

# Guemes Island Sub-Area Plan

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DECEMBER 2010

Based on the Guemes Island Planning Advisory Committee July 2007 draft, with suggested revisions from the Skagit County Planning Commission, Planning & Development Services, Public Health, and Public Works; and technical assistance from Mark Personius, growth management consultant.

**A Component of the Skagit County Comprehensive Plan  
December 2010**

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# Acronyms

ADU—Accessory Dwelling Unit  
CAO—Critical Areas Ordinance  
CaRD—Conservation and Resource Development Land Divisions (Cluster Subdivisions)  
CERT—Community Emergency Response Team  
CFP—Capital Facilities Plan  
CPP—Skagit County Countywide Planning Policies  
DNR—Washington Department of Natural Resources  
ECY—Washington State Department of Ecology  
EPA—U.S. Environmental Protection Agency  
FPA—Washington Forest Practices Act  
GIET—Guemes Island Environmental Trust  
GIPAC—Guemes Island Planning Advisory Committee  
GIPOA—Guemes Island Property Owners Association  
GMA—Washington State Growth Management Act (RCW 36.70A)  
HCA—Habitat Conservation Areas  
LAMIRD—Limited Areas of More Intensive Rural Development  
LOS—Level of Service  
MRC—Skagit County Marine Resources Committee  
NRL—Natural Resource Lands  
OHWM—Ordinary High Water Mark  
RCW—Revised Code of Washington  
RSI—Guemes Island Rapid Shoreline Inventory  
SCCP—Skagit County Comprehensive Plan  
SCC—Skagit County Code  
SSWS—Shorelines of State-Wide Significance  
SMA—Shoreline Management Act  
SMMP—Skagit County Shoreline Management Master Program  
SSA—Sole Source Aquifer  
TIP—Skagit County Transportation Improvement Plan  
USGS—United States Geological Survey  
VCA—Vegetation Conservation Areas  
WAC—Washington Administrative Code





## **1. Introduction**

### **Guemes Island**

Guemes Island is situated in the northern part of Puget Sound (Figure 1.1). The island is roughly triangular in shape and covers about 8 square miles or approximately 5100 acres. It is separated from Anacortes on Fidalgo Island by the Guemes Channel and is served by the Skagit County public ferry service from Anacortes ferry dock at 6th Street and I Avenue.

The 2000 U.S. Census counted 563 residents on Guemes Island, including 69 children under 18 years of age. Currently the Guemes Precinct lists 584 registered voters. This number includes a few people from other islands and many people who are not full-time Guemes residents. The island has experienced significant growth in recent years. This has led to concerns about growth-related impacts upon the qualities that make the island such a desirable place to live. Since groundwater is the main source of potable water on Guemes Island, protection of quantity and quality of the groundwater is a primary concern.

### **Goal and Vision Statement**

The overall goal of this sub-area plan is to allow growth that will conserve the island's groundwater resources, rural character, and sense of community. Rural character is understood to include both the amenities of the natural environment – the open spaces, views, wooded areas and wildlife – and the lack of urban-scale development. The term applies to the non-visual aspects of rural life on the island, the self-sufficiency, sense of community and mix of land-uses as well as the visual appearance of Guemes Island.

The intent is to make planning and sustainability internally derived and to reflect that goal in the sub-area plan. This ongoing process will use an integrated assessment of social, economic, and environmental factors. By combining these features, useful ways of approaching highly complex issues can be found.

Today, Guemes Island is a rural neighborhood of mostly small-scale homes. Islanders embrace values reflecting a strong sense of community, neighborliness, an unhurried pace of life, respect for privacy, awareness of history, stewardship for land and shore, creativity, and an independent spirit.

We envision a future wherein these community values will be retained:

- Uncrowded country roads where walking and bicycle riding are safe;
- A network of healthy, accessible shorelines and wetlands, open fields, wild thickets and forests, all supporting abundant wildlife;
- A mix of rural densities that preserves maximum open space and maintains the scale and character of current island homes;
- Sustainable growth as permitted by use of the island's aquifer and other natural resources, and by social and economic factors.

Most importantly, we see a future where sustainable growth and direction will continue to happen by building on active community involvement.

This vision has been captured by Gary Davis, a local island poet:

*Welcome*

As you walk here step gently  
enjoy the young raven in the ancient  
fir tree that shades the cattail marsh  
just up from the beach

Sense the harmony of the islanders  
as they go about with an  
unhurried pace, a kind wave of the  
hand for all passers by

Admire the quiet. Breathe the peace  
we all try to preserve for each other

and do no harm here  
to our place...to our home

*Gary Davis*

## History

Spanish explorers reported the first European sighting of the island in 1792 and named it after Señor Don Juan Vicente de Guemes.

Guemes Island was home to many Samish People who have been living on and using the island for as long as we can know. They continue to have a presence on the island. Guemes was one of the places where Samish people built huge winter houses, made from horizontal cedar planks split from living or downed trees and attached to a post and beam framework. The interior of such a Coast Salish longhouse had posts spaced along the outer walls and had a row of center posts inside the structure. Post were carved or painted in designs inspired by the owner's guardian spirit. Many families lived together in a house through the winter.

One such house was known as the Guemes House and was the central structure in what was called the New Guemes Village. The house has a well-documented history, dating from the homestead applications in 1876 by Bob Kitholano and Sam Watchoat for two plats on the west side of Guemes Island. The house, built across the dividing line of the two plats, was constructed in the traditional manner. According to several sources, this longhouse was one of the last traditional structures built in the late 1880s. The interior was divided into partitions for living quarters for the nine resident families. The longhouse functioned as a potlatch house as well.

The potlatch, banned from Indian reservations, continued to function over several decades at the Guemes Longhouse. One description in the *Puget Sound Mail* newspaper tells of hundreds of people coming by canoe and staying for several days of feasting and festivities. Although the Indian agents at the reservations tried to prohibit reservation residents from attending potlatches, many eluded the agents and traveled by canoe to the Guemes Village.

The last recorded Samish tribal potlatch was in 1917. The New Guemes Village fell into disrepair and was reportedly sold for tax liability in that era. White settlement had begun on Guemes in the 1860s, following the American Civil War. James Mathews, Sr. was the first to settle permanently in 1862, building a house on Deadman's Bay, now South Shore Road. Here he raised a family and brought the first cattle, sheep and poultry to the island where previously the Samish had raised wool-bearing dogs.

By 1877 the Woodcock and Mangan families had arrived at what is now the ferry landing and established a store and post office before there was any commercial activity across the channel in what is now Anacortes. Other early settlers included Allen Kittles, H.P. O'Brient, William Payne, Lucius Blackinton, John Edens and John and Sol Shriver. James Mathews Jr., and Lucius Blackinton both married native women and raised large families.

The first schoolhouse, a log structure, was built on the South Shore in 1873. It was moved to the center of the island on land donated by William Edens in 1885. Edens also donated land for the cemetery in 1904. Most communication was by rowboat or hired steamboat until W.C. Pyle established the first private ferry to Guemes in 1890. Telephone service came to the island in 1908. By that time, 100 families lived on the island. The first newspaper, the weekly *Guemes Tillikum* was first published in 1912, and rural mail delivery soon followed.

The Community Hall and Community Church were both established in 1914 on land donated by Jack Kidd. Both buildings were constructed with island funds and volunteer labor. The privately owned and operated car ferry Guemes began running in 1917 to service the Sloan Shipyard which enjoyed about a year ramping up to build ships for the World War I effort before going bankrupt at the end of the war. Electricity did not come to Guemes until 1949.

By 1960, the population of Guemes Island was an estimated 216 people. After a decade of slow growth, between 1960 and 1970, the population growth accelerated. By 1975 the estimated population was 289 people. Skagit County had been running the ferry system since the early 1960's. In 1978 it replaced the 9-vehicle ferry Almar with the newer and larger capacity vessel Guemes, which is still in service today, thereby more than doubling its capacity. At that time, the Guemes Island Property Owners Association (GIPOA) was formed to address issues facing all property owners and residents on the island. Ferry issues had always been of great importance to the islanders, and in 1980 a Ferry Committee was formed at the request of Commissioner Jerry Mansfield. He wanted the ferry business to be handled by one representative group rather than by numerous individuals and organizations. Its mission is to coordinate ferry-related issues among ferry users, the Skagit County Public Works Department and the Skagit County Board of Commissioners. Both GIPOA and the Ferry Committee have remained active to this day.

A number of small stores, several located near the ferry dock, served the community through the years. After a 5-year struggle to get the property rezoned, Anderson's General Store opened in June of 1998. The store is located at Mangan's Landing, a stone's throw from the first store built on Guemes in the late 1800s. It provides people with the option to buy provisions and gasoline on the island.

The old-time tradition on Guemes for the community to take care of its own affairs has been maintained through time, as exemplified by the Murray Read Pavilion, built recently with funds

raised on the island and constructed with volunteer labor at the Guemes Island Schoolhouse Park. The pavilion was dedicated on July 4, 2004.

### **The Growth Management Act and Sub-Area Planning**

The 1990 Washington State Growth Management Act (GMA), RCW 36.70A, directs the counties to encourage the involvement of citizens in the planning process and to ensure coordination between communities and jurisdictions to reconcile conflicts. The GMA provides for sub-area plans, which have to be consistent with the County's comprehensive plan. Sub-area plans are detailed land-use plans for smaller geographic areas.

The Skagit County-Wide Regional Comprehensive Plan Policies (1992) states that Skagit County shall utilize broad-based Citizen Advisory Committees to participate and assist in the development of the Comprehensive Plan Elements, sub-area plans and functional plans.

The Skagit County Comprehensive Plan of 2000 calls for Guemes Island to be a "Rural Area of More Detailed Planning." Guemes is suitable for sub-area planning because it is an island with distinct physical boundaries whose rural character continues to be shaped by its dependence on a ferry for access and on groundwater for drinking water. The community plan for Guemes shall address rural commercial uses and locations, sole-source aquifer issues, shoreline environs, ferry service, open space and natural resource lands, and provisions for maintaining rural character and lifestyles. Consideration should be given to the community's previously drafted sub-area plan for the island

### **The Guemes Island Sub-Area Planning Process**

In 1991, after the GMA had been enacted, the residents and property owners of Guemes Island community elected thirteen members for a Guemes Island Planning Advisory Committee (GIPAC) to formulate a basis for a Sub-Area Plan. The GIPAC presented its draft proposal of the "Guemes Island Policy Recommendations for Comprehensive Plans as mandated in the GMA" to the Skagit County Commissioners. Unfortunately this sub-area planning effort was premature as the Skagit County Comprehensive Plan was still under development at that time.

Based on the 2000 Skagit County Comprehensive Plan, islanders decided the time had come to develop a plan for sustainable growth on Guemes Island. At a public meeting in 2002, the island's community elected a new GIPAC to draft a sub-area plan. The Skagit County Commissioners recognized GIPAC as the Community-Based Representative for purposes of obtaining funds and initiating a Sub-Area Plan for Guemes Island (Resolution 20030037).

Subsequently GIPAC developed a Work Program, which was adopted by the Skagit County Board of Commissioners on January 24, 2005, by Resolution 20050025.

In 2005 GIPAC received a grant from the Washington Department of Ecology (ECY) to hire a consultant to develop a Guemes Island Component of the Skagit County Shoreline Master Program. John Owens from MAKERS Architecture and Urban Design produced a draft document that provided GIPAC with material to select and adapt for inclusion in the Guemes Island Sub-Area Plan.

## Early Community Commitment

Past activities show a high level of commitment of the Guemes Island Community:

**Aluminum Smelter.** In 1966 the Northwest Aluminum Company, a subsidiary of Bell Intercontinental Corporation, was interested in building an aluminum smelter on Guemes Island because of its proximity to shipping and cheap power. The proposed 720-acre site stretched from South Shore Road to Edens Road in the Valley. Skagit County and economically depressed Anacortes favored this opportunity, so the county commissioners hastily rezoned part of the island to heavy industry. Guemes Islanders, organized as the “Save the San Juans” group, hired Seattle lawyer John Erlichman, who pursued the legality of this rezone, and eventually appealed to the State Supreme Court. Northwest Aluminum bowed out under public pressure and the prospect of a long legal fight even before the Supreme Court ruled in 1969 that the rezone was a violation (See Washington Supreme Court Decision).

**Nori Seaweed.** In October of 1987, the American Sea Vegetable Company applied for shoreline development and conditional use permits for a proposed seaweed farm off North Beach, around Jack Island, initially of 700-acres of sea bottom, later reduced to about 360 acres for the exclusive cultivation of Nori seaweed. The proposal met with stiff opposition from Guemes Islanders and also from crab fishermen, as the project would have eliminated one of their most productive areas. The citizen’s group, Save the San Juans, revived to fight the project on the grounds of freedom of navigation and the protection of Jack Island, a Nature Conservancy preserve, and gathered 3000 signatures on a petition opposing the project. This process went on for several years. In the year 1990 the company lost its major financial backer and reorganized. Skagit County delayed action on the permit applications, partly because of public pressure. In the end the company withdrew its plans.

**Guemes Island Environmental Trust.** In July, 1988, the Naval Air Station-Whidbey Island shifted its ground controlled approach training flights over Guemes Island by placing a radar point at Cap Sante and routing A-6 air traffic around it. In response to the severe noise impact generated by these flights, the islanders organized the Guemes Island Environmental Trust (GIET) in April of 1989 to address this problem. After several years of discussions between GIET representatives and the Navy Commander and many protest calls and letters from the islanders, the radar point was removed in early 1991.

**Roadside Maintenance.** In 1989 GIET obtained a 5-year moratorium from Skagit County regarding the use of toxic herbicides to control the roadside vegetation. A method of Integrated Vegetation Management was adopted, which relies on mowing and grading and limits the use of herbicides to specific areas. This moratorium has been extended indefinitely.

**Groundwater Study.** In 1991 GIET, under sponsorship of the Skagit Conservation District, applied to ECY for a grant through the Centennial Clean Water Fund for an initial groundwater study of the island. The request was granted and the U. S. Geological Survey (USGS) completed a two-year study, funded jointly by USGS and ECY. The report was published in 1995.

**Sole Source Aquifer Designation.** In 1994, the Guemes Island Property Owners Association applied to the Environmental Protection Agency (EPA) for designation of Guemes Island’s aquifer system as

a Sole Source Aquifer; this was granted in 1997. This designation is based on the condition that at least 50 percent of the islanders obtain their drinking water from the groundwater.

**Community Emergency Response Team.** In 1996, a Community Emergency Response Team (CERT) was organized to assist the fire department in responding to any type of disaster on the island. Neighborhood volunteer leaders check on all households in their designated area. If telephone systems fail, a radio communications network is activated to report damages and people's needs to the Guemes Island Fire Hall communications center. The Guemes Island Church and the Community Center are both designated American Red Cross emergency shelters.

### **Current Public Participation in the Sub-Area Planning**

In addition to the GIPAC's meetings, which were posted on [www.linetime.org](http://www.linetime.org) and open to the public, and a number of public meetings, several additional opportunities for public participation were made available.

**Visual Planning Survey.** On May 2, 2004, a group of students from the Huxley College Planning Studio of the Western Washington University conducted a Visual Planning Survey. Sixty members of the Guemes Community attended the public workshop. The respondents preferred images of smaller roads, single-family houses set back from public streets, small-scale commercial land uses, scenic open spaces and farmland with traditional structures. The results of the study are reported in the "Guemes Island: Preserving Rural Elements and Enhancing Conservation Opportunities." A number of recommendations to preserve the rural character of the island are included in the report.

**Written Survey.** The Guemes Island written survey was modeled on the Lummi Island survey of 2002. After an extensive review process by twenty island residents the survey was mailed out to about 800 households of island residents and off-island property owners in July of 2004. We received a return rate of 46 percent. This excellent return validates the results.

The responses reflected a broad spectrum of opinions. Generally, aspects of the physical environment and the rural character of the island were rated very important by many respondents. Neighborliness and sense of safety received high marks as well.

One question concerns "the trade-offs between individual property rights and the community's right to preserve its character." People were asked to mark on a scale of 1 to 10, where 1 is "development rights most important" and 10 is "preservation is most important," which number best characterized their value. More than half of the respondents (56%) marked numbers 8-10, whereas 9% marked numbers 1-3. This indicates a very high appreciation of a rural community.

In addition to the survey itself, many people sent in comments and suggestions, which were all tabulated and give a broad perspective on the diversity of the island's population. Preliminary results of the written survey were presented at a public meeting on September 25, 2004. (Appendix A: written survey results)

**Rapid Shoreline Inventory.** The Skagit County Marine Resource Committee (MRC) was established by Resolution #17433 in May, 1999. It is funded through grants from the Northwest Straits Commission. People for Puget Sound (PPS) is a non-profit citizen's group working to protect and restore the health of Puget Sound and the Northwest Straits. This group obtained a grant from the Skagit County MRC to conduct a Rapid Shoreline Inventory (RSI) of shorelines of Guemes Island in

2005, where landowners granted permission. During the summer of 2006 PPS in cooperation with members of the Skagit MRC trained volunteers on Guemes and inventoried 6.45 miles of shorelines. The results augmented the knowledge and understanding of the importance of shoreline features to support marine life and pointed at areas of concern. This information is relevant to the Shoreline Management Element (Appendix B: RSI Report). The Beach Survey Results were presented at a public meeting on October 16, 2005.

**AIA Workshop.** Late 2005, GIPAC submitted a proposal for a service grant from the American Institute of Architects (AIA) Center for Communities by Design and Guemes Island was selected to receive technical assistance under their Sustainable Design Assessment Team (SDAT) program in 2006. A three-day workshop was held June 20-22, 2006, which included two public meetings and a number of intensive roundtable discussions, each table having an AIA technical expert as its facilitator. Because of the pivotal importance of water on the island, the acronym WATER was chosen to represent the five roundtables: Wildlife; Shorelines and Open Space; Aquifer; Transportation/Ferry; Energy Resources; and Rural Community Character. Many county staff and other experts from the Skagit County Planning Commission, the City of Anacortes, and the Skagit County PUD participated in the roundtable discussions. The public meeting concluding the workshop had an unprecedented attendance of an estimated 150 people.

In the AIA Final Report, the Sustainable Design Assessment Team discussed the challenges the Guemes Island Community faces in maintaining the rural character of the island while accommodating additional growth. One of the key recommendations is to implement where possible non-regulatory and incentive programs rather than imposing new regulations.

The issues, conclusions, and recommendations discussed in the final report validate the path the island community wishes to follow, thereby upholding the objectives of the sub-area plan.

### **Acknowledgements**

At various times Richard Hein, Bob Henderson, Victor Garcia, Willie McWatters, Tim Rosenhan, and Matt Simons, also served on the GIPAC, while Jaime Diamond, Hal Forsey, Joan Palmer, Anne Passarelli and others served on sub-committees. Rebecca Paskind and Paul Beaudet shared their technical expertise with the statistical analysis of the written survey. Anne Jackets edited the draft document.

In addition, many members of the Guemes Island community gave their time and effort to the formulation of the Guemes Island Sub-Area Plan by reviewing draft documents, by participating in the surveys, the Rapid Shoreline Inventory, and the AIA Workshop, and by attending public meetings.

Figure 1.1 USGS Topographic Map of Guemes Island





## 2. Land Use Element

### Introduction

The Land Use Element provides information and policy guidance specific to the Guemes Island Subarea. This element is intended to supplement the adopted Skagit County Comprehensive Plan's existing goals and policies. It includes a description of the island land pattern for residential and agricultural, forestry, and commercial uses. The element analyzes the possible future land use conditions with build-out residential density (units per acre) and with a range of other uses that the County zoning code could permit on the island.

Through the Growth Management Act (GMA) Washington State requires counties to designate land as either urban or rural. Making this distinction is very important since the GMA seeks to avoid the unreasonable costs and inefficiencies of providing urban type services to rural areas. To implement this requirement, Skagit County developed a set of Countywide Planning Policies (CPP) that define which areas receive urban level services, such as sewers and water, and which areas do not.

In the 2000 Skagit County Comprehensive Plan, Skagit County designated Guemes Island as a rural area in accordance with the CPP that states: all growth outside the urban growth boundary shall be rural in nature as defined in the Rural Element, not requiring urban governmental service, except in those limited circumstances shown to be necessary to the satisfaction of both the County and the affected city to protect basic public health, safety and the environment, and when such services are financially supportable at rural densities and do not permit urban development. [CPP 1.8]

### Rural Character Definition

The Growth Management Act [at RCW 36.70A.030] defines Rural Character as the patterns of land use and development established by a county in the rural element of its comprehensive plan:

- (a) In which open space, the natural landscape, and vegetation predominate over the built environment;*
- (b) That foster traditional rural lifestyles, rural-based economies, and opportunities to both live and work in rural areas;*
- (c) That provide visual landscapes that are traditionally found in rural areas and communities;*
- (d) That are compatible with the use of the land by wildlife and for fish and wildlife habitat;*
- (e) That reduce the inappropriate conversion of undeveloped land into sprawling, low-density development;*
- (f) That generally do not require the extension of urban governmental services; and*
- (g) That are consistent with the protection of natural surface water flows and ground water and surface water recharge and discharge areas.*

Two surveys were conducted leading up to the preparation of this Sub-Area Plan that specifically looked at the issue of rural character on Guemes Island. The first of these was a Visual Preference Survey prepared by planning students from Western Washington University (2004). The second was the Guemes Island Planning Survey conducted in 2004 by GIPAC. Respondents to the Visual

Preference Survey indicated very strong preferences for landscapes and roads with open spaces and woods, modest “non-suburban style” housing set naturally into the environment with farms and vistas, and an absence of suburban “amenities” and/or urban services. (1991 Draft Guemes Island Sub Area Plan & 2006 AIA Report)

**Rural Area Designation.** According to the Skagit County Comprehensive Plan, the Rural Area designation is intended to provide a variety of rural residential land use densities while maintaining overall lower than urban densities at rural service levels, encourage rural activities such as farming, forestry, and aquatic resources, and retain rural character and open space. Designating Rural Areas minimizes service demands and costs on county government, preserves historic and cultural structures and rural landscapes, and protects designated natural resource lands and identified critical areas. Rural Areas also provide a choice in living environments, through a mix of large lots, conservation and resource development (CaRD) land divisions.

**Limited Areas of More Intensive Rural Development (LAMIRDs).** These limited areas include the infill, development, or re-development of existing commercial, industrial, residential, or mixed-use areas, whether characterized as shoreline development, villages, hamlets, rural activity centers, or crossroads development. [RCW 36.70A-070(5)(d)]

**Open Space.** Skagit County recognized two major categories of Open Space: public and private.

- **Public Open Space** areas include publicly owned lands that are dedicated or reserved for public use or enjoyment or for protection of environmentally sensitive areas. If these are of regional or statewide importance, such lands are designated on the Comprehensive Plan Map.
- **Private Open Space** includes privately owned land that is set aside by the operation of the Critical Areas Ordinance, or by voluntary conservation. Through the use of techniques such as donation of conservation easements, selling of development rights, or outright donation of the land itself, development of these lands is limited or precluded in perpetuity. Private land trusts include the Skagit Land Trust, the San Juan Preservation Trust, and the Nature Conservancy. (See Figure 2.1)

**The Current Use Open Space Taxation Program** includes private land, utilized for agricultural, timber and open space uses. Lands enrolled in this taxation program are taxed based on their current usage. If property owners take one or more acres out of this program for development purposes, a tax lot is created for taxation purposes only.

With respect to Land Use, this sub-area plan is also linked to several other important planning documents, including the Skagit County Comprehensive Plan (SCCP) and the Skagit County Code (SCC). Figure 2.2 indicates current parcel development status, including developed and undeveloped parcels and lands in public ownership or known conservation status.

Figure 2.1 Parks, Open Space, and Conservation Lands

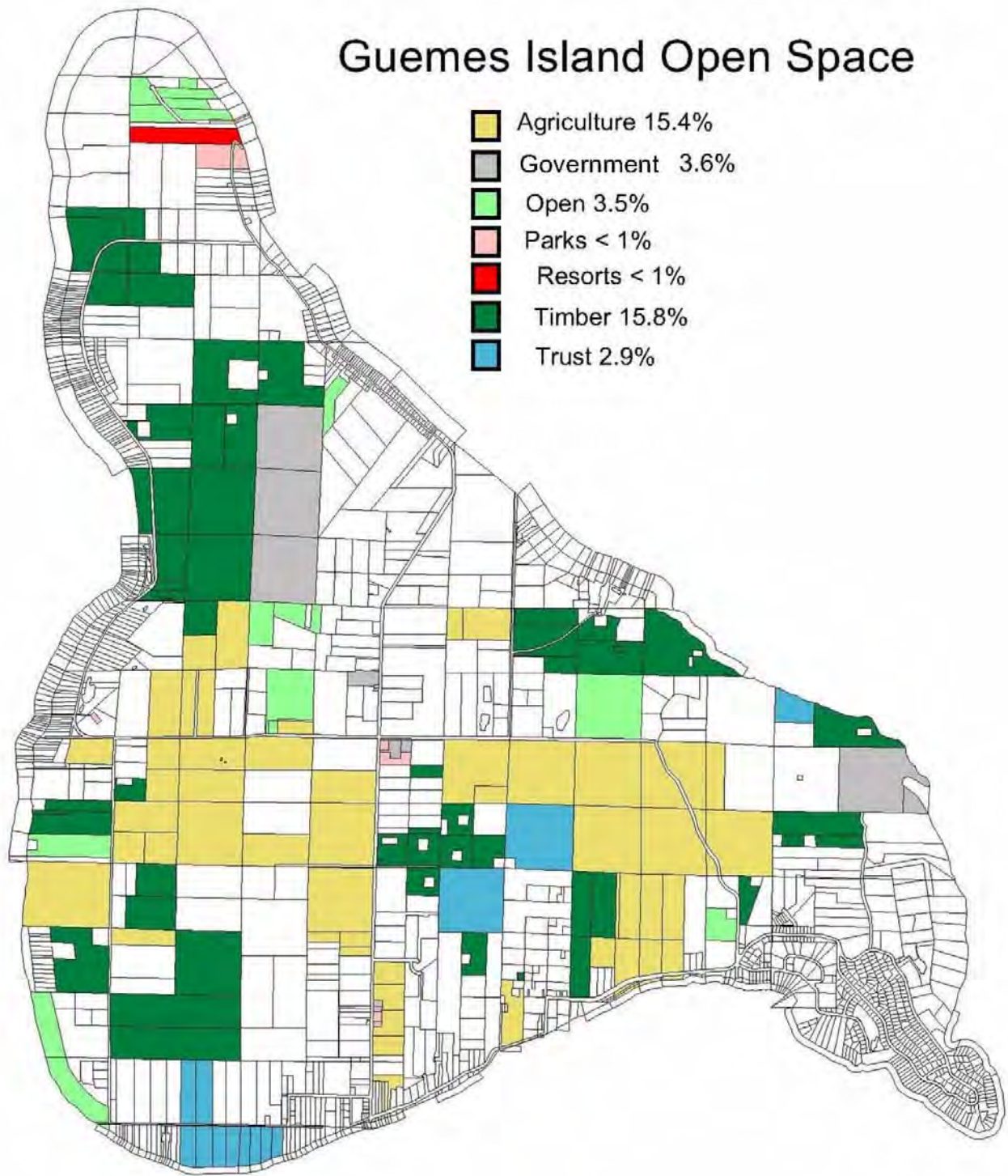
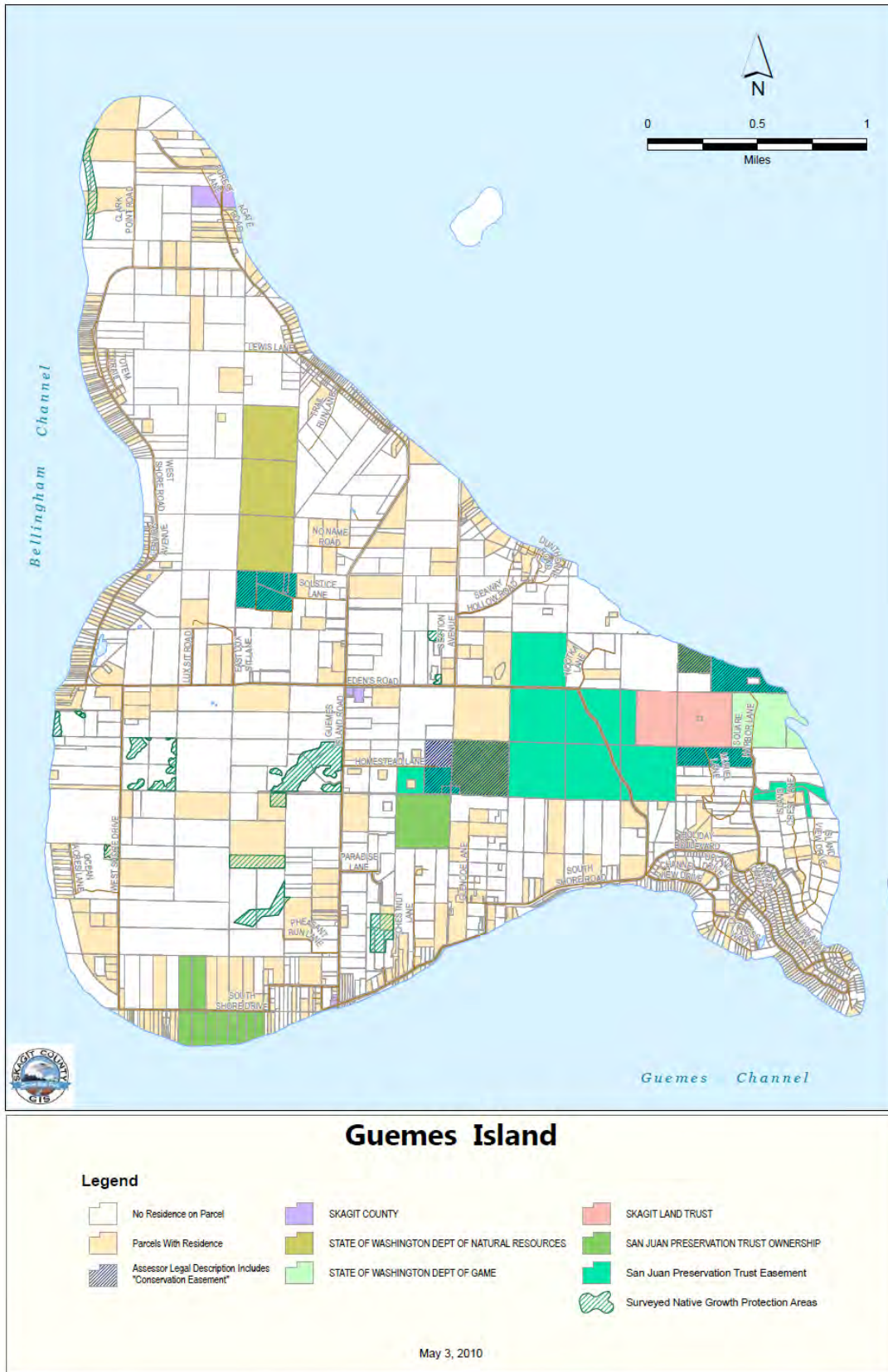


Figure 2.2 Parks, Open Space, and Conservation Lands



**The Skagit County Shoreline Management Master Program** is part of the Skagit County Code as a separate document. It is based on the recognition that shorelines are limited and irreplaceable resources that serve and support a broad range of activity. Management of these resources is necessary to allow continued use and conservation for future generations. The provisions apply to the shorelands, which are the upland areas extending 200 feet landward from the ordinary high water mark. See our Shoreline Element for more details.

