ELEMENT 06 – NATURAL RESOURCES ELEMENT

6.1 INTRODUCTION

The Natural Resource Element covers several important issues, such as the protection of agricultural land and forest areas, open space corridors, property rights, wetlands, groundwater, rural character, and wildlife habitat protection. The need for conservation and protection of natural resources increases as the County population continues to grow.

The balance between natural resource protection and development influences the economic condition of Island County. Natural resources have the potential to create jobs, provide recreational opportunities, enhance property values, attract customers and revenue to local businesses, increase government revenues, decrease the cost of community services, and improve the local quality of life.

Since the 2016 Comprehensive Plan, Island County has advanced several efforts to strengthen natural resource management. Notably the County completed an update to its Critical Areas Ordinance in 2019, conducted a Sea Level Rise Study in 2020, updated its Shoreline Master Program in 2025 (pending state approval), and completed a Climate Resiliency Element in 2025. The County will continue to build on this work to proactively protect critical areas and connected habitats, address water conservation, steer growth in ways that minimize risks and vulnerability to our changing climate, and to build environmental resilience.

6.1.1 DEFINITION OF NATURAL RESOURCES

Natural resources are natural materials, substances, processes or organisms that people and wildlife depend on for clean air, clean water, enjoyment, and production of products that can be potentially useful for economic gain. Classically, natural resources were thought of as minerals, fossil fuels, timber, water, fish, and wildlife. More frequently however, the definition has emphasized natural systems not as resources to be managed, but vital assets that provide ecosystem services, recreation, and climate resilience for current and future residents. This element covers natural lands, air quality, mineral lands, critical areas, and groundwater resources.

6.1.2 VISION FOR NATURAL RESOURCES

Natural resource systems should be conserved and preserved in recognition of the irreplaceable character of such resources, and of their importance to the quality of life of residents, visitors, and the future generations of Island County. Provisions should be made for natural resources to meet human needs throughout the County in order to protect them and enhance enjoyment and appreciation of the environment.

6.2 CRITICAL AREAS

Critical areas are lands that possess certain development limitations, or that provide important public natural resources. However, a property owner cannot be deprived of a reasonable use and the enjoyment of lands on which critical areas and their associated buffers, if any, are located.

Critical areas are:

A. Wetlands
B. Areas with a critical recharging effect on aquifers used for potable water

C. Fish and wildlife habitat conservation areas
D. Frequently flooded areas
E. Geologically hazardous areas

Prior to adoption of the 1984 Island County Code, many critical areas in Island County had been disturbed by past development, logging, or other human activity. Some critical areas are essentially in pristine condition, having recovered from logging or other activity which has occurred on or near them in the last century or so. Many of the county's most valuable critical areas lie in undeveloped rural areas and in resource lands.

The Critical Areas maps (located on the Island County Mapping System ICGeo Map), provide a generalized location based on authoritative studies, e.g., maps generated by the Washington Department of Fish and Wildlife (WDFW) Priority Habitats and Species Program; occurrence maps generated by the Washington Department of Natural Resources (WDNR) Natural Heritage Program; United States Fish and Wildlife Services (USFWS) National Wetland Inventory maps; DNR Water Type maps; maps of frequently flooded areas prepared by the Federal Emergency Management Agency; and maps of identified wetlands prepared for the County in 1990 or completed by qualified consultants. The County updated its maps of the shoreline areas to include commercial and recreational shellfish areas; additional updates may include kelp and eelgrass beds; and herring and smelt spawning areas. These maps are intended for informational (but not necessarily regulatory) purposes. Detailed on-site inspections may be required to determine if an area meets the designation and classification criteria. These studies may take precedence over generalized mapping.

The County is responsible for updating and maintaining the maps on a regular basis, as additional information is developed through studies and subsequent determinations. Considerable progress can be made toward protecting some types of critical areas simply by making the information in these maps and other materials readily accessible to current and potential landowners, development interests, and the public. Island County will make the location of wetlands, streams, and steep slopes publicly available but will not disclose the location of sensitive species when disclosure might harm those species or their habitat.

Effective enforcement is an important component of any critical areas protection program. The enforcement action and severity of any penalty must be proportionate to the nature and circumstances of the violation, and the damage or risk to private and public resources. When wetlands or fish and wildlife habitat conservation areas are damaged in violation of the law, restoration to at least pre-existing functional condition will be required.

6.2.1 WETLANDS

Island County contains a wide variety of wetlands, from salmonberry and alder swamps to lush bogs, thriving estuarine marshes, and broad wet meadows. Often these wetlands are fragile ecosystems that may serve important and beneficial functions. Wetlands can assist in reducing flooding, erosion, siltation, and ground and surface water pollution; help maintain ground water recharge and surface water flows; and provide wildlife, plant, and fisheries habitats. Wetlands harbor plant and animal species with recreational, economic, and cultural importance. Many wetlands are essential components of the highly valued visual landscape of Island County.

Wetlands historically have been treated as wasted land, to be reclaimed through draining and

filling. Wetlands destruction, or impairment of wetland functions, may result in increased public and private costs or property losses, through effects such as increased flooding or water quality degradation. Only in recent decades has the economic, environmental, and cultural impacts of wetlands destruction been recognized and efforts made to reduce the loss of wetland functions and values.

Designation of wetlands and regulation of wetlands are separate issues. The economic, environmental, and cultural values that communities place on wetlands should be used to determine wetlands policy and regulation. Wetlands classification or ratings systems are used to define what regulatory standards apply and to establish priorities for non-regulatory mechanisms, such as acquisition and restoration.

Wetland functions typically refer to physical, chemical, and biological processes. Some functions, such as water quality and purification, flood attenuation, sediment trapping, and wildlife habitat, can be quantified accurately depending on level of study. Wetland values (aesthetic, cultural, educational, or recreational) generally refer to the importance or worth that society places on wetlands. As values are by nature subjective, they are difficult to measure.

Some wetlands have greater economic, environmental, or cultural value than others. In some instances, wetland alterations may be preferable to available alternatives. For example, a valuable mature forest may also have high habitat value. Altering or developing it may have greater environmental costs than altering a highly degraded, adjacent wetland with minimal function and value.

Island County has had wetland regulations in place since 1984. During public review, these regulations were determined to have met the GMA's substantive and procedural requirements. Wetlands within the shoreline jurisdiction are regulated by the Shoreline Master Program, rather than the Critical Areas Ordinance. In addition, the County should require the use of best management practices for existing agricultural uses and should not exempt new agricultural uses. The County may also wish to allow certain low impact uses within wetland buffers and allow installation of infrastructure where there is no practical alternative location.

6.2.2 CRITICAL AQUIFER RECHARGE AREAS

The natural history of Island County, from the region's volcanic origins to its repeated glacial advances and retreats punctuated by massive post-glacial flooding, has left a geologic hodgepodge of sands, gravels, fine silts, and sediments; cemented till ("hardpan"); clays; and metamorphic rock formations.

Many of these formations bear accessible groundwater and can supply groundwater for the county's domestic, agricultural, recreational, and commercial/industrial needs.

Most of Island County depends on groundwater, 73 percent of residents rely on groundwater as a drinking water source. All county residents share responsibility to keep our groundwater resources safe. Some areas rely on surface water, such as the City of Oak Harbor, Naval Air Station Whidbey Island, and an outlying community near Deception Pass, which all rely on Skagit River water piped to the city via the Anacortes treatment plant.

General areas of low, medium, and high recharge potential have been mapped based on surficial geology county-wide (Map 6D). While providing useful and valuable information about

recharge potential over wide areas, the mapping scale and complexity of the underlying geology make it impractical to apply the information to site-specific land uses.

Rainfall infiltration from the surface to water-bearing layers is currently the only source for renewing the county's groundwater supplies. There is no evidence of any naturally occurring underground hydraulic connection to mainland sources of groundwater. Continued infiltration of fresh water can exclude intruding sea water from subsurface water-bearing layers, thereby keeping the sea water at bay.

(This topic is discussed in-depth below, see section 6.3)

6.2.2.1 GROUNDWATER DATA AND RECHARGE

Comprehensive data collection and management efforts are the basis for better management of Island County's groundwater resources. Island County Public Health compiles the best available science pertaining to groundwater wells and groundwater quality from the following sources:

- Island County Public Health Seawater Intrusion and Long-Term Groundwater Monitoring
- Washington Department of Ecology Well Report and Environmental Information Management System
- Washington Department of Health Office of Drinking Water Sentry and Source Water Assessment Program
- United States Geological Survey
- Public Water Systems
- Individual Well Owners

Island County conducts long term monitoring of groundwater and seawater intrusion and maintains a hydrogeology dashboard with information from multiple data sources for water quality and quantity throughout the county. Data collection and sharing helps protect our aquifers and drinking water supplies by informing and engaging the public in taking an active role in helping protect our groundwater resources.

