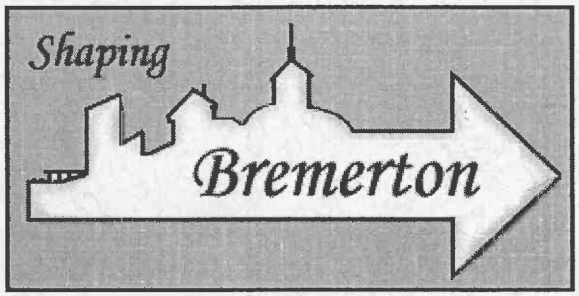

City of Bremerton

2003 – 2004 Comprehensive Plan Update

Draft Supplemental Environmental Impact Statement

October 2004

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TRANSMITTAL

TO: Review Agencies and Concerned Parties

FROM: The City of Bremerton, Department of Community Development

RE: **DRAFT SUPPLEMENTAL ENIRONMENTAL IMPACT STATEMENT, accompanying the City's proposed Comprehensive Plan Update**

DATE: October 22, 2004

The City of Bremerton is pleased to transmit to your office the Draft Supplemental Environmental Impact Statement (DEIS) for the proposed update to the City's Comprehensive Plan. This document supplements the Draft and Final SEISs prepared for the 1995 Comprehensive Plan (1995). While this distribution is done in part to meet regulatory requirements, we also appreciate hearing from your offices, especially if you can offer additional impact considerations for the Draft Plan.

Comments should be addressed to Department of Community Development, with attention to "Comp Plan DEIS", no later than **November 22, 2004**. All comments will be reviewed soon after, prior to the publication of responses and the Final EIS. Public Hearing on the Comprehensive Plan and accompanying Zoning provisions begin with the Planning Commission on Tuesday, October 26, 2004 and will likely conclude with a final hearing by the City Council on Wednesday, December 1, 2004.

Feel free to call upon the Long Range Planning Staff with any questions, especially in regard to the Adoption process now underway. The City's webpage is an excellent source of information, providing the Draft Comprehensive Plan elements, proposed land use maps, and **meeting details**, including upcoming reviews of development regulations for implementation of the plan. Comprehensive plan update information can be found under "Shaping Bremerton" links at www.ci.bremerton.wa.us. Paul Rogerson, Planning Manager, at 473-5283 heads this update process.

We look forward to hearing from your organization or seeing you in person at upcoming study sessions and public hearings.

I. SUMMARY OF ALTERNATIVES, ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

This section provides a brief summary of the environmental information contained in the City of Bremerton Comprehensive Plan Update Draft Supplemental Environmental Impact Statement (SEIS). The summary describes the framework for the planning process and provides a matrix-level overview of the issues, impacts, and mitigation measures analyzed for each of the alternatives.

This summary is intended to be concise and is selective. For complete information concerning environmental and mitigation measures, please refer to the appropriate section(s) within the Draft SEIS.

A. Proposed Action and Alternatives

1. Proposed Action

The Proposed Action by the City of Bremerton consists of the following:

1. Amendment or adoption of policies in the Comprehensive Plan organized in specific elements or chapters, including Land Use, Transportation, Housing, Environment, City Services, and Economic Development.
2. Adoption of a generalized future land use map showing the location of various land uses.

2. Location of Proposal

The City of Bremerton is located on the eastern edge of the Kitsap Peninsula on State Route 3, on the western side of Puget Sound in Washington State. Most of the City's land area is located on two peninsulas, separated by the Port Washington Narrows.

3. Alternatives

This Draft SEIS evaluates the impacts of three alternatives/scenarios, including revised Comprehensive Plan policies and a "preferred" future land use map recommended by the Bremerton Planning Commission. The three alternatives differ in the manner in which they would distribute projected population and employment growth within and between the existing City limits, the City's Unincorporated UGA (mostly located adjacent to the north of the City limits in East Bremerton, in Unincorporated Kitsap County, between the city limits and Riddell Road), and the "Non-Associated UGA" (which is mostly located adjacent to the north of Riddell Road in East Bremerton, in Unincorporated Kitsap County). All alternatives would accommodate a 20-year population increase of approximately 13,000 people, and employment growth of 9,000. All alternatives would retain current UGA boundaries.

Alternative 1 (No Action)

The No Action alternative would retain the existing Comprehensive Plan policies and future land use map from the 1995 Comprehensive Plan. In this alternative, approximately 75 percent of the projected new growth acres would continue to locate in the Non-Associated unincorporated UGA. Approximately 15 percent of the total growth acres projected by 2023 would locate outside existing City limits but within the Bremerton Unincorporated UGA. Only 10 percent of the total growth acres projected by 2023 would locate within the existing City limits. The growth within the City limits would mostly be distributed as infill on vacant properties along existing primary and secondary arterial streets. This alternative reflects a continuation of recent market trends, which has dispersed growth in UGAs outside the City.

Alternative 2 – Plan Update without Centers

Alternative 2 includes most revised Comprehensive Plan policies and an updated future land use map, but excludes those policies and map changes that reflect the "centers" concept of Alternative 3. The majority of the projected new population and employment growth by 2023 (approximately 55 percent) would locate in the Non-Associated unincorporated UGA. Approximately 30 percent of growth would locate outside existing City limits but within Bremerton's Unincorporated UGA. Only 15 percent of future growth would locate within the existing City limits. New growth within the City would be accommodated as infill on vacant properties along existing primary and secondary arterial streets, and through redevelopment.

Alternative 3 – Plan Update with Centers (Preferred Alternative)

Alternative 3 has been preliminarily recommended as the preferred alternative by the Bremerton Planning Commission, pending further discussion, public comment and review of the SEIS. This alternative includes revised Comprehensive Plan policies and an updated future land use map, including those policies and map changes that reflect the centers concept. They would be characterized by higher densities, mixed-use, pedestrian-oriented development, and reflect improved design. Centers of different type, size and function would be located throughout the City. Almost all projected 2023 population and employment growth (approximately 86 percent) would occur within the incorporated City limits. Of this, approximately 55 percent of the new population growth and 45 percent of the new job growth would locate within 14 designated centers. To encourage this concentration of growth, the City would redesignate most existing multi-family residential properties outside the centers to Low Density Residential (LDR), which allows 5-10 dwelling units per acre.

Westpark

The Bremerton Housing Authority is developing a master plan for the redevelopment of Westpark. The 74-acre site, which was developed in the 1940's with 642 public housing units, is located in West Bremerton near the junction between Kitsap Way and Highway 3. The Westpark site is currently being planned as a mixed-income urban including a mix of land uses, higher densities, pedestrian-oriented design, a grid street system, integrated open space, and modern facilities. Alternatives 2 and 3 designate Westpark (and two other sites) for "Public

Redevelopment." Under Alternative 1, a comprehensive plan amendment and rezone would be required.

4. Planning Process & Environmental Review

The City of Bremerton adopted its first Comprehensive Plan in 1987. The Plan included goals and policies for land use, natural resources, transportation, public services, housing and economic development. An Environmental Impact Statement (EIS) was completed for the 1986 Comprehensive Plan to address possible environmental impacts. In 1995, the City adopted a new revised Comprehensive Plan to comply with the Washington State Growth Management Act (GMA) requirements and ensure consistency with other jurisdictions in the region. A Supplemental Environmental Impact Statement (SEIS) was prepared and issued. The Comprehensive Plan is being updated at this time to comply with the requirements of the GMA, to address new market opportunities and to incorporate a new approach to managing growth within the City.

Supplemental EIS/Phased Environmental Review

Supplemental EIS. This document is supplementing the SEIS previously prepared for the City's Comprehensive Plan in 1995. A "Supplemental EIS" is one, which adds new information and analysis about impacts and alternatives (WAC 197-11-405(4)). It supplements environmental information in an existing EIS.

Analyses of impacts in the SEIS prepared for the existing Comprehensive Plans (1995) concerning many elements of the environment would not change and applies to the proposed Comprehensive Plan Update. These existing environmental documents have been used to focus the scope of the present Supplemental EIS on those issues where impacts of the updated Comprehensive Plan would be significantly different from those identified previously. Consistent with the SEPA rules (WAC 197-11-620), information in the existing SEIS is not repeated in this document.

Non-Project Document. Environmental Impact Statements on Comprehensive Plans and related policies and regulations are referred to as "non-project" or "programmatic" documents (WAC 197-11-704). Their purpose is to help the public and decision-makers to identify and evaluate the environmental effects of alternative policies, land use patterns, service standards, implementation approaches, and similar choices related to future growth. A non-project EIS is intended to promote understanding of environmental trade-offs among alternative courses of action (WAC 197-11-442).

Phased Environmental Review. The City of Bremerton is conducting phased environmental review of its GMA-mandated actions (pursuant to WAC 197-11-060(5) and 197-11-228 (2)(b)). Phasing of environmental review helps decision-makers and the public to focus on environmental issues that are clearly defined and ready for decision, while deferring analysis of other issues that are not ready for decision, or for which additional information is needed before a decision can be made. Phased environmental review generally progresses from proposed actions that are broad in scope and general in nature, to those that are narrow in scope and more

detailed. In the case of the City of Bremerton, the current phase of environmental review considers the proposed revisions to the City's Comprehensive Plan policies and future land use map. Future phases of environmental review will consider future actions, which would implement the revised Comprehensive Plan. These could include adoption of a revised zoning map, development regulations, sub-area plans, and financing programs and incentives.

B. Summary of Significant Impacts of the Alternatives

Table S-1 summarizes the significant environmental impacts and mitigation measures evaluated in the Draft SEIS. Significant unavoidable adverse impacts were also identified. The following elements of the environment are evaluated in this document:

- Natural Environment
- Land Use
- Population, Housing, and Environment
- Public Services
- Utilities
- Transportation

Note that the city Services Element of the comprehensive Plan Update includes both Public Services and Utilities. These topics are organized as separate sections in this Draft SEIS.

Please see the respective section in this Draft SEIS for each element for further details concerning impacts and proposed mitigation measures.

Table S-1
Summary of Significant Environmental Impacts by Alternative

Elements of the Environment	Alternative 1 No Action	Alternative 2 Plan Update without Centers	Alternative 3 Plan Update with Centers (Preferred Alternative)
	IMPACTS		
NATURAL ENVIRONMENT ***Water Resources***	All alternatives involve potential impacts to surface water which would include increased impervious surfaces, altered surface water flows, increased stormwater flow, localized flooding impacts, and generation of non-point source pollution to local surface waters.	Impacts generally similar to No Action. Shifting somewhat more growth to the City and its UGA, with existing roads and infrastructure, can reduce impacts.	Focusing development in centers, mostly as infill or redevelopment in urbanized areas, could reduce these impacts.
Plants and Animals	Any alternative will result in land clearing for construction of housing and infrastructure, stormwater runoff and human disturbance associated with future growth. Environmental resources subject to risk of direct and indirect impacts include numerous species of plants, animals and fisheries (including threatened or endangered species and their habitat). The more dispersed land pattern for No Action would extend impacts over a relatively larger area.	Impacts generally similar to No Action. Shifting somewhat more growth to the City and its UGA would help conserve existing resources outside the City to some degree.	This alternative would lead to the least amount of land clearing, habitat modification and new impervious surface, as most development or redevelopment is planned to occur within the City limits on already disturbed sites.

Elements of the Environment	Alternative 1 No Action	Alternative 2 Plan Update without Centers	Alternative 3 Plan Update with Centers (Preferred Alternative)
LAND USE	Most growth would continue to locate outside of the City and the City's UGA. Overall land use pattern relatively unchanged. Growth within the City would mostly occur on vacant and underdeveloped land and follow current development trends.	Impacts generally similar to No Action. Somewhat more growth would occur within the City and City's UGA than No Action.	Most growth would be focused in the City. Growth and development within the City would be focused in designated mixed-use, high density, pedestrian oriented centers of different scales. Relatively less change in other areas of the City and in unincorporated areas. Redevelopment in centers would result in some impacts related to displacement and/or redevelopment of existing uses. Potential compatibility and scale impacts between new center development, and existing development adjacent to the center.
POPULATION, HOUSING & EMPLOYMENT ***Population***	All three alternatives assume projected population growth of approximately 13,000 people through 2023. Distribution of this growth is different under each alternative. In Alternative 1, population growth is dispersed throughout the City (10%), City's UGA	In Alternative 2, population growth is dispersed throughout the City (15%), City's UGA (30%), and unincorporated Kitsap County (55%). The City's projected population for 2023 is 38,950 people.	In Alternative 3, 86% of the projected population growth will be within the City and 14% of the growth within the City's UGA. The City's projected population for 2023 is 50,172 people. Population growth more

Elements of the Environment	Alternative 1 No Action	Alternative 2 Plan Update without Centers	Alternative 3 Plan Update with Centers (Preferred Alternative)
	(15%), and unincorporated Kitsap County (75%).		focused in designated mixed-use centers.
Housing	Existing density and mix of single-family and multi-family housing would continue.	Existing density and mix of single-family and multi-family housing would continue.	Higher density housing would be focused within the designated centers, with existing density in the existing single-family neighborhoods and lower density in areas outside centers currently zoned multi-family.
Employment	All three alternatives include an addition of approximately 9,000 new jobs by 2023. New jobs will continue to be dispersed, with many locating in unincorporated Kitsap County.	Impacts generally similar to No Action.	Approximately 45% of the new employment would be focused in designated centers, including downtown.
PUBLIC SERVICES ***Fire Service & EMS***	No additional Fire or EMS equipment, personnel, or facilities will be necessary in the City. Depending on proximity to fire facilities, the more dispersed growth pattern outside of the City could cause relatively longer response times and less efficient fire/EMS service by	Impacts generally similar to No Action.	Additional personnel would be necessary to fully staff all of the City's existing fire apparatus (including reserve units which are not currently staffed). To meet the needs of the projected population, one new EMS unit and associated personnel would be necessary.

Elements of the Environment	Alternative 1 No Action	Alternative 2 Plan Update without Centers	Alternative 3 Plan Update with Centers (Preferred Alternative)
	other providers in unincorporated areas.		
Police Service	2 or 3 new officers would be required by 2023	Impacts generally similar to No Action.	About 20 new officers would be needed by 2023.
Parks	Additional local parkland, facilities, programs and maintenance required under any land use alternative. An additional 10 acres would be necessary under Alternative 1. The City currently has a 200 to 300 acre deficit of local park and open space acreage.	An additional 12 to 20 acres of local parkland would be required (in addition to current deficit).	An additional 70 to 110 acres of local parkland would be required in addition to current deficit.
Public Schools	Most growth would occur in unincorporated areas of Kitsap County, which could impact both the Bremerton School District and the Central Kitsap School District. The more dispersed growth pattern might increase transportation needs.	Impacts generally similar to No Action.	Approximately 2,000 new students within City limit. The school district estimates a need for an additional four to five elementary and one middle school. Development and siting of new schools could be more centrally located within the centers. There is a potential reduction in transportation needs because more students would live in

Elements of the Environment	Alternative 1 No Action	Alternative 2 Plan Update without Centers	Alternative 3 Plan Update with Centers (Preferred Alternative)
			centers near schools.
Utilities ***Water***	Growth associated with any land use alternative will generate additional needs for water. The capacity of the water system would permit the existing water supply, storage, transmission and distribution system to satisfy projected demand through 2023.	Impacts generally similar to No Action.	Impacts generally similar to Alternatives 1 and 2. The Oyster Bay and Manette Neighborhood Centers may require infrastructure improvements to maintain adequate pressure.
Sanitary Sewer	Growth associated with each of the alternatives will increase demands on the regional wastewater collection and treatment facilities. The existing wastewater collection, transmission and treatment system will satisfy projected loads through 2003 with identified WWTP improvements, beach sewer replacement and CSO control projects. Under No Action, a correspondingly greater demand would occur in systems serving unincorporated UGAs.	Impacts generally similar to No Action.	Impacts generally similar Alternatives 1 and 2. The recommended WWTP improvements would need to be completed earlier in Alternative 3 to meet the needs of the increased population in the City.

Elements of the Environment	Alternative 1 No Action	Alternative 2 Plan Update without Centers	Alternative 3 Plan Update with Centers (Preferred Alternative)
Stormwater	Any land use alternative would result in the need to upgrade the existing stormwater system to function effectively through 2023.	Impacts generally similar to No Action.	Impacts generally similar to Alternatives 1 and 2. The recommended upgrades to the stormwater system would need to be completed earlier in Alternative 3 to meet the needs of the increased population.
TRANSPORTATION	All alternatives show relatively similar impacts on traffic (traffic congestion and delay) based on assumptions of PSRC regional model and City's growth targets. From a regional perspective (including growth alternatives for unincorporated areas), future improvements will be necessary. No Action would likely generate incrementally greater auto traffic because it is the most dispersed and auto dependent.	Impacts generally similar to No Action.	Impacts generally similar to Alternatives 1 and 2. Concentrating higher density and mixed-use development within the City and City's UGA would support and encourage greater use of public transit. The centers approach would facilitate more efficient use of existing streets, thus reducing future capital needs, and would support and encourage greater use of public transit.

C. Summary of Mitigation Measures

Natural Environment – Surface Water, Plants, and Animals

Water Resources

Recommended measures to mitigate direct impacts to water quality could include: adoption of updated critical area regulations which address wetland and stream and applicable buffer preservation or restoration; preservation or restoration of existing native vegetation on a watershed scale; adoption of updated stormwater controls; education programs that lead to reduced fertilizer and pesticide entering surface waters; implementation of construction best management practices (BMP's); and mitigation for project specific impacts. Water resources would also be protected through future updates of the Critical Areas Ordinance and Shoreline Master Program. The Comprehensive Plan Update references these mitigation measures.

Plants and Animals

Impacts to plants and animals may be mitigated by the following measures, in addition to those identified above for water resources: timing allowable in-stream work periods to protect fish during critical times of their life history; preservation or restoration of corridors for wildlife movement between isolated areas of habitat; removal of fish passage barriers; enhancement of shoreline habitats; enhancement of instream habitat; removal of derelict structures in marine waters; requiring design of new structures to minimize overwater structures; and requiring mitigation designs for specific projects and impacts. By implementing federal, state, and local regulations regarding plants and animals, impacts may be further mitigated.

Land Use

The proposed Comprehensive Plan objectives, goals and policies are intended to mitigate land use impacts associated with growth. Design standards for new multi-family, mixed-use and commercial development within centers would address the type and location of use, site planning, building design, and site features, and would be implemented through project planning and design. Updated development regulations and design standards and guidelines would address impacts to residential areas directly adjacent to designated centers. Potential mitigation for building design and height compatibility could include building modulation, landscape buffers and development setbacks, which could be addressed through sub-area plans and design guidelines.

Population, Housing, and Employment

The demand for housing, public services and employment associated with an increased residential population could be mitigated by implementation of the proposed goals, policies, and objectives of the Comprehensive Plan Update. Updated development regulations, design guidelines and capital facilities programs would further mitigate impacts from an increased population and employment base.

Public Services

Fire,Emergency Medical,and Police Services

Under any alternative, the Fire, EMS, and Police Departments should review their respective level of service standards to ensure that they have accounted for projected growth. If necessary, adjustments in level of service standards would be reflected in future capital facilities plans. Continued monitoring of service demand is also recommended.

Parks

Regardless of alternative, the City currently has a deficit in local parks. Any growth within the City would increase this deficit. The City should actively seek opportunities to acquire land for local parks, playgrounds, and plazas. Future capital facilities plans should reflect the need to acquire and develop such properties, particularly in or near designated centers.

Public Schools

The Bremerton School District should review current projections and update future Capital Facilities Plans to address population projections for the City and proposed centers. Future enrollment projections should reflect the population and housing targets adopted and used for planning purposes in the City's Comprehensive Plan. The City could consider the adoption of an impact fee ordinance, consistent with RCW 80.02.050, in order to address the impacts from projected growth.

Utilities

Water Service

Under any of the alternatives, the City will need to implement water system improvements. The City has already included several system improvements in the capital improvement program (CIP), which would increase reliability, water quality, storage capacity, flows and pressure within the City's water service area.

Sanitary Sewer

Sewer system improvements will be required regardless of which Comprehensive Plan alternative is implemented. Improvements include replacing or constructing new sewer lines, and combined sewer overflow (CSO) projects to minimize the impact of wet weather flows on the sewer system.

Storm Water

The current CIP identifies several improvements to the storm drainage system which would apply under all of the alternatives. Implementation of adopted stormwater controls would mitigate development-related impacts.

Transportation

Population and employment growth will increase traffic congestion and delay. The degree of increase could be reduced or minimized, however, by implementing identified capacity improvements, transportation demand management strategies, proposed land use policies and map designations, and development regulations. Focusing a greater increment of growth within designated centers at higher densities could facilitate greater use of transit and non-motorized modes of travel, which could effectively extend the capacity of the existing transportation system.

D. Significant Unavoidable Adverse Impacts

Natural Environment

Increased growth, construction, human activity, traffic, and the expansion of public facilities under any of the alternatives would result in incremental impacts to the City's natural environment and resources.

Land Use

Future growth within the City would cause some unavoidable impacts to land use, including displacement, urbanization, discontinuity in type and scale of land use, and temporary construction impacts.

Population, Housing, and Employment

Growth and development will occur in and around the City over time, with or with out the adoption of an updated comprehensive plan, and regardless of plan alternative. Land developed for residential and commercial uses will generally be unavailable for other uses.

Public Services

Growth within the City will result in increased demands on existing public services and facilities, creating a need for additional facilities, personnel, and equipment. Additional costs resulting from service increases will need to be planned for, and funding sources will need to be identified.

Utilities

Anticipated growth for any of the alternatives will increase demands placed on the water and wastewater collection and treatment facilities. Any growth would also increase the demand for water resources and improvements to delivery systems. Increased development will result in increased impervious surface area and consequent increased volumes of stormwater run-off.

Transportation

Growth will unavoidably increase traffic congestion and delay. The extent of impacts could be reduced or minimized by implementing identified capacity improvements, transportation demand management strategies, proposed land use policies and map designations, and development regulations.

E. Major Conclusions, Issues to be Resolved and Environmental Choices Among Alternatives

The City is a developed urban area, with impervious surfaces and disturbed natural features. It is planning to accommodate future growth as mandated by the GMA. The Draft SEIS identifies environmental impacts within the City of Bremerton due to projected increases in population and employment. To some extent, these impacts are inherent in the development and redevelopment of cities and implementation of long-range plans. In terms of environmental impacts there are some significant advantages in implementing Alternative 3 and designating centers. Most future growth would be focused within the City and would occur through redevelopment, impacting a developed urban area where most environmental resources have previously been modified. In addition, the City can directly manage and regulate development occurring within its boundaries. In contrast, dispersing more growth to unincorporated UGAs – rather than focusing it with centers – would be less efficient (lower density) and would consume more vacant land, and would require greater inter-jurisdictional coordination (with Kitsap County). To realize the centers strategy, the City will need to provide sufficient incentives to alter the historical direction of the market, which has encouraged a dispersal of growth to vacant lands.

II. PROJECT DESCRIPTION & ALTERNATIVES

A. Description of Proposed Action

The proposed action addressed in this Draft Supplemental Environmental Impact Statement (SEIS) is the revision by the City of Bremerton of its 1995 Comprehensive Plan. The revised Comprehensive Plan will guide growth and development within the City for the next twenty years (until 2023). The City's 2002 population was 37,260; the revised Comprehensive Plan is planning to accommodate a 2023 total population of 50,172 residents, or growth of approximately 13,000 people. The revised Comprehensive Plan will comply with the requirements of the Washington State Growth Management Act (GMA), and of Kitsap County's County-wide Planning Policies (CPPs).

The proposed action consists of two primary elements:

1. Amendment or adoption of policies in the Comprehensive Plan organized in specific elements or chapters, including Land Use, Transportation, Housing, Environment, City Services, Economic Development, and Community Character.
2. Adoption of a generalized Future Land Use Map showing the location of various land uses.

The "preferred alternative" evaluated in this SEIS incorporates a "centers" concept for accommodating projected growth. Under this concept, almost all of the projected population and employment growth would be accommodated within the existing Bremerton City limits, and most of this growth would be concentrated in fourteen mixed-use, higher density, pedestrian oriented "centers" which would be designated in various locations throughout Bremerton. The centers would vary in function, scale and intensity. Downtown Bremerton would be the largest of these centers.

The Draft SEIS also contains information concerning planned redevelopment of the Westpark site, being proposed by the Bremerton Housing Authority. The site will be redeveloped pursuant to a master plan that is currently being prepared. Designation of the site area for mixed-use development would occur as part of the Comprehensive Plan Update and is addressed in this Draft SEIS. Redesignation will not approve development, foreclose alternatives, or commit the City to a course of action. Review and approval of the master plan and redevelopment of the site are separate actions which will considered by the City in the future, and will be the subject of separate, more detailed environmental review.

After deliberations by the City's Planning Commission and City Council, and public hearings and other public comment, the revised Comprehensive Plan and Future Land Use Map will be adopted by ordinance by the Bremerton City Council.

Actions to implement the Comprehensive Plan – such as adoption of a revised zoning map, development regulations, design guidelines, sub-area plans, financing programs and/or incentives – will occur in subsequent phases of the City's GMA work program. According to the GMA,

these implementing regulations must be consistent with the Comprehensive Plan. Future environmental review will examine potential environmental impacts associated with any actions proposed by the City to implement the Comprehensive Plan.

B. Location of Proposed Action

The revised Comprehensive Plan would apply to lands within the City of Bremerton, located on the eastern edge of the Kitsap Peninsula on State Route 3, on the western side of Puget Sound in Washington State. Most of the City's land area is located on two peninsulas, separated by the Port Washington Narrows. The City limits consist of 14,454 acres, including over 8,000 acres of undeveloped land and open space in the western portion of the City distributed between the Union River watershed (the city's surface water supply), the city-owned Gold Mountain Golf Course, and other forested utility-owned lands. The Comprehensive Plan will also apply to the City's Unincorporated Urban Growth Area (UGA), located primarily in East Bremerton, generally between the existing City limits and Riddell Road, and small areas in West Bremerton near Navy Yard City, West Hills, and Rocky Point. This unincorporated UGA is illustrated in the City's current Comprehensive Plan. The revised Comprehensive Plan does not propose changes to the existing City limits, or to the current boundaries or size of the City's unincorporated UGA.

C. Overview of the City of Bremerton & Surrounding Area

Most of Bremerton is located on two smaller peninsulas and is separated by the Port Washington Narrows. The Manette and Warren Avenue Bridges connect the two peninsulas and join east and west Bremerton. The boundaries of the city extend west to include approximately 8,000 acres of undeveloped land, which includes the Union River watershed, the city owned Gold Mountain Golf Course, and other forested utility owned lands. Neighborhoods within the city include Charleston, Kitsap Lake, Manette, Oyster Bay, and Wheaton Way.

The Puget Sound Naval Shipyard (PSNS) is located in West Bremerton, along Sinclair Inlet. PSNS is a large naval shipyard and supply center, and is a regional employment center.

The Washington State Ferries provide a direct link to downtown Seattle, and SR-3 and SR-16 lead to Tacoma. Bremerton also serves as a link for people traveling to the Olympic Peninsula.

Existing land uses reflect a mix of public, residential and commercial and industrial activities. Public open space land (including lands designated Watershed, Utility, and most Open Space) is the most extensive land use in the City, encompassing over 8,000 acres. Most of this large amount of land is located in the western portion of the City, and is set aside for protection of the City's water supply, and for used as part of the City's Gold Mountain Golf Course. The Comprehensive Plan Update does not propose changes to these open space and public lands.

Residential land use is the next largest land use designation, applied to approximately 7,330 acres. The residentially designated areas are mostly smaller lot sizes in the older portion of Bremerton with larger lot sizes in East Bremerton and in the West Hills/Kitsap Lake areas. The majority of housing units are detached single unit structures. Single-family units comprise 54

percent of the total, while nearly 44 percent of the population lives in multi-family units. Approximately 63 percent of the population lives in rental units, compared to approximately 37 percent in Kitsap County as a whole. The City of Bremerton also has a high proportion of affordable housing as compared to the remainder of Kitsap County; many of these affordable units are of old and/or of poor quality.

Industrial and commercial land use designations consist of approximately 1,435 acres. The majority of that land is underutilized; approximately 90 percent of commercial and industrial lands are vacant. Most of the industrially designated lands are in the west Bremerton area near Auto Center Way. The area developed for commercial uses stretches to the north on Wheaton Way. It is comprised of auto oriented commercial uses including fast food, and large footprint stores (such as Costco and Fred Meyer). Kitsap Way near Highway 3 is also developed for commercial uses, including restaurants and motels serving tourist uses.

Although Bremerton's population growth in the last ten years has been stagnant, with some years of decline, the population is projected to add approximately 13,000 new people by 2023, reaching a total population of 50,172 people. Some of the population growth can be accommodated by redeveloping existing underutilized residentially zoned land within the city; however it is estimated that an additional 512 to 852 acres of residentially designated land will be necessary. (This estimate includes the amount of land necessary for development, roads and street, and areas that are not developable because of critical areas.)

