall be evaluated according to the cumulative impacts of additional requests for like actions on the remainder of lots on the sand spit.

Discussion: Sand spits have limited upland area and, with their proximity to dynamic aquatic environments, are subject to impacts associated with flooding, storm waves, liquefaction, sea level rise, and the cumulative impacts of development on water quality, shoreline habitat, visual resources, and marine environments. However, redevelopment of existing structures, in accordance with legal nonconforming structure regulations, shall not require cumulative impact analysis.

Frequently Flooded Areas

Regulation of frequently flooded areas is important for property and habitat protection. Floodplains are valuable natural resource areas that play a major role in the function of ecosystems. Floods are a natural process where rising water inundates otherwise dry land. Floodplains provide storage for floodwaters, which reduces downstream erosion and improves downstream water quality. Floodplains allow infiltration for aquifer recharge and provide important habitat necessary for the survival of many invertebrate, fish and wildlife species. Flood courses can change naturally, over time. As impervious development covers more land surface and encroaches on floodplains, damage increases to both the built and natural environments.

The Federal Emergency Management Agency (FEMA) has designated frequently flooded areas as areas that have a 1% or greater chance of flooding in any given year. Also known as

the 100-year flood, this level was chosen to manage flooding as a compromise between an economic use of the land and an understanding of the natural benefits of flooding.

Sea level rise may happen as the result of natural or human activity such as geologic subduction or global warming. Here in the Puget Sound we experience the affects of both the geologic and hydrologic events. Regardless of the cause assigned, cumulative sea level rise has serious implications for the shorelines and lowland areas that are potentially affected by beach, bluff erosion and loss of intertidal zones. These areas serve such purposes as nursery habitat, feeding grounds for fish and fowl, stormwater collection and water filtration.

GOAL 1

Protect the natural functions of frequently flooded areas.

Discussion: Frequently Flooded Areas are described in the Critical Areas Ordinance as those lands and floodplains adjacent to streams, lakes, coastal areas and wetlands with a 1% or greater chance of flooding in any given year (i.e. the 100-year floodplain), as determined by the Federal Emergency Management Agency (FEMA).

FL 1.1

Minimize public and private losses due to flood conditions by limiting development in frequently flooded areas as shown on the Flood Insurance Rate Maps.

Discussion: Frequently flooded areas can and do migrate over time. Increased development may affect the level of occurrence and location of frequently flooded areas. The Flood Insurance Rate Maps adopted by the City were originally produced in 1975 and updated in 1977. Opportunities to update flood hazard maps should be pursued as resources become available.

FL 1.2

Limit the alteration of natural floodplains, stream channels, and natural protective barriers which help accommodate, dissipate, or channel floodwaters.

FL 1.3

Emphasize nonstructural methods, such as setbacks and vegetation, to prevent or minimize flood damage.

FL 1.4

Public facilities such as sewer and water lines should be located outside of frequently flooded areas, in order to minimize damage to both the public facility and the natural environment. Public facilities may be located within frequently flooded areas only if no environmentally preferable alternative exists to mitigate existing environmental concerns and additional development is not encouraged in frequently flooded areas.

GOAL 2

Anticipate and prepare for the consequences of sea level rise.

SL1

The City should work with Tribal, Federal, State and local agencies to develop a coordinated water management program that includes issues related to Sea Level Rise.

Geologically Hazardous Areas

GOAL 1

Protect landslide hazard areas and erosion hazard areas from the impacts of use and development for the protection of public safety, property and the environment.

GH 1.1

Land uses on landslide hazard areas and erosion hazard areas should be avoided. If the hazard caused by development can be mitigated, then land use should be designed to prevent damage to persons or property and environmental degradation, and to preserve and enhance existing vegetation to the maximum extent possible.

GH 1.2

As slope increases, development intensity, site coverage, and vegetation removal should decrease to mitigate problems of drainage, erosion, siltation, and landslides.

GH 1.3

In order to protect landslide and erosion hazard areas from damage during construction and from intrusion following construction, an analysis by a geotechnical engineer should be conducted.

GH 1.4

Roads, driveways, and utility corridors should be constructed to preserve the integrity of the existing land forms, drainage ways, and natural systems, minimizing impact to the landslide and erosion hazard areas. Common access drives and utility corridors should be utilized where feasible.

GH 1.5

When clearing, grading, or filling is permitted on sloped areas containing landslide areas and erosion hazard areas, such activity shall be limited to the dry period of the year.

GH 1.6

Any alteration of a landslide hazard area or erosion hazard area should not increase the rate of surface water discharge or sedimentation, and should not decrease slope stability on adjacent property. The altered area shall be landscaped to provide erosion control.

GOAL 2

Identify areas that are at risk due to seismic activity and regulate activities in these areas for public safety and property protection.

GH 2.1

The best available science shall be considered in regulating and permitting land use activities in areas that have a heightened risk from earthquakes, such as liquefaction areas and fault rupture zones, tsunami or other geological hazards, and in mapping these high-risk areas.

Discussion: The primary tectonic structure of concern for Bainbridge Island is the Seattle fault system. One surface strand has been identified south of Blakely Harbor; however, it is likely that this is only part of the system of fault lines. These fault lines result in the need to plan for larger earthquake acceleration than was previously anticipated.