6.2.3 FISH & WILDLIFE HABITAT CONSERVATION AREAS

Island County supports a variety of fish and wildlife species thanks to our abundant forests, prairies, and marine waters. The GMA requires County's to designate and protect Fish and Wildlife Habitat Conservation Areas (FWHCAs), areas vital for maintaining species populations. These include habitats for species listed as endangered, threatened, or sensitive, priority habitats identified by the state, and areas of local importance.

FWHCAs in Island County include streams and small seasonal creeks, lakes and ponds, wetlands, marine nearshore habitats, upland wildlife areas, and habitat corridors. Since 2016, the County has improved its mapping and information for these areas. For example, the County's critical areas map now incorporates data from state and federal agencies, including the Washington Department of Fish & Wildlife's Priority Habitats and Species (PHS) database, the National Wetlands Inventory, and local surveys of marine resources. These marine habitats are crucial for the marine food web and have been recognized as priorities for conservation. Eelgrass beds, for instance, provide nursery areas for juvenile fish and forage species.

6.2.4 FREQUENTLY FLOODED AREAS

Although lacking major river systems that occur in mainland Western Washington, Island County is not immune to flood threats. Flooding generally occurs in the winter during intense storms, combined with high tides. Wind-generated waves frequently run up the beach and overtop many shore protection structures, damaging structures along the shoreline and flooding inland areas. Wave-tossed driftwood can threaten safety and property.

Flooding that is less violent and severe, but perhaps more frequent, occurs around lakes and other low-lying areas during and following heavy precipitation. Increased rates of runoff have been caused by development, creation of impervious surfaces, channeling of surface water flows, and loss of wetlands and extensive forest vegetative cover, all of which decreases the capacity of upland areas to retain moisture and exacerbating flood problems.

Individual residents, community associations, and diking districts have undertaken local flood protection efforts, including drainage improvements, tide gates, holding ponds, and shore protection structures such as bulkheads and rip-rap. Some of these facilities are maintained by the County.

The County has adopted a Flood Damage Prevention Ordinance (Chapter 14.02A ICC) which provides construction standards for frequently flooded areas, and stormwater regulations with required detention (Chapter 11.03 ICC).

6.2.5 GEOLOGICALLY HAZARDOUS AREAS

Although Island County is characterized by a gentler landscape than much of the mountainous and river-torn Puget Sound mainland, the islands have been and continue to be buffeted by geological and climatological forces. Vertical bluffs, ancient landslides, slopes with groundwater seepage, or springs can be found in Island County. Careless development in such areas can lead to loss of life and property, both on-site and on other properties. The County regulates clearing and grading and construction activities under Chapter 11.02 ICC.

6.3 GROUNDWATER RESOURCES

6.3.1 GROUNDWATER OVERVIEW

The geologic development of Island County has resulted in the reliance on limited sources of groundwater. The physical presence of saltwater surrounding the islands creates threats to groundwater quality which are not experienced in other areas. Typical measures to protect groundwater include ensuring adequate recharge of rainfall and other surface waters and minimizing the threat of pollutants. In Island County, measures must also include careful monitoring of the level of groundwater extraction, to minimize the threat of saltwater intrusion into freshwater aquifers.

In 1979, Island County began work to define the hydrogeology of the islands; determine the chemical quality of groundwater; and identify areas of existing and potential sea water intrusion. These studies have provided detailed information on the hydrogeology of Island County.

In 1982, the Environmental Protection Agency declared Sole Source Aquifer for Whidbey Island and Camano Island. The designation acknowledged Island County's reliance on

groundwater as a potable water source for both islands and requires federally funded projects be designed to ensure protection of groundwater resources. The county is in fact served by a multiple aquifer system. The sole source designation refers to the county's reliance on groundwater for drinking water rather than a singular aquifer.

Island County's aquifer system is the critically important water supply for people living outside the general Oak Harbor area. Approximately 73 percent of the county's population relies upon groundwater as a potable water resource. Population growth in rural areas has increased groundwater demand proportionally; this is expected to continue in the future. Studies completed to date, including hydrogeologic investigations conducted by local, state and federal agencies, conclude that groundwater supplies are a finite resource in Island County.

6.3.2 GROUNDWATER RESOURCE AND RECHARGE PROTECTION

The Growth Management Act (GMA) requires the designation and protection of critical areas, such as aquifer recharge areas. Included in the adopted Ground Water Management Plan are areas identified as having a greater potential for recharge based upon soil type and surficial hydrology. In 1992, Chapter 8.09 ICC was amended to include measures to protect groundwater from surface activities in susceptible areas. All of Island County was considered a recharge area and specific protection measures were determined at the time of application and related to project impacts.

The amendments to Chapter 8.09 ICC in 1992 were based upon the entire county as a critical recharge area formulated from the sole source aquifer designation and adopted groundwater management areas pursuant to Chapter 90.44 RCW. The criteria established in Chapter 8.09 ICC provided the basis for the protection of groundwater resources in critical recharge areas.

A 2002 United States Geological Survey (USGS) Recharge Study provided Island County with invaluable information concerning the local conditions that affect the recharge of precipitation into our aquifer systems. Previously, these areas had not been specifically delineated other than through the application of potential recharge rates based upon superficial geology.

Through the Watershed Planning process, Critical Aquifer Recharge Areas (CARA) have been delineated using the "Guidance Document for the Establishment of CARA Ordinances", Department of Ecology, 2000.

The following four criteria were used to assess aquifer vulnerability, and maps of each parameter were developed.

1. Depth-to-Water parameter was used to develop the "Depth to Water Susceptibility Rating" map, using data from the Island County hydrogeology database;
2. Recharge parameter was used to develop the "Groundwater Recharge Rate" map, using information from the USGS Deep Percolation Model and Ecology Scoring Options;
3. Soil Permeability parameter was used to develop the "Soil Percolation Rate" map, using information from the Island County Soil Survey; and
4. Surficial Geology parameter was used to develop the "Surficial Geology Susceptibility Rating" map, using data from the Island County hydrogeology database.

The CARA Map shows the sum of the scores from the four individual maps and ranks the County into one of three zones: “limited,” “moderate,” and “high” risk for contamination. The specific risk associated with surface contaminants, then, is based upon the four criteria rather than just surficial geology as in the past. Project actions in areas identified as having an increased risk for groundwater contamination may require a hydrogeologic assessment, as determined by Chapter 8.09 ICC.

Hydrogeologic evaluations are required prior to approval of projects identified by the Health Officer as having a potential for groundwater contamination. Appropriate mitigation measures are imposed as conditions of approval for projects with a potential for impacts to groundwater resources.

Due to the complexity of the aquifer systems underlying Island County, it is difficult, if not impossible, to apply regional determinations of groundwater resource protection and water availability. Given these management limitations, site-specific, project specific evaluations are the best available option. As additional information is collected and analyzed, refinements can be made to the system of identifying critical areas for recharge and groundwater protection.

6.3.3 SEAWATER INTRUSION PROTECTION

In order to prevent seawater from entering a freshwater aquifer, adequate freshwater pressure must be maintained. An aquifer’s susceptibility for seawater intrusion can be evaluated by measuring the distribution of water level elevations. Thus, the relationship between an aquifer’s water level elevation and its susceptibility to seawater intrusion can be utilized as a planning and resource management tool.

An aquifer that has water level elevations (pressure) significantly above sea level is not at risk for seawater intrusion, while an aquifer that has near sea level water levels is at risk.

Through the Watershed Planning effort, Island County and the Water Resource Advisory Committee collected and analyzed water quality and groundwater elevation data for 378 wells. This information was used to develop county wide water level elevation criteria to define at what elevation is a well at risk to seawater intrusion. These elevations, coupled with chloride data, were then used to define risk categories for the purpose of reviewing land-use proposals to define impact to the resource.

Pursuant to Chapter 8.09 ICC, hydrogeologic evaluations are required prior to approval of projects identified by the Health Officer as having a potential for causing, inducing, or contributing to seawater intrusion (ICC 8.09.099). Appropriate mitigation measures are imposed as conditions of approval for projects with a potential for impacts to groundwater resources. Additionally, public water systems are required to collect groundwater chemistry indicators of seawater intrusion in areas defined as being at increased risks to intrusion.

6.4 NATURAL LANDS

6.4.1 NATURAL LANDS OVERVIEW

Island County has chosen to include information on the protection of natural lands in its Comprehensive Plan as a result of strong interest in this issue expressed by county residents. The protection and conservation of natural lands is important for the environment, is aesthetically

beneficial, and benefits the economy of Island County.

The conservation or protection of natural lands is an important strategy that can also help to maintain the rural character of much of Island County. Generally, large expanses of open spaces, interspersed with forest lands and working agricultural landscapes, are important elements of what it makes it special to live in Island County.

