

**Land use Impacts of the  
GUEMES ISLAND FERRY SCHEDULE EXTENSION**

Prepared for

**FRIENDS OF GUEMES ISLAND**

Prepared by

Barbara Rudge

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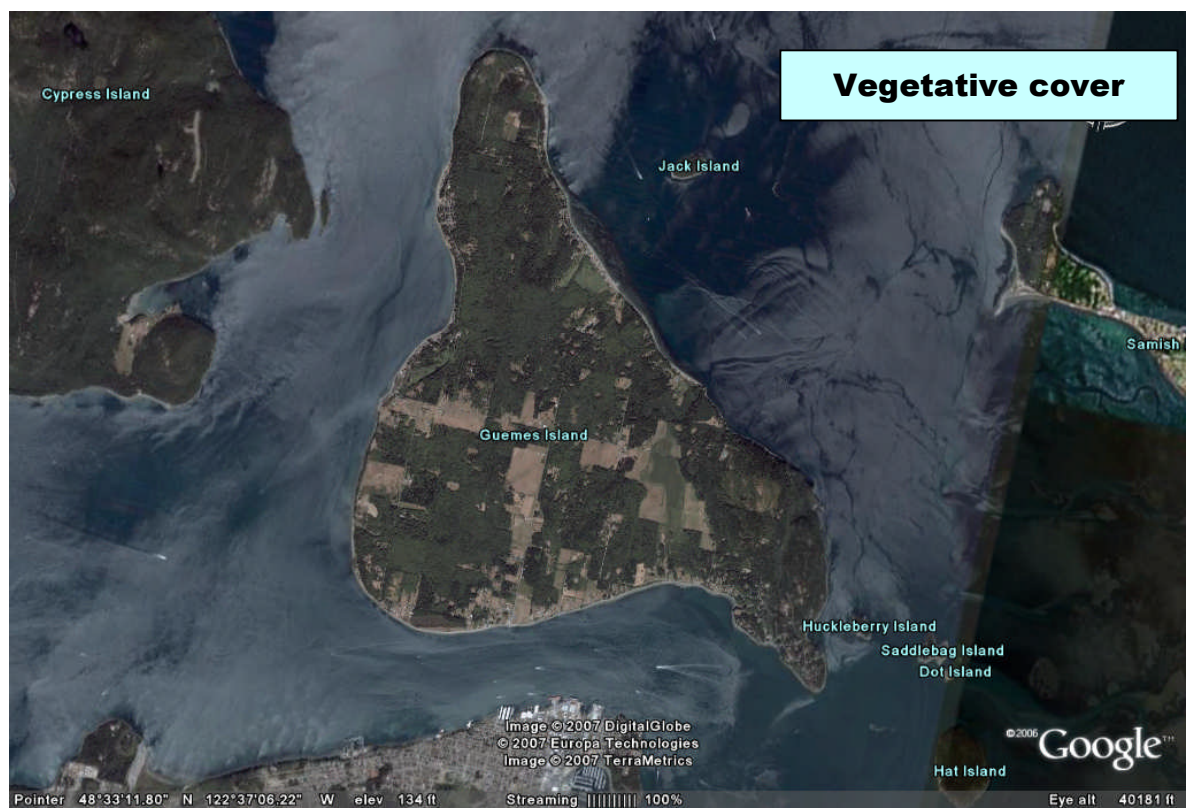
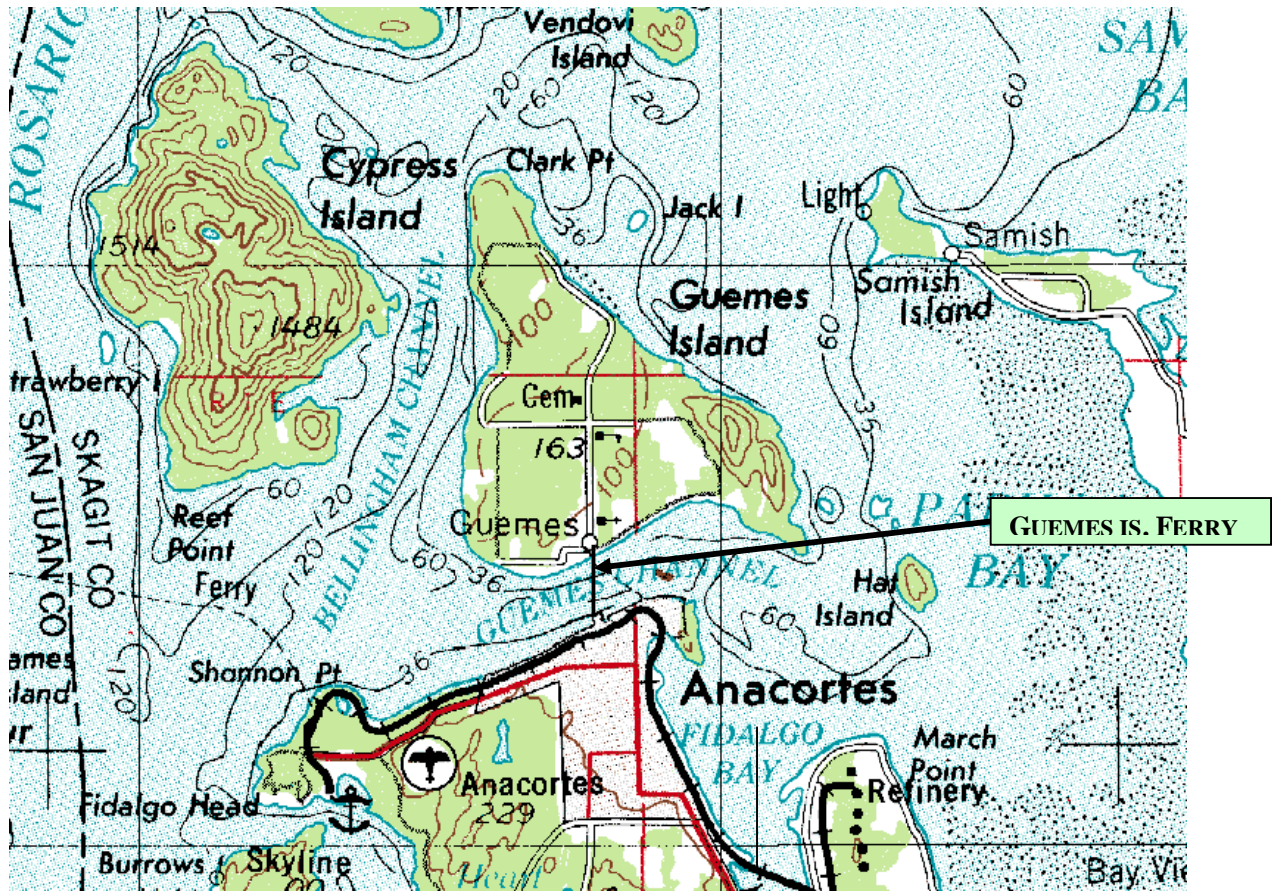
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**Land use Impacts of the  
GUEMES ISLAND FERRY SCHEDULE EXTENSION**

**Executive Summary of Adverse Impacts to Natural and Built Environment**

**Probable Significant Adverse Impacts**

1. Transportation induced growth causing significant effects to Guemes Island land and shoreline use (including population, housing, vegetative cover, impermeable surfaces, and existing agriculture.)
2. Long term and potentially irreversible damage to the Guemes Island Sole Source Aquifer, a sensitive resource and public health necessity.
3. Cumulative effects resulting in a significant adverse impact from the following additional adverse impacts:
  - a) Population and housing growth is likely exacerbate existing nitrate pollution of ground water serving public and private water sources.
  - b) Lowered ground water levels are likely to result in dehydration of wetlands and streams connected with ground water resulting in indirect impact to island wildlife.
  - c) Increased reliance on desalination technology is likely to have detrimental effects on sensitive marine environment and habitat of *Threatened* and *Endangered* species surrounding the island.
  - d) Extended hours of Ferry operation will result in new nighttime traffic, noise and glare on residential streets from vehicles accessing ferry landings from 6 PM to 10 PM.
  - e) Growth will likely result in need for currently unavailable island-based public services such as sewer, public water, professional fire protection, police protection, commercial services, cell phone towers, recreational facilities/youth programs and senior daycare.