**Critical Areas Ordinance.** Guemes Island is subject to the Critical Areas Ordinance, which closely evaluates new development within 200 feet of the shoreline. In addition, the Critical Areas Ordinance protects and conserves wetlands, aquifer recharge areas, flood and geological hazard areas and fish and wildlife conservation areas that exist within this subarea. (See Environment Element)

Critical areas are present throughout the sub-area; however, their exact location cannot be mapped accurately enough for regulatory purposes. Maps are useful primarily as indicators of the distribution and extent of critical areas. Wherever possible, maps will be used as part of the screening process for evaluating individual permit applications. Although a number of map resources are utilized, regulatory measures such as buffer requirements are based upon the identification of critical areas during the permit and development authorization process, or other County approvals. Critical areas will be designated by definition and then classified through site assessments so that they can be identified and protected, using scientifically based criteria. The use of site assessments to confirm the actual presence and classification of critical areas is central to the management approach of Skagit County.

The Critical Areas Ordinance allows staff of the Planning and Development Services Department to provide site visits, preliminary reviews, and pre-application meetings to assist in the identification of critical areas. In addition, performance based alternatives have been built into this process to allow flexibility in compliance with dimensional requirements. In the event that hardships and grievances occur, this Critical Areas ordinance contains provisions to allow for reasonable use exceptions, variances and appeals. Skagit County will work with the landowner in the management of critical areas.

Incentives will play an increasing role in enlisting landowner participation in conservation programs. Local, state and federal governments should continue to work toward the consolidation and coordination of regulatory requirements.

**The Seawater Intrusion Policy.** Seawater intrusion affects some public and private water wells on Guemes Island. Fresh water, being less dense than seawater, will float as a lens on top of seawater. The lens of freshwater is thinnest at the coastal edges and thickens landward. Fluctuations occur depending on seasonal rainfall (aquifer recharge), soil characteristics and tidal movement. Over-pumping areas which are under the influence of seawater intrusion will further degrade the aquifers and pull in more seawater. All of Guemes Island is subject to the County Seawater Intrusion Policy requirements for any new development.

**Sole Source Aquifer Designation.** The U.S. Environmental Protection Agency (EPA) has determined that the Guemes Island aquifer system is the sole or principal source of drinking water, and which, if contaminated, would create a significant hazard to public health. (See Environment Element)

## Current Conditions and Issues

The current development pattern for significant areas of Guemes Island was set by platting activity that largely occurred prior to the passage of the Washington State Growth Management Act of 1990. Significant stretches of the northeastern, southeastern, southwestern and central western shorelines of the island were platted into relatively small lots prior to the adoption of lower density rural residential zoning in the mid-1990s. A considerable number of these shoreline lots are smaller than the minimum lot size currently required under the Rural Intermediate (RI) designation (i.e., one (1) dwelling unit per two and one-half (2.5) acres).

According to Skagit County assessor's data released on May 1, 2005, Guemes Island comprises approximately 0.5% of Skagit County's total land area, and approximately 1% of the county's total population. Guemes Island has three major zones that cover more than 99% of the island's total land area. (See Table 2.1 and Zoning Map, Figure 2.3) These major zones are Rural Resource-Natural Resource Lands (RR-NRL), Rural Reserve (RRv) and Rural Intermediate (RI). The remaining 1% of the island's land area is encompassed within the Rural Center (RC), Rural Business (RB) and Small-scale Recreation and Tourism (SRT) zones. LAMIRD designations on the island include the Rural Intermediate (RI), Rural Center (RC), Rural Business (RB) and Small-Scale Recreation and Tourism (SRT) zones. Guemes Island fulfills Skagit County's Comprehensive Plan criteria and complies with its designation as a Rural Area. Many parcels are pre-existing, non-conforming parcels and may be smaller than the zoning allows. These sub-standard lots, if legally recorded prior to June 1, 1997, are legal lots of record and have the potential of being developed provided they can meet the lot certification requirements of SCC 14.06.045 and SCC 14.16.850 (4).

### Major Zones:

- The Rural Resource-Natural Resource Lands (RRc-NRL) zone contains 492 acres, with an allowable density of 1 dwelling per 40 acres.
- The Rural Reserve (RRv) zone contains 3,888 acres, with an allowable density of 1 dwelling per 10 acres.
- The Rural Intermediate (RI) zone contains 722 acres, with an allowable density of 1 dwelling per 2.5 acres.

These three zones cover more than 99% of the land area and include:

- Natural Resource lands that contain or support agriculture or forestry use
- Single Family Residences (SFR)
- Open Space areas
- Cottage Industry/Small Scale Business
- Home-Based Business

### Other Land Use Zones

- Rural Center (RC) 4 acres
- Small Scale Recreation and Tourism (SRT) 16 acres
- Rural Business (RB) 14 acres

The distribution of these zones is illustrated in Figure 2.3 below.

Figure 2.3 Zoning -Land Use Designations

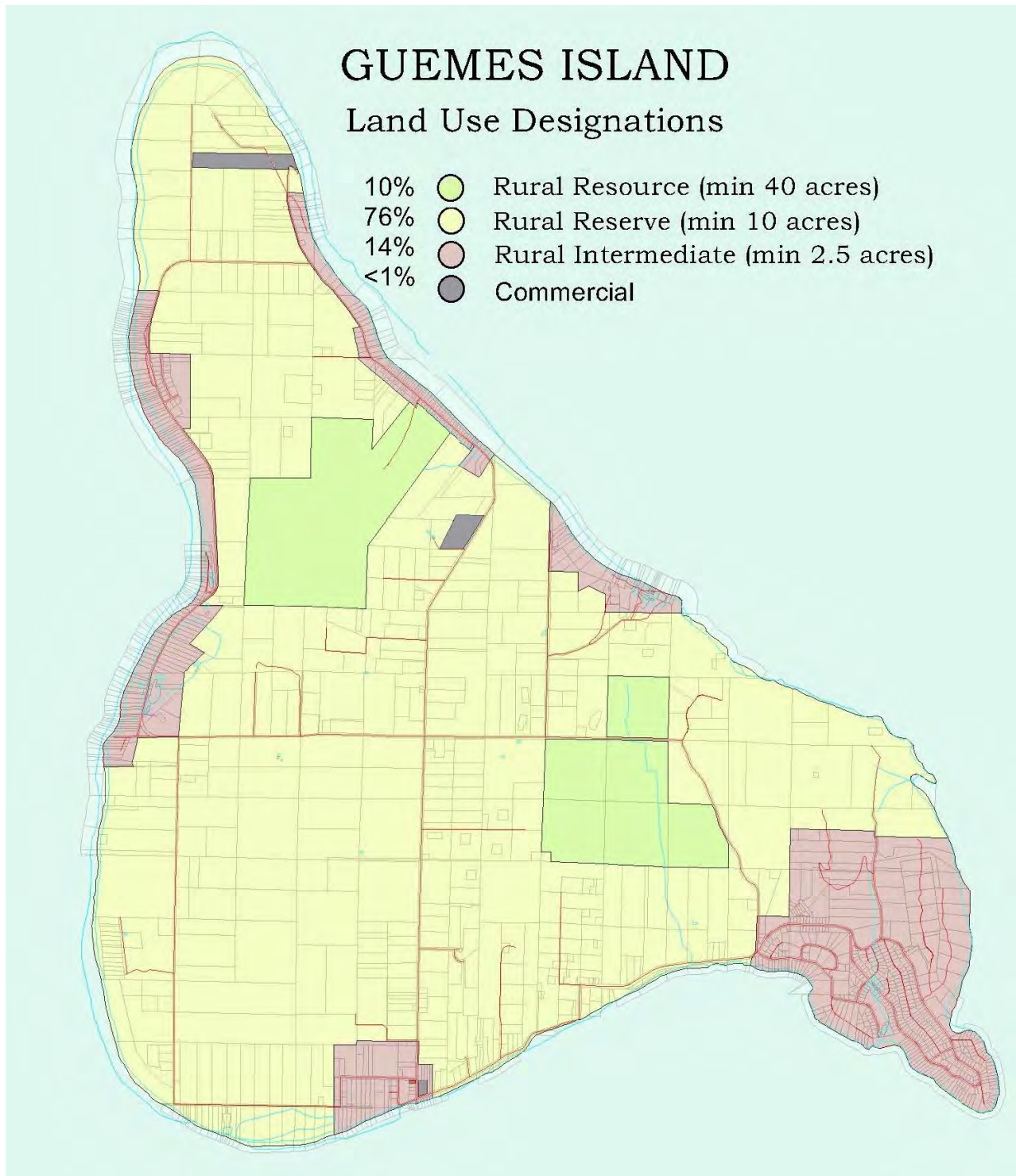


Table 2.1 Guemes Island Land Use & Zoning Designations Summary

Land Use/Zoning Designation	Maximum Permissible Density for New Subdivisions	Total Acres	Percentage of Total Land Base
Rural Resource–Natural Resource Lands (RR-NRL)	1 Dwelling Unit per 40 Acres	492	9.6%
Rural Reserve (RRv)	1 Dwelling Unit per 10 Acres	3,888	75.7%
Rural Intermediate (RI)	1 Dwelling Unit per 2.5 Acres	722	14.1%
Rural Center (RC)	Inapplicable	4	0.077%
Small Scale Recreation & Tourism (SRT)	Inapplicable	16	0.31%
Rural Business (RB)	Inapplicable	14	0.27%
<b>Totals</b>		<b>5,136</b>	<b>100%</b>

Sources: July 2007 Draft Guemes Island Sub-Area Plan; Skagit County Assessor's & GIS Data

### Future Growth and Issues

The Guemes Island Sub-area Plan Land Use Element is intended to anticipate future needs of the island community and provide solutions and strategies for their resolution. Growth-triggers, keyed to environmental, social and economic measures, can be developed to quantify the level of growth.

Table 2.2 indicates that as of May 2005, there were 1,532 parcels on Guemes Island and 627 had homes on them. With current zoning rules and future land division there is a theoretical possibility of increasing the total number of developed parcels to 1,584 with an increase of 957 additional homes. Approximately 95% of the theoretical new homes that could be developed would not require any further subdivision (i.e., those parcels already exist). Under current zoning only approximately 52 new lots could be created (i.e., 31 potential future lots within Rural Reserve and 21 new lots within Rural Intermediate).

The greatest potential for future development exists within the Rural Intermediate (RI) and Rural Reserve (RRv) land use designations. The RI designation has been applied predominately to those portions of the northeastern, southeastern, southwestern and central western shorelines of the island that were platted at non-rural densities prior to the advent of GMA. Although there is some modest potential for new lot creation within this designation (i.e., potentially, 21 additional lots could be platted), 422 of the previously platted 922 lots within this designation remain undeveloped and theoretically available for new residential dwellings. Within the RRv designation there is also a modest potential for new lot creation by subdivision (i.e., up to 31 additional lots). However, the vast majority of future development would be expected to occur on the 396 existing and vacant lots within the RRv designation.

It must be emphasized that these figures are estimates of theoretical holding capacity, and are not growth projections. Development constraints (e.g., water availability, critical areas, the County's lot certification requirements, etc.), market conditions and individual landowner decisions would likely prevent development of some potential dwelling units. In most circumstances, actual density yields would be expected to be lower. Nevertheless, even if it is conservatively assumed that only fifty



percent (50%) of the theoretical dwelling units will be developed over time, Guemes Island still could see the development of 500 additional dwelling units.

In sum, Skagit County’s Comprehensive Plan rural and resource zoning has substantially reduced Guemes Island’s pre-GMA potential for new lot creation through subdivisions, but the latent potential for future dwelling unit development and population growth remains considerable.

**Table 2.2 Present and Potential Development on Guemes Island**

Group	Existing Parcels		Existing Development		Potential Development Totals		
	Parcels	Acres	Homes	Acres	New Homes	Addition through Division	Max Homes
Rural Resource	15	492	1	40	14	0	15
Rural Reserve.*	39	308	7	135	2	0	9
Rural Reserve	556	3,580	192	820	394	31	617
Rural Intermediate	922	722	427	319	495	21	943
<b>Totals</b>	<b>1,532</b>	<b>5,102</b>	<b>627</b>	<b>1,314</b>	<b>905</b>	<b>52</b>	<b>1,584</b>

*\*parks and conservation easements*

*Source: Skagit County Assessor Data May 2005;*

These numbers are based on county information from 2005. An updated buildout analysis was conducted by the county in 2010 that indicates an approximate capacity for approximately 861 potential new units on the island under current zoning, as follows:

- Rural Intermediate—475 potential new homes
- Rural Reserve—380 potential new homes
- Rural Resource—6 potential new homes

Assuming that no further subdivision is allowed, changes may occur by putting land in conservation easements, park development and lot aggregation. Figure 2.4 indicates a 2010 generalized assessment of potential new units allowed on the remaining undeveloped parcels on the island. Figure 2.5 shows the location of the present buildings on the island and a graph of the history of the number of buildings. Figure 2.6 shows the land distribution between local and non-local owners.

Figure 2.4 Potential New Units

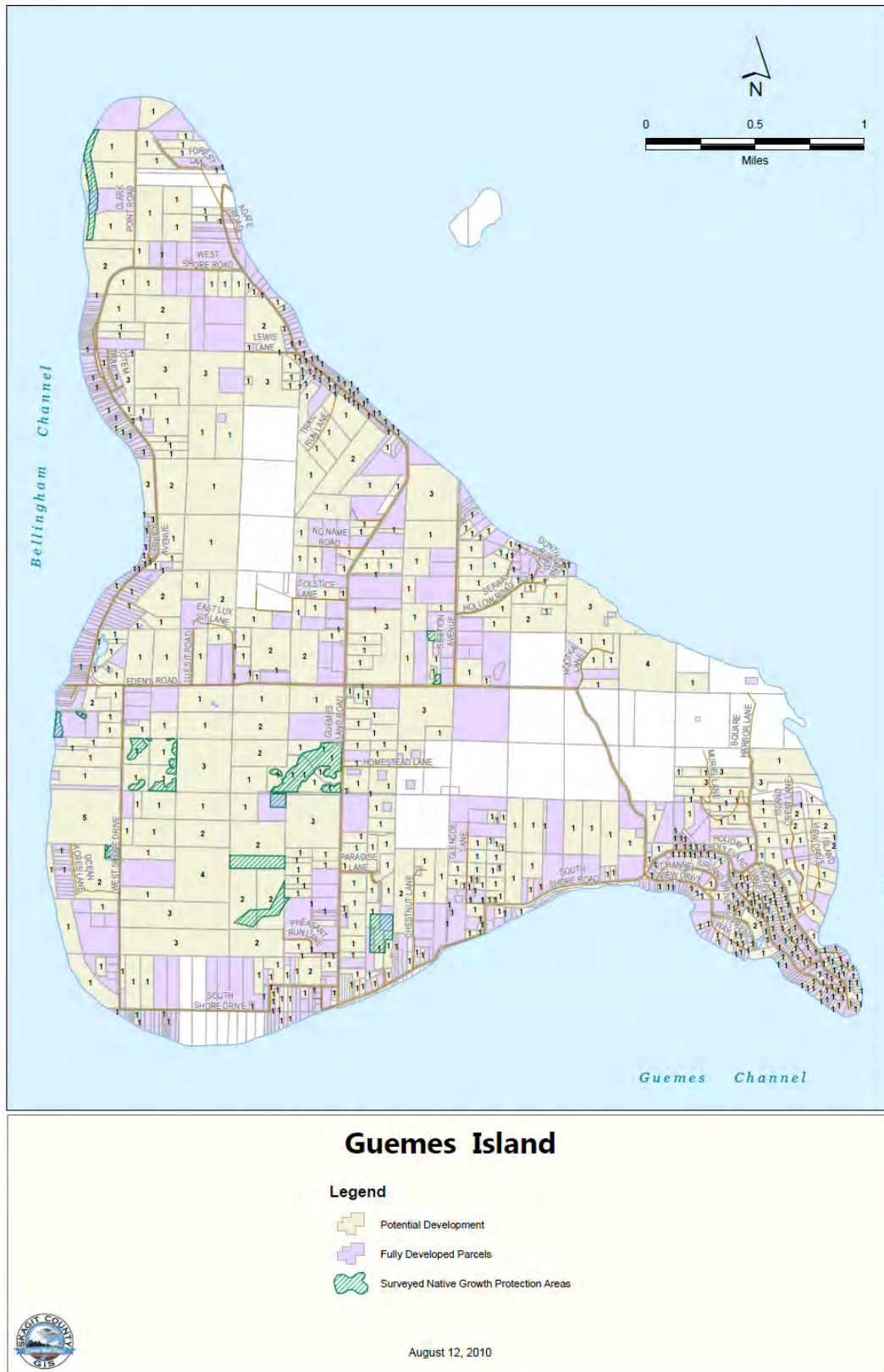
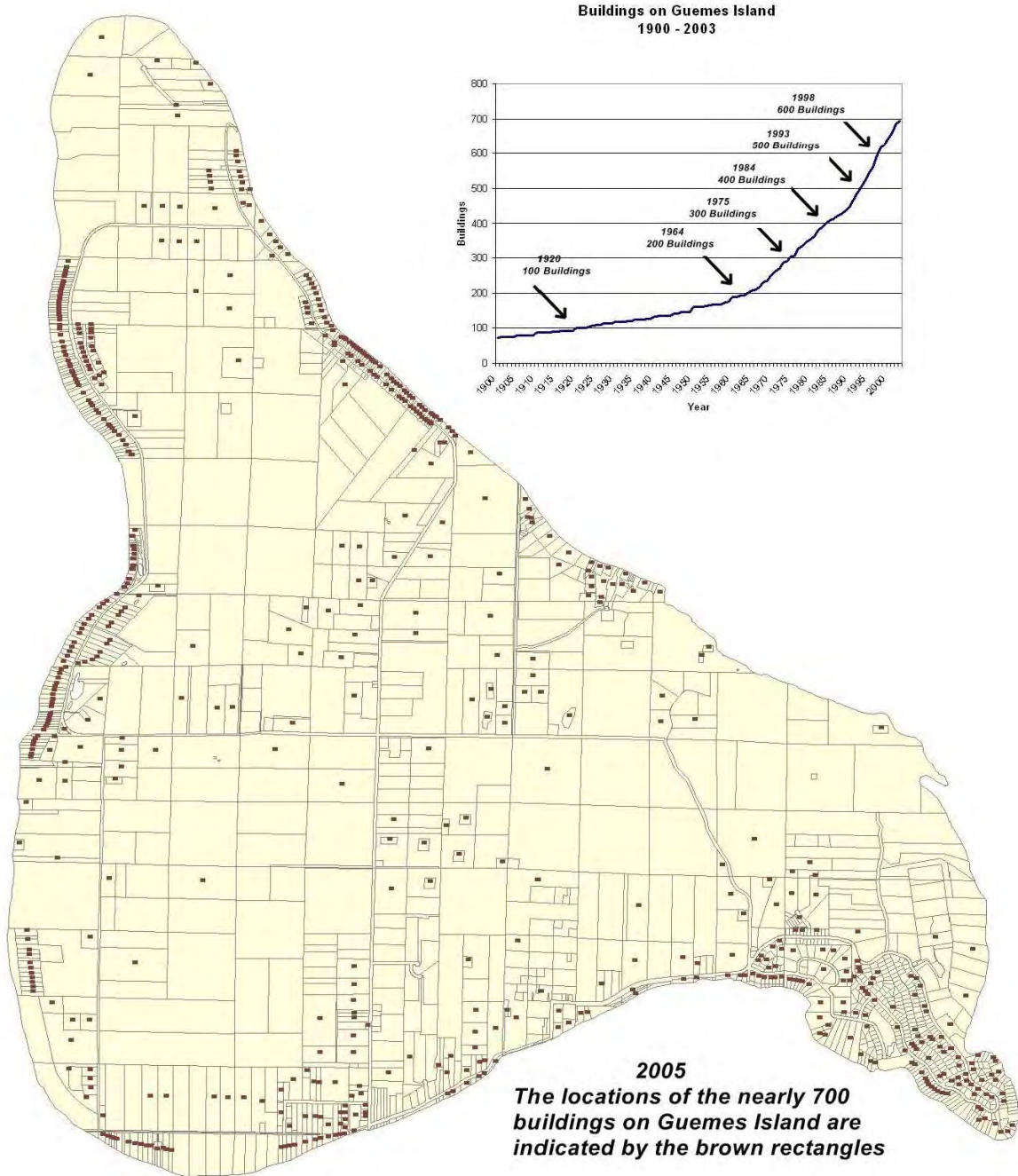


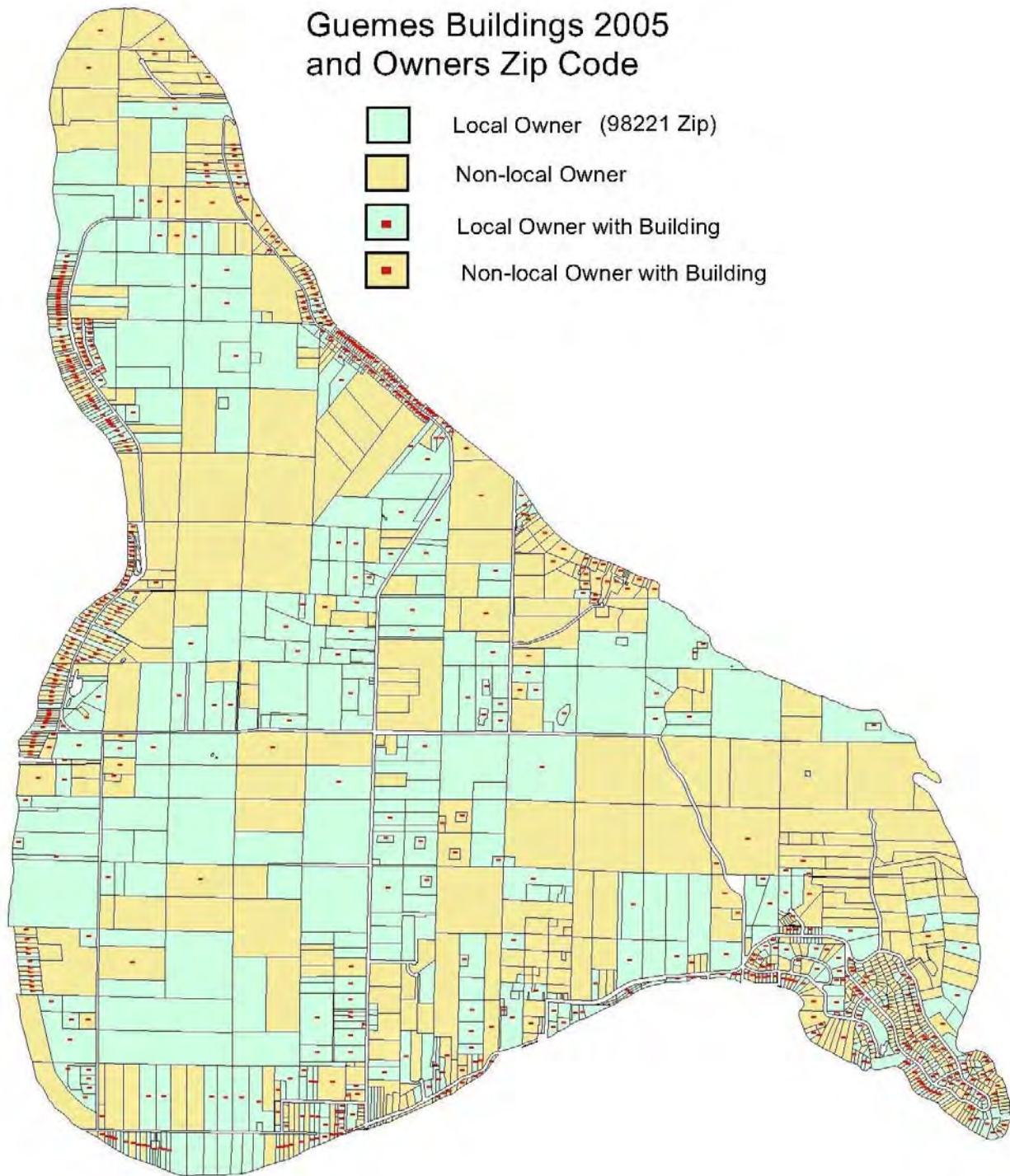
Figure 2.5 Buildings with Growth Chart. Skagit County Assessor Data

# BUILDINGS ON GUEMES ISLAND



Source: Skagit County Assessor Data

Figure 2.6 Distribution of Local and Non-Local Owners



The present population of the island is estimated to be around 600-800 permanent residents<sup>1</sup>. In the summertime the population may be over 2,000 from part time residents and visitors.. Building activity on the island for the past ten years (1997-2007) is shown on Table 2.3. The data indicate that a net total of 104 new dwelling units were approved and constructed, or have been approved and permitted, but not yet completed through this 10-year period (i.e., an average of 10.4 new units annually). New single-family dwelling units and manufactured homes made up 76 and 23 units of this total, respectively. The remaining five (5) units were accessory to a principal dwelling unit. One accessory dwelling unit (ADU) is permitted as accessory to an existing single-family dwelling provided that some requirements are met, see [SCC 14.16.710]. These dwellings cannot be sold separately but they may be rented out and thus will have an effect on the island population.

