

**Final  
Supplemental Environmental Impact  
Statement (FSEIS)  
for the Carlsborg Urban Growth Area**

**Clallam County  
Department of  
Community Development**

Date of Issuance: August 8, 2000

August 8, 2000

Agencies and Citizens

RE: Final Supplemental Environmental Impact Statement for the Carlsborg Urban Growth Area

This document is the Final Supplemental Environmental Impact Statement (FSEIS) for the Draft Capital Facilities Plan, Comprehensive Plan amendment, and Zoning amendment for the proposed Carlsborg Urban Growth Area. We would like to thank everyone who commented on the Draft Supplemental Environmental Impact Statement that was issued on June 30, 2000. Your participation has provided valuable input that will be part of the public record and decisions on land use policy for the study area.

A public hearing is currently scheduled before the Clallam County Planning Commission on August 16, 2000, at 6:30 P.M., in Room 160 of the Clallam County Courthouse, 223 East Fourth Street, Port Angeles. At that time, the Planning Commission will here testimony regarding the Draft Comprehensive Plan amendment and Zoning amendment. All members of the public including those who commented on the DSEIS are welcome to attend the public hearing and make their views known to the Planning Commission for the record. There will be an additional public hearing(s) held before the Board of County Commissioners following the Planning Commission's review and recommendation. Please contact the Planning Division or watch the news media for dates and times of the hearing(s). Written comments are welcomed.

If you have any questions about the Final Supplemental Environmental Impact Statement, the public process, or where to direct your comments, we encourage you to contact the Department of Community Development at (360) 417-2358. We will be happy to answer any questions you may have.

Sincerely,

Bob Martin, Director  
Department of Community Development

## FACT SHEET

<b>Project Title:</b>	Capital Facilities Plan (CFP), Comprehensive Plan Amendment, and Zoning Amendment for the Carlsborg Urban Growth Area
<b>Description:</b>	<p>The proposed project is the adoption of a capital facilities plan (CFP), Comprehensive Plan amendment and Zoning amendment for the implementation of an Urban Growth Area (UGA) for the 560-acre area described as Carlsborg. In total, the project proposes a CFP specific to Carlsborg, a new Section 31.03.350 to the Sequim-Dungeness Regional Comprehensive Plan, and a new Chapter 33.20 to Title 33, C.C.C., of the Clallam County Zoning Code. The proposed Carlsborg CFP identifies and provides a 6-year financing plan for public infrastructure and service needs for an Urban Growth Area. The proposed Comprehensive Plan amendment sets forth goals and policies designed to govern development and land use decisions within the proposed UGA. The proposed Zoning amendment establishes regulations and land use standards that implement the policies of the Comprehensive Plan, and in a manner consistent with the CFP.</p> <p>The proposed UGA analyzed in the CFP, Comprehensive Plan amendment and Zoning amendment, provides for a mix of residential, commercial, and industrial growth. The proposed UGA differs from existing zoning by the allowed intensity (e.g., building size and height, lot size, type of use) of commercial development for approximately 140 acres of land located along state Highway 101, and the maximum residential densities (i.e., 2 dwelling units/acre .vs. 1 dwelling unit per acre) allowed for almost 290 acres located throughout the project area.</p> <p>This SEIS analyzes the potential environmental impacts that could result from adoption of the proposal. In addition, the SEIS provides two additional alternatives pursuant to WAC 197-11, for the purpose of comparison analysis: Alternative 2 provides for a rural center alternative, and Alternative 3 provides analysis of impacts associated with “no action” taken.</p>
<b>Location:</b>	The project area is located in unincorporated Clallam County approximately 1.5 miles west of the City of Sequim.
<b>Proponent:</b>	Clallam County
<b>Lead Agency:</b>	Clallam County Department of Community Development 223 East Fourth Street Port Angeles, WA 98362
<b>Responsible Official:</b>	Andy Meyer, AICP Planning Director Clallam County Department of Community Development (360) 417-2321
<b>Lead Contact Person:</b>	Bruce Emery, Associate Planner – SEPA Review, (360) 417-2358 Clallam County Department of Community Development
<b>Required Permits:</b>	No licenses or permits are required for this proposed action.

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**Date of Issue of DSEIS:** August 8, 2000

**Public Hearings:** The Clallam County Planning Commission reviewed the proposed CFP under an earlier review process. A public hearing is currently scheduled for August 16, 2000, in Room 160 of the Clallam County Courthouse, 223 East Fourth Street, Port Angeles. Following the Planning Commission's review and recommendation, the Board of County Commissioners will hold an additional public hearing. For specific hearing dates, time and location, please contact the Planning Division at 223 E. Fourth Street, Port Angeles, WA 98362. Notice of the public hearings will also be published in the legal section of the Peninsula Daily News.

**Date of Final Action** Formal adoption by the County of the CFP Element will occur no sooner than 60-days from the issuance of the DSEIS which is September 4, 2000.

**Location of Background Data:** The proposed Carlsborg CFP, Comprehensive Plan amendment, Zoning amendment, environmental documents incorporated by reference under this proposal, and other background information can be reviewed at the Clallam County Department of Community Development, 223 East Fourth Street, Port Angeles, WA 98362, during normal business hours.

**Cost of Document:** \$4.00

**Copies Available From:** Copies of the proposed Carlsborg Capital Facilities Plan, Comprehensive Plan amendment, Zoning amendment and Final Supplemental Environment Impact Statement, dated August 8, 2000, are available at:  
  
Clallam County Department of Community Development  
223 East Fourth Street  
Port Angeles, WA 98362  
  
Clallam County will also forward copies of the Carlsborg CFP and DSEIS statement to the Port Angeles and Sequim branches of the North Olympic Library System.

**Carlsborg Urban Growth Area  
Final Supplemental Environmental Impact Statement**

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# FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT – CARLSBORG URBAN GROWTH AREA

## INTRODUCTION

### PROJECT SUMMARY AND BACKGROUND

Clallam County is preparing a Capital Facilities Plan (CFP), Comprehensive Plan amendment and Zoning amendment for the unincorporated community of Carlsborg to comply with Washington's Growth Management Act, RCW 36.70(A) (GMA) comprehensive planning requirements. Capital facilities are the infrastructure and services needed to support growth and development, such as sewage treatment, water supply, roads, drainage control, parks, law enforcement, and emergency services. The Comprehensive Plan contains goals and policies which govern land use decisions and development regulations for orderly growth. Zoning is the primary regulatory tool for implementation of these goals and policies. In order to ensure growth and development occurs within the financial and physical constraints of the community and natural setting, all three elements must be developed consistent with one-another.

It is the project objective to develop and implement land use policies and regulations that reflect historic and cultural values as well as the community's vision for future growth and development of the project area. Clallam County seeks to accomplish this objective by adopting policies and implementing regulations similar to those adopted under the 1995 Comprehensive Plan, Title 31, C.C.C., in a manner that harmonizes with the spirit and intent of the Growth Management Act, and its subsequent amendments. Because of the length and history of the on-going planning effort, the scope of land use policies has been narrowed considerably from its conception. Therefore, the scope and focus of policy choices do not need to consider a wide range of alternatives, except for those required under WAC 197-11-430.

The proposed CFP, Comprehensive Plan amendment and Zoning amendment support the designation of Carlsborg as an Urban Growth Area (UGA) as defined by the GMA. Pursuant to the State Environmental Policy Act (SEPA), WAC 197-11-430, environmental analysis of a proposed action, such as that under consideration, requires analysis of not only the action being proposed, but alternatives, including a "no action" alternative. For the purpose of this analysis, Alternative 1 would designate Carlsborg an Urban Growth Area (UGA) based on land use policies similar to those adopted for Carlsborg in the 1995 Clallam County Comprehensive Plan and implementing zoning districts similar to those adopted in 1996; however, with standards reflecting consistency with State health requirements and the GMA. This is the preferred alternative supported in the draft plans and regulations. Alternative 2 would designate the planning area a Rural Activity Center and set adopt land use policies and development regulations similar to those currently in place. The purpose of this alternative would be to continue the regulatory "status quo" for the planning area as developed under the Memorandum of Understanding (MOU) adopted jointly by the Board of County Commissioners and the City of Sequim in May, 1996. Alternative 3, being the "no action" alternative assumes that current interim land use controls and zoning designations will expire. Without specific guidance under existing

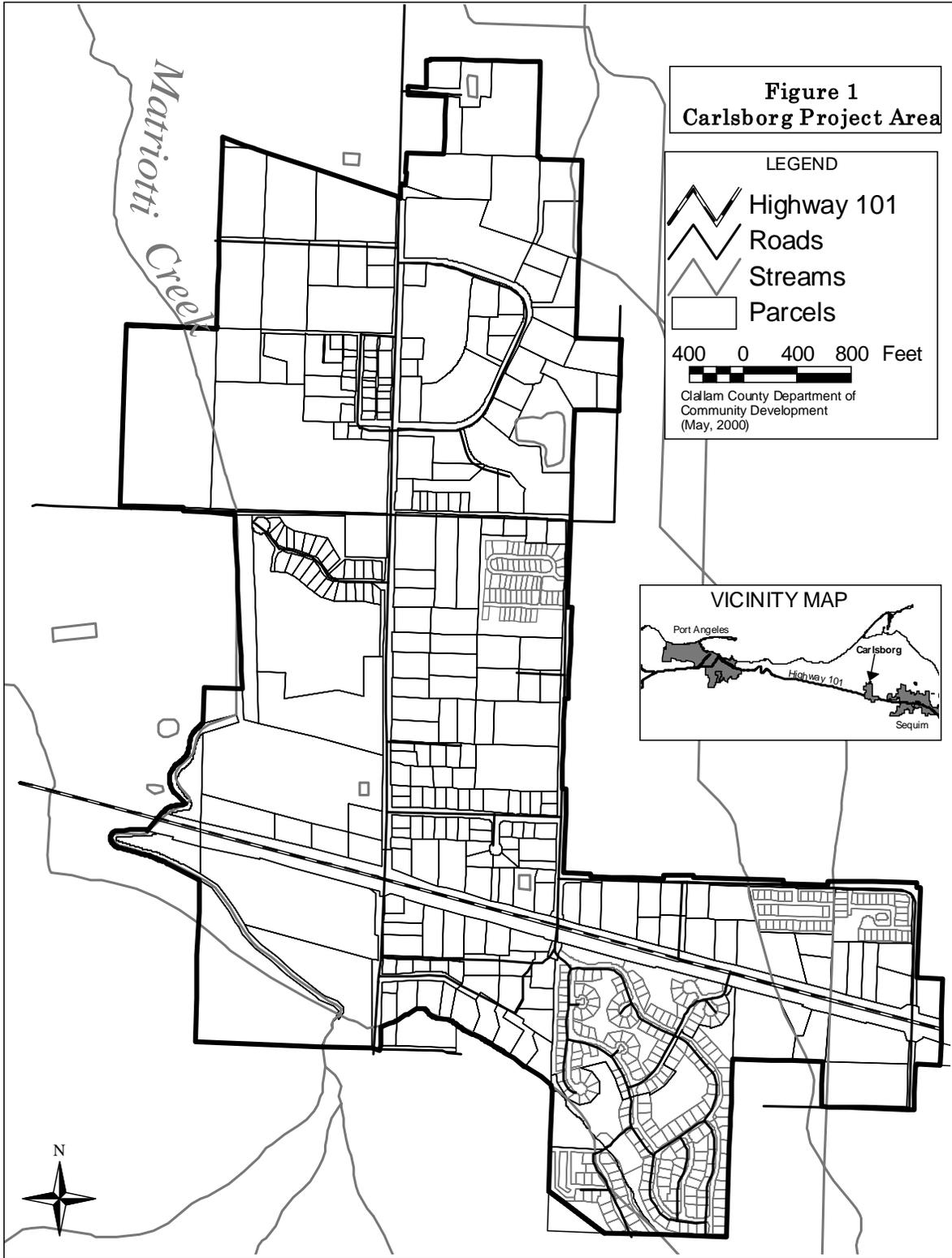
interim ordinances, it is assumed for the purposes of this analysis that land use regulations would revert to those adopted in December, 1995, or regulations that pre-dated that adoption. A more detailed description of the three alternatives is provided later in this document.

The area under study includes approximately 560 acres along the State Route 101 corridor immediately west of the Dungeness River bridge, as shown in Figure 1. This unincorporated area includes a mix of commercial activities associated with the highway corridor and the historic center, existing residential (single-family dwellings and mobile home parks) and industrial developments (Carlsborg Industrial Park and Idea Development). The Carlsborg planning area of Clallam County contains development densities and land uses which are beginning now, and will continue into the future, to challenge the efficiencies of existing infrastructure and services.

Historically, the Community of Carlsborg has served as an economic and cultural center. Lumber industries, agricultural industries, and associated businesses thrived amongst residences in what could be described as a rural village atmosphere. A public school and post office also added to services available in the community. By 1920, the town was inhabited by approximately 300 people, clearly identifying it as a commercial and cultural center for the greater Sequim-Dungeness area.

Development continued later on in the century. In 1968, the Port of Port Angeles acquired the area north of E. Runnion Road, and East of Carlsborg Road, and developed the site as an industrial park to attract businesses to the area. Since that time substantial development has occurred within the park. Also during the same time period, high-density mobile home parks (i.e. Parkwood, Green Acres, Carlsborg Mobile Home Park), as well as other subdivision developments increased residential densities throughout the area. The development of Costco in 1994, the Greywolf Elementary School, and other commercial developments before and after have contributed to the existing character of the community. The designation of Carlsborg as an UGA has a strong relationship to, and is consistent with this history and will ensure protection of these long-standing values of the community into the future consistent with the requirements of the GMA.

Clallam County adopted a Comprehensive Plan in June, 1995. The plan identified land use designations for the Carlsborg area as including residential densities of one home per one-half acre and continued commercial and industrial development. The City of Sequim filed a petition with the Western Growth Hearings Board, requesting that the Board determine whether densities greater than one home per acre and regional commercial development outside an urban growth area was consistent with the GMA. The City and County agreed to mediate the dispute and concluded the mediation with a mutually acceptable Memorandum of Understanding (MOU), that was adopted by the City and County on May 2, 1996. The MOU set forth standards for interim controls which included zoning designations that reduced residential densities to one home per acre and reduced the size and intensity of commercial uses. The interim controls were to remain in effect until permanent land use controls could be developed that demonstrated compliance with the MOU, or until an alternative was adopted that would comply with the GMA. The current effort to revisit capital facility and comprehensive planning efforts in the Carlsborg area is in response to this history and citizen concerns regarding long-standing property rights and quality of life issues.