## SECTION I

### SKAGIT COUNTY ACTIONS TAKEN ON GUEMES ISLAND FERRY SCHEDULE EXTENSION

On May 30, 2006- Skagit County adopts an extension to the Guemes Island Ferry schedule.

On July 27, 2006 – Three months after having taken the action, The County decides to make a threshold determination. They issue a DNS for a “non-project” action.<sup>1</sup>

On April 9, 2007- The SEPA responsible official, represented by Brandon Black, released an *Addendum to SEPA Threshold Determination*. Attached to this document is an undated *Addendum to the Checklist (AC)* with no author identified. In this, after the fact justification of County actions, released nearly a year after issuance of the DNS, the county asserts that the ferry schedule extension will “have no impact on county land use plans or decisions” but the addendum does not discuss the impact the ferry extension will have on island land use.

They assert that under WAC 197- 11-442(3) they are not required to do *site specific* analysis even though they admit that the area of environmental impact is the whole of Guemes Island and a portion of Fidalgo Island. As WAC197-11-442 pertains to the preparation of an Environmental Impact Statement, not a Threshold Determination, this WAC is not applicable to the situation, nor does it release the lead agency from doing environmental analysis to determine if there is a probable significant adverse impact from an action it proposes to take.

The AC states that county’s action was intended “to address existing and future demand for ferry service and is not expected to impact future land use *decisions*.” It asserts that the schedule extension addresses a growing operating and labor problem, pointing to growth on the island and congestion at the ferry. Even if the AC were released prior to their original action and threshold determination issuance, it would not provide adequate evidence that environmental analysis was ever done to determine if growth impacts from the action are likely to have probable significant adverse impacts to population, housing and land use on the island. It neither mentions other alternatives that were considered nor does it provide a comparison of impacts of possible alternatives, such as the Ferry Task Force recommended rescheduling within existing hours of 6 AM to 6 PM, previously adopted by the County Commissioners but never implemented.<sup>2</sup> There is no mention of the probable impacts of what increased access to the island during commute hours will have on ferry traffic shifts, population growth and demographics, occupancy of existing dwellings, future development, public services, water supplies or induced traffic on both sides of the channel.

In the AC, Section F, the County cites numerous polices from the Transportation Element of the County Comprehensive Plan but they fail to cite one very important and applicable policy:

“Policy 9A-6.1 -Skagit County supports expansion of public transportation into unincorporated areas only with public support.”

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<sup>1</sup> In my expert opinion, the action does meet the definition of a non-project action. WAC197-11-704 defines nonproject actions as “decisions on policies, plans, and programs” and lists road, street and highway *plans*. This decision is not merely a road, street or highway plan; it is a change similar to building a new bridge to be used in specific hours and therefore is a project action that “involves a decision on a specific project.”

<sup>2</sup> Resolution R20040051



The AC reports on data and anecdotal comments gathered from a 2002 Skagit County sponsored survey conducted by Berk and Associates. The AC fails to mention how the survey was conducted or that survey results clearly show that a large majority of the residents of the island were against ferry hour extension.

The survey was mailed to 925 property owners and hand distributed at the ferry terminals and Anderson's General Store to 150-175 ferry riders. No specific hours were proposed for the extension of ferry service past 6 PM; respondents were given a choice of hours for the proposed extension from 7 PM to 12 midnight. The overall result from all respondents was a majority (53%) were against extending the schedule later than 6 PM. The survey showed that 54% of *all* property owners and 60.6% of the *resident* property owners responding to the survey were against the extension. Only 85 resident property owners were favorable to schedule extension. Non-resident property owners were evenly split on the question, indicating that many non-resident property owners may want longer hours of ferry operation in order to live on the island and commute or that owners of undeveloped property may want extended service in order to increase the attractiveness of their property and its market value.

The AC did not report on 2 other surveys dealing with ferry hour extension conducted by Guemes Island Citizens groups.

In January 2006, Guemes Island Property Owners Association (GIPOA) mailed surveys to all property owners, resident and non-resident, asking:

“Do you favor extended ferry hours during the week?”

Of the 437 responses to the question, 57% said no. Results also show clear support (62%) of both completion of the Guemes Sub-area Plan and a Environmental Impact Analysis prior to making any change in ferry hours.

On February 22, 2006, right before the County Commissioners adopted the schedule extension, the Ferry Committee sent an advisory ballot to all 578 registered voters in the Guemes precinct asking:

“Should ferry service, Monday through Thursday, be extended from 6 PM to 10 PM.”

Of the 383 votes returned, 289 (75%) were against extension.

Not only did all 3 surveys clearly show that a majority of property owners and registered voters were opposed to the ferry schedule extension, survey results also indicated that opposition had increased from 2002 to 2006, perhaps as property owners became more educated on the issues involved. The surveys do not provide Skagit County with any evidence that there is public support for expansion of this public transportation into the unincorporated area of Guemes Island.

In its 1977 Environmental Impact Statement analyzing the introduction of a new, larger ferry, the Skagit County Planning Department predicted that ferry size would “not have significant effect on population, housing and land use. Ferry scheduling, however, will.”<sup>3</sup>

So Skagit County adopted the ferry schedule extension in the face of and without consideration of its previous 1977 environmental analysis that concluded that ferry scheduling

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<sup>3</sup> Skagit County, *Guemes Island Ferry DEIS*, Dec 1977

would significantly effect population, housing, and land use, and its own policy against expansion of public transportation without public support.

## **SECTION II**

### **GROWTH INDUCING IMPACT OF TRANSPORTATION**

#### **Issue 1- The Ferry schedule extension is a transportation improvement that will be growth inducing to Guemes Island.**

Transportation mechanisms provide access and that access stimulates growth. “New transportation infrastructure can help shape land uses by increasing the accessibility of the site and the mobility of the site’s users.”<sup>4</sup> Public policy and investment in transportation capacity that increases accessibility to a location, or decreases the cost of reaching that destination, either in time or money, will stimulate growth.

Such is the case with Guemes Island. If the growth was desired and planned, transportation could be a useful tool to stimulate wanted investment. But in this case, transportation improvements are being introduced to an island where the County has not planned how new growth will be accommodated given its limitations such as salt water intrusion in wells, high nitrate loads in ground water, and lack of sewer and other public services. Local officials have proceeded with this growth inducing transportation improvement without adequate assessment of the potential land use consequences. The resultant growth is unanticipated, reshapes the community in unexpected ways and plays havoc with necessary services.

#### **Issue 2- Improvements to transportation links have a history of adverse impacts to land uses.**

Over the last century, the introduction of a variety of transportation mechanisms has had unforeseen consequences. New transportation links have stimulated the decentralization of tight core cities and caused them to spread out farther and farther. Street cars and commuter trains near the turn of the 19<sup>th</sup> century allowed people to work in the city and live in distant small towns. In 1902, the Seattle-Tacoma Interurban Railway, built through what is now known as Kent Valley “greatly suburbanized the area by allowing commuters a chance to have a home in the country and a job in the city.”<sup>5</sup>

Later, the personal car and public investment in an ever increasing road system, allowed greater mobility and personal choice in where to live. Wherever traffic congestion built up, the community would cry for transportation improvements and modifications to “fix” the problem. Bypasses and loop roads were intended to provide a way around congested areas.