State law directs that local governments designate lands as critical areas, open space corridors, and for public purposes. Outside of these specific mandates, the decision to preserve natural lands is not mandated by the GMA or any other state or federal regulation. Rather, the decision lies with the determination of the citizens of Island County to preserve their quality of life by identifying and protecting those natural elements of the landscape which contribute to the scenic and open character of the community.

Many agencies are involved in the protection of natural lands throughout the county, including the federal government, the State of Washington, Island County, the Town of Coupeville, the City of Oak Harbor, and the City of Langley, as well as non-profits, private citizens, and Tribes. The conservation of natural lands can be accomplished in many ways, from regulation to tax incentives to land use ordinances. In all cases, the preferred method of conservation should include the voluntary participation of the property owner. When conservation occurs through land use regulation, efforts must be made to ensure that the owner is left with a reasonable use of the property.

The development and implementation of protection strategies for natural lands rely heavily upon community values. The protection of these natural assets is essential to the continued high quality of life of county residents. These assets are also important to the quality of the experience enjoyed by visitors to this special place.

6.4.2 DEFINITION OF NATURAL LANDS

Natural lands include any land area whose preservation in its natural or existing state would conserve or enhance natural, scenic, or cultural resources; protect surface water or groundwater quality and supplies; promote the conservation of soils, wetlands, beaches, or tidal marshes; enhance the value to the public of abutting or neighboring parks, forests, wildlife preserves, nature reservations, or other open spaces; enhance recreation opportunities; preserve historic sites; preserve working agricultural landscapes; or preserve visual quality or scenic vistas along transportation corridors.

Examples of natural lands may include, but are not limited to, forests and watersheds, agricultural lands, wetlands, significant wildlife habitats (including corridors important for wildlife movement or migration), complex shoreline systems (including lagoons, saltwater tidal flats, marshes, and accretion beaches), and conservation areas or reserves which have the capacity to support complex biological communities or ecosystems.

The terms ‘natural lands’ and ‘open space’ are often used interchangeably by the public. While ‘open space’ is a generic term which may be applied to any parcel of undeveloped land, ‘natural lands’ may also include lands which may contain some development activity or are “worked” (such as agricultural and forestry uses), but which promote values consistent with environmental conservation. Definitions of different types of natural lands can and quite often overlap and

should not be confused with the definition of Natural Resource lands, which the state clearly defines as based on soil types.

6.4.3 NATURAL LANDS TYPOLOGY

Not all natural lands will have equal value or serve the same ecological functions. Different types of natural lands will benefit from varying types of conservation or protection. Policies reflecting the values of the community will help to determine the types of sites to be protected or conserved, and the level of protection desired.

6.4.3.1 Agriculture

These land types have high visual value as they create a sense of 'openness' in rural areas. Unlike the more traditional definition of natural lands, agricultural areas experience a higher degree of human intrusion as crops are harvested. However, these lands are recognized as an important and limited resource which can provide a community with both environmental and economic value. Today's land use decisions can greatly affect future agricultural production capabilities. The need to preserve productive farmland is extremely important for future generations.

In addition to agriculture's historic and economic role, vast expanses of farmland provide scenic open spaces, which contribute to the overall health and welfare of residents and help to promote tourism.

As development occurs, the pressure to convert agricultural land to other, more intensive land uses increases significantly. Displacement can occur as agricultural areas become more urbanized, and as uses change. Loss of agricultural lands affects the whole community. Many strategies may be employed to promote the goal of agricultural land preservation. Among those strategies are:

- 'Right-to-farm' regulations which discourage the infringement of non-agricultural land uses in agricultural areas;
- Land use policies and related strategies which promote value-added activities such as the processing of agricultural products, and which recognize the diverse nature of land uses necessary for agriculture to succeed;
- Property tax policies which do not penalize farmers when land values rise.

6.4.3.2 Forestry

Unlike agricultural activities, the harvesting of timber crops is perceived to have a greater impact upon the land and to the surrounding community. Some of the reasons for the differing impacts are the following:

- The life cycle of a timber harvest can take more than a generation, people come to view wooded areas as a more permanent part of the local landscape;
- The harvesting of timber can create significantly more noise than the harvest of more traditional crops;
- The weight of logging trucks can significantly degrade pavements;
- Wooded areas can provide significant and sometimes critical habitat for wildlife;

- Trees improve air quality by absorbing carbon dioxide and releasing oxygen in significant quantities;
- The root systems of trees stabilize soils, and thus help to prevent or minimize soil erosion; and
- Wooded areas can promote groundwater recharge.

However, there are several reasons forestry should be protected in Island County. It is important to the economy of Island County and can offer a local source of lumber to residents thereby reducing transportation impacts on the environment of obtaining lumber elsewhere. Timberlands, although they may be too disruptive for permanent wildlife habitat, may provide corridors for wildlife travel and migration. Preserving timber lands also prevents further development which has larger environmental impacts.

6.4.3.3 Wetland Protection

Wetlands provide a variety of functions which are important such as flood prevention, groundwater recharge, and filtering, and they provide critical habitat for plants and wildlife. However, wetlands vary significantly from site to site in terms of their values, functions, and quality. The quality of a wetland must be taken into consideration in determining its priority status for conservation or protection. More detailed information regarding wetlands as critical areas is contained within section 6.2.1.

6.4.3.4 Open Space Corridors

Open space corridors serve important functions for humans, providing walking, jogging, or cycling paths, or scenic vistas. Additionally, they are useful as migratory corridors for wildlife.

The identification of open space corridors between cities and Urban Growth Areas (UGA) is of particular importance in meeting the requirements of the GMA. The County's open space map identifies the following open space components:

- Parks lands
- Designated forest lands
- Open space lands
- Whidbey Camano Land Trust lands
- Natural shoreline areas
- Documented Prairie and Oak Woodland Communities
- Critical areas (including streams, wetlands and unstable slopes)
- Mapped trails

Island County will utilize this map to help identify priority areas for future acquisition that will continue to build important open space connections.

6.4.4 SIGNIFICANCE OF NATURAL LANDS IN ISLAND COUNTY

Natural land protection and preservation has long been a high priority of residents of Island County. Residents place a high value in open space preservation, protection of watersheds and drinking water sources, natural lands, farmland, and forests threatened by development. Protection of the remaining Natural Lands in Island County continues to be an increasingly important issue for Island County residents.

Table 6-1. Natural Lands/Open Space Summary

	Acres	Parcels
Some Form of Development	64,912	37,448
Open Space Program	23,286	1,617

Although both agriculture and forestry have become a much smaller part of the Island County economy in their own right, the overall importance of natural resource lands to the economic and cultural character of Island County is not easily measured. Rolling farmlands and extensive forested tracts are important components of Island County's rural atmosphere. The rural "feel" that will attract more residents and tourists may depend on the continued existence and maintenance of these lands. In addition to their aesthetic values, these lands also play important roles in air and water quality, climate resilience, and wildlife habitat.

While the aesthetic and environmental benefits of mineral resource lands (such as gravel pits) are not on a level with agricultural and forested lands, extraction of mineral resources is required under the GMA and important to the county's economic stability and diversity.

6.4.4.1 Agricultural Land Conservation

Conserving productive agricultural soils and encouraging farming operations as economically viable activity (and as an accepted way of life) is a major challenge in Island County.

Significant efforts have been made to preserve agricultural lands of key aesthetic and historical significance, and where viable farming is continuing, through public purchase of easements or of the land itself. Outside of those areas, farming activities are scattered and in comparatively small blocks. Much of the area which remains in production is not underlain by significant amounts of prime (Class II or III) soils. There are no unique soils in Island County as defined by the USDA Natural Resource Conservation Service. Farming in Island County typically includes fruits and vegetables, livestock and poultry, forage and grain, and seed production.

In light of the existing pattern of rural development in Island County, the County must find ways to protect farms large and small from increasing development pressures.

Table 6-2. Agricultural Lands

There are 17,038 acres of farmland in Island County, comprising of 377 farms of different sizes. The average farm size is 45 acres, which is down from the historical average of 62 acres.

	Acres	Parcels
Commercial Agriculture Lands	4,316	199
Rural Agriculture Lands	6,651	435
In the Agricultural Tax Program	9,466	545

Table 6-3. Agricultural Economy

	Average Number of People
Employed in Crop Production	102
Employed in Animal Production & Aquaculture	78

Farming in Island County is a $23 million dollar industry. Of the commercial products produced by Island County farms, dairy and livestock operations tend to be in significantly larger blocks of land under single ownership or management than are vegetable, berry, and seed production areas. In examining the minimum block size under a single management which is feasible for dairy or livestock, however, it appears that farms as small as 40 acres may be economically feasible. Similarly, vegetable, berry, or seed production on blocks of 40 acres or more appears to be economically viable. Micro-farming of vegetables or flowers may occur on significantly smaller tracts.