Bremerton is also expected to add approximately 9,000 new jobs over the next 20 years, increasing total employment from 45,000 to 54,000 jobs by 2023. To accommodate this employment growth, the City estimates that 127 acres of developable land will be necessary for commercial uses and 126 developable acres will be necessary for industrial use. Existing commercial and industrial land designations are expected to be adequate to accommodate this growth.

The City is surrounded to the north and east by unincorporated urban areas. The Wheaton Way corridor extends from Bremerton north to Silverdale, an unincorporated area within Kitsap County which contains the Silverdale Mall, many large retailers and service-oriented businesses. To the west and south, the surrounding area is largely rural, with the exception of the cities of Port Orchard (and the South Kitsap/McCormick Woods UGA) and Gig Harbor.

D. State Environmental Policy Act (SEPA) Review Process

This Draft Supplemental Environmental Impact Statement (SEIS) is being prepared to satisfy the requirements of the Washington State Environmental Policy Act (SEPA, 43.21C) and implementing rules (WAC 197-11). It is also intended to assist local decision-makers and members of the public to better understand the potential environmental impacts of, and alternatives to, the proposed action. The SEIS will accompany the Draft Comprehensive Plan Update as it is reviewed by the Planning Commission, the City Council, citizens and agencies.

Supplemental EIS. This document is supplementing the EIS previously prepared for the City's adopted Comprehensive Plan. A "Supplemental EIS" is one which adds new information and

analysis about impacts and alternatives (WAC 197-11-405(4)), thereby supplementing environmental information in an existing EIS.

Analyses in the 1995 SEIS prepared for the currently adopted Comprehensive Plan concerning many elements of the environment is relevant and applicable to the proposed Comprehensive Plan Update. Only minor changes in background conditions (such as current and forecast population levels) have occurred, and the conclusions of the existing analysis would not change significantly for many elements of the environment (Earth, Air, Energy & Natural Resources, Environmental Health, Aesthetics and Cultural Resources). The existing environmental document is being used to focus the scope of the present Supplemental EIS on those issues where impacts of the updated Comprehensive Plan would be significantly different from those identified previously, including the Water Resources, Plants and Animals, Land & Shoreline, Population and Housing, Transportation, Public Services and Utilities. Consistent with the SEPA rules, the scope of this SEIS has been narrowed to focus on significant issues, and information in the document being supplement is not repeated in this SEIS (WAC 197-11-620). To assist the reader, however, Section G below summarizes the information contained in the existing EIS.

Non-Project Document. Environmental Impact Statements on Comprehensive Plans and related policies and regulations are referred to in the state SEPA rules as "non-project" or "programmatic" documents (WAC 197-11-704). Their purpose is to help the public and decision-makers to identify and evaluate the environmental effects of alternative policies, land use patterns, service standards, implementation approaches, and similar choices related to future growth. A non-project EIS is intended to promote understanding of environmental trade-offs among alternative courses of action (WAC 197-11-442). While land use plans and policies do not directly result in alterations to the physical environment, they do provide a framework within which future growth and development – and resulting environmental impacts – will occur.

Phased Environmental Review. The City of Bremerton is conducting phased environmental review of its GMA-mandated actions (pursuant to WAC 197-11-060(5) and 197-11-228 (2)(b)). Phasing of environmental review helps decision-makers and the public to focus on environmental issues that are clearly defined and ready for decision, while deferring analysis of other issues that are not ready for decision, or for which additional information is needed before a decision can be made. Phased environmental review generally progresses from proposed actions that are broad in scope and general in nature, to those that are narrow in scope and more detailed. In the case of the City of Bremerton, the current phase of environmental review considers the proposed revisions to the City's Comprehensive Plan policies and Future Land Use Map. Future phases of environmental review will consider future actions which would implement the revised Comprehensive Plan. These could include adoption of a revised zoning map, development regulations, sub-area plans, and financing programs and incentives.

E. Draft Comprehensive Plan / SEIS Alternatives

1. Background

The City of Bremerton adopted its first Comprehensive Plan in 1987. The Plan included goals and policies for land use, natural resources, transportation, public services, housing and economic development. An Environmental Impact Statement (EIS) was completed for the 1987 Comprehensive Plan to address possible environmental impacts; it was not appealed. In 1995, the City adopted a revised Comprehensive Plan to comply with the Washington State Growth Management Act (GMA) and to ensure consistency with other jurisdictions in the region. A Supplemental Environmental Impact Statement (SEIS) was prepared and issued; it was not appealed. The Comprehensive Plan is being updated at this time to comply with the requirements of the GMA, to address new market opportunities and to incorporate a new approach to managing growth within the City.

2. Public Involvement

To ensure public involvement in the Comprehensive Plan Update process, the City established six citizen committees – each focused on one element of the plan – to review and provide input to goals and policies. One member from each citizen committee was selected to join the Coordinating Council, which acts in an advisory capacity to the Planning Commission. The Planning Commission then held public meetings to discuss and refine the recommendations from the citizen committees and ultimately made a preliminary recommendation (preferred alternative) for the Comprehensive Plan Update. Prior to final adoption of the plan, the City Council will also hold public hearings, which will offer additional opportunities for public involvement.

3. Alternatives: Major Features, Similarities and Differences

This Draft SEIS evaluates the impacts of three alternatives, including the revised Comprehensive Plan policies and the preferred Future Land Use Map recommended by the Bremerton Planning Commission. (Note that the "alternatives" addressed in this SEIS were referred to as "scenarios" during the public's and Planning Commission's initial review of daft Comprehensive Plan Update policies and land use map.) The three alternatives differ in the manner in which they distribute projected population growth within and between the existing City limits, the City's existing (1995) unincorporated UGA (mostly located adjacent, north of the City limits in East Bremerton, in Unincorporated Kitsap County, between the City limits and Riddell Road), and the existing "Non-Associated UGA" (which is mostly located adjacent, north of Riddell Road in East Bremerton, in Unincorporated Kitsap County).

Alternative 1 ("Scenario 1: Existing Plan and Patterns") assumes no change to the City's current adopted 1995 Comprehensive Plan policies and Future Land Use Map; this is the "No-Action" alternative for purposes of SEPA review. It reflects what would be likely to happen if recent patterns and trends continued into the future, and provides a benchmark against which to measure the other alternatives. Alternative 2 ("Scenario 2: Updated Plan without Centers") assumes the adoption of revised Comprehensive Plan policies and Future Land Use Map, except

those policies and map changes embodying the proposed "centers" concept. Growth within the City would be more dispersed. Alternative 3 ("Scenario 3: Plan Update with Centers") assumes adoption of revised Comprehensive Plan policies and Future Land Use Map, including policies and map changes reflecting the proposed "centers" concept. This alternative was recommended by the Bremerton Planning Commission and is considered the preferred alternative for the purposes of environmental review. Designating it as "preferred" at this point in time is preliminary, does not commit the City to adopting it, and does not foreclose other courses of action. The Planning Commission will review the information in the SEIS before making a formal recommendation to the City Council.

Major factors considered in the alternatives include the following:

- Population Growth: All three alternatives assume a year 2023 population projection of 50,172 for the City (an increase of 12,912 over the 2002 population). They differ as to where within the City and the UGA(s) this population would be accommodated. Alternative 3, the preferred alternative, would accommodate this population growth as follows:

Neighborhood (Non-Centers) Single-family:	4,000-4,500
Non-Centers Multifamily:	1,000-1,500
Centers Single-family and Multifamily:	5,000-6,000
Downtown Center Multifamily:	1,000-1,500
Total Population Growth	11,000-13,500
Centers Population Growth	6,000 -7,500 (55 percent)

- Employment Growth and Economic Development: All three alternatives assume a year 2023 employment total of 54,030 jobs, an increase of 8,719 over the year 2000 job total.

- City Limits: All three alternatives assume no change in the existing City limits.

- Urban Growth Area: The alternatives assume no change to the City's unincorporated UGA boundary (mostly located north of the existing City limits and south of Riddell Road in East Bremerton) as illustrated in the City's 1995 Comprehensive Plan. In particular, none of the alternatives propose to add any of the unincorporated Non-Associated UGA (located generally north of Riddell Road) to the City's UGA. City and County policies call for the eventual annexation by Bremerton of properties within the City's unincorporated UGA. Currently the City does not plan to plan for or annex properties within the Non-Associated unincorporated UGA over the next 20 years.

- Land Use: The "No Action" alternative assumes continuation of existing land use patterns, with the vast majority of the new population and job growth occurring outside the City and its unincorporated UGA, in the Non-Associated UGA north of East Bremerton. No centers would be designated as a focus for future growth. Alternative 2 assumes a similar land use pattern; though relatively more growth would occur in or near the City (i.e. in the City's unincorporated UGA), the land use pattern would be similar to No Action. Similarly, Alternative 2 would not designate or guide future growth to mixed-use, higher density centers.

The preferred alternative (Alternative 3 - "Scenario 3: Plan Update with Centers,") assumes adoption of revised Comprehensive Plan policies and a Future Land Use Map, which would designate fourteen mixed-use centers throughout the City. Almost all of the City's projected population and job growth would occur within the existing City limits, with most of that being focused into the proposed centers at higher densities. To encourage and focus growth within designated centers, the City would redesignate most existing multi-family residential properties outside the centers as Low Density Residential. Over a period of years, this is expected to result in a significantly different land use pattern – concentrated, higher density, more mixed-use – when compared to the other alternatives.

Alternative 3, would accommodate projected growth and residential land needs as follows:

Neighborhood (Non-Centers) Single-family:	314-531 gross acres
Non-Centers Multifamily:	37-124 gross acres
Centers Single family and Multi-family:	144-172 gross acres
Downtown Center Multifamily:	17-25 gross acres
Total Growth Acres Needed	512-852 gross acres

- Housing Mix and Density: The No Action alternative would not change the existing mix of housing and density within the City. The growth that would occur within the city under this alternative would be infill or redevelopment on existing lots. Alternative 2 would also accommodate most growth as infill or redevelopment without any significant change in housing mix or density. Alternative 3 would increase housing density in the designated centers and encourage small-lot single family and multi-family units. Areas outside of the designated centers would be lower in density and include more traditional single-family units; they would not experience significant change.

- Centers: Alternative 3 incorporates a "centers" concept for accommodating projected growth. Centers would be characterized by higher density mixed-use development, and planned to be pedestrian-oriented and transit supportive. Four types/scale of centers are identified - neighborhood, district, employment and regional. Fourteen centers would be designated on the Future Land Use Map. Downtown Bremerton would be the largest, the most diverse and the most intensively developed of the centers. Under the centers concept, almost all of Bremerton's projected population and employment growth (approximately 86 percent) would be accommodated within the existing City limits, and most of this growth (55 percent of total growth) would be concentrated in designated centers. Public open space would be included in most or all of the centers.

- Downtown Bremerton: In all alternatives, downtown Bremerton would continue to be the City's major employment center and the focus of new economic and job growth. The Puget Sound Naval Shipyard would continue to be a principal economic base for the foreseeable future. The preferred alternative would incorporate goals and policies encouraging quality design in the downtown, where special design guidelines would apply to new construction. These and other goals and policies would strive to transform downtown Bremerton into a "full-service" regional downtown center, with 24-hour activity.

- Transportation: The Transportation Element of the Comprehensive Plan Update identifies future transportation system deficiencies, and proposed transportation improvements and costs, based on projected land use and population. In order to encourage growth in centers (preferred alternative), the Transportation Elements calls for the adoption of level of service standards that would allow greater congestion on certain streets within designated centers.

- Capital Facilities/City Services: The City Services Element of the Comprehensive Plan Update contains policies that would assure that capital project expenditures were consistent with the Comprehensive Plan in each alternative.

- Urban Design/Community Character: The preferred alternative would incorporate goals and policies encouraging high quality design throughout the community, and particularly in the centers, where special design guidelines would apply to new construction.

The three alternatives are described below, and summarized in Table 1.

Table 1. Summary of the Alternatives

	Alternative 1 "No Action"	Alternative 2 Updated Plan without Centers	Alternative 3 – Preferred Alternative Updated Plan with Designated Centers
Comprehensive Plan Policies	Existing (1995) policies	Revised policies, minus centers	Revised policies, including centers
Comprehensive Plan Future Land Use Map	Existing (1995) Future Land Use Map	Revised map, minus designated centers	Revised map, including designated centers
Forecast Population Growth	13,000 increase (50,172 total)	13,000 increase (50,172 total)	13,000 increase (50,172 total)
Growth Distribution	City: 10% City UGA: 15% Non-Associated UGA: 75%	City: 15% City UGA: 30% Non-Associated UGA: 55%	City: 86%, 55% of new population growth, and 45% of new job growth occurs in designated centers City UGA: 16% Non-Associated UGA: 0%
Employment	9,000 new jobs over 20 years	9,000 new jobs over 20 years	9,000 new jobs over 20 years, 45% in centers
City Limits	Existing City limits	Existing City limits	Existing City limits
Urban Growth Area (Unincorporated City UGA and Non-Associated UGA)	No changes from 1995 Comprehensive Plan	No changes from 1995 Comprehensive Plan	No changes from 1995 Comprehensive Plan
Housing Mix/Density	Existing mix of single-family and multi-family	Existing mix of single-family and multi-family	Small-lot single-family and multi-family in centers; single-family elsewhere
Centers Concept	No	No	Yes
Downtown Bremerton	Continues as City's employment center	Continues as City's employment center	Continues as City's employment center, but with a new mixed-use focus
Transportation	Identifies projected deficiencies, recommended improvements, and costs.	Identifies projected deficiencies, recommended improvements, and costs.	Identifies projected deficiencies, recommended improvements, and costs; lower LOS standards in centers
Capital Facilities / City Services	Consistent with Comprehensive Plan	Consistent with Comprehensive Plan	Consistent with Comprehensive Plan
Urban Design / Community Character	No design guidelines	City-wide design guidelines	City-wide design guidelines, special design guidelines in centers

Alternative 1: No Action (Existing Plan and Patterns)

The No Action alternative would retain the existing 1995 Comprehensive Plan policies and Future Land Use Map. See Figure 1. Like the other two alternatives, it also would retain the City's unincorporated UGA boundary from the 1995 Comprehensive Plan. The vast majority of the projected new population growth and new employment growth (approximately 75 percent of the total growth [in acres] projected by 2023) would continue to locate in the Non-Associated unincorporated UGA located north of Riddell Road in East Bremerton. Approximately 15 percent of the total growth (in acres) projected by 2023 would locate outside existing City limits but within the 1995 Bremerton Unincorporated UGA. Only 10 percent of the total growth (in acres) projected by 2023 would locate within the existing City limits; it would generally occur as infill on vacant properties along existing primary and secondary arterial streets. This alternative reflects current growth and development patterns. This alternative would not meet proposed goals and policies regarding centers development in the Comprehensive Plan Update.

Alternative 2 (Scenario 2: Updated Plan Without Centers)

Alternative 2 ("Scenario 2: Updated Plan Without Centers") would include most revised Comprehensive Plan policies and an updated Future Land Use Map, but excludes those policies and map changes that reflect the centers concept. See Figure 2. As in the No Action alternative, the majority of the projected new population and employment growth (approximately 55 percent of the total growth [in acres] projected by 2023) would continue to locate in the Non-Associated unincorporated UGA located north of Riddell Road in East Bremerton. Approximately 30 percent of the total growth (in acres) would locate outside existing City limits but within the 1995 Bremerton Unincorporated UGA. Only 15 percent of the total growth (in acres) would locate within the existing City limits. As in No Action, new growth would generally occur as infill on vacant properties, along existing primary and secondary arterial streets, and through redevelopment. Growth would be somewhat more focused in or adjacent to the City. Alternative 2 would retain the City's unincorporated UGA boundary from the 1995 Comprehensive Plan.

Alternative 3 (Scenario 3: Updated Plan With Centers/Preferred Alternative)

Alternative 3 ("Scenario 3: Updated Plan With Centers") has been preliminarily recommended as the preferred alternative by the Bremerton Planning Commission. This alternative would include all revised Comprehensive Plan policies and an updated Future Land Use Map, including those policies and map changes that reflect the centers concept. See Figure 3. Cumulatively, designated centers would comprise approximately 462 acres of land. Almost all of the projected new population and employment growth in Alternative 3 would occur within the incorporated City limits of Bremerton. Of this, approximately 55 percent of the new population and jobs would locate within the designated centers, rather than the more dispersed pattern of the other two alternatives. To encourage this redirection and concentration of growth, the City would redesignate most existing multi-family residential properties outside the centers to Low Density Residential (LDR), which allows 5-10 dwelling units per acre. Over a period of years, these actions are expected to result in a significantly more concentrated land use pattern compared to the other two alternatives. It would be characterized by higher densities, contain more mixed-use

Figure 1. Alternative 1 - No Action

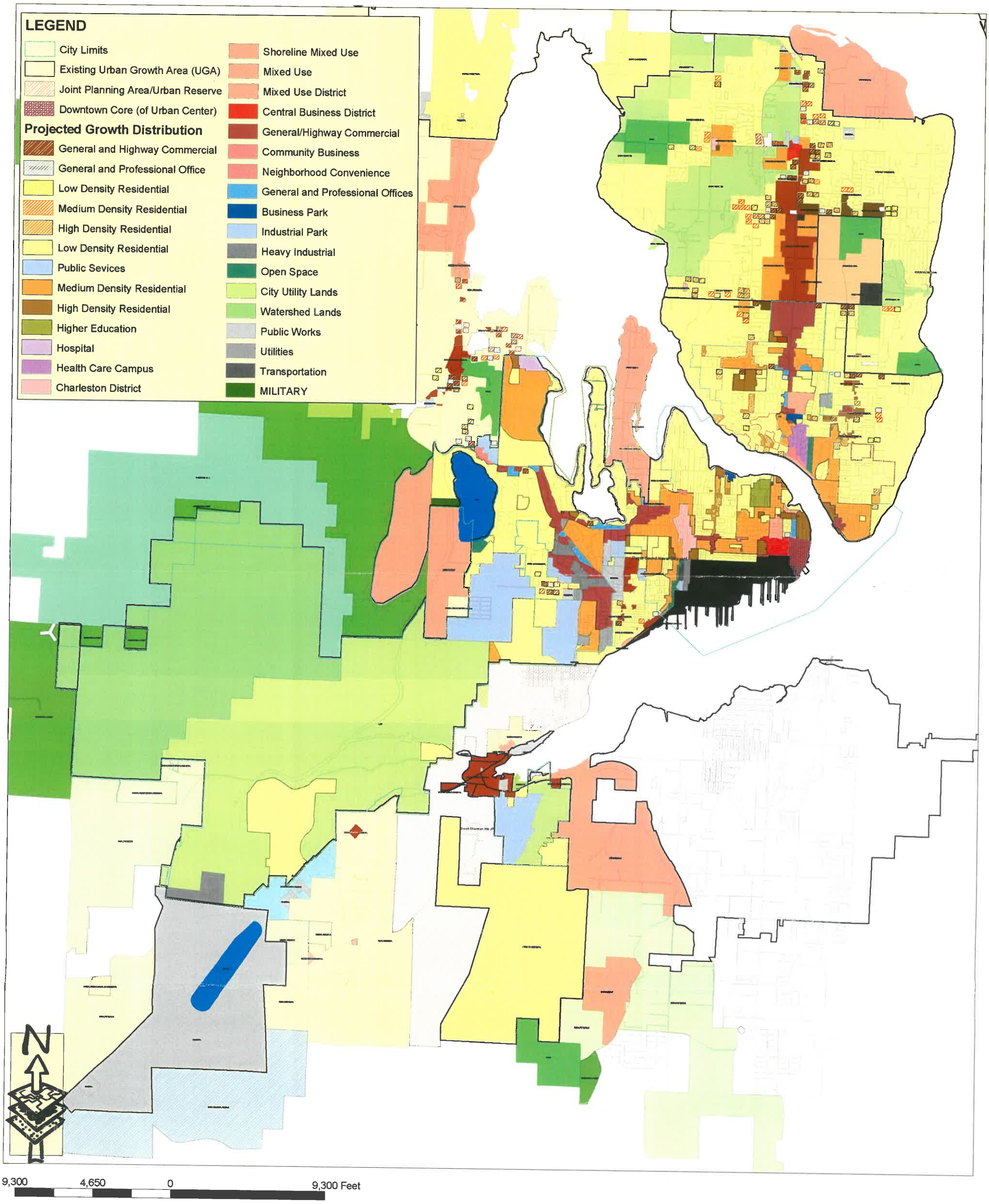


Figure 2. Alternative 2 - Plan Update without Centers

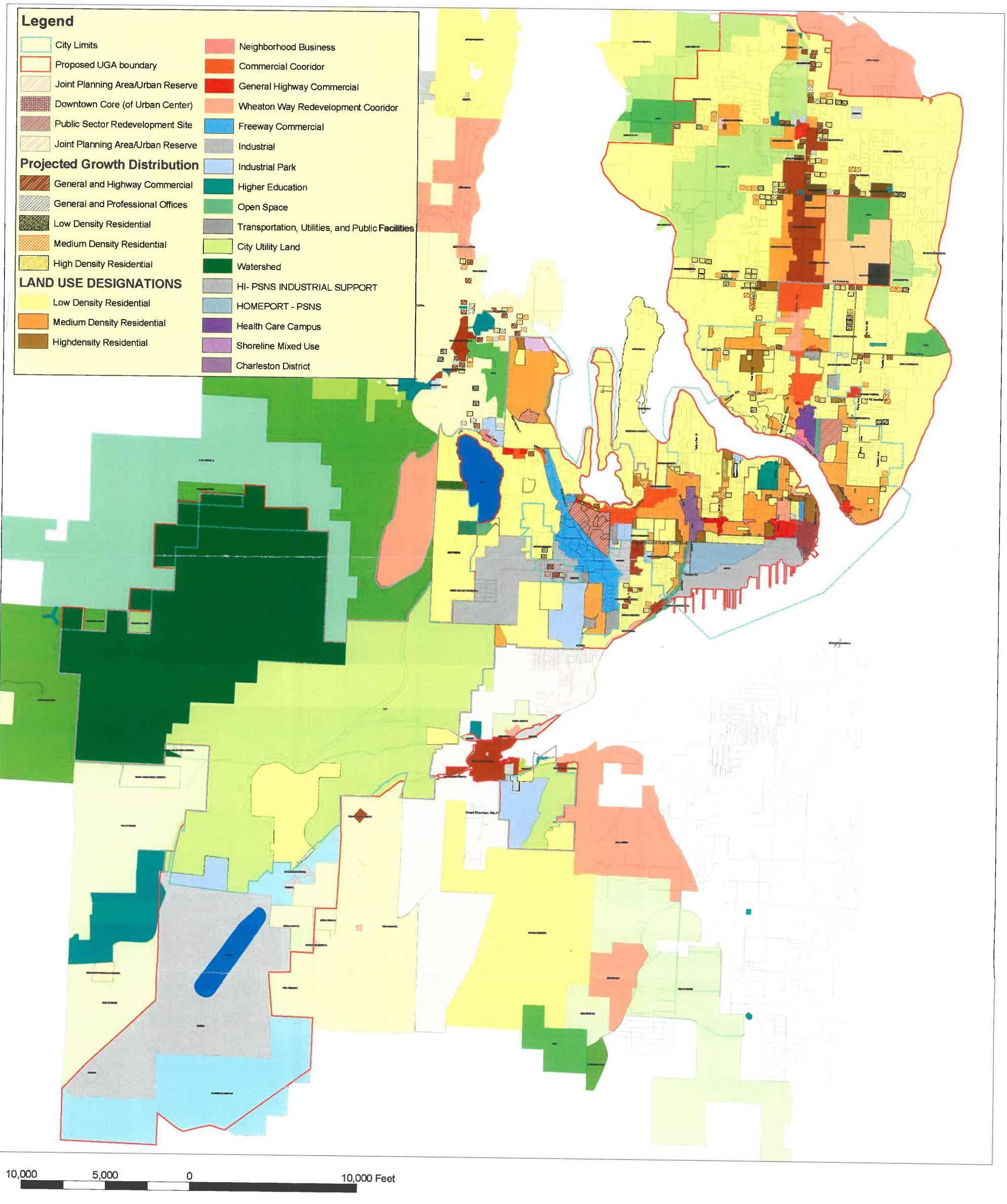
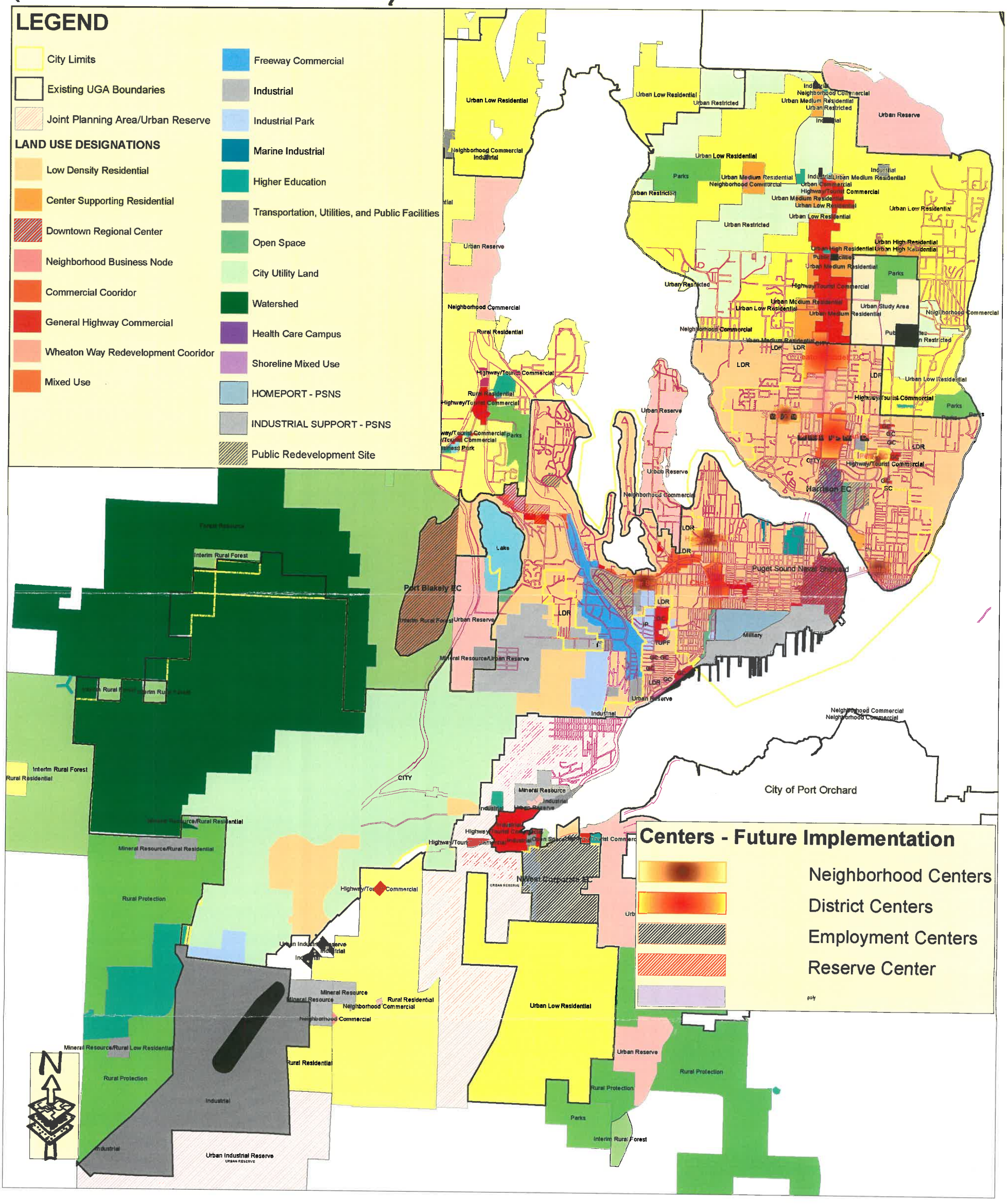


Figure 3. Alternative 3 - Plan Update with Centers (Preferred Alternative)



development, and reflect improved design. Alternative 3 would retain the City's unincorporated UGA boundary from the 1995 Comprehensive Plan.

Land Use Map Designations

Centers

The following centers are described in the Comprehensive Plan Update and designated on the Future Land Use Map.

NC (Neighborhood Center)
General Development Parameters:

- Density: 20 dwelling units per acre (average)
- Height: 1-4 stories
- Housing Type: Mixed, ranging from small-lot single-family near the edge, to 4-story mixed use structures as the focal point of the center.

DC (District Center)
General Development Parameters:

- Density: 20 dwelling units per acre (average)
- Height: 1-5 stories
- Housing Type: Mixed, ranging from small-lot single-family near the edge, to 5-story mixed use structures as the focal point of the center.