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<sup>4</sup> US Environmental Protection Agency, *Our Built and Natural Environment: A technical Review of the Interactions Between Land Use, Transportation, and Air Quality*, Washington D.C. Jan 2003, p 9.

<sup>5</sup> History Link, Washington State History.

But without fail, laissez faire officials would permit new growth along the new corridor, and eventually the bypass would become just as congested as the original road. The building of I-405 as a rural bypass around the City of Seattle, is a case in point. It was intended to provide a fast route around the congested city, but since its completion in 1964, it has spurred enormous growth. I-405 is now a clogged artery through major cities.

Another local example of a “fix” gone awry is the rerouting of SR 2 (the Stevens Pass Highway) to “bypass” the City of Monroe. Built to allow travelers to avoid the bottleneck of stop lights going through this small town, local officials allowed the bypass to become lined with fast food outlets and major stores, necessitating new stoplights to allow throngs of customers the opportunity to cross the highway. Today, the highway “bypass” traffic crawls along from one light to the next and it actually takes less time to travel the original route through “downtown” Monroe because business has deserted it. The “bypass” has become the major business corridor.

### **Issue 3- Ferries, like roads and bridges, promote growth.**

As with all transportation mechanisms, ferries have a long history of shaping transportation networks and development. Car ferries are considered extensions of the road system as they provide the means of passage of vehicles the same as a road or bridge; passenger-only ferries are considered extensions of public transit.

Ferry locations helped to determine the layout of the transportation network and pattern of habitation in the United States. Ferry landings grew to settlements, transportation hubs and large cities, such as St Louis. The growth of many of the cities of the Puget Sound was spurred by ferry transportation. Most of the current locations of population density were once served by ferries which allowed them to grow initially. In some locations bridges have replaced ferry service but many densely developed communities still rely on ferry service to reach other metropolitan areas.

Ferry service in the Sound began in 1888 with service between Seattle and West Seattle. San Francisco developers, the *West Seattle Land and Improvement Company*, subsidized the ferry and it attracted people to move to their residential development in the Admiral District of West Seattle.<sup>6</sup>

In the 1870's, the first settlers of Mercer Island traveled by rowboats to Seattle to pick up necessities. An occasional tramp steamer would drop off items that were too large to transport by rowboat. C.C. Calkins platted the town of East Seattle on the island and in 1891 he built a luxurious resort on the western side of Mercer. This spurred the building of a ferry dock and small steamers began to make regular trips. New access to the island attracted more residents. Ferry travel continued until July 2, 1940, when the floating bridge from Mercer Island to Seattle was opened.<sup>7</sup>

As an early mill town, Kirkland relied on the *Leschi*, the first auto ferry in Washington State, which began running in 1913 to Madison Park in Seattle. Residents and business relied on

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<sup>6</sup> History Link, West Seattle, Washington State History

<sup>7</sup> Mercer Island Historical Society

the ferry for access to Seattle and the world market until the Evergreen Point Floating bridge was built in 1940.

Before the Peninsula with its thick forest and few roads became Kitsap County, the early residents of mill towns such as Port Madison, Port Orchard, Port Blakely and Port Gamble depended upon water transportation. The Mosquito Fleet, as its small steam ferries were called, stopped at over 40 landings on the peninsula and allowed the county to grow. “Just as the lumber cut in the mills needed ships to reach their markets, people needed canoes, then steamships, then ferries to reach metropolitan centers in Seattle and Tacoma.”<sup>8</sup> Until the Agate Pass Bridge was built in 1950, residents of communities on the Olympic Peninsula, such as Port Angeles and Port Townsend could travel to Bainbridge Island by a car ferry that began service in 1920. From there they could reach Seattle by ferry.

Whether they are used as roads or public transit, it is evident that from the current maps of Washington State Ferry routes<sup>9</sup> and the U. S. Census population density map of the Puget Sound<sup>10</sup>, there is a close correlation between Puget Sound population density and ferry landing sites. In the north Sound, the Washington State ferry landings determine which islands in the San Juan chain have developed. Those that have no ferry service remain nearly uninhabited.<sup>11</sup> Since the first ferry was introduced to Puget Sound in 1888, the ferry has served as a major component of the transportation system and promoted growth at ferry landings and beyond, throughout northwest Washington.

#### **Issue 4- Environmental analysis of the San Francisco Ferry System expansion confirms a ferry extension is growth inducing.**

San Francisco has a long history of ferry service which was largely abandoned when its bridges were built. Many of the early ferries used in the Puget Sound were bought from San Francisco. However, as the highways and bridges have become gridlocked, the Bay Area has reintroduced and steadily expanded a new passenger-only ferry system. Both ferry routes and terminal expansion projects have been analyzed for environmental impact. Based on the information gathered in the impact statements routes were refined and landings in rural locations were dropped as being too growth inducing.

The impact of proposed expansion of routes was assessed in June 2003 in an Environmental Impact Report (EIR), conducted under the Calif. Environmental Quality Act by URS Corp. In the final draft EIR, URS found that growth inducement of the expansion of ferry service is considered significant.

“Changes at the local level as a result of providing new or enhanced ferry service could occur by making local communities more accessible. The benefits of ferry service may be perceived by many as an improvement to their current quality of life, making these communities attractive for commuters to live in. This effect is primarily of concern at terminal locations in relatively undeveloped or less accessible areas.”

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<sup>8</sup> Kitsap Peninsula Visitors and Convention Bureau

<sup>9</sup> Map A-23

<sup>10</sup> Map A-24, A-25, A-26

<sup>11</sup> Map A-21, A-22

“Implementation of the Proposed Project could increase demand for public services, housing, and other services. Specifically, people may move into areas due to a perceived increase in quality of life or job opportunities afforded by the proposed increase in ferry services.”

“Without proper planning, cumulative growth associated with the Proposed Project and other currently unplanned development could lead to potentially significant impacts on communities, public services, or open space resources, depending on the location.”<sup>12</sup>

In the Environmental Assessment, the San Francisco Water Transit Authority notes that growth can be induced in a number of ways, including removal of an obstacle to growth. If the project removes an impediment to growth, such as providing a new public service or new access to an area, the project may promote spatial, economic or population growth in a geographic area.<sup>13</sup>

**Issue 5- Kitsap County voters reject a proposed ferry to rural landings due to acknowledged growth inducing impacts to rural areas.**

Kitsap County continues to rely on the ferry system for service to Seattle across four heavily used routes.” In its 2002 Regional Growth Centers Report, the Puget Sound Regional Council relates that the Bremerton Comprehensive Plan counts on ferry service promoting desired growth. While much of the land in the Bremerton Regional Growth Center is underdeveloped or vacant, the City Comprehensive Plan and studies conducted indicate that improved ferry service will stimulate development of a mix of housing and employment opportunities.<sup>14</sup>

However, Kitsap Transit has been working to add new fast passenger-only ferry service (POF) for several years, without voter support. In Feb 2007, Kitsap county voters rejected the POF proposal for the second time. The cost of a proposed tax and growth inducement potential were not welcome. As a small county that is the 2<sup>nd</sup> most densely populated in the state, Kitsap voters may favor infill growth in Bremerton, but they don’t support the introduction of residential growth in outlying rural areas promoted by terminals in small communities like Southworth and Port Orchard, as predicted by the POF Land Use Compatibility Assessment.<sup>15</sup>

**Issue 6- The Anderson Island Ferry schedule extension failed to alleviate congested traffic as predicted and produced dramatic adverse impacts to the island and its population.**

The land use impacts of extending ferry service into evening commute hours is well demonstrated by ferry service between Steilacoom and Anderson Island, in Pierce County, WA. The demographics of Anderson Island, which was heavily used for retirement and vacation homes, had begun to show changes between 1990 and 2000. The number of people

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<sup>12</sup> URS Corp, , *Final Draft EIR, San Francisco Ferry Expansion Project* Sec 4, , Growth Inducement, 2003,

<sup>13</sup> San Francisco Bay Area Water Transit Authority, *South San Francisco Ferry Terminal Project, EIR/EA*

<sup>14</sup> Puget Sound Regional Council, *2002 Regional Growth Centers Report*.