Given the existing development pressure in the rural areas of the county, there is a long-term need to preserve lands which are in active commercial production, and which have soil quality to support agricultural production. Reviewing the blocks of land being actively farmed under single management in Island County disclosed that many of those farms are not underlain by 50 percent or more prime soils. Some commercial farms with relatively little prime soil have been in operation in Island County for many years. It is assumed, however, that where the farm does not have prime soils, the current status of the farm as a commercial operation may be more a result of the skill or commitment of the current operator than the long-term value of the land as a land base for commercial agriculture. As a result, the only farms that should be put in Commercial Agriculture designation automatically are those which meet three criteria:

1. The farm is a block of at least 40 acres in size, owned by a single farmer.
2. Fifty percent or more of the block is underlain by prime soils.
3. The block is in active commercial agricultural use.

Farms which do not qualify for designation as Commercial Agriculture because of soil quality may volunteer to be put in that classification. All other parcels of 20 acres or more, within the agricultural tax program should be treated as agricultural lands of local importance and designated Rural Agriculture.

Small farms are gaining increased importance in the county. Specialty crops may be cultivated on lands of a size and with underlying soils not normally associated with larger scale farming. It is important that the County recognize the changing trends of farming in the county and provide for the appropriate land use regulations to allow them to prosper.

Incompatible development adjacent to agricultural lands increases pressures to convert these properties. Pressure comes from demands to suppress the “nuisance” factors created by farms, such as prohibiting livestock raising or limiting the storage and use of fertilizers. Right-to-farm measures must be adopted to enhance the farm economy. Under GMA, the County must ensure that uses on lands adjacent to resource lands do not interfere with continuing well-managed agricultural activities on resource lands. This may be accomplished by establishing a rural zoning density surrounding the resource lands; and, as required per RCW 36.70A.060, adopting regulations requiring that all users of new development within 300 feet of the property be notified of the proximity and impacts of the ongoing agricultural activities.

Rising taxation on adjacent land further accelerates conversion pressures. Farmland can be preserved as agricultural open space by implementing an array of programs, such as agricultural

land zoning and placing the property in current use tax programs.

6.4.4.2 Forest Lands Conservation

Forests in Island County are an important natural resource to landowners and local citizens. Forest lands contribute to the rural character, protect watershed functions, and provide wildlife habitat. Management of forest lands for timber production constitutes a valued element in the county's renewable natural and economic resource base, although it forms a small part of the local economy. Development pressure and widespread antipathy to commercial forest practices threatens the viability of forestry as a self-sustaining local industry.

The remaining timber land in Island County is in small and scattered blocks. That is significantly smaller than the minimum block sizes established by several Western Washington counties for forest lands of long-term commercial significance and is much smaller than the blocks of commercial significance which exist in the counties of Western Washington where the forest industry is active.

There are few industrial foresters left in Island County. The remaining forest landowners in Island County are non-industrial private forest owners. Although a few of those owners actively manage their lands to increase growth and for continuous production, much of the land is subject to minimal management. There are currently no timber converting facilities in Island County. All timber which is harvested in the county is trucked off the islands for processing.

Table 6-4. Forestry Lands and Timber Production

	Acres	Parcels
In the Timber Tax Program	12,298	856
Owned by DNR	399.36	10

While not all of these lands are being actively managed for industrial timber production, it is likely that all forest lands which do meet the definition are in a timber tax program.

One of the greatest obstacles to timber lands management is pressure from adjacent land uses. There are very few, if any, forest lands that are not adjacent to or within sight of existing plats, urban areas, or major transportation routes, some of which are scenic highways. Changing attitudes towards resource use have brought intense political pressure on elected officials to limit the aesthetic and environmental consequences of timber management practices.

6.4.5 IDENTIFICATION AND MANAGEMENT OF NATURAL LANDS

Early identification of important natural land areas, and the use of proven management and environmental protection techniques can help to maintain and improve environmental quality by preventing unwanted environmental consequences. This approach is both environmentally and fiscally responsible, as the costs associated with remediation or correction of environmental problems can be significantly higher than costs for prevention.

Identification of natural lands should also include land within urban areas, such as towns, cities,

UGAs, and Limited Areas of More Intensive Rural Development (LAMIRDs). Efforts should be made to designate natural lands in sizes and patterns which will maximize their benefit to the community and environment. Natural lands within urban areas may also perform the valuable function of acting as a buffer between differing land uses.

The ownership and extent of protection afforded to natural lands within the county is as varied as the many different types of natural lands which exist. Publicly owned lands which may qualify as natural lands may be owned or managed by State or Federal agencies, local governments, special purpose districts, or a combination of interest groups. Most recently, lands acquired through "joint venture" arrangements have protected significant sites by combining the resources of both public and private entities. The success of these efforts will determine the model for many future acquisitions.

6.4.6 ANALYSIS

6.4.6.1 Incentives

6.4.6.1.1 Tax Benefit Programs

State law permits counties to offer reductions in property taxes as an incentive in exchange for agreements to conserve or protect farmlands, forest lands, or open space.

On a countywide scale this occurs as tax shift, rather than a reduction, because the same total amount of taxes are collected, but the burden is instead shifted to other property owners. Island County has offered these incentives for many years, and the County Assessor's office has developed a record of success in implementing these programs. Currently, the County implements a Public Benefit Rating System (PBRS) program to incentivize private property owners to conserve natural lands (Chapter 3.40 ICC). It is implemented by evaluating an applicant's property based on guidelines established by the County. A larger reduction is offered depending on the type of land conserved and its relative benefit to the public and the environment. When it comes to the tax reduction programs offered to forestry, the reduction is based on soil type (RCW 84.33 and WAC 458-40-540). The reduction for agriculture is a bit more complicated; while most counties use a Farm Advisory Board to value the land, Island County does not have a Farm Advisory Board (RCW 84.34). Instead, the County uses long established values based on which region of the county the property is located.

The advantage to tax benefit programs is that they do not require the appropriation of new funds by the County to protect unique or desirable natural lands. In addition, the PBRS approach permits the County to focus on the protection of their identified priorities, without providing a larger benefit than needed to a less important property. One of the most important benefits to a PBRS program is that it reflects the values and priorities established by county residents.

6.4.6.1.2 Purchase or donation of easements or other rights

In some cases, a valuable portion or characteristic of a site can be protected without limiting the use or development of the remainder of the parcel. In these instances, the purchase or acquisition of an easement, a conservation restriction, or a development right may provide the full level of protection needed or desired by the public. Because the conveyance of an easement or any other interest in a parcel of land will affect the value of the property, the

property owner is likely to also experience a reduction in property taxes. Also, the conveyance of an interest in land by donation may result in an income tax deduction for the property owner.

The advantage to this approach is that only a portion of the value of a property is acquired, thus resulting in a lower public cost than the outright purchase of a complete interest in the property. Advantages to the property owners is that they are left with a valuable remainder of the property that can still be used, as well as possible property or income tax reductions.

6.4.6.2 Funding Strategies

Many approaches to conserve or protect natural lands will require the expenditure of public funds. Traditionally, grants from State or Federal agencies have been sought and utilized for this purpose. However, with increasing competition for these scarce resources, exclusive reliance on these types of funding sources will not succeed. In an era of limited public resources, Island County will need creative approaches to locating the needed funds.

6.4.6.2.1 Impact or mitigation fees

The authority to impose fees to mitigate the impact of development is discussed under regulatory approaches. Once collected, such funds may only be used in a manner which will mitigate the identified impact. If funds are collected to replace lost open space or recreational opportunities, they may then be used as part of an overall funding strategy to acquire, preserve, or protect natural lands.

6.4.6.2.2 Grants or loans from foundations

Many foundations are dedicated to environmental stewardship, including the conservation of natural lands. Foundations may be established as independent organizations, or as a charitable extension of a corporation. In addition to foundations or charitable trusts, corporations will often provide direct funding for specific projects if such projects can benefit them or the communities in which they do business.

6.4.6.2.3 Dedicated revenues from local taxes

Subject to the approval of voters, the County may authorize the use of local real estate taxes to pay for the costs associated with acquiring or conserving natural lands. Some examples of uses of local taxes for this purpose are:

- Conservation Futures Fund
- Real Estate Excise Tax (REET)
- The Real Estate Environmental Endowment (TREE)
- Bonds
- Voter-approved Property Tax Levy

6.4.6.3 Collaborative Approaches

Island County benefits from the presence of a diverse array of citizens, organizations, and agencies who are dedicated to the conservation, preservation, or protection of natural lands. These organizations include park districts, port districts, private land trusts, and government

agencies on all levels. It is often the case that no single agency or organization has the resources to protect important natural lands. It is thus becoming increasingly important for individuals and groups with similar interests to work together to pool their resources and protect those qualities that they determine to be important.