The 1995 Comprehensive Plan, its elements, and subsequent regulations and projects have been reviewed in phases in compliance with the SEPA. A Final Environmental Impact Statement (FEIS) was adopted in June, 1995 for the County-wide Comprehensive Plan. This Draft Supplemental Environmental Impact Statement (SDEIS) on the Carlsborg CFP and associated Comprehensive Plan and Zoning Code amendments are part of that phased review. This is intended to supplement the previous analysis and therefore will focus on those areas of concern that were not a part of the previous FEIS. The environmental analysis provided in the SDEIS assesses the possible significant adverse environmental impacts associated with the implementation of this planning effort.

## **DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES**

The action under consideration is the adoption of a Carlsborg CFP, Comprehensive Plan amendment and Zoning amendment in order to implement an Urban Growth Area (UGA) for the Carlsborg planning area. This is the preferred alternative under consideration. However, WAC 197-11-430 requires that environmental analysis include not only the preferred alternative, but other alternatives including a “no action” alternative. The purpose of this requirement is to ensure that reasonable alternatives to the proposal are considered by the decision makers in relation to probable significant environmental impacts associated with the proposal so that mitigation of identified impacts may be achieved. This SEPA document will analyze the three land use alternatives described below, and the CFP, Comprehensive Plan amendment and Zoning amendment proposed under the preferred UGA Alternative.

- Alternative 1 – Urban Growth Area (UGA) Alternative
- Alternative 2 – Rural Activity Center/“Status Quo” Alternative
- Alternative 3 – No Action Alternative

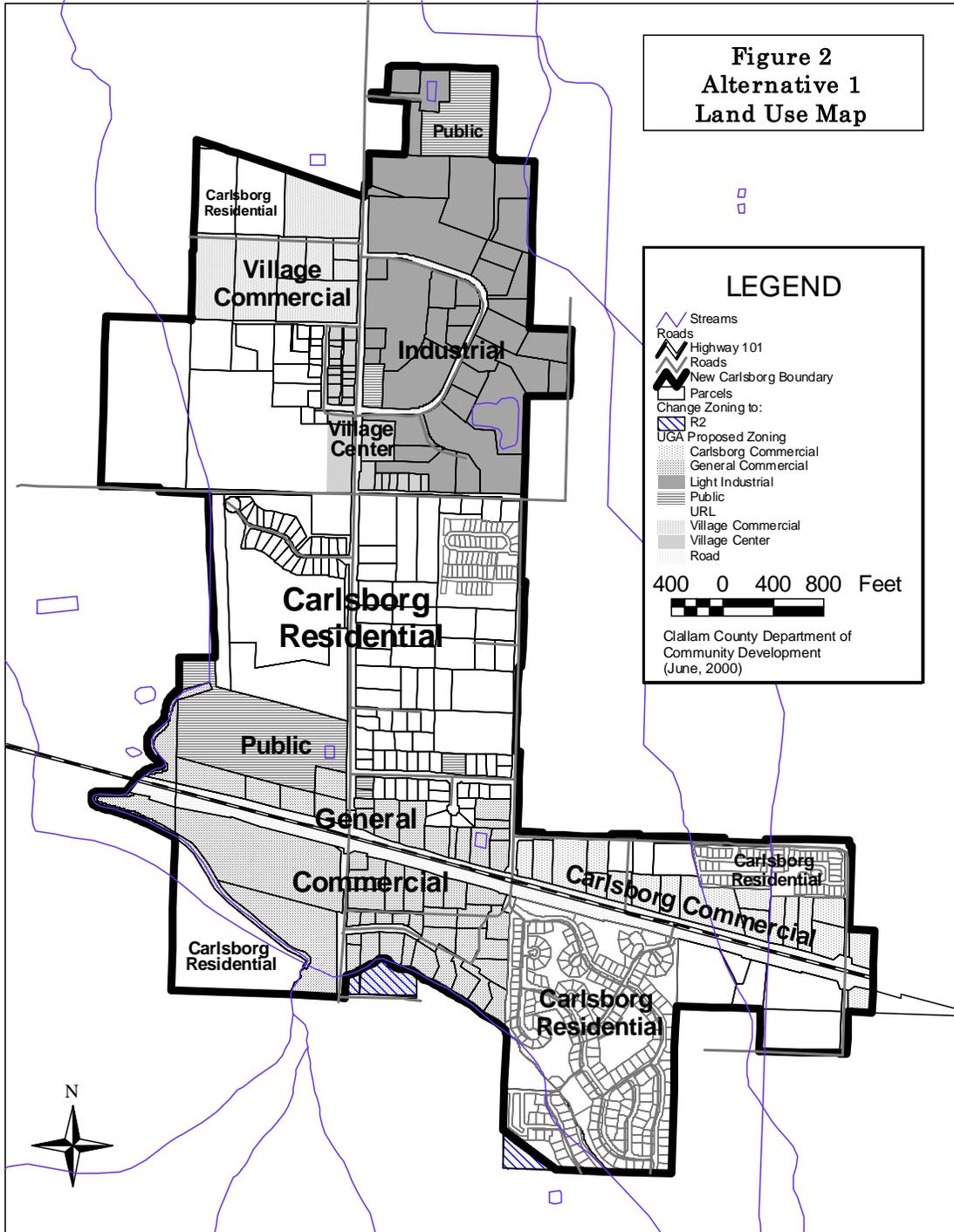
### **ALTERNATIVE 1 – URBAN GROWTH AREA (UGA), THE PREFERRED ALTERNATIVE**

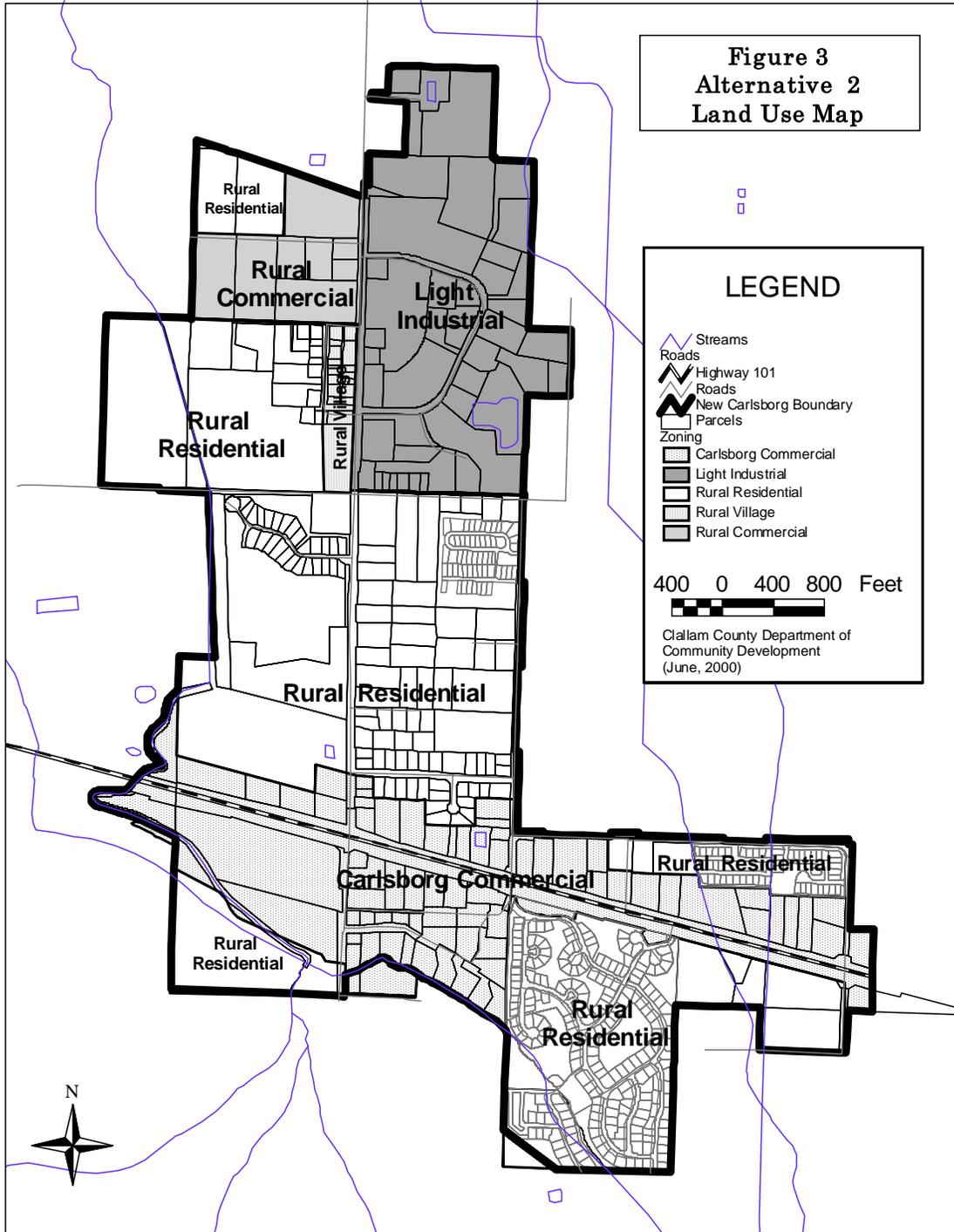
The proposed action is the formal adoption of a CFP and Comprehensive Plan amendment for the Carlsborg UGA, and implementation of the goals and policies of the CFP and Comprehensive Plan amendment through adoption of UGA zoning regulations. The goal of the proposed action is to use Alternative 1 as the overall blueprint for directing growth, while ensuring adequate services and utilities for existing and future residents and businesses.

Proposed land use controls for the UGA Alternative (Figure 2) are generally similar to the land use designations and standards outlined in the Sequim-Dungeness Regional Plan (SDRP) adopted in June 1995, and the implementing zoning districts and standards listed in the Clallam County Zoning Code adopted in December, 1996. The main differences are: 1) the Carlsborg area would be designated an Urban Growth Area rather than a Rural Center, 2) limited commercial designations are included, and 3) potential densities and land uses have a higher requirement for maintaining consistency with environmental

health regulations for on-site sewage disposal and potable water, and consistency with the GMA.

The proposed CFP allows for the continued use of on-site sewage disposal systems, provided enhanced denitrification technology is utilized. Approximately 95% of the





soils in the Carlsborg area are classified as Type 1 soils with highly permeable characteristics. The State Health Code requires a minimum parcel size of ½ acre in conjunction with use of on-site sewage disposal methods on Type 1 soils. Therefore, all proposed land use designations under Alternative 1 would have a minimum parcel size of ½ acre (21,780 square feet). The analysis provided in Chapter 4 and Appendix B of the proposed CFP, clearly indicates that use of denitrification systems and prescribed land use density is essential to ensure no further degradation occurs to the area groundwater. Therefore, consideration of higher land use densities can only occur if a centralized approach to waste water treatment is implemented. This would be necessary to ensure compliance with the State's Antidegradation Policy (WAC 173-200-050(3)(b)(ii)).

The proposed boundary for Alternative 1 adds approximately 30 acres to the Rural Center boundary originally adopted under the 1995 Sequim-Dungeness Regional Plan. It is based on the current boundary of the Carlsborg Rural Center adopted under the interim land use controls (Ordinance 595, 1996) with a few minor exceptions.

For UGA's, the Growth Management Act (GMA) requires the preparation of comprehensive plans that account for the effects of growth and development over the short term (six years), as well as the long term (20 years). An UGA must identify and plan for existing and future residents' needs for public services, economic stability, land use, and other factors. A strategy must be developed so that the cost to maintain a desirable level of service for urban infrastructure is shared equitably among residents and commercial/industrial property owners.

The Capital Facilities Element defines such a strategy and guides the development of all subsequent Comprehensive Plan Elements. Its goals, policies, and mapped land use designations are used in subsequent elements to determine and plan for the effects of growth.

The State has recognized that increased population and business activity unavoidably lead to increased demand for services and infrastructure improvements. The GMA requires cities and counties to plan for this growth. This document examines how Alternative 1 may effect the environment in the course of accommodating the pressures and demands of projected growth, and provides mitigation measures for avoiding or minimizing such impacts.

## **ALTERNATIVE 2 – RURAL ACTIVITY CENTER OR “STATUS QUO” ALTERNATIVE**

This growth alternative (Figure 3) designates Carlsborg as a Rural Activity Center (RAC) consistent with the spirit and intent of the Memorandum of Understanding (MOU) adopted jointly by the Board of County Commissioners and the City of Sequim in May, 1996. Land use controls for Alternative 2 are identical to those adopted under the interim land use controls under Ordinance 595, 1996 (see Figure 3). A significant difference between Alternative 1 and Alternative 2 is that the residential zoning district will permit a density no greater than one unit per acre. Another difference is that on-site sewage disposal systems will continue to be the primary form of sewage disposal under this Alternative; however, enhanced denitrification technology will not be required. Capital facilities needed

to accommodate future growth and development under Alternative 2 will rely upon the planning strategies set forth in the County-wide CFP and Comprehensive Plan.

While it is the intent of Alternative 2 to maintain the status quo for the Carlsborg area established under interim controls, some modifications may be necessary to ensure compliance with current state law. Currently, the GMA requires lands to be designated as Urban or Rural, with little flexibility in between. Land uses and densities permitted must either conform to a “rural character” or be placed within an “urban growth area” where public infrastructure is located and/or can be provided to allow urban level development. Engrossed Senate Bill 6094, which amended the GMA in 1997, does provide an avenue by which rural areas of more intensive development can justify land use densities and permitted uses that allow for “infill” development of the area. However, there are specific requirements for meeting the criteria of this regulatory provision. In the context of the Carlsborg planning area, the boundary of the Rural Activity Center may be required to be modified to more closely match the more intensive development that existed in 1990. Additionally, legislation may require that commercial uses be curtailed to serve the local community only as opposed to goods and services of a more regional nature (see ESB 6094).