<sup>15</sup> Cascadia Community Planning Services ,*Port Orchard/ Southworth POF Land use Compatibility Assessment*, Jan 2, 2007

between 45 and 64 was up, bringing the median age of residents down from 58 to 52; the number of families with children was up 39%, and the number of occupied houses (as opposed to seasonal use houses) was up 72%. The ferry service, which ran from 6AM to 6 PM, was being impacted by commuters traveling to and from work on the mainland. Commuters were being left behind at the dock during commute hours.

Pierce County commissioned IBI Group to thoroughly study the ferry service and in their Waterborne Transportation Study, it was recommended that Pierce County reorganize the ferry routes, increase fares, and add one new run extending service so that the last run to the island from the mainland would be at 7:30 PM. The consultant made this recommendation to “provide greater convenience for commuters living on the island, residents who are shopping or conducting other activities on the mainland, and students who wish to participate in after-school activities.”<sup>16</sup> It was also recommended that the system buy a new ferry to replace the 70 year old backup ferry and be used to alternate with the existing *Christine Anderson* a 54-car, 250-passenger ferry to avoid downtime for servicing. The Study stated that the implementation of these recommendations would provide “sufficient capacity to meet projected peak period demands until the year 2025.”

The new schedule took effect in January, 2004. Unfortunately, the ferry study did not accurately predict the results. Within one year of the schedule extension, Debbie Lowe, Chair of the Anderson Island Citizens’ Advisory Board, says that the change to the island had been dramatic.<sup>17</sup> There was a significant increase in property values and more diverse population, which she felt was a positive, but she also said crime was up and new construction removed green spaces and was likely impacting the island aquifer. Home sales increased by 20%, vacant lots were being bought up, and full-time occupancy of former vacation homes was continuing to increase. The trend toward a population shift from predominantly retirees to families with children, who commute to work daily, increased greatly. Residents reported more traffic, more noise, and lots of visitors looking for property on the island.

The extension of operating hours has not had the expected congestion relieving effects on the ferry predicted by IBI. In fact, Ms. Lowe reports that there has been a noticeable increase in vehicles using the ferry. The Anderson Island Ferry schedule bears out Ms Lowe’s perception that the extension has done little to reduce ferry congestion. It warns travelers that:

“Traffic volumes vary greatly. To avoid the heaviest weekday traffic, tourists should not travel during weekday commute periods- from Anderson Island in the morning and to Anderson Island in the early evening.”

In Feb 2007, Pierce County put into service the *Steilacoom II*, a new 54-car, 300- passenger ferry at a cost of \$11.2 million dollars. The new boat is said to be a mirror image of the existing *Christine Anderson*. Pierce County is currently operating the craft alternately to extend their life. Don Peterson, Ferry Manager at Pierce County Public Works reports that congestion in the evening is not so bad during evening hours but morning congestion has become a real problem. He says that the county is anticipating that it will soon have to operate the two ferries in tandem to accommodate the growing ferry traffic at commuter

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<sup>16</sup> IBI, *Waterborne Transportation Study*, Oct, 2003 p ii

<sup>17</sup> Anderson Island Citizens Advisory Board, *Anderson Island Effect*

hours. He states that if Pierce County were to eliminate midday runs it would probably have little or no effect because the primary user is now the commuter.

**Issue 7- The Ferry schedule extension will remove an obstacle to access and will increase demand for property on Guemes Island.**

“Transportation investment cannot produce growth absent demand. That demand, and the land use policies that affect it, drive land use and resulting impacts.”<sup>18</sup> Extending the hours of ferry operation is like opening a previously closed bridge. Now commuters arriving from jobs after 6 PM have new access to the island.

Accessibility reflects “both the attractiveness of potential destinations and the ease of reaching them.”<sup>19</sup> In choosing a place to live, people balance the desirability of the place in terms of cost of housing and aesthetics (community residents, schools, size of lot, view, quality of life, recreational opportunities), against the need for access to a job, goods and services. The more desirable the mix of these elements, the more demand is created for housing in that location. People can and do commute long distances to get to a home in what they deem to be a desirable location. But even if they would like to live in a place due to its cost and amenities, they are barred from living there if it has *no* access to their work, due to the absence of any transportation link during commute hours. Providing access by removing an obstacle, such as providing new ferry service during evening hours, opens the door to commuters to live in that location.

## **SECTION III**

### **DEMAND AND GROWTH**

**Issue 1 -Current Washington State growth rates indicate strong demand for homes in Skagit County.**

Washington State Department of Transportation reports that “Demand is up” in the Puget Sound region.<sup>20</sup> Population will increase by 2 million or 35% by 2030 and Vehicle Miles Traveled (VMT) will increase by 45%. Ferry ridership will increase by 62%, which means the number of people taking ferries to distant locations from urban core cities will be double the population growth rate.

Despite Washington’s Growth Management Act, which is designed to direct urban growth to urban areas, suburban counties adjacent to high density urban Puget Sound counties are experiencing the highest growth rates in the State. The 2007 *State of the Sound Report*<sup>21</sup>

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<sup>18</sup> American Association of State Highway and Transportation Officials, *Handbook on Integrating Land Use Considerations into Transportation Projects to Address Induced Growth*.

<sup>19</sup> Handy, S. L., “Regional Versus Local Accessibility: Implications for Nonwork Travel.” Transportation Research Record 1400, Washington, DC, TRB, National Research Council (1993) pp. 58-66.

<sup>20</sup> WSDOT. *Washington Transportation Update*

<sup>21</sup> 2007 State of the Sound Report, Governors Office, p 15



(Office of the Governor) projects that during the six years from 2000 to 2006, Thurston County had the highest growth rate at 62%, with San Juan County and Skagit County tying for second at 60% growth. That is substantially up from the 29% growth Skagit County experienced during the previous *ten* year period from 1990 -2000.

This may be partially due to the cost of housing rising over 100% in both King and Snohomish Counties, from 2000 to 2007. In King County, the single family house median price was up from \$225,000 in 2000 to \$454,000 in April 2007. Snohomish County saw a similar increase in median price, from \$185,000 in 2000 to \$382,500 in April 2007.<sup>22</sup> By comparison, the Skagit County median single family home price in the fourth quarter of 2006 was \$260,000.<sup>23</sup> With a median house price at only 57% of that in King County, many people have chosen to live in Skagit County and commute to work in King, Snohomish, and Whatcom counties. In 2000, 9,863 workers (20%) living in Skagit County commuted to out-of-county to work. While the average commute time in Skagit County is 25 minutes, 8,081 workers (17%) drove from 40 minutes to 90 minutes or more each way daily.<sup>24</sup>

**Issue 2- Despite limited resources and no plan for accommodating new growth without significant adverse impacts to island water supply, existing lots and zoning allow for significant growth on Guemes Island.**

Despite progressively restrictive zoning cited by Skagit County in its *Addendum Checklist*, the county admits “it is clear there is great potential for additional residential development on Guemes Island.”