6.4.7 CONTINUED PUBLIC INVOLVEMENT AND EDUCATION

To implement this plan, support from the public is essential. Public involvement should be encouraged throughout this plan's implementation. The County should encourage dialogue among its citizens, and it should make every effort to enhance communication between individuals, interest groups, special districts, and governments at all levels.

Public involvement and support starts with education. In order for these strategies to succeed, they must be accepted and actively supported by the citizens of the county. Experience in many jurisdictions throughout the country has shown that such support will be given only when the public understands the issues.

The most traditional form of public involvement has been through formal public hearings. Such hearings serve a useful purpose, but they are most helpful in educating and informing the public. One major drawback to the use of public hearings is that the format of the hearing often results in a rigid setting between citizens and public officials which doesn't allow for adequate dialogue. Less formal meetings that encourage a cooperative exchange of information are almost always more productive. Other educational methods include speaking before interest groups and local service clubs, disseminating information through the internet, and providing informational materials to the public in easily understood formats.

6.5 MINERAL LANDS

The GMA calls for long-term conservation of mineral resource lands to ensure current and future supplies of sand, gravel, and non-renewable minerals. These lands must be protected from urban encroachment while ensuring environmental protection through appropriate siting, operation, and reclamation standards. Mineral resource lands include those lands devoted primarily to mineral extraction or that have a known potential for long-term commercial extraction of minerals. Minerals are defined as sand, gravel, and valuable metallic substances.

Surface mining is considered a zoning overlay, applicable within Agricultural, Forestry, and Rural Lands. This precludes unnecessary rezoning of land for mining and related mine activities and maintains the Comprehensive Plan's long-term land use vision beyond surface mining. However, as with agricultural and forest lands, GMA requires the County to establish designation and protective criteria for these lands.

6.5.1 EXISTING MINERAL LANDS

While designation of these sites is fairly straightforward, the issue of protecting them is more difficult. Existing sites have, however, already been permitted. Thus, the conditions under which they operate have been established and are vested. Surrounding uses of existing sites have had fair warning of the existence of the site. Therefore, it is not clear that additional restrictions on surrounding lands are necessary. The County will require that all plats, short plats, development permits, and building permits issued for development activities on, or within three hundred feet of

existing mineral lands contain a notice that the subject property is within or near designated mineral resource lands on which a variety of commercial activities may occur that are not compatible with residential development for certain periods of limited duration.

6.5.2 POTENTIAL MINERAL LANDS

Although the U.S. Geological Survey (USGS) has identified broad areas of potential gravel deposits in Island County, it is unreasonable to designate those entire areas. They are in large part already developed with small lot sizes and incompatible land uses for any new mineral extraction. The USGS designation also provides no assurance that the land in fact has gravel under it, how deep such gravel deposits may be, or whether any gravel, if it exists, is present in commercial quantities.

Thus, restricting the use of land which may be in large enough undeveloped parcels to provide the ability to permit a new mineral extraction site, based on the USGS study, is unreasonable, because it is little more than speculative to suggest that the land has “potential” for mineral development. The County will revisit the issue of designation of potential mineral sites at such time as it has information upon which to make a reasonable judgment about designation of potential sites. For now, a permitting system and land use standards for surface mining that allows new proposals to be considered, on a case-by-case basis, is the best interim course of action available to the County.

6.6 GOALS AND POLICIES

Goal 1. Safeguard the natural environment as an integrated system where the land, water, and air resources interact creating a ~~balanced~~ healthy and resilient environment for all life on the islands.

NR 1.1 Include the best available science in developing policies and development regulations to protect the ecosystem functions and values of critical areas to ensure no net loss and give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries.

NR 1.2 Preserve Island County's environmental quality in pursuit of environmental justice and health equity through the careful use of land, water, and air resources.

NR 1.2.1 Extraction of mineral resources must avoid to the greatest extent feasible ~~minimize~~ detrimental effects to the environment. ~~(Other policies related to the siting and conservation of mineral lands are located in the Land Use Element.)~~

NR 1.2.2 Prioritize and incentivize infilling of developed lands, Urban Growth Areas, clustering, and areas of more intensive rural development ~~will be encouraged in order~~ to provide public facilities and services in the most efficient manner, as laid out in the Land Use Element.

NR 1.2.3 Incentivize green infrastructure and Low Impact Development (LID) practices to promote stormwater infiltration, non-point source pollution, and aquifer recharge.

NR 1.3 Conserve energy by incentivizing efficient energy consumption, reduction of waste, reduced emissions, and ~~proper~~ efficient land use management.

NR 1.3.1 ~~Government must~~ Provide ~~leadership~~ guidance and education in employing energy conservation practices and the use of renewable energy technologies to improve climate resilience.

NR 1.3.1.1 ~~Recycling of wastes and use of recycled or reused materials will be encouraged.~~ Encourage easy to access community facilities for reuse, recycling, and composting.

NR 1.3.1.2 Allow for reuse of ~~gray and treated black~~ water ~~will be encouraged~~, provided treatment design meets local and state public health standards.

~~NR 1.3.2 Transportation systems and land use patterns must be designed to consider conservation of energy. Primary employers, commercial users and population centers will be clustered where possible to minimize worker, service and consumer travel, as laid out in the Transportation Element.~~

~~NR 1.3.3 Government services will be sited to minimize consumer travel, as laid out in the Capital Facilities Element.~~

NR 1.3.2 ~~4 Island County will encourage~~ Incentivize developments and structures with energy and/or water conservation technologies through density credits, waiving of permit fees, and

bonuses for implementation of conservation practices in development.

~~NR 1.4 High intensity lighting is discouraged, but where necessary will require that it must be shielded from adjacent properties and roads and shielded and directed down to reduce impacts to the dark sky.~~

NR 1.4 Conserve and enhance a diverse network of natural lands and open spaces for public benefit and wildlife.

NR 1.5 Incentivize innovative conservation methods to permanently protect high-priority natural areas.

NR 1.6 Preserve a high level of air quality by limiting outdoor burning and reducing the use of fossil fuels.

NR 1.6.1 Encourage alternatives to outdoor burning from clearing, grading, and logging activities, and incentivize having materials chipped on site.

NR 1.6.2 Incentivize conversion to alternative fuels and energy sources and tree planting to improve air quality.

~~**Goal 2. Preserve a high level of air quality**~~

~~NR 2.1 Emphasis will be given to alternative forms of transportation (public transit, car pools, bicycle and pedestrian trails) decreasing dependency on the single occupant automobile.~~

~~NR 2.2 Promote non-polluting alternatives to wood burning, such as solar heating and chipping instead of burning slash.~~

Goal 2. ~~**3Protect wetlands from a net loss in functions.**~~ **Protect, preserve, and enhance wetlands to offset impacts and to achieve no net loss of wetland functions.**

~~NR 3.1 Protect, preserve, and enhance wetlands to achieve no net loss of wetland functions.~~

NR 2.1 ~~3.1.1~~ Avoid land development that causes loss of wetland functions and values. When there is no reasonable alternative, minimize and ~~mitigate~~ compensate adverse impacts to wetland functions.

NR 2.2 ~~3.1.2 Mitigation projects that add to existing wetlands or increase functions and values of degraded wetlands are preferred over efforts to create wetlands from non-wetland areas and should remain subject to wetlands protection regulations.~~ Prioritize onsite mitigation projects that add to existing wetlands or increase functions and values of degraded wetlands followed by in-watershed mitigation. ~~rather than creating wetlands from non-wetland areas.~~

NR 2.3 ~~3.1.3~~ Prohibit alteration of land that results in degradation of ~~Category A~~ wetlands, except for maintenance of existing public use, ~~or~~ road, or utility crossings that are the least environmentally damaging practical alternative. ~~or if necessary to permit reasonable use of the land. In such cases, minimize and mitigate the degradation.~~

~~NR 3.1.4 Implement non-regulatory wetlands protection measures such as acquisition and incentive programs and the public benefit ratings system.~~

NR 2.4 ~~3.1.5~~ Improve ecological connectivity between critical areas by allowing increased flexibility in the application of buffers, to include buffer averaging, protection of non-buffer areas via conservation easements, density and/or tax incentives, site design, and other techniques.

NR 2.5 ~~3.1.6~~ Consider economic, environmental, and cultural costs when evaluating proposals for wetland buffer alterations, and recognize instances where development or alteration within or adjacent to wetland~~s~~ buffers is acceptable.

NR 2.6 ~~3.2~~ Allow reasonable use of a property, provided all wetland~~s~~ functions are evaluated, the least ~~harmful~~ impactful alternative is pursued, and degraded functions are mitigated to ensure no net loss of ecological function.