Table 2.3 Guemes Island Building Activity Data – 1997 to 2007

Year	New Single Family DUs	Manufacture d Homes	ADUs	Total Net New DUs	Replacement Units	Residential Remodels	On-Site Septic Permits	Plats (new lots)
1997	5	0	1	6	2	3	11	4
1998	9	1	0	10	1	7	7	0
1999	5	1	1	7	1	8	9	0
2000	12	2	0	14	1	5	7	6
2001	10	3	0	13	0	2	3	0
2002	0	2	0	2	0	4	1	3
2003	3	2	0	5	2	5	8	0
2004	10	4	1	15	2	6	4	0
2005	13	1	2	16	1	5	2	0
2006	5	4	0	9	1	6	6	2
2007	4	3	0	7	2	3	4	6
<b>Totals</b>	<b>76</b>	<b>23</b>	<b>5</b>	<b>104</b>	<b>13</b>	<b>54</b>	<b>62</b>	<b>21</b>

Sources: Skagit County Planning & Development Services; Mark Personius AICP, Growth Management Consultant

<sup>1</sup> The 2000 U.S. Census indicated the census tract including Guemes Island (CT 9501) had a population of 839 persons (Block data indicates that Guemes island’s population comprised about 67% of this total, or 563 of 839 persons). Of the total CT 9501 population, this represented an 11.4% increase over the 1990 population of 753, and an average annual growth rate for the same period of approximately 1.14%. Recent population estimates from the Washington State Office of Financial Management (OFM) and the Skagit County Public Health Department indicate that the population of CT 9501 grew to some 948 persons by 2006, an increase of some 26% over the 1990 population, and an average annual growth rate of 1.6% for the same 16-year period.

The headings in the table above correspond to the following permit types, both approved and pending:

- New Single Family DUs = NSFD Permit Types
- Manufactured Homes = Manufactured/Mobile Home (MOBL Permit Types)
- ADU = Accessory Dwelling Unit such as guest cabins, cottages, living quarters over garages or shops, etc.
- Replacement Unit = NSFD or new Manufactured Home replacing an existing mobile home or single family dwelling
- Residential Remodels = Single Family Unit Additions, Decks, etc. (ASFD Permit Types)
- On-site Septic Permits = Septic Permits issued for new drainfields or modifications to existing drainfields and treatment systems (NEW Permit Types)
- Plats = New lots created through Short Plat or Short CaRD process (SPLT & CARD Permit Types)

Table 2.4 depicts the increase of primary single-family residences by decade between 1951 and 2004<sup>2</sup>. These data show that Guemes Island experienced an annual residential dwelling unit growth rate of approximately 5.1% from 1980 to 2000, and a 1.1% growth rate from 2001 to 2004. For the period spanning 1990 to 2004, the average annual growth rate in single-family units was 3.4%, well in excess of the population growth rate for Census Tract (CT) 9501 over a similar period. This likely indicates that a significant percentage of the new residential units are second homes supported by the distribution of local and non-local building owners shown in Figure 2.6.

**Table 2.4 Increase of Primary Single-Family Residences (SFR) by Decade – 1951 to 2004**

Decade	New SFR	Average per Year	Total SFRs	Percentage Increase	Average Annual Percentage Increase
1951-1960	+67	6.79	101	197.1%	19.7%
1961-1970	+74	7.4	178	72.6%	4.4%
1971-1980	+146	14.6	329	84.8%	4.5%
1981-1990	+136	13.6	472	43.5%	3.2%
1991-2000	+178	17.8	666	41.1%	2.9%
2001-2004	+28	7.0	695	4.4%	1.1%

Source: *Guemes Island Ferry Capital Facilities Plan 2006-2020, pages 18 and 23*

The Rural Intermediate zone will shoulder the majority of the island’s future growth. The purpose of the Rural Intermediate district is to provide land for residential living in a rural environment, thereby taking priority over resource land uses. Site-planning with long-term open space retention

<sup>2</sup> Table 2.4 is derived from data contained in the Guemes Island Ferry Capital Facilities Plan 2006 – 2020 (see Appendix B, pages 18 and 23).

and critical area protection is encouraged. As suggested in SCC14.04, CaRDs are the preferred development pattern within this district. This statement and the island's future growth potential present a conflict between the Critical Areas Ordinance and the undeveloped parcels in the Rural Intermediate Zone. This zone contains the greatest risk of adverse environmental effect upon critical areas because much of it is located near the shoreline. Therefore these areas are regulated by the Critical Areas Ordinance, the Shoreline Master Plan, and the County Seawater Intrusion Policy. (See also Shoreline Element)

There is also significant growth potential remaining in the Rural Reserve Zone. The purpose of the Rural Reserve district is to allow low-density development and to preserve the open space character of those areas not designated as resource lands. Lands in this zoning district are transitional areas between resource lands and non-resource lands for those uses that require moderate acreage. Long-term open spaces and critical area protection are established using Conservation and Resource Development (CaRD) cluster subdivisions as the preferred development pattern. Future growth in the Rural Reserve zone will have less of an impact on Guemes Island's Critical Areas and have less potential for Seawater Intrusion as these undeveloped Rural Reserve parcels tend to be further inland. Greater open space retention may be available when this zone is developed.

A CaRD is a method of single-family residential land development characterized by legal building lots or envelopes that are much smaller than typical of the zone, leaving open space for agriculture, forestry, continuity of ecological functions characteristic of the property, and preservation of rural character. This results in reduced impervious surface area and lowered costs of development and maintenance. Certain requirements of the zone may be modified to encourage these purposes when using the CaRD process (SCC 14.18.310). Land division using CaRD is permitted and encouraged on Guemes Island as long as there is no density bonus resulting from such land divisions. This is due to Guemes Island's Sole Source Aquifer designation and the unknown capacity of its fresh water supply.

Skagit County's Comprehensive Plan encourages development right transfers, permanent conservation easements and outright ownership through private land trust organizations as a way of maintaining Rural Open Space.

Property values on the island have increased substantially in the past 20 years and continue to do so. A major consequence of this trend is that residents with a low income may not be able to afford to continue living on the island because of increased property taxes. Low-income elderly residents may qualify for tax breaks, however this is not available to the young low-income population. It is desirable to find a solution for this problem to maintain a diverse population on the island.

### **Proposed Land Use/Zoning Map Designation Change**

In September 2004, a proposed land use map amendment application was filed with Skagit County Planning and Development Services (PDS) by Mr. Joost Businger. The land use map amendment was labeled CPA05-21 and was docketed for the SCCP 2005 GMA Update. CPA05-21 requested rezoning approximately 222 acres of land on SE Guemes Island (in the area north of Holiday Blvd.) from Rural Intermediate (RI), with an allowable maximum density of 1 unit per 2.5 acres, to Rural Reserve (RRv), with an allowable maximum density of 1 unit per 10 acres. See Figure 2.5.

Skagit County PDS deferred the proposed amendment to the Guemes Island Subarea Plan process for further review and community input<sup>3</sup>. PDS noted, at the time, that there appeared to be merit to the proposal based on the fact that the majority of the parcels and acreage are undeveloped along with the size of the parcels relative to the RI designation criteria. Both the GMA and the SCCP (through RI LAMIRD criteria) require these areas be predominantly delineated by the built environment (i.e., existing homes) that existed on July 1990 (the effective date of the GMA) with limited new development allowed. In contrast, the area within CPA05-21 is predominantly undeveloped. Figure 3.2 illustrates the current development pattern within the area. Table 2.5 details CPA05-21 parcel ownership, sizes and development potential under both the existing RI and proposed RRv zoning.

The Holiday Hideaway area on SE Guemes Island constitutes the largest Rural Intermediate LAMIRD designation on the entire island. The area is characterized by rugged hilly terrain and rocky soils. Water availability has been an issue in this area where several efforts to drill wells have failed. The area within CPA05-21 also differs significantly from the (pre-GMA) Holiday Hideaway subdivision immediately south of Holiday Blvd. (not proposed for any zone change) where lot sizes are considerably smaller and the plat density commensurately higher.

Given the concern expressed by islanders, both in this subarea plan and elsewhere, over future growth, groundwater availability and quality, development proximity to shorelines, saltwater intrusion and protection of rural character, as well as concerns over consistency with the RI LAMIRD designation criteria in the SCCP, Skagit County PDS maintains its preliminary recommendation to approve this rezone request. The Department requests careful consideration of this proposal as part of the public review and approval process for the subarea plan.

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<sup>3</sup> The draft Guemes Island Sub-Area Plan prepared by GIPAC in July 2007 did not include or address CPA 05-21.



Figure 2.7 Comprehensive Plan Amendment Request (CPA 05-21)

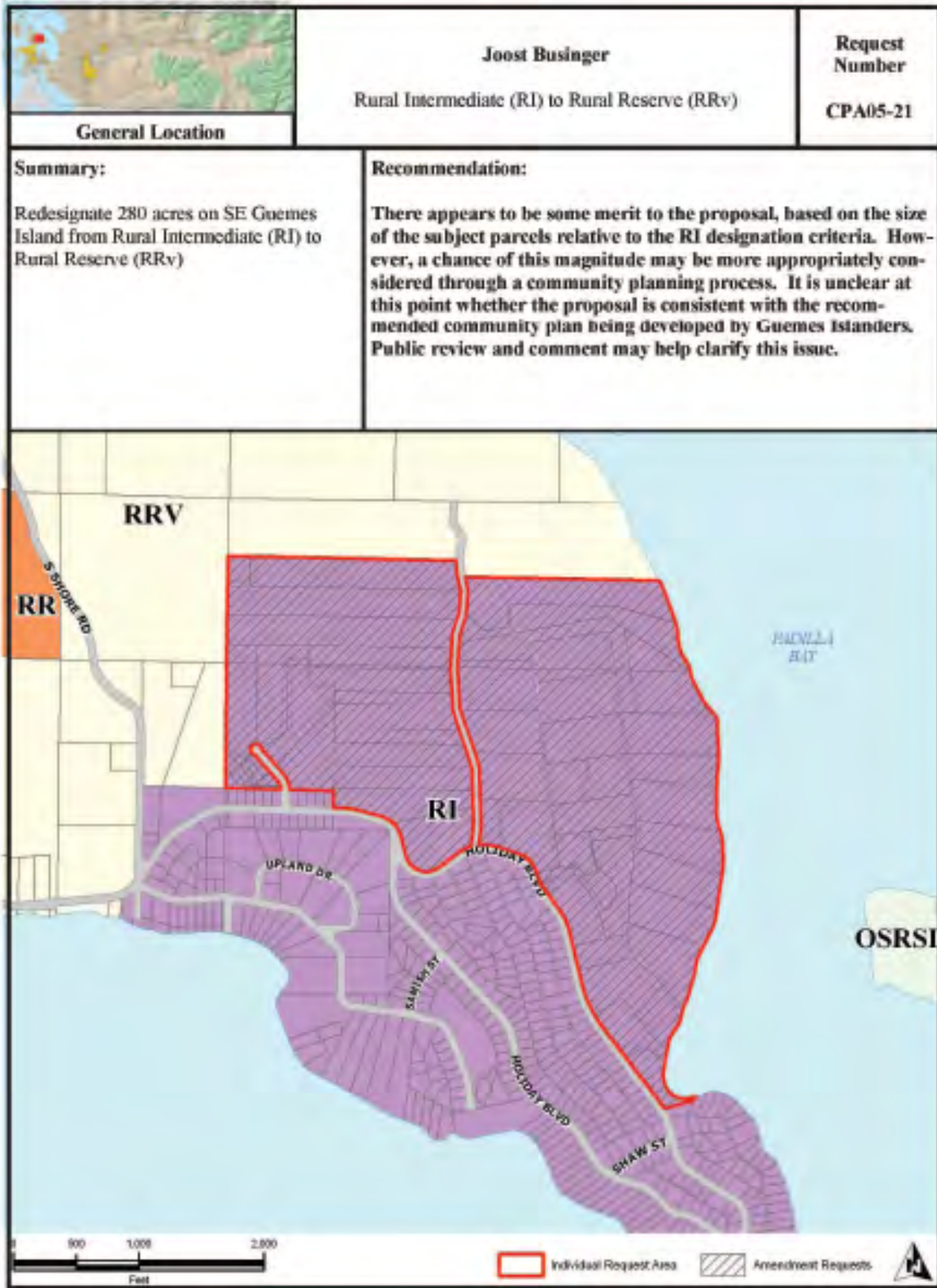


Figure 2.8 CPA 05-21 Parcel Development Pattern



Table 2.5 Resulting Density Changes from Proposed Rezone

Parcel ID	Parcel Status	Map Acreage	Current New Units Allowed (RI)	Proposed New Units Allowed (RRv)	Proposed Rezone Difference in New Units Allowed
P32712	Residence	4	0	0	0
P32795	Residence	3.76	0	0	0
P32798	Residence	4.56	0	0	0
P32800	Residence	4.88	0	0	0
P32808	Residence	2.16	0	0	0
P32812	Residence	5.13	1	0	-1
P32818	Residence	4.61	0	0	0
P32823	Residence	4.43	0	0	0
P32824	Residence	4.43	0	0	0
P32826	Residence	4.94	0	0	0
P32829	Residence	4.99	0	0	0
P32833	Residence	5	1	0	-1
P32843	Residence	3.44	0	0	0
P32814	Sewage Disposal	0.31	0	0	0
P32818	Sewage Disposal	0.26	0	0	0
P32819	Sewage Disposal	0.27	0	0	0
P32820	Sewage Disposal	0.23	0	0	0
P32821	Sewage Disposal	0.23	0	0	0
P32822	Sewage Disposal	0.22	0	0	0
P32823	Sewage Disposal	0.27	0	0	0
P32824	Sewage Disposal	0.27	0	0	0
P32825	Sewage Disposal	0.24	0	0	0
P32791	Vacant	2.07	1	1	0
P32792	Vacant	4.24	1	1	0
P32793	Vacant	5.01	2	1	-1
P32796	Vacant	5	2	1	-1
P32797	Vacant	4.73	1	1	0

<b>Parcel ID</b>	<b>Parcel Status</b>	<b>Map Acreage</b>	<b>Current New Units Allowed (RI)</b>	<b>Proposed New Units Allowed (RRv)</b>	<b>Proposed Rezone Difference in New Units Allowed</b>
P32799	Vacant	4.94	1	1	0
P32801	Vacant	1	1	1	0
P32802	Vacant	5.22	2	1	-1
P32803	Vacant	5.61	2	1	-1
P32804	Vacant	2.7	1	1	0
P32805	Vacant	2.3	1	1	0
P32806	Vacant	3.73	1	1	0
P32807	Vacant	4.72	1	1	0
P32810	Vacant	6.02	2	1	-1
P32813	Vacant	7.77	3	1	-2
P32814	Vacant	4.57	1	1	0
P32815	Vacant	4.73	1	1	0
P32816	Vacant	9.78	3	1	-2
P32817	Vacant	6.69	2	1	-1
P32819	Vacant	4.65	1	1	0
P32820	Vacant	4.56	1	1	0
P32821	Vacant	4.62	1	1	0
P32822	Vacant	4.65	1	1	0
P32825	Vacant	4.72	1	1	0
P32827	Vacant	9.82	3	1	-2
P32828	Vacant	4.85	1	1	0
P32830	Vacant	4.56	1	1	0
P32831	Vacant	1.43	1	1	0
P32832	Vacant	4.74	1	1	0
P32834	Vacant	1	1	1	0
P32834	Vacant	1.26	1	1	0
P32835	Vacant	6.1	2	1	-1
P32836	Vacant	5.57	2	1	-1
P32837	Vacant	2.06	1	1	0
P32839	Vacant	2.06	1	1	0
P32840	Vacant	2	1	1	0
P32842	Vacant	3.26	1	1	0

Totals	221.37	53	37	-16
With Residence	56.33	2	0	-2
Sewage Disposal	2.3	0	0	0
Vacant	162.74	51	37	-14
Ave. Parcel Size	3.75			
Ave. Parcel Size (excluding sewage disposal parcels)	4.43			

### Land Use Policy Recommendations

**Policy 2.1:** Provide Open Space Education illustrating the use of Skagit County’s Open Space Taxation Program, conservation easements and the selling or gifting of development rights.

**Policy 2.2:** An island-wide critical areas education program should be developed to alert the Guemes Island community to the functions and hazards associated with critical areas.

**Policy 2.3:** Proposed changes to Rural Area designations should be thoroughly evaluated to ensure the protection of rural character on the island, based on the following: existing lots of record and zoning; geological and groundwater aquifer characteristics; environmental constraints; unique land forms; proximity to shorelines and designated natural resource lands; identified critical areas and known areas of seawater intrusion; adequate capacity to maintain existing rural level of service facilities and utilities to support development as established in relevant capital facility plans; and compatibility with adjoining land uses.

**Policy 2.4:** Private Open Space is privately owned land that has been or will be set aside by the operation of the Critical Areas Ordinance, by voluntary conservation, or by land conservation easements. The use of conservation easements or other measures should be encouraged for the protection of critical areas.

**Policy 2.5:** The Current Use Open Space Taxation Program includes properties utilized for agricultural, timber and open space uses as provided in RCW 84.34. Property owners should be encouraged to enroll in the Current Use Open Space Taxation Program.

**Policy 2.6:** There shall be no density bonus for CaRD developments on Guemes Island except if the development is to be served by an approved public water system utilizing seawater with mitigation to further protect the freshwater aquifer. SCC 14.18.310 (2) should be amended to reflect this intent.

**Policy 2.7:** Guemes Island is designated as a Category I Critical Recharge Area under SCC 14.24.310, therefore all applications for single-family residential building permits, including Accessory Dwelling Units and Accessory Buildings as well as residential short plats, shall comply with the Site Assessment Requirements as outlined in SCC 14.24.330. GIPAC recommends that SCC 14.24.330 (1) be amended to reflect that initial project review by the Skagit County Planning and Development Services Department will include staff from the County Health Department and a County Staff Hydrogeologist to evaluate likely impacts to groundwater quality or quantity.

**Policy 2.8:** Requirements for Accessory Dwelling Units (ADUs) regulated under SCC 14.16.710 should be amended (based on the current Seawater Intrusion Policy or Code) to prohibit ADUs on Guemes Island in areas where the water source is 25 ppm or more chlorides and the well capacity must meet current quantity requirements as specified in SCC 12.48. These recommended changes should be considered in the next update for the County Seawater Intrusion Policy or Code and should be consistent with SCC 12.48 Drinking Water Code.

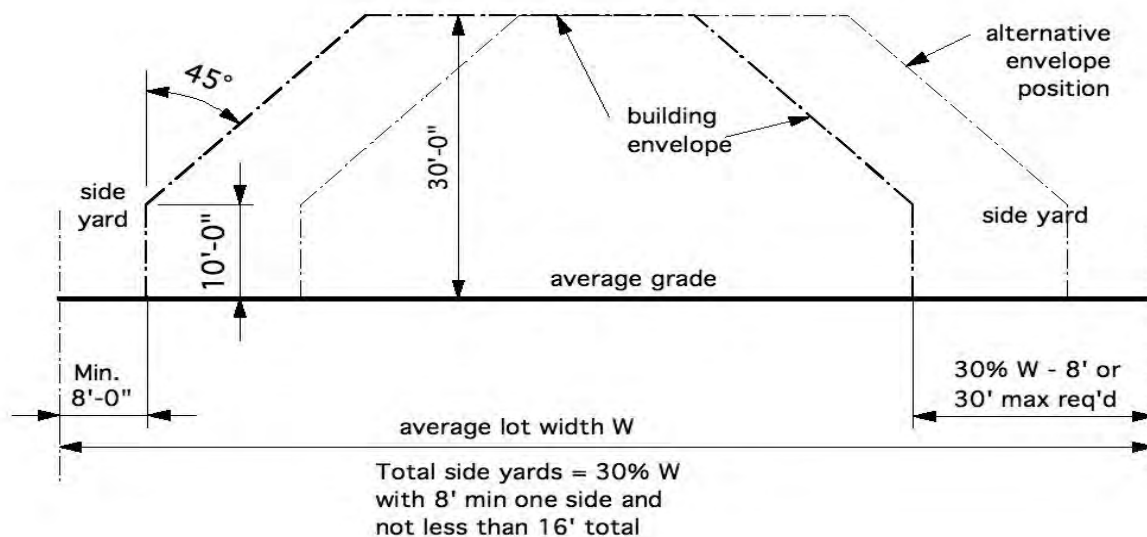
**Policy 2.9:** Skagit County should consider limiting the total number of building permits for new residential dwellings, for additions exceeding 25 percent of the existing square footage and for ADU's to twenty per year. This recommendation is based on a maximum build-out in fifty years. It is intended to ensure that the rate of growth on the island conserves and protects groundwater resources and the County's ability to maintain adequate capital facilities and ferry service commensurate with the rural character of the island.

**Policy 2.10:** Skagit County should work with GIPAC and islanders to find a solution for the problem that younger low-income property owners on Guemes Island might not be able to continue living on the island because of increases in property taxes.

**Policy 2.11:** The County should consider the following recommendations for amendments to Skagit County Code relating to Dimensional Standards for RI and RRv lots:

- For RI, the maximum building height should be 30 feet with a ten-foot height limit at the side-yard setbacks, sloping 45° to 30 feet height.
- For RI and RRv, side-yard setbacks should total 30 percent of the average width of the lot with an eight-foot minimum setback and a 30-foot maximum setback.

Setbacks should apply to multiple buildings. For shoreline residential development standards, see Table 5.9.



### **3. Natural Resource Conservation Element**

#### **Introduction**

Natural Resource Lands (NRL) have an important role in preserving the rural character of Guemes Island. Under the Skagit County Comprehensive Plan (SCCP), the NRL include three primary types of land-based natural resources: agriculture, forest, and mineral. The larger tracts of NRL lands may be zoned Agricultural-NRL, and Industrial-or Secondary Forest-NRL, while smaller acreage with characteristics of both agricultural and forest capability are zoned Rural Resource-NRL. Mineral NRL are designated as a Mineral Resource Overlay. On Guemes Island, the NRL are limited to Rural Resource-NRL.

The Natural Resource Conservation Element is intended to complement the Land Use Element by defining the purpose and intent of land-use policies to guide long-range planning, programs, and regulations with the objective to conserve the Natural Resource Lands. The element provides information on the current and future conditions of the NRL on Guemes Island and makes recommendations to supplement the policies of the SCCP and the Skagit County Code (SCC).

Therefore, the purpose of this element is to:

- Preserve the rural environment of Guemes Island.
- Support the primary and preferred uses of growing, harvesting and processing of natural resources and their products.
- Minimize residential development in resource lands.
- Provide opportunities for agricultural and forest activities.
- Provide opportunities for timber activities.
- Protect Guemes' natural resources for future generations.

#### **Current Conditions and Issues**

Guemes Island contains approximately 500 acres designated as Rural Resource Natural Resource Lands (RRc-NRL). The Department of Natural Resources (DNR) owns 120 acres of these lands as forested School Trust Lands. Islanders use the trails on this tract for recreational activities. The remainder of the RRc-NRL is a mixture of agriculture, forest, wetland and drainage channels (Figure 2.1). Of the privately-owned RRc-NRL, 315 acres are currently classified under the Open Space Taxation Program: almost 78 acres are in Open Space; another 80 acres in Timber Open Space; and 157 acres in Farm and Agriculture Open Space.

The acreage zoned Rural Resource Lands on Guemes amounts to 10 percent of the total acreage on the island, while the 15 parcels so designated make up only 1 percent of the total number of parcels. No mineral resources have been documented for Guemes Island, although Down Under Guemes has historically been a low-production sand-and-gravel mine since 1967.

The EPA has designated Guemes Island as a Sole Source Aquifer (SSA; see Environment Element for details of this designation). Because of its SSA status, Skagit County does give special consideration to the island in cases of Conservation and Reserve Development (CaRD) subdivisions, where density

bonuses are not allowed except where the source of water is outside of the SSA-designated area. [SCC14.18.310 (2)] (See Land Use Element for details of the CaRD process)

Some of the Rural Resource Land parcels may be significant aquifer recharge areas and several serve an important function in the regulation of surface water run-off.

### **Future Considerations and Issues**

As the County reassesses the need to accommodate future growth, the possibility exists that the zoning of the natural resource lands might be changed or that a higher density might be allowed under the present zoning. In addition, a number of uses that are currently allowed in the RRL under Permitted Uses and Hearing Examiner Special Uses might pose a threat to the aquifer or would conflict with the peaceful nature of the island.

As trees are harvested from forested areas, the Forest Practices Act (FPA) requires replanting of trees. However, the FPA does not require replanting with mixed species, which should be encouraged to create diverse habitats on the island.

Although many of the Rural Resource Lands parcels are enrolled in the County Open Space Taxation Program, this program does not protect the lands on a permanent basis. Property owners should be encouraged to permanently protect their lands.

Agriculture and forestry resource production are important elements of the island community. In order to support sustainable living on the island, it is desirable to encourage such activity. In doing so, the rural character of the island landscape and the diversity of the community would be maintained.

### **Education**

Island organizations should work closely with private land trust organizations to encourage natural-resource land-owners to permanently protect these lands through sale of development rights, estate planning, and conservation easements or through land donations.

### **Natural Resource Conservation Policy Recommendations**

The following recommendations are intended to supplement the policies of the Natural Resources Conservation Element of the SCCP or SCC. The Land Use Element also includes recommendations that affect uses in the Rural Resource Lands.

**Policy 3.1:** No increase in density should be permitted in a CaRD (Conservation and Resource Development) sub-division on Guemes Island in accordance with SCC 14.18.310(2).

Property owners should be encouraged to place a conservation easement on their Rural Resource Lands designed to encourage long-term forestry and agricultural land conservation.

**Policy 3.2:** The County should consider the following recommendation for amendment to Skagit County Code: Commercial land-based aquaculture and related development should be a Hearing Examiner Special Use instead of a Permitted Use.

**Policy 3.3:** The County should encourage the use of mixed native forest species, suitable for the site, in reforestation activities.



## 4. Environment Element

### Introduction

The Environment Element provides the policy basis for the protection and regulation of the critical areas on Guemes Island. The critical areas contain wetlands; aquifer recharge areas; frequently-flooded areas; geologically-hazardous areas; and fish and wildlife habitat conservation areas. Some of the areas, such as geological hazards, are critical because of the hazard they represent to people. Others, such as fish and wildlife habitats, are critical because of their public value. Air quality, although not identified as critical area under the GMA, is included in this element. The policy recommendations are intended to achieve the following objectives in supplementing the Skagit County Comprehensive Plan (SCCP):

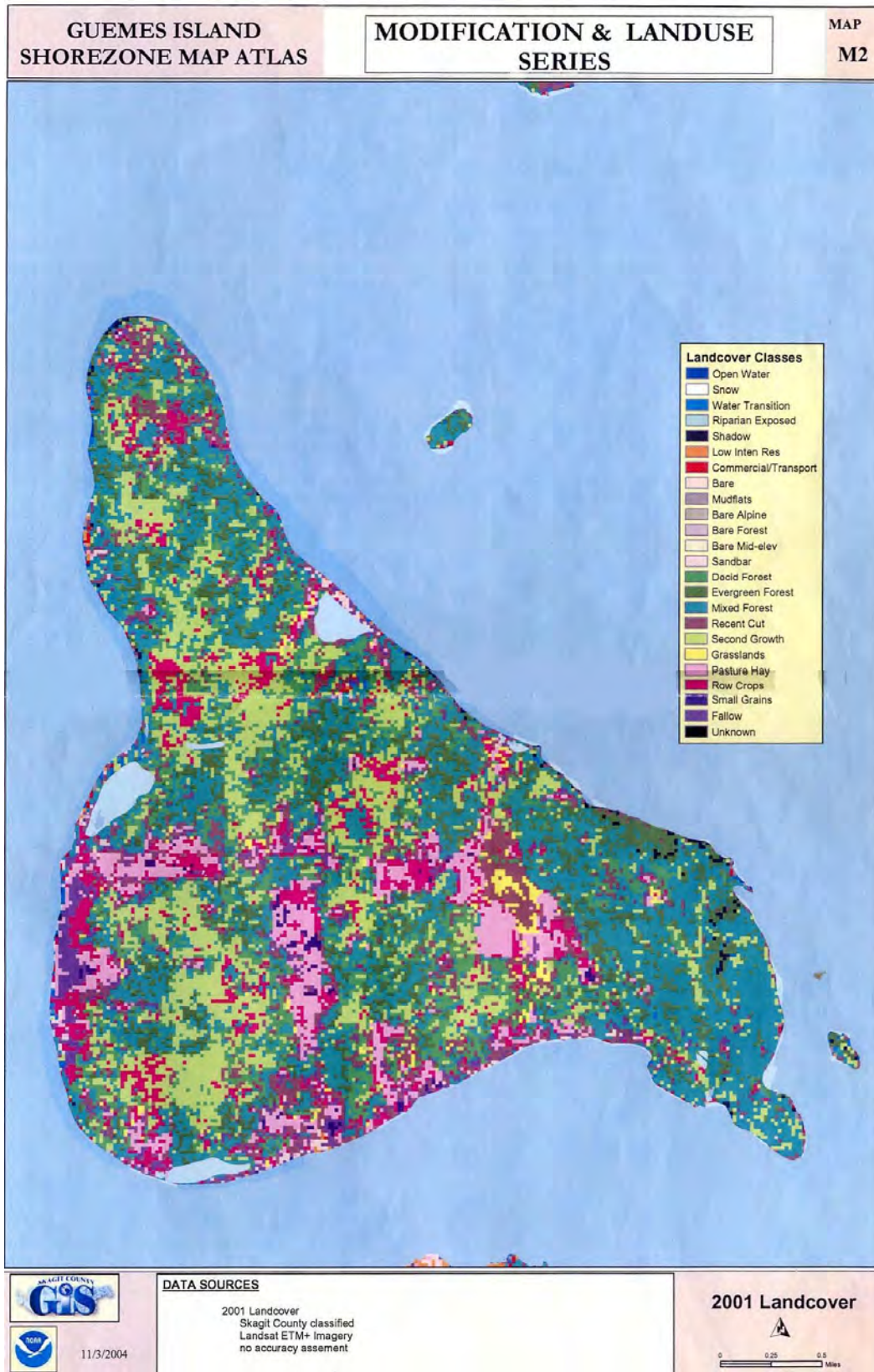
- Preserve the rural character of Guemes Island for future generations
- Protect the environment from adverse effects of development
- Enhance the environmental quality of Critical Areas and wildlife corridors
- Protect the quantity and quality of ground water
- Protect the air quality over Guemes Island

### Current Conditions and Issues

Guemes Island's natural features contribute greatly to the well-being and enjoyment of both residents and island visitors. A mixture of woodlands, wetlands, pastures, and open vistas are components of the island's physical environment (Figure 4.1). Responses to the Guemes Island Planning Survey indicate that these features rate very highly. Aspects of the rural character rated as very important are air and water quality; quiet; rural landscape; a sense of privacy; and a comfortable pace of life.