While this Alternative is being considered for the purposes of this analysis, it was not selected as a viable land use management option in the proposed plans and regulations primarily because, if the above modifications were determined necessary, it would fail to recognize lawfully established developments that have occurred since 1990 (i.e. Costco and Greywolf School), and would fail to address existing infrastructure needs that are unique to the Carlsborg area. While it is believed that Alternative 2 could be crafted in a way that meets the criteria and intent of the GMA, it fails to provide a solution for future development consistent with the historic and cultural background of the area, nor the vision of the community for the future. It is, however, provided as a tool pursuant to WAC 197-11-440 (EIS Contents), for comparison analysis and development of land use policies with the least environmental impact feasible.

### **ALTERNATIVE 3 – NO ACTION ALTERNATIVE**

This alternative assumes that interim land use controls and zoning designations adopted pursuant to the MOU in 1996, will be allowed to expire. While the legal implications of such an event are not completely understood, for the purposes of this analysis, it is assumed that such expiration would invalidate the interim land use controls in effect. Without specific guidance under existing interim ordinances, it is assumed for the purposes of this analysis that land use regulations would revert to those adopted in December, 1995, or regulations that pre-dated that adoption. Given the currently unconcluded challenge by the City of Sequim over the County’s 1995 adopted zoning policies and subsequent arbitration agreements (MOU), it is arguable whether a challenge to such policies could be defended. This may result in land use regulations reverting to those that pre-dated the 1995 adopted standards and designations.

The zoning designations in effect prior to the 1995 Comprehensive Plan included Urban Residential 1 (UR1), Urban Residential 2 (UR2), and General Commercial (C1), among others. These zones allowed minimum parcel sizes for single and multi-family developments of ½ acre to 9,000 square feet. The C1 zone allowed for all types of commercial retail and wholesale developments. The uses and densities permitted under

these zoning designations were clearly urban in nature. Absent the necessary capital facilities planning and more appropriate designation as an urban growth area, the “No-Action” Alternative does not provide a management strategy that is consistent with the GMA. Therefore, no further analysis or consideration is warranted.

## **OTHER ALTERNATIVES CONSIDERED**

Alternative 1 designates Carlsborg an UGA, and would establish land use densities up to two units per acre (residential, commercial or industrial). As an UGA, higher densities were originally considered that might provide greater compatibility with the GMA for urban development. However, as stated earlier, increased densities would require use of a centralized sewer system to address sewage disposal needs in order to ensure adequate ground water protection and consistency with the State’s Antidegradation Policy (WAC 173-200-050(3)(b)(ii)). The feasibility of providing a centralized sewer for the Carlsborg planning area was explored in the 1994 Carlsborg Comprehensive Sewer Study (Parametrix, Inc., December, 1994), and later in the 1998 Draft Capital Facilities Plan (KCM, Inc., September, 1998). Under the latter analysis, cost estimates of a central sewer system demonstrated that such a facility would be profoundly cost-prohibitive. Therefore, such an option has been removed from consideration and alternatives for higher land use densities in Carlsborg are not included in the scope of alternatives.

## **ALTERNATIVES COMPARISON**

Areas designated for residential, commercial, and industrial uses generally follow the same boundaries under both Alternatives 1 and 2. The primary difference between these growth alternatives are the Comprehensive Plan land use designations and implementing land use controls (zoning) for residential lands and for commercial areas adjacent to Highway 101.

Residential lands are designated as Carlsborg Urban Residential (CR) under Alternative 1 and as Rural (R1) under Alternative 2. For residential uses, the primary difference between CR and R1 is the maximum allowable residential density. The maximum residential density is one dwelling unit per 21,780 square feet for the CR designation under Alternative 1. In comparison, the maximum residential density for R1 lands is one dwelling unit per acre. It is important to note that the URL zoning district, the zoning designation originally intended for the Carlsborg area under the 1995 Comprehensive Plan, has a minimum parcel size of 21,500 square feet (C.C.C. 33.13.020). However, in order to meet the State Health Code standard described above, the CR zoning district was developed to provide a low-density, urban residential district that implements the minimum parcel size standard of 21,780 square feet for the Carlsborg planning area.

Commercial lands located adjacent to Highway 101 west of the Mill Road Intersection are designated as General Commercial (GC), with that portion east of Mill Road and north of Highway 101 being designated Carlsborg Commercial (CC) under Alternative 1. Alternative 2 designates this entire area as Carlsborg Commercial (CC). The primary differences between the GC and the CC designations are the maximum allowable height, maximum size (square footage) of area of new commercial structures, and types of commercial uses allowed. Generally, the CC designation allows for small-scale, low impact types of commercial uses while the GC zone is designed for larger, more intensive commercial uses intended to provide region-wide goods and services. Under Alternative 2,

the CC designation may be further modified to ensure only those uses that provide goods and services to the local community.

The proposed CFP under Alternative 1 establishes limits on generation of sewage effluent and water usage for all developments based on lot size. Specifically, new commercial developments locating anywhere in Carlsborg will not be able to generate more than 450 gallons of effluent per ½ acre parcel (or equivalent), nor use more than 900 gallons of water per day per the same unit of area. While the GC zone may allow for more intensive uses such as restaurants or motels, such uses may require additional acreage to stay within required septic and potable water standards.

Of a more specific nature, the land use designation map for Alternative 2 shows two parcels abutting the Parkwood Mobile Home Community and Highway 101 as Carlsborg Commercial (Figure 3). Under Alternative 1, these parcels are designated as Carlsborg Residential (Figure 2). The purpose of considering this land use change relates to the priority to maintain Highway 101 for efficient regional mobility of goods and services. Additional commercial access points to Highway 101 are not consistent with this priority, and justifies changing the commercial designation of these parcels. However, being that the properties do have access to Parkwood's internal road network, such access concern could be eliminated. Therefore, if the policy choice is made to maintain the commercial designation for these parcels, it can be considered by the Board without an expectation of significant environmental impacts as long as size/scale limits are clearly outlined for these parcels.

Land use designations for the commercial area abutting, and in the area of Highway 101 are consistently proposed under Alternative 2 as Carlsborg Commercial (CC). However, designations proposed under Alternative 1 differentiate that portion lying easterly of Mill Road from that lying westerly of Mill Road. The purpose of this difference again is to reduce traffic and associated safety impacts to the Highway 101 corridor from uncontrolled access. Specifically, the area generally existing between Carlsborg and Mill Roads is designated as Carlsborg General Commercial (CGC). That area lying northerly of Highway 101 and easterly of Mill Road is designated as Carlsborg Commercial (CC). While the uses listed as permitted, conditional and prohibited (C.C.C. 33.20.040) are similar, the significant difference between the two designations is the scale and intensity of uses allowed. Building sizes in the CC district are limited to 5,000 square feet in area and 25 feet in height. The CGC district allows up to 20,000 square feet of building area and a maximum building height of 50 feet. Restaurants in the CC district are limited to no larger than 3,000 square feet in area with no such limit in the CGC district. Grocery stores in the CC district are limited to no larger than 10,000 square feet and those in the CGC district is allowed up to 20,000 square feet. It is important to note that while these differences are proposed, all development is subject to minimum lot size and environmental health standards. While the CGC district may have a greater potential for larger-scale developments, such developments may also require proportionately larger properties to meet all applicable standards.

## **IMPLEMENTATION AND ZONING**

***Alternative 1 Zoning:*** Adoption of Alternative 1 would be concurrent with zoning amendments to the Clallam County Zoning Code, CCC Title 33. Entitled Chapter 33.20,

Carlsborg Urban Growth Area, this amendment would provide zoning standards which facilitate the goals and policies of the amended Comprehensive Plan under the UGA designation. Chapter 33.20 provides for, and describes the purposes of, six (6) zoning districts (CCC 33.20.030) within the Carlsborg UGA. In general, these districts provide for a range of land uses from moderate-density residential development to low-impact commercial and industrial activities.

Bulk and Dimensional standards (CCC. 33.20.050) provide for minimum lot sizes in all zoning districts as 0.5 acres. Maximum building sizes for residential uses are established at 6,500 square feet, and from 5,000 to 20,000 square feet in commercial and industrial zones.

Other Development Standards under Alternative 1, found in CCC.33.20.060, include guidance for concerns such as sewage disposal, water supply, landscaping, services, and other considerations which ensure the protection of public health, safety and general welfare. Of significant note, these zoning requirements include mandatory utilization of enhanced denitrification sewage treatment on all new on-site systems and for all replacement or repair of existing systems (CCC 33.20.060 (1)(a)). New development would similarly be required to connect to an approved public supply as provided by CCC. 33.20.060 (1)(b).

***Alternative 2 Zoning:*** In essence, land use regulations under Alternative 2 would be the same as that provided by the Clallam County Zoning Code, CCC Title 33 as adopted under the current interim land use controls (Ordinance 623, 1997). Zoning controls under Alternative 2 would provide for a range of land uses from the suburban/rural densities of the Rural (R1) zone (CCC 33.10.040) to low-impact industrial and commercial activities of the Light Industrial (LI) (CCC 33.17.020) and Carlsborg Commercial (CC) (CCC 33.15.015) zones. The over-all purpose of this Alternative would be to achieve infill of existing development patterns in the Carlsborg area consistent with current development standards.

Alternative 2 differs significantly from Alternative 1 in providing for a minimum lot size of 1 acre, thus allowing lower-density development. Alternative 2 also does not require the more stringent development standards and infrastructure requirements as provided by Alternative 1. Specifically, sewage disposal and water supply standards do not require new development to incorporate denitrification technology nor to connect to approved public water systems.

In addition to development standards provided by the individual zoning districts (Chapters 33.10, 33.15, and 33.17), standards for Alternative 2 would include all applicable standards such as landscaping, lighting, etc. further defined in CCC Title 33.

Table 1 below compares the purposes of the zoning districts under Alternatives 1, 2 and 3.

Table 1. Zoning Districts Purposes

Alternative 1	Alternative 2
<p>Urban Residential (CR):</p> <p>To provide for areas of single and multi-family residential development generally free from encroachment of commercial and industrial activities.</p>	<p>Rural (R1):</p> <p>To provide areas having a suburban/rural density setting free from commercial and industrial developments.</p>
<p>Carlsborg Village Commercial (CV):</p> <p>To provide for limited, low impact, commercial activities that generally require larger developable lots and not depend on location directly accessible and visible from State Highway 101.</p>	<p>Rural Commercial (RC):</p> <p>To provide limited, low impact, neighborhood commercial activities in rural areas.</p>
<p>Carlsborg Village Center (CN):</p> <p>To provide for a limited area of moderate-density residential development and low impact, neighborhood commercial activities within the historic town center of Carlsborg.</p>	<p>Rural Village (RV):</p> <p>To provide a variety of low-intensity, tourist related, commercial and residential activities, and the Village Commercial area of the Carlsborg neighborhood.</p>
<p>Carlsborg General Commercial (CGC):</p> <p>To provide for a wide range of moderate-scale commercial activities that provide for neighborhood, regional, and tourist-related goods and services for both residents and the traveling public.</p>	<p>Commercial (GC):</p> <p>To allow a wide range of commercial goods and services to the entire region.</p>
<p>Carlsborg Industrial (CI):</p> <p>To allow for low nuisance, low intensity industrial uses. Residential development and certain types of commercial development (e.g., retail stores, lodging, grocery stores) are prohibited in order to retain the limited amount of land available for industrial</p>	<p>Light Industrial (LI):</p> <p>To allow for certain low nuisance, low intensity industrial uses within urban growth areas.</p>

development.

Carlsborg Commercial (CC):

Carlsborg Commercial (CC):

To provide for a limited area of moderate-density residential development and low impact, neighborhood commercial activities.

To provide limited, low impact, neighborhood commercial activities within the Carlsborg Rural Center.

Table 2 below summarizes the major differences between zoning regulations for Alternatives 1, and 2. Additional standards (e.g. allowed, conditioned and prohibited uses, bulk and dimensional standards) may differ to varying degrees. Refer to Clallam County Zoning Code, Title 33 for further information and development standards.

Table 2. Major Zoning Districts Differences

Alternative 1	Alternative 2
CR, CV, CN, CGC, CI, and CC zones	R1, RC, RV, LI, and CC zones
0.5 acre minimum lot size	1.0 acre minimum lot size
Denitrification required for new development or repair of existing sewage systems	No enhanced sewage treatment required for new development or repair
New development required to connect to approved public water supply	New development water requirements subject to existing applicable regulation

## **AFFECTED ENVIRONMENT, SIGNIFICANT IMPACTS AND MITIGATION MEASURES**

### **EARTH**

The U.S. Department of Agriculture's Soil Survey of Clallam County (February, 1987), identifies three general soil types that are present in the Carlsborg planning area: Carlsborg Gravelly Sandy Loam, Carlsborg Dungeness Complex, and Puget Silt Loam.

Carlsborg series soils are deep, somewhat excessively drained soils that are formed in alluvium. These soils occupy a substantial majority of the Carlsborg area. The profile consists of very gravelly sandy loam, extremely gravelly loamy sand, and extremely cobbly loamy sand overlying deposits of extremely gravelly sand. The permeability of these soils is rapid, and the available moisture holding capacity is low. This soil is considered to have

severe limitations for use of on-site sewage systems because of inherent inability to retain and treat contaminants, including nitrates (Soil Conservation Service, 1987).

Dungeness series soils are very deep, well drained soils that are formed in alluvium. They occupy some of the southeastern portions of the Carlsborg area where, because they are intricately intermingled with Carlsborg soils, they are mapped together as a "complex" consisting of roughly 50 percent Carlsborg soils (described above), 30 percent Dungeness soils, and 20 percent miscellaneous soils. The profile of Dungeness soils tends to be highly stratified, consisting of silt loam, very fine sandy loam, and silty clay loam overlying deposits of fine and medium sand. Permeability of Dungeness soils is moderate and the available moisture holding capacity is high. The Natural Resource Conservation Service (formerly Soil Conservation Service) considers Dungeness series soils to offer few limitations in general to the use of on-site sewage systems. However, with regard specifically to nitrate, while the relatively high degree of stratification and finer texture suggest that Dungeness soils provide a greater level of nitrogen removal than Carlsborg soils, there remains a potential for nitrate from on-site sewage systems to contaminate ground water underlying conventional on-site sewage systems for reasons outlined in subsection 3.1 of Appendix B of the Carlsborg CFP.