Skagit County reports in the AC that 2000 Assessors data showed a total of 1,589 parcels, 908 of which are undeveloped and 681 developed. Based on Census data which showed there were 592 houses in 2000, and there have been 35 permits issued to date, in 2007 there are 627 housing units on the island so the 54 remaining “developed” lots must not contain a housing unit. Therefore, without any further subdivision 962 homes could be built on existing parcels. However, local residents report that approximately 39 parcels are affected by conservation easements limiting or reducing their development potential.

There are approximately 450 very small lots located in 7 development areas lining the shoreline, where about 100 small lots remain. Holiday Hills development on the east tip of the island has very small lots approximately half of which are undeveloped.

Under current zoning, even with the restriction on CaRD development imposed by SCC 14.18.310 and 14.24.350, additional division is possible in the Rural Reserve and Rural Intermediate zones creating 52 additional building lots.<sup>25</sup>

Despite the “history of increasingly restrictive zoning” cited by Skagit County in its AC, based on the County Assessor’s parcel count, under current zoning, 1016 additional homes could be added for a total build-out 1643 housing units. At the average Skagit County

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<sup>22</sup> Snohomish County, *Snohomish County Tomorrow 2000 Growth Monitoring Report, Housing Sales Market*

<sup>23</sup> Washington Center for Real Estate Research, *Housing Market Snapshot*

<sup>24</sup> State of Washington OFM, *Common County-to-County Commutes 2000 Census*

<sup>25</sup> Resident calculation of division potential from Assessors parcel lists showing acreage, zone and development.

occupancy rate of 2.6 persons per unit, these new homes would add 2642 people to the island's population.

If all 1643 potential units were occupied, the island would increase from a current population of 563 to 4,272 people, a 659% increase.

**Issue 3- If the county were to adopt a complete moratorium on building permits, island population could easily triple if vacant units were fully occupied.**

The number of housing units on Guemes Island has increased from 592 in the year 2000 to a current count of 627 housing units. In 2000, 272 of the existing units were vacant most of the year, used for vacation and part-time occupancy. If the Guemes Island Ferry extension makes it possible for current owners to move to their vacation or retirement home and commute to work daily, the existing vacant houses could become occupied very quickly and multiply the population without a single building permit being issued or a new well being dug. If all the existing units were fully occupied at the average person per unit in Skagit County, the population would increase from 563 to 1630 people, a 189% increase that would triple the year 2000 resident population. In 1994, the USGS estimated that peak population during summer months, including 535 full time residents and 1605 seasonal residents and visitors, was 2,140, so the 1,630 figure may well be an underestimate. This would triple the demand for potable water on the already failing water system. Many of the units that are vacant now are on small shoreline lots where salt water intrusion is greatest.

**Issue 4- A waterfront or island home available on Guemes Island is in high demand among home buyers.**

The high demand for an island home is demonstrated by high growth in San Juan County. Despite a median house price of \$620,000, by far the highest in the state, this all island county, next to the Guemes/ Cypress island group, had a 60% growth rate from 2000 to 2006.<sup>26</sup>

- Scott Price, a real estate professional, states; “waterfront is always more desirable and tends to be a better investment than non-waterfront real estate. And if a down market ever occurs in the future, waterfront will still be the most desirable and first to sell if priced appropriately.”
- Price's calculation of waterfront prices for Seattle area communities revealed just how much more people are willing to pay for the desirable waterfront house. He found the Average price for a waterfront home on a lake or saltwater in the Seattle vicinity was \$1,806,860 and the Median price was \$1,187,000, over 2.6 times the median price for all housing in King County.<sup>27</sup>
- Real Estate agents are advertising small waterfront communities, accessible by ferry as being great places to get that serene lifestyle and great views at half the price.<sup>28</sup>
- A real estate search for Guemes Island property revealed 11 waterfront homes listed from \$250,000 to \$950,000, making it an attractive alternative for the buyer eager to own waterfront.

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<sup>26</sup> Office of the Governor, *State of the Sound Report*, page 15, 2007.

<sup>27</sup> Scott Price, Waterhavens, *2006 Waterfront Market in Review*, Jan 11, 2007

<sup>28</sup> MCR City Report, *Realty Times*, August 15, 2003

## SECTION IV

### IMPACTS TO NATURAL AND BUILT ENVIRONMENT

#### WATER RELATED ADVERSE IMPACTS

**Issue 1- Growth will have probable significant adverse impact on the failing Guemes Island water system and remediation of damage to island aquifers would take years or decades to take effect.**

The water supply on Guemes is tenuous with the current population and increased population drawing water from the aquifer system is likely to create a crisis situation. The condition of the aquifer layers under the island was studied most extensively by the U.S. Geological Survey in 1994, in its Hydrogeology and Quality of Ground Water on Guemes Island.<sup>29</sup> In its Addendum to Checklist, the county references the USGS Study at C.(2) but makes no comment as to how the ferry schedule extension will exacerbate the progressively worse potable water situation or how the county plans to handle the issue of potable water as island population is increased by their growth inducing action. From the AC it is clear that the County has not even considered, let alone completed an adequate environmental analysis to make a threshold determination on this probable significant adverse impact on Guemes Island.

Guemes Island, an 8.2 sq. mi island, depends entirely on ground water for all drinking water, except for small catchment systems and the Skagit PUD Potlatch Desalination plant which serves 34 homes. In 1997, the island aquifer system was designated a sole source aquifer, meaning it is bounded and limited, by the U. S. Environmental Protection Agency. Recharge to aquifers is low due to low average rainfall and low permeability of island geology. Of the average 25 inches of rain, it is estimated that only 6 inches reaches the identified aquifers that supply island wells.

The inventory phase of the study in 1991 sampled 83 wells, and 24 wells were sampled in 1992. They found that while soils in the area near the shores have higher permeability than interior areas, the freshwater aquifer is thin and rests in a layer above the salt water layer that intrudes under the island.<sup>30</sup> When wells pump water from shore areas, the freshwater layer gets thinner and soon saltwater is being drawn into wells. Most of the developed housing and the majority of wells are confined to small lots lying along the shoreline, about half of which are considered vacant due to their occasional use for vacations.<sup>31</sup>

Of wells sampled, those near shorelines and the low lying interior were experiencing the highest levels of sodium chlorides. In some of the wells near shorelines the chloride content varied seasonally but in others there was no variation. The sampled contaminated wells were not drawing from only one aquifer, but three of the main aquifers supplying the island indicating that the problem cannot be cured by drilling a new well into a different aquifer. The USGS stated, "Once seawater intrudes a coastal aquifer, control or reversal of the condition can be difficult and expensive. Because ground water moves slowly, remedial measures may require years or decades to take effect."

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<sup>29</sup> U.S Geological Survey, Hydrogeology and Quality of Ground Water on Guemes Island, Skagit County, WA. Report 94-4236

<sup>30</sup> USGS Conceptual Diagram Saltwater intrusion

<sup>31</sup> Skagit County, map of Buildings 2005 and Owners Zip Code.