**Air Quality.** Guemes Island is located down-wind from the March's Point Refineries during the winter months, making air pollution a significant concern during that windy season. Information from the refineries and the Northwest Air Pollution Authority is needed to inform islanders of the levels of air pollution.

Figure 4.1 Land Cover



**Wetlands.** A general inventory of the wetlands on Guemes Island is shown on Figures 4.2, 4.3, and 4.4. An extensive wetland complex is found in the valley near the eastern end of Edens Road. It runs from north to south and serves an important function in regulating surface water run-off through Cayou Creek into the Guemes Channel. It may also contribute to the recharge of the groundwater and allow infiltration of potentially contaminated run-off into the underlying aquifer complex. Other wetlands include Veal Pond just north of the western end of Edens Road and the wetland at North Beach. Run-off from these two wetlands flows through drainage channels and tide-gates to the Bellingham Channel and Padilla Bay, respectively.

Figure 4.2 Wetlands



Figure 4.3 Hydrology



Figure 4.4 NWI Wetlands and Hydric Soils

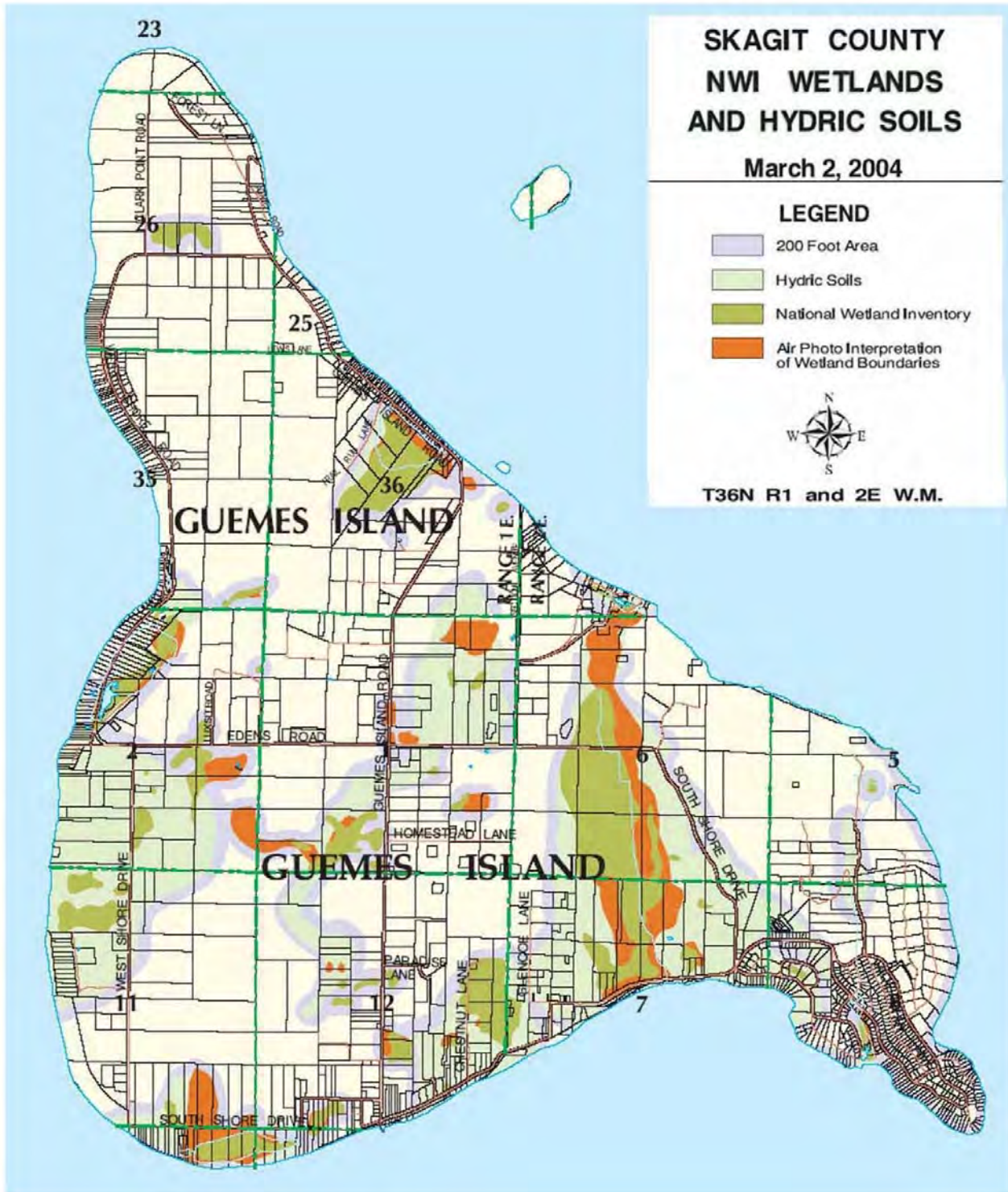
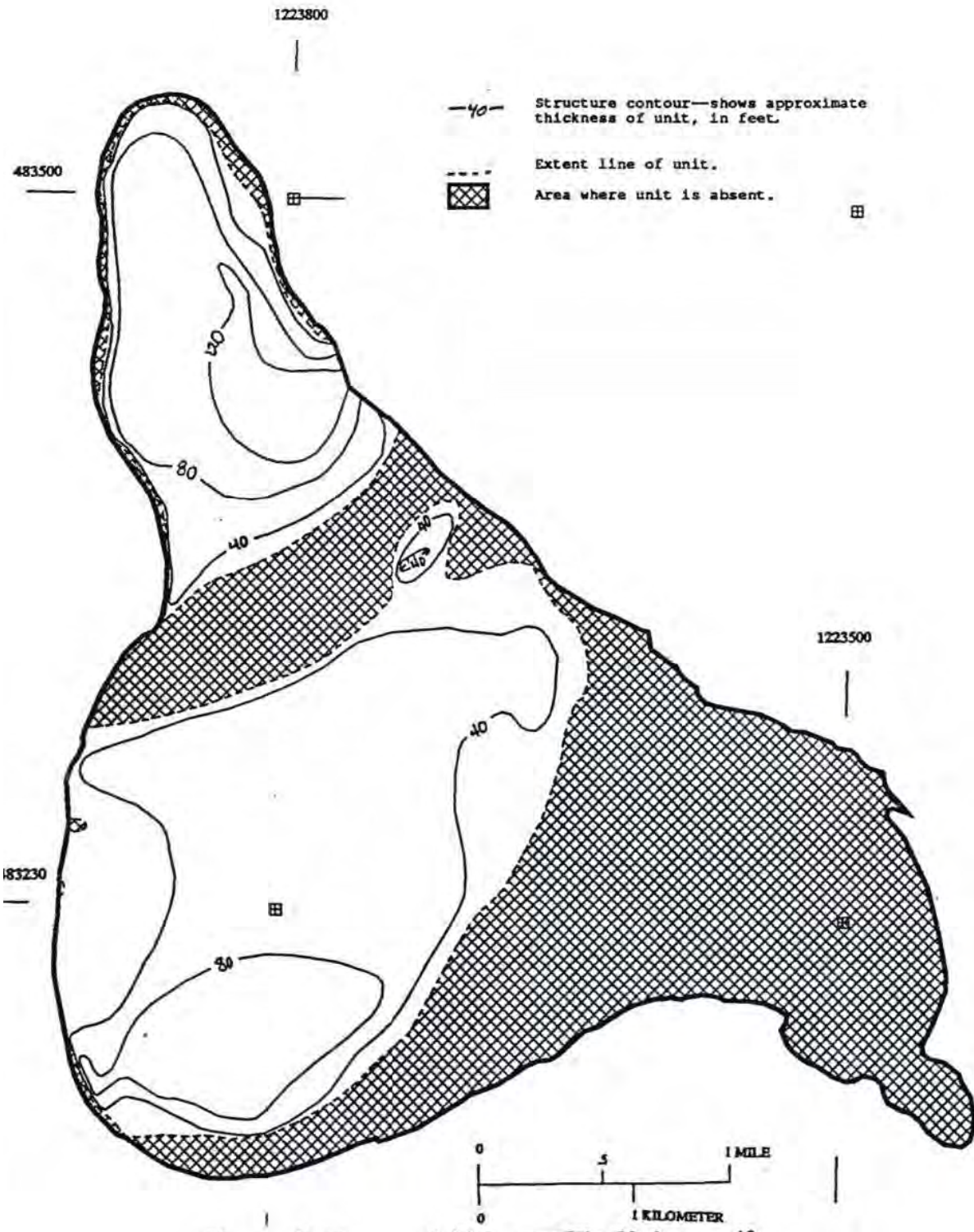


Figure 4.5 Extent and Thickness of the Vashon Aquifer (USGS 1995 Report)



**Aquifer Recharge Areas.** The ground-water resource of Guemes Island is the principal source of fresh water used by the permanent and seasonal residents. In 1997 the Environmental Protection Agency (EPA) designated the Guemes Island Aquifer System as a Sole Source Aquifer. The Double Bluff aquifer complex, which generally is located at or below sea level, is the most extensive water-bearing unit and many of the wells are completed in this unit. It underlies all but the rocky eastern part of the island. The Vashon aquifer complex, located above the Double Bluff aquifer, does occur in two separate areas rather than under the entire island and is variable in thickness and productivity (Figure 4.5).

Recharge of fresh water to the ground-water system is primarily from infiltration of precipitation. Most of the recharge occurs in the wet winter months from November through February, when the precipitation greatly exceeds evapo-transpiration. Recharge from septic-fields and irrigation is relatively small. Precipitation recharges through all permeable surfaces on the island except where groundwater is discharging, such as from springs. Some areas contribute more to the recharge than others, depending on the vertical hydraulic conductivity of the underlying geological units (penetration to the lower strata). It is not known what percentage of the recharge water reaches the Double Bluff and Vashon aquifer complexes (USGS report, 1995), and therefore it is not known what the carrying capacity is of the groundwater system. Recharge areas are at risk for contamination of the groundwater from the land surface

**Seawater Intrusion.** The potential for seawater intrusion is great for many of the wells that were drilled in areas near the shore. Seawater intrusion is one important factor that can render groundwater unfit for consumption. A topographical map (Figure 1.1) shows that the Veal Pond and the wetland at North Beach are connected by a low stretch of land, close to sea level. The tip of Guemes Island north of this stretch is the area most susceptible to seawater intrusion. From a combination of water well reports and accurate land elevation measurements for wells that have been completed in the Double Bluff aquifer in this area, it is known that the head of fresh water in the wells is very shallow, between 0.5 and 1 ft above mean sea level. Although some seawater intrusion was found in wells in the Vashon aquifer, it generally is not a problem for wells completed in this unit because most of it is situated above sea level (Figure 4.6).

In December 1994, the Skagit County Board of Health adopted the Interim Seawater Intrusion Policy that regulated new wells for building permits or land division in potential seawater intrusion areas. The seawater intrusion policy sets well pumping rate limits, monitoring and conservation requirements, based on the level of chlorides (which is an indicator of seawater intrusion) detected in groundwater samples, for applicants proposing to use wells for building and land division projects. The Policy prohibits new land divisions when chloride levels in groundwater are above a set level (200 ppm). Although the Policy is not formal code, Skagit County implements the policy when evaluating building and land division permit applications and it is incorporated by reference into code (SCC 14.24.340(4)(l) and 350 (3)). The Skagit County Public Health Department is currently updating the Seawater Intrusion Policy.

About twenty public water systems serve local communities on the island. These range from Group B systems with up to 14 connections to the Group A Holiday Hideaway Water System, which currently has 138 connections and has been approved for a total of 267 connections. This system has wellhead protection areas designated for their two well fields (Figure 4.7).

Figure 4.6 Well Chloride Levels

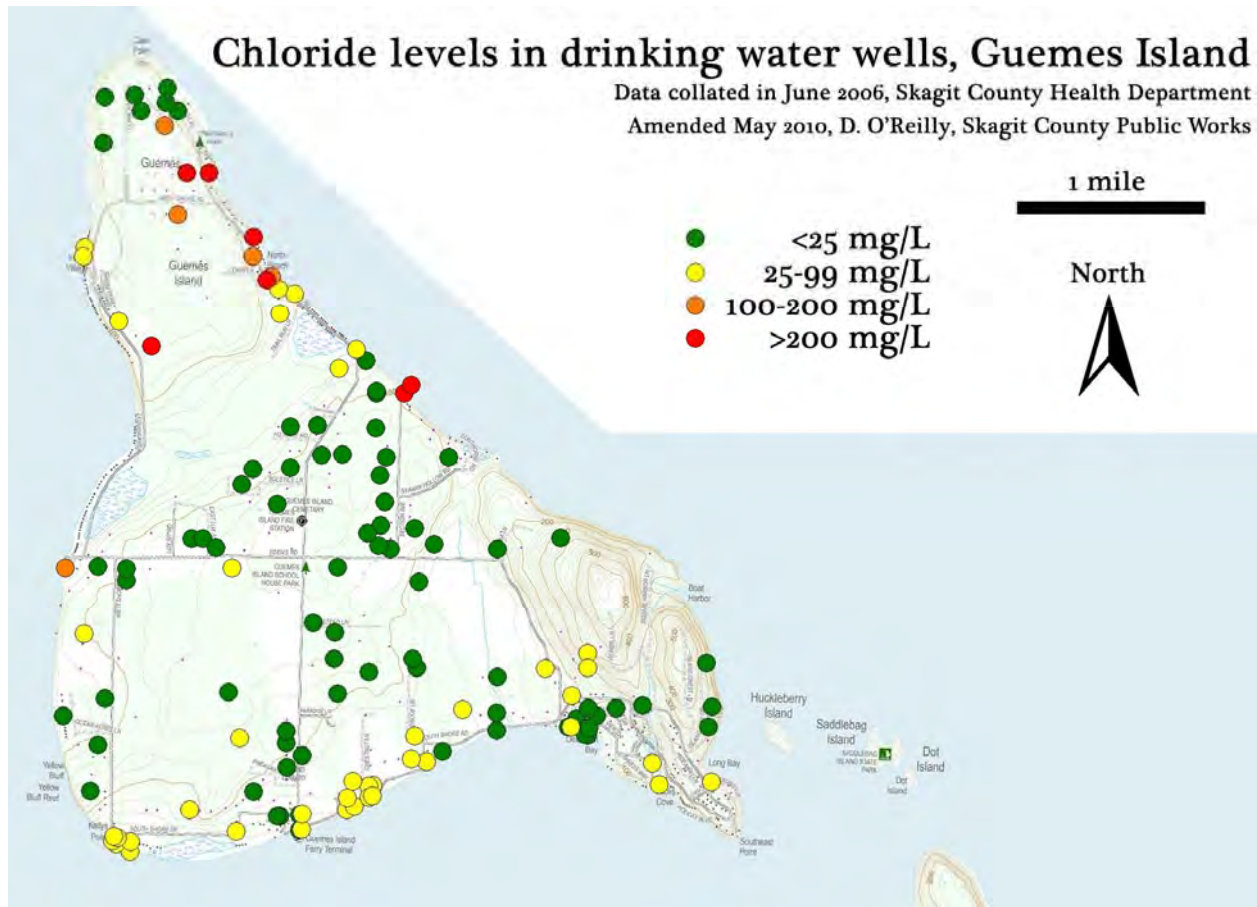




Figure 4.7 Wellhead Protection Areas



Figure 4.8 Public Water Systems



Due to severe seawater intrusion into its two wells, one West Shore system is now served by a reverse osmosis (R.O.) system, owned and operated by the Skagit Public Utility District. This system uses seawater as its intake and discharges the saline effluent away from the shore into the channel. For seawater, the recovery of potable water may be up to 30 per cent. Several private property owners have installed individual R.O systems, which are not regulated. They use well-water as their source, which has an only slightly higher recovery rate. Therefore, they cause additional stress on the aquifer.

Guemes Island has been designated as a Category I Aquifer Recharge Area. These areas are so designated because of the need to provide special protection due to specific pre-existing land uses, or because the County, State or Federal Government has determined the aquifer needs protection from future land use that poses a risk to the quality or quantity of the aquifer. [SCC 14.24.310 (1) (a)]

Category I includes areas served by groundwater which have been designated as a “Sole Source Aquifer Area” under the Federal Safe Drinking Water Act; areas identified by the County as “Seawater Intrusion Areas”; and areas designated as “Wellhead Protection Areas” pursuant to WAC 246-290-135(4) and the groundwater contribution area in WAC 246-291-100(2)(e). [SCC 14.24.310 (Aquifer recharge area designations)]

Since the USGS groundwater aquifer study was completed in 1995, the Guemes Island Environmental Trust (GIET) has continued to monitor groundwater on the island. The Health Department has provided equipment, field test kits, and reagents to the Trust for this work and the Trust has shared the data collection with the County. In general, the data supports what was learned in the USGS study. The data also indicate that groundwater in two areas on the island actually improved dramatically since the USGS study was conducted (Potlatch Beach #1 and the Alverson Tract well).

Skagit County Public Health has begun the process to update the Seawater Intrusion Policy. The Skagit County Hydrogeologist has proposed long-range plans to protect groundwater resources on Guemes Island that include:

- Enhancing Guemes Island Environmental Trust data with additional data
- Augmenting the existing monitoring network by adding more wells to the network
- Surveying all wells in the monitoring network to gain an accurate elevation
- Creating a long-term monitoring program not reliant on volunteers
- Developing a comprehensive database for all seawater intrusion data
- Generating a computer model of the Guemes Island groundwater aquifer system

**Frequently Flooded Areas.** The shoreline area west of Veal Pond and the North Beach area northeast of the wetland are susceptible to flooding during winter storm conditions combined with high tides. These two areas are indicated on Figure 4.9, which also shows several smaller areas around the island susceptible to coastal flooding.

Figure 4.9 Tsunami Inundation Areas



Figure 4.9 Tsunami Inundation Areas

During heavy rain, Cayou Creek and its wetland overflows the culvert under Edens Road,  $\frac{3}{4}$  miles east of Guemes Island Road, creating a hazard for motorists during these periods. See also the Transportation Element for other roads prone to flooding. Currently there is no drainage plan for Guemes Island.

**Geologically Hazardous Areas.** Soil Erosion-Potential Areas are shown on Figure 4.10. The yellow bluff near Kelly's Point and the shoreline extending north towards Edens Road are feeder bluffs that can slough off substantial material during fierce westerly storms. Likewise, the sheer bluffs along South Shore Road are erosion-prone. Not shown on this map are the high sand bluffs running in a southeasterly direction from North Beach. In addition to the unstable shoreline bluffs, steep slopes are present on the two rocky hills at the eastern part of the island.

Coastal areas are subjective to Tsunami Inundation (Figure 4.9). Major earthquakes with a magnitude of 9 or higher, involving the Cascadian Subduction Zone, have occurred in the Puget Sound Region with an average frequency of about 500 years. Lesser events on the Seattle Fault will also have seismic and tsunami effects on Guemes Island but have not yet been evaluated. The most recent Cascadia Event took place in the year 1700.

When the Cascadia event reoccurs, peak ground accelerations in the Guemes Island area can be expected to be on the order of 15% gravity with a shaking duration of 5 to 6 minutes. The resulting tsunami can be expected to occur within 2½ hours. The height of the tsunami swell as it travels around the island will be 10 to 12 feet. Areas with offshore shallows, such as North Beach, will likely experience higher breaking waves.

The Pacific Tsunami Warning System follows earthquakes magnitude 7 or more with tsunami potential. When necessary, they issue a tsunami warning to the Skagit County Emergency Management and to the Emergency Alert System (EAS). EAS would generate warnings by radio and television. The County Emergency Management would alert the Guemes Island Fire Department that would in turn alert the Community Emergency Response Team (CERT). The island organizations would implement the evacuation of the coastal population. No Tsunami Hazard Zone signs have been posted on Guemes Island. Active geological faults have not been mapped.

Figure 4.10 Soil Erosion Areas



**Fish and Wildlife Habitat Conservation Areas.** The Critical Areas Ordinance (CAO) designates Habitat Conservation Areas (HCA) based on specific criteria that include areas with which endangered, threatened, and sensitive species have a primary association. The county has currently designated all shoreline areas of the island HCA because of their fragile nature and importance in supporting marine-dependent life.

Other areas with a high value for wildlife habitat and plant communities include Square Harbor Wildlife Preserve, owned by the Washington Department of Fish and Wildlife. It was purchased with funds from the Washington Wildlife and Recreation Coalition and thus is protected in perpetuity. It is a haven for raptors and many other bird species. The pileated woodpecker, a State Candidate Species of concern, is frequently seen in the woods. In addition, a small wetland with dead cedar snags is used as a bald eagle night roost, which is an important winter habitat.

The Peach Preserve, also known as the Demopoulos Marsh, is owned by the San Juan Preservation Trust. It also is protected in perpetuity. The preserve features 2,100 ft of shoreline and contains a wetland south of South Shore Drive between the road and the beach. Herons roost in trees north of this wetland. The preserve also includes 19.2 acres of mature secondary forest north of South Shore Road.

**Threatened Species.** The bald eagle is designated as a State Threatened Species. Since 2001, the Washington Department of Fish and Wildlife (DFW) no longer performs an annual survey of nest sites, but an undated map shows 14 nest sites, some of which are probably alternate nests for one nesting pair. The peregrine falcon is no longer considered endangered or threatened in Washington, but at present has the status of State Sensitive; Guemes Island has been host to a falcon scrape in various locations over the years. According to several local bird watchers, the Brandt's cormorant, the merlin, pileated woodpecker, Vaux's swift, and western grebe are among the State Candidate Species frequenting the island. Federally threatened juvenile Chinook salmon stay in the island's extensive eel grass and kelp beds for protection and rely on the forage fish production for their food supply.

**Wildlife.** Guemes Island supports many species of wildlife and plants of varied diversity and density. The intrinsic value of these species represents important historic, cultural, recreational and economic resources. These species should be enhanced for the benefit and enjoyment of everyone.

**Hunting.** Through the years, hunting by off-islanders has frequently led to conflicts between Guemes Islanders and hunters. At times, residents have been at risk of injury from injudicious shots close to residential development. Hunters frequently violate the regulations by trespassing on private land; hunting past the one-half hour after sunset; hunting with artificial lights; and hunting from a motor vehicle or from a public road.

**Noxious Species.** The following state-designated noxious weeds are of interest on Guemes Island because they have a limited distribution on the island and can still be eradicated: spartina, tansy ragwort, hawkweed, and purple loosestrife. The loosestrife has been successfully limited by biological controls. Spartina was found in one beach location. Other species, such as poison hemlock and Scotch broom, are more widely distributed on the island.

In recent years the Norway rat, also known as sewer rat, and the roof rat, or black rat, have become unwanted inhabitants of the island, causing damage to property and posing a health threat to people and their pets.

### **Future Conditions and Issues**

Population growth on Guemes Island will require careful monitoring to ensure that the island's environmental quality does not suffer deterioration. With the increase in population, residents can expect an increase in noise and light pollution. Areas presently zoned as Rural Intermediate may include lots subject to geologic or flood hazards. The density of development permitted in these areas may result in increased seawater intrusion and/or contamination of the groundwater system by failing septic systems.

A bill was passed in 2006 by the state legislature requiring local health jurisdictions to designate Marine Recovery Areas as part of the state's initiative to clean up Puget Sound. The legislation was specifically aimed at identifying areas where on-site sewage (septic) systems may be having an adverse impact on marine water quality. State rules regarding on-site sewage systems (Chapter 246-272A WAC), required the Puget Sound County local health jurisdiction adopt on-site sewage management plans delineating how they will assure septic systems are properly functioning over time in compliance with WAC 256-272A. The Skagit County Public Health Department operations and maintenance program (O/M Program) has been working in this arena for nearly nine years. The Skagit County Board of Health adopted the local Skagit County On-Site Sewage Management Plan in September 2007, in which Guemes Island was proposed as a Marine Recovery Area (MRA). Subsequently, in 2008, the County adopted Marine Recovery Areas for several threatened marine watersheds, including Guemes Island. The criteria for designation of Guemes Island as Marine Recovery Area included

- Recreational shellfish beds closed due to water quality impairment
- Poor soils that require pre-treatment components on some areas for on-site septic systems
- Small lots in close proximity to shorelines in the Rural Village zoned areas; and
- Data indicating large numbers of unknown septic systems.

The designation as a Marine Recovery Area (MRA) means that the County will take action to educate property owners about proper care and maintenance of on-site sewage septic systems; identify and assess the status of unknown septic systems on the island; and require regular inspections, monitoring and repair (if necessary) to maintain adequately functioning on-site septic systems to protect marine water quality.

Skagit County Health has completed the first level of work on Guemes Island, which was to identify all unknown onsite sewage systems (OSS). An escalating scale of enforcement over the course of one year resulted in identification of all 132 parcels with unknown on-site sewage systems. Table 4.1 identifies the status of OSS evaluations on Guemes Island as of May 2010.



Table 4.1 Guemes Island On-Site Sewage System (OSS) Evaluation

Year	Number of OSS serviced		Failures or Corrections Needed
Since 2000	261	35%	11
Within last 3 years	144	20%	10
Within last 1 year	48	8%	1

Source: Skagit County Department of Public Health

The “Failures” or “Corrections Needed” column in Table 4.1 indicate that the operations and maintenance specialist found a component of the system that could be repaired (typically, a pump or a disintegrating baffle). Many times, these corrections prevent a catastrophic failure. Because Guemes Island is a MRA, property owners are required to have inspections annually to be in compliance with local code.

Much of the future development on the island is expected to occur in some of the most fragile environments, including shorelines and wildlife corridors. Protection of these resources and preservation of wildlife, including shoreline, marine and endangered species, is critical to the island’s environmental quality. Further discussion of shoreline areas may be found in the Shoreline Master Program.

In case of a Cascadia earthquake, major structural damage will occur to older buildings that have not been adequately constructed and anchored. Properly built wood frame structures should be more resistant. The resulting tsunami will cause extensive damage to buildings and roads in low-lying areas along north and west beaches. The north part of the island will likely be isolated until roads can be cleared and repaired. Ferry service will most likely be disrupted, so Guemes Island residents will probably need to fend for themselves until regular transportation, power and communication services are restored. Lower magnitude earthquake events will have less severe effects. The Guemes Island Fire Department and CERT should blend into a closer unit so that adequate response time will be available to evacuate low-lying areas.