~~NR 3.3 Locate development away from regulated wetlands by use of buffers. and Planned Residential Developments.~~

~~NR 3.4 Maps, site-specific studies, and information collected by other agencies available for public review will be made readily accessible to potential and existing landowners, interested citizens, and development interests to aid in the protection of these areas.~~

~~NR 3.5 Alteration will occur only after careful consideration of the function of the area, the potential environmental costs of alterations, the sensitivity of the area to disturbance, and the intensity and potential risks associated with a proposed land use.~~

~~NR 3.6 When a violation of the policies and regulations of this area is identified, the enforcement action and severity of any penalty will be proportional to the nature and circumstances of the violation and the damage or risk to private and public resources.~~

~~NR 3.7 Overlay policies and development regulations shall be implemented in addition to those associated with the underlying land use designation. When there is a conflict in policy statements or development regulations, the more restrictive shall apply.~~

~~NR 3.8 Wetlands regulations are contained in ICC 17.02B and where applicable, ICC 17.05A.~~

Goal 3. ~~4~~ Protect Fish and Wildlife Habitat Conservation Areas to provide for biodiversity and ecosystem services, such as water infiltration and retention, flood mitigation, climate resiliency, and recreation.

NR 3.1 ~~4.1 Develop~~ Utilize specific criteria and processes to nominate, designate, and classify habitats and species of local importance.

NR 3.2 ~~4.2~~ Periodically review and update designations as new information on species viability and habitat needs becomes available.

~~NR 4.3 Conserve habitats necessary for continued reproductive success of designated species.~~

NR 3.3 ~~4.3.1~~ Conserve and protect ~~elements necessary to the survival of designated species, including~~ habitat areas such as nests, breeding areas, and nurseries from disturbance during critical life cycle periods to support the survival of protected species.

NR 3.3.1 ~~4.3.2~~ Encourage enhancement of ~~degraded~~ habitat areas where the function and value of habitat has been degraded.

NR 3.3.2 ~~4.3.3~~ Based on the recommendations of Biological Site Assessment or Habitat Management Plan, provide physical buffers or timing restrictions around specific habitat areas used by designated species commensurate to the seasonal use of the area (where that is the case), the sensitivity of the species and habitat, the relative importance of the species and habitat, and the intensity of proposed and actual uses.

NR 3.3.3 ~~4.3.4 Landscaping, screening, or vegetated buffers required through development review should r~~ Retain, salvage, or re-establish native vegetation using conditions developed during review of a development application.

~~4.3.5 Limit the use of non-native and prohibit the use of invasive plant species in Fish and Wildlife Habitat Conservation Areas.~~

NR 3.3.4 ~~4.3.6 Encourage the provision of~~ Identify, map, protect, and encourage corridors and networks of native vegetation between protected habitat areas to minimize isolating and fragmenting designated wildlife habitat. ~~Incorporate~~ Incentivize natural resource lands supporting uses such as forestry and agriculture into wildlife corridors and networks.

NR 3.3.5 Allow the modification of buffer standards that would result in no net loss of ecological function and values (pursuant to Biological Site Assessment) to promote connectivity of critical areas.

NR 3.3.6 ~~4.3.7 Consult with~~ Review State and Federal regulations and guidelines for consistency ~~agencies~~ when making wildlife management and protection decisions.
NR 3.3.7 ~~4.3.8~~ Develop a watershed-based plan to identify options for improving continuity of natural systems, through restoration, rehabilitation and preservation, including incentives for landowners including flexibility of buffer standards, tax incentives, or density bonuses.

NR 3.4 ~~4.4 Protect all streams.~~ Support and incentivize voluntary stream, wetland, riparian, and shoreline restoration and preservation efforts.

NR 3.5 Establish a regular update schedule for the County's Monitoring and Adaptive Management element of the Critical Areas Ordinance, based on guidance from WDFW and WA Dept. of Ecology and pursuant to WAC 365-196-660(2)(b).

~~NR 4.5 Protect near shore habitats, including commercial and recreational shellfish areas; kelp and eelgrass beds; herring, sand lance and smelt spawning areas.~~

~~NR 4.5.1 The design of new and replacement on-site sewage systems shall meet the minimum requirements outlined in ICC 8.07C and where applicable, meet the siting requirements in ICC~~

~~17.05A~~

~~NR 4.5.2 Require buffers for new development adjacent to streams and marine habitats.~~

~~NR 4.5.3 Require preparation of farm plans for new agriculture uses in the Commercial Agriculture land use district.~~

NR 3.6 ~~4.5.4~~ Require implementation of Natural Resources Conservation Service best management practices for ~~new and~~ existing agricultural activities.

~~NR 4.6 Maps, site-specific studies, and information collected by other agencies available for public review will be made readily accessible to potential and existing landowners, interested citizens, and development interests to aid in the protection of these areas.~~

NR 3.7 ~~4.7~~ Regulation of these areas will take into consideration the ecological functions and values of the area, the potential environmental costs of alterations, the sensitivity of the area to disturbance, and the intensity and potential risks associated with a proposed land use.

~~NR 4.8 When a violation of the policies and regulations of this area is identified, the enforcement action and severity of any penalty will be proportional to the nature and circumstances of the violation and the damage or risk to private and public resources.~~

~~NR 4.9 Overlay policies and development regulations shall be implemented in addition to those associated with the underlying land use designation. When there is a conflict in policy statements or development regulations, the more restrictive shall apply.~~

~~NR 4.10 Fish and Wildlife Habitat Conservation Areas regulations are contained in ICC 17.02B and where applicable, 17.05A.~~

NR 3.8 Support recovery of native fish populations based on data provided by, and in coordination with state, tribal, and federal programs.

Goal 4 ~~5~~ Protect public health, safety, and welfare, to minimize public and private losses due to flood conditions in frequently flooded areas.

NR 4.1 ~~5.1~~ Reduce the potential for physical injury and damage to public and private property from flooding by minimizing impacts of upstream land uses.

NR 4.1.1 ~~5.1.1~~ Protect natural water storage areas and drainage systems, including wetlands, streams, and lakes, to reduce downstream flooding.

NR 4.1.2 ~~5.1.2.~~ Ensure new or expanded development ~~above identified thresholds~~ located within frequently flooded areas complies with the current version of the State Stormwater Manual and is accompanied by appropriate stormwater facilities, such as detention ponds, infiltration facilities, and other measures to maintain rates of runoff at pre-development levels. ~~minimizes additional runoff by limiting impervious surfaces, unnecessary grading and compaction of soils, and preserving areas of undisturbed vegetation.~~

~~NR. 5.1.3 Ensure new development above identified thresholds is accompanied by appropriate stormwater facilities, such as detention ponds, infiltration facilities, and other measures to maintain rates of runoff at pre-development levels.~~

~~NR 5.1.4 Impose standards for construction in frequently flooded areas to minimize the potential for physical injury and property damage.~~

~~NR 5.2 Maps, site-specific studies, and information collected by other agencies available for public review will be made readily accessible to potential and existing landowners, interested citizens, and development interests to aid in the protection of these areas.~~

~~NR 5.3 When a violation of the policies and regulations of this area is identified, the enforcement action and severity of any penalty will be proportional to the nature and circumstances of the violation and the damage or risk to private and public resources.~~

~~NR 5.4 Development regulations shall be implemented in addition to those associated with the underlying land use designation.~~

NR 4.2 ~~5.5~~ The County's Surface Water Program will continue to implement LID practices ~~work~~ to review drainage, flooding, and stormwater run-off in the area and nearby jurisdictions to provide guidance for corrective actions to mitigate or cleanse those discharges that pollute waters of the state.

NR 4.3 Examine alternatives and increase scrutiny for septic systems located in areas that are subject to flooding for any reason, particularly during high runoff rainstorms or coastal flooding events.

~~NR 5.6 Regulations for frequently flooded areas are contained in the ICC 17.02B, as well as ICC 17.05A for the FEMA designated 1% flood zone.~~

NR 4.4 Incentivize community septic systems and the purchasing of land for septics located landward of shoreline areas that replace aging single-family infrastructure in flood prone areas.

Goal 5 ~~6~~ Protect the public health, safety, and welfare from threats resulting from incompatible development being sited on or near steep and/or unstable slopes.

NR 5.1 ~~6.1~~ Minimize damage to life, health, property, and natural resources caused by geological processes.

NR 5.1.1 ~~6.1.1~~ Require thorough geotechnical investigation of localized conditions during the review of proposed development within areas of steep/unstable slopes. ~~The amount of information required will be proportionate to the severity of the geologic hazard and the susceptibility of the proposed development.~~

NR 5.1.2 ~~6.1.2~~ Encourage, and where appropriate, require use of special engineering, site design, and modified construction practices.