EC (Employment Center)
General Development Parameters:

- Density: none specified
- Height: none specified
- Structure Type: Master-planned light industrial and/or office uses in combination with supporting residential and commercial uses.

DRC (Downtown Regional Center)
General Development Parameters:

- Density: 40 dwelling units per acre
- Height: (consistent with DT height plan)
- Housing Type: Various, single use residential and commercial, and/or mixed-use structures.

Centers proposed in Alternative 3 are described below, and are summarized on Table 2.

Table 2. Proposed Centers/Preferred Alternative

	Area (acres)	20-Year Population (# People)	Commercial Floor Area (square feet)	20-Year Employment (# Employees)
Neighborhood Centers				
Haddon Callow Ave/N 15th	27	108	126,000	14-35
Manette Manette Peninsula	33	528	164,688	69-173
Perry Avenue Perry Ave/NE Sheridan	27	216	126,563	28-71
Sylvan/Pine	30	120	140,625	16-39
Kitsap Lake ("Reserve Center") Kitsap Way/Harlow Dr.	48	0	225,000	0
Oyster Bay/Westpark	37	1332	231,250	232-581
Subtotal	*202*	*2,304*	*1,014,126*	*359-899*
District Centers				
Wheaton/Riddell Riddell Rd/Wheaton Way	106	1908	660,000	370-924
Wheaton/Sheridan Sheridan Rd/Wheaton	81	875	500,000	169-424
Charleston Callow Way/N 1st-N 11th	39	280	244,000	54-136
Subtotal	*223*	*3,063*	*1,404,000*	*593-1,484*
Regional Center				
Downtown	37	1332	578,125	652-1630
Employment Centers				
Harrison	0	0	0	0
NW Corp. Campus	0	0	0	0
Port Blakely	0	0	0	0
Total Centers	*462*	*6,669*	*2,996,251*	*1,604-4,013*

Source: City of Bremerton, 2004; Huckell/Weinman Associates, 2004

Neighborhood Centers would be the smallest type of center, between 25 and 50 acres each in area, characterized by a small scale and a pedestrian focus. Commercial uses generally would be limited to personal and professional services serving a single neighborhood. Residential growth would be approximately 75 percent Medium Density Residential (MDR) and 25 percent Low Density Residential (LDR). There would be no new High Density Residential (HDR) development within a Neighborhood Center. Typically a Neighborhood Center would have a park, community center, post office, or school to provide a central point for the center and the residents. The city would designate six Neighborhood Centers throughout the city: Haddon, Manette, Perry Avenue, Sylvan/Pine, Oyster Bay, and Kitsap Lake. Kitsap Lake is designated as a "reserve" centers and is expected to redevelop after 2023.

District Centers would provide several neighborhoods with services and uses not found in the smaller Neighborhood Centers. District Centers would be characterized by larger commercial and professional uses supported by a more dense residential population.

People coming from outside of the Center in automobiles would also use the District Centers; although District Centers would be pedestrian in design, there would be road and parking infrastructure to support automobiles. Residential growth would be allocated with 50 percent being HDR, 25 percent being MDR, and 25 percent being LDR. There would be three District Centers: Wheaton/Riddell, Wheaton/Sheridan, and Charleston.

The section of Wheaton Way located between the two centers would be designated as a "Redevelopment Corridor (WWRC)." The goal of the plan is encourage infill and redevelopment of this auto-oriented commercial strip to a higher density, mixed-use corridor. Design guidelines would require buildings to front the street and to locate parking located behind buildings or on the side. The redevelopment corridor would support and connect the two district centers.

The Downtown Regional Center (DRC) consists of Bremerton's existing downtown core. The DRC would be designed to serve the entire region with jobs, high density residential development, civic and cultural activities. Development in the DRC would be characterized by ground floor retail, galleries, and restaurants and high density residential or office uses on the upper floors.

Employment Centers would be mixed-use areas, with large-scale employment activities supported by residential and commercial uses. Office, light industrial and industrial uses would be allowed and would attract a workforce from a large geographic area. While some employees would commute, there would be opportunities to live in or near the Employment Center. Three Employment Centers would be designated: Harrison at the hospital complex; the underutilized Northwest Corporate campus located in the Bremerton UGA; and the Pope and Talbot and Port Blakely properties in the West Hills area. The Employment Centers are assumed to develop over the longer term; no employment has been allocated to these centers at this time.

The fourteen centers were identified based on their ability to absorb population or commercial development, relative absence of constraints due to critical areas, and the availability (existing or planned) of water, sanitary sewer, storm sewer and transportation over the next twenty years. In subsequent phases of GMA planning, the City will prepare a variety of tools to help implement the centers concept, including sub-area/implementation plans, new zoning designations and design guidelines. Additional environmental review would occur for these future actions.

Other Land Use Map Designations

The Future Land Use Map would combine and consolidate the thirty-three designations on the current Comprehensive Plan Land Use Map into twenty-three designations. In addition to the four centers designations discussed above, the Future Land Use Map would designate sites within the City for a variety of land uses. These include different types of residential, commercial and industrial uses; a neighborhood business node; open space; shoreline mixed use; three public redevelopment sites; a redevelopment corridor (Wheaton Way); watershed; city utilities; transportation, utilities and public facilities; higher education; health care campus; and the Puget Sound Naval Shipyard (PSNS).

Three "Public Redevelopment Areas" are designated at Westpark, Eastpark and Jackson Park. These are generally lands owned by public entities (e.g., U.S. Navy, Bremerton Housing Authority) which are currently developed. The sites (or groups of site) are large in area, present a significant opportunity for master plan redevelopment, and would provide a benefit to the public. The designation is a means to ensure that redevelopment is coordinated with the Comprehensive Plan goals and policies.

F. Westpark Redevelopment

As noted previously, the Bremerton Housing Authority is preparing a master plan for the redevelopment of Westpark. The 74-acre site, which was developed in the 1940's with 642 public housing units, is located in West Bremerton near the junction between Kitsap Way and Highway 3. In 2003, the City passed ordinance No. 4873 designating the site as "blighted" and appropriate for public redevelopment. Pursuant to the state Housing Cooperation Act (RCW 35.83), the City is also committed to "aid and cooperate with the Bremerton Housing Authority and Kitsap County Consolidated Housing Authority in the planning, undertaking and construction of housing projects by providing for planning and development parameters for the redevelopment of Westpark by providing for housing and other related uses" (Ordinance No. 4870).

The Westpark site is currently being planned as a mixed-income "urban village" incorporating "new urbanism" planning principles. The urban village concept includes a mix of land uses, higher densities, pedestrian-oriented design, a grid street system, integrated open space, and modern facilities. The general concept for redevelopment of the community, as described in a Strategic Master Plan (2003), indicates a mix of land uses, including the following:

- 500-1,000 residential units, rental and for sale, in a variety of types, and design. Between 20 and 25 percent of the units would be public housing, with the balance market rate. Any existing public housing units not replaced on-site would be replaced off-site; no net loss of public housing units would occur;
- neighborhood-scale retail and commercial uses, focused in and around a village center with a central open space; large footprint commercial uses could also be developed on a portion of the site;
- community facilities, such as a community center, library, social center, post office, and/r fire station;
- parks and open space dispersed throughout the community, and natural features preserved and integrated into the design; and
- potentially a new school.

Most existing units on-site would likely be demolished. Redevelopment would occur in phases over a 10-year period. The Housing Authority would implement a relocation plan for existing residents.

More detailed information about the master plan or the site is not available at this time. The Housing Authority's planning process will include preparation of site-specific data, technical

environmental studies, market and feasibility analysis, and will culminate in a proposed master plan that will be submitted to the City of Bremerton. Additional environmental analysis pursuant to SEPA and/or NEPA will occur in conjunction with the master plan.

Implementation of a master plan for the Westpark site could occur under any of the Comprehensive Plan alternatives; however, actions required to permit the master plan would vary. Under No Action, redevelopment would require a comprehensive plan land use map amendment and a rezone initiated by the applicant. A change in land use designation for the Westpark site is included in Alternatives 2 and 3 (a portion the site is also within a designated Neighborhood Center). Rezoning of the site would occur as a separate action, likely in conjunction with master plan approval. The City is including information about Westpark in this Draft SEIS to help further the purposes of phased environmental review (described in section C above), to identify and disclose potential impacts associated with the land use map redesignation, and to help inform the community about future redevelopment of the site.

G. Scope of Draft SEIS & Summary of Environmental Information Contained in Previous EISs

Introduction

The City's review of the 1995 SEIS prepared for the adopted Comprehensive Plan indicated that much of the analysis of impacts is still relevant, would not change significantly as a result of updated information or the Comprehensive Plan Update, and would not resulting new or different impacts. The amount of growth being planned for in the 2003-2004 Comprehensive Plan Update is approximately the same as the planning target in the existing Comprehensive Plan. The 1995 Draft SEIS, for example, was based on a 1994 city population of 36,000 people, a 20-year planning forecast of 20,000 additional residents, and a total city population of 56,000 people. Due to limited growth over the last decade, current conditions and projections are only marginally different from those in the current plan. The 2003-2004 Comprehensive Plan Update is based on a 2002 city population of 37,260, a 20-year increase, and a total city population of just more than 50,000. The mix of land use by type is almost identical to that identified in 1995.

The proposed actions and alternatives are also similar to those evaluated in the existing environmental document. The "managed growth" alternative evaluated in the 1995 SEIS, for example, incorporated a number of elements or characteristics which are similar to features of Alternative 3, including downtown revitalization; new locations for commercial growth; and concentrating higher density housing, improvements and increased densities in and around certain business districts. Because the amount and type of growth forecast in 2023 is so similar to previous forecasts, many environmental impacts would be substantially the same, or possibly slightly lower, than those identified in the 1995 SEIS. In terms of the location of growth, Alternatives 1 and 2 in the 2003-2004 Comprehensive Plan Update are similar to those evaluated in the 1995 environmental document.

This EIS for the Comprehensive Plan Update supplements the 1995 SEIS for the existing comprehensive plan. Based on the City's review of the existing documents, it determined that analyses of probable impacts to the following elements of the environment was accurate and

would not change significantly, and did not require reevaluation: Earth, Air, Environmental Health, Energy and Natural Resources, Aesthetics/Light & Glare, and Cultural Resources/Historic Preservation. Consistent with the SEPA Rules, information in the existing SEIS is not repeated in this Draft SEIS (WAC 197-11-620). For the convenience of the reader, the major conclusions of the prior analysis is briefly summarized below.

1. Earth & Groundwater Resources

Earth. On a City-wide scale, potential development on or near steep slopes, unstable soils, or erodible soils could generate significant impacts. The West Bremerton and Anderson Creek areas are specifically mentioned as susceptible to such impacts. Seismic hazards are also identified. Identified mitigation measures include the City's Critical Areas Ordinance, which would avoid or limit impacts, and use of planned unit developments, to help tailor development to sensitive sites.

The general locations of some of the centers proposed in Alternative 3 are identified on the City's critical area maps as containing steep slopes or other geologic constraints (landslide hazards, erodible soils, seismic hazards). Redevelopment in these centers could impact constrained lands. However, impacts would not be different in type or magnitude from those previously identified. For the most part, these areas are already developed.

Review of future redevelopment projects would provide opportunities to address impacts. The City's adopted Critical Lands Ordinance would apply to redevelopment and would provide mitigation tools. The City will be updating its critical area regulations to comply with GMA requirements and will incorporate the best available science in its regulations. Implementation of these regulations would protect critical areas.

Ground Water Resources. Potential contamination of surface water resources was not identified as a significant impact within the City. Urbanization near wells or aquifers could reduce recharge or generate contaminated stormwater.

Information in the Comprehensive Plan Update identifies four critical aquifer recharge areas in or adjacent to the City (East Bremerton/Manette North, Gorst Creek, Anderson Creek, and North Lake) which together supply about one-third of the City's water. A city-wide wetland inventory is not required by GMA and has not been completed. Several frequently flooded areas, located within the 100 year floodplain, are identified.

The City will be updating its critical area regulations to comply with GMA requirements and will incorporate the best available science in its regulations. Implementation of these regulations would protect aquifer recharge areas and mitigate the effects of future growth.

2. Air Quality

Impacts to air quality associated with planned growth would result from construction activities, vehicular traffic and congestion, and use of wood-burning stoves. Higher density development and increased use of transit are identified as ways to reduce air quality impacts.

Levels of population growth in the Comprehensive Plan Update are almost identical to those in the 1995 Comprehensive Plan, and levels of construction activities and resulting air pollution would be comparable. Implementation of construction "best management practices" (BMPs) could mitigate these impacts. Updated information on traffic congestion is provided in this Draft SEIS. In general, Alternative 3 would focus population and employment growth at higher densities into designated centers; the planned mix and density of development would facilitate use of public transit and non-motorized modes of transportation.

3. Energy & Natural Resources

Energy will be consumed to construct and operate new homes, buildings and facilities and for transportation. To the extent that population growth is a measure of energy consumption, impacts of the Comprehensive Plan Update would be the same as identified for the current plan. In actuality, new building codes and more fuel efficient autos would likely result in a decrease in future per capita energy consumption. Alternative 3 would focus almost one-half of projected growth over the next 20 years into designated centers. The mix of uses, higher densities, and pedestrian design of these centers would facilitate use of transit and non-motorized transportation modes, which would reduce energy consumption.

4. Environmental Health/Noise

The elements of environmental health (e.g., risk of contamination, explosion, etc.) and noise were not addressed in the previous EISs prepared for the Comprehensive Plan. These are not considered to be significant environmental issues in the context of Bremerton's GMA planning and have not been included in the scope of the present SEIS. Phased environmental review is being used to address these issues; they would be evaluated and mitigated, as appropriate, in the context of site-specific project applications.

Some areas/sites within the City are affected by some degree of contamination as a result of past land uses. Such sites would be cleaned up pursuant to federal programs, such as Superfund (CERCLA), and/or state programs and regulations, such as the Model Toxics Control Act (MTCA, RCW 70.105D). Clean up would occur in connection with development, redevelopment or independent clean up actions.

Noise would be associated primarily with construction activities and increased traffic, both of which are exempt from noise control ordinances. Development conditions which limit construction hours and require construction best management practices are typically used to address such impacts. Noise levels in centers, including Downtown Bremerton, could increase as a result of urbanization. Some increase is unavoidable. Sensitive uses can be protected from significant impacts through conditions imposed during the development review process for new public and private activities. Setbacks, site planning/building orientation and/or noise walls or berms could be required to protect some sites from noise sources.

5. Aesthetics/Light & Glare

Urban growth – including clearing of trees and construction of buildings – could alter existing views and the appearance of developing portions of the City. Mitigation measures identified in the 1995 SEIS included: view corridor protection, building setbacks, parks and open space, and landscaping.

In Alternatives 1 and 2, this growth and change would be relatively more dispersed throughout the City and Urban Growth Areas. Alternative 3, in contrast, would guide growth to designated centers; redevelopment would change the appearance of these areas significantly. Other areas of the City would change relatively less. The Community Character element of the updated Comprehensive Plan contains numerous policies that would guide future change. Development regulations, design guidelines and a design review process would be adopted to implement these policies and help to ensure high quality urban design, particularly in centers.

6. Historic & Cultural Resources

Future development and redevelopment could result in the demolition or modification of historic structures, or the disturbance of cultural resources. Mitigation measures identified in the prior EISs include resource identification, and protection through development regulations and incentives. In addition, future development review and SEPA evaluation will help to identify and mitigate potential impacts at the project level.

III. AFFECTED ENVIRONMENT, SIGNIFICANT IMPACTS OF THE ALTERNATIVES, MITIGATION MEASURES AND SIGNIFICANT UNAVOIDABLE IMPACTS

Natural Environment

1. Water Resources

Affected Environment

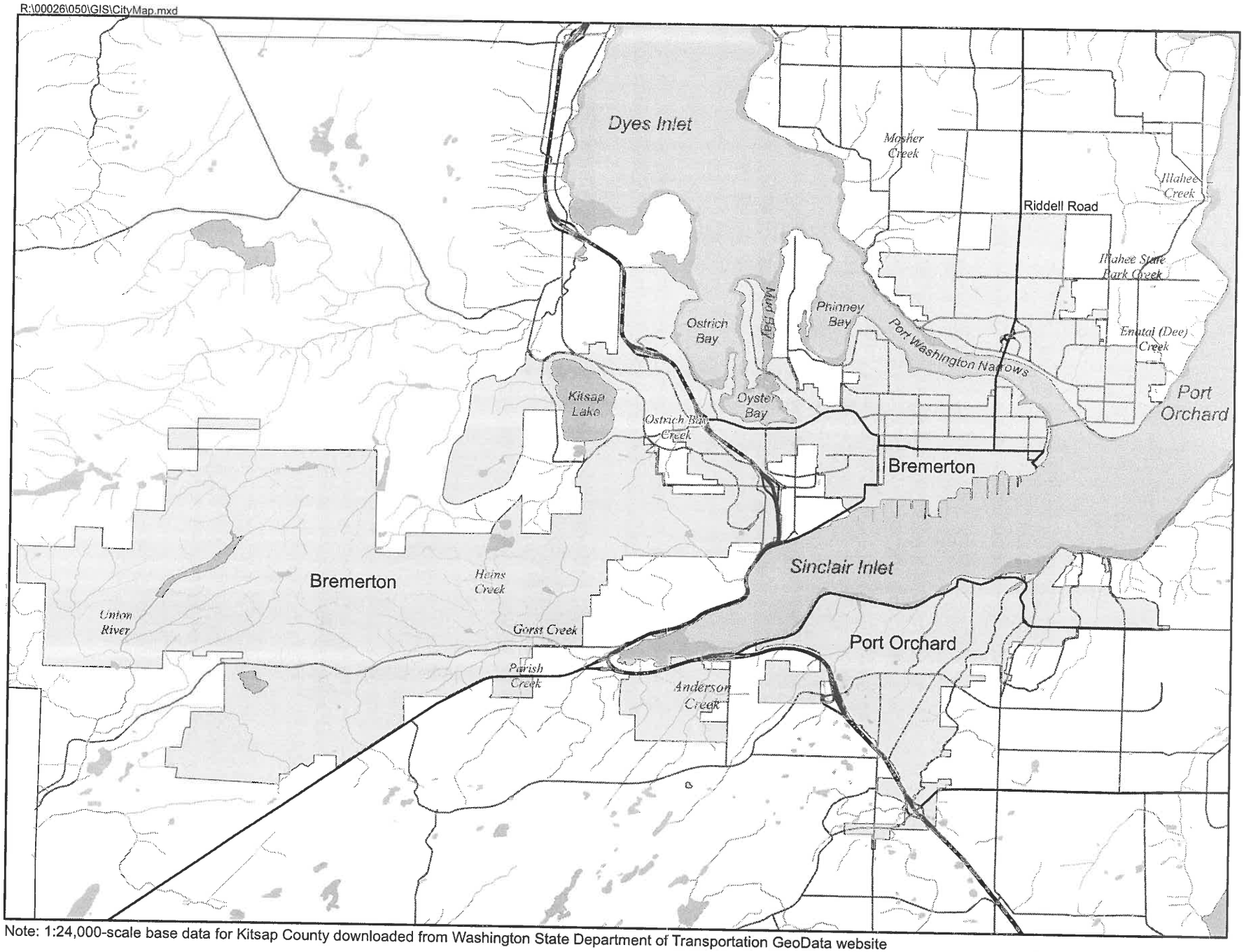
Surface Water

The Bremerton area is surrounded by various bays and channels of Sinclair Inlet, Dyes Inlet, and Port Orchard (Figure 4). The waters of Puget Sound enter the area through Port Orchard Bay and Rich Passage. The Port Washington Narrows bisects the City and connects Sinclair Inlet to Dyes Inlet. Marine shoreline and nearshore areas have been highly altered in the Bremerton area, due to roads, railroads, shipyards, and commercial and residential development.

Bremerton also has a number of streams within its City limits and Urban Growth Areas. The largest perennial streams are Union River (which provides the a majority of the City's surface water supply) and Gorst Creek; both run primarily through the undeveloped lands and open space in the far western portion of the City limits. Ostrich Bay Creek and Phinney Creek lie within the more developed areas of West Bremerton. Ostrich Bay Creek is within the city limits, and Phinney Creek originates within the City limits, runs through the County land adjacent to the city, and is partially covered and contained in culverts. Both Watersheds lie within the more developed areas of the West Bremerton. Other streams within the City's Unincorporated UGA and Non-Associated UGA include Anderson Creek, Enatai (Dee) Creek, Illahee Creek, Illahee State Park Creek, Mosher Creek, and a variety of other small unnamed steams (Figure 4).

All of the streams within the City of Bremerton from Sinclair Inlet to Oyster Bay have been covered and contained in culverts, eliminating all surface water and estuarine habitat characteristics (Haring 2000). Most of the natural stream channels along this 11-mile stretch of shoreline and other areas within the City limits were eliminated during the last century.

Gorst Creek is a protected watershed and provides a secondary source of drinking water to the City of Bremerton. A restoration project on the creek has replaced 750 feet of concrete channel with 1000 feet of natural stream channel that replicates a more natural stream system and provides spawning, rearing and riparian habitat for salmonid species as well as other wildlife (City of Bremerton 2003). This project also placed gravel, large woody debris and native plantings along 1.5 miles of stream.



Note: 1:24,000-scale base data for Kitsap County downloaded from Washington State Department of Transportation GeoData website

Figure 4
City of Bremerton and Surrounding Water Resources

Kitsap Lake is the largest lake in the City's planning area. The lake is almost completely surrounded by residential development, and many of the homes have private boat docks on the lake. The southwest portion of the lake is outside the City limits and UGAs and is managed by Kitsap County. Many of the City's wetlands are associated with Kitsap Lake inlet. On the south side of the lake, Kitsap Lake Park contains a wildlife preserve that protects a majority (30 acres) of these important wetlands.

Along with the wetlands associated with Kitsap Lake, there are other wetlands scattered throughout the City. Bremerton's wetlands provide a variety of important ecological functions. They provide habitat for fish and wildlife, protect water quality, contribute to groundwater recharge/discharge, and provide flood water storage and attenuation or desynchronization.

The areas of Bremerton that have been mapped to contain 100-year floodplains according to the Federal Emergency Management Agency (FEMA) include Gorst Creek, Parish Creek, Sinclair Inlet, Kitsap Lake, Port Washington Narrows, Phinney Bay, Mud Bay, and Ostrich Bay.

Water Quality

Water bodies within the City of Bremerton exhibit water quality conditions generally associated with heavily developed urban areas. The Kitsap County Health District conducts stream and marine monitoring in Dyes Inlet, Port Washington Narrows, Port Orchard Bay, and Sinclair Inlet. Anderson Creek in the small area of the Non-Associated UGA near Port Orchard has failed the water quality standard for fecal coliform (FC) in the 2002-2003 monitoring (KCHD 2004). Gorst Creek had previously failed to meet the FC standard and was on the Washington State Department of Ecology's 303(d) list in 2002. Based on the 2003 water monitoring data from the Health District, it currently meets the standard for all parameters (FC, dissolved oxygen, pH, temperature, and turbidity; KCHD 2004).

Ostrich Bay Creek, located in a more developed area of Bremerton, did not meet the standard for three parameters: FC, dissolved oxygen, and turbidity in 2002-2003 monitoring. Both Ostrich Bay Creek and Phinney Creek (adjacent to the City limits in West Bremerton) have high bacteria levels, and the Health District advises the public to avoid contact with them. Illahee State Park Creek and Enatai (Dee) Creek on Port Orchard Bay also failed the standard for FC, and the Health District is trying to minimize public exposure to this water (KCHD 2004).

Marine monitoring shows a general improvement in FC concentrations in Dyes Inlet, Port Washington Narrows, Sinclair Inlet, and Port Orchard Bay in the few years it has been monitored by the Health District. In addition to FC, Sinclair Inlet and Dyes Inlet are both listed on the State's 303(d) for heavy metal, organic, or inorganic parameters in sediment, which are not monitored by the Health District (Ecology 2004). The City of Bremerton has had a history of repeated ongoing combined sewer overflow (CSO) problems that affect estuarine and nearshore water quality, but has been implementing an aggressive CSO reduction program since 1992, which has drastically reduced this problem (City of Bremerton 2004).

Kitsap Lake is listed as an "impaired water body" by the Washington State Department of Ecology (Ecology 2004). Pollution sources may include failing on-site sewage systems, pet

waste, livestock waste, fertilizers, construction site runoff, waterfowl, wildlife, stormwater runoff, or sewer conveyance systems. Kitsap Lake is routinely monitored by the Health District and has been closed to swimming at various times due to high levels of *E. coli* bacteria, swimmers itch, and blooms of potentially toxic blue-green algae. The Health District is conducting a "Pollution Identification and Correction" project on the lake, in which the District works with lakefront property owners, the City, and the County to work toward the goal of cleaning up the lake water and preventing future pollution.

Westpark

No identified wetlands or streams are located on the Westpark site. No known habitat for threatened or endangered species is present. Existing trees and vegetation provide habitat for typical urban species.

Based on preliminary, conceptual site planning, approximately 25 percent of the site (about 20 acres) would be retained in open space. Additional portions of the site would be landscaped using native species. Although exact quantities are not known, there could be a reduction in vegetation (and an increase in impervious area) to accommodate redevelopment at urban densities.

Currently, no detention or water quality treatment system exists for on-site stormwater. A new stormwater management system would be designed and constructed in conjunction with master planning. It would include water quality treatment prior to discharge to Oyster Bay (where it is currently discharged). Water quality, and resulting habitat for fish, would likely improve relative to existing conditions.

Significant Impacts of the Alternatives

Alternative 1 - No Action

Although the No Action Alternative would not result in a change in the land use pattern, future growth and development could have an adverse effect on water resources. Increased development results in vegetation removal, and creation of impervious surfaces. Increased impervious surface areas reduce the infiltration of rainfall, increase stormwater runoff, and result in greater potential for erosion (Booth and Jackson 1997). The results of the erosion process can in turn adversely affect the physical and biological characteristics of streams and other water resources. Sedimentation of lakes, wetlands, and streams can reduce storage volume and can also have impacts on flood moderation, groundwater exchange, and sediment stabilization. Freshwater and marine aquatic resources can be affected by dissolved nutrients and contaminants that wash off the increasing amounts of impervious surfaces into these water bodies.

The alteration or destruction of wetlands can reduce or eliminate the biological and hydrological functions they perform. Direct impacts can result from development activities, including clearing, grading, and filling of wetlands. These types of activities can also affect wetlands by increasing the volume of sediment-laden runoff that enters wetlands, which reduces the wetland's natural capacity to remove nutrients, process chemical and organic wastes, and

temporarily store flood waters. Indirect impacts from new development, e.g., by reducing wetland riparian buffers or by increasing impervious surface area, can also include alteration of surface water flows or an interruption in the infiltration of groundwater.

Surface water impacts are generally proportionate to the amount of impervious surface area within a drainage area (Booth and Jackson 1997). The effects of the increased impervious surfaces and other changes associated with development under the No Action Alternative would include altered surface water flows, increased stormwater flow, localized flooding impacts, and generation of non-point source pollution to local surface waters. The Bremerton Municipal Code (BMC) requires the inclusion of stormwater treatment facilities in most projects that create new, or expand existing impervious surface area. These regulations require that stormwater be treated or detained before it is released to local streams to help reduce potential detrimental effects on these aquatic resources.

The development associated with the No Action Alternative is expected to be greatest in the Non-Associated UGA located north of Riddell Road in East Bremerton. The amount of new impervious surface associated with the No Action Alternative is expected to be more than the other two alternatives as development is focused on areas outside the City limits that contain less existing infrastructure. New roads and utilities would need to be installed, and currently vegetated open land would be cleared and developed. Important water resources that could be affected include Mosher Creek, which drains into Dyes Inlet, and Enatai (Dee) Creek, Illahee Creek, and Illahee State Park Creek, which drain into Port Orchard Bay.

Alternative 2 – Updated Plan without Centers

Impacts to water resources under Alternative 2 would be similar in nature to those described for the No Action Alternative. Alternative 2 would have slightly less impervious surface associated with it, as development would be focused somewhat closer to the City, and these portions of the UGA may have more existing development and infrastructure than those further away from the City limits. Affected watersheds would be the same as No Action, but impacts would be slightly lower in degree.

Alternative 3 – Updated Plan with Centers (Preferred Alternative)

Impacts would be similar in nature to those described for No Action. However, impacts would generally be lower in magnitude because development or redevelopment would be focused in urbanized areas with development, existing roads and infrastructure,

Creation of additional impervious surfaces would be much more limited than under the other alternatives. Alternative 3 would primarily affect the watersheds within the City limits. These would be the streams that are already the most impaired in the area, primarily Ostrich Bay Creek and Phinney Creek. Marine waters would experience levels of impacts similar to those under the No Action, but impacts would be more concentrated at the outlets of these urban streams. Aquatic resources outside the City limits would be expected to be more protected from the impacts associated with development.