GH 2.2

Tsunami hazards should be considered in regulating land use activities on Bainbridge Island.

Discussion: Preliminary tsunami modeling suggests that the southern end of Bainbridge Island is susceptible to inundation or wave run-up of up to four (4) meters following a large earthquake on the Seattle fault.

GH 2.3

Seismic activity and the potential for earthquake-induced landslides should be considered in the determination of geologically hazardous areas.

Discussion: Areas that are stable under normal conditions can become landslides during earthquake events.

GH 2.4

The City should provide information and educational opportunities to the citizens of Bainbridge Island on the hazards posed by seismic events.

Atmospheric Conditions

GOAL 1

Protect and promote clean air.

Discussion: Clean air is necessary for healthful living. These policies address the desire to protect the residents of the Island from unacceptable impacts.

AT 1.1

Promote land use patterns and transportation policies that ensure that the Island's contribution to regional air quality is consistent with State and Federal standards.

Encourage the retention of existing vegetation and the installation of landscaping in new development that will provide natural filtration of suspended particulate matter.

Consider the impacts of new development on air quality as a part of the environmental review process and require mitigating when appropriate.

Cooperate with the Puget Sound Clean Air Agency in providing information to the community about available and innovative emission controls for residential, commercial, vehicular and light industrial use.

AT 1.2

Strive to ensure beneficial indoor air quality in all renovations and new construction of City-owned facilities, and promote design conditions that enhance beneficial indoor air quality in private construction.

GOAL 2

Promote the reduction of cumulative noise impacts.

AT 2.1

Review the effectiveness of current noise standards and modify these standards as necessary to ensure acceptable noise levels.

AT 2.2

Promote actions such as equipment modifications and operational requirements that reduce noise from transportation modes, construction sites, industrial uses, and commercial business establishments.

GOAL 3

Contribute to regional greenhouse gas reduction efforts.

AT 3.1

Assess municipal, commercial, residential and transportation related greenhouse gas emissions.

AT 3.2

Promote energy conservation measures such as:

- Retrofitting municipal offices, shops and garages with high-efficiency lighting;
- Converting municipal vehicles to hybrid fuel vehicles as replacement or new vehicles are acquired;
- Converting traffic signals to LED; and
- Adopting incentive programs and design standards that encourage the employment of renewable energy sources and energy efficient appliances on the Island.

GOAL 4

Preserve and enhance the view of the dark sky by controlling glare and light trespass.

AT 4.1

Develop regulations that provide standards for appropriate lighting practices and systems that will curtail the degradation of the nighttime visual environment.

Greenways

GOAL 1

Develop and maintain a Greenways Plan for Bainbridge Island.

Discussion: On Bainbridge Island the "greenways" concept encompasses a variety of terms. The greenways system is composed of land areas and connector links. The land areas include, but are not limited to: large open areas, public lands, farmlands, critical areas, forests, shoreline areas, and parks. The features of the connector links include trail systems, riparian areas, visual or scenic views of ridgelines, wildlife corridors or any combination of these. In most cases these land areas and connectors will be public or will be private and encumbered with appropriate conservation easements (or other instrument), to insure that they will not be significantly altered by future development.

The greenways system contributes to the preservation of the rural character of the Island, provides important wildlife habitat, improves the environmental quality of the Island (i.e., water quality, aquifer recharge, air pollution abatement) preserves working farms, and provides pedestrian, equestrian and bicycle trails, as well as other recreational opportunities.

GW 1.1

Each Greenway component should incorporate some or all of the following:

- Refuge, habitat, and functional migration routes for wildlife.
- Trails, free of motorized traffic, that are for use by walkers, joggers, bicyclists, and equestrians to travel to and from schools, recreation areas, public transportation areas, commercial areas, and neighborhoods.
- Recreation opportunities.
- Scenic landscapes and viewpoints.
- Large open spaces, farmlands, forests, shoreline areas and critical areas.
- Public end roads.
- Historic areas.
- Buffers of trees and vegetation that help to maintain the rural character of the Island.

GW 1.2

In creating a Greenways Plan, where feasible, multiple function characteristics should be considered and barrier-free trails that are designed and built expressly for access for persons with disabilities should be provided.

GW 1.3

Encourage the development of City road ends to promote neighborhood access and/or view corridors to the shoreline. Greenways should include access to the shoreline including road ends or rights-of-way leading to saltwater. Shoreline access points should be marked and visible from the shore and water where appropriate for small boat use. Where possible, waterways should be designated between shoreline points for rowboat and kayak access.

GW 1.4

Tax title strips which are of unknown ownership or owned by Kitsap County should be acquired, whenever possible, as part of the greenways system.

Discussion: Tax title strips are usually narrow pieces of land that were left over because of an error in a legal description, a survey, a platting error, or a mis-measurement by the County Assessor's office. An Island-wide inventory of these lands should be conducted and strips appropriate for public use should be identified.

GW 1.5

Wildlife corridors should provide connections to larger protected open space and habitat areas, including public parks and privately held reserves or open space areas.

GW 1.6

The trail, open space and recreational components of the Greenways and Open Space Plan should be coordinated with the Non-Motorized Transportation Plan.