Puget series soils are very deep, poorly drained soils formed in alluvium and occupying low terraces and flood plains. They occupy some of the western portions of the Carlsborg area. In profile, these soils consist primarily of silty clay loam to a depth of more than 60 inches. Permeability is moderately slow and available water capacity is high. A winter water table is present in the soil between 48 and 60 inches below ground surface, and the soil is subject to occasional flooding. Puget soils pose severe limitations to the operation of on-site sewage systems use because of slow permeability and wetness. However, because of their slow permeability, they represent a relatively low risk of nitrate contamination to underlying ground water.

There are significant impacts that result from and occur to area soils as a result of urban level development. Erosion of vulnerable soils not only compacts the topsoil layer and the flora that depends upon it, but sedimentation of nearby streams, wetlands and other water resources is an associated impact as well. Additionally, ground water resources can be impacted by the effects of development on particular soil types. In the case of the Carlsborg planning area, sedimentation of Matriotti Creek and area wetlands is a significant concern. Increased nitrate contributions to the area aquifer due to excessively drained soils is also a problem that needs to be addressed. However, these impacts will be addressed in later sections of this document.

Impacts associated with erosion and landslide potential were considered for the project area. The Carlsborg area is flat with little to no notable topographic variation. Landslide hazard areas do not exist in the project area and, therefore do not constitute a significant issue.

Under Alternative 1, impervious surfaces are likely to increase beyond that of Alternative 2 and 3 as urban density residential development and commercial development include additional roof tops, driveways, new streets and sidewalks. However, the soils in the planning area are predominantly well-draining and well suited to provide adequate infiltration for runoff from roads, driveways and other types of impervious surfaces.

Adherence to the County's minimum standards for road sections and utility locations will adequately handle roadway runoff including that generated by most off-site sources. Pre-treatment of runoff from areas with potential sources of contaminants is required under C.C.C. 27.12, Critical Areas Code. These standards, described in detail in Appendix C of the CFP, require that stormwater conveyances be designed to handle at a minimum, either the 25-year frequency, 30-minute duration design storm, or 2-year, 24-hour storm (equivalent). The standards cited herein indicate that there will be no significant adverse environmental impact resulting from Alternative 1 to area soils. No additional mitigation is necessary.

## **AIR**

The Final Environmental Impact Statement (FEIS) for the County-wide Comprehensive Plan adequately addresses the issues of this section. No further analysis or mitigation is necessary.

## **WATER**

The Growth Management Act requires counties planning under the Act to designate critical or environmentally sensitive areas and develop regulations aimed at their protection. When developing the land use plan for the Carlsborg area, the County evaluated possible carrying capacity and critical area protection issues when establishing maximum densities for each neighborhood. Critical areas identified within the Carlsborg area include wetlands, fish and wildlife habitat, high aquifer recharge areas, and floodprone areas.

The County developed goals and policies for the protection of environmentally sensitive areas as part of its comprehensive planning process. In a further action to implement these goals and policies, Clallam County adopted the Critical Areas Ordinance (CAO) in December, 1999. The CAO sets forth protection standards and requirements that provide protection of identified environmentally sensitive areas that meet or exceed current best management practices (BMP's). Specific protection standards of the CAO that apply to the issues of this section include, but are not limited to the following:

- C.C.C. 27.12.215 – Wetlands;
- C.C.C. 27.12.315 – Stream Environments;
- C.C.C. 27.12.515 – Frequently Flooded Areas;
- C.C.C. 27.12.615 – Aquifer Recharge Areas.

## **Discussion**

**Wetlands:** Wetlands are an important and valuable natural resource, and their protection is a matter of public interest. In addition to local protection standards of the CAO, Section 404 of the Clean Water Act of 1977 gives the U.S. Army Corps of Engineers (Corps) responsibility and authority to regulate the discharge of dredged or fill materials into waters of the United States including wetlands. Washington State Governor's Executive

Orders 89-10 and 90-04, "Protection of Wetlands" (1989 and 1990) have declared no net loss of wetland acreage and functions in Washington state.

The Carlsborg UGA is located in a flat, low-lying area near the northern edge of the Olympic Peninsula. Dominant land uses include agriculture (pasture and cropland), residential and commercial development, and open space. Wetlands identified in and adjacent to the Carlsborg UGA are of the Riparian and Palustrine classes.

The County's geographic information system (GIS) data base identified six wetlands within and abutting the southern half of the planning area. Three of these wetlands, primarily occurring within and near Green Acres Mobile Home Park and Parkwood Mobile Home Park, were determined to be previously existing agricultural ponds, and not regulated by the CAO. Of the three regulated wetlands known within and abutting the project area, one is part of a larger wetland system that is associated with Matriotti Creek on the north side of Highway 101, lying west of Greywolf School. The other two are also associated with Matriotti Creek, but are not directly associated with other wetland complexes in the area. Portions of the wetland existing near the intersection of Hooker and Atterberry Roads are forested, giving this environment a high habitat value (Figure 4).

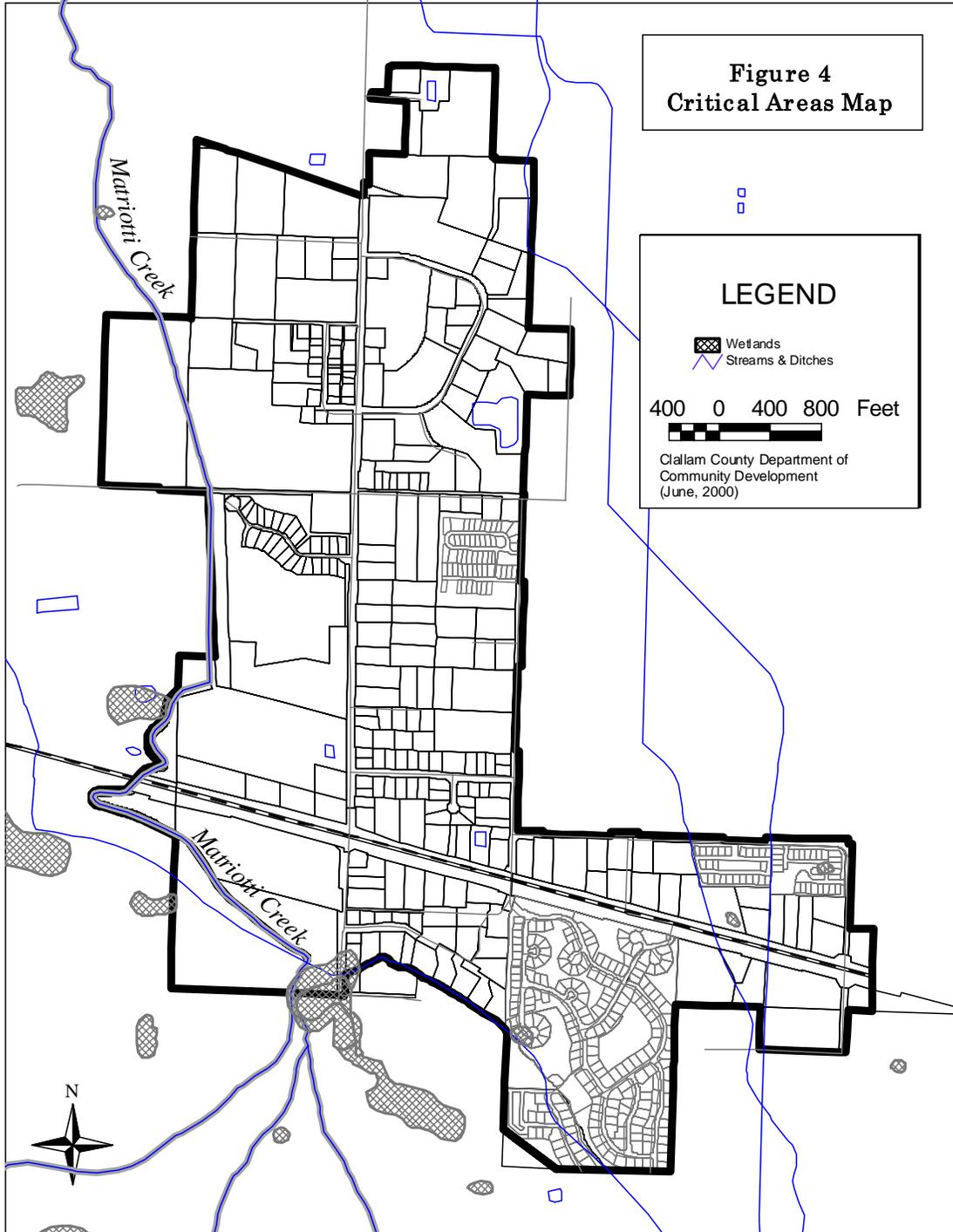
***Aquifers:*** The entire Carlsborg planning area is located within an aquifer recharge area and is underlain by several aquifers and confining beds. There are two principle concerns regarding the aquifers as development increases in Carlsborg. The first is that of water quality, and nitrate contamination in particular. Documented in the Carlsborg planning area since the early 1980s, nitrates can cause disorders in humans and also provide an indicator of the presence or potential presence of other contaminants, such as some organic pollutants and pesticides.

Appendix B of the CFP describes that the results of sampling projects conducted by Clallam County in the mid-1990s that tended to indicate the highest nitrate levels are generally associated with wells installed in areas occupied by the highly permeable Carlsborg soils (although this correlation is not absolute). Additionally, although the shallowest wells tend to be the most profoundly affected, all the wells tested along Carlsborg Road, regardless of depth, demonstrated elevated nitrate concentrations. The nitrate contamination was attributed to a combination of dairy and beef cattle as well as on-site sewage systems. Another source of nitrate contamination may also exist in the form of fertilizers.

The second concern for the Carlsborg area aquifers is for the quantity of available water as development places increasing demands on groundwater resources. According to the 1999 Hydrogeologic Assessment of the Sequim-Dungeness Area (Water Resources Investigation Report 99-4048, USGS, 1999), the area contains 3 known underlying aquifers and two associated confining beds (p. 28).

There is a close relationship between the ground water of the Carlsborg planning area, the Dungeness River, adjacent aquifers, and the extensive irrigation system of the surrounding Sequim-Dungeness Valley (p.111, USGS, 1999)). Studies have defined groundwater flows in the Carlsborg planning area, describing these flows as generally to the north, roughly paralleling the Dungeness River (Figs. 24 & 25, USGS, 1999). However, due to variability of aquifers and confining beds, some lateral flows tending both to the east and west are

possible. Additionally, there is vertical flow (mostly downward in the Carlsborg area) between the shallow and middle aquifers of the area.



Some up-ward flow occurs between the lower and middle aquifer as well. These flows account for the majority of the recharge of the middle aquifer (p.82, USGS, 1999), although, at this time, not enough data is available to quantify this movement (p.48 and 112, USGS, 1999). The confining layers separating the three aquifers is mostly comprised of fine-grained, unconsolidated deposits. Permeability of these layers are slow. The recharge of the middle aquifer is moderated by this slow percolation and makes the level of this aquifer less susceptible to the seasonal fluctuations that occur in the upper aquifer. Less is known about the lower aquifer, but similar processes are likely at work.

Thus, the underlying aquifers of Carlsborg are tied directly to hydrogeologic units within and outside the planning area. Activities within Carlsborg boundaries affect surrounding aquifers and vice versa.

The upper aquifer in the Carlsborg planning area is recharged by infiltration and percolation of precipitation, percolation of unconsumed irrigation water and septic return flows, leakage from irrigation ditches, streams and the Dungeness River, and subsurface flows from adjacent aquifers. Aquifer discharges include subsurface flow to the Strait of Juan de Fuca, springflow, flow to the Dungeness River, flow to Matriotti Creek and other streams, and net withdrawal by wells (p. 48-54 and Fig. 42-p.90, USGS, 1999).

Currently, about 81% of the water supplying the Carlsborg area comes from the upper aquifer, with about 13% coming from the middle aquifer and about 6% coming from the lower aquifer (p. 29, USGS, 1999). Clallam County PUD has indicated that if it provides a public water system to the Carlsborg area, it will likely do so by drilling into the middle aquifer. Figure 21 (p. 45, USGS, 1999) indicates the thickness of the middle aquifer in Carlsborg to be from 0 to 50 feet, (Figure 17c, p.33, USGS, 1999), suggests the possibility that the middle aquifer may be absent or near the lower end of this range as the planning area lies near the southern boundary of the middle aquifer extent. In this case, the PUD may find it desirable to drill to the lower aquifer.

Between 1978 and 1997, water levels in the shallow aquifer have remained fairly stable, with fluctuations occurring in conjunction with seasonal recharge variations (i.e. rainfall, irrigation, stream flows, etc.). Where recharge is provided mainly by irrigation, shallow aquifer levels have declined. Throughout the Sequim-Dungeness area, middle aquifer levels during this period have remained stable (USGS, 1999).

***Aquatic Habitat:*** Matriotti Creek, in the western portion of the Carlsborg planning area, is designated as a Class III stream (Joal Freudenthal, Clallam County Habitat Specialist, 1997). Spawning by Coho salmon has been documented in the lower reaches of Matriotti Creek. Specific use within the project vicinity is not known. However, recent habitat enhancement efforts in the area between Highway 101 and Runnion Road has resulted in increased use of the stream by both freshwater and anadromous fish (Joal Freudenthal, Clallam County habitat Specialist, 1997). There are no other identified aquatic habitats occurring in the project area.

***Flood Hazard Areas:*** Matriotti Creek, which is a tributary to the Dungeness River runs adjacent to and crosses the western border of the Carlsborg planning area. This creek has

the potential to flood in conjunction with flooding on the Dungeness River. However, this flood potential is remote. The Flood Insurance Rate Map published by the Federal Emergency Management Agency (Community Panel Number 50021-0510-D, December 5, 1989), designates the creek channel and a small portion abutting the creek of approximately 25-feet in width as a 500-year flood zone. Floods reaching this extent occur on an average of once every 500 years. The substantially low likelihood of significant flooding occurring in the project area makes this issue non-significant for the purposes of this analysis.

### **Significant Impacts**

Potential loss of wetland habitat or impact to fish habitat in Matriotti Creek could occur under any of the three land use Alternatives. Potential impacts would result from increased impervious surface area and stormwater runoff into wetlands and Matriotti Creek. Sedimentation from exposed soils during construction could also adversely impact these sensitive areas. Such impacts could destroy wetland and fish habitat, values and functions. Development in designated wetland habitat would proportionally reduce the area's ability to support wildlife.