Increasing development on the island will have other less obvious effects on the environment. These may include loss of trees as lots are cleared, greater prevalence of opportunistic noxious weeds, birds like crows and starlings on cleared land, and more impervious surfaces that increase storm-water runoff and reduce aquifer recharge. The problems with rats in our community will very likely increase unless checked.

Extended ferry hours make it easier for hunters to come across during weekdays and hunting violations will likely increase. With the increase in population, conflicts between islanders and hunters and the risks to the Guemes residents will increase as well unless safe and legal hunting practices are enforced.

With mounting pressure on the refineries across the Guemes Channel to increase production, the risk of residents being exposed to air pollution from that source may also increase. However, with technological improvements at the refineries this risk may actually decrease.

## Education

- Guemes Island residents should be strongly encouraged not to water their lawns and gardens with well water. Rainwater catchment systems provide a viable alternative. People shall be encouraged to install water meters in order to track their water usage and detect leaks when the usage rises above the norm.
- Island organizations should cooperate with the County in developing and distributing educational programs to encourage people to minimize destruction of the native vegetation during development of their property and to re-vegetate with native plants that, once established, require a minimum of water and care.
- The island community should work with existing land trust organizations to assist willing landowners to protect lands, valuable for aquifer recharge areas and wildlife, in perpetuity. [SCC 14.24.170 (1)(b)]

## Recommendations: Map Modifications

The County should modify the following maps in the Guemes Island Shorezone Map Atlas as part of its required Shoreline Master Program Update consistent with the new shoreline management guidelines adopted by the Washington Department of Ecology:

### Wetlands – Figures 4.2 and 4.4.

- The wetland complex in the valley, intersected by Edens Road, is physically separated from the pond along Seaway Hollow by a ridge, as can be seen on a USGS topographical map (Figure 1.1).
- The low area between Veal pond and the North Beach wetland should be evaluated to determine whether there is a continuous wetland complex. See USGS topographical map (Figure 1.1).

### Soil Erosion-Potential Areas-Figure 4.10.

- The partially unconsolidated, partially consolidated sections of shoreline from North Beach in southeasterly direction around the rocky part of the island should be corrected to correspond with Skagit County Potential Landslide and Erosion Areas.
- Tsunami Inundation – Figure 4.9. This map should have an overlay with contour lines and parcel lines.

## Environment Policy Recommendations

The following recommendations are intended to supplement the policies in the Environment Element of the SCCP.

### Air quality

**Policy 4.1:** The Northwest Air Pollution Authority (NWAPA) should monitor air quality over the island. (SCCP Introduction)

### Aquifer Recharge Areas

**Policy 4.2:** Potential prime aquifer recharge areas on the island need to be identified and evaluated.

**Policy 4.3:** The Skagit County Interim Seawater Intrusion Policy, adopted by the Board of Commissioners/ Health by Resolution #15570, should be updated and codified, if necessary, by the Skagit County Department of Health with guidance from the County Hydrogeologist

**Policy 4.4:** The preliminary groundwater budget, as presented by the USGS in the 1995 report entitled *Hydrogeology and Quantity of Ground Water on Guemes Island, Skagit County, WA*, should be further evaluated by the County Hydrogeologist, and the issue of groundwater availability needs to be addressed.

#### **Frequently Flooded Areas**

**Policy 4.5:** A drainage plan for Guemes Island should be developed to reduce flood damage and to allow proper conveyance of flood flows.

**Policy 4.6:** Property owners and residents, living on property that is subject to flooding, should be informed of this threat and provided with information on ways to protect their property. These people should be included in the tsunami warning system.

#### **Geological Hazardous Areas**

**Policy 4.7:** Removal of vegetation in landslide hazard, erosion hazard and coastal bluff hazard areas, shall be minimized. Replanting should maximize the use of native trees, shrubs, and ground cover that is compatible with the existing surrounding vegetation, meets the objectives of erosion prevention and site stabilization, and does not require permanent irrigation for long-term survival.

**Policy 4.8:** Low-lying areas within the inundation zones should be posted with Tsunami Hazard Zone signs.

**Policy 4.9:** When activated, emergency shelters will be posted as “EMERGENCY SHELTER” by the Guemes Island Emergency Response Team (CERT).

**Policy 4.10:** The County should ensure that emergency shelters have adequate seismic resistance.

**Policy 4.11:** Emergency shelters should be designed to have the ability to maintain function with loss of grid power and public communication service.

#### **Fish and Wildlife Habitat Conservation Areas**

**Policy 4.12:** Skagit County should coordinate with ECY and WDFW to identify and evaluate potential sites suitable for the Fish and Wildlife Habitat Conservation Area designation.

#### **Noxious Species**

**Policy 4.13:** The County Noxious Weed Inspector should provide information to and work with island organizations to control noxious weeds on the island.

**Policy 4.14:** The County Health Department should work with island organizations to provide information on methods to minimize impacts from rats.

## **Protection and Conservation Measures**

**Policy 4.15:** Seawater Intrusion Mitigation. Mitigation for a single-family residence shall be in conformance with the “Current Seawater Intrusion Policy or Code.” The Policy should be updated and/or codified by the Skagit County Health Department with guidance from the County Hydrogeologist.

**Policy 4.16:** Building permits in areas susceptible to seawater intrusion should be conditioned upon the restriction of ground water to use in the home only. This requirement should be included in an updated Seawater Intrusion Code.

**Policy 4.17:** Water meters should be required for all new development and encouraged for all existing residences, in order for people to track their water usage and detect leaks. Guemes Islanders should explore with Skagit County the potential for considering implementing a rebate program for the purchase and installation of individual water meters.

**Policy 4.18:** Land elevation shall be determined prior to the drilling of a new water well in order to provide necessary information about the depth to mean sea level. This requirement should be included in an updated Seawater Intrusion Code.

**Policy 4.19:** The County Health Department shall ensure compliance with inspection requirements of on-site sewage disposal systems stated in WAC 246-272A and SCC 12.05, On-Site Sewage Systems. These rules require all on-site sewage disposal systems in Marine Recovery Areas have annual inspections. This system assures identification of failing septic systems, upon which the Skagit County Public Health Department takes action. Where there is identified nitrate contamination of the groundwater, Skagit County Public Health will investigate the source of such contamination.

**Policy 4.20:** Sole Source Aquifer Mitigation. There shall be no density bonus for CaRD developments on Guemes Island, except if the development is to be served by an approved public water system whose source is other than groundwater or that utilizes seawater with mitigation to further protect the freshwater aquifer. SCC 14.18.310 (2) should be amended to reflect this intent.

**Policy 4.21:** The County should ensure that open space set aside by CaRD subdivisions is permanently protected.

**Policy 4.22:** The Skagit County Planning and Development Services Department’s Critical Areas Checklist should include the question whether the property is located on a Sole Source Aquifer Area, or if the property is located on an island.

**Policy 4.23:** The County shall require that individual reverse osmosis (R.O.) systems be professionally engineered and designed. In particular, the water source and effluent discharge need to be addressed. No R.O. systems shall be allowed to use ground water from the aquifer system. A public well system or public R.O. system utilizing seawater will be preferable over multiple individual R.O. systems utilizing seawater. The Seawater Intrusion Policy update and/or codification should reflect the intent of this policy.

**Policy 4.24:** The County and island organizations should encourage islanders to use native vegetation on their property by making them easily available.

**Policy 4.25:** Integrated Vegetation Management (IVM) approaches, with emphasis on mechanical control techniques (mowing and grading), should be used on the public rights-of-way. All available control actions, such as biological means, should be considered. Some selective herbicide applications may be used near intersections and traffic signs, where sight distance and visibility is of critical importance, or on areas with isolated populations of noxious weeds.

**Policy 4.26:** Artificial lighting shall use full cut-off fixtures so that direct light from high intensity lamps will not result in glare. Lighting shall be directed away from adjoining properties so that not more than 1-foot candles of illumination leaves the property boundaries, per SCC 14.16.840 (3).

**Policy 4.27:** On-site sound levels are not to exceed levels established by noise control regulations by the Department of Labor and Industries. Maximum permissible environmental noise levels to be emitted to adjacent properties are not to exceed levels of the environmental designations for noise abatement (EDNA) as established by the Washington Department of Ecology, per SCC 14.16.840 (5)].

**Policy 4.28:** GIET, and other island organizations, will work towards research, in coordination with the Skagit County Hydrogeologist, and education of the islanders with respect to water use and discharge.

#### **Public Information and Incentives**

**Policy 4.29:** All public notices affecting Guemes Island shall be posted in the Skagit Valley Herald. Additionally, the County shall notify the Evening Star and or other widely read island media.

**Policy 4.30:** The County Public Health Department and other departments should cooperate with island organizations to provide islanders with information on the Sole Source Aquifer System; groundwater recharge; and groundwater and surface water quality issues; care of private wells and septic systems; and conservation of water usage. Islanders shall be encouraged to be water resource stewards through participation in decision-making, volunteer activities and educational programs.

**Policy 4.31:** The County should encourage private participation in water conservation strategies, including best management practices and reuse of water.

**Policy 4.32:** The County and island organizations should encourage property owners to protect critical areas and open space by participating in incentive programs like the County Open Space Taxation Program. See SCC14.24.170 (1)(a).

**Policy 4.33:** Hunting on Guemes Island should be reviewed regularly by the Washington State Department of Fish and Wildlife in cooperation with island citizens to insure safety of residents and hunters alike. In addition, wildlife populations should be closely monitored and inventoried in the same cooperative manner in order to manage wildlife resources.

## 5. Shorelines Element

### Introduction

The Guemes Island shoreline is a fragile ecosystem that sustains life for a wide variety of marine plants and animals. It is also subject to geologic hazards like erosion and landslides. Shorelines are easily degraded by erosion from human activities and buoy chains that can dislodge delicate inertial plants or home construction where native vegetation (habitat) is removed. At the same time, the Island's shoreline is now, and is expected to continue to be, the most highly developed area of the island.

The Washington State Shoreline Management Act (SMA) (RCW 90.58) was enacted in 1971 to guide shoreline development in balance with protection of shoreline habitat. The State Shoreline Master Program Guidelines, as developed by the Washington Department of Ecology (ECY) in 1972, translate the policies of RCW 90.58 into standards for regulation of shoreline uses. They help local governments to develop shoreline master programs for their communities as required by the SMA. Preparation of the Skagit County Shoreline Management Master Program was initiated by the Skagit County Planning Department and adopted in 1976. It is a shoreline comprehensive plan and zoning ordinance with a distinct environmental orientation and is customized to local circumstances. Its provisions regulate developments within 200 feet of the Ordinary High Water Mark (OHWM) of Puget Sound, wetlands associated with the Sound, and all tidelands and waters of Puget Sound. On Guemes Island, this element covers shoreline activities such as residential development, boat launches, boathouses, reverse osmosis systems, and other developments.

After the Legislature passed the Growth Management Act (GMA) in 1990, the need arose to integrate the SMA and the GMA. The GMA required the counties with a Shoreline Master Program to incorporate the goals and policies into the county's comprehensive plan. At the same time, it was becoming clear that stronger measures were needed to protect shoreline habitat due to significant declines in Chinook and other salmon species (pers. comm. 10/20/06 from Tom Clingman, WA Department of Ecology). The conclusion was that both laws needed to be amended in order to make them work better together. After an arduous process, the final version of the amended SMA, started in 1999, was finally adopted in 2003.

The Skagit County Shoreline Management Master Program (SMMP) was last amended in 1995 (Resolution 15819). Skagit County must update its SMMP by 2012 to comply with the new Shoreline Management Guidelines adopted by ECY. In addition to the outdated SMMP, the county's Critical Areas Ordinance (CAO) also regulates the environmental impacts of all shoreline development. However, neither ordinance prohibits shoreline uses such as docks, major marine aquatic operations, industrial uses, or other uses that may be inappropriate on Guemes Island. In order to develop a plan that captures the 2003 SMA updates and addresses inappropriate uses, Skagit County and GIPAC applied for and received a grant from ECY to prepare a draft Shoreline Master Program for Guemes Island (MAKERS, Guemes Island Shoreline Master Program Element, Draft November 21, 2005).

The key objectives of the Shoreline Element are to:

- Preserve and enhance the natural character, resources, and ecological processes of shorelines
- Ensure that residential setbacks, lot coverage standards, height limits, and protection of shoreline vegetation are in place to avoid degrading shoreline character or ecology.
- Protect and enhance the current shoreline public access network without impacting fragile shoreline areas.
- Limit shoreline commercial development to areas currently used for commercial purposes.

### **Current Conditions and Issues**

Of the 627 island residences, more than half (346) are on shorelines. Most of these homes are either in the Rural Intermediate or Rural Reserve zone (Figure 2.3, Land Use). The removal of native shoreline vegetation and, in some cases, placement of bulkheads has degraded the ability of these shorelines to support marine-dependent wildlife. For example, trees for marine birds to nest and perch are scarce, and the wide-open character of these shorelines invites city birds like crows and pigeons at the expense of native island birds. As described in the Environment Element, excessive well pumping is locally increasing seawater intrusion into the groundwater.

### **Significant Habitat Areas**

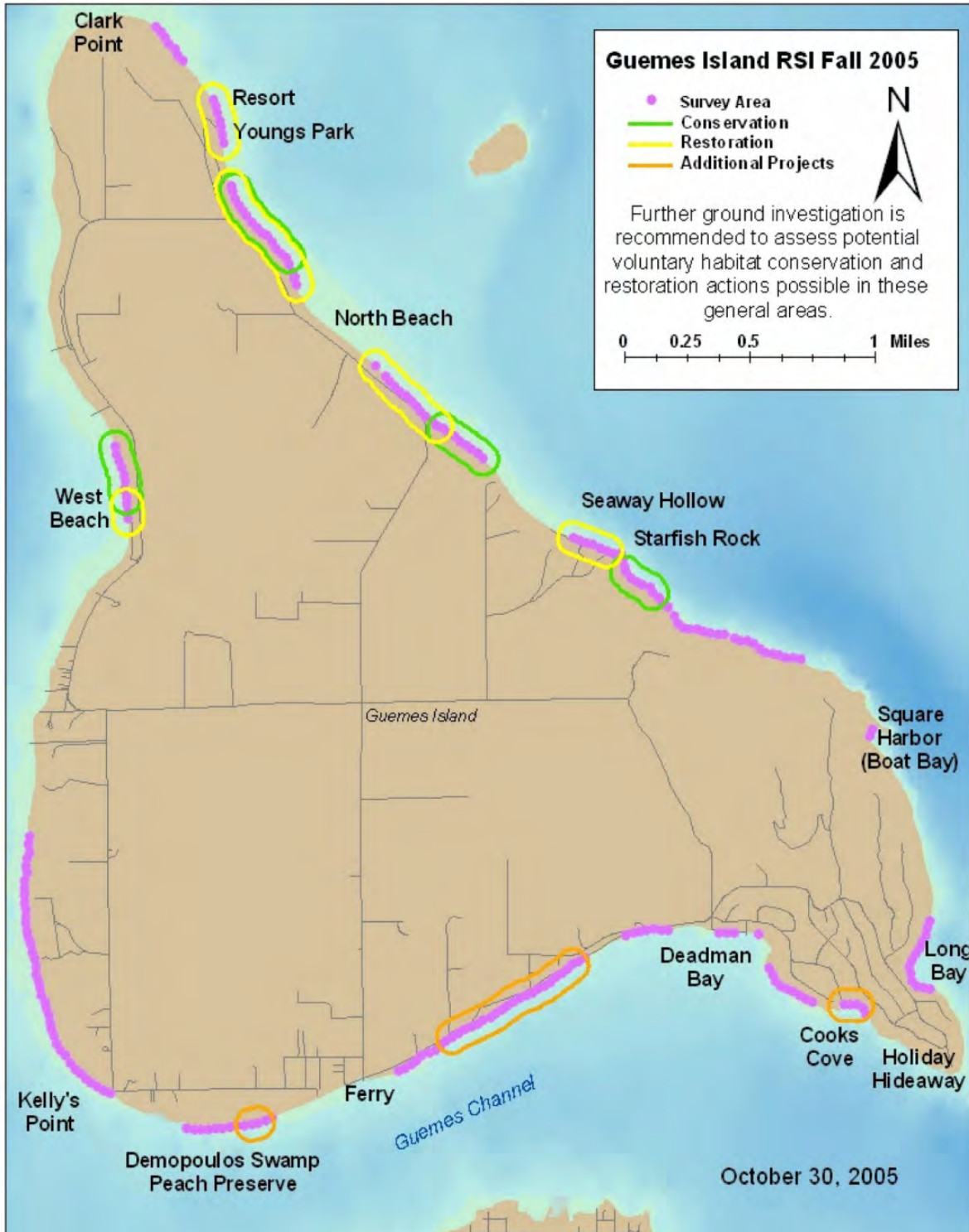
Under the SMA all shorelines on Guemes Island lying seaward from the line of extreme low tide are considered Shorelines of Statewide Significance [RCW 90.58.030 (2)(e)(iii)]. In addition, those shorelines associated with Padilla Bay – from Southeast Point to Clark’s Point, between the OHWM and the line of extreme low tides and also their shore lands have the same designation [RCW 90.58.030 (2)(e)(ii)(E) and vi]]. As a result, Skagit County (see Environment Element) has designated these shorelines as Habitat Conservation Areas that require special studies prior to development to ensure that the natural character of the shorelines is protected.

The 2005 Rapid Shoreline Inventory (RSI) of Guemes Island identified several areas of the shorelines with exceptional habitat value. In particular, these areas are important for their abundant eelgrass and kelp beds which support a myriad of marine species, and beaches which provide good spawning areas for crab and forage fish. Herring, surf smelt, and sand lance, in turn, feed the juvenile salmon including the threatened Chinook salmon that forage these waters.

Shorelines with high-value habitat are shown as Conservation areas in Figure 5.1. They include sites at Kelly’s Point and on West Beach near Ocean Acres and Potlatch Beach that could contribute to improved marine habitat on the island. Shorelines along North Beach are important habitat for clams and Dungeness crab.

Other areas with high-value habitat include the Square Harbor Wildlife Preserve, which is owned by the Washington Department of Fish and Wildlife and protected in perpetuity. It is a haven for raptors and many other bird species and supports some marine life. The Peach Preserve, also known as the Demopoulos Marsh, is owned by the San Juan Preservation Trust and is protected in perpetuity. The section of the preserve south of South Shore Drive features a fresh-water wetland and 2,100 ft of shoreline.

Figure 5.1 Guemes Island Rapid Shoreline Inventory



Source: Guemes Island Rapid Shoreline Inventory Report, People for Puget Sound, 2005.



## Shoreline Designations

The Skagit County Shoreline Master Program assigns Guemes Island shorelines three of six possible environmental designations, or zones, to establish the nature of allowable development given the environmental sensitivity of the shoreline: Rural, Rural Residential, and Aquatic. Table 5.1 identifies the primary purpose of each designation. The three other designations: Urban for intense uses and Rural Conservancy and Natural, mainly to protect sensitive shoreline areas, were not designated here. See Figure 5.2, Current Shoreline Designations and SCCP, Chapter 6 for additional details. The allowed shoreline uses and development standards may be more stringent than the underlying land use zone to protect environmental values. In cases where there is a conflict between shoreline and zoning standards, the more restrictive applies.

Table 5.1 Current Shoreline Environmental Designations on Guemes Island

<b>Shoreline Environmental Designation</b>	<b>Purpose</b>
Rural Residential	To provide transition area between more intense urban areas and rural areas allowing low to medium density uses and small scale shoreline alterations
Rural	To protect agricultural land from urban density expansion, regulate intensive development along undeveloped shorelines, function as a buffer between Urban and Conservancy shorelines, and maintain open spaces by permitting low to moderate density uses.
Aquatic	To encourage and protect appropriate multiple purposes of the water and prevent inappropriate waterward encroachments.

Source: Skagit County Shoreline Master Plan Program December, 1976.

## Shoreline Use Activities

As mentioned above, all Guemes Island shorelines are considered critical areas and therefore proposed uses are regulated under the Critical Areas Ordinance (CAO) (SCC 14.24). Project proponents are required to provide a Critical Areas Review to identify steep and unstable slopes, fish and wildlife, and other areas of ecosystem impact. The CAO requires that projects first attempt to avoid or minimize significant adverse effects and significant ecological shoreline impacts. If this is not feasible, projects are required to minimize their impacts by limiting the degree or magnitude of the action and/or by mitigation of impacts. If these requirements cannot be met, permits will not be granted.

Shoreline uses include the suite of principal uses, such as residential or commercial and their accessory uses, including docks, buoys, etc. The combination of zoning and shoreline designations, (Figure 2.3, Zoning and Table 5.2 and Figure 5.2 describing current shoreline designations) determines the allowed uses in shoreline areas. In the past, islanders have expressed strong concerns about the adverse affects of proposed commercial marine aquaculture. Aquaculture, marinas, and mining are possible uses under the current SMMP.

Figure 5.2 Current Shoreline Designations

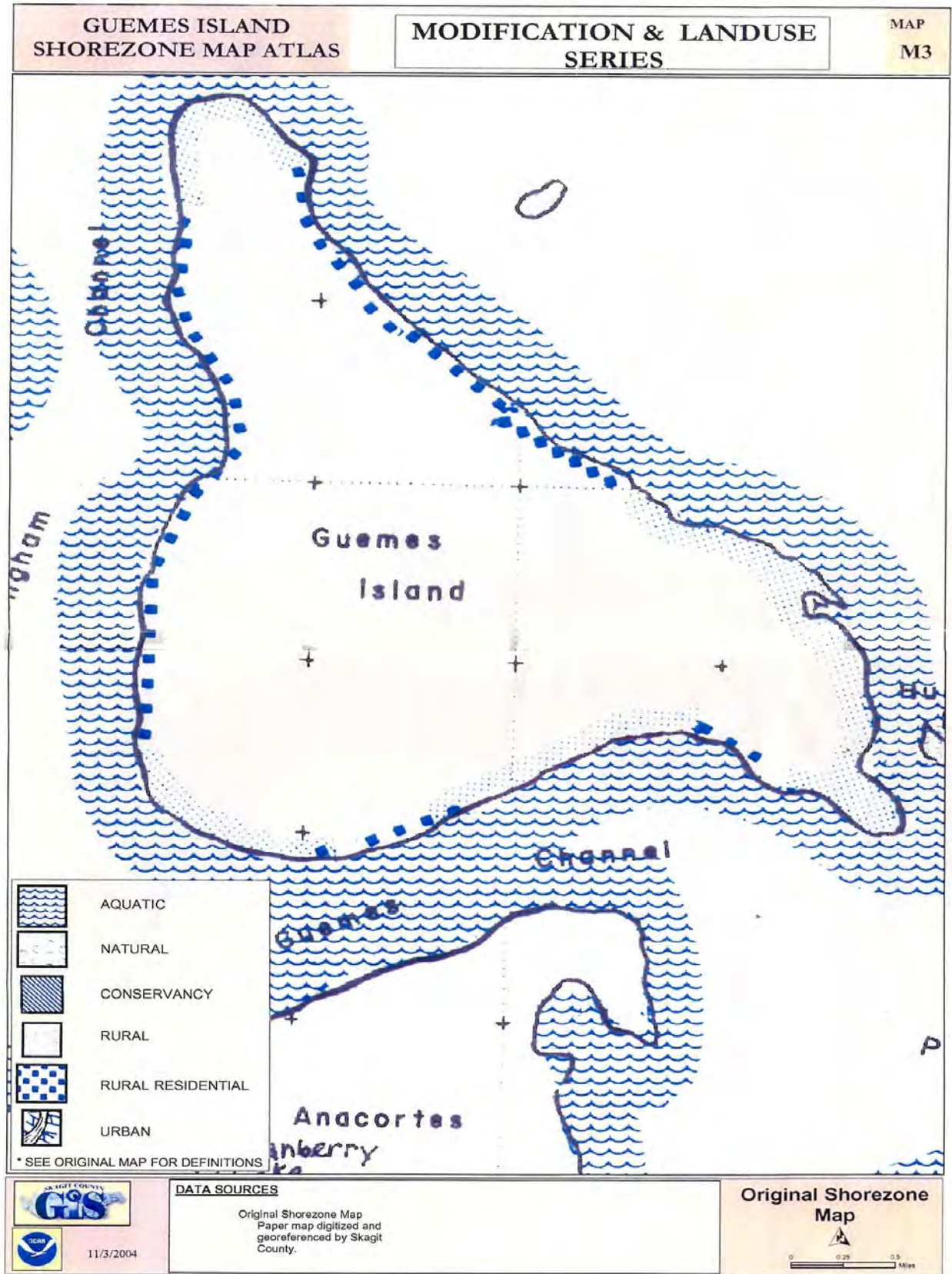


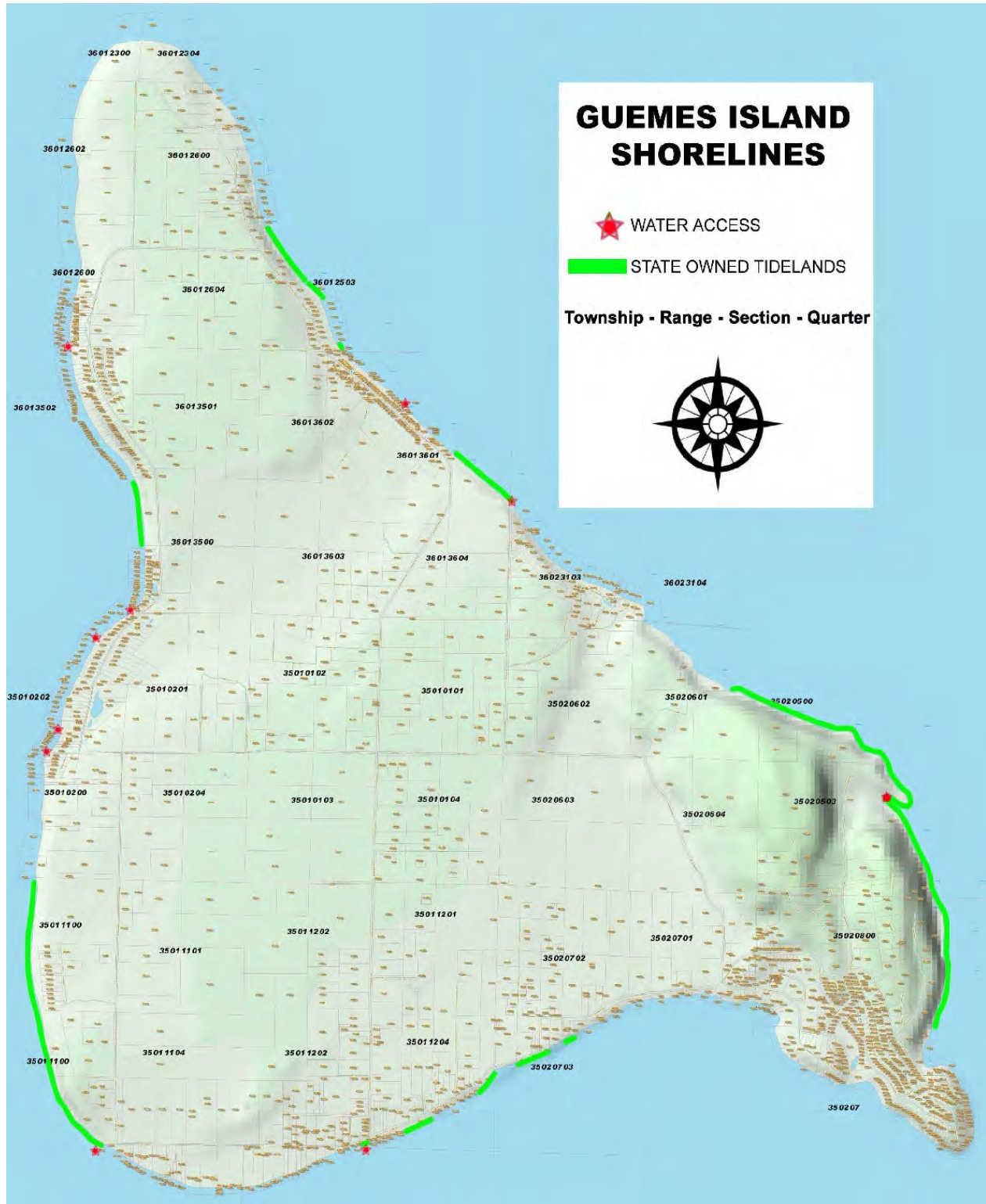
Table 5.2 Current Shoreline Development Standards

	<b>Rural Residential</b>	<b>Rural</b>	<b>Aquatic</b>
<b>Shore Setback</b>	50 ft.	50 ft.	NA
<b>Sideyard Setback</b>	8 ft.	8 ft.	NA
<b>Site Coverage</b>	30%	30%	NA
<b>Height Limit</b>	30 – 40 ft.*	30 – 40 ft.*	NA

**Parking Lots.** The two shoreline public parking lots are for the ferry and Young’s Park (see Figure 5.1). Enhancing the shoreline of these lots with more vegetation would improve the natural shoreline character.