NR 5.1.3 ~~6.1.3~~ When technology cannot reduce risks to acceptable levels, prohibit activities and

land uses which cause or exacerbate existing hazardous geological conditions such as site modification, modification of vegetation, and/or modifications for stormwater management.

~~NR 6.2 Maps, site-specific studies, and information collected by other agencies available for public review will be made readily accessible to potential and existing landowners, interested citizens, and development interests to aid in the protection of these areas.~~

NR 5.2 ~~6.3~~ Regulation of these areas will take into consideration the sensitivity of the area to disturbance, and the intensity and potential risks associated with a proposed land use.

~~NR. 6.4 When a violation of the policies and regulations of this area is identified, the enforcement action and severity of any penalty will be proportional to the nature and circumstances of the violation and the damage or risk to private and public resources.~~

~~NR 6.5 Overlay policies and development regulations shall be implemented in addition to those associated with the underlying land use designation. When there is a conflict in policy statements or development regulations, the more restrictive shall apply.~~

~~NR 6.6 Steep and unstable slope regulations are contained in ICC 17.02B.~~

Goal 6 ~~7~~ Manage and protect ground water and provide for resource protection through a common goal of non-degradation and replacement for existing and future residents of Island County.

NR 6.1 ~~7.1~~ Protect the quantity and quality of groundwater resources for existing and future residents of Island County.

NR 6.1.1 ~~7.1.1~~ Provide or direct residents to incentive programs to encourage participation in water conservation and aquifer recharge area protection programs.

NR 6.1.2 ~~7.1.2 No~~ Prohibit development ~~shall be allowed~~ in areas of known ground water limitations as determined by the Health Department, unless it can be proven through objective well tests not to diminish water supplies or reduce water quality for existing users~~, per ICC 8.09 and related policies~~.

~~NR 7.1.3 Continue to carefully evaluate the hydrogeologic setting when making decisions on potentially contaminating land uses, and require use of Best Management Practices, hazardous material management plans, and other tools to help prevent contamination of ground water.~~

NR 6.2 ~~7.2 The County will promote~~ Incentivize the retention and reuse of stormwater using integrated stormwater management best practices to protect surface and groundwater quality ~~when it is the best and environmentally correct option~~.

NR 6.3 ~~7.3 Public education concerning water conservation will be a continuing high priority.~~ Educate County residents and businesses about the function and benefits of water conservation.

NR 6.4 ~~7.4 Reuse of water, recharge of aquifers and alternative storage systems will be~~

~~encouraged.~~ Identify and protect critical aquifer recharge areas by utilizing LID site planning principles, water reuse, or alternative storage systems to the greatest extent possible for reducing stormwater runoff.

NR 6.5 ~~8.1 Consider acquisition of~~ Identify, protect, and acquire areas with particular value to groundwater recharge.

NR 6.6 ~~8.2 Continue efforts to identify areas with ground water problems such as seawater intrusion, groundwater depletion, and contamination from surface activities.~~ Develop a comprehensive assessment of groundwater infrastructure in Island County including resiliency needs to support preparedness.

NR 6.6.1 Continue implementing data collection and analysis efforts as recommended in the Ground Water Management Program.

NR 6.6.2 Use site-specific data as it becomes available to determine locations of important recharge areas, areas of limited ground water availability, and areas of particular vulnerability to contamination from surface activities. Maintain, update, and coordinate this data to make the most effective use of the available information.

~~NR 7.6.2 Work with the Island County Health Department, Washington Departments of Health and Ecology to make best use of available data and new technology.~~

NR 6.7 Prohibit hazardous uses in critical recharge areas and protected wellhead areas, limit impervious surfaces to reduce stormwater runoff, and require LID standards.

Goal 7 ~~**9 Ensure that Island County plans and develops in a manner that utilizes the best available information regarding water resources so that the resource will be preserved for current and future use.**~~ **Ensure water will be preserved for current and future uses by treating it as precious and incentivizing conservation, reducing leakage, reclamation, and reuse.**

~~NR 9.1 Maps, site-specific studies, and information collected by other agencies available for public review will be made readily accessible to potential and existing landowners, interested citizens, and development interests to aid in the protection of these areas.~~

NR 7.1 ~~9.2 Watershed management planning will be cognizant of the need to preserve water supply while providing drainage facilities to protect the welfare and safety of the community.~~ Develop a watershed planning approach through collaboration between Island County DNR, Public Works, and Planning utilizing the Clean Water Utility to support comprehensive watershed plans that can be continually updated to advance priorities.

~~NR 9.3 Development plans will contain plans for facilities to mitigate the impacts of increased runoff, stormwater drainage and flooding.~~

~~NR 9.4 The location and design of development will be carefully guided in order to minimize potential adverse impacts on the quality of ground and surface waters.~~

NR 7.2 ~~9.5~~ Encourage land use patterns and practices such as preservation of forested areas, wetlands, and floodplains, and impervious surface reduction that preserve and restore the integrity of the natural watershed system.

~~**Goal 8 Protect aquifer recharge areas from contamination and insure long term recharge potential.**~~

Goal 8 ~~10 Natural Lands~~ Conserve a variety of natural lands, in both public and private ownership, for the enjoyment and economic benefit of current and future residents of Island County.

NR 8.1 ~~10.1~~ Balance public and private interests in land.

NR 8.1.1 ~~10.1.1~~ Correct ~~any~~ imbalances in public policies between open space protection and land development ~~incentives through sound incentives for land conservation and careful analysis of the~~ using equity criteria and real costs, both financial and environmental, of subsidizing development.

NR 8.1.2 ~~10.1.2~~ Only consider divestment in publicly owned open lands and resources if careful analysis shows that they contain little value as public conservation or recreational land.

NR 8.1.3 ~~10.1.3~~ Reinvest proceeds from the selling or trading of publicly owned open lands and resources ~~should be reinvested in~~ towards conservation of land and resources, either directly or through a dedicated fund that yields continuing income streams devoted to land conservation.

NR 8.1.4 ~~10.1.4~~ Respect property rights when developing regulations and policies around land conservation.

~~NR 10.1.4.1 Ensure that the designation of natural lands does not infringe on individual property rights.~~

NR 8.1.5 ~~10.1.5~~ Develop objective criteria to prioritize public expenditures for the acquisition of fee simple or other interests in natural lands recognizing the physical and mental health benefits that natural environments provide to our residents.

NR 8.2 ~~10.2 Identify~~ Pursue funding ~~sources~~ for the acquisition or protection of natural lands in accordance with the Parks and Recreation Element.

Goal 9 ~~11~~ Prioritize the protection of natural lands that coincide with other valuable resources, including ecological~~, historical,~~ and agricultural~~, recreational, and cultural~~ lands.

NR 9.1 ~~11.1~~ Maintain the important ecological functions and values of natural landscapes such as wetlands, stream corridors, shoreline systems, and forests.

NR 9.1.1 ~~11.1.1~~ Develop land use regulations and strategies such as cluster development and wetlands buffer requirements to identify and preserve important natural lands areas located on sites proposed for development.

NR 9.1.2 ~~11.1.2 Prioritize the protection of natural lands that contain historic or archaeological sites, structures, and landscapes. which are important to local culture and retain the county's rural quality and character.~~ Prioritize the protection of natural lands that provide multiple benefits, including critical wildlife habitat, aquifer recharge, flood storage, carbon sequestration, and recreational or scenic value.

NR 9.2 ~~11.2~~ Conserve agricultural lands for the continued profitable production of crops, timber, and livestock.

NR 9.2.1 ~~11.2.1 Discourage the conversion of~~ Require properties identified as having prime farmland soils or designated as resource lands comply with WAC 365-190-040 to de-designate lands to non-agricultural uses.

NR 9.2.2 ~~11.2.2 Look into~~ Consider possible strategies for protecting agricultural uses and maintaining the economic viability and sustainability of existing farms.

NR 9.3 ~~11.3~~ Enhance recreational opportunities for ~~C~~county residents.

~~**Goal 13 Continue to promote active public involvement in the conservation or protection of important natural lands.**~~

NR 9.4 ~~13.1~~ Foster enduring voluntary land conservation through incentives, partnerships, new innovative solutions, and government assistance such as income and estate tax benefits, technical assistance grants, and programs to purchase partial land interests.

NR 9.5 ~~13.1.1~~ Continue implementing the Public Benefit Rating System as a property tax reduction incentive program for property owners to conserve open space and encourage transition of parcels from designated forest to PBRS.

NR 9.6 ~~13.1.2~~ Maintain existing current use taxation programs for designated forest and agricultural lands.

NR 9.7 ~~14~~ Continue an open dialogue between Island County, incorporated jurisdictions, special purpose districts, non-profits, and other interested individuals and organizations working toward the conservation or protection of natural lands.