The worst cases of salt water intrusion were at Indian Village, West Beach and North Beach at the north end of the island. By 1994, the two Potlatch Beach Water Association wells at North Beach were so contaminated that another sampling conducted by Hong West Associates found one well marginal and the other clearly exceeding the allowable chloride standard of 250 ppm<sup>32</sup> (the level at which a salty taste is discernible) and even significant pumping reductions were not likely to improve water quality in the short run. The Hong West study stated that “at current (1992) rates of withdrawal, most of the existing wells on the north end of the island will likely experience significant seawater intrusion. Additional development will exacerbate this trend.” Skagit County has since required well drillers to apply to the health department before drilling new wells on the north end. Hong West suggested that “Based on available data, the most likely location to obtain acceptable quality ground water supplies which would not experience seawater intrusion problems *in the short term*, would be in the central part of the island.” The Study did not make a recommendation on a long term supply source able to accommodate existing population, let alone new growth.

The USGS study did not inventory all wells, and the water budget and ground water levels were only estimated due to insufficient data. The study found that while ground-water withdrawals from wells account for a small part of the annual recharge to the water system, increased withdrawals could have significant impacts to the system due to loss of fresh water storage capacity. It concluded that it is possible that a significant portion of the water that would recharge the Double Bluff aquifer is being pumped out at upper levels before it can percolate to the deeper aquifer. They called for future monitoring, because in 1992, ground water levels and quality data were “sparse.” They said the “effects of additional ground water development on the island’s ground water system cannot be accurately quantified at present” and they suggested the development of a ground-water model could help determine the effects of increased ground-water withdrawals.

## **Issue 2- Potlatch Desalination Plant- a solution with a high cost to residents and a potentially adverse impact to the shoreline “critical areas” of the island.**

Due to levels of salt exceeding the allowable amount in the two wells of the Potlatch water system, in 1996, Skagit PUD #1 built a reverse osmosis (RO) desalination plant at a cost of \$490,000 to serve 34 homes. Table I, a cost comparison between water supplied by the desalination plant and water service to other residential customers of Skagit PUD, shows that Potlatch water is 4 times as expensive as water delivered by the pipe throughout Skagit County.

The plant processes 80 gallons of seawater into 20 gallons of potable water returning the remaining 60 gallons of brine to the sea. The RO process, especially if it were used on a larger scale to serve more residents on the island, would have probable significant adverse environmental impact on the marine environment surrounding the island. The California Coastal Zone Commission has studied the adverse impacts of existing and proposed desalination plants in coastal areas of California.<sup>33</sup> The Commission found that discharges from desalination plants may have the following types of potentially adverse constituents and qualities: 130 % Higher salt concentrations than those of receiving waters, temperatures and

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<sup>32</sup> Parts per million

<sup>33</sup> California Coastal Zone Commission, Seawater Desalination in California, Oct 1993

turbidity above those of receiving waters; chemicals<sup>34</sup> from pretreatment of the feedwater and flushing of pipelines and membranes, preserving membranes, and metals that are picked up by the brine in contact with plant components and pipelines. The highly concentrated brine has been found to affect migration patterns of fish along the coast, while particles damage kelp beds and chemicals and metals have been found to be damaging to phytoplankton, cause red tide and may be toxic to fish. If the discharge is to an area of great flushing like the Pacific Coast, the impact is diluted. However, discharge to the calmer waters of the Puget Sound where high salinity water would sink and may accumulate, the impact could have significant adverse impact to Guemes' sensitive marine ecology that includes spawning areas and eel grass beds.

Desalination Plants are also seen as growth inducing if located in areas of scarce water supply. "Limited water is often the major constraint to development in many parts of the coast. Therefore, new desalination projects in coastal areas could lead directly to new development and a resulting increase in population migration to coastal areas."<sup>35</sup>

**Issue 3 – Draw down of ground water, may result in lowering or disappearance of existing island wetlands and the one stream. This would have a probable adverse impact on island wildlife, including bird nesting areas.**

The USGS Hydrogeology Report indicates that water is in continuous circulation from the ocean, the atmosphere, and to the earth's surface. This hydrologic cycle means that surface water, such as wetlands and streams are affected by precipitation, sea levels, and ground water levels. Removal of water from the ground by well pumping pulls water from the sea and from the surface. This can cause saltwater intrusion. It can also cause wetlands to dry up and shorten the annual presence of intermittent streams. As these areas may be the only source of fresh water for wildlife on the island, loss of these water resources would likely have a significant impact on existing species, some of which are threatened or endangered.

**Issue 4- New development will result in loss of green open space, increased impermeable surfaces, increased runoff, and the need for surface water collection facilities.**

Vegetation, particularly forest, absorbs precipitation and slows runoff, allowing it to collect in natural depressions and recharge ground water. As land is cleared for development, new roofs, driveways and roads all create surfaces that increase the amount of runoff and allow it to move quickly, reducing absorption and recharge. Typical suburban housing allows 90% less water to permeate into soils than existing forested vegetation. This will reduce the small amount of recharge that the island has today and will be a probable significant adverse impact.

**Issue 5- Skagit County has failed to do State required watershed resource planning and assessments for Guemes Island and they have developed no strategies to provide sufficient water for existing and future residential populations on the island.**

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<sup>34</sup> sulfur dioxide, coagulants (e.g., ferric chloride), carbon dioxide, polyelectrolytes, anti-scalants (e.g., polyacrylic acid), sodium bisulfite, antifoam agents, and polymers; propylene glycol, glycerine, or sodium bisulfite; sodium compounds, hydrochloric acid, citric acid, alkalines, polyphosphate, biocides, copper sulfate, and acrolein

<sup>35</sup> California Coastal Zone Commission, Seawater Desalination in California, Oct 1993

In 1997 the Legislature adopted RCW 90.82 which called for watershed plans to manage, develop and protect vital local water resources. The act called for the development of implementation plans for each WRIA which “must contain strategies to provide sufficient water for: 1) Production agriculture, 2) commercial, industrial and residential use, and 3) instream flows. Each plan must contain timelines to achieve these strategies and interim milestones to measure progress. The act allows for grant funding from the state to complete local plans.

Guemes Island is included in the Lower Skagit Watershed Resource Inventory Area (WRIA 3). WRIA 3 is an area of 472,912 acres which includes all of the lower Skagit River, east to Hamilton, north into a small area of Whatcom County and south to Snohomish County.<sup>36</sup>

Skagit County began planning for the Samish sub-basin of WRIA 3 but, according to the Department of Ecology’s *2006 Report to the Legislature*, Skagit County spent \$1,039,000 in grants to complete a level 1 and 2 assessment and a draft watershed plan for the Samish sub-basin only, then terminated the process due to inability to reach consensus on the draft plan. As of May 18<sup>th</sup> 2007 the Department of Ecology which administers the planning process reports no further work on watershed planning for WRIA 3. Skagit County has not even begun to do watershed planning for the remainder of the WRIA, including the island areas of WRIA 3. Of the 17 DOE monitoring stations in WRIA 3, not one is located on or near Guemes or any other island. Of the 104 documents, dating back to 1971, written by public agencies or private individuals, associated with WRIA 3, listed at the Department of Ecology’s website, not one involves study, monitoring or planning for Guemes Island.

As a sole source aquifer, a bounded and limited watershed, Guemes Island, though included in the same watershed for inventory and planning purposes, has no physical connection to WRIA 3 water resources. Assessments, studies, and plans for the mainland areas of the WRIA 3 will have no benefit to Guemes Island. At this point, while they are fully aware of the water quantity and quality problems on Guemes Island, Skagit County has made no effort to complete its state mandated responsibility to develop a plan that contains “strategies to provide sufficient water” for existing and future residential populations on the island.