Discussion: See also the Transportation Element, Non-Motorized Transportation Plan.

GW 1.7

Greenways should include connections to recreational opportunities and sites of historical interest.

GOAL 2

The City and the Bainbridge Island Park and Recreation District shall jointly develop a Greenways Master Plan that will identify greenway land areas and connector links, and other large tracts. The overall goal of the Greenways Plan is to provide several continuous links, east to west and north to south, to enhance the quality of life for Island residents.

Discussion: The Bainbridge Island Park and Recreation District and the City of Bainbridge Island are working cooperatively with Kitsap County to plan a county-wide Greenways system to create, adopt and implement a Greenways Master Plan. The Kitsap County Greenways project is being coordinated through the Regional Planning Council. Three planning area teams have been designated – North, Central and South Kitsap County. A Bainbridge Island Greenways Group has been formed as a subcommittee to the North Area Planning Team. Greenways and Open Space have been developed as a part of this Plan.

GW 2.1

Promote and encourage the preservation of a greenways system through the use of property tax reductions, conservation easements, land donations, or other techniques such as land use actions requiring open space for new development, or acquisition through purchase with public funds. Encourage and support community-based, non-profit organizations offering options and alternatives to development in the interest of preserving desirable lands as a public benefit.

GW 2.2

The implementation of part of the Greenways Master Plan shall be one of the criteria used when evaluating the preservation of open space as part of clustering, flexible lot design subdivisions, transfer of development rights (TDRs), and purchase of development rights (PDRs).

GOAL 3

The Bainbridge Island Park and Recreation District should develop and maintain a trails system that establishes non-motorized access throughout the greenways system of Bainbridge Island, maximizes public access to greenway land areas, provides increased recreational opportunities for the public, and provides an alternative to motorized transportation between residential, public transportation, commercial, schools and recreation areas. The City should assist in acquisition of trail easements.

Discussion: Trails are an important component of the connector links to provide human access, where appropriate. Not all greenway connectors will, or should, have trails. Some areas are environmentally sensitive or provide wildlife habitat that would cease to exist if human development were allowed. In some cases the connectors are visual buffers, such as trees along roadsides.

GW 3.1

The multipurpose trail system should serve local and regional users and be linked to the Kitsap County and regional trail systems. Trail linkages should be provided to the Agate Pass Bridge, between residential areas, public transportation, schools, commercial and Neighborhood Service Centers, along the Winslow waterfront and recreation areas.

GW 3.2

Trails should provide for the needs of a diverse population of differently-abled people engaging in non-motorized passive and active pursuits including:

- Recreation and nature study.
- Exercise.
- Shopping.
- Commuting to work and school.

Discussion: See also the Transportation Element, Non-Motorized Transportation Plan.

GW 3.3

The trail system should be recognized and maintained by the City or Parks District as distinct from informal or private pathways.

Discussion: A Trails Plan adopted as part of the Bainbridge Island Park and Recreation District Comprehensive Plan identifies those trails systems recognized and maintained by the City or Parks Districts as primary trails. Primary trails are distinct from informal or private pathways.

GW 3.4

Encourage the retention of existing informal or private pathways and the creation of new pathways which link to the greenways system. These trails should be developed and maintained under joint public/private partnership, if appropriate, or developed privately.

Discussion: Informal or private pathways should form a secondary system with linkages to the public system.

GW 3.5

Linkages should be provided to the Agate Pass Bridge, between residential areas, public transportation, commercial and Neighborhood Service Centers, and recreation areas.

GW 3.6

Unopened road rights-of-way should not be vacated, and unopened easements should not be revoked without a requirement for permanent public trail access. Trails should be planned to avoid conflict with future road development in these rights-of-way easements.

Discussion: See also the Transportation Element.

GW 3.7

New utility rights-of-way and easements should be encouraged to include trail access easements.

Discussion: See also the Utilities Element.

GW 3.8

Existing utility rights-of-way and easements should be reviewed on a case-by-case basis to provide trail access.

Discussion: A survey should be conducted of existing utility easements and rights-of-way that would be appropriate for trail use. This survey should occur in conjunction with implementation of the Non-Motorized Transportation Plan.

GW 3.9

The trails system should include parking areas at trail heads located on public land, and not neighborhood areas, unless it is not feasible to provide parking on public land for a trail

system. Trails that connect with the ferry systems should encourage access for bicyclists and walk-on passengers, and discourage the need to drive an automobile.

Discussion: See also GW 3.1.

GOAL 4

Maintain a system of high quality public parks and recreation facilities on Bainbridge Island.

GW 4.1

The park system for Bainbridge Island should include neighborhood, community, and regional parks with sufficient acreage and facilities to meet the standards contained in the Bainbridge Island Parks and Recreation District Comprehensive Plan.

Discussion: The Parks and Recreation Comprehensive Plan prepared by the Bainbridge Island Park and Recreation District, which is adopted as part of this Plan, contains an analysis of the existing and proposed future parks and recreation system.

GW 4.2

A greenways and open space designation should be created for public parks, dedicated open spaces and trails.

Discussion: The Greenways and Open Space category is for areas devoted to public recreational facilities such as parks and trails and areas that have been preserved as open spaces through a variety of open space methods.