Matriotti Creek is currently listed under Section 303(d) of the Clean Water Act as an impaired water body from fecal coliform pollution. The State Department of Ecology has an on-going study that monitors the total maximum daily load of contaminant levels in the Creek. Data collected as a result of this effort indicates contamination levels in violation of the Clean Water Act is occurring to the Creek from sources within the Carlsborg planning area, as well as upstream and downstream of the area. Irrigation ditches also exist throughout the project site. Many of these ditches empty into Matriotti Creek, making the Creek even more susceptible to contamination from upland sources.

Related to this issue, Dungeness Bay receives waters from Matriotti Creek and its tributaries. A portion of the Bay has recently been closed to commercial and recreational shellfish harvest due to fecal coliform bacteria contamination. This closure has a regional impact on the economic use of the resource, recreational benefits and the biodiversity and habitat it provides. Increased development in the Carlsborg area has the potential to increase contamination levels in Matriotti Creek and Dungeness Bay if appropriate mitigation is not implemented.

Continued reliance on on-site septic systems, regardless of the alternatives, could potentially adversely impact the Carlsborg aquifer recharge area (as discussed in Appendix B of the CFP), insofar as contributions from these systems add nitrates to groundwater in the area. The exact magnitude of this threat is not known. However, any additional nitrate contributions to the elevated levels already present in the Carlsborg area could be detrimental. Additionally, increased development is likely to lead to an increase in impervious surfaces, which may contribute increasing amounts of pollutants from such sources as vehicles and industrial activities.

Currently, as indicated by only slight declines in water well levels in the Carlsborg area between 1978 and 1997, this groundwater system is relatively stable. However, increased groundwater demand resulting from future development may impact this stability. Additional withdrawal from the system could necessitate a balancing by:

- 1) A decrease in discharge to adjacent aquifers, the Dungeness River, Matriotti Creek and other streams, the Strait of Juan de Fuca, and affected springs;
- 2) A loss of storage in the system (reflected by lower water levels);
- 3) An increase in recharge; or
- 4) A combination of these factors.

Increased development under all three land use Alternatives may result in decreased recharge as impervious surfaces increase run-off and decrease natural infiltration. Decreased irrigation from reduced farmland also will diminish recharge potential. Therefore, each Alternative could be accompanied by diminished storage and lower water levels. Such impacts could result in some very shallow wells in the area going dry.

Decreased storage in the underlying aquifers could have an impact on systems outside of the study. There is a strong correlation between storage levels in area aquifers and discharge into springs, area streams (including Matriotti Creek), the Dungeness River, and the Strait of Juan de Fuca. Area fish populations, including threatened salmonid species, are particularly sensitive to instream flows – particularly during low rainfall periods. Discharge from groundwater sources is a crucial component of maintaining healthy stream and river flows and temperatures during low precipitation months.

The proposed CFP indicates that the public water system (or equivalent), will require an increased capacity of 427 gpm in order to meet the peak day demands of the twenty year planning period. Withdrawals necessary to meet this demand will have an impact on the water available for natural discharge.

### **Mitigating Measures**

Protection of Matriotti Creek and other surface water resources is made more complex by the existence of irrigation ditches that traverse the planning area. Many of these ditches drain into Matriotti Creek. The Clallam County Critical Areas Ordinance, Chapter 27.12, C.C.C., does not regulate man-made irrigation ditches. Without regulatory protection in place, these surface water sources can be exposed to uncontrolled contamination sources and transport such contaminants to Matriotti Creek, Dungeness Bay and other surface water resources. This potential will increase as additional development and associated impervious surfaces occurs throughout the project area.

Clallam County is making efforts to develop a stormwater management program and implementing regulations that will address the issue of stormwater quantity and quality control. However, it is impossible to predict when such regulations will be completed and implemented. In the interim, it is therefore essential that mitigation be provided under Alternative 1 that mitigates potential impacts to surface water resources from new development, and to the degree practicable, addresses impacts that are already occurring.

Because of identified present and potential impacts to Matriotti Creek and other surface water resources, and the absence of a stormwater management plan, proposed development regulations for the Carlsborg planning area should incorporate or otherwise

require compliance with the standards of the Department of Ecology's 1992 Stormwater Management Manual. This provision would address stormwater impacts resulting from new development. In order to control the proliferation of impervious surfaces, standards should also be considered that limit the amount of lot coverage for new development. Other BMPs may include, but are not limited to: diversion of surface water runoff from exposed, erodible soils; use of retention ponds to remove suspended sediment from runoff; mulching and seeding exposed soils; and scheduling work for dryer months. Proper design of retention ponds would also help to maintain water quality after project completion. Future mitigation could include adoption of a County-wide stormwater management plan and associated development standards, implementation of the Department of Ecology's water quality management recommendations to be developed following completion of the Total Maximum Daily Load Study, and a Carlsborg area master stormwater management plan that provides for community detention ponds and other stormwater infrastructure designed to accommodate not only future development, but existing development as well.

The O&M program proposed under Chapter 4 of the Draft CFP, includes a strong public education element for effective management of on-site sewage disposal systems. This mechanism should also be utilized to educate land owners of the harmful impacts of lawn fertilizers, pesticides and other harmful household chemicals on surface and ground water resources. While regulatory control of residential landscape practices is virtually impossible, proper education and public assistance can not only achieve environmental protection for the majority of area residents and business owners, but will also elevate community conscience regarding these resources. In turn, community awareness will assist the county and other interested agencies in recognizing violations and gaining compliance. Because the O&M program calls for an effective monitoring program for existing and new septic systems, failed systems will be discovered with greater efficiency thereby protecting surface and ground water resources from significant contamination from this source.

Another mechanism for providing interim and/or permanent stormwater protection is the proposed Zoning Code amendment. Standards could be implemented that require all new commercial and industrial uses to incorporate water quality treatment, stormwater infiltration, and emergency containment strategies. Standards could be developed that are consistent with the Department of Ecology's 1992 Stormwater Manual as it applies to the unique circumstances of the Carlsborg Planning area. In particular, standards should provide for protection of water quality of Matriotti Creek, irrigation ditches, and ground water. While recent stream enhancements to Matriotti Creek have resulted in increased use of the stream by anadromous fish, failing to provide appropriate site design for new development could undermine this progress.

Clallam County's Critical Areas Ordinance contains protection standards to regulate development in or adjacent to critical areas. Implementation of the County's ordinance will help to ensure no significant impact to sensitive areas (including floodprone areas). This will also provide a comprehensive and internally consistent means for regulating development and land use activities that have the potential to degrade or impact sensitive areas.

Nitrate contamination of local groundwater by on-site septic facilities in the Carlsborg area would be curtailed with the required use of enhanced on-site sewage disposal systems. The

CFP has established a standard that all new and replacement systems shall reduce nitrates from system discharge by more than fifty (50%) percent. The CFP also proposes an operation and maintenance program to ensure compliance with this standard. This requirement is also proposed to be implemented as a performance standard in Title 33, Zoning Code. Incentive programs, such as a revolving fund or similar finance subsidy, for retrofitting existing residential systems may also be considered.

Maintaining natural discharge levels from ground water sources is an essential component to fish habitat, including threatened stocks of salmonids. Under Alternatives 2 and 3, growth would continue as presently allowed with minor differences affecting land use. Water demands would generally be the same, with the majority of that water (approximately 81%) coming from the upper aquifer through continued use of individual and small (six connections or less) community wells.

Under Alternative 1, the PUD will be the likely central water purveyor for the planning area. The PUD has indicated that use of the middle aquifer is preferable to use of the upper aquifer, and would drill any new wells accordingly. Such infrastructure would mitigate any significant impacts due to water withdrawal. Ground water in the middle aquifer moves at an estimated rate of approximately 1 foot per day, while ground water in the upper aquifer moves at an estimated rate of 8 feet per day (p. 51, USGS, 1999). Because of the vastly larger extent and depth of the upper aquifer, as well as its rate of flow compared to the middle and lower aquifer, the vast majority of ground water discharge to area streams and the Dungeness River is attributed to this upper system. By providing a central water system to the Carlsborg Area, all new growth, and new connections by existing development will ensure current aquifer levels and associated discharge are not disturbed or otherwise impacted.

### **Unavoidable Adverse Impacts**

As the development capacity of the Carlsborg area is reached, the increased number of people living in the area and using the land may result in an increased potential to impact sensitive areas.

Implementation of the County's Critical Areas Ordinance will help to ensure no unavoidable adverse impact to sensitive areas occurs. No other unavoidable impacts have been identified.

### **PLANTS AND ANIMALS**

**Wildlife Habitat:** The isolation of the Olympic Peninsula has created an environment where numerous unique plant species either developed in isolation from other species, or survived on the Peninsula when other segments of the plant population were exterminated. Many of the unique plant species of the Peninsula occur in wetlands. The dry, coastal areas east of Port Angeles also support many species (some rare) of drought-tolerant plants that are uncommon in western Washington such as prickly-pear cactus, Rocky Mountain Juniper, and lodgepole pine (Clallam County, 1995). Emergent marsh and forested or scrub-shrub swamps comprise the wetland communities.

The EIS conducted for the Washington State Department of Transportation's Highway 101 Bypass project (1993) indicated that several federally-endangered or state sensitive species may be found in the general vicinity of the study area. The U.S. Fish and Wildlife Service (USFWS) indicated that wintering bald eagles may occur in the region from October 31 to March 31, and that two bald eagle nesting territories are located near, but not in the study area. Migrating peregrine falcons are also known to frequent the general area during spring and fall, though not in Carlsborg UGA/RC proper.

Washington Department of Fish & Wildlife records indicate two state sensitive species, the osprey and the Oregon vesper sparrow breed within the general study area vicinity. These species have no federal designations.

The natural areas within the Carlsborg planning area are characterized by undeveloped open space. No priority animal habitat or migration corridors are known to exist within the planning area (Joal Freudenthal, Clallam County Habitat Specialist, 1997).

***Fish Habitat:*** Clallam County provides a great variety of freshwater and marine environments. Anadromous fish utilize fresh and saltwater areas and include all five species of Pacific salmon (chinook, coho, chum, sockeye, and pink); steelhead (ocean-going rainbow trout), sea-run cutthroat trout, and sea-run dolly varden. Specific life histories vary with each species, but basically the patterns are similar. Eggs are hatched in freshwater streams, and each species spends some time in freshwater before migrating to saltwater. A period of feeding, growth, and development occurs in the marine environment before fish return to the freshwater environment where they fight their way up county rivers to spawn. Native residents, freshwater fish include brook, cutthroat, and rainbow trout, whitefish, and the Beardslee trout (known only to exist in Lake Crescent) (Clallam County, 1995).

Matriotti Creek, in the southwest portion of the Carlsborg UGA/RC, is designated as a Class III stream (Joal Freudenthal, Clallam County Habitat Specialist, 1997). Spawning by Coho salmon has been documented in the lower reaches of Matriotti Creek; however, use within the project vicinity is not known. Recent habitat enhancement efforts in the area between Highway 101 and Runnion Road has resulted in increased use of the stream by both freshwater and anadromous fish (Joal Freudenthal, Clallam County Habitat Specialist, 1997).

No known priority animal habitat or migration corridors are known to exist within the planning area. Therefore, no impact to threatened or endangered plant or animal species is anticipated.

## **ENERGY AND NATURAL RESOURCES**

The analysis provided under the FEIS for the County-wide Comprehensive Plan adequately addresses the issues of this section (Page 15). No further analysis or mitigation is necessary.

## **ENVIRONMENTAL HEALTH**

Environmental health hazards may result from development under all three land use alternatives. Continued use of on-site sewage disposal systems has the potential to contribute nitrates and other organic and chemical pollutants to the area ground water. Industrial development on the Carlsborg Industrial Park will continue under all three alternatives as well. The potential for exposure to chemicals resulting from continued industrial developments in the park could pose risks.

The issues relating to possible nitrate contamination of the area aquifer has been addressed above under the “Water” section. C.C.C. 27.12.615 (CAO), requires specific protection measures to prevent potentially harmful substances from being discharged into the ground. Special drainage designs that include oil separation and emergency containment are required. In industrial development, as with all commercial developments proposing structures larger than 4,000 square feet, the processing of an environmental checklist in conjunction with the underlying construction permit is also required (WAC 197-11-315). This affords a case-by-case review of each substantial development proposal. Specific mitigation can be developed during this process under authority of WAC 197-11-660 (Substantive Authority), to ensure BMP’s and other mitigation are made a condition of permit approval. Given this mitigation, no further discussion is necessary under this section.

## **LAND AND SHORELINE USE**

Washington State Growth Management Act (GMA): The Revised Code of Washington (RCW 36.70A.070) requires that a comprehensive plan under the GMA address land use, housing, capital facilities, utilities, and transportation. The following sections of the Clallam County Comprehensive Plan set forth policies that apply to the Carlsborg area concerning land use and capital facility planning:

- C.C.C. 31.01.200 – Growth Management Act Goals;
- C.C.C. 31.02.820 – Capital Facilities Plan Goals;
- C.C.C. 31.02.230 – Urban Growth Area Designation Policies;
- C.C.C. 31.02.240 – Urban Growth Area Implementation Policies;
- C.C.C. 31.03.340 – Carlsborg Neighborhood;
- C.C.C. 31.03.350 – Carlsborg Urban Growth Area (Proposed).

The Clallam County Zoning Code was amendment in December, 1996, in order to implement the policies contained in the Comprehensive Plan. The purpose of the Zoning Code is presented under C.C.C. 33.01.020 (PURPOSE). Specifically, Item 2 of this section reads: “*Direct the future growth and development of the County, consistent with the Clallam County Comprehensive Plan*”. This statement requires that zoning regulations be consistent with the goals and policies of the Comprehensive Plan. Specific performance

standards of the zoning code, as they relate to individual zoning districts, are found under Sections 33.07.010 to 33.17.010, C.C.C.

Because Alternative 1 proposes changes in the Comprehensive Plan and Zoning Code specific to the needs of the Carlsborg area, the Zoning Code and Comprehensive Plan will have to be amended in order to reflect such changes. Land uses proposed under Alternative 2 utilize zoning districts and development standards that already exist within the Zoning Code. Alternative 3 not only utilizes districts and standards that currently exist in the Zoning Code, but would retain those zoning districts that are currently established for the Planning Area.