## **OTHER ADVERSE IMPACTS**

**Issue 1- 1992 Nitrate levels in wells indicate that septic systems are contaminating potable water and that increased population without a sewer system will have a probable significant adverse impact on the health of marine habitat and residents.**

High nitrate levels were also found in island wells however, the wells with high concentrations were widely spread and found both in shallow and deep wells over 100’. While it is generally assumed that shallow wells are contaminated directly by septic systems and lawn fertilizers, it is thought that deep wells have been contaminated by poor sealing of the well casing. The USGS found that “Overall, there was no strong correlation of nitrate concentration with a hydrogeologic unit (aquifer layers) or well depth on the island.”<sup>37</sup>

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<sup>36</sup> WRIA3 map

<sup>37</sup> U.S Geological Survey, Hydrogeology and Quality of Ground Water on Guemes Island, Skagit County, WA. Report 94-4236

If current homes on very small lots become occupied year-round, it is likely that septic system failure will occur. Sensitive marine habitat areas along the shoreline will be adversely impacted and given current nitrate levels in wells, it follows that further contamination would occur and health concerns would necessitate the installation of a waste treatment system. The introduction of a sewer system to the island would be highly growth inducing. The cycle of new growth will exacerbate the potable water problem unless a new source of water becomes available or the County determines that Guemes cannot support growth and amends current zoning to prohibit new development.

**Issue 2- Nightly traffic and parking on residential streets creates an adverse impact to local residential areas.**

Until the ferry schedule was extended, residents living on the local Anacortes streets leading to the ferry terminal could expect that ferry traffic would cease shortly after 6 PM on weeknights. The same was true for residents living on Guemes Island Road and South Shore Drive on the Guemes side. The very small parking area on the Anacortes side would generally empty out by 6 PM and Guemes Island Road would no longer hold a line of waiting cars.

After the ferry schedule extension, the traffic continues until 10 PM on weeknights. The people and cars create noise on previously quiet streets, at night when children are supposed to be sleeping, and headlights glare into windows. As new Guemes Island commuters increase, so too will this nightly traffic and resultant noise and glare. In order to avoid blocking the streets, the City of Anacortes may find it necessary to expand the parking area along the street, creating large expanses of new impermeable surface. Without careful mitigation measures, currently not planned or mentioned in the County AC, increased oil from parking areas will leach into the Guemes Channel.

**Issue 3- Increased population from induced growth will increase demand for commercial and public services now unavailable on Guemes Island.**

The ferry landing is a desirable location for commercial expansion, just the same as a freeway exit. Several years ago, the argument was made that Guemes needed a convenience store so that residents would not have to travel across the channel to get a loaf of bread or a bottle of milk. The proponent who asked for a rezone to allow his proposed store, choose the property next to the ferry landing because it would allow him the opportunity to sell snacks to people waiting in line at the ferry.

Today the “general store” operates daily from 8 AM to 7 PM, and until 8 PM Friday and Saturday. It has expanded to include a restaurant which serves Breakfast, Lunch and Dinner during the same hours and on Friday nights it offers musical entertainment until 9 PM. It typifies the evolution of commercial expansion over time.

As the ferry operates later hours on weekdays, it may become desirable to the owner of this commercial enterprise to extend operating hours again, which would impact neighboring properties. While the Guemes Island Planning survey ( distributed by GIPOA) shows that 69.5% of the property owners were against additional commercial zoning on the island, over time, with increased population, it is likely that there will be pressure to expand the



commercial operations adjacent to the ferry landing similar to landings on Orcas and San Juan Island.

Fire protection is supplied by volunteer residents operating fairly old equipment and there is no police protection provided on the island. With increased population comes the need for professional fire and police protection and expensive equipment. With public service workers, as with the existing ferry workers, come labor disputes and negotiations. The cost and difficulties associated with these new “services,” are likely to be a significant adverse impact on residents who live the quiet rural existence available on Guemes Island today.

## SECTION V

### ENVIRONMENTAL ANALYSIS OF THE IMPACTS TO LAND USE OF A TRANSPORTATION PROJECT

“Local governments affect the supply of developable land through land use regulations that specify where and under what conditions development can occur and through the provision of infrastructure, such as water, sewer, and transportation systems.”<sup>38</sup>

In *Land Use Impacts of Transportation: A Guidebook*, prepared for the National Cooperative Highway Research Program by Parsons Brinckerhoff, they point out:

“When assessing the impact of a transportation improvement or modification, local government must determine the “differences in land use patterns between a future with the transportation project and one without it.” “This comparison distinguishes between land use changes that would have occurred anyway and those related to the transportation project. Two forecasts of future land uses—one with and one without the project—are needed to make this comparison.”

*Land Use Impacts of Transportation: A Guidebook* suggests that Skagit County should have undertaken the following environmental analysis:

1. Understand existing conditions and trends.
2. Establish governmental policy assumptions.
3. Measure the transportation outcomes with and without the project. The county should have answered the following questions:
  - How will accessibility to, from, and within the study area change with and without the project?
  - How much and where will access to jobs change?
  - How much will access to other major destinations change?
  - What differences will the project make in travel behavior?
  - How will the number of trips in the study area change?
  - How much and more will the distribution of trips by time of day change?

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<sup>38</sup> Parsons Brinckerhoff, *Land Use Impacts of Transportation: A Guidebook*, prepared for the National Cooperative Highway Research Program Oct, 1998

- How much and where will be congestion levels be changed?
4. Estimate total study area population and employment growth with and without project. This step will produce an estimate of the number of people and jobs expected in the study area at the end of the planning period with and without the transportation project.
- Will the transportation change cause any shift in population to the study area?
  - Will transportation change induce households to move from other parts of the region to the study area?
  - Will the transportation project induce any increases (or decreases) in population or jobs in the study area over what would occur anyway?
5. Inventory land with development potential.
6. Estimate how the project will change the location and types of residential and business development within the study area.

## SECTION VI

### EXISTING RESIDENT PROFILE FROM 2000 CENSUS DATA<sup>39</sup>

The following demographic information should be used to perform the Impact Assessment.

#### *Population and housing*

- In 2000, there were 563 full time residents on Guemes Island, up from 546 residents in 1990, a 3% increase.
- There were 592 housing units in 2000, up 15% from 514 units in 1990. However, only 287 were occupied and 272 (49%) were used for vacation and part-time occupancy.
- 35 new units have been built since 2000, bringing the current number of dwellings to 627.
- If all 35 units built since 2000 were occupied by full time residents, based on the 2000 Guemes Island occupancy rate of 1.96 persons per unit, the current population would be 630 people, a 12 % increase in 6 years.
- If all existing housing units on the island were occupied by full-time residents at the 2000 Skagit County average of 2.6 persons per household, the existing 627 houses could accommodate 1630 people, a 189% increase or triple the year 2000 resident population.

#### *Age*

- The population of Guemes Island has been steadily aging. The median age of residents in 2000 was 53 years old.<sup>40</sup>
- In 2000, 239 people were over age 55 (42%).
- In 2000, children were only 12% of the population. There were only 69 children under age 18 living in 29 resident families. There were 54 school age children, 23 of whom were high school age.

<sup>39</sup> 2000 US Census Tract 9501 Blocks 1002-1024 & 1038-1042

<sup>40</sup> 2000 US Census Tract 9501, Block 1

- In 1990 there were 92 residents in the 20 – 40 age group, but by year 2000 that number was down to 36 people, representing only 6% of the resident population.