Mitigation Measures

Direct impacts to water resources, including wetlands, streams, shorelines, and lakes from increased development could potentially be avoided or minimized by implementing applicable federal, state, and local guidelines, rules, and ordinances. For example, impacts to water resources may be mitigated by the following measures:

- Critical Areas Ordinance, which address wetlands, streams, and applicable buffer preservation or restoration;
- Preservation or restoration of existing native vegetation on a watershed scale;
- Stormwater controls;
- Education programs that lead to reduced fertilizer and pesticide entering surface waters; and
- Mitigation for specific project impacts.

City stormwater regulations will be implemented to mitigate for impacts related to water quality in new development and redevelopment. For large development or redevelopment (>5,000 square feet of new impervious surface) this includes an engineered erosion control plan and an engineered drainage plan. Small development or redevelopment (<5,000 square feet of new impervious surface) requires a drainage plan and adherence to Ecology's BMPs to mitigate for erosion. In the preferred alternative, small-scale urban infill development of one- to two-story buildings would be typical. It may be difficult both economically and physically for individual developers to mitigate fully in accordance with City BMC Title 17 and Ecology's BMPs. As a result, it may be more appropriate to at least partially mitigate these impacts of increased impervious surfaces with regional facilities using a system-wide or sub-basin approach.

An alternative or additional mitigation requirement would be for the City to expand BMC Title 17.04.060, or to adopt additional low impact development (LID) requirements to apply to single family residences, thereby reducing allowed off-site discharges of stormwater.

The City's Critical Areas Ordinance (BMC 21.22) is applied on a project-by-project basis to protect the City's critical areas. The ordinance includes standards, guidelines, criteria, and requirements to identify, analyze, and mitigate the probable impact of development on critical areas and resource lands, and to enhance and restore the areas when possible. The goal of the ordinance is to avoid environmental impact where feasible and reasonable. In appropriate circumstances, the impact on critical areas resulting from regulated land uses and activities may be minimized, rectified, reduced, or compensated for, consistent with the requirements of the Ordinance.

The adopted Bremerton Comprehensive Plan includes an Environmental Management Element, which provides goals and policies that support the City's critical areas designations and regulations. The draft 2003-2004 Comprehensive Plan Update includes these protection measures and moreover, encourages practices that would limit urban sprawl and focus development within the City limits. The City's Comprehensive Plan, in concordance with the City's Critical Areas Ordinance and Shoreline Master Program, provide many protective measures that would mitigate for impacts to surface water associated with increased

development. The Critical Areas Ordinance and the Shoreline Master Program will be updated in subsequent phases of work to comply with GMA requirements.

2. Plants and Animals

Affected Environment

Plant Resources

Plant resources in the Bremerton planning area are typical of urban areas in Northwest Washington. Trees in Bremerton include western hemlock, western red cedar, Douglas fir, red alder, and big leaf maple. Typical native understory in the City includes salal, vine maple, Oregon grape, and native blackberry. Dominant plants in wetland and riparian areas within Bremerton include red alder, black cottonwood, willow, and a variety of other understory species. Non-native invasives in the City are also common, and include Himalayan blackberry, English ivy, Japanese knotweed, and Scots broom.

Plants in wetlands are generally those that are well adapted to survival in saturated soil conditions. These can include canary grass, bulrushes, and spike rushes in wetland meadows, red-osier dogwood and willow in scrub-shrub wetlands, and red alder, black cottonwood, salmonberry, and cascara in forested wetlands.

Wildlife Resources and Terrestrial Habitats

Bremerton has significant areas of natural habitat for a variety of wildlife. A large portion of this habitat is within the City's protected watershed and utility lands, but wildlife habitat can also be found within the City's neighborhoods, parks, shorelines, and riparian areas. These areas are home to many species of birds, mammals, amphibians, and reptiles that depend on the various habitat features for their survival. Bremerton has areas that would be considered high-density, low-density, and forested, each of which provides a different kind of wildlife habitat.

Urban areas with high-density development (>60 percent impervious surface), such as the downtown area, support a low diversity of wildlife, with generalists and introduced species having advantages. These high density environments have little in the way of natural refuge or natural food sources for wildlife and generally lack the unique habitats, such as snags or downed logs in various stages of decay, that are required by many specialists. Birds and mammals that can feed on human garbage and handouts often are highly successful in these environments (e.g., rock doves, English house sparrows, gulls, mice, and rats). Other birds that use high-density urban areas include red-tailed hawks, many species of gulls, cliff and barn swallows, swifts, crows, and in urban park areas, some species of songbirds such as American robins, chickadees, bushtits, and ruby-crowned kinglets. Non-native birds are especially common and productive in these urban settings; rock doves, European starlings, and English house sparrows are three prime examples. Introduced mammals such as house mice, eastern gray squirrels, black rats, and Norway rats are also very common in these environments. Other native mammals include opossum, raccoon, and various species of bats.

Outside of its urban core, habitats available for wildlife tend to be residential neighborhoods, parks, or green belts, which have more trees and shrubs and a higher frequency of water sources than in high-density areas. Birds such as Steller's jays, flickers, Bewick's wrens, and hummingbirds (three spp.) augment the list of birds described above for high-density urban areas.

In addition to the wildlife that use high-density areas, a variety of birds, mammals, reptiles, and amphibians are able to use lower density areas. Moles, many species of bats, voles, and mice, Eastern gray squirrels, beaver, muskrat, and skunk may use these areas. Larger mammals such as deer, coyote, and red fox may inhabit the outskirts of these areas and forage within them. Amphibians such as Pacific treefrog, red-legged frog, and western redback salamander may be common in wetter portions of low-density urban areas.

The forested areas of Bremerton's undeveloped lands and open space in the western portion of the City, including the Union River, Gorst Creek, and Anderson Creek Watersheds, are typically second growth mixed conifer and deciduous forests that are productive and contain a variety of conditions that support a high diversity of species. There are several unique amphibian species that are dependent on forested habitats, including the tailed frog and the Pacific giant salamander. A variety of other amphibians are abundant in forested areas, especially in riparian areas near streams or wetlands. Small mammals in forested areas include ground-dwelling mammals such as shrews and moles, forest canopy mammals such as flying squirrels and tree voles, and those that use multiple components of the forest structure such as weasels and raccoons. Bird species characteristic of forested areas include chestnut-backed chickadee, varied thrush, Steller's jay, winter wren, and golden-crowned kinglet. Snags and fallen wood provide food, refuge, and nesting habitat for many forest species, including bats, small mammals, amphibians, and birds. Owls, woodpeckers, and waterfowl may use cavities for nesting. Haring (2000) reports that there appears to be much higher black bear presence and predation on salmon in upstream portions of Gorst Creek than in other drainages on the Kitsap Peninsula.

Many species of fish and wildlife are wetland dependent, requiring wetlands to complete all or a portion of their life cycle (Mitsch and Gosselink 2000). Beaver, muskrat, marsh wren, red-winged blackbird, Pacific tree frog, rough-skinned newt, northwest salamander, red-legged frog, and long-toed salamanders are some of the more common wetland-dependent species in Kitsap County, including the Bremerton area.

Priority habitats identified in the Bremerton planning area include wetlands and estuarine zones (WDFW 2004). Other important habitats in the Bremerton area include the estuary at the mouth of Gorst Creek, which provides important foraging and resting habitat for shorebird and waterfowl concentrations, and Washington Narrows and Phinney Bay, which provide shelter and food for overwintering waterfowl (WDFW 2004). Harbor seals use various floats in Ostrich Bay as haulouts. Some beaches in the Bremerton area, such as the west side of Marine Drive, for example, provide surf smelt spawning habitat, as well as a small amount of sand lance spawning habitat. Port Washington Narrows is used by intertidal and subtidal hardshell clams (WDFW 2004)

Fish Resources

Puget Sound Chinook salmon were listed as threatened under the Endangered Species Act (ESA) in 1999. Only Gorst Creek provides habitat for Chinook salmon in the Bremerton planning area, although they may migrate through the larger marine waters (Haring 2000).

Gorst Creek has been the focus of a large restoration effort, and currently supports significant populations of Chinook, chum, coho, steelhead, and cutthroat. Sockeye are also occasionally observed in Gorst Creek, although it is unknown whether they are of local origin. The Suquamish Tribe operates two Chinook rearing ponds and two yearling fall Chinook raceways on the creek. This program was established in 1981 as a cooperative effort with WDFW, the City of Bremerton, and the Poggie Club, to provide salmon for tribal and sport harvest. Returns of Chinook spawners are observed annually in Gorst Creek. Haring (2000) indicates that adult Chinook returns are likely hatchery origin returns, rather than the result of natural production.

Four other creek systems are known to support anadromous salmon within the Bremerton planning area. Anderson Creek enters the south shore of Sinclair Inlet approximately 0.75 mile east of the town of Gorst. Anderson Creek also provides some of the City of Bremerton's water supply. The water supply area is managed for both municipal water supply and commercial forestry. The watershed supports chum, coho, and cutthroat, and possibly steelhead (Haring 2000).

Ostrich Bay Creek is the only creek within the urbanized City limits known to support salmon. It lies within a steep ravine in a primarily residential area. It is a small independent drainage with approximately 2 miles of creek length and supports chum and coho salmon, as well as cutthroat trout (Haring 2000).

Enetai (Dee) Creek is a small independent creek enters Port Orchard Bay approximately 1.0 mile northeast of Point Heron. The creek currently supports chum and coho salmon, as well as cutthroat trout in the lower reaches, but anadromous fish are limited in their range due to culverts, which act as fish passage barriers (Haring 2000).

The Illahee Creek Watershed includes mainstem Illahee Creek and two salmonid bearing tributaries. The basin enters the west shore of Port Orchard Bay approximately 1.0 mile north of Illahee State Park. The watershed supports chum and coho salmon, as well as cutthroat trout (Haring 2000).

The other inlets, bays, and small estuaries within the area are also very important to salmonids. Juvenile salmonids use shorelines and estuaries for food and protection. Adult salmonids also use these areas for migration.

Species and Habitats of Concern

Chinook salmon are listed as threatened under the ESA and are discussed above. The City of Bremerton works with 29 other cities, counties, tribes, business, and environmental groups to

implement salmonid conservation projects and develop a long-term plan for protecting and restoring salmon habitat in the watershed.

Bald eagles are commonly observed in the City and are reported to occur in the City by the Priority Habitats and Species Maps (WDFW 2004). Seven eagle nests are reported within the Bremerton planning area, and two other nests are within a mile of the planning area. The marine shorelines around Bremerton, as well as Kitsap Lake, provide foraging and resting habitat for eagles in the Bremerton area.

Other species with special federal or state designations that may be present in the Bremerton planning area include (WDFW 2004):

- Peregrine falcon, State Sensitive, Federal Concern;
- Purple martin, State Candidate; and
- Pileated woodpecker, State Candidate.

Significant Impacts of the Alternatives

Alternative 1 – No Action

Projected growth and development under No Action would cause direct and indirect impacts to vegetation and wildlife. Direct impacts to vegetation would primarily include its physical removal for construction projects. Indirect impacts could involve changes related to water flow and infiltration. Installation of roads, utilities, and infrastructure usually alter the vegetation community, either temporarily or permanently. Disturbance often gives an advantage to non-native invasive plant species.

Future development would also negatively affect wildlife species and their required habitats within the City. As habitat changes from forested to low-density urban to high-density urban, wildlife communities decline in number and diversity (see discussion above). The impact of development and redevelopment on habitat involves the replacement of vacant or underdeveloped parcels (as would primarily be the case in the No Action Alternative) with buildings, roads, parking lots, landscaping, and structures. Depending on the location, density, and intensity of land use, development can result in the removal, displacement, and/or fragmentation of habitat, and can cause some wildlife species to relocate. Increased human disturbance, traffic, and other associated factors negatively affect wildlife species and/or habitat.

Impacts to surface water (see above) can result in reduction of the quality and quantity of aquatic resources over time. Changes associated with development can impact the aquatic ecosystems that support fish populations by causing higher water temperatures, sedimentation, increased peak flows, reduced low flows, pollution, and reduced riparian and wetland areas. Salmonid fish species are very sensitive to any change in the stream environment. Direct impacts to fish and fish habitat are expected to be minimized by application of current buffer requirements for salmon-bearing streams and the required timing of in-stream work window periods, which protect fish during critical times of their life history.

Indirect impacts to fish and wildlife habitat would include an increase in stormwater runoff from impervious surfaces. As discussed above, increased impervious surfaces increase the volume, peak flows, and velocity of stormwater flowing into streams. These effects can in turn cause greater bank erosion, bed scour, and sedimentation, which negatively affect salmonid species by disrupting spawning and resting areas, reducing prey, scouring redds, and limiting fish passage though culverts.

Under No Action, the greatest impacts to plants and animals would be felt in the City's UGA and the unincorporated Non-Associated UGA in East Bremerton. Increases in population, employment, traffic, impervious surfaces, and human activity would result from development of open space areas that currently provide habitat for wildlife. Watersheds in which plants and animals would be most affected include Mosher Creek, which drains into Dyes Inlet, and Enatai (Dee) Creek, Illahee Creek, and Illahee State Park Creek, which drain into Port Orchard. Continued loss of potential quality habitat could result in reductions in plant and animal numbers and diversity, and reduce productivity of anadromous and resident salmonids. No Action would likely have the largest increase in impervious surfaces, more new development would occur on vacant lands, rather than through redevelopment. This alternative would have the greatest effect on fish and wildlife and their habitats within the drainage basins.

Threatened Chinook salmon primarily use Gorst Creek for spawning and rearing in this area. Impacts on Chinook would be minimal as intense development is not projected in this area under any of the alternatives.

Alternative 2 – Updated Plan without Centers

Impacts related to Alternative 2 would be very similar in nature to those described above under the No Action Alternative. Fragmentation of habitat and development on open space would still be expected under this alternative, but to a lesser degree as development pressure would be focused closer to the City limits. A slightly smaller amount of impervious surface would be expected to be created under this alternative than under the No Action Alternative, as more redevelopment would occur.

Alternative 3 – Updated Plan with Centers (Preferred Alternative)

Impacts related to Alternative 3 would be similar in nature to, but lower in magnitude than those described above under No Action. Most growth would locate within the City limits and within centers, and an increased number of people would be supported on the same amount of land. This would increase pressure on plants and animals within the City limits, and the plant and animal communities in the low-density areas of the City would likely shift to more closely resemble those in the high-density urban areas.

This alternative would also create the least amount of new impervious surface; most development or redevelopment is planned to occur within the City limits, where existing development, roads, and utilities already exist and where habitat has previously been disturbed by urban development. A minimal increase in impervious surface could affect salmonid habitat in the City's streams; however, these streams are already the most impaired in the area. Areas

within the unincorporated UGAs would experience less development pressure, and plants and animals, including salmonids in those areas would be less impacted. Open space, connections, and habitat quality would also be better preserved in the areas outside of the City limits.

Mitigation Measures

Direct and indirect impacts to wildlife and aquatic resources from increased development could be avoided or minimized by implementing applicable federal, state, and local guidelines, rules, and ordinances.

Impacts to terrestrial and aquatic biological resources including wildlife and fish may be mitigated by the following measures, in addition to those identified above for water resources. Mitigation would involve programmatic actions and project-specific conditions.

- Timing allowable in-stream work periods to protect fish during critical times of their life history;
- Preservation or restoration of corridors for wildlife movement between isolated areas of habitat;
- Removal of fish passage barriers;
- Enhancement of shoreline habitats;
- Enhancement of instream habitat;
- Removal of derelict structures in marine waters;
- Design of new structures to minimize overwater structures; and
- Mitigation designs for specific projects and impacts.

Significant Unavoidable Adverse Impacts

Increased growth, construction, human activity, traffic, and the expansion of public facilities under any of the alternatives would result in incremental impacts to the City's natural environment and resources. Adverse impacts to the City's natural environment would be unavoidable to some extent. The concentration and focus of new population and employment density, especially in the preferred alternative, would reduce overall impacts to plants and animals, air quality, water quality, and earth-related resources. The implementation of potential mitigation measures, as defined above, would help to prevent adverse impacts to the natural environment.

Land Use

1. Land Use Patterns

Affected Environment

The City of Bremerton is approximately 14,454 acres (23 square miles) in area. It's unincorporated Urban Growth Area (UGA), designated in the Kitsap County Comprehensive Plan, is located in East Bremerton and consists of 2,281 acres. Of the total acreage within the City, approximately 35 percent is residential, 9 percent is commercial, 9 percent is industrial, and 47 percent is public lands. The high percentage of public lands includes land owned for watershed protection, for a municipal golf course, and for public utility purposes.

Over the past decades, the City has experienced a decline in its residential population; commercial/industrial growth has also increased much more slowly than the rest of Kitsap County. A surplus of land capacity exists, particularly with industrial lands, with nearly 90 percent of the industrial designated lands in the City remaining vacant.

Residential Land Uses

Residential land use is the second most prevalent land use in the City (approximately 35 percent); this represents almost twice the amount of land designated for commercial and industrial uses combined. In 2000, approximately 54 percent of residential dwelling units were single-family homes, while 44 percent of dwelling units were in multi-family structures. In the last five years more multi-family development has occurred than single-family development. Outside of the downtown and public lands, most of the City's waterfront is developed in residential uses. Overall, Bremerton has a residential density of approximately five people per acre.

Westpark

Westpark, one of the City's established neighborhoods, was developed in the 1940's as a public housing community. Existing uses include 642 housing units (single family, duplexes, fourplexes and apartment) and a community center. The surrounding area is developed for a mix of industrial, freeway commercial, and office uses. The area north of Kitsap Way, adjacent to Oyster Bay, is single family residential in character.

The Westpark site is designated as Medium Density Residential on the existing Comprehensive Plan land use map and zoning map. The preferred Comprehensive Plan alternative (Alternative 3) would designate the site as "Public Sector Redevelopment Site" on the Future Land Use Map. Redevelopment could occur under any of the SEIS alternatives, although under Alternative 1 (No Action) a rezone would be required.

Commercial/Industrial Land Uses

Commercial and industrial designations together represent approximately 18 percent of the land within the City. Much of this land is vacant. The largest single industrial use is the Puget Sound Naval Shipyard (PSNS), which occupies approximately 179 acres. New commercial development within the City has mostly been auto-oriented parking-intensive retail uses located on major arterials. The Wheaton Way corridor has seen the largest increase in this type of commercial growth. The other concentration of commercial and industrially designated land is downtown Bremerton. Much of the commercial and industrially designated land downtown is vacant or underutilized. The Washington State Ferry Terminal is located downtown, as well as a recently completed convention center and associated retail.

Appendix B contains information about existing conditions in the areas proposed in Alternative 3 as Neighborhood, District, and Employment Centers, and the Downtown Regional Center. These centers are discussed further in the subsection on Significant Impacts, below.

Open Space

Open space land (including lands designated Watershed, Utility, and most lands designated Open Space) is the most extensive land use in the City, encompassing over 8,000 acres. Most of this large amount of land is publicly owned, and is located in the western portion of the City. Most of it is set aside for protection of the City's water supply, and for the City's Gold Mountain Golf Course. There also are additional forested Utility-owned lands in this part of the City. Open space lands also include City parks located throughout the Bremerton. The Comprehensive Plan Update does not propose changes to these open space and public lands; the designations, and the amount of land assigned to these designations, is the same in all three SEIS alternatives.

Shoreline Uses

The City of Bremerton is surrounded by Puget Sound shorelines including Sinclair Inlet, Port Washington Narrows, and Port Orchard Bay. Much of the shoreline area is developed and used for single-family residences. The exception is the downtown area, where the Washington State Ferry Terminal and the PSNS facility dominate the shoreline of Sinclair Inlet. Kitsap Lake is also included within the City limits and is dominated by residential uses. The Shoreline Master Program (SMP) regulates all of the shorelines within the City of Bremerton. Under the SMP all of the shorelines are designated as Urban shorelines with several sub-designations recognizing conservancy, residential, commercial, waterfront and industrial uses. The City currently is in the process of updating its SMP.

Significant Impacts of the Alternatives

Alternative 1 (No Action)

None of the Comprehensive Plan Update alternatives would change the overall land use pattern or mix of uses in the City significantly. Rather, the three alternatives differ in the relative concentration or dispersal of new growth. Alternative 1 (No Action) would result in the most

dispersed pattern of growth, with almost all new growth continuing to locate in the Non-Associated unincorporated UGA; this reflects an assumed continuation of historical market preferences. A relatively small amount of growth would locate in the City's Unincorporated UGA, and very little new growth would locate in the City itself.

Growth would result in the development and redevelopment of land for urban uses. Some existing uses on underutilized parcels could be displaced and redeveloped. Alternative 1 would continue development pressure on undeveloped areas to the north of Riddell Way on the East Bremerton peninsula. Because most new growth would locate on undeveloped or underutilized unincorporated County land, Alternative 1 would produce the least displacement or redevelopment within the City limits. Redevelopment of specific sites that are called out in the Preferred Alternative – such as Westpark, the Bremerton Middle School site, or individual sites within the downtown – could still take place under Alternative 1, although some redevelopment sites might require rezones.

Development would be characterized primarily by single uses; the amount of development that is mixed-use in nature (e.g., residential and commercial on the same site or in the same building) would not be significant. In general, less redevelopment would occur and land would be used less efficiently.

Although it is assumed that growth would locate in designated UGAs consistent with GMA and applicable City and County land use designations, it is also possible that the dispersed nature of land use in this alternative could generate greater pressure on rural lands and/or for expansion of existing UGAs.

The general impacts of urbanization have been identified in previous environmental documents for the Comprehensive Plans prepared in 1987 and 1995. These include potential conflicts or incompatibilities between land uses of different type or intensity. The potential for such impacts would also be more dispersed under Alternative 1.

Alternative 2 –Updated Plan without Centers

Under Alternative 2, a majority of new growth – though slightly less than in Alternative 1 – would continue to locate in the unincorporated Non-Associated UGA; the City's Unincorporated UGA and the City itself would receive relatively little growth, but slightly more than in Alternative 1. Most new growth would continue to be relatively dispersed in nature; less redevelopment, and relatively little displacement or relocation, would occur. The limited amount of new development in the City limits would tend to occur on vacant lots, and would follow current development trends with regards to location, density, and housing type. Because most new growth would locate on undeveloped or underutilized unincorporated County land, Alternative 1 would produce the least displacement or redevelopment within the City limits. Redevelopment of specific sites that are called out in the Preferred Alternative, such as Westpark, the Bremerton Middle School site, or individual sites within the downtown, could still take place under Alternative 2.

Overall, the impacts of Alternative 2 would be similar to those identified for No Action.

Alternative 3 – Updated Plan with Centers (Preferred Alternative)

City-Wide Land Use Impacts

Overall, types of land uses occurring within the City would not change significantly as a result of adoption of the Alternative 3 Future Land Use Map. Quantitatively, watershed and open space lands would still predominate; additional open space would be provided in centers. Excluding watershed lands, housing would remain the predominant land use. Current multi-family designations outside of designated centers (high density and medium density) would be reduced or eliminated, to help create opportunities for growth within centers and for mixed-use along corridors (e.g., Wheaton Way). Development potential for residential uses, including high and medium density multi-family, would increase; it would now be focused in designated centers, however. Low density residential designations would not change significantly. This redesignation, and guiding of 55 percent of the City's population growth into centers, would limit potential land use change in surrounding neighborhoods, and focus land use impacts within the designated centers themselves.

Similarly, the overall land use character of the City would not change significantly in the near term. Much of it would look, feel and function much as it does today. The existing urban pattern of neighborhoods and auto-oriented commercial areas would, however, be punctuated with well designed, mixed-use centers and more pedestrian activity. Portions of some currently strip commercial, auto-oriented corridors – such as Wheaton Way – would similarly begin to convert to a well designed mixed-use pattern. Over time, as more of the City's growth and redevelopment activity flowed to centers, the changes would become more pronounced.

Impacts in Designated Centers

The Future Land Use Map would designate 14 centers of various size, type and function; nine of these would redevelop in part by 2023. Together, designated centers would occupy approximately 262 acres of land, which is about 3 percent of the City's total area, and approximately 9 percent of the City's urban lands (excluding designated watershed lands). These lands would be redeveloped intensively and efficiently – they would accommodate approximately would 55 percent of forecast population growth, and 45 percent of job growth over the next 20 years. Most growth (approximately 86 percent) would occur within the City, and on lands already developed for urban uses.

Development within designated centers in the City would be consistent with policies in the County-wide Planning Policy and Kitsap County Comprehensive Plan. Focusing growth in this manner could also reduce pressure for development in rural areas and/or for expansion of UGAs to accommodate growth.

Because most new growth would locate within already developed areas, Alternative 3 would entail the most redevelopment and would produce the most displacement. These effects would be focused within the City limits and specifically within centers. Some new growth would be accommodated on undeveloped sites within the centers, particularly with the Downtown Regional Center, where there is a significant amount of vacant land and buildings.

Centers development would differ from the predominant development with regards to location, density, form and design. More development would be mixed-use in character and densities would be higher than at present (20-40 units per acre). Buildings would be taller (up to 5 stories) and could be larger in scale than existing development. This difference in intensity could generate land use conflicts with adjacent uses, particularly at the boundaries between centers and adjacent neighborhoods or uses. Existing residential neighborhoods surrounding the designated centers could experience additional traffic, activity, noise, and light. To minimize impacts on the surrounding neighborhoods, the centers would be developed with the most intensive use occurring in the core with gradually less intensive uses located toward the outside of the center.

Indirectly, designation of centers could also generate pressure for upzoning of adjacent areas, or expansion of centers' boundaries to accommodate more intensive development. If approved, such changes could result in land use change and conflicts occurring over a larger area. The Comprehensive Plan Update does not address how boundary changes or issues would be addressed; it is likely that center boundaries would be reconfirmed and/or adjusted in the context of future sub-area plans. Similarly, sub-area plans would provide an opportunity to identify and resolve site-specific conflicts due to height, bulk, scale and use. It is assumed that the City will implement its Comprehensive Plan and development regulations consistently, to achieve articulated goals, and to minimize or otherwise mitigate impacts.

The implementation program for the Comprehensive Plan Update includes adoption of design standards for all new development in Centers. Sub-area plans would also be developed for designated centers. These plans and regulations would provide opportunities to mitigate potential impacts relating to land use change, scale and intensity.

Potential adverse land use impacts are identified below according to the type of center relative to existing land use patterns. These are intended to be representative of the types and magnitude of impacts that could occur.

Neighborhood Centers: Five Neighborhood Centers would be designated on the Future Land Use Map: Haddon, Manette, Perry Avenue, Oyster Bay and Sylvan/Pine. A Reserve Center is also identified at Kitsap Lake. All of the proposed Neighborhood Centers are located in existing hubs, at major intersections, commercial areas, or in well-defined residential areas. Higher residential densities, mixed-uses, and small-scale retail would develop within the Neighborhood Centers over time to serve local residents. Base densities would average 20 units per acre. Neighborhood Centers would be walkable and would serve residents within a diameter of one mile. Typically the Neighborhood Center would have a park, community center, post office, or school to provide a central point for the center and the residents. In the core of the center, structures could include four-story mixed-use buildings, with the ground floor used for small retail and service-oriented business and with residential uses above. Toward the outside of the core the center would transition to small lot single-family residences.

Generally, there would likely be some impacts relating to displacement and redevelopment in the Neighborhood Center and potential land use conflicts. Impacts would occur incrementally, as the centers developed over time. As taller mixed-use buildings developed in the cores of the

centers, there could be some abrupt differences in scale with existing smaller scale buildings. For example, the proposed Haddon Neighborhood Center would be located in an established single-family residential community located in West Bremerton, around the intersection of Callow Avenue and North 15th Street. There are several existing small commercial buildings at the intersection. The Haddon Neighborhood Center would redevelop with mixed-use structures of two or three stories, residential above and commercial at street level, in the core area, surrounded by small one and two story multi-family residential buildings, and duplex, triplex, and fourplex residential units nearer the center edge. As the center redevelops over time, there could be abrupt changes in density, scale and character between new multi-family buildings and existing single-family homes within the center, which tend to be small and poorly maintained. These impacts generally would be transitional and would diminish as the center redeveloped.

There could also be potential land use compatibility and scale impacts between new Neighborhood Center development, and existing development adjacent to but outside of the center. For example, the Haddon Neighborhood Center would be located several blocks north of the proposed Charleston District Center (discussed below). These intervening blocks are occupied by older, poorly maintained single-family homes and vacant lots. As the Haddon Neighborhood Center (and the Charleston District Center to the south) redevelop, new center development could sharply contrast in density, scale, condition, and appearance with the existing development in these intervening blocks. Over time there could be pressure for these intervening blocks to redevelop as well. Haddon Neighborhood Center redevelopment would also contrast with the existing large-lot residential development to the west, along Corbet Drive, but would in large part be buffered from this area by the existing Haddon Park (a City of Bremerton facility with a small basketball court, a tot lot, and a large lawn area.).