**Public Access.** Shoreline public access allows the general public to reach the water. The island has a number of shoreline access points around the island (see Figure 5.3, Shoreline Public Access). However, more than half of the privately owned shoreline parcels also include privately owned tidelands, which may limit beach access to the public. For this reason, where possible, it is desirable for tidelands to be held in public trust. A variety of state, federal, and private funding sources are available for the acquisition of water access. The only public boat launch is located next to the ferry dock at Mangan’s Landing. Other private launches are at Cook’s Cove and the Resort (see Figure 5.1).

Figure 5.3 Shoreline Public Water Access



\*Within 100 ft. of the OHWM the maximum height is 30 ft. From 101 – 200 ft. of the OHWM the maximum height is 40 ft.

Source: Skagit County Shoreline Master Plan Program December, 1976.

## Residential Development

**Shoreline Setbacks.** Skagit County SMMP shoreline setbacks are well below what is currently recommended by the best available marine shoreline science. Table 5.2 shows the minimum setback from the Ordinary High Water Mark (OHWM) is 50 feet in the Rural Residential and Rural Environments. Research from the past 20 years, however, suggests that to protect marine dependent wildlife in shoreline areas, shoreline buffers should be much larger than the current standard. The County is now considering wider shoreline buffer areas.

**Structural Footprint.** Over time, many of the original beach cabins, which are on the smaller and narrower lots and dominate the island's shorelines, have been replaced by larger residences. This change directly affects the amount and quality of shoreline vegetation that can be retained. These residences are often accompanied by lawns and ornamental gardens. This type of development is more consumptive of water and other resources than smaller scale structures and native vegetation. From a larger perspective, bigger structures also undermine the island's rural character.

Another aspect of structures contributing to an appearance of bulkiness is height. As Table 5.2 shows, structures in the Rural and Rural Residential Environment can be built to 40 feet.

**Shoreline Modifications.** Shoreline modifications on Guemes Island include shoreline stabilization, beach restoration/enhancement, bulkheads, rip rap, fill, and piers. Bulkheads and rip rap can interfere with the normal movement of sand and gravel along the shoreline, thereby depriving some areas of this material and causing other areas to fill-in. Where sand and gravels are depleted, beach spawning forage fish that feed larger fish are unable to spawn. Similarly, bulkheads placed too far water ward cover beach where forage fish spawn, thereby reducing opportunities to increase these stocks.

Piers and docks are vulnerable to break-up by the strong currents and tides that move around the island. The 2005 RSI identified numerous bulkheads around the island (see Figure 5.4, Shoreline Modifications). The only pier on the island is the ferry dock, which is regularly inspected and professionally maintained.

Figure 5.4 Shoreline Modifications



**Shoreline Restoration and Ecological Enhancement.** The results of the 2005 Rapid Shoreline Inventory (RSI) tell us that much of the Guemes Island shoreline vegetation has been maintained substantially intact and provides excellent habitat for marine dependent life. Native vegetation provides food, nesting and perching areas, and shade to prevent beach spawning fish eggs from desiccation. Maintaining these plant assemblages of significant vegetation is so critical that development should not be allowed there unless impacts to this resource can be avoided or fully mitigated. Unfortunately, however, along many reaches of the developed shoreline, native trees, shrubs and groundcovers, have been removed and replaced with non-native plants.

The RSI report makes recommendations to encourage landowners to continue to conserve intact shoreline vegetation and restore degraded areas. The RSI shoreline restoration recommendations are described in the Recommendation section of this chapter and further detailed in the Rapid Shoreline Inventory Report (Appendix B).

**Utilities.** The principal utilities in the shoreline zone are power cables that service the island and water systems. As discussed in the Environment Element, saltwater intrusion has degraded the quality of a number of shoreline wells. The preferred alternatives are a community water system or a public reverse osmosis system, that are regularly monitored for quality. Individual reverse osmosis (R.O.) systems are not a desirable option since they are not regulated and tend to use their contaminated well water as a source, thereby further stressing the groundwater system.

**Future Shoreline Conditions and Issues.** At full build-out, more than 100 additional homes could be constructed on the island’s shorelines, for a total of nearly 450 residences housing some 800 people. This is up to one-third of the island’s future population. This increased population will place more stress on shoreline resources. New homeowners will desire to remove shoreline vegetation to fully capture views, while new homes would increasingly diminish rural character. With this in mind, significant efforts will be needed to encourage landowners to reestablish native shoreline vegetation and minimize development impacts on this resource. At the same time, pressure for more public access to shorelines is likely to grow, underscoring the need for additional access to tidelands. Where shorelines overlay shallow aquifers, landowners may increasingly choose private reverse osmosis systems and further contaminate the groundwater near the shoreline. (See seawater intrusion discussion in Environment Element – Section 4)

The proposed shoreline designations and development policies for Guemes Island incorporate new shoreline environment designation categories established by recent changes in the Shoreline Management Act. These environments apply to the same 200-foot area from the OHWM as the existing designations. Like the current designations, they assign appropriate land use controls; however, the policies place greater emphasis on protecting and restoring natural shorelines and native vegetation than the current designation described in Table 5.1.

Table 5.3 Descriptions of Proposed Shoreline Designations

Shoreline Designation	Purpose	Location
High Intensity	To provide for water-dependent commercial, transportation, and industrial uses, while protecting and restoring ecological functions.	Mangan’s Landing
Shoreline	To accommodate residential development	Assigned to the most highly

<b>Shoreline Designation</b>	<b>Purpose</b>	<b>Location</b>
Residential	and accessory structures that comply with the SMP, to restore and enhance ecological functions, and provide appropriate public access and recreation use.	developed shorelines of the island, including much of West Beach, North Beach, and Holiday Hideaway.
Rural Conservancy	To protect, conserve and restore ecological functions, natural resources and valuable historic and cultural areas. Appropriate for low density residential development, sustained yield forest management noncommercial aquaculture, agriculture, and other low intensity uses.	Appropriate for the low density residential development along south shore, West Beach, Clark Point and the southeast shoreline of the island.
Natural	To protect and restore shoreline that are relatively free of human influence or are intact or have minimally degraded shoreline functions intolerant of human use and require restrictions on intensities and types of uses permitted.	Demopoulos, Square Bay, Lervick shoreline, and the North Beach wetland.
Aquatic	To protect, restore, and manage the unique characteristics and resources of areas waterward of the ordinary high water mark.	Applies to all marine waters and their underlying lands waterward of the OHWM.

The five environments are High Intensity, Shoreline Residential, Rural Conservancy, Natural, and Aquatic. Figure 5.5 shows the proposed distribution of these designations and Table 5.8 describes the purpose and general location of each. They generally correspond to the underlying zone and ecological values of their shorelines. For example, the Shoreline Residential designation, which permits the highest rural density, follows shorelines in the Rural Intermediate zone (Figure 2.3, Land Use) on West Beach (north of Edens Road), North Beach, and Holiday Hideaway where shoreline degradation is considerable. The Rural Conservancy designation, intended for lower densities, is aligned with shorelines in the Rural Reserve zone and lower densities occurring at Clark Point, on West Beach (south of Edens Road) and along the shorelines of much of the southern half of the island where ecological functions are more intact. The High Intensity and Natural Environment, which overlies the Rural Reserve zone, however, follow the function of the site. The High Intensity Environment at Mangan’s Landing is intended for marine transportation, thus it accommodates ferry operations, while the Natural Environment, which permits only minimal development is confined to the island’s most ecologically intact shorelines of Demopolis Marsh, Square Harbor, and the Lervick shoreline. The principal emphasis of the Aquatic Environment applies to all waters and seabed water ward of the OHWM.



Figure 5.5 Proposed Shoreline Designations



Source: MAKERS, Draft Guemes Island Shoreline Master Program Element, November 2005.

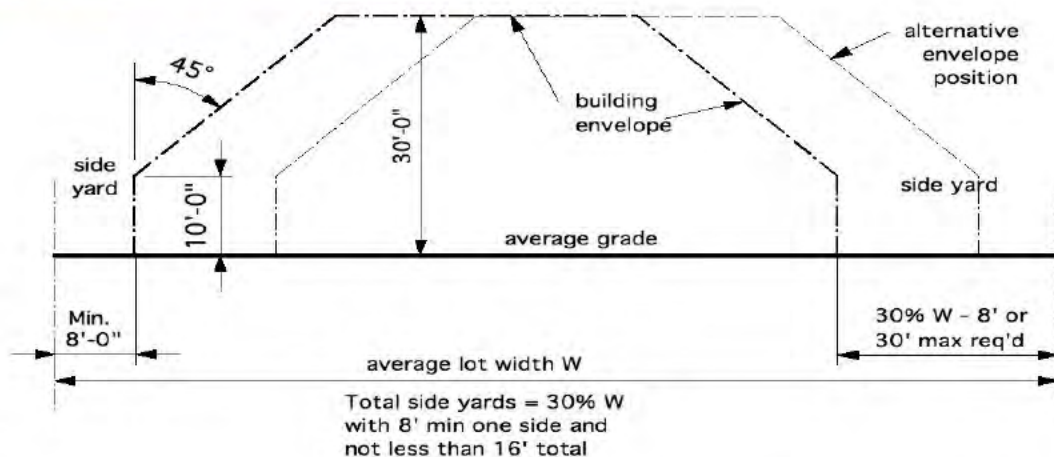
The nature of future development, especially on sub-standard lots in the Shoreline Residential is a major concern as vacant lots and small existing homes are replaced with large new residences. Therefore, further restrictions on height, lot coverage, and setbacks are needed to ensure that such structures are more proportionate to lot size. Table 5.4 and Figure 5.6 describe the proposed development standards for shoreline development in all designations. Other shoreline development standards will be proposed for public review during the review and adoption of this subarea plan as well as the update to the Shoreline Management Master Plan in 2011-2012.

**Table 5.4 Recommended Shoreline Residential Development Standards (see Figure 5.6)**

Structure Element	Recommended Standard
Height	10 feet at the side yard setbacks with a 45° sloping limit boundary to 30 feet maximum
Lot coverage	30%
Shoreline Setback	Rural Conservancy – 150 feet from OHWM Shoreline Residential – 100 feet from OHWM
Sidyard Setback	The larger of 8 feet or total of 30% of average lot width, with a minimum of 8 feet on one side
Street Setback	25 feet
Landscaping	In the shoreline setback area, a Vegetation Conservation Area with existing native plants or implementation of a residential landscape plan to restore native vegetation
Accessory structures: Height	15 feet
Accessory dwellings: Water supply	The well does not exceed 25 ppm chlorides and meet the minimum standards of SCC 12.48
Fences	Up to 3 foot high -0 setback from property line 6 foot solid fence – 10 foot setback from property line on ROW (does not apply to agricultural wire fencing)

Source: People for Puget Sound. Guemes Island Rapid Shoreline Inventory, October 2005.

**Figure 5.6 Side Yard Setbacks Illustration**



## **Shoreline Policy Recommendations**

The following policy recommendations are intended to supplement the Skagit County Comprehensive Plan and the Shoreline Management Master Program as they apply to Guemes Island.

### **General Policies Applying to All Shoreline Uses and Activities**

**Policy 5.1:** Ensure that restrictions on shoreline uses do not unduly infringe upon the rights of private ownership.

**Policy 5.2:** Guemes Island marine shorelines below extreme low tide are designated Shorelines of State-Wide Significance (SSWS). In addition, the shorelines associated with Padilla Bay, from Southeast Point to Clark Point, between the OHWM and the lines of extreme low tides have the same designation. These SSWS are of value to the entire state and should be protected and managed to comply with RCW 90.58.020. In order of preference, these are the priorities:

- Recognize and protect the state-wide interest over local interest
- Preserve the natural character, resources and ecology of the shore
- Prefer long-term over short-term benefit
- Increase public access to publicly owned areas of the shorelines

**Policy 5.3:** Projects that cause significant ecological impacts are not allowed unless mitigated to avoid or reduce damage to ecosystem-wide processes and ecological functions.

**Policy 5.4:** The County will set mitigation requirements or permit conditions based on impacts identified. Avoidance of impacts by means such as relocating or redesigning the proposed development will be applied first. Lower priority measures will be applied only after higher priority measures are demonstrated as not feasible or not applicable.

**Policy 5.5:** Encourage the protection and enhancement of the natural ecology of Guemes Island shorelines as a designated Skagit County Habitat Conservation Area, including areas where endangered, threatened and sensitive species have primary association, all public and private tidelands suitable for shellfish harvest, kelp and eel grass beds, herring and smelt spawning areas, areas where salmon species have primary association, State Natural Area Preserves and Natural Resource Areas; and other aquatic areas. Special consideration should be given to the east and northeast shorelines of the island as important and irreplaceable parts of the Padilla Bay ecosystem.

**Policy 5.6:** Encourage educational projects and programs that foster a greater appreciation of the importance of shoreline management, environmental conservation and local history.

### **Specific Shoreline Use and Activity Policies Aquaculture**

**Policy 5.7:** Commercial aquaculture shall not be permitted on the shoreline of Guemes Island because of its potential to significantly degrade ecological functions over the long term.

### **Archaeological and Historic Resources**

**Policy 5.8:** Protect and preserve important archaeological, historical, and cultural sites located in shore lands of the State for educational, scientific, and enjoyment uses of the general public.

## **Mining**

**Policy 5.9:** Mining and associated activities should not be permitted within SMA jurisdiction on Guemes Island.

## **Parking**

**Policy 5.10:** Locate and design parking lots to minimize adverse impacts including those related to storm runoff, water quality, visual qualities, public access and vegetation, and public maintenance.

## **Public Access**

**Policy 5.11:** Consider access to public waters in the review of all private and public developments (including land divisions).

**Policy 5.12:** Provide access to public waters as close as possible to the water's edge without causing significant ecological impacts.

**Policy 5.13:** Pursue opportunities for public access for recreational uses on publicly owned shorelines by encouraging acquisition of additional shoreline properties from willing landowners.

**Policy 5.14:** Design access to public waters to provide for public safety and comfort and to minimize potential impacts to private property and individual privacy.

**Policy 5.15:** Prohibit the vacation of public access to marine waters.

## **Shoreline Modifications (Including Bulkheads)**

**Policy 5.16:** Shoreline development should be located and designed to prevent or minimize the need for shoreline modifications.

**Policy 5.17:** "Soft" shoreline stabilization using natural materials such as protective berms, beach enhancement or vegetation stabilization is strongly preferred over structural shoreline stabilization made of materials such as steel, wood, or concrete. These non-structural measures have less adverse and cumulative impacts on shore features and habitats. Proposals for structural solutions including bulkheads shall demonstrate that natural methods are unworkable.

**Policy 5.18:** Locate, design and construct bulkheads and other structural stabilizations primarily to prevent damage to existing development and minimize adverse impacts to ecological functions. New development requiring bulkheads and/or similar protection should not be allowed.

**Policy 5.19:** Shoreline modification should be discouraged on shorelines existing in their natural state.

**Policy 5.20:** The County shall take steps to assure that shoreline modifications, both individually and cumulatively, do not result in a net loss of ecological functions. This is to be achieved by giving preference to shoreline modifications that have a lesser impact on ecological functions and requiring mitigation of identified impacts resulting from shoreline modifications.

## **Piers and Docks**

**Policy 5.21:** In general, private docks and piers should be prohibited on Guemes Island in light of extreme tidal currents around the island that damage over-the-water structures and impact

ecosystem processes. However, consideration should be given to permitting public docks or piers for public access. Such structures shall be accompanied by a long-term maintenance and repair agreement that is recorded with the County Auditor.

### **Shoreline Residential Development**

**Policy 5.22:** All shoreline residential development should protect and enhance shoreline vegetation in dedicated Vegetation Conservation Areas (VCA) – assemblages of native trees, shrubs, or groundcovers -as determined by Skagit County.

**Policy 5.23:** The County should implement the shoreline development standards identified in Tables 6.4 and 5.10 for Guemes Island.

**Policy 5.24:** Appropriate provisions should be made to protect groundwater supplies, including the encouragement of roof catchments systems for irrigation use and storage ponds to augment aquifer storage.

**Policy 5.25:** Adequate provisions should be made in accordance with the CAO for erosion control, drainage systems, protection and enhancement of aquatic and wildlife habitat, geohydraulic processes, and open space.

**Policy 5.26:** Sewage disposal facilities shall be provided in accordance with the WAC and certified by the Skagit County Health Department to not adversely affect groundwater quality or supplies or marine water quality.

**Policy 5.27:** Appurtenances and accessory structures should be located landward of the principal residence.

**Policy 5.28:** For shoreline stabilization measures, refer to recommendations 5.15 -5.19, Shoreline Modifications, above.

**Policy 5.29:** The creation of new shoreline residential lots should be prohibited unless it is demonstrated that the lots are not:

- Clearing or grading within the VCA
- Constructing shoreline stabilization structures
- Causing significant erosion or slope instability

**Policy 5.30:** Accessory dwellings should not be permitted if the water source exceeds 25ppm chlorides, as is currently required by SCC 14.16.710, or where the well does meet the quantity requirements of SCC 12.48. This regulation should be amended to permit accessory buildings in these areas if they will not be served by groundwater.

### **Shoreline Conservation, Restoration, and Ecological Enhancement Policies**

**Policy 5.31:** Shoreline management activities, including the provisions and implementation of this Shoreline Element shall be based on a comprehensive approach that considers the ecological functions currently and potentially provided by vegetation on different sections of the shoreline.

**Policy 5.32:** Where possible, shoreline restoration and/or enhancement shall use maintenance-free or low-maintenance and “soft” structural designs.

**Policy 5.33:** Restoration of degraded shorelines due to natural or manmade causes shall, wherever feasible, use soil bioengineering techniques to arrest the processes of erosion, sedimentation and flooding.

**Policy 5.34:** The design and use of naturally regenerating systems for prevention and control of beach erosion is to be encouraged where

- The length and configuration of the beach will accommodate such systems.
- Such protection is a reasonable solution to the needs of the specific site.
- Beach restoration/enhancement will recreate or enhance natural shoreline conditions and habitat and to reverse otherwise erosional conditions.

**Policy 5.35:** The restoration of native vegetation should be a condition of all development that causes significant vegetation removal or degradation.

**Policy 5.36:** Skagit County, when updating the Shoreline Management Master Program (SMMP) under the new Shoreline Management Guidelines adopted by ECY, should coordinate with GIPAC (Guemes Island Planning Advisory Committee [see Plan Implementation]) on recommendations to improve shoreline vegetation at the priority restoration sites. This should involve the following steps:

- Determine the willingness of landowners to participate and identify project needs and resources to complete the project and monitor the results.
- Work closely with willing landowners in designing and implementing projects to ensure that views and other project concerns are accommodated and inconvenience is minimized.
- Coordinate with the County, local, state and federal agencies as well as local experts for information and technical expertise

**Policy 5.37:** The following table (Table 5.5, Rapid Shoreline Inventory Recommendations) summarizes the RSI recommendations, project objectives, and desired landowner participation (see Figure 5.1, RSI Map).

**Table 5.5 Rapid Shoreline Inventory Recommendations**

<b>RSI Recommendation</b>	<b>Objective</b>	<b>Desired Landowner Participation</b>
<b>Shoreline Conservation Sites</b>	<b>Maintain natural conditions over the long-term. Restoration work is not needed in these areas.</b>	<b>Maintain vegetation and beach processes in their current state</b>
<b>Shoreline Restoration Sites</b>	<b>Reestablish native shoreline vegetation to support marine life.</b>	<b>Remove noxious weeds and establish native plants that avoid view obstruction.</b>
<b>Shoreline Additional</b>	<b>Reestablish native shoreline</b>	<b>Remove noxious weeds and</b>

<b>RSI Recommendation</b>	<b>Objective</b>	<b>Desired Landowner Participation</b>
<b>Projects</b>	<b>vegetation to support marine life.</b>	<b>establish native plants that avoid view obstruction.</b>

**Policy 5.38:** GIPAC should encourage landowners in non-inventoried areas to participate in shoreline protection and restoration efforts.

**Policy 5.39:** The County should provide technical assistance to landowners who wish to participate in the restoration of shoreline areas, especially in priority areas identified in the Rapid Shoreline Inventory (Appendix B).

**Utilities (Accessory to Residential Structures)**

**Policy 5.40:** When utility lines require a shoreline location, they should be placed underground, where feasible.

**Policy 5.41:** In densely populated areas and/or areas impacted by seawater intrusion, joint public facilities such as public wells (located outside the impacted area) and public reverse osmosis systems are the preferred method for water supply provided overview by thorough environmental studies are performed to support the system.

**Water Quality**

Refer to the Environment Element.

## 6. Transportation Element

### Introduction

The purpose of this element is to provide information on the transportation topics relevant to Guemes Island and to make policy and capital facility recommendations to address the issues. Three transportation issues are addressed:

- Ferry Service (ridership demands, parking, service outages, extended hours, and transit connections)
- Public and private roads; and
- Non-motorized transportation (such as pedestrian and bicycle movement)

This section briefly describes how the Growth Management Act (GMA) affects transportation planning, including a description of current and future transportation conditions and the recommendations. The recommendations are intended to supplement the Skagit County Comprehensive Plan (SCCP) that includes the Skagit County Transportation Improvement Plan (TIP), the Skagit County Guemes Island Ferry Capital Facilities Plan (GIFCFP), and the Skagit County Capital Facilities Plan (SCCFP).

### GMA Mandate

The GMA requires counties to designate areas of urban and rural development. The purpose of this urban/rural distinction is to avoid the inefficiencies and expense involved in providing services and facilities to low density rural areas like Guemes Island, and to protect natural resources and wildlife habitat there. Thus, transportation service standards, such as wide traffic lanes and shoulders with curbs and sidewalks are required for the higher densities and commercial/industrial development in urban designated areas. By contrast, the level of service standards (LOS) for rural transportation facilities are purposely limited to the minimum necessary. Adding a higher LOS would encourage urban level development.

Table 6.1 shows the types of transportation services in urban areas compared to those in rural areas. These differing requirements for urban and rural areas are referred to as “Level of Service” standards, or LOS. Standards for road-related facilities, like sidewalks, drainage, and pavement area, differ between rural and urban areas and are referred to as road standards. The level of service (LOS) for the Guemes Island ferry is reflected in the adopted ferry schedule which takes into account such factors as ferry capacity, crossing time, cost of operation, ridership demand, and wait times.

Table 6.1 Transportation Level of Service Standards

Urban Level Service	Rural Level Service
Curbs & sidewalks	Minimal paving objectives - no curbs or sidewalks
Stormwater sewers	Open drainage channels
Separate bike paths	Limited regional bike & pedestrian facilities in traffic lanes
Ferry level of service (schedule and capacity)- sufficient to accommodate urban needs	Ferry schedule, incorporating rural level of service based on existing ferry capacity, operational costs, ridership demand, ridership demand management, crossing times and wait times.



## Transportation Policies

The GMA establishes goals to guide the development of the transportation policies in the (SCCP). These policies stress the following objectives for transportation systems:

- Provide facilities and services that are consistent with the land use in rural areas
- Move people, goods and services safely and cost-effectively
- Provide affordable transportation services for senior citizens and handicapped individuals
- Use alternatives to single occupancy vehicles, including transit, ride sharing, and bicycling to reduce system demands and costs; and
- Develop new facilities that are designed and constructed to preserve natural systems and protect critical areas.

The discussion and recommendations in this chapter are guided by these policies as they apply to Guemes Island as a designated Rural Area.

## Current Conditions and Issues (Ferry)

**Ferry Planning.** Skagit County is one of four counties in Washington State that owns and operates a ferry system. Chapter 36.54<sup>4</sup> of the Revised Code of Washington (RCW) requires the legislative authority of every county that operates a ferry to prepare, with the advice and assistance of the County Engineer, a Fourteen-year long range plan and six-year capital improvement plan for all major elements of the ferry system. In addition, Washington Administrative Code (WAC), WAC 136-400<sup>5</sup> provides additional specifics regarding the administration of the Guemes Island Ferry Capital Facilities Plan (GIFCFP). The GMA contains additional statutory requirements for Skagit County to engage in transportation and capital facilities planning.

As such, the Guemes Island Subarea Plan Transportation Element contains guidance for the development and update of the Guemes Island Ferry Capital Facilities Plan, which provides the specific planning and development criteria for ferry operations.

**Ferry Service.** Skagit County owns and operates a ferry system from the City of Anacortes to the south side of Guemes Island at Mangan's Landing. In the early 1900's, a small private ferry system was established by the local residents. In 1958, this system was expanded by the purchase of the M/V Almar which had a capacity of 9-11 vehicles. In the early 1960's, Skagit County purchased the M/V Almar and ferry facilities and began full-time management of the system. In 1979, the County purchased the 124 foot vehicle and passenger ferry M/V Guemes that currently serves Guemes Island. The ferry has a capacity of 100 passengers and approximately 22 vehicles.

The ferry provides daily service (365 days a year) across the Guemes Channel between the County ferry dock in Anacortes at 6th Street and I Avenue, and at the south end of Guemes Island Road at Mangan's Landing.

Emergency service is available 24 hours a day 7 days a week through the 911 system. After hours emergency service is generally delayed since a crew must be organized on a case-by-case basis.

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<sup>4</sup> RCW 36.54, <http://apps.leg.wa.gov/RCW/>

<sup>5</sup> WAC 136-400, <http://apps.leg.wa.gov/wac/>

<sup>6</sup> Guemes Island Ferry Capital Facilities Plan, [www.skagitcounty.net/ferry](http://www.skagitcounty.net/ferry)

**Ferry Committee.** Islanders have desired representation as a group to the County and thus created the Guemes Island Ferry Committee. Since 1980, several ferry committees in succession have filled this role. It has been the desire of the Ferry Committee to have open lines of communication with the County and to support the public process for decisions about ferry operations. In the year 2002, at the request of the Board of County Commissioners, the Ferry Committee created a charter that included public elections of ridership representatives. The charter was soon amended at the recommendation of the Board of County Commissioners to have the representatives on the Ferry Committee elected by the registered voters of the Guemes island precinct.

In 2004 Skagit County adopted resolution R20040393 which established the Guemes Island Ferry Operations and Performance Roundtable and recognized the Guemes Island Ferry Committee as the “eyes and ears” of the island. Additionally they would meet regularly with Skagit County Public Works staff to discuss policy, operational and financial issues relative to the Guemes Island ferry and advise the County on perspectives of Guemes Island ferry riders.

In 2010 at the direction of the Board of County Commissioners, Skagit County Public Works, in consultation with the Ferry Committee, restructured the Guemes Island Ferry Operations and Performance Roundtable to provide a structured Forum to include a broader perspective of stakeholders having interest in the Guemes Island ferry operations. Subsequently R20040393 was rescinded and R20100050 was adopted and established the Guemes Island Ferry Operations Forum.

Skagit County Public Works management will continue to meet with the Guemes Island Ferry Committee, other interested groups and citizens at-large as deemed necessary.

Skagit County Public Works shall use the Public Forum process to gather public advisory input on the County’s Work Plan for the Guemes Island ferry operation. Future topics of interest include ticket fare structure and fare recovery model, cost containment, ferry sailing schedule, ferry operations master plan and ADA accessibility issues confronting passenger-only ferry service.

Many of these issues relate to the sub-area plan since they may affect island growth and implementation of transportation policies in the SCCP. Thus, they are addressed in this element<sup>7</sup>.