GW 4.3

Promote the use of property tax reductions, conservation easements, and other techniques as incentives to preserve desirable lands as a public benefit.

GW 4.4

Ensure that future development provides adequate recreational facilities and trail linkages to public parks and recreational facilities.

GW 4.5

Whenever new development adjoins a park site, a vegetative buffer shall be required which shall include the preservation and protection of existing vegetation, to visually screen the development year-round from the park.

BAINBRIDGE ISLAND GREENWAYS AND OPEN SPACE PLAN
GREENWAY MAPS

A Greenways Plan was developed by staff based on the Greenways Goals and Policies and the work of ongoing greenways-related projects (Bainbridge Island Greenways Committee, Bainbridge Island Parks and Recreation District Trails Committee, Road Ends Advisory Committee, Public Works Transportation Committee and others). The maps will be coordinated with the Non-Motorized Transportation Plan and updated as needed to show new greenways opportunities.

The Greenways Plan has an Open Space and Trails component and a Wildlife and View Corridor component. The Open Space and Trails plan will take shape mainly through the acquisition of land, the development of trails, and the dedication of easements. It is driven largely by land ownership and use. The Wildlife and View Corridor plan will rely primarily on retaining wildlife habitat and natural systems. Existing regulations and preservation incentives rather than acquisition will be the primary tools for implementing this part of the Plan.

Open Space and Trails Map

This map outlines the accessible part of the greenway which will connect large, public open spaces with a trail network. It distinguishes existing opportunities (public land, dedicated trails, water access, etc.) from potential opportunities for acquisition or trails. This map will be administered by the Department of Planning and Community Development and updated by resolution of the City Council without requirement to amend the Comprehensive Plan.

Existing Opportunities

Public recreation areas: This is public land dedicated to recreational use. These park lands are the major open spaces in the publicly accessible part of the Greenways Plan.

Private land with public access: These lands are not publicly owned but do have limited public access and internal trails. Included here are subdivisions on which trails have been obtained as mitigation for development impacts. The developments shown have received at least preliminary approval.

Private trail corridors: This trail network connects the island's large public open spaces along road rights-of-way. The Plan calls for the improvement of these roads to better accommodate pedestrian and bicycle traffic. These trails should be separated from traffic (moved onto undeveloped portions of the right-of-way) as the means become available. Trail easements across private land could also augment or replace roadside trails.

Established trails (other than those along public right-of-way): The map indicates where there are public trails across private property, but there is no attempt to map trail networks on property already designated on the map as public or private open space.

Water access or viewpoint: These are points on the shoreline with public uplands or with access to the shoreline by way of a utility corridor. There is not always access to the beach; some are viewpoints only.

Associated public tidelands: Public tidelands are shown where they adjoin public uplands and where there is potential for public access.

Potential Opportunities

Planned acquisitions: The City or the Parks District plan to purchase this land as the means become available. The Greenways Plan supports the acquisition of these properties; they would make tremendous additions to the greenways network.

Other land where the City should pursue trails: These are public, utility or institutional lands where we cannot assume public access. Also included are proposed residential developments through which we hope to establish public trails.

Potential water access or viewpoint: These locations are being looked into by the Road Ends Advisory Committee as possible City road ends. It should be noted that this map does not claim public access to these areas, but rather acknowledges their potential. The Greenways Plan supports the Road Ends Advisory Committee's work, as the locations shown would help link the trail network to the water.

Wildlife and View Corridor Map

This map delineates critical areas, some important wildlife habitat, and parcels which have some level of protection afforded them by their land use or ownership. Other areas are delineated for their importance to the visual quality of the island. This map will be administered by the Department of Planning and Community Development and updated without requirement to amend the Comprehensive Plan.

This is an inventory map identifying meaningful wildlife corridors and scenic resources. The Bainbridge Island Wildlife Corridor Map, adopted by resolution of the City Council, more specifically identifies habitat links to larger protected open space habitat areas. Work remains to adequately analyze and catalog vegetation and important viewsheds.

Many of the **Wildlife Corridor** elements on this map are already committed to open space use or preserved by conservation easements. Much of the remaining land can be protected through the purchase of development rights (proposed TDR/PDR program) and the enforcement of existing critical areas regulations. The preservation of **View Corridor** elements will rely on conscientious development, the purchase of development rights and the pursuit of conservation easements.

Wildlife Corridor

Regulated critical areas: This shows critical areas including priority wetlands, steam corridors, lakes, ponds and steep slopes. Offshore areas include tidelands, Eelgrass beds, Kelp beds, and Herring and Surf Smelt spawning areas.

Permanent public open space: These parks are in public ownership and typically have large areas of undeveloped land.

Permanent private open space: This includes conservation easements and open space designated in Flexible Lot Designs, subdivisions and short plats.

Current Use open space: These property owners have made a ten-year commitment not to develop their land. This land is much less secure as wildlife habitat.

Farms: Farmland provides valuable habitat because of a low human presence and because of the Edge Effect it produces in the transition zone between field and forest.

View Corridor

Ridgelines: Ridgelines break up views across the island. Their importance should be considered in the review of development proposals; a little creative site design can often provide easy alternatives to clearing a visually significant ridge.