As another example, the proposed Manette Neighborhood Center (located at the east end of the Manette Bridge) currently includes small restaurants and commercial uses on the main streets of Wheaton Way and 11th Street, in existing storefronts or converted residences. The northeast portion of the proposed center consists of mostly dense, older, but well-maintained single-family residences, with similar single-family residences to the north (uphill) and east of the proposed center boundaries. There also is a senior center and a closed elementary school north of the center. The entire area is characterized by dramatic views of the Port Washington Narrows. In the core of the center, along 11th Street and in a few nearby locations, mixed used buildings (residential above commercial storefronts) up to 4 stories in height could be developed. These buildings would contrast in density and scale with the predominantly single story development that now characterizes this core area. Alternative 3 also encourages the development of small multifamily buildings, and townhomes, immediately outside the core, with duplexes, triplexes, and fourplexes nearer the edge of the center. These new residential structures could also contrast in density and scale with existing single-family residential development in the center and just outside of the center; if not carefully located and designed, they could also cause view blockage from some existing homes.

District Centers: Three district centers would be designated on the Future Land Use Map: Wheaton/Riddell, Wheaton/Sheridan, and Charleston. District Centers would be larger than neighborhood centers and would be designed to serve several surrounding neighborhoods with commercial and professional services. These uses would be more numerous and larger in scale

than those in neighborhood centers and residential uses would be focused in denser patterns. District Centers would have an average density of 20 units per acre, with structures ranging from detached single-family residential toward the outside of the center, to up to five-story mixed use building towards the core. Although the District Centers would serve many neighborhoods, they would be designed to be pedestrian in nature with parking located underground or outside of the core area. District Centers would be located along primary transit routes on major arterials, although secondary circulation routes through the centers could be identified.

Like Neighborhood Centers, the District Centers would be characterized by a mix of land uses with commercial and professional services located on the ground floor of buildings and residential uses above. Each district center would have a distinct core with one or more key "focus amenities" (plazas, green spaces, etc.), with three or four story mixed use buildings with retail / commercial uses at ground level. Moving away from the core, building size would be reduced and become primarily residential in nature. The district centers would be located in existing developed areas, and have access to sewer, water, and mass transit. The two Wheaton Way Centers would be in largely automobile-oriented commercial areas with retail stores located behind large parking areas along Wheaton Way. Development in these centers would transition slowly from automobile oriented commercial to the proposed pedestrian oriented district center concept.

As with Neighborhood Centers, the redevelopment of District Centers would result in some impacts related to displacement and/or redevelopment of existing uses over time. Mixed-use buildings, up to 4 stories in height, in the core of the center could result in abrupt differences in scale with existing smaller scale buildings. For example, several blocks of Callow Way in the proposed Charleston District Center (39 acres located to the east and west of Callow Way, generally between North 1st Street and North 11th Street) currently are developed with predominantly one and two-story retail buildings, with storefronts facing the street. As taller mixed-use buildings are developed, there could be abrupt changes in density, scale and character between older and newer structures. Alternative 3 would limit such infill buildings to three stories, to minimize such potential impacts.

There could also be potential contrasts in scale and land use incompatibility between new development in district centers, and existing, adjacent, development outside of the center. For example, the proposed Charleston District Center would be located several blocks south of the proposed Haddon Neighborhood Center (discussed above). Older, poorly maintained houses and vacant lots characterize the intervening blocks between the centers. As the Haddon Neighborhood Center (and the Charleston District Center to the south) redevelop, new center development could sharply contrast in density, scale, age, design, and appearance with existing development in these intervening blocks. Over time there could be pressure for these intervening blocks to redevelop as well. There could also be some abrupt transitions in scale along the east edge of the Charleston District Center, where the existing development is mainly smaller, older single-family residences. Existing development to the west of the proposed center also is characterized by residential development (single-family as well as some multifamily); but this west area is on a hillside, much higher in elevation than the proposed center. This topographic separation would minimize any adverse impacts associated with changes in scale or development

intensity in the proposed center. Alternative 3 would limit new development in certain areas of the center to two stories, to minimize view impacts on existing hillside homes.

Employment Centers: Three employment centers would be designated on the Future Land Use Map: Harrison, Northwest Corporate Campus and Port Blakely. Employment centers are intended to provide areas with a large number of jobs and the opportunity to live nearby. The employment base would consist of office, light industrial and industrial activities. Mixed residential uses would be located nearby to provide housing for workers and reduce the need to commute. With the large number of jobs that would be available, it is expected that some people would continue to commute to employment centers from around the region, which would require parking to be integrated into the centers. The centers would also include small and medium scale commercial and retail uses to serve the residents and the commuter population. The centers would require a large, undeveloped or (in the case of the Harrison Employment Center) redevelopable area to support land use needs. Individual design characteristics of the economic/employment center will be determined at a later time. Alternative 3 does not allocate any population or job growth to the three employment centers during the 20-year planning period. Therefore, there would be no adverse land use impacts caused by centers development or redevelopment during that period. Future land use impacts (that is, impacts beyond the 20-year planning period) would be considered during the environmental review of future Comprehensive Plan updates, plan amendments and/or specific development proposals.

Downtown Regional Center (DRC): Downtown Bremerton is already recognized in the CPPs and Kitsap County Comprehensive Plan as the region's major center. The DRC designation is intended to help guide appropriate development to the downtown over the next 20 years. Residential densities of 40 units per acre would be encouraged to help build a substantial downtown population. A diverse mix of uses – including employment, transportation, restaurants, galleries, and retail within walking distance – is anticipated. Mixing uses would help reduce reliance on the automobile. Parking would be located underground or in parking structures; no parking would be allowed on surface lots. The Comprehensive Plan would emphasize creating a pedestrian-friendly, mixed-use environment, with street trees, public gathering places, adequate pedestrian-level lighting, and other pedestrian amenities. New mixed-use buildings would feature retail spaces at street-level, with offices or residential units above.

Current redevelopment occurring downtown includes the Bremerton Harborside Conference Center and a new hotel. The new government services building, which will house new City offices, is nearing completion as of this writing. A 200-unit condominium complex will soon begin construction along the waterfront. Under Alternative 3, this redevelopment would continue and would be actively supported.

As with the other types of centers discussed above, as the DRC redevelops over time, there could be impacts relating to displacement and/or redevelopment of existing uses in the downtown, as well as potential land use conflicts with older, smaller buildings. Much of the downtown is underutilized and significant redevelopment would occur over time. There could be some compatibility impacts and abrupt differences in scale with existing smaller scale buildings in the center, and along the center's edges.

Over time, the downtown would become more intensively developed and more urban in character. In general, such impacts are inherent in the development and functions of any downtown regional center.

Westpark

Redevelopment of the 80-acre Westpark site would displace most existing uses – substantially all buildings except the existing multi-family building and community center – in the near term. (A proposal to develop a portion of the site for an assisted living facility is being reviewed independently of the Comprehensive Plan.) The site would be redeveloped to implement a mixed-use master plan and to create a mixed-income community. Existing public housing units would be replaced on-site and off-site.

The design, height and scale of future residential buildings are not known at this time. While the site would be developed more intensively than at present, the surrounding area is currently characterized by a mix of industrial, office and commercial land uses. A mixed-use, urban density project would be consistent with the existing and planned land use pattern in the area, and significant land use conflicts are not anticipated. Similarly, the design, height and scale of commercial uses and mixed-use buildings are not known at this time. However, big box retail is identified as a potential use. If such a store was developed, it could create potential aesthetic contrasts with the adjacent Westpark redevelopment. Any conflicts could be mitigated through careful site planning and design, which would be required by design guidelines adopted subsequently to implement the Comprehensive Plan.

The site is adjacent to the Oyster Bay Neighborhood Center, which would be designated in Alternative 3. The portion of the Westpark site adjacent to the Neighborhood Center (approximately 20 acres) and fronting on Kitsap Way could be developed primarily for retail/commercial land uses. Depending on the specific size, location and design of buildings on the master plan, retail/commercial uses could generally be compatible with the surrounding land use pattern in terms of type and intensity. A "big box" use, if proposed, could generate land use and aesthetic conflicts due to contrasts in scale and similar issues.

Mitigation Measures

Many land use impacts associated with development of centers in Alternative 3 would be mitigated through implementation of proposed Comprehensive Plan policies. These policies, for example, anticipate revised development regulations, new design standards and guidelines, and future sub-area planning. Design standards for new multifamily, mixed-use and commercial development within centers would address type and location of use, site planning, building design, and site features (e.g., entrance and delivery orientation, lighting, parking, trash receptacles). Such issues would be implemented through site planning and design and verified during permit review. Future sub-area plans for individual centers would address issues relating to localized functions and conditions.

Development regulations and design standards and guidelines will address impacts to residential areas directly adjacent to the designated centers. In addition, compatibility of building design

and height will also need to be addressed when locating buildings on the outside of the core of the center and around planned parks/open spaces. Potential mitigation approaches include building modulation, landscape buffers and development setbacks.

Significant Unavoidable Adverse Impacts

Future growth that is realized within the City would cause some unavoidable impacts to land use. The anticipated change is not necessarily adverse in nature and many potentially significant land uses issues could be avoided through development regulations and design guidelines.

Under the preferred alternative, most growth within the City will occur through redevelopment, which would displace or convert existing uses and buildings. Redevelopment and change will occur incrementally. Some discontinuities in the types and scale of land uses will occur. To some extent, these impacts are inherent in the development of cities and implementation of long-range plans.

Alternatives 1 and 2 would continue the trend of development occurring just outside of the City limits, which would continue to impact existing infrastructure in unincorporated areas. This impact, if it occurred, would be caused primarily by market conditions; while the City is attempting to reverse this trend, it may or may not be "unavoidable" in a larger market context.

Construction of new buildings, streets, and other components of the centers would result in temporary impacts to adjacent land uses during construction. Adverse impacts could include: temporary air and noise pollution from construction vehicles, earthwork activities, and building construction; increased traffic; and temporary water quality deterioration or stormwater runoff from construction sites during inclement weather. These impacts can be reduced through construction best management practices but cannot be eliminated entirely.

2. Relationship to Plans & Policies

The following discussion identifies the relative consistency of the City's Draft Comprehensive Plan with the goals and major provisions of the Growth Management Act (GMA) and relevant elements of the County-Wide Planning Policy (CWPP). This analysis is intended to provide a baseline assessment of how the land use alternatives and policies would implement the major goals of growth management.

Urban Land Use & Centers

Discussion: Land Use Element *(GMA Goal 1 & Goal 2, Urban Growth Area Requirements (RCW 36.70A.110), definition of urban growth, CPP Element B & Element E)*

Land Use Pattern, Densities and Centers. All alternatives are based on the OFM 20-year population projection and Bremerton's allocation from the Kitsap Regional Coordinating Council (KRCC). However, the alternatives hypothesize that growth would occur in different spatial patterns, depending on the substance of land use policies and map designations the City uses to guide growth. Alternative 1 (No Action) assumes a continuation of recent trends, with most growth locating outside the City. While this effect is not intentional and is not the City's

objective, it would reflect the strong influence of local market conditions and unincorporated land use patterns. A significant portion of future growth would continue to locate in unincorporated UGAs adjacent to the City.

In contrast, Alternative 3 (Comprehensive Plan Update with Centers) would focus projected growth within the City, and the majority of the growth (55 percent) would be guided to designated centers at higher densities. Services and facilities would be targeted to the designated centers to attract and support planned growth. Net average residential densities city-wide would range between 20 and 35 dwelling units per acre. Densities in designated centers would average 20 units per acre; densities in downtown Bremerton would average 40 units per acre. This is the most concentrated of the alternatives and the most consistent with the anti-sprawl goal of GMA and the CPP. Most growth would occur through infill and redevelopment of already urbanized lands. Alternative 2 is between Alternatives 1 and 3 in terms of the spatial location of projected growth as between City and UGAs. Indirectly, by not providing a focus or incentive for growth in the form of designated centers, it would allow the market to continue to direct most growth to the City's Unincorporated UGA and the Non-Associated UGA.

GMA defines "urban development" as development that makes intensive use of land for structures and impervious surfaces, but the Act does not reference a specific density as being urban nor does it establish a minimum threshold. Several Central Puget Sound Growth Management Hearings Board decisions, however, have established a "bright line" of 4 dwelling units per acre as a minimum that it considers to be urban in nature and not sprawl. Planned average (net) densities within any of the City's alternatives would meet this threshold. Proposed densities would, therefore, be consistent with GMA policy.

CPP Element B (Centers of Growth) identifies various types of "centers" as providing opportunities for concentrating population or employment growth at higher densities, and supporting transit and non-motorized transportation. These centers are intended to define the future county-wide land use pattern. The CPP designates downtown Bremerton as the region's "metropolitan center." Other types of centers, including "mixed-use" and "employment" centers, are defined more generically. Mixed-use "neighborhood" or "district" centers are intended to accommodate a mix of uses at higher densities. Employment centers are envisioned as larger and containing industrial and business park uses.

Alternative 3, which includes 14 designated centers of varying size, intensity and function, would implement and be consistent with the CPP. Alternatives 1 and 2, although they include downtown Bremerton as a de facto metropolitan center, would not designate centers on the Comprehensive Plan land use map and would not attempt to guide future growth to defined centers. They would be less consistent with the CPP growth centers policy.

In addition, under Alternative 1, market forces, land availability and similar factors would continue to attract relatively more growth to unincorporated UGAs, including the East Bremerton "Non-Associated" UGA (this UGA has not been specifically associated with any City in terms of future service provision, annexation, etc.). This would continue the relatively dispersed, lower density land use pattern that has historically characterized development in Kitsap County, rather than focusing it in centers.

At this time, the City is not proposing to expand its currently designated UGA to include the unincorporated East Bremerton UGA in connection with any of the alternatives. Providing adequate services to this area would divert the City's resources and its intended focus on implementation of its centers-based land use pattern. The City will continue to work with Kitsap County to address UGA issues.

Transportation

Discussion: Transportation Element (GMA Goal 3, Comprehensive Plan elements (RCW 36.70A070(6), CPP Element G)

The Comprehensive Plan Transportation element is generally consistent with the requirements of the GMA and CPPs. The Plan contains the information required by the GMA. Background information for the Comprehensive Plan (Transportation Element Appendix), and analysis in the Draft EIS (Transportation section), includes land use assumptions used to estimate travel, an inventory of transportation facilities, identification of improvement needs, proposed level of service standards, travel forecasts for 20 years, and travel demand strategies (Policy T7).

Policy T6 addresses levels of service (LOS) on identified links and intersections. The policy includes a concurrency requirement which would defer or deny development approval until adopted LOS standards are met.

A preliminary estimate of financing capability is also included in the Transportation Element of the Comprehensive Plan. Although it shows an apparent $9 million budget shortfall for the identified 6-year (2004-2009) needs (Transportation Element appendix, Table 5-1), this apparent deficit is related to monies for SR 304 which have been dispersed from federal, state and local sources prior to 2004.

CPP Element G.4 includes policies relating to adoption of design standards for designated centers which support transit and pedestrian circulation. These standards should address neighborhood connectivity, and require pedestrian-oriented and transit-oriented design. The City's draft Land Use element currently addresses these issues. Design guidelines and other implementation tools will be developed in the subsequent phase of the City's work program.

Transportation impacts and improvements are summarized in the Transportation section of the Draft SEIS. For more detailed information, please also refer to the Transportation appendix of the Comprehensive Plan Update.

Housing

Discussion: Housing Element (GMA Goal 4, CPP Element H)

Housing element goals and policies are intended to encourage the availability of affordable housing to: preserve and enhance the City's existing housing stock; provide a variety of housing types and densities to meet varied needs; provide housing in mixed-use centers; promoting access to quality, affordable housing for all residents; dispersing below-market-rate housing throughout the City rather than concentrating it; build cohesive neighborhoods; improving visual

quality; adopt design review; encourage pedestrian connections; and promoting social interaction and neighborhood identity. GMA required components of a housing element are included. Similarly, the Housing element addresses policies in the CPPs.

The City is planning to accommodate 13,000 people over the next 20 years. This will require between approximately 5,300 and 6,420 new housing units, depending on the type and mix of housing provided. The City's land capacity calculations indicate that there is sufficient designated land to accommodate this target. Much of this housing will occur on infill and redevelopment parcels. Alternative 3 would allocate new housing units among designated centers (approximately 40 percent, including multi-family and attached single-family), downtown (approximately 10 percent, multi-family), in existing residential neighborhoods (approximately 25 percent single family, and 10 percent multi-family). Slightly more than 50 percent of new housing would be single-family in character.

The great majority of subsidized housing units are located in the City. The Bremerton Housing Authority and Kitsap Consolidated Housing Authority provide and administer subsidized housing programs in the County. The Bremerton Housing Authority owns a total of 2,256 units and/or certificates and vouchers. Currently, there are almost 3,800 county households on waiting lists for housing assistance.

The City is working with the Bremerton Housing Authority to help accomplish mutual objectives for providing affordable housing in the City and the region. The Westpark site would be designated on the Comprehensive Plan land use map as a public redevelopment site. Redevelopment of Westpark pursuant to a master plan would help meet a portion of identified needs for market rate and below-market-rate housing. Although Westpark would be developed as a mixed-use, mixed-income community, all existing public housing units will be replaced on-site or off-site. Dispersal of affordable units would meet goals of the City and the Housing Authority.

Economic Development

Discussion: Economic Development Element (GMA Goal 5, no explicit CPP policy)

In the 2002 legislative session, the legislature amended the GMA to require inclusion of an economic development element in Comprehensive Plans (SSHB 154, codified in RCW 36.70.070(7)). This is intended to be a means to achieve GMA Goal 5. However, cities are not required to adopt an economic development element until the state allocates funds to cover the local costs of meeting this requirement.

Bremerton's Comprehensive Plan Update contains an economic development element. It contains an inventory of the local and regional economy, and goals and policies. Major goals and policies include: planning strategically for an adequate supply of lands and infrastructure to support employment (EC1a); encouraging redevelopment of underutilized sites (EC1c); providing appropriate business zoning (EC1j); designating centers throughout the City that encourage economic development (EC2a); encouraging mixed-use development in centers (EC2c); encouraging economic development in the downtown core (EC3); expediting the permit and development process (EC5a); and providing economic opportunities for residents (E6).

These goals and policies are consistent with the direction contained in the GMA and are coordinated with the other elements of the Comprehensive Plan.

Natural Environment

Discussion: Natural Environment Policies (GMA Goal 10, RCW 36.70A.060 & 170)

The Draft Comprehensive Plan Natural Environment Element contains goals and policies for sustainability, waste reduction/recycling, pollution reduction/prevention, conservation, education and public participation, habitat, open space, water, energy, quality of life/public health, and development regulations. The overall objective of the Plan element is to ensure that the City preserves its natural beauty and long-term environmental health. Other elements of the Comprehensive Plan (such as Land Use) also incorporate consideration of environmental factors. For example, Policy LU-20 addresses use of the best available science when designating critical areas, as required by RCW 36.70A.172.

In general, more dispersed land use patterns such as No Action tend to spread impacts out over a greater area and place more natural resources at risk. Focusing growth in centers, on the other hand, would tend to focus impacts in defined areas. However, implementation of critical area regulations will ultimately determine how any land use alternative would impact or protect important environmental resources.

Public Facilities and Services

Discussion: City Services Element (GMA Goal 12, RCW 36.70A.070(3)-(4), CPP Element A)

The City Services element of the Comprehensive Plan Update combines the utilities and capital facilities elements required by GMA. Overall, the City Services element meets the requirements of the GMA. Inventory data, needs assessments and other detailed information about services, facilities and utilities is contained in the City Services appendix of the Comprehensive Plan Update. Facilities and utilities that are addressed include: police, fire, schools, parks and recreation, transportation, stormwater, sewer, water, solid waste, and telecommunications.

Major goals and policies of the updated City Services element include: providing adequate services that enhance the quality of life; allowing essential public facilities; maintaining and rehabilitating existing facilities; and ensuring coordination and consistency between capital facility planning/funding and the Comprehensive Plan. Coordination would also occur between the City, County and other service providers. Over time, the City would become the primary provider of services within the City's UGA; this is consistent with the intent of the GMA and the Kitsap County CPP.

Level of service (LOS) policies call for adopting LOS standards for transportation at a minimum, and considering adopting LOS standards for water and sewer, police and fire service, parks, solid waste and schools. Long-term LOS standards, and a concurrency standard, for these services are discussed in the plan. In addition, the City would adopt LOS standards that support and encourage development of centers. This could, for example, result in considering incentives such as a reduced LOS for centers or improved transit service. Level of service standards are still being evaluated and discussed as part of the City's planning process.

Updated policies also call for adopting a concurrency management ordinance requiring that required levels of transportation facilities required to serve new development and maintain adopted levels of service must be in place within 6 years. In addition, development proposals that do not meet concurrency may not be approved. These policies would be implemented through development regulations adopted in the next stage of GMA planning. Finally, the policies state that the land use assumptions and plans would be reconsidered if funding is not adequate to support identified needs.

Population, Housing and Employment

Affected Environment

Population

In 2002 there were an estimated 37,260 people living in the City of Bremerton (plus approximately an additional 7,555 people in the unincorporated portion of the City's UGA).

Census reports from the period 1970 to 2000 show an increase of fewer than 2000 people, less than 1/5 of 1 percent annual growth; the 2000 census showed an actual decrease in population (883 people) since the 1990 census. During this time – and especially in the past 20 years – Kitsap County as a whole has seen rapid population growth, growing from a 1980 population of 147,152 to a 2000 population of 231,969 (an increase of nearly 60 percent). As a result of these population trends, Bremerton's proportion of the County's total population has dramatically decreased (Table 3).

Table 3. City of Bremerton Population 1970-2003

Year	Population	Population Change	Percent of County
1970	35,307	+8,626	34.7%
1980	36,208	+901	24.6%
1990	38,142	+1,934	20.1%
2000	37,259	-883	16.0%
2001 (est.)	37,260	+1	16.0%
2002 (est.)	37,530	+270	16.0%
2003 (est.)	38,604	+1,074	N/A%

Sources: Washington State OFM (2001-2003 estimates), US Census, as cited in City of Bremerton Comprehensive Plan Update, Appendix H Housing

The Kitsap Regional Coordinating Committee (KRCC) has established population, housing, and employment targets for the County and each of its cities. These are based on the 20-year population projections from OFM, which establish the planning targets for each county. Bremerton's planning target is approximately 13,000 people, or a total projected population of 50,172 people. The 2023 population projection for Bremerton's unincorporated UGA is an additional 8,459 people; this would bring total population for the entire Bremerton UGA (incorporated City and Unincorporated UGA) to 58,631.

The goals of the Comprehensive Plan and the Kitsap County Countywide Planning Policy (CPP, Ordinance 312-2003) stress growth within the Urban Growth Area (UGA), including growth within existing City limits.

Housing

Housing Stock and Type

The 2000 Census identified 16,631 housing units in the City of Bremerton. Approximately 56 percent of the total housing units were single-family structures (including mobile homes and trailers) and 44 percent of the housing units were classified as multifamily units. Bremerton's housing is characterized by relatively small units; 50 percent of all single family and multi-family units have four rooms or less, which is far greater than the county-wide average (28 percent).

The housing stock in Bremerton is also older than the housing stock county-wide. Fifty-seven percent of Bremerton's housing stock is 40 years old or older, compared with less than 25 percent of the homes within unincorporated Kitsap County. Less than 20 percent of Bremerton's housing units have been constructed since 1980.

A large portion of Bremerton's housing is rental housing. In 2000 approximately 63 percent of housing units were renter-occupied units and 37 percent owner-occupied units. This is the reverse of the split county-wide split. It also represents an increase from 1980, when only 57 percent of Bremerton's housing was renter-occupied.

The condition of the housing stock in Bremerton is declining, due to age and the high amount of turnover from renting. In 1993, 15 percent of the occupied single family housing units were rated as being in fair, poor, or very poor condition. In the next twenty years, approximately 5,700 housing units will need to be rehabilitated due to substandard conditions and aging. Approximately 700 units will have to be replaced because of the inability to rehabilitate.

Recent Development Activity

Residential development within the City of Bremerton has been limited in the last several years. There was an increase of 938 units between 1990 and 2000. Between 1995 and 1999, 42 percent of the new units permitted were single-family, and 58 percent of the new units permitted were multi-family. Of the single-family units there are a significant amount of manufactured homes included in the calculation. Despite this nearly 6 percent increase in housing units, the City's population has not increased. This is due in part to a volatile vacancy rate influenced by the number of ships at Puget Sound Naval Shipyard, and by the lower number of people per household.

Household Income

Bremerton's median household income in 1999 was $30,950. Nearly 23 percent of all households have an annual household income of less than $15,000. In addition, only 15 percent of the households have an income greater than $60,000 per year. This creates stress for housing in the low $100,000's range that would be affordable to the median household income. The large percentage of households below the median household income are facing increasing difficulties in obtaining affordable housing.

Housing Costs and Affordability

In 2001, the average price of a single-family home in the West Bremerton area was $105,859. For the same period, the average price of a single-family home in the East Bremerton area was $128,923. Most of this cost difference can be explained by the relatively smaller and older housing units in West Bremerton. The average price of a single-family home in Kitsap County (excluding Bainbridge Island) in 2001 was $163,557. The difference in single-family home prices between Bremerton and Kitsap County can be explained by the relatively high percentage of rental properties within Bremerton and the higher proportion of new homes that are being sold in the remainder of the County. The median monthly rent in Bremerton for 2000 was $554. This is an increase of nearly 70 percent from the 1990 median monthly rent of $323, but is still 20 percent less than the average rent county-wide.

As a rule of thumb, housing is considered affordable if the household spends no more than 30 percent of its monthly income on total housing costs. Using this definition, nearly 40 percent of the rental population in Bremerton is paying more for rent than is affordable. This corresponds to a higher frequency of overcrowding. In 2000, 5.5 percent of the housing units in Bremerton had more than 1 person per room, compared to 3.5 percent in Kitsap County.

With nearly 40 percent of the population looking for low income housing, there is increased pressure on the housing market. The availability of rental units (i.e., the vacancy rate) is highly dependent upon the arrival and departure of ships from the Puget Sound Naval Shipyard (PSNS), which also affects the affordability of rental units. In Spring 1994, the vacancy rate was almost 14 percent, but had decreased to 3 percent by Fall. The high number of rental units also decreases the number of residential units available for home ownership.

Assisted Housing Availability

There are many demands for affordable housing and assisted housing with the City of Bremerton. The Bremerton Housing Authority owns and operates a total of 2,256 units. The Kitsap County Consolidated Housing Authority also owns and operates public housing in Bremerton. Throughout Kitsap County approximately 3,800 households are currently waiting for housing assistance within the County. Many of the multi-family housing units in Bremerton are subsidized by the Federal government's Section 8 program

Housing assistance and community public services are also needed for the special needs population. This includes an increased need for developmentally disabled adult housing; alcohol and substance abuse treatment and home care, among other services. More temporary and transitional housing is identified as necessary for the special needs and the greater population of the City. Only 12 family shelter units – 30 beds for single people, and 17 beds for women and children who are victims of domestic violence – are available, which must be shared by all of Kitsap County.

Westpark

Westpark is a 1940's-era public housing project operated by the Bremerton Housing Authority. The existing population of Westpark's 642 housing units is estimated at approximately 1,000 people. Employment is limited to the community center and maintenance workers.

Employment

In 2000, estimated employment for Bremerton was 45,311 jobs. Approximately 35 percent of the total jobs in Bremerton are government sector, including federal, state, local, and education. The next largest sector of employment is the service sector, followed closely by goods including wholesale and retail. Between 1970 and 2000 the amount of public employment increased by 143 percent, compared with a increase of 335 percent in the goods and services categories in the same time frame.

By 2023, the City's employment base is projected to grow to approximately 54,000 jobs, an increase of just over 9,000 jobs. To accommodate this employment growth, the City estimates that 127 acres of developable land will be necessary for commercial uses, and 126 developable acres will be necessary for industrial uses.

Significant Impacts of the Alternatives

Population

All three Comprehensive Plan alternatives assume a 20-year increase of 12,912 people, or a year 2023 population projection of 50,172. The three alternatives differ as to where within the City and its UGA this population would be accommodated.

Under Alternative 1 (No Action), population growth would be dispersed over a wider geographic area. The vast majority of the projected new population growth (approximately 75 percent of the total growth projected by 2023) would continue to locate in the Non-Associated UGA. Approximately 15 percent of the total growth projected by 2023 would locate outside existing City limits but within the Bremerton Unincorporated UGA. Only 10 percent of the total growth projected by 2023 would locate within the existing City limits. Alternative 2 would be similar, but growth would be somewhat more focused in or adjacent to the City.