The designation of Carlsborg as an UGA is consistent with the Comprehensive Plan as it is currently adopted. Section 31.02.230(2), suggests that the County “...*should designate as urban growth areas those unincorporated areas already characterized by urban growth and not in proximity to existing cities, provided that such areas meet the principles established for UGAs and that appropriate service providers are identified to provide specified urban governmental services.*” The proposed CFP designates those service providers necessary to provide urban level services to the specific needs of the Carlsborg planning area. In this respect, the CFP provides mitigation of all service and capital facility needs for Alternative 1 over the next twenty years. Deficiencies that result under Alternatives 2 and 3 would have to be addressed under the existing Capital Facilities Plan, Comprehensive Plan goals and policies, and the current Zoning Code. Costs of such services and facilities would have to be borne by the County as a whole.

Proposed zoning designations under Alternative 1 are shown in Figure 2. Zoning that would be considered under Alternative 2 is shown in Figure 3. Existing interim zoning that would become permanent under Alternative 3 is shown in Figure 5. Impacts relating to these alternatives have been identified in other sections of this analysis.

The Comprehensive Plan designates the City of Sequim as the primary commercial and service center for the Sequim-Dungeness region (C.C.C. 31.03.310(13)). This policy requires that commercial development be concentrated in the core of the City and not allowed to sprawl into rural areas or cause congestion to Highway 101 or other arterials of regional significance. Adoption of the Alternative 1 would be consistent with this policy. The proposed CFP sets forth specific controls on new or expanding commercial developments that relate to the limitations regarding use of on-site sewage disposal systems. Specifically, only those developments that generate less than 450 gallons of sewage waste per ½ acre parcel per day (or equivalent), will be permitted. Certain commercial land uses will not be permitted or are significantly curtailed within the proposed zoning amendment due to their size and/or scope. Infrastructure costs estimated by the CFP will be equitably borne on development. These limitations, while created out of the necessity to provide needed infrastructure and maintain compatibility with the natural constraints of the Carlsborg planning area, will result in increases in the cost of development under Alternative 1. It is anticipated that the costs associated with new development under Alternative 1 will be compatible with the costs associated with new development occurring in the City of Sequim and unincorporated UGA. Therefore, adoption of Alternative 1 will again demonstrate consistency with the Comprehensive Plan for Clallam County.

## **HOUSING**

The existing land uses as designated by the interim land use controls are shown on the zoning map in Figure 5. Residential dwelling units are concentrated in the areas designated R1—Rural. These areas are limited to residential development at a density no greater than 1 dwelling unit per acre. There are fewer than 50 residential units scattered within other zoning designations. Further residential development in industrial and commercially-zoned areas is restricted under the three land use alternatives.

In order to develop an understanding of what the future holds for Carlsborg in terms of residential development, a land capacity analysis was performed (Appendix A). Growth was projected under the preferred alternative (Alternative 1). Under Alternatives 2 and 3, the current interim Residential (R1) zoning classification would remain relatively unchanged in place for the 20-year planning period. The analysis provided for under Appendix A clearly demonstrates that sufficient area exists in Carlsborg to accommodate the twenty-year growth projection under Alternative 1.

The designation of a UGA proposed under Alternative 1 may concentrate residential areas where homeowners and renters would be in close proximity. This would enable more efficient response to those areas and planning strategies could be better tailored to address their special needs. Aside from inevitable growth-related impacts on housing, there are no significant unavoidable adverse impacts associated with the proposed action.

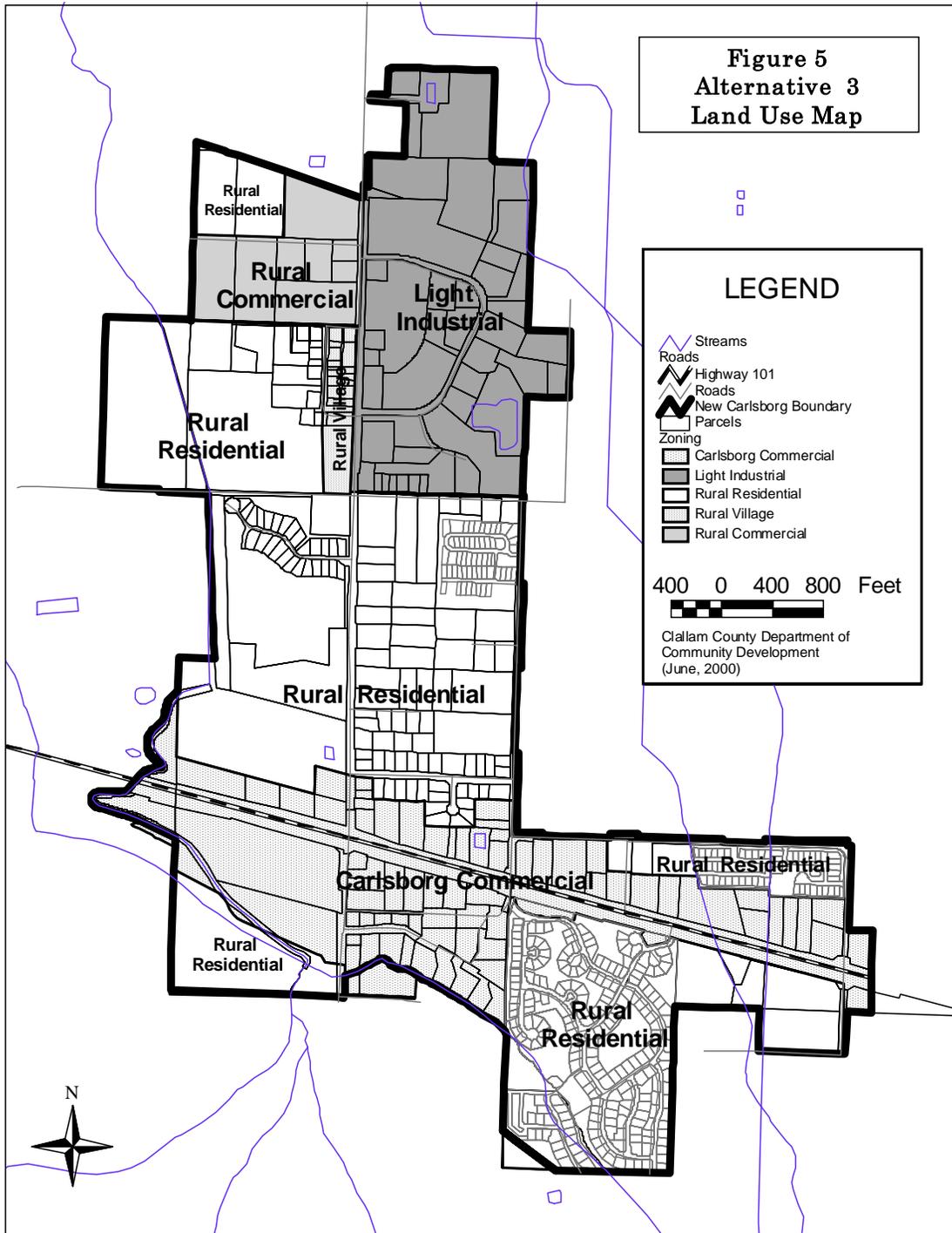
## **AESTHETICS**

As a stated objective, it is the intent of the Carlsborg planning effort to develop long-term plans that guide future development consistent with the character and historic development patterns of the Carlsborg area. By developing densities and other land use management strategies that provide for this objective, the aesthetic character of the community will be protected from significant impacts resulting from inappropriate developments.

However, aesthetic impacts on a smaller scale could still occur from development under the Preferred Alternative. While the boundaries of proposed commercial and industrial zoning designations are the same, or similar to that under the existing interim rules, many commercial and industrial sites have not yet been developed. Several of these districts exist adjacent to or in close proximity to existing urban-level residential developments. Conflicts between these two uses have occurred in the past. Whether they continue into the future or not depends largely on consideration of appropriate mitigation at the planning level.

Currently, the Clallam County Zoning Code (C.C.C. 33.53), requires a landscape plan for all new or expanding commercial or industrial development locating anywhere in Clallam County. Commercial developments that are found not to be exempt from the requirements of the State Environmental Policy Act (SEPA) offer the County additional authority to condition developments so that light and glare, noise, dust and fumes, and other nuisance impacts associated with commercial and industrial developments are addressed and mitigated. However, absent clear County policy on such issues, effective mitigation of all potential aesthetic impacts cannot be assured beyond normal landscape requirements.

While developments standards designed to address aesthetic impacts are a matter of public policy to be decided by the Board of County Commissioners, this analysis does showcase a deficiency in existing standards that should be addressed. Additional standards for commercial or industrial developments abutting a residential zone may include: requirement of berms or other proven noise-abatement improvements, increased buffer widths and vegetative screening, specific lighting standards that ensure against off-site glare, hours of operation to reduce nuisance conflicts, exterior coloring and design standards that prevent visually offensive or intrusive developments, and air quality standards that ensure against noxious odors or dust.



## **LIGHT AND GLARE**

The analysis provided under the FEIS for the County-wide Comprehensive Plan adequately addresses the issues of this section (Page 84). No further analysis or mitigation is necessary.

## **RECREATION**

(see discussion under “Utilities and Public Services” below)

## **HISTORIC AND CULTURAL PRESERVATION**

The analysis provided under the FEIS for the County-wide Comprehensive Plan adequately addresses the issues of this section (Page 26). No further analysis or mitigation is necessary.

## **TRANSPORTATION**

Carlsborg is a small urbanizing area in Clallam County. It serves a larger surrounding rural area and is served, in turn, by the larger, more established urban centers of Sequim and Port Angeles.

The major east-west access through Carlsborg is Highway 101, which bisects the area and connects Sequim and Port Angeles. The primary north-south access is via Hooker and Carlsborg Roads, which meet at Highway 101 at the only signaled intersection within Carlsborg. Between the intersections of Highway 101 with Taylor-Cutoff and Hooker Roads, Highway 101 is accessed via Mill Road, local access roads My Way, Parkwood Blvd, and Frederick Drive. Several private driveways also access the Highway in this general area.

The roadway system in the planning area is made up of county roads and private roads in addition to Highway 101. In the Clallam County Comprehensive Plan and the SDRP, minimum width standards are established for County roads. These are based on the average daily traffic (ADT) measured for each road. The County roads within or near the project area are listed in Table 3. Existing widths and ADTs that are available from the SDRP are also included in this table. Roads that do not meet width standards are considered deficient and should be improved.

TABLE 3 CARLSBORG AREA COUNTY ROAD INVENTORY			
Roadway Name	ADT	Roadway Width (feet)	Meets Width Standards
Bennett Place	100	26	Yes
Carlsborg Road	2432 to 3889	34	No
Runnion Road W.	184	20	No
Runnion Road E.	642	20	No
Gilbert Road	237	18	No
Gupster Road	281	18	No
Hooker Rd. (north)	1678	22	No
Mill Road	1049	18	No
Roupe Road	197	18	No
Smithfield Drive	353	24 to 26	Yes
Spath Road	406	18 to 22	No
Streit Road	152	20	No
Taylor Cutoff Road	2047	26	No

The Olympic Discovery Trail is a designated facility for bicycle use in the area. Highway 101 has also been identified as a designated bicycle route. Clallam Transit operates along Highway 101. In order to increase mobility, provide for alternative forms of transportation and expand recreational opportunities in the area, the CFP plans for a non-motorized path that connects the Highway corridor with the Olympic Discovery Trail. The path will be located near and take advantage of the Matriotti Creek Corridor for aesthetic purposes and provide public education opportunities for the benefits of natural aquatic and riparian habitats. To ensure mitigation of potential adverse impacts to the wetland and aquatic habitat(s) in the area, all construction will be subject to the protection standards of the CAO (Chapter 27.12, C.C.C.).

### Significant Impacts

According to the CFP, current facilities within Carlsborg meet the minimum LOS threshold, based on traffic flow. No capital improvements are needed to maintain the minimum LOS standard for public roads during the 20-year planning period.

However, specific transportation policies and standards will need to be addressed in the future. Although the County is not required to provide a 6-year financing plan for these other policies, concurrency may be demonstrated through development conditions (see Clallam County Code 31.02.420(23)) which embody the specific design standards (refer to Table 3) promulgated by the County. Based on minimum width requirements, the following roads have been identified for future improvements:

- Atterberry Road

- Runnion Road
- Hooker Road
- Mill Road
- Roupe Road

The goals and policies in the SDRP identify the following projects in the study area:

- Shoulder widening for bicycle use. Bicycle storage facilities and transit shelters.
- Sidewalks or paths on Highway 101.
- Park and ride lot.
- Transit shelters for the Highway 101 Corridor.
- Hooker Road improvement project.
- Trail for non-motorized users between Sequim and Carlsborg.
- Prohibiting new access onto Highway 101.
- Discourage the proliferation of stoplights on Highway 101.
- Improve circulation in the Carlsborg area.
- Designated bicycle routes along Highway 101.
- Park and ride lot and transit shelters in Carlsborg.
- Minimum LOS of “C” for County roads.
- Frontage roads that direct traffic to Carlsborg and Hooker Roads.

The goals and policies in the Comprehensive Plan identify the following projects in the study area:

- Street trees and pedestrian amenities along Highway 101.
- Landscaping in the Highway 101 corridor.
- Underground utilities in the Highway 101 corridor (in conjunction with other improvements).
- Design standards for County Roads.
- Access standards.

In addition to the above planned improvement projects, the proposed CFP under Alternative 1 also requires the development of frontage access roads for the GC and CC zoning designations abutting Highway 101.

The Port Angeles Area Regional Transportation Planning Organization (RTPO) plan does not show any road segments with LOS below C in this area and no projects are proposed based on LOS deficiencies. Of the projects listed above, only the following is included in the funded portion of the current 6-Year Transportation Improvement Plan.