Scenic road corridors: These road corridors are noted for having outstanding buffers to screen the adjacent development. As parcels are developed along these roads it is important to retain that buffer.

Agricultural Lands

The protection and support of existing farms and the preservation of prime agricultural lands and farms of local significance are important goals of the residents of Bainbridge Island, as evidenced in the Bainbridge Island Subarea Plan, testimony from public meetings, and community survey.

Farming on the Island provides an economic and nutritional benefit to the community. Equally important, protection of agricultural lands will enhance the cultural and economic diversity of the community and help retain the rural character of the Island.

Farm operations on the Island are unique. Unlike many other jurisdictions, farms on the Island are not located within one geographical area. Instead, over 40 small farms, ranging in size from 1 acre to 40+ acres, are mostly dispersed throughout the Island, with some clustering of farms in a few locations. The specialty, high-intensity, very small farms will continue to be an important adjunct to farming in the future.

Agriculture is one of the most fragile industries in any rapidly growing area. As land values continue to rise, the threat to small farms on Bainbridge Island increases. Given the nature of farming on the Island – small farms dispersed throughout the Island – the City must use creative solutions to conserving existing farms and encouraging the creation of new farms.

GOAL 1

Conserve and protect the Island's existing agricultural uses by using preservation methods including incentive-based programs.

AG 1.1

Owners of farms should have the option of participating in the transfer of development rights (TDRs)/purchase of development rights (PDRs) program. A set of criteria should be developed to determine farms appropriate for the TDRs program.

AG 1.2

The City should examine whether identifying specific areas on the Island as appropriate for future agricultural operations would provide viable opportunities for new and expanded farming operations.

Discussion: Creating a specific area or areas for future agricultural operations aims to limit conflicts with residential uses and would provide an opportunity for farm operations within the area to share resources such as farm equipment, processing facilities, retail sales area, and road access.

AG 1.3

Existing traditional agricultural lands should be included in the open space of clustered development.

GOAL 2

Minimize conflict between agricultural and non-agricultural uses.

AG 2.1

Development adjacent to areas designated as agricultural land should be designed and located so as to avoid or minimize potential conflicts with agricultural activities.

AG 2.2

Require notification on all plats, development permits, and building permits of the existence of any registered, agricultural lands within 300 feet of the development.

AG 2.3

The Right to Farm Ordinance shall be maintained.

AG 2.4

The City should cooperate with the Washington State Extension Service and the Kitsap Conservation District to facilitate the development of Best Management Practices.

GOAL 3

Encourage and support farming as an economically viable option for land use and as a means to providing diversity of lifestyle.

AG 3.1

Small-scale farming shall be encouraged to adopt Best Management Practices.

AG 3.2

The farming community should work with the Kitsap County Assessor's office and the City to educate the community about the availability of the Tax Reduction Program.

AG 3.3

Elevate and encourage public appreciation and awareness of farms by allowing tours of farms and farming facilities.

AG 3.4

Accessory farm buildings should be allowed as an integral component of farming activity.

AG 3.5

The City should permit the production, processing, and marketing of farm products from Island farms. Processing shall include value-added processing of Island-grown crops.

AG 3.6

The City should support the Farmers' Market.

AG 3.7

The parking requirements for agricultural uses should be minimized (i.e., number of parking spaces, paved parking, and landscaping requirements), due to the seasonal nature of the marketing of farm products.

Forest Lands

Few large tracts of second-growth timber remain on the Island and these will likely be converted to other uses in the near future. As of August 2004, there were approximately 620 acres classified as timberlands by the Kitsap County Tax Assessor. Thirty-eight parcels are classified as Open Space Forest Land (over 20 acres), including the 42-acre Port Madison watershed, and 16 are classified as Open Space Timber (less than 20 acres).

GOAL 4

Encourage the retention of forest land and multiple-aged forests producing commercial timber, since forest land provides benefits such as wildlife habitat and stormwater retention.

FP 4.1

The City shall prepare a Conversion Option Harvest Plan (COHP) process, approved by the Department of Natural Resources, which will establish criteria to review Forest Practices applications for property owners who want to "convert" their property to non-forestry status and yet are not prepared to develop the property.

FP 4.2

To the extent forestry activity is retained on the Island, encourage the retention of the use of multiple-age management of commercial forest land on the Island.

Mining

There are no active mining operations on the Island. Several locations have been reclaimed including a pit on the corner of Fletcher Bay Road and Johnsonville Road and a pit south of Lovgreen Road adjacent to a parcel now owned by the Bainbridge Island Parks and Recreation District.

M 5.1

Rigidly control the excavation of sand and gravel and other minerals.

Community Forestry

GOAL 1

Bainbridge Island seeks to retain, conserve and steward community forests where people live, work and learn, through public education and through management and protection measures that are sufficient to conserve these resources.

Discussion: A community forest is comprised of the street tree system, trees in parks and on other public lands, as well as trees on private properties throughout the Island. Bainbridge Island's urban and rural forests have historically been a source of community identity and civic pride. It is recognized that, in addition to biological benefits, a community forest provides a significant return by creating appealing streets and resulting higher property values in the built environment. In addition, trees and forests provide buffering and screening between differing land uses, reduce surface water runoff, improve water quality, help maintain soil stability, provide wildlife habitat, and reduce energy consumption by providing shade and functioning as windbreaks.