Under Alternative 3, the Preferred Alternative, nearly all projected population growth would be included within the City limits, and the majority of that growth (58 percent) would be focused into designated centers, including the downtown. The balance of the projected population increase would be accommodated within existing City neighborhoods as infill or redevelopment. The centers would include a mix of multi-family and single family residential units; housing in the balance of the City would be primarily single family residential. Based on plan assumptions, population growth within the City would be distributed approximately as follow:

Neighborhood (Non-Centers) Single-family:	4,000-4,500
Non-Centers Multifamily:	1,000-1,500

Centers Single-family and Multifamily:	5,000-6,000
Downtown Center Multifamily:	1,000-1,500
Total Population Growth	11,000-13,500
Centers Population Growth	6,000 -7,500 (55 %)

Housing

Alternative 1 (No Action) would not change the existing mix or density of housing within the City. The limited growth that would occur within the City limits under this alternative would be infill or redevelopment on existing lots. There would continue to be more multi-family units built than single-family units. This would likely perpetuate the lower home ownership rates as compared to the rest of the County. Most of the new housing would continue to be built in the Non-Associated UGA, outside of the Bremerton City limits.

The effects of Alternative 2 on housing would be similar to No Action.

Alternative 3 would accommodate almost all of the City's projected population growth within the City limits. Fifty-eight percent of projected population and housing growth would occur in the new Neighborhood and District Centers, creating high-density residential areas. Other things being equal, higher density multi-family housing could provide greater opportunities for affordable units. The Comprehensive Plan's policies recognize the need to provide safe, quality affordable housing for all of the residents. The preferred alternative would increase housing density in the designated centers and encourage small-lot single family and multi-family units. Areas outside of the designated centers would be lower in density and include more traditional single-family units; they would not experience significant change.

Under the preferred alternative, housing densities in the City of Bremerton would range from a low of four units per acre in non-centers single-family neighborhood areas, to a high of 40 units per acre in the Downtown Regional Center.

Employment

All three alternatives assume a year 2023 employment total of 54,030 jobs, an increase of 8,719 over the year 2000 job total. In all the alternatives, downtown Bremerton would continue to be the City's major employment center, and the focus of new economic and job growth. The Puget Sound Naval Shipyard would continue to be an important economic base for the City. The commercial and industrial land currently available throughout the City exceeds the acres needed for development under all three alternatives.

Under Alternative 1 relatively more of the new jobs would continue to locate in the Highway 3/Kitsap Way corridor and along Wheaton Way, predominantly in the form of large auto-oriented businesses. Under Alternative 2 much of the projected job growth also would continue to locate outside of the City.

Alternative 3 would strive to accommodate almost all of the City's projected job growth within Bremerton and its Unincorporated UGA. Of the 8,719 new jobs projected through 2023, nearly

45 percent would be located within the proposed centers. During the 20-year planning period, the Downtown Regional Center and the Wheaton/Riddell District Center would have the greatest employment growth. Alternative 3 also identifies three Employment Centers (Harrison, Northwest Corporate Campus, and Port Blakely) that would accommodate a large percentage of future commercial and industrial job growth (beyond 2023).

The City's buildable lands analysis identified a need for 127 acres of developable land for commercial uses, and 126 acres for industrial uses to accommodate projected job growth. Alternative 3 includes an estimated 135 acres of commercial designated lands within the centers, which would meet projected needs. Approximately 86 acres of commercially designated lands exist outside of the centers, which would also meet projected needs.

Westpark

The Westpark site is adjacent to the proposed Oyster Bay Neighborhood Center, which under Alternative 3 would be designated on the future land use map. Twenty-year development assumptions for the Neighborhood Center include development of a portion of the Westpark site for commercial uses (approximately 20 acres) and/or mixed use (approximately 5 acres).

Assuming an average residential density of 20 dwelling units per acre for the Neighborhood Center and this portion of Westpark, the population accommodated would be approximately 1,500. Population generated by redevelopment of the overall Westpark site would depend on the types and sizes of the units ultimately proposed in the Westpark mater plan.

Depending on development assumptions, retail and office uses within the Neighborhood Center and Westpark could accommodate an estimated 260-650 jobs. This increase of population and jobs is incorporated within and is consistent with the City's 20-year GMA growth target.

The existing 642 units of 1940's-era public housing (single-family, duplex, fourplex, and apartment units) would be demolished and replaced with 500-1,000 units. These new units would be a mix of for sale and rental, subsidized and market rate. Between 20 percent and 25 percent of new units would be public housing. Any units not replaced on-site would be replaced off-site, dispersed to several locations in Bremerton and Kitsap County. This approach would be consistent with the Housing Authority's objective of reducing the concentration of public housing in the City. There would be "no net loss" of low-income housing units as a result of redevelopment. A relocation plan would be developed, and various forms of assistance would be provided, to address the needs of relocated residents.

Mitigation Measures

The Preferred Alternative would accommodate Bremerton's projected population, housing, and employment growth within the City, focusing most of that growth within 14 designated centers, including the downtown. This would represent a change from current growth and development patterns, but would not, in itself, be considered an adverse impact.

Impacts associated with an increased residential population, such as demands for public services and facilities, could be addressed by implementing Comprehensive Plan Update policies, adopting new development regulations and design guidelines, and capital facility programs. Please refer to the Public Services, Utilities and Transportation sections of this Draft SEIS for further discussion of these measures. (Note that the Public Services and Utilities sections of this Draft SEIS discuss information contained in the City Services Element of the Comprehensive Plan Update.)

Significant Unavoidable Adverse Impacts

Growth and development will occur in and around the City over time, with or with out the adoption of an updated comprehensive plan, and regardless of plan alternative. Land developed for residential and commercial uses will generally be unavailable for other uses. These changes are not necessarily adverse or unavoidable impacts, assuming that they occur pursuant to adopted plans and policies and consistent with GMA requirements.

Transportation

The majority of information presented in this section of the Draft SEIS is summarized and/or incorporated from the Bremerton Comprehensive Plan Transportation Element (February, 2004). The Transportation Element was prepared to comply with GMA planning requirements and to evaluate the transportation impacts of Comprehensive Plan Update alternatives. To reduce redundancy, the Draft SEIS references the Transportation Element for most data and graphics.

Traffic impacts of redevelopment of the Westpark Public Sector Redevelopment Site are also included at a general level in the analysis for Alternative 3. A detailed traffic study for a master plan would be prepared in connection with a subsequent development proposal.

Affected Environment

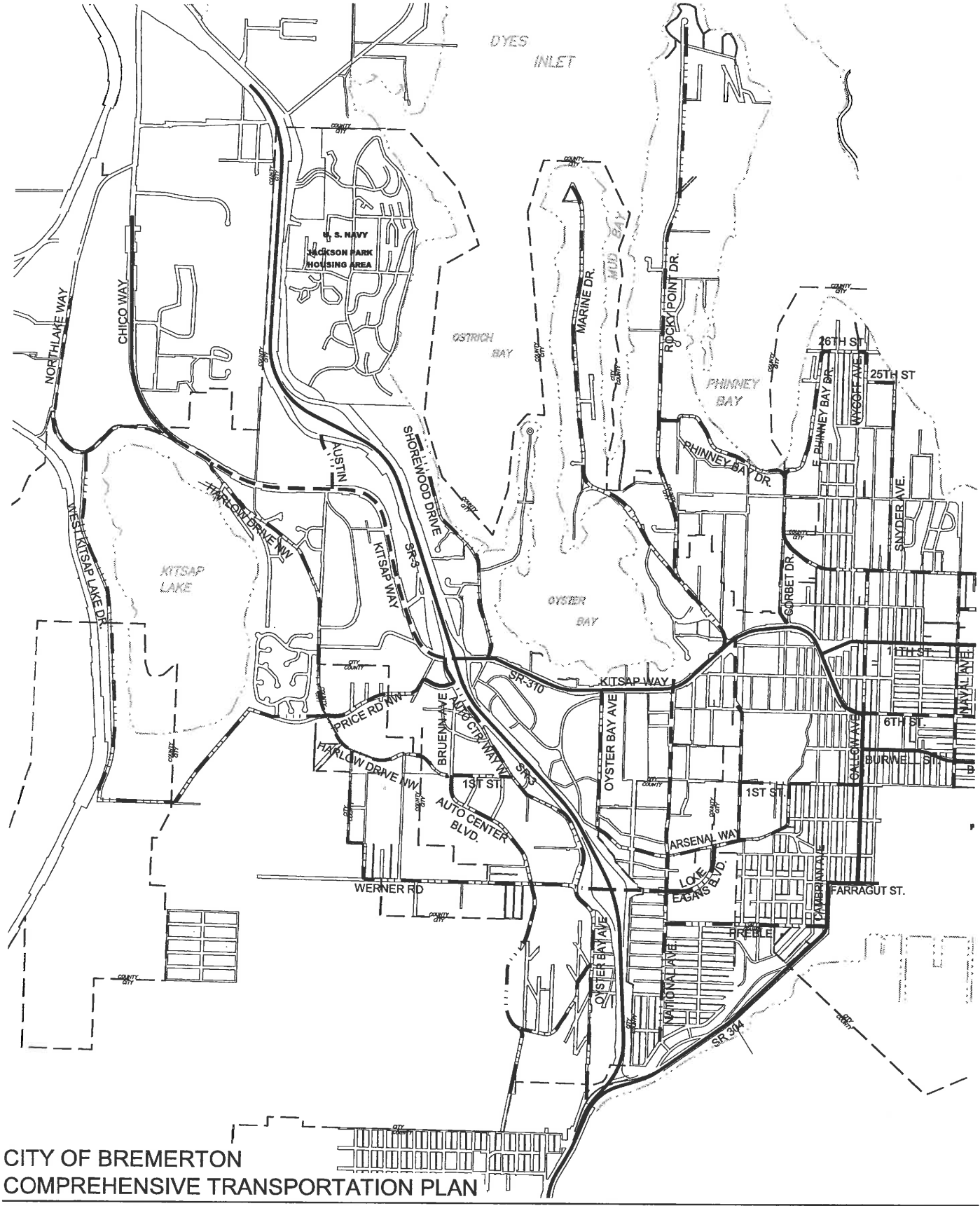
The functional classification of the arterial roadway system serving the study area is depicted in Figure 5, as are ferry routes serving the City of Bremerton. The following definitions serve as a general guide in determining street classifications:

- **Principal Arterials** – Intercommunity roadways connecting primary commercial areas with major facilities. Principal arterials are generally intended to serve through traffic. It is desirable to limit direct access to abutting properties.
- **Minor Arterials** – Intracommunity roadways connecting commercial areas with principal arterials. In general, minor arterials serve trips of moderate length. Access is partially controlled with infrequent access to abutting properties.
- **Collector Arterials** – Streets connecting residential neighborhoods with smaller commercial areas and facilities as well as access to the minor and principal arterial system. Property access is generally a higher priority for collector arterials; through-traffic movements are served as a lower priority.
- **Local Access Streets** – Streets providing direct access to individual residential or commercial properties.

The Transportation Element addresses only the arterial street system within Bremerton, as local access streets typically do not have capacity deficiencies. The following is a brief description of the state highways and arterial streets in the City of Bremerton.

State Highways

- **SR-3** is the only north-south freeway in Central Kitsap County. Located on the west side of Bremerton, it accommodates regional and localized travel between surrounding communities in Kitsap County. Interchange connections within the City of Bremerton exist at Austin Drive, Kitsap Way (SR 310), Loxie Eagans Boulevard/Werner Road, and SR-304.



CITY OF BREMERTON
COMPREHENSIVE TRANSPORTATION PLAN

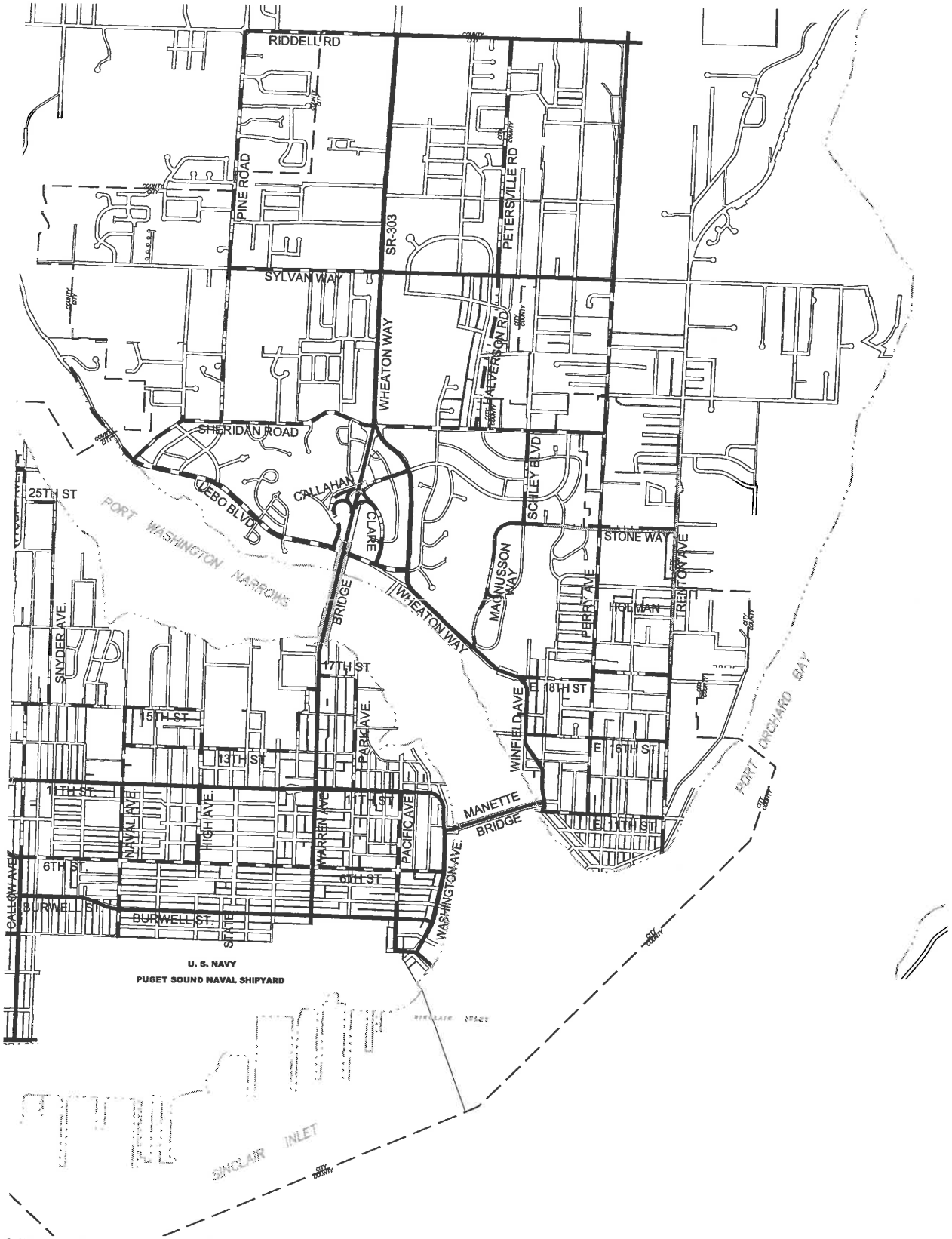
Parametrix DATE: 01/28/04 FILE: K1896053P01T05-F2-1

SCALE IN FEET
0 1250 2500

N

LEGEND
- Freeway
- Principal Arterials
- Minor Arterials
- Collectors

Figure 5
Functional Classifications
Western Portion



CITY OF BREMERTON
COMPREHENSIVE TRANSPORTATION PLAN

Parametrix DATE: 02/04/04 FILE: K1896053P01T05-F2-1C

SCALE IN FEET
0 1250 2500

N

LEGEND
- Freeway
- Principal Arterials
- Minor Arterials
- Collectors

Figure 5 (continued)
Functional Classifications
Eastern Portion

- **SR-304** is a three to four-lane principal alignment that extends northeast from the SR 3/304 interchange and continues as the Navy Yard Highway to Charleston Boulevard, along Callow Avenue to Burwell Street, and east on Burwell Street to downtown. In downtown Bremerton, there is a one-way couplet between SR 304 and 1st Street on Pacific Avenue and Washington Avenue. The couplet is used access the Bremerton Transportation Center (BTC) and Washington State Ferry (WSF) Terminal. The couplet operates in the southbound direction on Pacific Avenue and northbound direction on Washington Avenue. First Street is a one-way eastbound street.

- **SR-310** connects West Bremerton to Central Kitsap County via SR-3 and extends east-west as a four lane arterial along Kitsap Way from SR 3 to Callow Avenue, and on Callow Avenue from Kitsap Way/6th Street to SR 304 (Burwell Street).

- **SR 303** is a four to five-lane principal arterial originating at Burwell Street and extending north to Silverdale. It is the primary connection between West and East Bremerton, and to the Silverdale retail area.

Arterial Routes

The primary east-west arterials in West Bremerton include 6th Street and 11th Street, Burwell Street (SR 304), Kitsap Way, and Werner Road. Sixth Street and 11th Street are four-lane undivided facilities that extend from Washington Avenue to the west and eventually join at Kitsap Way (SR-310), continuing as a single, principal arterial to the interchange connection with SR-3. Burwell Street is a three to four lane facility that also serves downtown and functions as the most direct connection between south Kitsap County and downtown Bremerton. The north-south streets in West Bremerton include
Pacific Avenue and Washington Avenue within the downtown core, and Naval Avenue and National Avenue west of the downtown area.

In East Bremerton, Riddell Road, Sylvan Way, and Sheridan Road are the major east-west arterial streets, all of which also intersect with Wheaton Way (SR-303). The two-lane Manette Bridge connects Washington Avenue in downtown Bremerton to Wheaton Way (SR 303) in East Bremerton via the Wheaton Way/Warren Avenue arterial streets. Wheaton Way, Pine Road NE, Perry Avenue, and Trenton Avenue are the major north-south arterials in East Bremerton.

Highways of Statewide Significance (HSS)

In 1998, the Washington State Legislature passed HB 1487 (also referred to as the "Level of Service" bill). The bill (codified in RCW 47.06.140) relates to transportation and growth management planning, and calls for coordinated planning for major transportation facilities identified as "transportation facilities and services of Statewide Significance." In 1999 the State Legislature adopted a list of Highways of Statewide Significance (HSS), including the following facilities in the City of Bremerton:

- SR 3 – SR 101/Shelton to SR 104 (entire route)

- SR 304 (Burwell Street, Callow Avenue, Navy Yard Highway) – SR 3 to Bremerton Ferry Terminal (entire route)
- SR 310 (Kitsap Way, Callow Avenue) – SR 3 to SR 304/Bremerton (entire route)

Designation as an HSS confers a higher priority for State improvement funding, authorizes the State to set level of service (LOS) standards, exempts the highways from local transportation concurrency requirements, identifies them as an essential public facility, and allows consideration for primary funding by a Regional Transportation Investment District (RTID).

Traffic Volumes

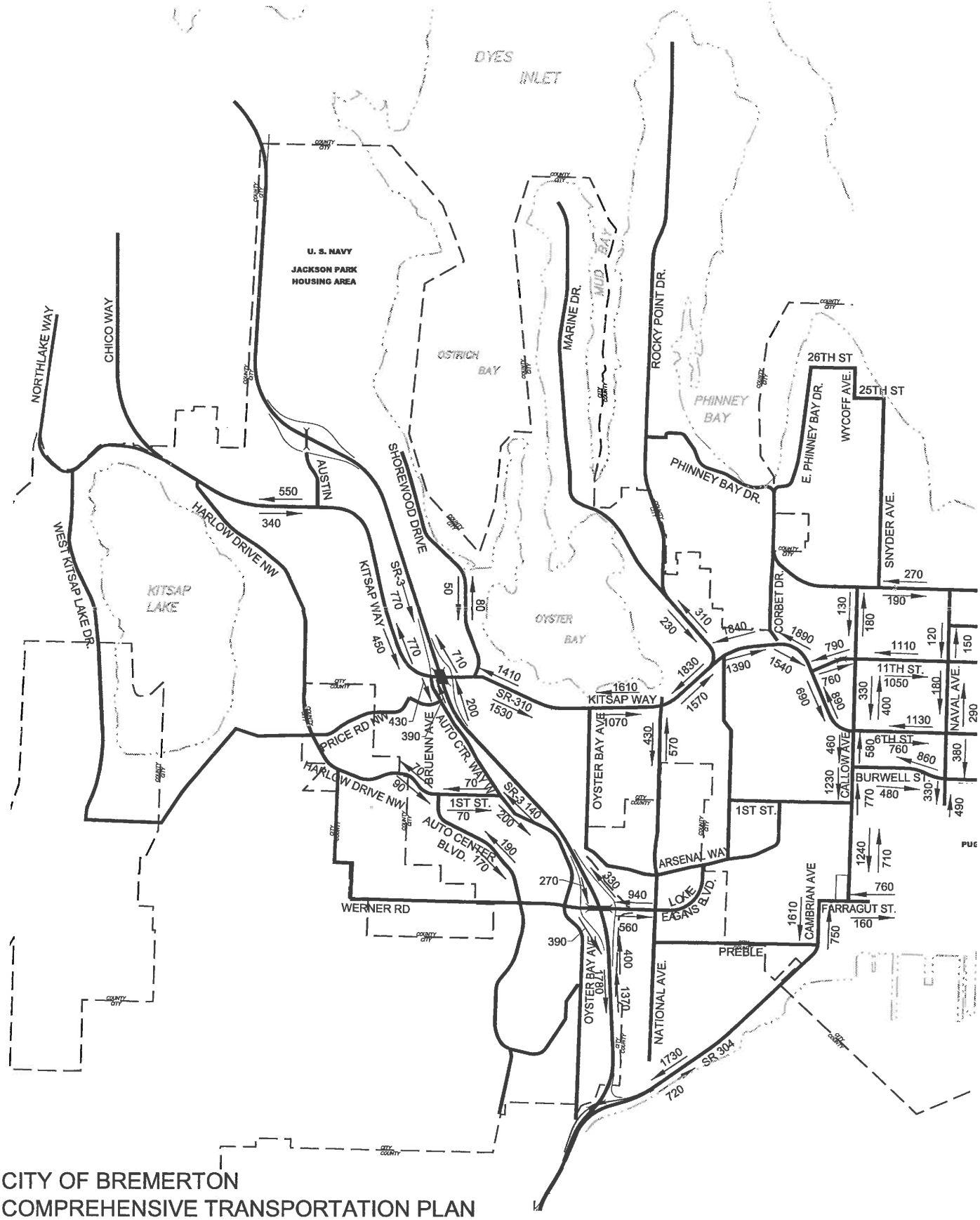
Average daily weekday traffic volumes range from 1,100 vehicles per day on Park Avenue north of 13th Ave and Synder Avenue north of 15th Street, to 46,700 vehicles per day on the Warren Avenue Bridge. The higher-volume arterials are Kitsap Way (SR 310) between 11th Street and SR-3, 11th Street between Warren Avenue and Callow Avenue, 6th Street between Naval Avenue and Callow Avenue, and Wheaton Way/Warren Avenue between 11th Street and Riddell Road. (For a detailed map of average daily weekday volumes, please see Figure 2-3 of the Bremerton Comprehensive Plan Transportation Element.)

PM peak-hour directional traffic volumes range from 160 (Harlow Drive NW) to 3,800 (Warren Bridge) vehicles per hour on the arterial street system. These volumes are shown in Figure 6, which also may be used as a reference to identify specific areas and streets discussed in the following sections.

Level of Service

LOS is an estimate of the quality and performance of transportation facility operations in a community. A commonly used method is the Transportation Research Board's Highway Capacity Manual 2000 LOS system. The degree of traffic congestion and delay is rated using the letter "A" for the least amount of congestion to the letter "F" for the highest amount of congestion. The following Level of Service categories provide general descriptions of the different levels of service defined in the Highway Capacity Manual. The community determines what level of traffic congestion is acceptable for a given planning sub-area, roadway classification, specific corridor, or street. Establishing LOS standards is also a requirement of the GMA. LOS Categories used for this analysis include the following:

- **LOS-A**. A free-flow condition. Speeds are at or near the speed limit and little to no delay exists. Freedom to select desired speeds and to make turns and maneuver within the traffic stream is extremely high.



CITY OF BREMERTON
COMPREHENSIVE TRANSPORTATION PLAN

Parametrix DATE: 02/04/04 FILE: K1896053P01T05-F2-4

SCALE IN FEET
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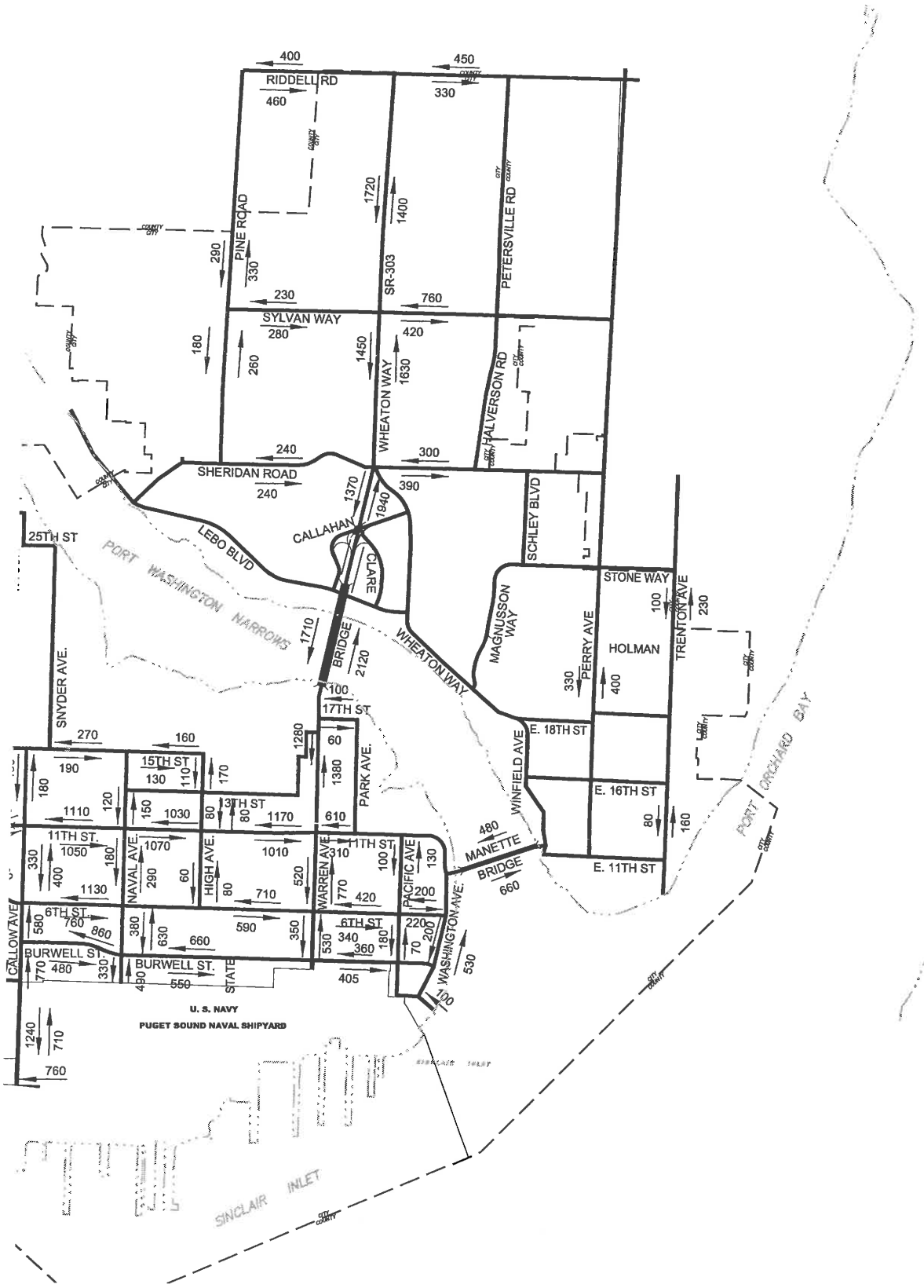
N

LEGEND
580 Directional PM Peak Hour

NOTE:
Traffic counts recorded in 2001

Figure 6
Existing Traffic Volumes PM Peak Hour
Western Portion



CITY OF BREMERTON
COMPREHENSIVE TRANSPORTATION PLAN

Parametrix DATE: 02/04/04 FILE: K1896053P01T05-F2-4C

SCALE IN FEET
0 1250 2500

N

LEGEND
580 Directional PM Peak Hou

NOTE:
Traffic counts recorded in 2001

Figure 6 (continued)
Existing Traffic Volumes PM Peak Hour
Eastern Portion

- **LOS-B**. Zone of stable flow. Drivers still have reasonable freedom to select their speed. Only minor delays of 10 to 20 seconds per vehicle at signalized intersections are experienced.