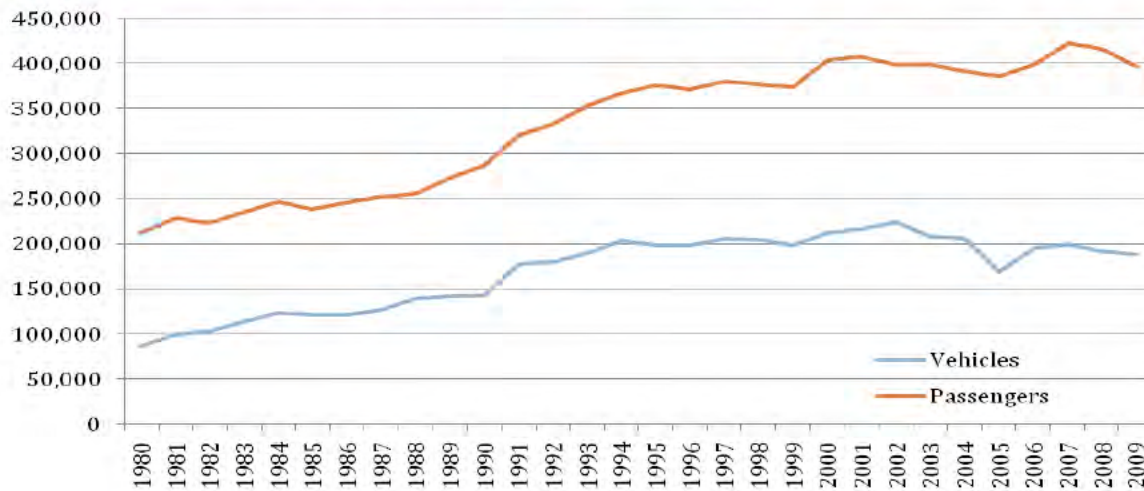
**Ferry Ridership.** Table 6.2 indicates actual annual Guemes Island ferry vehicle and passenger ridership from 1980-2009. The data shows the total annual ridership, including vehicles, increased steadily between 1980 and 2009. From 1980 to 2000 total ferry ridership increased 90% while the vehicle numbers for the same period increased 145%.

As an indication of an expected increase in total ridership, the 1991 Guemes Island Ferry Capital Facilities Plan (Ferry CFP) projected growth between 28% and 38% by 2005. Instead, ridership in 2000 surpassed this projection by more than 5,000. Based on current County data and a Ferry Committee assessment the trend toward increased vehicle ridership has leveled off and decreased slightly. Vehicle use since 2006 does not appear to be increasing as projected and may even be declining, while pedestrian numbers have shown an increase. In 2006, over 195,000 vehicles and almost 400,000 passengers used the ferry.

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<sup>7</sup> In the interest of accuracy and complete disclosure, GIPAC has sought information from the Ferry Committee and Skagit County to describe ferry-related issues in this section. However, GIPAC is solely responsible for the final recommendations.

**Table 6.2 Guemes Island Ferry Actual Ridership (1980-2009)**



Year	Vehicles	Passengers
1980	86,858	211,984
1981	100,058	227,974
1982	102,854	222,942
1983	113,682	234,238
1984	123,208	246,646
1985	121,724	237,666
1986	121,434	245,544
1987	127,404	252,568
1988	139,554	254,946
1989	142,510	272,716
1990	143,748	286,260
1991	177,612	320,796
1992	179,796	331,802
1993	189,338	353,362
1994	203,460	367,450

Year	Vehicles	Passengers
1995	198,622	375,616
1996	198,950	371,502
1997	205,718	379,996
1998	205,156	376,956
1999	198,664	373,878
2000	212,820	403,752
2001	216,579	406,558
2002	224,484	398,128
2003	208,723	398,759
2004	205,864	391,055
2005	169,386	384,904
2006	195,526	398,793
2007	199,497	422,257
2008	191,643	415,834
2009	188,852	396,191

*Source: Skagit County Department of Public Works*

Skagit County indicates that total ridership in 2000 as compared to 2009 increased a total of 96% or 9.6% annually. Vehicular ridership for the same time period increased 77% or 7.7% annually. Although both ridership and vehicle ridership were down in 2009, it appears both passenger and vehicular ridership have leveled off and are following a cyclical trend over the past few years. Total passenger ridership for 2009 was 396,191 and vehicular ridership was 188,852.

Prior to 2007, vehicle loads often exceeded the ferry capacity. This was due in part to the spacing of scheduled runs. The ferry would then make an unscheduled run to pick up the overload vehicles. In

2006 the County changed the sailing schedule to a more structured sailing schedule versus an on demand type of sailing schedule. This type of schedule has alleviated most capacity issues and the need to make extra runs. The ferry will still operate on demand when scheduled sailings are more than one hour apart and the ferry is overloaded. Vehicles not accommodated by an additional run generally must wait for the next scheduled sailing.

As discussed below, congestion and parking issues that revolve around the ferry operation can affect other activities in and around the two terminals involved. These capacity issues, as well as the potential of a leveling of vehicle ridership and the impact of additional ferry service on growth, should be considered when planning for future ferry service needs. .

**Ferry Parking.** In response to the increase in ridership the County, in the early 1980's, purchased the old railroad right of way east of and adjacent to the Anacortes terminal to create a parking lot (lot 2). In 2005 lot 2 was paved and proper drainage was installed. In 2002 the County purchased land along 6th Street and K Avenue (lot 3) to provide additional parking near the terminal. The parking lot was completed in 2006. Additional parking at the terminal (lot 1) of 20 spaces and 13 additional spaces on 6th street created for the Guemes ferry users increase the total parking capacity to 148 spaces.

Parking in lot 3 is underutilized due to people wanting to park as close to the terminal as possible. With approximately 30 spaces lost to the Kiwanis Park which historically had been the most convenient parking for Guemes ferry users, parking in the surrounding neighborhood continues to be a source of tension among Anacortes residents in the 6th Street neighborhood.

To address these issues, islanders initiated a series of discussions, called Crossing Over, with the County, City of Anacortes, and 6th Street residents. This process led to a number of recommendations for the participants to implement. The recommendations focus on improving parking, transit service, neighborhood signage and public education to reduce parking pressure (*Appendix D*). These proposals are echoed in the recommendations of this element.

On the island side, prior to 2005, there was a small gravel parking lot at the ferry dock. The County has started making improvements to this lot. In 2005, the County acquired adjacent property and enlarged the existing parking lot, now accommodating approximately 100 vehicles. Discussions between islanders and the County Public Works Department on the final plan for the lot are in progress.

**Ferry Service Interruptions.** The County dry docks the ferry for major maintenance and repairs each year, interrupting vehicle service for approximately 10 days. In addition, unscheduled repairs can cause service disruptions. During dry dock periods and throughout the year, the County contracts with private companies, for passenger-only ferry service. If necessary, vehicles can cross to and from the island by private barge. Although these interim passenger-only ferries have sufficient capacity to carry all passengers, vehicle transport is effectively eliminated. Service for the elderly and disabled is significantly diminished during this period of passenger-only ferry service which adversely impacts the health care needs of the elderly and disabled.

**Ferry Vehicle Congestion.** On the island, the summer holiday peak period ferry lines can exceed a half-mile north of Mangan's Landing, extending beyond the dedicated ferry lane. This has caused vehicles to wait in the southbound lane of Guemes Island Road. Under the circumstances, traffic congestion and safety issues are a concern, especially when emergency vehicles have difficulty

passing. In 2009 the ferry holding lane was extended by 1000 feet which should help solve this issue.

In Anacortes, waiting lines for vehicle traffic during the summer weekends and holiday peak periods can extend well beyond the end of the dedicated ferry lane on 6<sup>th</sup> Street at K Ave. During these peaks, ferry traffic may occupy the parking areas on the North side of 6<sup>th</sup> Street leading to significant congestion on 6<sup>th</sup> Street that can result in a several hour wait. When coupled with the overflow of ferry parking, it is not surprising that the 6<sup>th</sup> Street neighborhood has become increasingly vocal about the effects of ferry traffic. This issue should be addressed and discussed at length through the Guemes Island Ferry Operations Forum.

**Ferry Transit Service.** During ferry dry dock periods, Skagit Transit has provided on island “dial-a-ride” shuttle service to and from the ferry for most scheduled runs. An estimated 1,450 passengers used this service during the 2-month outage in 2005. This service is a general convenience although it has limitations for the elderly and disabled passengers. On the Anacortes side during these periods, transportation is available from the ferry to parking areas. During non-outage periods, this service is unavailable. Skagit Transit maintains a bus stop at the corner of 6<sup>th</sup> Street and I Avenue, near the Anacortes terminal.

Skagit Transit service is, however, not adequate to accommodate the transit needs of islanders going to the Anacortes business district or elsewhere in the region. Generally, there is little or no coordination between ferry operations and Skagit Transit services. In 2005, Skagit Transit added two morning stops at the Anacortes terminal; however only one coordinates with a ferry run.

**Ferry Fares.** Prior to 2004, the County had not had a general fare increase since 1991. Increased operating expenses forced the County to take a serious look at ferry finances and increased ferry fares by about 12% in June 2004 and again in 2006 and minor adjustments in 2007 and 2008. The target for fare recovery is spelled out in County Resolution R20100050 signed by the Skagit County Commissioners February 16, 2010.

**Extended Ferry Hours.** In 2001, the County hired Berk and Associates to conduct a “comprehensive review of Ferry operations in relation to planning, management and policies” and provide recommendations in these areas. In March 2003, the County Commissioners established the Guemes Island Ferry Schedule and Fare Task Force (Resolution R20030074). The Task Force included a variety of on-island and off-island residents and local government representatives. It met with Berk & Associates staff over an 18-month period to draft recommendations on the fare and schedule issues raised by Draft Berk Report.

The Task Force submitted its recommendations to the County Commissioners in December, 2003 on a broad range of specific fare and schedule recommendations. In February 2004, the Commissioners approved the Task Force recommendations in Resolution 20040051. The recommendations included an analysis of service demand, capacity limitations, and cost impacts of operations and the ferry schedule.

In his September 2006 preliminary ruling on a challenge to the extended ferry hour policy brought by the *Friends of Guemes Island*, Superior Court Judge Allendoerfer concluded that the potential environmental and growth impacts should have been anticipated prior to the decision to extend ferry hours.

Due to increasing demand for extended evening ferry service, the Board of County Commissioners adopted Resolution #R20060184, which amended the ferry's sailing and departure schedules for a two-year trial period, effective July 1, 2006 to June 30, 2008. The resolution modified the "last ferry of the day" policy, made changes to the daytime departure schedule and extended the sailing schedule to add ferry runs between the hours of 6:30 p.m. and 10:00 p.m. Monday through Thursday evenings.

The County subsequently completed an environmental analysis and assessment of the proposed extension of evening ferry hours. That analysis<sup>8</sup> concluded that extending evening ferry service to include up to five (5) additional crossings on Mondays through Thursdays (until 10 p.m.) would be unlikely to induce additional growth or result in significant adverse environmental impacts on the island. After a series of public meetings and hearings in 2008 to gather public comment on the proposed extension of ferry service, the Board of County Commissioners adopted Resolution R20080556 in December 2008 that established a new ferry sailing schedule from 6:30 a.m. to 8:30 p.m. Monday-Thursday.

The 2000 Countywide Planning Policies (CPP) and its 2006 update are somewhat consistent in calling for consideration of several major factors in making decisions about extending transportation facilities and services. They include the GMA mandates calling for cost effectiveness and limiting facility/service extensions to Rural Areas. The 2000 Comprehensive Plan included a specific policy calling for the Skagit County Regional Transportation Planning Organization to develop LOS ferry standards for the Guemes ferry (CPP 9A-8.7). However that policy was not carried forward into the 2006 update of this plan. Both versions of the plan, however, identify specific policies for expanding ferry service (CPP 9.A-8.2, draft update 8A-5.2). It appears that the intent of these policies is to implement each in a stepwise fashion and evaluate their effectiveness over time before implementing the next. In order of priority, these steps are: 1) encouraging walk-ons and car-pooling, 2) increasing the frequency of runs, and 3) increasing ferry capacity and finally, 4) extending ferry hours.

In addition to seeking cost-effective ferry service, the goal of these policies is based on the GMA premise that the extension of public services and facilities to Rural areas like Guemes Island will not induce growth or adversely affect rural resources or rural character.

## **Current Conditions and Issues (Roads)**

**Public Road Network.** Guemes Island has over 28 miles of roads. Of this sum, approximately 20 miles have been designated by the county as public rural major collector or local access roads. Some 8 miles are private roads (see Figure 6.1 and 6.2).

The County's Public Works Department is responsible for the maintenance and repair of Guemes Island's dedicated public roadway. The maintenance of these roads includes the roadway pavement, traffic control devices and signs, striping, guardrail, ditching and culverts, and maintaining vehicle sight distance through vegetation control. Private roadways on the Island are maintained and repaired by the homeowners through respective use agreements.

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<sup>8</sup> *Guemes Island Ferry Service Schedule Changes: Environmental Assessment & SEPA Non-Project Checklist*, Final Report, May 6, 2008, Skagit County Planning & Development Services.

Figure 6.1 Guemes Island Road Map

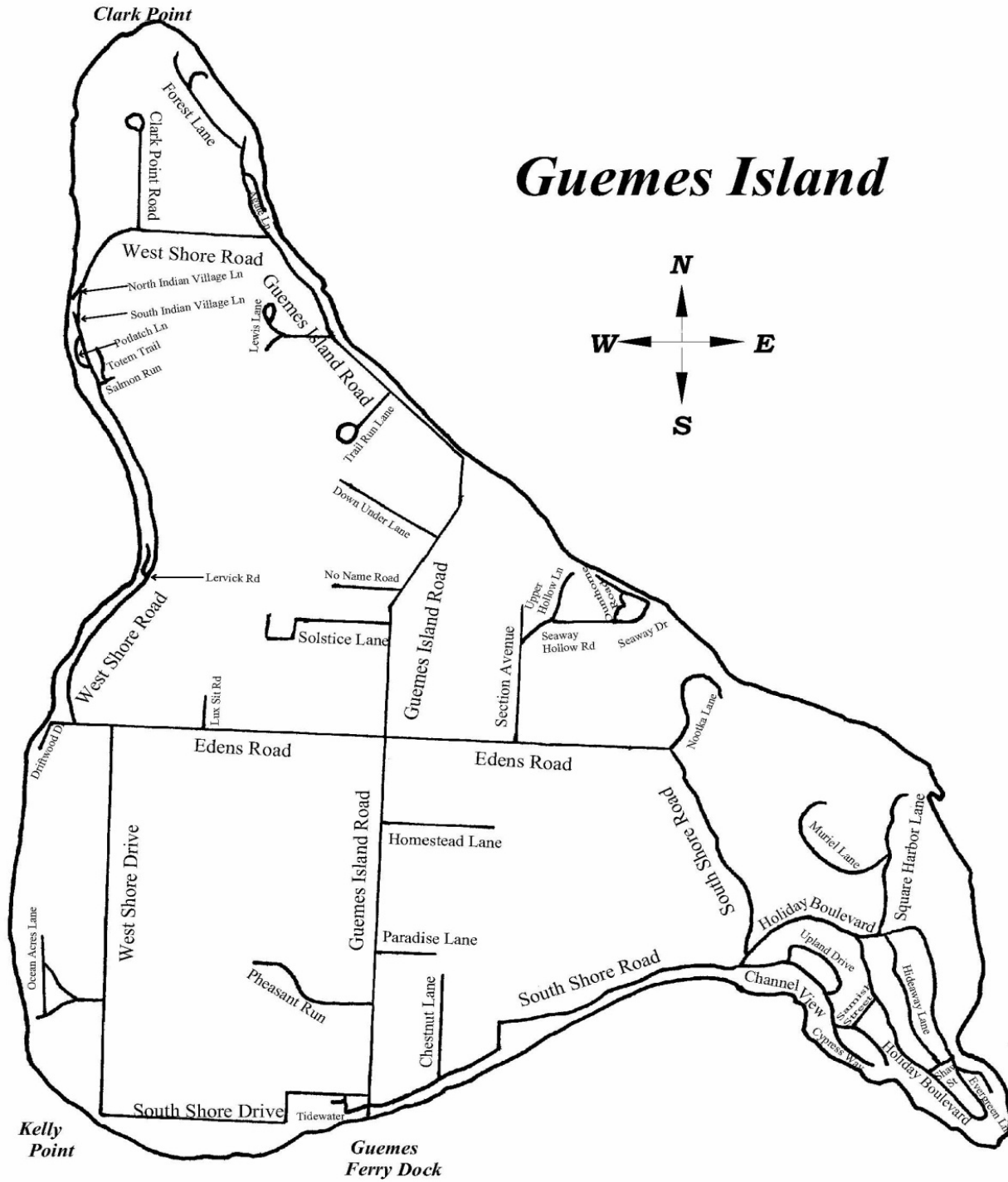


Figure 6.2 Guemes Island Road Classifications



### Road Pavement Characteristics

There are four road surface treatments commonly used on County roads: bituminous surface treatment (BST), also known as chip seal; asphalt concrete pavement (ACP), or simply asphalt roads; Portland cement concrete (PCC), or simply concrete roads; and gravel roads (GRV). The vast majority of public roads on the island utilize chip seal construction (see Table 6.3).



Table 6.3 Guemes Island County Road Pavement Types

County Road Type	Miles	%
Gravel	0.30	1.5%
BST (chip seal)	19.35	98.5%
ACP (asphalt)	0.00	0.0%
Concrete	0.00	0.0%
<b>Total</b>	<b>19.65</b>	<b>100%</b>

Source: Skagit County Department of Public Works

**Pavement Condition.** Skagit County has established a program to continuously evaluate and rate the condition of pavement on County roads. Factors included in the pavement evaluation include rutting, waving, patching and cracking. A condition rating based on a segment of roadway is determined and a number between 0 and 100 is assigned to the roadway segment; with 100 being a road in perfect condition. For summary purposes, we have defined the pavement conditions below. As shown in Table 6.4, the vast majority of public roads on the island have pavement conditions rated as good or excellent.

Table 6.4 Guemes Island County Road Pavement Condition

Pavement Condition	Rating	Miles	%
Excellent	100-76	18.16	92%
Good	75-56	0.89	5%
Fair	55-36	0.40	2%
Poor	35-0	0.20	1%
<b>Total</b>		<b>19.65</b>	<b>100%</b>

Source: Skagit County Department of Public Works

**Street Functional Classification.** Existing roadways are classified by how they function as a network based on their ability to meet local needs. Roadways are classified by the County through the Federal Highway Administration (FHWA) based on defined criteria. Figure 6.1 provides a map of island roadways and Figure 6.2 illustrates roadway classifications. Roadway classifications ultimately lead to different funding programs based on their classifications.

Roadways are classified in relation to their function with respect to continuity, connectivity, mobility and access. An interstate freeway provides a high degree of connectivity between communities, however, by design, provides poor access to adjacent property. On the opposite end of the transportation system, local roads provide a wide degree of access to adjacent property, but are not effective in efficient movement of people and goods.

Functional classifications are generally described as:

*Principle Arterial:* The primary function of a principle arterial is to carry traffic. Direct access is limited and these roadways see average daily traffic (ADT) volumes greater than 15,000 vehicles per day.

*Minor Arterials:* The primary function of a minor arterial is to provide movement of through traffic, but they provide more access for local traffic to move to and from regional centers. ADT volumes typically range from 8,000 to 15,000 vehicles per day.

*Collector Roads:* The primary function of a collector road is to assemble and concentrate residential and local traffic and direct it to a higher order arterial system. ADT volumes typically range from 4,000 to 8,000 vehicles per day.

*Local Roads:* The primary function of a local roadway is to provide direct residential access and generally connect to collectors or minor arterials. ADT volumes are typically less than 4,000 vehicles per day.

**Design Standards.** The current design standards for County roads are set forth in the County Road Standards Manual<sup>9</sup> Resolution 17930. Table 6.5 indicates the minimum street standards as adopted by the County.

Table 6.5 Adopted Street Standards

Type of Road	ADT	Minimum ROW Width	Minimum Pavement Width	Description
Private Road	<160	50	20	2, 10-foot driving lanes no shoulder
Local Road	<251	50	24	2, 10-foot driving lanes with 2-foot shoulders
Local Road	251 to 400	50	26	2, 10-foot driving lanes with 3-foot shoulders
Local Road	>400	60	32	2, 10-foot driving lanes with 6-foot shoulders
Collector Road	<401	60	28	2, 11-foot driving lanes with 3-foot shoulders
Collector Road	401-2000	60	34	2, 11-foot driving lanes with 6-foot shoulders
Collector Road	>2000	60	40	2, 12-foot driving lanes with 8-foot shoulders

Source: Skagit County Department of Public Works

Collector/arterial roadway standards for Guemes Island public roads are shown in Table 6.6.

Table 6.6 Guemes Island Roadway Standards

Road Name	Left Shoulder		Lane Width		Right Shoulder	
	Existing	Standard	Existing	Standard	Existing	Standard
West Shore Rd	3	3	10	11	3	3
Guemes Island Rd (S of Edens)	3	6	10	11	3	6

<sup>9</sup> Design Standards- [www.skagitcounty.net](http://www.skagitcounty.net) Public Works Engineering

Road Name	Left Shoulder		Lane Width		Right Shoulder	
	Existing	Standard	Existing	Standard	Existing	Standard
Guemes Island Rd (N of Edens)	3	3	10	11	3	3
S. Shore Rd	2	3	10	11	2	3
Edens Rd	2	3	10	11	2	3

Source: Skagit County Department of Public Works

The County classifies Guemes Island Road, West Shore Drive, and South Shore Dr. as rural major collectors since their function is to serve the major residential traffic generators on the island, based on traffic flow. The primary purpose of local access roads, or “locals,” is to provide access to adjacent land. Local roads include Edens Road, South Shore Road, Section Ave., and Holiday Blvd. .

Edens Road between West Shore Road and Section Road now serves as a major collector, carrying traffic from various neighborhoods to Guemes Island Road. Similarly, South Shore Road is the major link from the Holiday Hideaway area to the ferry and other parts of the island.

**Traffic Volumes.** Regular traffic counts are conducted on Guemes Island. Table 6.7 shows the current 2009 average daily traffic (ADT) volume for Guemes Island. A historical analysis of the data shows that overall growth on the island is consistent with development and is steady.

In 2009, the average daily traffic volume (ADT) on the island's major collectors ranged from 60 at South Shore Dr. to 716 on Guemes Island Road at the ferry dock. The ADT on all island roads is well below the County maximum of 7,000 ADT, or the volume where the road capacity is exceeded.

Table 6.7 Guemes Island Roadway Average Daily Traffic Volume (2009)

Road Name	Beginning Milepost	Ending Milepost	Length	Volume (ADT)
West Shore Road	0.000	1.170	1.170	173
West Shore Road	1.170	1.894	0.724	146
West Shore Road	1.894	1.990	0.096	146
West Shore Road	1.990	2.690	0.700	205
West Shore Drive	0.000	1.510	1.510	68
Guemes Island Road	0.000	0.010	0.010	716
Guemes Island Road	0.010	0.210	0.200	716
Guemes Island Road	0.210	1.420	1.210	716
Guemes Island Road	1.420	1.480	0.060	716
Guemes Island Road	1.480	2.640	1.160	375
Guemes Island Road	2.640	2.680	0.040	375
Guemes Island Road	2.680	3.770	1.090	422
Guemes Island Road	3.770	4.190	0.420	409
South Shore Road	0.000	0.720	0.720	206

Road Name	Beginning Milepost	Ending Milepost	Length	Volume (ADT)
South Shore Road	0.720	1.530	0.810	60
South Shore Road	1.530	2.460	0.930	214
South Shore Drive	0.000	0.680	0.680	409
South Shore Drive	0.680	1.110	0.430	219
Edens Road	0.000	0.310	0.310	225
Edens Road	0.310	0.330	0.020	225
Edens Road	0.330	1.060	0.730	389
Edens Road	1.060	2.200	1.140	212
Edens Road	2.200	2.320	0.120	167

Source: Skagit County Department of Public Works

**Level of Service.** Level of Service (LOS) is a quality measure describing operational conditions within a traffic stream. It is a qualitative measure of the effect of traffic flow factors such as speed and travel time, interruptions and delays, freedom to maneuver, and driver comfort and convenience. Six LOS are defined for each type of facility that has analysis procedures. Letters designate each level from A to F, with LOS A representing the best operating conditions and LOS F the worst.

The following figure illustrates LOS Characteristic Traffic Flows<sup>10</sup>

A	<p>Free flow, little or no restrictions on speed or maneuverability caused by the presence of other vehicles</p>	B	<p>Stable flow, operating speed is beginning to be restricted by other traffic</p>
C	<p>Stable flow, volume and density levels are beginning to restrict drivers in their maneuverability</p>	D	<p>Stable flow, speeds and maneuverability closely controlled due to higher volumes</p>
E	<p>Stable flow, speeds and maneuverability closely controlled due to higher volumes</p>	F	<p>Forced traffic flow, very low speeds, traffic volumes exceed capacity, long delays with stop and go traffic</p>

<sup>10</sup> Source Transportation Research Board 2000

To determine the level of service of a roadway, the County uses the criteria established in the Highway Capacity Manual, Transportation Research Board. For rural county roads, LOS is based on the percent time spent-following, or the average percent of the total travel time that vehicles must travel in platoons behind slower vehicles due to inability to pass on a two-lane roadway.

The adopted LOS standard for County roads is LOS C (for roads with less than 7,000 ADT). In order to determine future traffic, the land use element data developed as part of the Guemes Subarea plan was utilized. Table 2.2 from the Land Use Element was used to generate projected traffic increases.

The volume a roadway is able to handle is based on the volume of vehicles per the peak hour of service. For Guemes Island, the current and projected LOS corresponding to the peak hour volume at potential buildout is shown in Table 6.8. All Guemes Island roads are currently classified as LOS A and future LOS predictions indicated a continued LOS A, even at buildout under current land use designations.

Table 6.8 Guemes Island Current and Projected LOS at Buildout

Roadway Segment	Current LOS	VpPH	LOS at Full Build-Out (1,584 Homes)	VpPh
Guemes Island Road North of Ferry	A	110	A	182
Guemes Island Road North of Edens	A	34	A	86
Edens Road West of Guemes Is Rd	A	30	A	50
Edens Road East of West Shore Dr	A	27	A	45
South Shore Dr West of Guemes Is Rd	A	28	A	46
South Shore Rd East of Guemes Is Rd	A	44	A	73
West Shore Dr South of Edens Rd	A	10	A	17
West Shore Rd North of Edens Rd	A	36	A	60

LOS = Level of Service                      VpPh = Vehicles per Peak Hour

Source: Skagit County Department of Public Works

**Road Safety Issues.** South Shore Road, between Guemes Island Road and Holiday Blvd., is failing in several locations caused by significant erosion along the steep bluff above the Guemes Channel. In some locations the road is just a few inches from the receding bank. In the past, the County has provided signage for these locations, repaired the road and attempted to fill the eroded bank to extend its life. However, since the bank is considered a “feeder bluff,” it can be expected to continue to erode and “feed” the marine beach system with new soil.

In 2009, Skagit County closed the eastbound (southernmost) lane of this portion of South Shore Road and made the roadway one-way between Holiday Blvd. and Guemes Island Road due to continuing erosion and sloughing of the roadway.

Cayou Creek is a seasonal waterway that drains the valley bisected by Edens Road to the north. The creek passes under South Shore Road through a culvert hanging some 20 feet above the water. The gap is caused by erosion of the bluff below.

Approximately  $\frac{3}{4}$  miles east of Guemes Island Road, Edens Road descends into a valley intersecting a wetland complex that drains the upper end of Cayou Creek. During severe storms, the water overflows onto the road due to inadequate drainage of the land on both sides of Edens Rd. A planned 2010 project will raise this low point on Edens Road approximately 18 inches and out of the water.

Guemes Island Road at North Beach and West Shore Road at the Veal Pond are also vulnerable to flooding from strong storm surges. Tidewater Road, connecting South Shore Dr. to the ferry parking lot, is a substandard one lane County Road. In warmer months, vehicles and trailers parked on its shoulders reduce its width, creating a traffic hazard for vehicles moving in opposite directions.

The County has sited numerous advisory or warning signs with recommended speeds, ranging from 10 to 25 mph throughout Guemes Island.

Speeding, especially to catch the ferry, is a common practice. Speed signs are routinely ignored. This is especially true on Guemes Island Road and South Shore Road. A combination of public vigilance and education can have a positive effect on minimizing this behavior.

It is common during summer celebrations and gatherings that vehicles are parked on narrow road shoulders and encroach on traffic lanes. This can create hazards for ordinary vehicle traffic and pedestrians. During certain occasions at the Church or Community Hall, road traffic can be limited to a single lane and may impede emergency vehicles.

During high wind conditions, numerous power lines are severed causing dangerous driving conditions and fire hazards throughout the island. These conditions cause power outages that can last for days, inconveniencing residents and placing vulnerable populations at risk.

**Private Roads.** A number of existing nonconforming private roads are in poor condition and may be difficult to access by fire and other emergency vehicles. This situation creates a problem for the fire district and a danger to surrounding properties in the case of an emergency. In addition, road damage from utility-related construction is not always repaired. As part of the permit process, the County negotiates installation agreements with utility companies and property owners (SCCP 10A-1.4). However, the permits do not require the restoration of roads to their former condition.