CF 1.1

The City shall encourage protection, restoration and maintenance of existing vegetation that has environmental, wildlife habitat and aesthetic qualities, including tree groves, significant tree stands, forested hillsides, and vegetation associated with wetlands, stream corridors and riparian areas.

CF 1.2

The City shall utilize various tools to understand and monitor existing conditions and changes over time of Island-wide tree cover, significant tree groves and significant individual trees.

Discussion: Monitoring tools could include periodic tree inventories to assess the cover and health of forests and trees.

CF 1.3

In providing information to property owners and as part of the review of development applications, the City shall encourage property owners to maximize the preservation of trees and to maintain and enhance the cohesive quality of tree groves through appropriate site design and construction methods as well as open space dedication of areas that contain these resources.

Discussion: Incentives, such as a building height bonus, could be used to encourage tree preservation during site design. Additionally, the Guidelines for Commercial and Mixed Use Projects including Guidelines for Lynwood Center, Island Center and Rolling Bay should be updated to incorporate tree preservation practices and policies.

CF 1.4

A community-wide program to educate Island residents about the functions and values of trees should be developed.

Discussion: The Community Forestry commission should be supported and maintained to provide leadership in community outreach. City government staff and diverse community groups should be encouraged to participate in outreach and monitoring activities.

CF 1.5

Encourage the use of Best Management Practices to protect and enhance community forests.

CF 1.6

Activities that enhance the community's awareness of the value of trees and a community forest should be encouraged.

Discussion: Focused activities might include celebration of Arbor Day; developing a volunteer tree protection program that identifies and conserves trees that are significant due to size, species, or historical or cultural importance; and provision of expert arborist resources where necessary. A program, such as a "Heritage Tree Program," would be voluntary on the part of the property owner, and would include criteria that must be met to be considered as a resource important for recognition and protection. A Heritage Tree Program might, for example, require that special consideration be give to preservation of Heritage Trees during site development.

EXISTING CONDITIONS - OVERVIEW

Critical Areas

The environmental goals and policies address aquatic resources (wetlands, streams, lakes, creeks, tidal inlets, and mud flats), fish and wildlife habitat, frequently flooded areas, and geologically hazardous areas.

Greenways

The Greenways Goals and Policies establish a framework for the Greenways Plan for the Island.

Agriculture

The Plan seeks to retain and enhance existing farming on the Island and provide additional opportunities for farming and reaffirms the Right to Farm ordinance. Farmers who wish to sell the unused development potential of farmland may opt to use TDRs.

The Natural Environment

The Island's natural systems will play an important role in how and where future development occurs. There are limits to the amount of population growth and physical development that the natural environment can absorb without threatening public health, welfare, and safety through environmental degradation. The purpose of the natural systems inventory is to provide the necessary background information on existing conditions of the Island in order to develop appropriate goals and policies that best protect the natural environment while still allowing compatible uses to occur. The following will include discussions on topography and geology, climate, soils, geologically hazardous areas, surface water (including watersheds, lakes, streams and wetlands), aquifers and aquifer recharge areas. The original reports and surveys from which this overview was compiled can be found in the Bibliography.

Geography of Bainbridge Island

Bainbridge Island is located within the central Puget Sound Basin, east of the Kitsap Peninsula and west of the City of Seattle. It is approximately 3.5 miles wide and 10.5 miles long, encompassing approximately 17,778 acres, or 28 square miles, and is one of the largest Islands in Puget Sound. The Island is characterized by an irregular coastline of approximately 45 miles, with numerous bays and inlets. At the north end of the Island is a large sand spit called Point Monroe and at the sound end is Restoration Point, consisting of raised bedrock.

The formation of Bainbridge Island was a result of the last ice age, 13,000 to 15,000 years ago, when the 3,000-foot-thick Vashon Glacier carved out Puget Sound. The primary shaping influence on topography and soils on the Island was the glaciation. Elevations on the Island range from sea level to 400+ feet. The topography of the Island is generally of low, rolling hills with several ridges oriented mostly north to south at 250 to 300 feet elevation, which form the Island's 12 watersheds. The highest point is Toe Jam Hill on the southeast portion of the Island, approximately 400 feet above sea level.

Soils on the Island are typical of Puget Sound in that dense, compacted, glacial till is present at a rather shallow depth throughout much of the Island with underlying hardpan. This glacial till is made up of clay, silt, sand, and gravel, and overlay bedrock in varying thickness across the Island. There is sedimentary bedrock on the southern part of the Island where soils in some areas are moderately well to poorly drained. A more extensive discussion of soils and their properties can be found in the *USDA Soil Survey of Kitsap County*.

Climate

The climate on Bainbridge Island reflects the moderating influence of Puget Sound and the Pacific Ocean, and is generally characterized by mild wet winters and warm, dry summers. The average winter daytime temperature on the Island is 40˚ to 50˚ F; the average summer daytime temperature is 70˚ to 80˚ F. Annual rainfall on the Island varies from 35 to 45 inches.