- **LOS-C**. Still in the zone of stable flow, but speeds and maneuverability are more closely controlled by the higher volumes. The selection of speed is not affected by the presence of others, and maneuvering within the traffic stream requires vigilance on the part of the driver. Longer delays of 20 to 35 seconds per vehicle are experienced at signalized intersections.

- **LOS -D**. Approaches unstable flow. Speed and freedom to maneuver are somewhat restricted with average delays of 35 to 55 seconds per vehicle. Small increases in traffic flow can cause operational difficulties at this level.

- **LOS-E**. Represents operating conditions at or near the capacity of the roadway. Low speeds (approaching 50 percent of normal) and average intersection delays of 55 to 80 seconds per vehicle exist. Freedom to maneuver within the traffic stream is extremely difficult. Any incident can be expected to produce a breakdown in traffic flow with extensive queuing.

- **LOS-F**. Describes forced flow operation at very low speeds. Operations are characterized by stop-and-go traffic. Vehicles may progress at reasonable speeds for several hundred feet or more, then be required to stop in a cyclic fashion. Long delays of over 80 seconds per vehicle occur at signalized intersections.

A more technical method has been developed in the Highway Capacity Manual (HCM) to measure LOS, involving the calculation of the volume-to-capacity ratio (V/C) of the roadway or intersection. Table 4 summarizes the V/C ranges for determining planning level mid-block LOS on urban and rural roadways.

Table 4. Level of Service Definitions for Urban and Rural Roadways

LOS		Volume Capacity (V/C) Ratio
A	Less than or equal to	0.3
B	Less than or equal to	0.5
C	Less than or equal to	0.75
D	Less than or equal to	0.90
E	Less than or equal to	1.0
F	Greater than	1.0

More detailed methodologies to calculate LOS at specific locations such as unsignalized or signalized intersections are also outlined in the HCM. The calculated LOS at specific intersection locations may not necessarily be consistent with LOS along adjacent roadway links, since intersection LOS is dependent upon a variety of other factors, including intersection traffic control, signal timing/phasing, intersection geometrics, and crossstreet traffic volumes.

Existing Level of Service in Bremerton

Based on current traffic volumes, V/C ratios and LOS were calculated for mid-block arterial roadway sections throughout the City. The results are shown in Table 5. Level of Service D was selected as the initial LOS threshold used to identify system deficiencies. This is the LOS standard used in most urban areas in the Puget Sound region, including the urban portion of Kitsap County. The following existing roadway sections exceed LOS D (and are approaching LOS E) during the PM peak hour:

- Kitsap Way (SR-310) – 11th to National
- Sylvan Way – Wheaton to Petersville
- Warren Avenue (SR-303) – Callahan to Sheridan
- Wheaton Way (SR 303) – Sheridan to Riddell

Table 5. Existing Corridor Level of Service

Street	Section	Two-Way Peak Hour Volume	Capacity[c]	V/C Ratio	LOS
West Bremerton					
6th Street	Washington to Warren	760	3,890	0.20	A
6th Street	Warren to Callow	1,890	3,700	0.51	C
11th Street	Washington to Warren	920	3,440	0.27	A
11th Street	Warren to Kitsap Way	2,180	3,950	0.55	C
15th Street	High to Callow	460	1,310	0.35	B
Auto Center Way	South of Kitsap Way	820	1,910	0.43	B
Auto Center Way	North of Werner	330	1,770	0.19	A
Burwell Street (SR 304)a	Washington to Warren	760	3,970	0.19	A
Burwell Street (SR 304)a	Warren to Naval	1,250	3,030	0.41	B
Burwell Street (SR 304)a	Naval to Callow	1,340	3,530	0.38	B
Callow Avenue (SR 304)a	Farragut to Burwell	2,000	3,630	0.55	C
Callow Avenue	6th to 11th	730	1,850	0.40	B
Charleston Blvd. (SR 304)a	Preble to Farragut b	2360	4,230	0.56	C
Harlow Drive	1st to Price	160	1,340	0.12	A
High Avenue	6th to 15th	280	1,290	0.21	A
Kitsap Way (SR 310)a	North of 11th	3,430	3,890	0.88	D
Kitsap Way (SR 310)a	East of National	3,400	3,940	0.86	D
Kitsap Way (SR 310)a	West of National	2,670	3,690	0.72	C
Kitsap Way (SR 310)a	East of SR 3	2,930	4,020	0.73	C
Kitsap Way	SR-3 to Northlake Way	1,220	3,570	0.34	B
Loxie Eagans Blvd.	National to SR-3	1,500	3,580	0.42	B
Manette Bridge		1,140	2,390	0.48	B
National Avenue	Kitsap to City Limits	1,000	1,340	0.74	C
Naval Avenue	Burwell to 11th	1,010	3,580	0.28	A
Pacific Avenue	Burwell to 11th	240	1,110	0.22	A
SR-304 a	SR-3 to Preble	2,460	4,130	0.59	C

Warren Avenue (SR 303)	Burwell to 11th	1,300	3,700	0.35	B
Warren Avenue (SR 303)	11th to Bridge	2,670	4,020	0.66	C
Warren Avenue (SR 303)	Bridge to Callahan	3,830	4,920	0.78	D
Washington Avenue	6th to Burwell	730	2,820	0.26	A
Werner Road	East of Auto Center Way	1,380	3,910	0.35	B
Werner Road	West of Auto Center Way	970	1,250	0.77	D
East Bremerton					
Perry Avenue	E. 11th to Riddell	580	1,430	0.40	B
Pine Road	Sheridan to Riddell	630	1,390	0.45	B
Riddell Road	Pine to Wheaton	860	1,880	0.46	B
Riddell Road	Wheaton to Petersville	778	1,350	0.58	C
Sheridan Road	Wheaton to Halverson	700	1,350	0.52	C
Sylvan Way	Wheaton to Petersville	1,180	1,350	0.87	D

Accident Information

Using accident data records for the years 1997 through 2001, major intersections were reviewed for the number of accidents and accident type (rear end, right angle, pedestrian, and bicycle). The criteria used to determine if an intersection has an unusually high accident rate included five or more average accidents per year for unsignalized intersections and ten or more average accidents per year for signalized intersections. These intersections should be considered for further examination from a safety perspective.

The list of intersections provided in Table5 does not imply that the City of Bremerton is responsible for improvements at all intersections. In some cases, there are no consistent accident patterns or no reasonable improvements that could be identified to decrease accidents. Table 6 identifies the intersections that exceed these accident thresholds based on the average number of accident between 1997 through 2001. More detailed accident information is contained in Appendix A of the Bremerton Comprehensive Plan Transportation Element.

Table 6. Existing Intersections that Exceed the Annual Accident Thresholds

Intersection	Total Number of Accidents						
	'97	'98	'99	'00	'01	Total	5-Year Average
Signalized Intersections							
Callow Avenue & 6th Street	8	9	10	9	17	53	10.6
Callow Avenue & 11th Street	18	13	25	18	19	93	18.6
Kitsap Way & 11th Street	15	11	17	13	14	70	14.0
Warren Avenue & 11th Street	12	17	25	30	30	115	23.0
Wheaton Way & Sheridan Rd.	8	16	11	14	16	65	13.0
Wheaton Way & Sylvan Way	14	12	7	7	22	62	12.4 [a]
Unsignalized Intersections							
Hewitt Avenue & 11th Street	8	9	5	4	5	31	6.2
Ohio Avenue & 11th Street	6	5	1	10	6	28	5.6

Kitsap Way & Arsenal Way/Shorewood Drive [b]	3	9	11	3	7	33	6.6
Kitsap Way & Corbet Ave./13th Street/Wilbert Street	5	5	5	8	12	35	7.0
Kitsap Way & Pershing Ave.	1	8	6	7	13	35	7.0
Kitsap Way & Morgan Ave [c]	4	5	9	11	6	35	7.0
Veneta Avenue & 11th Street	2	7	6	11	4	30	6.0

[a] Accident records revealed a pedestrian fatality at the intersection of Wheaton Way and Sylvan Way in 1998.
[b] The reduction in accident rates at the Kitsap Way & Arsenal Way/Shorewood Drive intersection between 1999 and 2001 is a result of intersection and signal improvements.
[c] Accident rates at this intersection may decrease as a result of minor striping improvements made by WSDOT and the City of Bremerton. The City of Bremerton will monitor accidents at this intersection.

Transit and Ferry Service

Many of the transit routes from the City of Bremerton serve the Puget Sound Naval Shipyard (PSNS), downtown Bremerton, and Washington State Ferry (WSF) Terminal. Transfers between the various transit routes can be made at the following locations (for a detailed map of ferry routes and transfer station locations, please see Figure 2-6 in the Bremerton Comprehensive Plan Transportation Element):

- Washington Avenue at the Washington State Ferry Terminal
- Wheaton Avenue/Sylvan Way intersection
- Auto Center Way south of the SR-3/Kitsap Way intersection

According to Kitsap Transit's November 2003 bus schedules, transit routes generally operate at one-hour headways, with improved service during peak hours with the exceptions of Route #15 and #16. Route #15 (McWilliams Shuttle), is a special weekday route that provides service between BTC, and the McWilliams and Crossroads Park-and-Ride lots. Route #16 (Jackson Park) is a new special service route that provides AM and PM peak hour service in West Bremerton between Elwood Point located north and east of the SR 3/Austin Drive interchange and PSNS.

Downtown Bremerton is currently served by auto and walk-on ferry service operated by WSF and passenger-only ferry service operated by Kitsap Transit. The auto and passenger ferry service connects downtown Bremerton with Colman Dock in downtown Seattle, and the passenger-only ferry service links downtown Bremerton with Port Orchard and Annapolis. There are two auto and walk-on ferry vessels that operate on the Bremerton to Seattle route. During peak summer months there is the Walla Walla (206 vehicle capacity, 2,000 passenger capacity), and one Issaquah 130 class ferry (130 vehicle capacity, 1,200 passenger capacity). In the winter months the Walla Walla vessel is replaced with a 160-car super ferry (160 vehicle capacity, 2,500 passenger capacity).

There are daily runs in each direction, with operating headways that range from 60 to 140 minutes. The Bremerton terminal area currently has a holding area for approximately 178

vehicles, two transfer spans, two tollbooths, and overhead passenger loading. The route length is approximately 13.5 nautical miles and the scheduled crossing time is approximately 60 minutes.

From 1997 to 2003, quarterly and seasonal ridership trends for the Seattle-Bremerton auto ferry routes have been similar. The peak auto-ferry ridership occurs during the spring and summer month from April to June and July to September. The daily walk-on and vehicle passenger peak ridership also tends to be higher during the peak spring and summer months (for a detailed graph of Seattle-Bremerton ridership, please see Figure 2-7 in the Bremerton Comprehensive Plan Transportation Element).

The passenger-only ferry service had similar seasonal trends, however, in the spring (between April and June) of 1998 there was an increase in passenger only ferry ridership as a result of improvements that were made to the scheduled crossing time. Between 1998 and 2002 passenger-only ferry ridership either remained the same or increased. However, in the fall of 2002, passenger-only ferry ridership decreased, and continued to decrease due to a fare increase. In 2002, Kitsap Transit purchased the passenger-only ferry route from Horluck Transportation, a privately owned business. This new ferry service will operate seven days a week, with expanded service from the passenger-only ferry terminal in downtown Bremerton to Port Orchard and Annapolis. The ferry route will provide Bremerton commuters a link to Port Orchard and Annapolis across Sinclair Inlet.

Pedestrian and Bicycle Facilities

Sidewalks are generally provided throughout the downtown and Central Bremerton areas creating a grid-system for pedestrians and sidewalks along arterial streets that have commercial land uses such as Kitsap Way and Wheaton Way. Many of the streets outside the commercial area in both West and East Bremerton have paved or gravel shoulders rather than sidewalks. (For more detailed information on existing bicycle routes and arterial pedestrian facilities, see Figure 2-8 in the Bremerton Comprehensive Plan Transportation Element.)

The non-motorized network has missing links around some elementary and secondary schools, many of which are located in residential neighborhoods. Continuous sidewalk and bicycle routes would provide a safe environment for elementary and secondary school children to walk to and from school. Schools that are located in areas with no-to- minimum sidewalks and/or bicycle routes include Kitsap Peninsula Vocational Skills Center, Morgan School, and West Hill Elementary school in West Bremerton, and Armin Jahr Elementary School, View Ridge Elementary School, and Bremerton Middle School in East Bremerton. The Olympic Community College is located west of Warren Avenue, and north of 13th Street and there are sidewalks on 13th Street, 15th Street, and Warren Avenue. In addition, bicycle routes extend north-south on Warren Avenue and also on local streets west of Olympic Community College.

Bremerton also has a complete bicycle route network that extends through East and West Bremerton. Most of the bicycle routes do not have dedicated bicycle lanes, but are minor arterial or collector streets that are commonly used by bicyclists. Exceptions to this include the recently constructed sections of SR 304, which has dedicated bicycle lanes, and Kitsap Way, which has wide-shoulders that are suitable for use by bicyclists. Bicycle routes in East Bremerton serve

residential neighborhoods, schools, and community facilities such as the Kitsap Central Library on Sylvan Way. There are also bicycle routes across the Manette Bridge and the Warren Avenue Bridge. In West Bremerton, the bicycle routes serve Olympic College and Bremerton High School and there is also bicycle access to the WSF Terminal and BTC from Washington Avenue, Park Avenue, and Burwell Street. Both Kitsap County and PSRC have proposed to improve the existing bicycle network in the future. These improvements are discussed in detail in Chapter 4 of the Bremerton Comprehensive Plan Transportation Element.

The local streets leading to the Evergreen Park, located north of 15th Street, also lack bicycle routes. However, the park does have a mixed use-trail that could provide commuters an alternative route to access the neighborhoods to the west of the park and there are adequate sidewalks on the streets both east-west and north-south of the park.

Existing Deficiencies

Roadway Capacity Deficiencies

Existing transportation system capacity deficiencies have been identified (the LOS analysis used is described in Section 2.4 of the Transportation Element). Deficiencies include:

- Kitsap Way (11th to National): This roadway segment currently operates at LOS D with a high V/C ratio approaching LOS E. This roadway segment serves traffic between downtown Bremerton and SR 3.

- Warren Avenue (Callahan to Sheridan): This portion of the Warren Avenue/Wheaton Way corridor (SR 303) currently operates at LOS D with a high V/C ratio but is at the verge of declining to LOS E.

- Wheaton Way (Sheridan to Riddell): This portion of the Warren Avenue/Wheaton Way corridor (SR 303) also operates at LOS D with a high V/C ratio but is at the verge of declining to LOS E.

- Sylvan Way (Wheaton to Petersville): This east-west arterial currently operates at LOS D but is approaching LOS E conditions.

Operational, Safety, and Other Deficiencies

Other existing transportation system deficiencies, identified as a result of discussions with City staff and the Bremerton Citizen's Advisory Committee, include:

- Auto Center Way between Kitsap Way and the SR-3 southbound On-Ramp: This section of Auto Center Way has existing operating deficiencies due to the dual left turn lane on Kitsap Way transitioning to a single through lane on southbound Auto Center Way.

- Loxie Eagans Blvd./Arsenal Way and 1st Street to SR 304 connections: Arterial connections between the Puget Sound Naval Shipyard and the Loxie Eagans interchange

are limited. In particular, missing links and inefficiencies in the arterial network currently exist between 1st Street, Loxie Eagans Blvd./Arsenal Way and SR 304. Streets in portions of the corridor are narrow and have limited pedestrian facilities.

- Lower Wheaton Way between Sheridan Road and Callahan Drive: The roadway needs to be realigned to improve safety and operating characteristics at the intersection of Lower Wheaton Way and Sheridan Road, and improve access to the Harrison Hospital area.

- Warren Avenue at 11th Street: The intersection has PM peak hour congestion and a high accident rate.

- Downtown Core: Improvements are needed to improve vehicle congestion, improve pedestrian safety, and improve ingress/egress to the BTC.

Significant Impacts of the Alternatives

The Comprehensive Plan Transportation Element evaluated the range of land use patterns considered in the Draft SEIS – from a continuation of trends and more dispersed growth pattern in No Action, to the centers-based land use pattern and focused growth that would occur in the Preferred Alternative. Alternative 2 is between these two broad land use patterns and was not modeled separately. In addition, the transportation analysis examined three different packages of improvements ("network options") for the preferred, centers-based alternative (Alternative 3). All alternatives are based on the same population and employment targets.

The modeling results indicated that there are no statistically significant differences in traffic generation, predicted future LOS, or other empirical measures between the land use alternatives. The transportation network options described in the following sections, therefore, could apply relatively equally to any of the land use alternatives.[1]

It should also be noted, however, that the Alternative 3 land use pattern would result in several transportation benefits that are not quantified or reflected in the analysis. For example, it is widely recognized that concentrating higher density and mixed use development in centers tends to support and encourage greater use of mass transit, and would encourage increased pedestrian activity and some related reduction in automobile use. By focusing growth closer to the city center, the centers approach would also facilitate more efficient use of existing streets, thus reducing future capital needs. While these effects are difficult to quantify, they are accepted transportation advantages of centers-based land use approaches.

The following section describes transportation network options that are provided to offer additional measures to positively impact overall traffic patterns under the Proposed Action. LOS standards are also provided for each transportation network option as well as future traffic volumes. In addition, proposed transportation improvements, and financing and implementation comparisons are also provided. The information in these specific sections may be attributed to

[1] It should be noted that the "transportation network *options*" described in this section are referred to as "transportation network *alternatives*" in the Transportation Element. The wording has been changed in this discussion to avoid confusion with the SEIS alternatives.

all of the alternatives in this analysis and do not specifically relate to the proposed action. However, they will be provided in this section exclusively to avoid repetition in the discussion of the other alternatives.

Transportation Network Options

This section identifies future transportation system deficiencies resulting from projected population and employment increases that would occur in the City of Bremerton and Central Kitsap County. The year 2030 used for analysis to maintain consistency with the Puget Sound Regional Council's (PSRC's) travel demand models and other models. (The time horizon for the Comprehensive Plan Update is 2023. The use of Year 2030 for analysis would tend to slightly overstate Year 2023 transportation impacts.) Several alternate roadway network options that could improve capacity were modeled and evaluated. For purposes of this analysis, "No Action" implies no significant future increases in roadway capacity and is based on the assumptions of Draft SEIS No Action alternative. It reflects continuation of the 1995 Comprehensive Plan policies and future land use map.

Three different transportation network options were also tested. The different transportation network options included capacity improvements on some of the major transportation corridors in Bremerton that could impact overall travel patterns. Major Corridor improvements on SR 3, SR 303, and SR 310 were tested in different combinations to determine how different improvements on specific facilities would affect the overall transportation system. The land use and assumptions used for the Preferred Alternative (Alternative 3) were also used to test network Options 2, 3, and 4. The following additional transportation network improvements were assumed for each option:

- **Option 2** – Provide HOV lanes along SR 3 between SR 16 in Gorst and SR 303 in Silverdale.

- **Option 3** – Provide HOV lanes along SR 303 between 11th Street in downtown Bremerton and NE Fairgrounds Road in Kitsap County (these lanes would operate as general purpose travel lanes during off-peak hours of the day); and widen Kitsap Way (SR 310) to 7 lanes between 11th Street and SR 3. This alternative implements the preliminary preferred alternative on SR 303 (Alternative 13 –modified) as identified in the SR 303 Corridor Study completed in 2002.

- **Option 4** - Provide HOV lanes along SR 303 between 11th Street in downtown Bremerton and NE Fairgrounds Road in Kitsap County (these lanes would operate as general purpose travel lanes during off-peak hours of the day); widen Kitsap Way (SR 310) to 7 lanes between 11th Street and SR 3; and provide HOV lanes along SR 3 between SR 16 in Gorst and SR 303 in Silverdale.

Level of Service Standards

The GMA requires that jurisdictions adopt LOS standards for arterial streets to measure the performance of the transportation system. The LOS standards for streets in the City of

Bremerton will be based on the peak hour link LOS. LOS standards required by the GMA are closely related to the issue of concurrency. The GMA requires transportation improvements to be made concurrent with development. Once a street exceeds its LOS standard, the street must be planned for improvement within six years to a level that does not exceed the standard. If plans to improve the street would exceed the six-year timeframe, new development that would add traffic to the street could not be approved.

LOS D is the standard used in most urban areas in the Puget Sound region, including the urban portion of Kitsap County. Kitsap County currently measures LOS using a methodology similar to the City of Bremerton, but calculates V/C ratios based on daily instead of PM peak hour volume and capacity. As shown in Table 5, several roadways in the City of Bremerton already exceed this LOS D threshold. In order to encourage growth in targeted areas of the City (i.e., designated centers), LOS E is recommended along several arterial corridors.

For consistency with regional models and planning documents which incorporate year 2030 population and employment forecasts, roadway capacity deficiencies were identified based on projected traffic growth over a 27-year period. However, preliminary LOS standards were developed considering that some facilities operating at LOS F in the year 2030 would meet lower LOS standards within the six year planning horizon consistent with GMA and concurrency requirements.

Based on the methodology described above, the following preliminary LOS standards are recommended:

- Maintain LOS E or better (V/C less than or equal to 1.0) in the SR-303 (Warren/Wheaton) corridor, Kitsap Way (SR 310), Sylvan Way, and on the Manette Bridge.
- Maintain LOS D or better (V/C less than or equal to 0.9) on all other arterial streets in the City.

The WSDOT sets LOS standards for Highways of Statewide Significance (HSS), including SR 304, SR 310, and SR 3 in the City of Bremerton. LOS D is set as the LOS standard for urban areas, except where development affects an intersection where the LOS is below the applicable threshold, in which case the pre-development LOS is used. The SR 303 (Warren/Wheaton) corridor is currently on PSRC's list of Regionally Significant (Non-HSS) State Highways. PSRC is currently leading an effort, with input from WSDOT and local jurisdictions, to develop and adopt LOS standards for regionally significant state highways in the central Puget Sound Region. In response to local concerns, PSRC staff have developed alternative recommendations for LOS standards. For SR 303, one option would be to have the LOS standard set at LOS E/mitigated, which means that congestion should be mitigated when PM peak hour LOS falls below LOS E. The second option, which is consistent with WSDOT's standards for HSS facilities, would set the LOS standard at LOS D. This is consistent with the LOS D or better threshold discussed previously, except at a few locations where a LOS E threshold has been established.

In the 1995 Comprehensive Plan Transportation Element, the Planning Commission Citizen Advisory Committee (CAC) suggested two locations where additional studies were needed to develop long-term solutions for improving LOS in the Warren/Wheaton and Kitsap Way corridors. These suggestions include:

- The City will initiate the preparation of a cooperative city/county/state Wheaton Way/Brownsville Highway Corridor Study from Burwell to Waaga Way. This jointly funded study was completed in June 2002. The recommended improvements developed as an outcome of this project, which include the addition of peak hour HOV lanes (general purpose lanes during off-peak) in both directions, were modeled in the transportation network Options 2 and 3 (discussed previously in "Transportation Network Options" above). These improvements were considered in the development of preliminary LOS standards for the SR 303 (Warren/Wheaton) corridor.

- The City will initiate the preparation of a cooperative city/county/state Kitsap Way Corridor Study, from 11th Street to SR-3. This study has not yet been initiated because the traffic volumes on Kitsap Way have not increased significantly from 1994 to 2003.

These suggestions were intended to provide clear direction to City staff to initiate these corridor studies, in cooperation with WSDOT, Kitsap County, and Kitsap Transit, prior to reaching the LOS standard established in each corridor.

Future Traffic Volumes and Level of Service

Under the Preferred Alternative's "Centers" approach, traffic volume forecasts were prepared for the four transportation network Options (the three identified above, plus the No Action) using the transportation forecasting model. These volumes were used to calculate V/C ratios and to determine the future LOS of arterial streets in the City. The year 2030 traffic volume forecasts were prepared assuming that future travel characteristics (in terms of mode of travel) would continue to be the same as they are today. The transportation forecasting model used for this analysis is limited in its ability to predict travel characteristic changes in the future as a result of:

- Increased transit use.
- Implementation of additional intra-county passenger ferries.
- Spreading of the peak hour - as a facility becomes increasingly congested; some of the demand tends to shift to other times of the day, resulting in a spread of the peak hour.
- Increased bicycle and pedestrian facility use.
- Other demand management strategies such as telecommuting.

These travel demand adjustments, many of which could be achieved with the Preferred Alternative, could reduce the total peak hour volumes by as much as 10 percent. The largest reductions could occur from increased transit use and peak hour spreading.

The LOS and V/C ratios for the four transportation network improvement options are summarized in Table 7. The LOS and V/C information is presented in Table 7. (This information is also shown graphically in Transportation Element Figures 3-2, 3-3, 3-4, and 3-5.

Appendix C of the Comprehensive Plan Transportation Element also contains a more detailed table showing the volume, capacity, V/C ratio, and LOS on the arterial street segments within the City of Bremerton).

Table 7. Year 2030 Corridor Level of Service

Street	Section	Existing (2001)		Alternative 1 – No Action		Alternative 2 – SR 3 HOV		Alternative 3 – SR 303 HOV and Kitsap Way Widening		Alternative 4– SR 3 HOV, SR 303 HOV, and Kitsap Way Widening	
		V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS
West Bremerton											
6th Street	Washington to Warren	0.20	A	0.46	B	0.47	B	0.45	B	0.46	B
6th Street	Warren to Callow	0.51	C	0.61	C	0.62	C	0.64	C	0.65	C
11th Street	Washington to Warren	0.27	A	0.25	A	0.26	A	0.34	B	0.34	B
11th Street	Warren to Kitsap	0.55	C	0.66	C	0.67	C	0.68	C	0.67	C
15th Street	High to Callow	0.35	B	0.62	C	0.62	C	0.63	C	0.62	C
Auto Center Way	South of Kitsap Way	0.43	B	0.71	C	0.57	C	0.70	C	0.58	C
Auto Center Way	North of Werner	0.19	A	0.26	A	0.21	A	0.23	A	0.20	A
Burwell Street (SR 304)a	Washington to Warren	0.19	A	0.38	B	0.37	B	0.36	B	0.36	B
Burwell Street (SR 304)a	Warren to Naval	0.41	B	0.94	E	0.89	D	0.98	E	0.95	E
Burwell Street (SR 304)a	Naval to Callow	0.38	B	0.81	D	0.79	D	0.82	D	0.79	D
Charleston Blvd. (SR 304)a	Farragut to Burwell	0.55	C	1.18	F	1.11	F	1.24	F	1.14	F
Callow Avenue	6th to 11th	0.40	B	0.63	C	0.63	C	0.64	C	0.63	C
Charleston Blvd (SR 304)a	Preble to Farragut a	0.56	C	0.99	E	0.96	E	1.01	F	0.96	E
Harlow Drive	1st to Price	0.12	A	0.08	A	0.09	A	0.08	A	0.09	A
High Avenue	6th to 15th	0.21	A	0.39	B	0.40	B	0.38	B	0.39	B
Kitsap Way (SR 310)[a]	North of 11th	0.88	D	1.07	F	1.04	F	0.83	D	0.81	D
Kitsap Way (SR 310)[a]	East of National	0.86	D	1.10	F	1.10	F	0.83	D	0.83	D
Kitsap Way (SR 310)[a]	West of National	0.72	C	1.02	F	1.00	F	0.75	C	0.72	C
Kitsap Way (SR 310)[a]	East of SR 3	0.73	C	0.99	E	1.02	F	0.73	C	0.74	C
Kitsap Way	SR-3 to Northlake Way	0.34	B	1.00	E	0.90	D	0.96	E	0.89	D
Loxie Eagans Blvd.	E/O SR-3	0.42	B	0.40	B	0.40	B	0.38	B	0.41	B
Manette Bridge		0.48	B	1.04	F	0.96	E	0.87	D	0.84	D
National Avenue	Kitsap to City Limits	0.74	C	0.81	D	0.76	D	0.85	D	0.81	D
Naval Avenue	Burwell to 11th	0.28	A	0.26	A	0.25	A	0.28	A	0.26	A
Pacific Avenue	Burwell to 11th	0.22	A	0.14	A	0.15	A	0.13	A	0.14	A
SR-304 [a]	SR-3 to Preble (GP)	0.59	C	0.86	D	0.85	D	0.89	D	0.84	D
	SR-3 to Preble (HOV)			0.70	C	0.71	C	0.65	C	0.70	C
Warren Avenue (SR 303)[b]	Burwell to 11th	0.35	B	0.65	C	0.63	C	0.76	D	0.71	C
	11th to Bridge (GP)	0.66	C	0.91	E	0.89	D	0.85	D	0.84	D
	11th to Bridge (HOV)							0.81	D	0.65	C

	Bridge to Callahan (GP)	0.78	D	1.18	F	1.12	F	1.06	F	1.03	F
	Bridge to Callahan (HOV)							0.80	D	0.54	C
Washington Avenue	6th to Burwell	0.26	A	0.48	B	0.44	B	0.48	B	0.43	B
Werner Road	East of Auto Center Way	0.35	B	0.50	C	0.49	B	0.47	B	0.48	B
Werner Road	West of Auto Center Way	0.77	D	1.08	F	1.04	F	1.03	F	1.01	F
East Bremerton											
Perry Avenue	E. 11th to Riddell	0.40	B	0.91	E	0.90	D	0.87	D	0.86	D
Pine Road	Sheridan to Riddell	0.45	B	0.78	D	0.71	C	0.70	C	0.66	C
Riddell Road	Pine to Wheaton	0.46	B	0.70	C	0.70	C	0.72	C	0.73	C
Riddell Road	Wheaton to Petersville	0.58	C	0.94	E	0.92	E	0.92	E	0.92	E
Sheridan Road	Wheaton to Halverson	0.52	C	0.90	E	0.93	E	0.98	E	0.98	E
Sylvan Way	Wheaton to Petersville	0.87	D	1.00	E	1.05	F	1.12	F	1.14	F
Trenton Avenue	E. 11th to Stone	0.28	A	0.56	C	0.48	B	0.39	B	0.36	B
Warren Avenue (SR 303)[b]	Callahan to Sheridan (GP)	0.88	D	1.23	F	1.17	F	1.13	F	1.08	F
	Callahan to Sheridan (HOV)							0.75	D	0.77	D
	Sheridan to Riddell (GP)	0.90	D	0.97	E	0.95	E	0.94	E	0.92	E
	Sheridan to Riddell (HOV)							0.73	C	0.55	C

[a] Designated as a Highway of Statewide Significance (HSS).
[b] Currently nominated for HSS designation.
[c] No recent traffic counts have been conducted at this location since traffic volumes have not significantly change in this area since 1994 the year 1994 traffic volume is shown.