- Mill Road Smithfield Road to Runnion Road East (milepost (MP) 0.15 to MP 0.57) Widening

Two projects are included in the unfunded portion of the plan. These are:

- East Runnion Road Carlsborg Road to Mill Road (MP 0.89 to MP 1.14) Widening
- Spath Road Kitchen-Dick Lane to Carlsborg Road (MP 0.00 to 1.26) Widening

## **Mitigating Measures**

Future growth and development in this area will cause an increase in the traffic volumes on County roads. The ongoing RTPO planning process will identify regional roadway needs based on increased volumes. Volumes should also be monitored to ensure that the roads listed in Table 3, above, continue to meet the appropriate width standards as the ADT's increase.

It is unlikely that all of the projects listed in the CFP that are needed to correct existing deficiencies will be constructed in the first six years because of the associated costs. A program should be established to continue to construct these projects in a reasonable time period, which should be coordinated with other transportation planning and funding efforts. New roadways and other facilities can be constructed in accordance with the goals and policies of the Comprehensive Plan and SDRP, which will forestall any future deficiencies from occurring.

While some impacts may result from future growth and development under Alternative 1, the issues of these impacts will be mitigated through requirements of the proposed CFP. Requiring commercial access frontage streets, limiting access to highway 101, providing additional bus stops and a park & ride lot, and limiting intensive commercial developments to the previously established commercial areas will mitigate transportation congestion and safety impacts resulting from the proposed action.

In the development and implementation of traffic impact mitigation, two factors need to be considered: Some impacts are of a regional nature and it is therefore not the responsibility of this planning effort to address all roadway improvements within Carlsborg; and mitigation measures themselves should not result in additional adverse impacts that are in conflict with Carlsborg planning objectives. Utilizing frontage streets for commercial areas is one example of mitigation that could lead to adverse impacts. Some preliminary discussions of possible frontage street routes included extension of a frontage street through long-established residential areas. Such improvements could have a highly significant impact on the residential aesthetics and atmosphere of these areas. Because of the potential impacts to residential and non-commercial areas, frontage roads should be planned for and designed to avoid such areas.

The mitigation proposed under Alternative 1 will help to mitigate some of the impacts already being experienced in the project area from non-UGA related growth and development. Taylor Cutoff Road extends several miles to the south, connecting the Carlsborg Area with large acreages of rural residential land. This area has a large

capacity for additional residential development that will rely on connection to Highway 101. Currently, all traffic is forced to utilize the Taylor Cutoff intersection with Highway 101. Current ADT's indicate that this intersection may soon reach thresholds that require a traffic signal be installed. Safety is also a factor at this intersection as entry onto the highway can be difficult given average speeds of west and east-bound motorists. The proposed CFP under Alternative 1 suggests that a traffic study be pursued to address regional transportation needs in this area, including review of various alternatives. However, given that such issues are of a regional nature, no further consideration is required under this analysis.

### **Unavoidable Adverse Impacts**

Increased population and business activity within the Carlsborg area will lead to increased traffic and demand for transportation system improvements. However, this kind of growth is inevitable under all three land use alternatives and the State has mandated specific requirements of UGAs and counties to plan for this growth. The proposed action would have significant unavoidable adverse impacts only if the County fails to properly apply revised land use designations in guiding future growth proposals. Such a situation could lead to a lack of coordination between development and transportation system improvements.

Preliminary discussions concerning Alternative 1 indicated that some support existed for the designation of approximately 16 acres in the southeast portion of the project area as Carlsborg Commercial (CC). This area is generally described as those properties lying east of Parkwood Mobile Home Park, south of Highway 101, and west of Taylor Cutoff Road. Despite routing efforts such as the option described above, commercial development of this area would likely rely on the Taylor Cutoff/Highway 101 intersection for ingress and egress. Frontage streets would merely support this circulation pattern. Given the need to maintain Highway 101 for the efficient mobility of goods, services and the traveling public, adoption of such land use would create unavoidable impacts to the transportation network. Mitigation may be required in the form of a traffic signal at the Taylor Cutoff/Highway 101 intersection, which in turn would result in more congestion and less efficient mobility for the Highway.

### **UTILITIES AND PUBLIC SERVICES**

***On-Site Sewage Disposal Systems:*** The existing planning area is served by on-site septic systems. On-site systems include both individual and community facilities. The CFP provides a technical analysis of existing on-site sewage disposal system conditions and use in the Carlsborg area, as well as the future implications of their continued use. This analysis presents the latest groundwater quality, soils, and other data supplied by the County, along with an assessment of regulatory issues and preliminary alternatives for on-site sewage disposal. The conclusion of this analysis is that for continued use of on-site septic systems, all new and replacement systems must utilize enhanced technology systems that achieve a reduction of effluent nitrates by 50% or better.

Ground water resources are the most affected environmental element resulting from on-site sewage system use. As discussed in Chapter 3 of the CFP and in greater detail under Appendix B, traditionally designed septic systems can be a significant source of nitrate

contribution to the area ground water. The soils in the Carlsborg area are classified as Type 1, which have highly permeable characteristics. Septic discharge is quick to permeate these soils with little to no additional treatment benefit provided by the soil profile. The result is a ground water resource that is highly susceptible to contaminants entered from the surface.

**Potable Water:** Clallam County PUD No. 1 is the major water purveyor in the area and operates several water districts in the County. The PUD completed a Water System Plan for all its water districts in August 1994. There is one water district operating in the Carlsborg UGA (LUD #10). The service area boundary of the Carlsborg Water System and the UGA boundary overlap significantly. However, the UGA extends further north and west than the water service boundary. There are four private water systems in addition to the PUD within the planning area.

**Surface Water:** The existing surface water facilities are minimal. The Clallam County Road Department maintains ditches and culverts in the Carlsborg planning area. Generally the County guidelines call for a maximum increase in drainage flow of 10 percent and in some cases increases in flow are not allowed. County facilities are designed for storm events at the 25 year frequency with a 30 minute duration. Systems utilizing outfalls shall either have the discharge rate equal to a two year storm based on pre-development conditions or shall have staged outfall structures designed to release runoff at the pre-development rates for a series of rainfall events. Infiltration basins in the Carlsborg area are maintained by the County. There are several developer-installed drainage facilities including detention ponds, biofiltration swales, and infiltration basins.

**Solid Waste System:** According to the 1994 Comprehensive Plan, Clallam County owns or manages three solid waste handling facilities, all of which lie outside the Carlsborg area. These facilities and their capacities are shown in Table 5.

TABLE 5. SOLID WASTE FACILITIES		
Facility	Capacity (Tons/Year)	Operational Level (1994)
Blue Mountain Drop Box	4,680	766
Lake Creek Transfer Station	10,600	1,516
Clallam Bay Drop Box	3,120	113
<b>Totals</b>	<b>18,400</b>	<b>2,395</b>

The County's 1994 Comp Plan, uses an LOS threshold of 4.03 pounds per person per day for solid waste facilities. For the six-year growth projection of 904, this amounts to about 1.8 tons per day. For the 20-year population of 1,352, about 2.7 tons per day will be generated by the Carlsborg planning area. Since excess capacity can handle these demands, there is no need for additional facilities to handle current or future solid waste from Carlsborg.

**Parks and Recreation:** Recreational facilities in the Carlsborg planning area include the play fields and playground equipment at the Greywolf Elementary School and the Olympic

Discovery Trail. Clallam County is currently in the process of developing the new 155-acre Robin Hill County Park located approximately 1.5 miles west of Carlsborg. In addition, the CFP provides for the development of a public recreation trail that connects the Highway 101 corridor with the Olympic Discovery Trail. The trail is planned along the Matriotti Creek corridor for the majority of the project area.

**Law Enforcement:** According to Clallam County Sheriff Joe Hawe, the current level of service County-wide is about 0.78 officer per 1,000 population. The International Association of Chiefs of Police recommends a ratio of 2 officers per 1,000 population (Hawe, J., Clallam County Sheriff's Department, April 2000 personal communication). The current law enforcement resources for the east end of the County, which includes Carlsborg, is three patrol cars per shift, each containing one officer. Response times to reported incidents average about 15 to 20 minutes.

The County Sheriff's Department has recently contracted to rent office space at the west end of Sequim, within just a few miles of Carlsborg. This will help maintain the response time in this area, even with projected growth.

**Fire Protection:** Fire protection for the area is provided by Clallam County Fire Protection District Number 3. The main station for District 3 is within the City of Sequim, with another station located at Carlsborg on the northeast corner of Highway 101 and Carlsborg Road.

According to Tom Lowe, the District No. 3 Fire Marshal, the current response time for the Carlsborg area is 3 to 4 minutes. This should be maintainable even with the growth projected Under Alternative 1. One additional aspect in support of this assessment is that the all volunteer station in Carlsborg may be receiving two full-time, independently funded, emergency response staff within the next six years. These additions to the personnel will ensure quick response (and may even initially improve response times) since there will be full-time staff on duty 24 hours per day. In addition to the response service, the CFP requires that new commercial and industrial development in Carlsborg install sprinkler systems as a mandatory part of construction. This will add additional protection to area development.

## **Significant Impacts**

Specific capital facility deficiencies and improvements are identified in the CFP which are needed over the six- and 20-year planning horizons to enable the Carlsborg area to maintain acceptable levels of service for all its public facilities. The deficiencies and improvements required to rectify these deficiencies are translatable into specific facility needs for each of the different types of public infrastructure profiled in the Capital Facilities Plan. The CFP developed for the proposed UGA (Alternative 1) is itself a detailed mitigation plan for avoiding the adverse impacts of growth-associated shortfalls in Carlsborg's capital facilities and services. With the implementation of these improvements, no further mitigation would be required. No significant unavoidable adverse impacts associated with the proposed action have been identified at this time.

## Incorporation by Reference

Several project and non-project documents and studies have been written that have significantly contributed to the growth management process as it applies to the Carlsborg planning area. They provide supporting information pertinent to the environmental analysis of the proposed Carlsborg Urban Growth Area and related legislation. They provide greater depth and understanding of the issues and associated impacts of the proposed action. These documents are hereby incorporated by reference pursuant to WAC 197-11-635, and include the following:

FEIS Clallam County Comprehensive Plan (1995) – Provides in depth analysis of all significant impacts resulting from the Comprehensive Plan of 1995 and implementing Zoning Code of 1996. The analysis includes discussion of significant impacts and mitigation measures. The SEIS being the subject of this analysis is supplemental to the Comprehensive Plan FEIS.

FEIS – Sequim Bypass, SR 101 O'Brien Road to Palo Alto Road (1993) – Provides analysis of the Sequim Bypass project and other facility improvements projects of the Highway 101 corridor in the eastern portion of the County, including the project area. The analysis includes discussion of significant impacts and mitigation measures.

Traffic Impact Study for the Costco Wholesale Outlet (1992) – Provides analysis of impact created through the development of the Costco Wholesale Outlet at the corner of Hooker Road and Highway 101. The study also provides substantial detail on transportation dynamics of the vicinity of the Carlsborg area.

Carlsborg Comprehensive Sewer Study by Parametrix, Inc. (1994) – This document provides a feasibility study for providing the Carlsborg area with a centralized sewage disposal system. While the area considered under this 1994 study is significantly larger than the current project area, it does provide substantial detail on current conditions and needs of the community concerning sanitary sewage disposal.

Water System Plan, P.U.D. #1 of Clallam County (1994) – This document provides the policy guidance for the recognized utility and water service provider in Clallam County. The Plan discusses specific needs and facility planning for a portion of the Carlsborg area (LUD #10).

Hydrogeologic Assessment of the Sequim-Dungeness Area, Clallam County Washington (USGS Report 99-4048, 1999) – This document provides the most detailed, region-wide study of its kind to date. It provides a profile of the aquifer systems of the project area and their relation to other surface and sub-surface aquatic systems. The study provides analysis of system quantity, quality, and areas of vulnerability.

As required under WAC 197-11-635, copies of the above documents and studies are available at the office of the Department of Community Development, 223 East Fourth Street, Port Angeles, WA, 98362, and may be inspected during normal business hours.

## Distribution List

City of Port Angeles  
321 East 5<sup>th</sup> Street  
Port Angeles, WA 98362

City of Sequim  
152 West Cedar Street  
Sequim, WA 98382

Clallam Conservation District  
111 East 3<sup>rd</sup> Street  
Port Angeles, WA 98362

Clallam County PUD Number 1  
2431 Highway 101 East  
Port Angeles, WA 98362

Northland Cable Television  
725 East 1<sup>st</sup> Street  
Port Angeles, WA 98362

Clallam Transit System  
2417 West 19<sup>th</sup>  
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Clallam County Housing Authority  
2603 South Francis Street  
Port Angeles, WA 98362

Sequim School District #323  
503 North Sequim Ave.  
Sequim, WA 98362

Washington Department of Community, Trade, and Economic Development  
P. O. Box 48300  
Olympia, WA 98504-8300

Washington Department of Transportation, District 3  
1707 South C Street  
Port Angeles, WA 98362

Washington Department of Natural Resources  
SEPA Division  
P. O. Box 47015  
Olympia, WA 98504-7015

Washington Department of Fish and Wildlife  
P. O. Box 43155  
Olympia, WA 98504-5711

Olympic Air Pollution Control Authority  
909 Sleater-Kinney Road SE #1  
Lacey, WA 98503

Natural Resources Conservation Service  
206 South Lincoln Street  
Port Angeles, WA 98362

U.S. Fish and Wildlife Services  
1638 Barr Road South  
Sequim, WA 98382

Point No Point Treaty Council  
7999 NE Salish Lane  
Kingston, WA 98346

Ann Seiter, Director of Natural Resources  
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Protect the Peninsula's Future  
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Dungeness Irrigation District  
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Olympia, WA 98504-7600

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Washington Department of Transportation  
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## Response to Public and Agency Comments

### **Jon Gibson Company, Parkwood Mobile Home Community – July 27, 2000**

1. *Possible Frontage Road Through Parkwood Mobile Home Community* – Concern is raised over the potential adverse impact a commercial frontage road would have on the quiet, residential atmosphere of the Parkwood Mobile Home Community if such a road were constructed on the northern portion of the site, abutting Highway 101. The comments highlights concern that such potential impacts were not addressed in the DSEIS. In response to this concern, the FSEIS has been corrected to include analysis of these potential impacts (see FSEIS, Page 31).
2. *Zoning Consistency with Parkwood Development* – Concern is raised over proposed zoning that would result in the density of the Parkwood development as being considered non-conforming with the residential densities of the proposed Carlsborg Residential designation. Concern was also raised over proposed re-zoning of two commercial lots abutting Highway 101 to residential. However, setting residential densities of proposed zoning districts and district locations is a function of County policy to be determined by the Board of County Commissioners. Such concerns will be forwarded to the Planning Commission and the Board of County Commissioners for consideration prior to taking action on the proposed legislation.
3. *Nuisance Impacts Originating from Commercial Development Adjacent to Parkwood*– Concern exists that with future development occurring on commercial-zoned parcels to the west, and potentially to the east of Parkwood, significant impacts to the atmosphere, peace and quiet of the community will occur. Development standards that include visual landscaping, noise abatement and other nuisance mitigation are already contained in the Clallam County Zoning Code, Title 33, C.C.C. However, the effectiveness of these standards may require further consideration by the Board given the unique circumstances of the proposed Urban Growth Area. While development standards are a matter of public policy to be determined by the Board, the concerns raised herein also constitute environmental impacts. In response to this concern, the FSEIS has been corrected to include analysis of these potential impacts (see FSEIS, Page 26).
4. *Traffic Considerations* – Concern exists that transportation policies to ensure efficient mobility of the Highway 101 corridor neglect the safety needs of motorists and other residents of Parkwood. Comments recommended the Intersection of Highway 101 and Mill Road be lighted to increase safety. In response to this concern, it is felt that the transportation element of the Draft Capital Facilities plan (Chapter 10), adequately addresses this issue. The plan provides for a frontage street that connects the existing ingress/egress of Parkwood to Hooker Road and the existing lighted intersection at Highway 101. This alternative provides mitigation of safety concerns while meeting the policy objective of the Board of Commissioners, which is to ensure the preservation of the Highway 101 corridor for safe and efficient mobility.