NR 9.8 ~~14.1 Establish and maintain~~ Continue to foster active public involvement and partnerships with State and Federal agencies, cities, towns, private non-profit conservation groups, port districts, school districts, tribes, foundations, corporations, and individuals for the purpose of acquiring or protecting natural lands.

NR 9.9 ~~14.2~~ Design and implement education programs to promote the benefits of conserving natural lands, and to introduce available and proposed current use taxation programs.

Goal 10 ~~12~~Protect ~~natural,~~ scenic, cultural, and historic lands as community assets.

NR 10.1 ~~12.1~~ Maintain Island County's natural lands and open space to protect health and

welfare, enhance the quality of life, preserve heritage, promote economic vitality, and reduce the burden on government resources.

~~NR 12.2 When converting land to a use that requires water availability, Island County will prohibit major alterations to the land beyond the minimum necessary to do soil and water testing prior to the issuance of a water right or other state or local authorized evidence of adequate potable water.~~

NR 10.2 ~~12.2~~ Ensure residents have adequate access to open space areas, including land that contains natural areas, beach access, ~~habitat lands, natural drainage features,~~ and/or other ~~environmental,~~ cultural, and scenic resources.

Goal 11 ~~15~~Protect existing and ongoing resource management operations and preserving long-term commercial viability of those uses, while encouraging extraction methods that are least damaging to the environment.

NR 11.1 ~~15.1 Measures shall be used~~ Implement further measures to support ~~silviculture~~ sustainable forest practices ~~industries~~.

NR 11.2 ~~15.2~~ Encourage the conservation of lands suitable for forestry ~~use~~ and support healthy forest~~ry~~ stewardship and management as an activity valued in the County.

NR 11.3 ~~15.3 Cluster development or~~ Encourage low intensity uses or cluster development (per WAC 365-196-425) to minimize site clearing and maintain future forestry use options.

NR 11.4 ~~15.4~~ Encourage forestry landowners to retain their lands in timber production and timber stewardship and to utilize tax incentive programs.

NR 11.5 ~~15.5~~ Support innovative public and private programs that provide foresters incentives to stay on the land.

NR 11.6 ~~15.6~~ Encourage selective clearing and logging, as opposed to clearcutting, especially if forest harvesting is done in the Ebey's Landing National Historical Reserve.

NR 11.7 Promote innovative and sustainable forest management that enhances forest health, protects existing tree canopy, and promotes replanting with diverse native species.

NR 11.8 Encourage reforestation of underutilized or degraded lands and agroforestry practices that integrate native trees into the landscape.

NR 11.9 ~~15.7~~ Achieve agricultural preservation through:

NR 11.9.1 ~~15.7.1~~ Support right to farm and forest measures which protect the right to pursue farm and forestry activities.

NR 11.9.2 ~~15.7.2~~ Support the continuation of preferential tax programs.

NR 11.10 ~~15.8~~ Encourage an effective stewardship of the environment to conserve and protect

Commercial Agriculture lands.

NR 11.10.1 ~~15.8.1~~ Prevent or correct agricultural practices that produce non-point source pollution of surface and groundwater.

NR 11.10.2 ~~15.8.2~~ Take measures to minimize adverse impacts of agricultural activities, including agritourism.

NR 11.11 ~~15.9~~ Protect agricultural operations from incompatible uses by using measures including, but not limited to:

NR 11.11.1 ~~15.9.1~~ Ensuring that uses on adjacent lands do not interfere with continuing agricultural good management practices on resource lands.~~;~~

NR 11.11.2 ~~15.9.2~~ Setbacks and buffer strips should be on land within the development unless an alternative is mutually agreed on by adjacent landowners.~~; and~~

~~NR 15.9.3 Public education concerning resource activities and the common benefits derived from them.~~

NR 11.12 ~~15.10~~ Protect and promote related development such as farmers markets and roadside stands, cooperative marketing, and value-added products, etc.

NR 11.13 ~~15.11~~ Strengthen public disclosure of current adjacent agricultural activities by means of a “right to farm” notice on the deed, area maps, etc.

~~NR 15.12 Support the continued existence of agricultural lands by means of tax incentives or other appropriate financial aid or incentives.~~

NR 11.14 ~~15.13~~ Coordinate agricultural land preservation policies with other jurisdictions, special districts and their respective programs.

NR 11.15 ~~15.14~~ Coordinate agricultural land preservation policies with other Countywide Planning Policies through:

NR 11.15.1 ~~15.14.1~~ Correlating agricultural land preservation policies with Urban Growth Area policies and with public facility and service provision policies to prevent the extension of urban services to areas intended for continued agricultural use;

NR 11.15.2 ~~15.14.2~~ Ensuring that public facility and service extension, even if not directly serving the agricultural lands, do not stimulate the conversion of agricultural land or make its preservation and protection more difficult.

NR 11.16 ~~15.15 In order to assure the rights of agricultural land owners and to provide them reasonable flexibility to modify classification of their land, owners of agricultural land may request change of agricultural lands classification under certain circumstances.~~ In order to assure the conservation of agricultural lands, landowners wishing to request a modification to the classification of their land shall have their proposals reviewed through the comprehensive

plan amendment process, consistent with WAC 365-190.

NR 11.17 ~~15.16~~ Cooperative agricultural production and marketing will be encouraged.

NR 11.18 Permanently preserve prime farmland while directing growth to appropriate areas.

~~NR 15.17 Maintain and enhance natural resource based industries.~~

NR 11.19 ~~15.17.1 Assure conservation of mineral resource lands.~~ Conserve long term mineral lands to ensure the continued supply of sand, gravel, and non-renewable minerals, and their protection from urban encroachment, as well as environmental protection through appropriate siting, operation, reclamation standards and groundwater protection measures.

NR 11.19.1 ~~15.17.1.1~~ Assure that the use of lands adjacent to mineral resource lands do not interfere with the continued use, in accordance with best management practices, of lands designated for the extraction of minerals.

NR 11.19.2 ~~15.17.1.2~~ Assure that the excavated land will have an ultimate economic use which will complement and preserve the value of adjoining land.

NR 11.19.3 ~~15.17.1.3~~ Maintain the contribution of mining and processing operations to the Island County employment base.

NR 11.19.4 ~~15.17.2~~ Island County will provide for title or plat notification for property owners within 300 feet of an existing approved mining operation.

NR 11.19.5 ~~15.17.3~~ Regulate surface mining operations to minimize land use conflicts through the conditional use process.

NR 11.19.6 ~~15.17.4~~ Apply standards which consider noise levels, light pollution, dust, visual screening, transportation impacts, hours of operation, water quality and groundwater protection and consumption, to new and expanding mine operations.

~~NR 15.17.5 Encourage the purchase of development rights, by the mine developer, of the area within 300 feet of the proposed mine, thus limiting use within that area to forestry, agricultural or designated open space, for the life of the mining operation.~~

NR 11.20 ~~15.18~~ Allow extractive industries to locate where prime natural resource deposits exist, provided these sites are separated by buffers from existing residential areas and restored for appropriate reuse after removing the resource material.

NR 11.21 ~~15.19~~ Discourage new residential uses from locating near active extractive sites, unless the residential developer provides adequate buffering.

NR 11.22 ~~15.20~~ Operation of new and expanding sites will be regulated by land development standards to ensure proper siting and to minimize environmental impacts during operation.

NR 11.23 ~~15.21 There is no minimum parcel size for existing operations.~~ Future commercial

sites generally should be 10 acres or greater to provide for adequate screening. Future small-scale operations such as borrow pits (where soil, sand, gravel, and other materials are made available) may be less than 10 acres.

NR 11.24 ~~15.22~~ On sites with disturbed areas of three acres or less, site reclamation will be carried out as soon as practical, as phased operations are completed, to prevent erosion and water quality degradation, and to return the site to a natural state. Reclaimed sites can be used for any of the uses permitted in the underlying land use designation.

NR 11.25 ~~15.23~~ Surface mining is not considered to be a permanent use of the land. The land should be utilized consistent with the long-term plans of the community, and mining allowed based upon performance standards.

~~NR 15.24 Overlay policies and development regulations shall be implemented in addition to those associated with the underlying land use designation. When there is a conflict in policy statements or development regulations, the more restrictive shall apply.~~

~~NR 15.25 Island County shall notify adjacent landowners of the existence of a surface mine and to the extent known, undeveloped mineral resources, acknowledging that surface mining is market dependent, and operations may be intermittent and more or less intense at times.~~

NR 11.26 Encourage Innovative development concepts to buffer agricultural and mineral resource lands from development.

NR 11.27 Develop guidelines that require cluster developments to be separated from lands designated Mineral Resource by dedicated open space areas or by other measures.