**Non-Motorized Mode Conditions.** Non-motorized transportation modes of travel include walking, bicycling, equestrian riding, small wheeled transport (skates, skateboards, scooters, etc.) and wheelchairs. The importance of accessibility is crucial to all non-motorized activities, and the use of this term is intended to address the needs of all modes of non-motorized transportation.

The ultimate goal of a good transportation system is accessibility. In many situations, the best way to improve transportation is to improve walking and bicycling access to transit as well as employment centers and gathering areas.

Walking and bicycling are environmentally friendly modes of transportation that have been proven to enhance individual physical and mental health, and community well-being. That is in addition to their trip-making benefits, non-motorized transport modes also represent important modes of recreation with many public health, social, environmental, and economic benefits. Further, automobile usage is not always an option for all citizens, and therefore, some people have no choice but to bike or walk on our roadways.

Separate public paths for bicycles, pedestrians, and equestrians are not available on the island. The limited equestrian use on the island is primarily recreational. Residents regularly travel around the island by bicycle and off-island recreation bicyclists frequent island roads.

**Types of Facilities.** The facilities on Guemes Island that serve as non-motorized routes for walking and bicycling include:

- Paved & gravel shoulders
- Wide Curb Lanes
- Paved & gravel roadside trails
- Trails in park or waterfront settings

**Pedestrian and Bicycling.** Guemes Island should continue to promote walking and biking as a necessary, natural and respected means of travel, and to ensure that walking and biking are routinely considered as a critical mode in the transportation decision-making processes. Goals should be to:

- Encourage more walking and biking through developing better facilities
- Ensure walking and biking safety
- Better accommodate those who are dependent upon walking and biking as their primary mode of transportation
- Coordinate public transportation and ferry transportation modes into walking and biking

Consideration of pedestrian issues should be an integral part of all transportation planning and decision-making. The County should:

- Consider pedestrian needs in roadway paving and design
- Promote walking and biking safety initiatives to further public awareness of the benefits derived from such activities
- Integrate facility connections into all projects when a purpose and need exists

Low volume roads often serve as shared facilities where the roadside shoulders are of adequate size and condition. Sidewalks are typically used more in urbanized setting due to the high cost of construction and maintenance. Separated trails or paths are preferred on high volume high-speed roadways. The County design standards provide shoulder widths to accommodate pedestrian traffic. Higher volume, higher speed roadways have wider, more defined shoulders than lower volume, lower speed roadways. As indicated, the shoulders on Guemes Island, and in large part, the rest of the County, do not meet the current design standards. The collector system shoulders should be upgraded to standards as they are significantly improved or reconstructed to provide the basis of the system.

When designing and implementing projects, special care should be considered to minimize and eliminate roadway hazards. Some of the hazards include:

- Drainage grates and utility covers—Bicycles will tend to avoid grates and covers by entering into travel lanes
- Poor pavement conditions—Potholes, loose rock, fractured pavement, steep drop offs and debris are obstructions and hazards for bicycles. If shoulders are poorly constructed or inadequately maintained, bicycles will avoid them and be forced to ride in the travel lane
- Sign posts, utility and light poles and guardrail—Bicycles are sometimes forced to or off the edge of the road if post or poles are not adequately set back from the edge of the roadway. As such these obstructions should be set back a minimum of one-foot from the edge of the portion of the road used by bicycles
- Intersections with unimproved streets, parking lots, and driveways—At intersections with dirt or gravel roads, parking lots, or driveways, pavement should be extended at least 10-foot back onto the unimproved facility to minimize the amount of gravel and debris that is drawn onto the paved surface of the road
- Chip seal roads—Due to the nature of the pavement type, loose rock is common on the shoulders of the road. Special care should be taken to ensure loose rock is removed from the shoulders and kept clean

**Connections with other Transportation Modes.** The roadway network used by bicycles and pedestrians passes through the residential areas of Guemes Island and eventually connects to the ferry system. Opportunities exist to connect with other transportation modes such as a bus system and the ferry as Skagit Transit provides bus service in that area. It should be possible for a person to walk or bike and then take a bus and connect to the ferry dock. The bus schedule would need to be scheduled to connect with the ferry with reasonable convenience and there must be a connection on the Anacortes side of the ferry to connect further into the bus system.

The current County proposal to upgrade the ferry parking area includes provisions to locate the pedestrian waiting facility to the west side of the ferry dock. In 2005 the County purchased a glass and aluminum passenger shelter and will install this in October 2010. However, the design should take into consideration inclusion of sufficient covered bicycle racks. .

**Accessibility and ADA Policy and Plan.** Accessibility guidelines, such as ADAAG<sup>11</sup> or UFAS<sup>12</sup> provide minimum specifications for accessibility that meet the needs of most people. However, exceeding those minimum standards whenever possible will increase a facility's overall ease of use and will make environments accessible to more people. For example, routing a multi-use path to minimize grades, rather than installing a high percent grade ramp, would enable more people who cannot negotiate steep grades to use that trail. Some design approaches might benefit one group but inhibit access for another. The needs and capabilities of all potential users should be considered and balanced when designing pedestrian facilities.

Roadways and roadway shoulders are currently not addressed in ADA Policy guidelines. In practice it would be impossible, if not impractical, to construct roadways to meet accessibility guidelines

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<sup>11</sup> ADA Accessibility Guidelines

<sup>12</sup> Uniform Federal Accessibility Standards



due to natural terrain and grades. However, special pathways or trails can and should be constructed to incorporate ADA requirements and needs.

### **Other Transportation Modes**

#### ***Air***

Guemes Island has no designated air service on the island. Guemes Island is served by two regional airports; Port of Anacortes and Port of Skagit County airports. An emergency helicopter landing area is designated for emergency services on the island. There are no current or future plans to designate air transportation on the Island.

#### ***Tourism Traffic***

Tourism generates a substantial amount of traffic, especially in the summer months. Guemes Island is, to a limited degree, easily accessible and a key destination. Guemes Island activities that draw tourists include boating, kayaking, biking, beachcombing, and special events such as the Dog Island Run, garden tours, and art shows.

#### ***Boat***

Public marine facilities on the island are limited and consist of a boat launch and the Guemes Ferry dock. Both facilities are co-located in the vicinity of Guemes Island Road and South Shore Drive.

**Current Transportation Capital Facilities Plan.** The Skagit County Capital Facilities Plan (CFP) includes projects to maintain existing facilities and construct new ones. Maintenance projects include road resurfacing and striping work, which is scheduled every several years. In addition, the County mows vegetation on the shoulders, in the drainage ditches, and on the back slopes of the county roads once or twice yearly during the growing season. The Ferry CFP also includes the ferry dry dock, as previously discussed.

In the past, the County has attempted to realign failing sections of South Shore Road between Guemes Island Road and Holiday Blvd. to avoid additional road failures and safety hazards. It identified an alternative route between Glencoe Lane and Paradise Lane. While a small portion of the easement for a new route has been acquired in conjunction with a development project, the County was unable to acquire another portion of the right-of way and the project was terminated. The County has since reprioritized the project to evaluate new road alignment and repair options. South Shore Road currently has weight restrictions of 12,000 gross tons in place. These weight restrictions are in place due to the deterioration of South Shore Road along the bluff.

**Ferry Capital Facilities Plan.** In 2009, the County started a series of capital improvement projects around the ferry operations. All projects should be completed by the end of 2011. They include widening Guemes Island Road to increase the ferry holding lane by 1,000 feet, a new passenger waiting area on Guemes Island, a new pathway connecting the parking lots at the Anacortes terminal, a new federally funded terminal building, state and federally funded bridge replacements on the Anacortes and Guemes Island docks, new wing walls at both docks and two new dolphins at the Guemes Island dock as part of the program to eliminate all creosote piles by 2018.

Skagit County adopted the new Fourteen-Year Guemes Island Ferry Capital Facility Plan (2010-2023) in November 2009 (Resolution #R20090475). That plan identifies improvements, projected costs and funding sources for planned ferry modifications, as well as dock, terminal, and facility improvements at both the Anacortes and Guemes Island ferry landings.

**Non-Motorized Capital Facilities Plan.** The following non-motorized transportation improvements on Guemes Island are recommended to be included in future updates to the Skagit County Capital Facilities Plan by the Skagit County Department of Public Works:

- *Guemes Island Road*—Install shoulders from the Ferry Terminal to Young’s Park (4 miles of 3-ft to 6-ft shoulders)
- *West Shore Road*—Install Shoulders from Guemes Island Road to S Shore Road (2.7 miles of 3-ft to 6-ft shoulders)
- *South Shore Road*—Install shoulders from West Shore Road to Guemes Island Road
- *Edens Road*—Install shoulders from West Shore Road to South Shore Road (2.3 miles of 1-ft to 3-ft shoulders)
- *South Shore Road*—Maintain, in the future, South Shore Road as a pedestrian facility once a new road to replace South Shore Road is determined and constructed

**Future Ferry Service Conditions.** The County’s predictions of future growth in ridership on the Guemes Island ferry are based on a combination of past trends and current conditions. . Twenty-Year projections of growth in ferry ridership, developed by the Skagit County Department of Public Works, for both vehicles and passengers from 2010-2030 are shown in Table 6.9. Historic ferry ridership counts from 1980-2009 are shown in Figure 6.4 and the 2010-2030 projected ridership is illustrated in Figure 6.5. The 2010-2030 projections are based on an assumed 2% average annual increase in ridership.

**Table 6.9 Guemes Island Ferry Projected Ridership (2010-2030)**

Year	Vehicles	Passengers
2010	190,000	400,000
2011	191,000	410,000
2012	193,000	411,000
2013	195,000	412,000
2014	198,000	413,000
2015	200,000	414,000
2016	202,000	415,000
2017	204,000	416,000
2018	206,000	417,000
2019	208,000	418,000
2020	210,000	419,000
2021	212,000	420,000

Year	Vehicles	Passengers
2022	214,000	421,000
2023	216,000	422,000
2024	218,000	423,000
2025	220,000	424,000
2026	222,000	425,000
2027	224,000	426,000
2028	226,000	427,000
2029	228,000	428,000
2030	230,000	429,000

*Source: Skagit County Department of Public Works*

Figure 6.3 Guemes Ferry Ridership 1980-2009

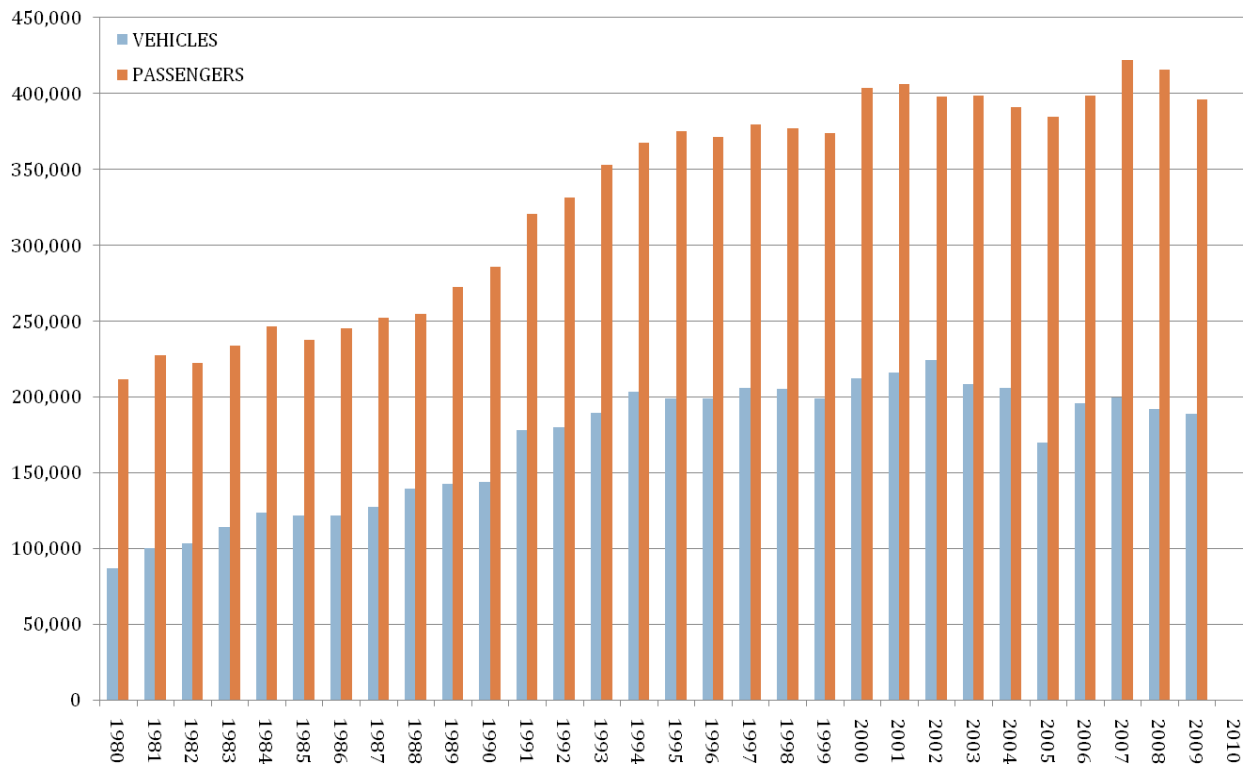
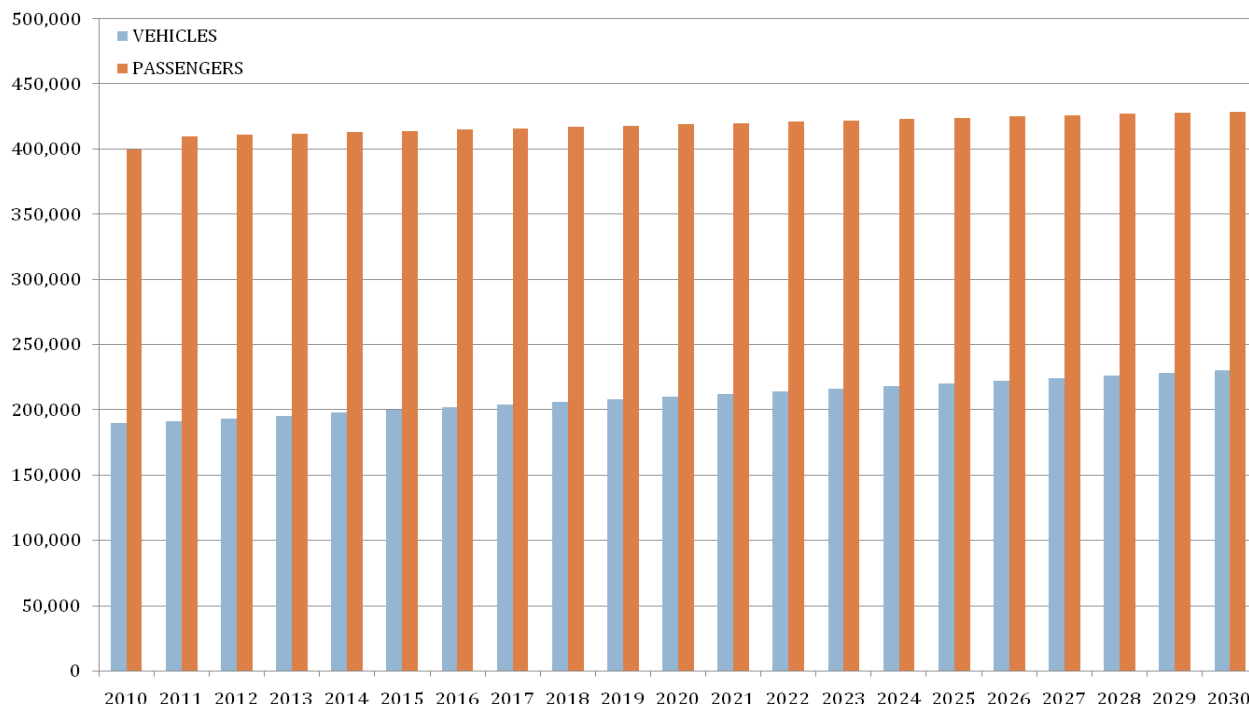


Figure 6.4 Guemes Ferry Projected Ridership 2010-2030



Growth in total ridership on the Guemes Island Ferry between 2010 and 2030 is expected to continue to increase at a rate similar to the growth that occurred from 1980 to 2000. In addition, if current trends hold, vehicle ridership is expected to continue to outpace walk-on ridership. With the advent of new ferry fares in 2006, however, there is some indication that vehicle use has declined while walk-on traffic has increased. Presently, there is insufficient data to determine if this will be a long-term trend.

With the increase in population, it is probable an incremental increase in ferry vehicle traffic will occur and will most certainly be felt around the ferry terminals. It may also create pedestrian and vehicle conflicts around the island ferry dock. Overflow parking on South Shore Road and Tidewater Lane, coupled with ferry lines extending well beyond the designated ferry lane, will continue to reduce safety for pedestrian, bicyclists, and vehicle movement on Guemes Island Road.

Future vehicle increases are expected to continue to exceed the capacity of the existing parking facilities around the Anacortes terminal. More vehicles will expand the current parking conflicts in the 6th Street neighborhood. The new walkway between the upper and lower parking lots can encourage more walk-ons. However, it is also anticipated that during peak periods these lots will be unable to handle the vehicles from walk-on passengers during the summer season. To relieve congestion and parking limitations, it is important to continue efforts to implement the Crossing Over Report recommendations.

As Guemes Island population continues to grow, it is likely that future vehicle traffic will also surpass the capacity of the existing parking lots even with the proposed improvements. Continually expanding the ferry vehicle capacity would be costly. The SCCP calls for encouraging car-pooling and walk-on passengers before additional ferry runs or adding ferry vehicle capacity. To be consistent with these policies while managing increases in ferry ridership, parking, and congestion, a comprehensive approach to ferry-related vehicle and pedestrian traffic movement is needed. The approach should encourage alternative modes and improve public education about the benefits of these modes; improve transit links on and off the island; improve bicycle and pedestrian movement; and coordinate with the City of Anacortes to manage ferry traffic and parking around the Anacortes Ferry Terminal.

**Public Road Network.** Although future population growth of the island will greatly increase the number of vehicles on island roads, these volumes are not expected to exceed the capacity of either individual roads or the overall road system.

Over time, erosion of the bluff below South Shore Road will continue to cause the bank to retreat toward the road, potentially causing a failure. Periodic flooding on Edens Road in the valley is expected to be alleviated by roadway improvements planned by the Skagit County Department of Public Works. Also, occasional flooding of roads near shorelines may become more serious in the future because of rising sea levels.

With increased population there is a greater likelihood that parked vehicles will encroach more frequently on shoulders and roads. Visitors and a larger island population are expected to continue to push speed limits, particularly around ferry departure and arrival times.

As the population increases and more residences are located on private roads, the demands for emergency services will increase. This will also increase public safety concerns if emergency vehicles are unable to reach structures and individuals in a timely manner. Increases in the number of motorized vehicles on the island, in combination with narrow roads and limited shoulders, will also raise the likelihood of vehicle conflicts with bicycles and pedestrians.

## **Transportation Policy Recommendations**

The following recommendations are intended to supplement the transportation policies in the SCCP for Guemes Island and the transportation capital improvements in the Capital Facilities Plan. The cited SCCP are the basis for the recommendations.

### **Ferry Recommendations**

#### ***Ferry Committee***

***Policy 6.1:*** The County should continue to encourage regular and structured advisory discussion of operational issues associated with the effective operation of the Guemes Island ferry through the Public Forum process as set forth in accordance with resolution R20100050. Issues of ferry access for the elderly and disabled should be addressed through the Public Forum process and implemented, as needed, by Skagit County Public Works.

***Policy 6.2:*** The County should review recommendations from the Berk Study Report as part of preparing its annual Ferry Operations Work Plan.

***Policy 6.3:*** The County should provide reports discussing progress in implementing related SCCP policies and presenting data on ridership demand, system costs and performance in simplified graphic format. This information should be presented to the County Commissioners and the Guemes Island community as a part of the Public Forum meetings.

#### ***Ridership Demand***

***Policy 6.4:*** The County in coordination with the Ferry Committee, should promote alternatives to automobiles on the Guemes Island Ferry with educational materials, incentives, and other supportive measures to reduce vehicle demand, especially during peak use periods.

***Policy 6.5:*** The County should coordinate with Skagit Transit to provide a direct local service route between the Anacortes ferry dock and the Anacortes downtown core as well as beyond.

***Policy 6.6:*** The County should consider “flex cars” as part of an overall strategy to reduce vehicle demand and encourage more “walk-on” passengers.

***Policy 6.7:*** The County, in coordination with the Ferry Committee, should identify measures for increasing foot traffic and ridesharing, and provide economic and other incentives to encourage these modes of transportation.

***Policy 6.8:*** The County should work to ensure that timely after hours emergency ferry service is available.

***Policy 6.9:*** The County should improve accessibility for elderly and disabled passengers when normal ferry service is unavailable.

### **Parking**

**Policy 6.10:** 6.11 The County, the City of Anacortes, the 6th Street neighborhood, and Guemes Island commuters should cooperatively implement the recommendation of the Crossing Over Report to improve transit service, street signage, commuter education, and street parking.

### **Ferry Schedule**

**Policy 6.11:** When evaluating major changes in ferry operations or schedules, the County shall include the following factors:

- An assessment of ridership demand and alternative means to reduce that demand or encourage less vehicle trip usage and more pedestrian, carpool and bicycle usage.
- An assessment of the potential impacts on Anacortes and Guemes Island, including costs, congestion, parking and growth and effects on critical areas, the rural character and the social fabric of the island community.

### **Public Road Recommendations**

**Policy 6.12:** Where economically feasible, utility lines should be placed underground.

**Policy 6.13:** The County should evaluate Tidewater Road for consideration as a one way road in conjunction with the proposed ferry parking lot plan.

**Policy 6.14:** Puget Sound Energy should evaluate where fallen power lines frequently cause hazardous driving conditions and consider placing these lines underground

**Policy 6.15:** The county should enforce requirements to place private fences within property lines and not on public right-of-ways.

**Policy 6.16:** Solid fences that are three feet or higher should be set back a minimum of ten feet from the street front property line. Solid fences that are within building setback limits should be limited to six feet in height.

**Policy 6.17:** Skagit County should meet with GIPAC and/or the broader island community to discuss present conditions, future needs and safety issues for the island roads, including whether current roads are substandard.

### **Private Road Recommendation**

**Policy 6.18:** The County should require written road maintenance agreements for all new developments and promote such agreements for existing communal private roads.

**Policy 6.19:** Prior to commencing with construction activities on a communal private road, the initiating landowner should negotiate appropriate easements and agreements to ensure that the road will be restored to the same or better condition as it was before the construction.

### **Non-Motorized Mode Recommendation**

**Policy 6.20:** The Island community should provide information to drivers so that bicyclists and drivers can safely share the road.

## Capital Facility Policy Recommendations

### General

**Policy 6.21:** The County should initiate public outreach materials and/or meetings with the Guemes Island community to receive comments at the draft stage of major capital facility improvement projects.

### Ferry Capital Facilities

**Policy 6.22:** The County shall closely coordinate with the Guemes Island community concerning proposed improvements to the Mangan's Landing parking and waiting area through the Ferry Committee and Public Forum process.

### Road and Non-Motorized Capital Facilities

#### *Edens Road*

**Policy 6.23:** The County should continue to monitor traffic counts on Edens Road at Guemes Island Road and on South Shore Rd. during the summer peak period to determine if further traffic management measures are warranted.

**Policy 6.24:** A drainage plan for Guemes Island should be developed to reduce flood damage and to allow proper conveyance of flood flows.

#### *South Shore Road*

**Policy 6.25:** The County should continue to pursue full funding to provide a long-term solution to bluff-related failures and the deteriorating Cayou Creek culvert on South Shore Road between Guemes Island Road and Holiday Blvd. The functions and values of any wetland system in any new alignment should be protected.

**Policy 6.26:** Upon establishing the new alignment, the existing right of way should be converted to a public bicycle/pedestrian path.

**Policy 6.27:** Until the new route for South Shore Road is constructed, the County should consider implementing the short-term recommendation of the Guemes Island South Shore Road Recommendations (September 8, 2009) and take the following on-going steps on South Shore Road:

- Reevaluate the south road edge to identify locations where the eroding bluff is in danger of imminent road failure.
- Limit traffic to one lane; designate it as "local access only"; prohibit heavy truck traffic (load limits have not worked and heavy trucks further bluff erosion); place barriers, such as jersey barriers, where road shoulders are limited or non-existent; and sign these areas to reduce speed accordingly.

## **7. Plan Implementation**

### **Introduction**

The components of the Guemes Island Sub-Area Plan include the following elements: land-use, natural resources, environment, shorelines, and transportation. Each element includes a brief introduction to the topic, a description of current and future conditions, and policy recommendations aimed towards achieving the goal of sustainable growth on Guemes Island. The document also contains a series of maps to illustrate the issues. The Guemes Island Sub-Area Plan, as adopted by the Skagit County Board of Commissioners, is a legal document supporting the Skagit County Comprehensive Plan and serves to guide public and private land use decisions regarding issues affecting Guemes Island.

### **Plan Implementation**

Following adoption of the plan, the approved policies assigned to the county, other agencies, and the island community will begin to incorporate the plan's direction into their actions and decisions. Most of the recommendations are policy guidance to supplement the Skagit County Comprehensive Plan. These amendments will provide guidance to the county and other agencies on issues affecting Guemes Island. By contrast, regulations are required actions that become part of the County Code. Ordinarily plans will go through the official adoption process before regulations are written. Any code changes that are based on the policy recommendations will be drafted for public review and proposed to the County Commissioners following plan approval. To assist in plan implementation, Appendix F identifies the lead entity for each recommendation and where it can be found in the plan.

### **Consistency between the Guemes Island Sub-Area Plan and the Skagit County Comprehensive Plan**

The Guemes Island Sub-Area Plan needs to be consistent with the Skagit County Comprehensive Plan (SCCP). Overall, it strives to reflect the elements of the SCCP that relate to Guemes Island, while the policies conform to the purpose and intent of the SCCP goals. In accordance with the GMA, the sub-area plan must be consistent with the SCCP. If there are inconsistencies, modifications would need to be made to either the sub-area plan or the comprehensive plan through an amendment process.

### **Amendment Process**

Amendments to the Guemes Island Sub-Area Plan may be necessitated by annual amendments to the Skagit County Comprehensive Plan or by adoption or amendment of a county shoreline management master program.

In addition, the Guemes Island Sub-Area Plan maybe reviewed and, if necessary, amended once every seven years, after the Skagit County Comprehensive Plan Update has been completed.

### **Plan Implementation Policy Recommendations**

It is part of the vision of the Guemes Island Sub-Area planning process that islanders have a voice in the implementation of the sub-area plan. To that end, the following recommendations are intended to provide meaningful public involvement in implementation decisions..



**Policy 7.1:** A permanent Guemes Island Planning Advisory Committee (GIPAC) should be formed to provide communications between Guemes Island property owners/residents and government agencies regarding the sub-area plan. GIPAC should consist of nine members, elected by Guemes Island property owners and residents, and serve in accordance with the State law RCW 36.70.060.070 which governs the actions of planning advisory committees.

**Policy 7.2:** GIPAC will monitor implementation of the approved sub-area plan and initiate studies and other actions related to plan implementation.

**Policy 7.3:** GIPAC should be notified of any County proposal to change zoning or property classifications on Guemes Island.

**Policy 7.4:** GIPAC will hold public meetings to gather input on resolving problems or proposed changes and submit comments on behalf of the island.

#### **Public Notice**

**Policy 7.5:** All public notices affecting Guemes Island shall be posted in the *Skagit Valley Herald*. Additionally, the County should notify the *Guemes Tide* and/or other widely-read island media.

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## **9. Appendices**

**Appendix A. Written Survey Results**

**Appendix B. Rapid Shoreline Inventory Report**

**Appendix C. Resolution 20040393; recognizing the Ferry Committee and establishing the Ferry Roundtable**

**Appendix D. Crossing Over Report**

**Appendix E. Resolution 20030074; Guemes Island Ferry Schedule and Fare Task Force**

**Appendix F. 2004 Fare and Schedule Proposed Package**

**Appendix G. Resolution 20040051; Approval Task Force Recommendations**

**Appendix H. Plan Policy Recommendations by Lead Entity**

**Appendix I. Shoreline Master Program Element. Draft November, 2005**