5. *Costs of Infrastructure Improvements* – Concern is raised over the projected costs of infrastructure improvements and maintenance of establish Levels of Service for such improvements proposed under the proposed Capital Facilities Plan (CFP). Specifically, concern was raised as to how the responsibility of paying for those costs are to be allocated. However, assigning cost allocation is a function of County policy to be determined by the Board of County Commissioners. Such concerns will be forwarded to the Planning Commission and the Board of County Commissioners for consideration prior to taking action on the proposed legislation.
6. *Costs Associated with Installation of Denitrification Systems (septic)* – Concern is raised over the requirement to retro-fit existing on-site septic systems with denitrification systems during all replacement and repairs. The concern cites that nitrate levels in the Parkwood water system continues to be stable and apparently unaffected by nitrates in area ground water, making such a requirement “cost without benefit”. Concern is also raised that the O&M program will constitute an expansion of bureaucracy, favoring instead the use of private, multiple licensed inspectors to contract for the program. In response, the proposed CFP (Chapter 4, and Appendix B), and the DSEIS both provide in-depth analysis of the susceptibility of Carlsborg area groundwater to contamination. While the Parkwood Water System has not shown a decline in water quality, factors such as groundwater movement (gradient) and surrounding land use density could account for this stability. Actual impacts could be experienced down-gradient and not be realized in the Parkwood Water System. Ensuring denitrification of all new or repairs/replacement systems has been shown under the analysis to have a positive environmental benefit. As far as providing for private septic system inspectors, such a mechanism is being considered by the Environmental Health Division and allowed under the proposed CFP. Actual Policy development and finalization will be determined by the Board of County Commissioners.
7. *Mandatory Connection to the PUD Water System for Failed Private Wells* – Concern is raised that requiring an existing private individual or community water system to hook up to the PUD system if significant repairs are required, is strongly objectionable due to costs and inconvenience. In response, it should be clarified that the proposed CFP only requires such connection if and when a well goes dry, or repairs are not feasible. In such circumstances, new wells would have to be installed. Because of the need to maintain the current hydrology of the Carlsborg planning area for existing systems and natural amenities that depend of ground water resources, such a provision is necessary to mitigate other anticipated impacts. Funding or otherwise deferring costs associated with PUD connection is a matter of PUD and/or County policy to be determined by those authorities.

**Phil Olbrechts, on Behalf of the Central Carlsborg Community Coalition (CCCC) – July 31, 2000**

1. *Statement of Objective* – Concern is raised that the proposal objective is not clearly defined in the DSEIS and that the scope of issues is therefore open for any and all legal considerations. In response to this concern, the FSEIS has been corrected to address this issue (see FSEIS, Page 1).

2. *Legal Sufficiency of DSEIS Alternatives* – Concern is raised that the alternatives described in the DSEIS fail to meet the minimum requirements of WAC 197-11-440 (5), citing accuracy issues with the “no-action” alternative, and GMA compliance issues with Alternative 2. In response to these concerns, the FSEIS has been corrected to address these issues (see FSEIS, Pages 1 through 13).
3. *Need for Increased Densities Under the Preferred Alternative* – Concern is raised that by limiting land use densities to no more than two units per acre, the validity of the Preferred UGA Alternative is jeopardized. While the comments provides legal background to illustrate this concern, the Responsible Official does not concur with this conclusion. The entire project area is classified as an aquifer recharge area pursuant to Chapter 27.12, C.C.C. (Critical Areas Ordinance), and as such, justifies utilizing a lower-density development strategy that fits within the natural constraints of the area. Furthermore, density issues are a matter of policy to be determined by the Board of Commissioners. While analysis related to the issue of density has been provided in the proposed CFP, associated Appendices, and the DSEIS, such analysis has been based on densities set forth in the proposed Comprehensive Plan Amendment and Zoning Amendment. Changes to these anticipated densities would not only require a complete analysis under SEPA, but would also necessitate entirely new Draft Comprehensive Plan and Zoning Amendment documents. Such change should only be directed by the Board of County Commissioners as a matter of policy. Therefore, the concerns of this section will be forwarded to the Planning Commission and Board of County Commissioners for review and consideration.
4. *Community Justification, History, and Cultural Preservation* – Concern is raised that the DSEIS does not provide sufficient analysis or background of the historic and cultural values, nor the development patterns that provide the setting and justification for designating Carlsborg an UGA. The Concern is followed by an alternative recommendation that a community advisory council be established for the Carlsborg planning effort. Response to this recommendation would require policy action by the Board of Commissioners. These comments will therefore be forwarded to the Planning Commission and the Board for further review and consideration. In response to concerns regarding historic and background analysis, the FSEIS has been corrected to address these issues (see FSEIS, Page 2).
5. *Traffic Mitigation* – Concern is raised over several traffic-related issues identified in the DSEIS, including; frontage roads disrupting the community of Parkwood, and traffic light considerations at Taylor Cutoff Road and other non-UGA (regional) issues. The issue of a frontage road through Parkwood has been addressed under the responses to Jon Gibson’s comments, above (see item 1). The DSEIS does make reference to those issues that are of a regional nature and exist or will exist regardless of whether Carlsborg is designated a UGA or not. However, in response to the concerns expressed, the FSEIS has been corrected to reflect this issue (see FSEIS, Page 31).
6. *Miscellaneous Comments* – (A) Concern is raised over the characterization of commercial development in the area of Highway 101 as “strip development”, citing that such language is offensive. While it is questionable whether the se of such language accurately depicts existing development, the term is nevertheless subjective. In response, the FSEIS has bee corrected to reflect this concern. (B) Concern exists over

language that limits commercial development to the existing “commercial core”, expressing that such limitation is not consistent with an UGA designation. The Responsible Official does not concur with this conclusion in the context of Carlsborg. Land capacity analysis shows there is sufficient commercial land available to accommodate development over the next twenty years without expanding the proposed districts. Such expansion could result in sprawl, which is also a primary objective of the GMA to control. Furthermore, land use designations are a matter of policy to be determined by the Board of Commissioners. Such concerns will be forwarded to the Planning Commission and the Board for further consideration prior to action. (C) Concern is raised over quotations of the County Habitat Specialist, Joal Freudenthal, throughout the DSEIS. A request for clarification of the context of such quotes and qualifications of Mr. Freudenthal should be provided. In response to this concern, the FSEIS has been corrected to address this issue. (D) Concern is raised over wording on Page 18 of the DSEIS that appears to require denitrification for all septic systems in Carlsborg. This is not part of the policies proposed under the Preferred Alternative, and the FSEIS has been corrected to address this issue (See FSEIS, Pages 2, 18 through 23).

**Mark D. Smith - July 31, 2000**

Only comment was to demonstrate support for the above stated comments provided by Phil Olbrechts, July 31, 2000. No response is necessary.

**Lisa Donaldson - July 31, 2000**

Only comment was to demonstrate support for the above stated comments provided by Phil Olbrechts, July 31, 2000. No response is necessary.

**Ann E. Seiter, Jamestown S’Klallam Tribe – July 31, 2000**

1. *ESA Species and Water Quality* – Concern is raised that the potential impacts to Matriotti Creek and associated ESA-listed species are not adequately addressed. Further more, adequate consideration of the many irrigation ditches that run through the planning area, many of which empty into Matriotti Creek and the Dungeness River, has not been addressed. In response to these concerns, the FSEIS has been corrected to address these issues (see FSEIS, Pages 18 & 19).
2. *Shellfish Harvest Closure* – Concern is raised that increased fecal caliform bacteria from urban-level development introduced into Matriotti Creek could increase impacts to shellfish areas located in Dungeness Bay. The comments expressed concern that the DSEIS did not adequately address this potential impact. In response to this concern, the FSEIS has been corrected to reflect this issue (see FSEIS, Pages 18, 19 & 20).

**Ann Soule, 3890 Lost Mountain Road – July 31, 2000**

1. *Traffic Signal at the Highway 101/Taylor Cutoff Road Intersection* – Concern is raised that a traffic signal at this intersection would add congestion to Highway 101 and thwart efforts to reduce congestion as with the Sequim Bypass. However, the letter makes suggestions as alternatives to a traffic signal. Such suggestions are a matter of policy under the jurisdiction of the Department of Transportation. It is also important to note that this traffic circumstance currently exists without the creation of the

proposed UGA and is therefore a regional issue and not the sole responsibility of the Carlsborg planning effort to correct. Nevertheless, mitigation in the form of controlled access, frontage streets and appropriate land use designations proposed under the draft plans have addressed impacts to the transportation network that could result from a UGA designation.

**Ann Soule, Natural Resources Division, Clallam County – July 31, 2000**

1. *Clarifications and Corrections* – The comments received included technical suggestions to provide factual accuracy and clarity to the text of the DSEIS. In response to these suggestions, the FSEIS has been corrected accordingly (see FSEIS, Pages 15, 18 & 19).
2. *Residential Use of Fertilizers, Pesticides and Other Chemicals* – Concern is raised that mitigation does not include contamination from residential use of fertilizers, pesticides and other chemicals used outdoors. The comments suggested education of landowners and the public about this threat. More specifically, concern was raised over the lack of impact analysis regarding increased impervious surfaces and its association to aquifer recharge and groundwater contamination. In response to these concerns, the FSEIS has been corrected to reflect these issues (see FSEIS, Pages 19 & 20).

**Nancy McKay, Chair, Puget Sound Water Quality Action Team – July 31, 2000**

1. *Surface Water Quality* – Concern is raised that the listing of Matriotti Creek under Section 303(d) of the Clean Water Act as an impaired water body from fecal coliform pollution should require further analysis of the effects continued use of on-site septic systems will have on surface water resources. The comments also expressed concern about down-stream impacts to shellfish beds in Dungeness Bay. These concerns are consistent with those raised by Ann Seider, Jamestown S’Klallam Tribe (see above), and have been addressed in the FSEIS (see FSEIS, pages 2, 19 & 20).
2. *Stormwater* – Concern is raised that as Carlsborg urbanizes, increases in flooding and the potential for contaminants to enter surface and groundwater resources increase. While the comments suggest that the timeframe for adopting a stormwater program in Clallam County be addressed in the FSEIS, it is impossible to anticipate such timeframe as it is subject to workload constraints, and Board of Commissioner policies and priorities. However, the issues associated with these concerns have been addressed in the FSEIS (see FSEIS, Pages 18, 19 & 20).

**Kari Rokstad, SEPA Coordinator, Department of Ecology – July 31, 2000**

1. *Surface Water Quality* – Concerns are raised over the County’s stormwater protection policies that differ from that of Ecology’s 1992 Stormwater Management Manual. Concern also exists over the protection of Matriotti Creek and Dungeness Bay from fecal coliform and other contaminants. The comments suggest that further analysis of existing conditions and appropriate mitigation be addressed. In response to these concerns, the FSEIS has been corrected to reflect these issues (see FSEIS, Pages 18, 19 & 20).
2. *Wetlands* – The DSEIS does address the issue of wetlands to an adequate degree. Those wetlands identified are all located outside the boundary of the proposed UGA.

Although they exist in close relation, they are separate from the boundary by topography, existing up-gradient from the proposed boundary. Therefore, it is with certainty that Clallam County finds no anticipated significant impacts associated with the Preferred Alternative to area wetlands. No further response or change is warranted.

- 3 *Non-Critical Area Protection* – The entire planning area of Carlsborg is classified as an aquifer recharge area as set forth by Chapter 27.12., C.C.C. (Critical Areas Ordinance). Specific mitigation through treatment of stormwater and infiltration control of larger-scale developments has been provided for through the Critical Areas Ordinance, the DSEIS, and the draft plans. No further mitigation is warranted.
- 4 *Groundwater Quantity* – The DSEIS adequately addresses the issues of this section. Analysis on the issue of water rights is provided in the draft as well as preference for lower aquifer systems as a source. However, the policies contained in the proposed CFP and analysis of the DSEIS clearly indicate that the plan provides significant mitigation over the effects development would have on groundwater resources if the plan were not adopted. Therefore, no further analysis is necessary.
- 5 *Groundwater Quality* – The policies proposed under the draft CFP, Comprehensive Plan Amendment and Zoning Amendment do require use of denitrification systems for those systems requiring repairs, as well as replacement and new systems. Additionally, Chapter 4 of the proposed CFP does provide in-depth analysis and projected nitrogen loading associated with use of denitrification systems. No further analysis is warranted regarding the proposed use of denitrification systems for the Preferred Alternative. However, as addressed above, consideration and further analysis is provided in the FSEIS regarding nitrate and chemical contaminants originating from other uses of properties (i.e. fertilizers, pesticides and other contaminants) (see FSEIS, Pages 19 & 20).