#### *Income and Commute*

- In 2000, 50% of the resident households were collecting Social Security, 151 households had no wage or salary income, and 57 households had self employment income.
- Of the 187 people that reported that they “commute to work,” 58 spent less than 20 minutes in travel time. As taking the ferry to Anacortes, with loading and crossing, as reported by the County’s Annual Ferry report takes more than 20 minutes, these “commuters” were either inaccurate in their estimation of travel time or work somewhere on the island itself, leaving 129 “commuters” who left the island to work.
- While 89 commuters said their commute lasted between 15 and 34 minutes, there were 40 who traveled 40 to 90 minutes or more each way to work daily.

## **SECTION VII**

### **SUMMARY AND CONCLUSIONS**

Guemes Island is a small, 8.2 sq. mi island with public access only by a 22 car, 99 passenger ferry. After ferry operation hours, people who needed to access the island had to provide private transportation. There are 627 houses, of which approximately 50% are vacant, used seasonally. Limited access has shaped the resident population of only 563 people, which is largely comprised of retirees, and the self employed, including a fairly substantial group of artists, and a few farmers. Census data reports that the population has been steadily aging, with 42 percent over the age of 55. There are only 69 children in 23 families. With 50% of the households collecting Social Security, the average occupancy per dwelling unit is only 1.96 persons, substantially lower than that 2.6 persons per dwelling unit average in the whole of Skagit County. The 2000 U.S. Census indicates that only 187 people left home to go to work, some of whom likely worked somewhere on the island. Those who did cross the channel to Anacortes to go to work had to return by 6 PM to catch the last ferry to the island. Forty people traveled 40 to 90 minutes or more each way daily.

On May 30, 2006, Skagit County extended ferry service to 10 PM on weekdays over the objections of the full time residents. The County asserts that the changes were made to improve ferry operations, improve labor conditions and better handle heavy traffic loads at the last run at 6PM. They did not show any evidence of having done environmental analysis of the impact of this change in ferry schedule on Guemes Island land uses.

Though intended to decrease traffic congestion and increase mobility, transportation improvements and expansion, provide increased access which may make a location more attractive to home buyers, inducing growth to occur. The extension of ferry service is known to be growth inducing, particularly in rural areas. Many Puget Sound communities owe their existence and growth to ferry service. Removing an impediment or obstacle to growth, like adding ferry service during evening commute hours, provides new access and will promote growth. Without proper planning, growth from a transportation improvement can lead to

significant impacts on the community, public services and open space resources. But a transportation improvement, like extension of ferry service, will only induce growth if there is demand for the location.

The significant impact of extension of ferry service to evening commuter hours is clearly illustrated by Anderson Island in Pierce County. It is a small island which had similar demographics to Guemes Island; a population of 900 mostly retirees, a lot of vacant vacation homes. It had a larger 54-car, 250-passenger ferry with a similar ferry schedule ending at 6 PM. In 2000, demand for the location was already having an effect on population and housing. Families with children were moving in and vacant vacation homes were becoming occupied by full-time residents. The ferry was crowded at peak commute hours and new residents complained about congestion. In 2004, Pierce County extended ferry hours by one run only to 7:30 PM. Their consultant said with rerouting and the new schedule, the 162-car capacity at peak hours would be enough to handle demand until 2025. They replaced their old 30 car back-up ferry with another 54-car ferry that could handle 300 passengers at a cost of \$11.2 million and began alternating ferry use to extend ferry life and avoid downtime for maintenance.

Within one year, the growth inducing effects of the new access were very evident. Residents of the island reported the trend toward more families with children and full-time occupancy of former vacation homes was continuing at an increased pace; home sales, lot sales, and new construction were up; noise, traffic and crime were up, and green space was disappearing fast. The new schedule did not improve ferry traffic congestion as predicted. Peak commuter hours are so crowded that tourists are warned not to plan to use the ferry during commute hours. The schedule change caused a traffic congestion shift. While evening traffic was previously the most congested, morning peak hours have now become the problem hours. Pierce County Public Works predicts that soon it will have to begin running both ferries in tandem.

## **IMPACTS**

Induced growth from the ferry schedule extension is likely to take three forms: 1) New larger families replacing older homeowners with one or two persons in the household; 2) New full-time residents moving into vacant vacation homes; 3) new development of existing and new parcels.

As the Guemes Island population ages, it can be expected that the current residents will gradually leave their houses due to the need to reduce maintenance responsibilities, health care issues or death. Their homes will either be retained by younger members of the family or will be sold to new people. The population on Guemes Island would likely grow younger, even without the Ferry schedule being extended into evening hours. However, when homes become available for sale, with new commuter access to the island, younger families with children are very likely to find Guemes an attractive place to live. Demand for a home in Skagit County and San Juan County is high as indicated by a 60% growth rate between 2000 and 2006, the second highest growth rate in the Puget Sound. The demand for an island home is extremely high as demonstrated by the median house price in San Juan County at \$620,000, by far the highest in the state. The prices of property available on Guemes

compares attractively with a waterfront home in King County, which in Jan 2007 had an average price over \$1.8 million.

Now that they are able to commute to work and have access they never had before, owners of houses currently used seasonally may decide to move to their island home. Skagit County reports in their AC that while full-time residents were against extending the ferry schedule to evening hours, part-time residents/property owners favored extension, a possible indication that they wanted later service to enable them to move to the island and commute to work. Even without new development, at full occupancy of all existing homes, island resident population could triple to a population of 1630 in a very short time, with no new building or well permits issued.

Under current zoning, 1016 new homes can be built on Guemes Island for a total of 1643 homes. At full occupancy, at the average Skagit County occupancy rate, the total population would be 4,272 people, a 659% increase over current population.

Induced growth from the ferry schedule extension will inevitably have a significant adverse impact on the already ailing water supply on Guemes. Existing problems with salt water intrusion in shoreline development areas are likely to become worse as vacant shoreline homes become occupied and as the approximately 100 vacant small lots are developed. If well water-levels go down, it will negatively impact wetlands and the one stream. New development will remove vegetation and replace it with impermeable surfaces that will increase quantity and speed of runoff and reduce recharge. If the County were to expand the existing desalination which currently only serves 36 families, the cost and environmental effects on the sensitive marine environment would also be negative. Nitrate problems caused by septic systems will be exacerbated. Residential streets leading to the ferry landings on both sides of the channel, would experience increased night time traffic, noise and glare. New growth would encourage commercial growth and increase the need for currently unavailable public services such as sewer, public water, professional fire protection, police protection, commercial services, cell phone towers, recreational facilities/youth programs and senior daycare.

In trying to improve ferry operation, Skagit County neglected its responsibility to adequately assess the environmental impact of its actions. The County initially made the decision to expand ferry service without making any threshold determination. Then it issued a Determination of Non-significance months after the schedule change without doing an adequate environmental assessment of the land use impacts. It ignored its policy not to expand transportation without public support and its own 1977 EIS on Guemes Island Ferry Service that determined that ferry scheduling would have a significant effect on population, housing and land use. One year later it has tried to justify its DNS with an addendum that still fails to address the significant impacts of the project. It has done no watershed planning for the island so when population growth occurs, there will be no plans or strategies to deal with basic needs like potable water and waste management.

Skagit County has chosen to take a similar course as Pierce County did with the Anderson Island Ferry; a course that Anderson Island residents report only resulted in an increased rate of growth, more ferry congestion, and greater expense. There are other possible solutions to

Guemes Island ferry operations problems that will not require new ferry service during commute hours.

Given the gravity of probable significant adverse impacts from ferry schedule extension, Skagit County must complete a full analysis of probable land use impacts in an Environmental Impact Statement so that impacts may be fully understood, alternatives examined and mitigations can be developed. Skagit County's extension of the ferry schedule must be rescinded while there is still an opportunity to avoid significant and irreversible adverse impacts to Guemes Island.