Geologically Hazardous Areas

Geologically hazardous areas are defined by the Growth Management Act as those "areas that, because of their susceptibility to erosion, sliding, earthquake, or other geologic events, are not suited to the siting of commercial, residential, or industrial development consistent with public health and safety concerns." In some cases, the risk to development from geologic hazards can be minimized or mitigated by engineering design or modified construction practices.

One of the sources available to identify *landslide hazard* areas, as well as other hazardous areas, is the *Quaternary Geology and Stratigraphy of Kitsap County, Washington* written by Jerald D. Deeter. The Deeter report identifies and classifies landslide areas and unstable slopes throughout Kitsap County. The classification system used in the report is similar to the system used in the *Coastal Zone Atlas of Washington*. The Deeter report describes critical hazard areas in terms of geologic age and by steepness of slope (>15% and >30%). Another source being developed uses Lidar terrain mapping and a draft surface geology map developed by the United States Geological Survey. This map is currently (2004) being finalized.

> ***Erosion hazard:*** These are areas identified as having a severe rill and inter-rill erosion hazard. The Soil Conservation Service defines rill as a steep-sided channel resulting from accelerated erosion which is generally a few inches deep. Rill erosion tends to occur on slopes, particularly those with poor vegetative cover. Erosion hazard areas were studied more extensively to correlate the data from the Deeter report with the information from the *Soil Survey*.
>
> ***Seismic hazard:*** These are areas subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, soil liquefaction, or surface faulting. Natural and artificial uncompacted materials such as clay and silt deposits, sediments in river deltas, and material used as landfill, generally amplify ground shaking more than consolidated sediments and bedrock. Current and historic slide areas could be activated by seismic activity from a major earthquake. On Bainbridge Island, seismic hazard areas are identified as unstable slopes, recent/historical landslide areas and prehistoric landslide areas, and are identified on

the Slope Stability map as U, URS, and UOS and are also outlined in the Deeter report.

Watersheds

Protection of the integrity of Bainbridge Island's surface waters, which include lakes, ponds, streams, and wetlands, is crucial in maintaining a high quality of life. Beneficial uses include drinking water, salmonid and fish habitat, recreation, stock, and crop watering. Surface waters also provide immeasurable aesthetic value to Island residents. This section will begin with a discussion inventory of watersheds and follow with inventory data on streams, and wetlands.

A drainage basin, or watershed, is an area of land defined by surrounding ridgetops where all precipitation that falls within it eventually drains to a common stream, river, bay, or other water body. As water from rainfall flows over land in a watershed, it may collect pollutants and sediments from the land which flow into a stream or other common body of water. Thus, every activity that occurs within a watershed has the potential to impact the body of water into which the watershed drains. In the case of Bainbridge Island, this is Puget Sound, streams, or lakes. (Refer to Figure 2.)

In 1991, the firm of Kato & Warren undertook the Bainbridge Island Drainage Reconnaissance Study which identified and evaluated the 12 major watersheds and 45 sub-basins that define the Island's significant drainage features. These are listed below with the approximate acreage of each. (Refer to Figure 2.)

Major Drainage Basin	**Number of Sub-Basins**	**Approximate Basin Acreage**
Agate Passage	1	590
Blakely Harbor	3	1,350
Eagledale	4	1,180
Fletcher Bay	5	2,190
Gazzam Lake/Crystal Springs	3	850
Manzanita Bay	4	2,090
Murden Cove	4	2,100
North Eagle Harbor	7	2,100
Pleasant Beach	3	1,530
Port Madison	3	1,610
South Beach	2	720
Sunrise	3	1,310
TOTAL	45	17,620

Except for the North Eagle Harbor sub-basin-4 which encompasses historic Winslow, all other watersheds and sub-basins on the Island are drained by natural streams and drainage

ways. The existing drainage system consists of wetlands, streams, springs, ditches, and culverts crossing the roadways. A few piped drainage systems exist in several platted areas or near some wetlands. The natural drainage system does currently remove stormwater, but not without signs of distress from erosion, siltation, and water quality degradation. A natural drainage system, in order to work effectively, requires regular maintenance.

The concern for water quality has become one of paramount importance to the City. The declining quality of water from stormwater runoff, poor agricultural and forestry practices, failing septic systems, and domestic use of fertilizers and pesticides is threatening the viability of streams, wetlands, and the surrounding waters of Puget Sound where shellfish beds can become contaminated. Thus, the City has applied for and has received a grant from the Centennial Clean Water Fund through the Department of Ecology to obtain additional data on the 12 watersheds and to formulate a Watershed Action Plan that will establish a detailed action plan to improve water quality in each of the watersheds. Funding for the Plan began in 1994 and will take two years to complete.

Wetlands

Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (EPA, 40 CFR 230.3). Wetlands support predominantly hydrophytic vegetation, the underlying material is predominantly undrained hydric (water-logged) soils, and is saturated or inundated by water for a period of seven days or more during the growing season each year.

Wetlands play a vital role in providing habitat for fish and wildlife, stormwater retention/detention, water quality improvement, groundwater recharge and discharge, recreation, opportunities for scientific research and public education.

In 1991, Sheldon and Associates and Springwood Associates, under a grant from the Department of Ecology, conducted Phase I of the Bainbridge Island Wetland Inventory. That inventory identified some 65 wetlands, with roughly 40% of those field-verified. Phase II of the inventory was conducted by Sheldon and Associates during the fall of 1992, under a grant from the U.S. Environmental Protection Agency. A total of 212 wetlands were identified, with 157 field-verified. This does not mean all wetlands that exist were inventoried. Since the inventories were conducted, the City has been updating the maps as information becomes available. The current wetland maps (2004) show 354 wetlands with a total area of 1,242 acres.

Wetlands are identified by the drainage basin in which they are located, by the U.S. Fish and Wildlife Service vegetation community classification, and by the category based on the Bainbridge Island Critical Areas Ordinance (BIMC 16.20). The definitions of those categories are included in the legend in the Wetlands Map. (Refer to Figure 3.)

Streams

Bainbridge Island has an extensive network of small streams and creeks which all eventually empty directly into Puget Sound or into the bays or inlets surrounding the Island. Streams are created from either rainfall or groundwater. Those created mainly from rainfall are usually referred to as intermittent, or as flowing with water only during the annual, rainy seasons. Groundwater streams usually flow year round.

The Department of Natural Resources has inventoried most of the streams of the state and has classified them according to WAC 222-16-030. This is included in the legend of the Water Type figure (see Figure 3). Not all of the known streams on Bainbridge Island are included in this inventory. Major stream locations were updated based on topography developed from the Lidar data. Not all the streams on the Island have been classified due to lack of information about them.

Fish and Wildlife

The diversity of life on Bainbridge Island can be attributed to the Island's topography and vegetation. The interior part of the Island contains woodlands, meadows, wetlands, and riparian areas, while shoreline habitats include tidelands, shorelands, tidal inlets, and coastal forests typical of the estuarine and marine environment of Puget Sound. Because the Island has so much shoreline, saltwater habitats are a major component of the Island's ecosystem. Oysters, clams, geoducks, and crabs are found on the tidelands. Many species of shorebirds and waterfowl live along the shoreline or use the area for a stop-over point during migration.

On the uplands, stands of second-growth Douglas fir, Western red cedar, big leaf maple, and red alder make up the woodland forests. The forest understory of salal, Oregon grape, huckleberry, and salmonberry provides habitat for deer, coyotes, raccoons, squirrels, and dozens of bird species. Pastures and open meadows support open land wildlife, such as pheasant, quail, and rabbits, while riparian and wetland areas provide cover for fish, birds, mammals, and amphibians. Salmon usage has been verified in Springridge, Hidden Cove, Manzanita and Murden Cove.

The Washington State Department of Wildlife has identified Priority Habitat Species (PHS) on Bainbridge Island that are classified as threatened, endangered, sensitive, or in need of monitoring. They include:

- The bald eagle (State and Federal threatened classification) which is found along the shores of saltwater and freshwater lakes and streams, and found nesting in predominantly coniferous forests.
- The great blue heron (State priority habitat status for breeding areas) typically found at low elevations near all types of fresh and saltwater wetlands, streams, and shorelines and found usually nesting in colonies in the tallest conifers or deciduous trees available.
- The pileated woodpecker (State candidate) that inhabits mature and second growth forests with significant numbers of snags and fallen trees, and usually nest in cavities in snags or live trees.

Other PHS species sighted by citizens, but not officially documented by the Department of Wildlife include osprey, river otter, deer harlequin ducks, and salamander.

Fish and wildlife conservation management is defined as managing land to maintain species of wildlife in suitable habitats within their natural, geographic distribution so that isolated subpopulations are not created. Growth Management guidelines define the following areas as fish and wildlife habitat conservation areas that should be considered for designation:

- Areas with which endangered, threatened, and sensitive species have a primary association.
- Habitats and species of local significance.
- Commercial and recreational shellfish areas.
- Kelp and eelgrass beds.
- Herring and smelt-spawning areas.
- Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish and wildlife habitat.
- Waters of the state.
- Lakes, ponds, streams, and rivers planted with game fish by a government or tribal entity.
- State Natural Area Preserves and Natural Resource Conservation Areas.

Resource Lands

Agriculture

Agriculture is still an important part of life on Bainbridge Island. Throughout the Island there are a number of small-scale farms ranging from strawberry and raspberry farms to a goat dairy, tree farms, and organic vegetable farms. There are currently (2004) 38 parcels with a total acreage of 222 acres classified as agricultural land for tax purposes. There are many more properties that are operated as farms that do not meet the requirements for tax purposes or are non-commercial pasture land.

Forest Land

Few large tracts of second-growth timber remain on the Island and these will likely be converted to other uses in the near future. There are approximately 620 acres classified as timberlands by the Kitsap County Tax Assessor. Thirty-eight parcels are classified as Open Space Forest Land (over 20 acres), including the 42-acre Port Madison watershed, and 16 are classified as Open Space Timber (less than 20 acres). (Refer to Figure 8.)

Mining

There are no parcels where mining is the primary operation. One operation on Miller Road may be doing some mining in conjunction with other construction material handling operations. The pit on Bucklin Hill Road and the Clemetz pit on Lovgreen Road have been reclaimed. The Kitsap County Pit on Lovgreen Road is currently being managed by the Bainbridge Island Park District and is being studied for other uses.