Based on the LOS analysis, the streets shown in Table 8 would exceed the year 2030 LOS standards established in the "Level of Service Standards" section above. Table 8 also shows that in the year 2009 (six-year horizon for GMA concurrency), none of the roadway segments shown would fall below the proposed LOS standards.

As shown in Table 8, twelve roadway segments would operate below proposed LOS thresholds by the year 2030 if no significant roadway capacity improvements are made. If HOV lanes are added along SR 3, as represented by Option 2, V/C ratios would improve along the SR 303 (Warren Avenue/Wheaton Way) corridor, on the Manette Bridge, and along Perry Avenue in East Bremerton. Some LOS improvement would also be expected along Burwell Street between Warren Avenue and Naval Avenue. An increase in traffic volumes is expected along some east-west arterials in East Bremerton, including Sylvan Way, which would operate at LOS F with Option 2, 3 or 4.

Table 8. Roadway Segments Exceeding LOS Standards in Years 2009 and 2030

Facility	Proposed LOS Standard	Year 2009 No Action	Year 2030			
			Alternative 1 – No Action	Alternative 2 – SR 3 HOV	Alternative 3 – SR 303 HOV and Kitsap Way Widening	Alternative 4 – SR 3 HOV, SR 303 HOV, and Kitsap Way Widening
Burwell Street from Warren to Naval	LOS D	meets standard	LOS E	meets standard	LOS E	LOS E
Charleston Blvd. (SR 304) from Farragut to Burwell	LOS D	meets standard	LOS F	LOS F	LOS F	LOS F
Kitsap Way (SR 310) between 11th and SR 3	LOS E	meets standard	LOS F	LOS F	meets standard	meets standard
SR 304 between Preble and Farragut	LOS D	meets standard	LOS E	LOS E	LOS F	LOS E
Manette Bridge	LOS E	meets standard	LOS F	meets standard	meets standard	meets standard
Warren Bridge (SR 303)	LOS E	meets standard	LOS F	LOS F	LOS F	LOS F
Werner Road west of Auto Center Way	LOS D	meets standard	LOS F	LOS F	LOS F	LOS F
Perry Avenue from 11th to Riddell	LOS D	meets standard	LOS E	meets standard	meets standard	meets standard
Warren Avenue (SR 303) from Callahan to Sheridan	LOS E	meets standard	LOS F	LOS F	LOS F	LOS F
Perry Avenue from 11th to Riddell	LOS D	meets standard	LOS E	meets standard	meets standard	meets standard
Riddell Road from Wheaton to Petersville	LOS D	meets standard	LOS E	LOS E	LOS E	LOS E
Sheridan Road from Wheaton to Halverson	LOS D	meets standard	LOS E	LOS E	LOS E	LOS E
Sylvan Way from Wheaton to Petersville	LOS E	meets standard	meets standard	LOS F	LOS F	LOS F

Option 3, which provides HOV lanes along SR 303 and widens Kitsap Way to 7 lanes between 11th Street and SR 3, would further improve V/C ratios along the SR 303 corridor. The additional capacity provided along Kitsap Way would also improve LOS to D or better in the year 2030. Some worsening of LOS would be expected along SR 304 (Cambrian Way) between Preble Street and Farragut Avenue due to increased traffic volumes along SR 303 and SR 304 between East Bremerton and Gorst.

As shown under Option 4, V/C ratios along SR 303, Kitsap Way, Perry Avenue, and the Warren and Manette bridges would further improve if HOV lanes are provided along SR 3 in addition to the improvements proposed for SR 303 and Kitsap Way. The following arterials would continue to exceed LOS thresholds in the year 2030 with some or all of the proposed improvement options:

- Burwell Street (SR 310) from Warren to Naval (LOS E – Options 1, 3, and 4)
- Charleston Blvd. (SR 304) from Farragut to 6th (LOS F – all options)
- SR 304 between Preble and Farragut (LOS F – Option 3, LOS E – Options 1, 2, and 4)
- Werner Road west of Auto Center Road (LOS F – all options)
- Warren Avenue (SR 303) from Callahan to Sheridan (LOS F – all options)
- Riddell Road from Wheaton to Petersville (LOS E – all options)
- Sheridan Road from Wheaton to Halverson (LOS E – all options)
- Sylvan Way from Wheaton to Petersville (LOS F – Options 2, 3, and 4)

These roadway segments would likely operate at acceptable LOS through the year 2009. However, capacity improvements would need to be implemented or LOS thresholds would need to be changed at many of these locations before the year 2030. Alternatively, increased Transportation Demand Management and Transportation Systems Management strategies – such as increased bicycle or transit use, telecommuting, or other measures -- could provide an acceptable LOS.

Mitigation Measures

Traffic congestion and delay will increase incrementally as a result of forecast population and employment growth. The degree of increase could be reduced or minimized, however, by implementing identified capacity improvements, transportation demand management strategies, proposed land use policies and map designations, and development regulations. Focusing a greater increment of growth within designated centers at higher densities could facilitate greater use of transit and non-motorized modes of travel, which could effectively extend the capacity of the existing transportation system. In addition, development projects and associated increments of growth that cannot meet the City's concurrency standard, would be denied.

A range of options are identified for roadway improvements, transit, ferry, pedestrian, bicycle, and transportation demand management strategies which could mitigate the impacts of future growth on the transportation system. These could be implemented with any of the Draft SEIS land use alternatives

Roadway Capacity Improvements

Improvements to the SR 303 (Warren Ave./ Wheaton Way), SR 310 (Kitsap Way), and SR 304 corridors are recommended to address existing and future roadway capacity deficiencies. The improvement options for each of these major travel corridors are discussed in detail in the Bremerton Comprehensive Plan Transportation Element (pages 4-1 to 4-2).

Operational, Safety, and Other Improvements

There are a number of smaller-scale improvements that could be considered to improve traffic operations and safety. Many of these improvements would address existing operational, safety, and other deficiencies identified previously:

1) Downtown BTC Access/Pedestrian Improvements

2) Auto Center Way between Kitsap Way and the SR-3 On-Ramp
3) Lower Wheaton Way between Sheridan Road and Callahan Drive
4) Warren Avenue at 11th Street
5) Warren Ave. southbound off-ramp to Callahan Drive
6) Manette Bridge Replacement
7) Sylvan Way, Burwell Street, Callow Avenue, and SR 304
8) Loxie Eagans Blvd./Arsenal Way and 1st Street to SR 304 connections
9) Other miscellaneous channelization or traffic control improvements to reduce accidents as warranted

Transit Service and Facility Improvements

Future transit service and facility improvements in Bremerton are documented in Kitsap Transit's Transit Development Plan (2001-2007). Key elements of the Plan that relate to the City of Bremerton's transportation plan are summarized below.

- Promote the use of public transportation while sustaining the existing public transportation facilities and equipment. Kitsap Transit's strategies include reducing the cost per passenger from $4.18 to $3.92 and ensuring that vehicle costs per mile do not exceed 51 cents. In addition, commute trip reduction and transportation demand management measures will be used to promote the use of public transportation.

- Build partnerships between federal, state, regional, local and private sector public transportation entities to improve public transportation planning and coordinate service delivery.

- Integrate public transportation services into a coordinated system linked by inter-modal facilities. Fully coordinate multi-agency (City of Bremerton, Sinclair Landing Association, WSF and Port of Bremerton) Bremerton Transportation Center operations and maintenance.

- Increase ridership and improve connectivity to the Bremerton Transportation Center by expanding East Bremerton park-and-ride lots and develop a Memorandum of Understanding with the Department of Transportation on the McWilliams Park-and-Ride lot leading to a public/private project for an expanded lot in the vicinity of the current one.

- Improve mobility by increasing ACCESS ridership and re-planning the transit service network in East Bremerton to include new trip generators and a trunk route between east Bremerton and Silverdale.

- Enhance and build facilities to improve urban public transportation services, facilities, and programs. This includes the development of high capacity transit, HOV lanes, and transportation demand management to meet local and regional economic development, congestion, energy, and clean air objectives. As part of this effort, Kitsap Transit will

develop and coordinate more Worker/Driver buspools, vanpools and other Rideshare services to the Puget Sound Naval Shipyard in 2001, along with other major employers.

Proposed Transit Projects

Kitsap County is in the process of identifying a feasible transit solution to increase mobility along the entire length of SR 303, which includes downtown Bremerton and Silverdale. Transit options include:

- Bus Rapid Transit between Kitsap Mall in Silverdale and Bremerton Transit Center. The preferred alternative extends from the Bremerton Transportation Center north along Washington Avenue, across the Manette Bridge, north on old Wheaton Way and Cherry Street to a new Transit Center located between Old Wheaton Way and Sheridan Street. From there, the system would enter SR 303, and continue north to Silverdale.

- A local bus system that provides access to the Bus Rapid Transit line, or directly to Bremerton Transit Center.

- Transit centers that facilitate convenient transfers between the local transit routes and Bus Rapid Transit.

- Adequate parking for access to the corridor, either free or paid depending on the level of convenience offered and/or the cost of parking at private development projects.

- Land use strategies that encourage denser multi-use development around stations, which will provide new opportunities to live and work in Bremerton-Silverdale area without relying on an automobile for all trips.

In *Destination 2030 Metropolitan Transportation Plan,* PSRC has identified transit improvement projects that would enhance transit in the City of Bremerton and Kitsap County. These projects include building an East Bremerton Transit Center by the year 2010, and providing transit priority throughout Kitsap County by the year 2008.

Ferry Service and Facility Improvements

Although the recent ferry service proposal failed in the November 2003 election, the City of Bremerton should continue to promote restarting the passenger-only ferry route between Bremerton and downtown Seattle, as this service would provide Bremerton commuters a convenient, dependable, and fast way to commute between the City of Bremerton and Seattle.

In 2002, Kitsap County purchased the passenger-only ferry from Horluck Transportation, to provide multi-modal transit access across the Sinclair Inlet from Port Orchard and Annapolis to the passenger only ferry terminal in downtown Bremerton. This ferry route allows Kitsap Transit to minimize bus service through Gorst. The ferry service would have expanded hours of operation seven days a week and during holidays, and would function as an extension of Kitsap Transit's bus routes. Kitsap Transit's top priorities for the new ferry service are to renovate the

Port Orchard dock so that it is in compliance with environmental regulations and the Americans with Disabilities Act (ADA). In addition, Kitsap Transit plans to improve connectivity between the passenger-only ferry and existing bus transit routes.

PSRC's *Destination 2030 Metropolitan Transportation Plan* identifies phased improvements to the existing Bremerton Transit Center by the year 2010. Phases A and B, and parts of phase C have been completed. Improvements include an expansion of the car holding at the dock, an elevated transit deck, and an expanded waiting terminal. The completion date for the remainder of phase C and all of phase D are scheduled for 2010. These projects include a new WSF tollbooth and terminal agent office, covered Kiss-and-ride area, an electric vehicle parking facility, structural improvements, and promoting mix-use development at the transit center.

For a more detailed review of proposed ferry service and facility improvements, please see page 4-6 of the Bremerton Comprehensive Plan Transportation Element.

Pedestrian and Bicycle Improvements

The greatest potential for shifting trips to a non-motorized travel mode applies to those to and from transit and ferry terminals, and short trips for shopping, errands, and other purposes. Improving safety for pedestrians and bicyclists is also critical to advance this form of transportation. With the planned increase in density in the downtown area, pedestrians and bicycle facilities will be important to accommodate trips to and from the ferry terminal and short trips to various downtown destinations including the PSNS.

The two transit transfer stations located at the Wheaton Way/Sylvan Way intersection and on Auto Center Way south of Kitsap Way, and the combined transit transfer station/ferry terminal in downtown Bremerton should be made fully accessible to bicyclists and pedestrians. Improvements that can enhance pedestrian and bicycle access to these terminals include: secure and weather-protected bicycle storage and waiting areas, crosswalks and signal timing that give pedestrians equal advantage at intersections, and exclusive bicycle access lanes and wide sidewalks that connect to major residential and retail areas in the surrounding community.

Facility improvements would include safety improvements at crosswalks in central areas, access to and across principal arterials, and removal of barriers to pedestrian and bicycle travel. Other improvements could include the provision of new sidewalks where they are currently nonexistent, too narrow, or deficient. In addition, pedestrian access between Downtown Bremerton and the Manette Bridge and Evergreen Park area should be improved.

Bremerton has also adopted a policy regarding "Frontage Improvements for New Developments or Redevelopments," and has proposed new projects and improvement plans that would expand their non-motorized facilities. For a detailed review of these policies as well as proposed non-motorized improvements, please see pages 4-7 to 4-10 in the Bremerton Comprehensive Plan Transportation Element.

Transportation Demand Management Strategies

The GMA requires that Comprehensive Plans include transportation demand management strategies. The goal of transportation demand management is to reduce the amount of vehicle travel on roadways and ferries. This can be accomplished by:

- shifting single-occupant vehicle trips to carpools, transit, or non-motorized travel modes;
- eliminating trips entirely—telecommuting and home-shopping are common examples of trip elimination; or
- shortening trip lengths and "trip-chaining"—combining a series of multi-purpose trips into a longer chain of trips can improve efficiency and reduce vehicle miles traveled.

Most transportation demand management programs need to be initiated at the state or regional level since most trips cross any jurisdictional boundaries. There are, however, programs that can be initiated at the local level that can enhance and support these larger statewide and regional programs.

The full-range of strategies include transportation pricing, employer-based strategies, land use strategies, telecommunications, and capital facilities. Specific transportation demand management activities in each of the five categories are described in more detail in pages 4-10 to 4-11 in the Bremerton Comprehensive Plan Transportation Element.

Transportation System Management Strategies

Transportation systems management (TSM) refers to strategies that improve facility operations, traffic flow, or safety without adding lanes to increase capacity. Some of the more common TSM strategies that should be considered include the following:

- One-way couplets;
- Parking prohibitions;
- Access control; and
- Traffic signal timing coordination.

For more information, please see pages 4-11 to 4-12 of the Bremerton Comprehensive Plan Transportation Element.

Traffic Calming

Traffic calming measures should be considered to reduce the speed and volume of traffic to acceptable levels to support livability, safety, and community character within residential neighborhoods. Traffic calming includes *speed control measures*, which are primarily used to address speeding problems by changing vertical alignment, changing horizontal alignment, or narrowing the roadway; and *volume control measures,* which are primarily used to address cut-through traffic problems by blocking certain movements and diverting traffic to streets more appropriate for higher traffic volumes. For a detailed review of some of the more commonly

used traffic calming measures used throughout the region, please see pages 4-12 to 4-14 of the Bremerton Comprehensive Plan Transportation Element.

Significant Unavoidable Adverse Impacts

As noted above, traffic congestion and delay will unavoidably increase to some extent as a result of forecast growth. The degree of increase could be reduced or minimized, however, by implementing identified capacity improvements, transportation demand management strategies, proposed land use policies and map designations, and development regulations.

Public Services

Note: The City Services Element of the Comprehensive Plan Update includes both Public Services and Utilities. These topics are organized as separate sections in this Draft SEIS.

1. Fire & Emergency Medical Service

Affected Environment

The Bremerton Fire Department currently serves approximately 37,000 people. The Department has three fire stations located in west, central, and east Bremerton with seven fire apparatus and two specialty vehicles; three of the six fire engines are reserve units. The Department's current level of service (LOS) of 4.7 minutes response time. The Comprehensive Plan Update (Appendix CS City Services) proposes a new LOS of 5.0 minutes response time.

The City has three emergency medical service (EMS) vehicles, with two units each covering one-half of the City; the remaining unit is used as a reserve unit. The current LOS, which is based on response times, is 3.3 minutes for both basic life support (BLS) and advanced life support (ALS). The American Heart Association recommends a LOS of 4 minutes for BLS and 8 minutes for ALS. The City currently exceeds the recommended LOS.

Significant Impacts of the Alternatives

Population growth and development under any of the Comprehensive Plan alternatives would increase the number of fire-related calls, fire inspections, and medical emergencies. As a result, the Fire Department would need to expand services, which could include adding personnel and equipment. Replacement of existing apparatus due to wear would need to be continued. Although there has been little growth within the City for the last five years, there has been an increase in EMS calls inside the City. This is due to an aging population and a concentration of retirement homes and convalescent homes that are associated with the medical center around Harrison Hospital. If this trend continues, it may be necessary to expand services based upon the existing as well as new population.

Fire level of service standards are typically calculated based on residential population and do not explicitly account for employment. In general, employment uses typically generate lower calls for service and do not generate significant impacts.

Alternative 1 (No Action)

Alternative 1 would result in the most dispersed pattern of population growth, with the least amount of growth locating within the City limits (approximately 1,300 new people in the city by 2023). The Comprehensive Plan Update (Appendix CS City Services) states that no new stations, fire apparatus, or staffing units would be required. Likewise, no new EMS units will be necessary, unless the LOS is revised. The assumed increase in population in unincorporated portions of Kitsap County (approximately 11,700 people) could increase service demands upon other fire districts within the county. Depending on proximity to fire facilities, the more

dispersed growth pattern outside of the City could cause relatively longer response times and less efficient fire/EMS service by other providers in unincorporated areas.

Alternative 2 – Updated Plan without Centers

The impacts of Alternative 2 would be generally similar to No Action. A larger proportion of forecast growth would locate within the City although not within centers. The land use pattern would be relatively dispersed, with attendant potential effects on response time.

Alternative 3 – Updated Plan with Centers (Preferred Alternative)

Under Alternative 3, population within the City limits would increase by approximately 11,200 new residents by 2023 (86% of the total projected population growth of 13,000). The pattern of growth would be more compact compared to the other alternatives. The location of much of the increased population and employment within centers could lead to faster response times; fewer new stations may be necessary to serve a more compact population. However, a larger population would generate increased calls for service, and new Fire Department and EMS personnel or equipment would still be required to respond. In addition, more sophisticated equipment and training could be necessary to serve more intensive or larger developments. The Comprehensive Plan Update (Appendix CS City Services) indicates that a total of seven fire apparatus would be necessary, based upon the proposed LOS of 5.0 minutes for response time. The city currently has seven fire apparatus, although 3 are reserve units. However, additional crews would be necessary to fully staff all of the fire apparatus (including reserve units which are not currently staffed). To meet the needs of the projected population, approximately one new EMS unit and associated personnel would be necessary. Again, the LOS could be revised to reflect a potential increase in EMS calls to the City, and more EMS units and personnel could be required.

2. Police Services

Affected Environment

The Bremerton Police Department provides police services for the City. The City's LOS standard for the number of officers is based upon population, while the LOS standard for capital facilities is based on building floor area per officer. Based on the 2002 total City population of approximately 37,000 persons, there are approximately 1.6 officers for every 1,000 persons. The Police Department has determined that this existing LOS is too low given the crime rate for the City and identifies a preferred LOS standard of 1.8 officers for every 1,000 persons.

The City currently has 268 square feet per officer in three existing facilities (City Hall/Police, West Precinct/Patrol Headquarters and the Capital Hill Fire Station/Special Investigative Unit). The Capital Hill facility has approximately 770 sq. ft. per officer, which skews this average somewhat; without the Capital Hill facility, the adjusted existing floor area per officer is 212 square feet. A 5,000 sq. ft. Public Safety Building for use by the Special Operations Group is scheduled to begin construction soon, but is not included in these calculations.

Significant Impacts of the Alternatives

Any increase in population would place a higher demand on police services, which would result in the need to add personnel, purchase equipment and/or expand facilities. Depending upon the Comprehensive Plan alternative and the resulting location of growth, the Police Department or Kitsap County Sheriff's Department different agency could need to increase the number of officers or size of facilities to meet population demands.

Police level of service standards are typically calculated based on residential population and do not explicitly account for employment. In general, employment uses typically generate lower calls for service and do not generate significant impacts.

Alternative 1 (No Action)

Under No Action, the 2023 population within the City limits would increase by about 13,000 persons. Applying the current LOS of 1.6 officers per 1,000 persons, and the preferable LOS standard of 1.8 officers per 1,000 persons, about 2 or 3 new officers would be required by 2023. Based on the addition of 2 to 3 officers, and using the existing LOS standard of 268 square feet of building floor area per officer, there could be a projected need for between 500 to 800 square feet of building area to house these new officers. This does not count the new Public Safety Building, which would more than cover the projected need. Additional equipment would also be required.

This Alternative would place the least amount of new growth in the City. Following current trends, the balance of the projected growth would locate in unincorporated portions of Kitsap County. This could increase service demands on Kitsap County law enforcement personnel serving these areas.

Alternative 2 – Updated Plan without Centers

Impacts of Alternative 2 would be comparable to those for No Action. A larger proportion of the population would locate within the City, which would increase service calls to the City police department and reduce calls to Kitsap County police, relative to No Action.

Alternative 3 – Updated Plan with Centers (Preferred Alternative)

Under Alternative 3, the population within the City limits would increase by 11,200 new residents by 2023, to a total population of 48,200 persons. Using current LOS of 1.6 officers per 1,000 persons, about 18 new officers would be required by 2023. Using the preferable LOS standard of 1.8 officers per 1,000 persons, about 20 new officers would be needed by 2023. Based on the addition of 20 officers, and using the existing LOS standard of 268 square feet of building floor area per officer, there could be a projected need of up to 5,400 square feet of building area to house these new officers. This does not count the new Public Safety Building, which would cover most of the projected need.

Alternative 3 would concentrate the majority of the projected growth into the 11 designated Centers, which may increase efficiencies in service and decrease some response times.

3. Parks

Affected Environment

The City of Bremerton Parks Department has a total of 681 acres of parklands, excluding the cemetery. Approximately 93 percent of the parklands are developed. City parks consist of 16 neighborhood, 5 community, 6 regional parks and 3 regional parks of significance. There are also three additional areas of open space and other recreational facilities such as the senior and aquatic centers. Neighborhood and community parks serve local needs, and regional parks are designed to serve an entire region.

The National Recreation and Parks Association (NRPA) has established recommended minimum population-based standards for parks, park facilities, and open space. Table 9 shows the current amount of land in different categories of parks, and the amount suggested by NRPA standards. Currently, existing "local parks" and "open space" are below NRPA population-based standards. Total park lands meet the NRPA overall standard because of the large amounts of regional parklands (primarily the Olympic Golf Course at Gold Mountain).

Table 9. Level of Service (LOS) For City Park Lands

Type	Acres	Existing LOS (acres/1,000)	NRPA LOS Standards (acres/1,000)
Local	54.88	1.48 acres	6-10 acres
Regional	544.06	14.64 acres	5-10 acres
Open Space	82.18	2.21 acres	3.6 acres
Total	681.12	18.33 acres	N/A

Source: City of Bremerton Draft 2003-2004 Comprehensive Plan Update, Appendix CS City Services; Huckell/Weinman Associates, Inc.

Significant Impacts of the Alternatives

Population growth under any of the Comprehensive Plan alternatives would result in greater demand on existing parks and a need for additional parks within the City or the surrounding area. In general, projected employment under any of the alternatives would not generate significant impacts to parks.

Alternative 1 (No Action)

Alternative 1 would have relatively little impact on City park needs because the majority of population would locate outside the City. The City population would increase by 1,300 people by 2023, which implies a need for about an additional 10 acres of local using NRPA standards. If no additional lands were acquired, the existing deficit in local parks and open space would be exacerbated. Increased population could increase demand for existing parks and facilities. Kitsap County could also experience an increased need for parks, since the majority of future population would locate in unincorporated UGAs.

Alternative 2 – Updated Plan without Centers

Impacts of Alternative 2 would be comparable to No Action. An additional 12 to 20 acres of local parkland would be required. Use of and need for City parks would increase, and use of and need for County parks would decrease relative to No Action.

Alternative 3 – Updated Plan with Centers (Preferred Alternative)

Under Alternative 3, the population within the City limits would increase by 11,200 new residents by 2023. This projected increase in population would require between 70 and 110 acres of local parklands and 40 acres of open space to meet NRPA standards. If no additional lands were acquired, the existing deficits in local parks and open space would be exacerbated.

4. Public Schools

Affected Environment

Bremerton Public School District No. 100C serves all of the City of Bremerton, portions of the City's unincorporated UGA, and some additional areas. The District operates seven elementary schools, one middle school, one junior high school, a high school with various vocational skills center programs, and an alternative high school program, for a total enrollment of about 6,700 students. This enrollment tends to fluctuate depending upon activities at the Puget Sound Naval Shipyard (PSNS) and the amount of ships homeported or being overhauled at PSNS.

Approximately fifty percent of the enrollment is within the elementary schools, which are currently having a problem meeting enrollment demands. Existing elementary enrollment is more than 550 students greater than the current capacity; five of the seven elementary schools are over capacity and utilize portables for extra classrooms. When Crownhill Elementary, which was damaged by fire, is replaced, current enrollment will still be greater than capacity. The middle school is currently over capacity, but the junior high and the high school can both accommodate additional students.

The need for additional facilities is based upon the county-wide percentage (projected by Kitsap County Department of Community Development) of enrollment to population of approximately 18 percent. The school district has established a standard size (or LOS) of 550 students for elementary, 1,000 students for middle school/junior high, and 1,250 students for senior high. The district has also set an overall ratio of 23 elementary students for each teacher, and 30 secondary students for each teacher. Support facilities such as a central food facility, administration building, maintenance shop, and a bus barn have also been identified as necessary by the district.

Enrollment Projections

School Level	Existing Capacity	Projected Enrollment 2000	Surplus Capacity 2000	Projected Enrollment 2014	Surplus Capacity 2014
Elementary	2,720	3,674	-954	4,609	-1,889
Middle	900	1,037	-137	1,301	-401
Junior High	1,236	843	393	1,058	178
Senior High	1,500	1,388	112	1,742	-242
Total	**6,356**	**6,942**	**-586**	**8,710**	**-2,354**

Source: : City of Bremerton Draft 2003-2004 Comprehensive Plan Update, City Services Appendix

Significant Impacts of the Alternatives

Current school system facilities are above capacity, and population increases of any size would impact the Bremerton School District. Depending on the Comprehensive Plan alternative and the resulting population distribution, new schools could be required in different areas of the city, UGA and county. In addition, it is important to note that all student enrollment projections are subject to change given fluctuations in navy personnel.

Alternative 1 (No Action)

Under Alternative 1, the population within the City limits would increase by 1,300 new residents by 2023, to a total population of 38,300 persons. Alternative 1 would only add about 200 new students within the City of Bremerton. Under Alternative 1, most of the growth is expected to occur in unincorporated areas of Kitsap County, which could impact both the Bremerton School District and the Central Kitsap School District (which operates schools to the north of the Bremerton City limits in East Bremerton). The Bremerton School District elementary school located near north Wheaton Way is currently 89 students over capacity. Development in this area may require Bremerton School District to expand or build new schools. In addition, the more dispersed growth pattern might increase transportation needs.

Alternative 2 – Updated Plan without Centers

Under Alternative 2, the City population would increase by about 2,000 people by 2023, for a total of about 39,000 people. Alternative 2 would add approximately 360 new students within the City of Bremerton. Although this Alternative would focus some growth into the City, the growth would be dispersed and not located in centers. The impacts of this Alternative would be similar to the Alternative 1.

Alternative 3 – Updated Plan with Centers (Preferred Alternative)

Under Alternative 3 population within the City limits would increase by 11,200 new residents by 2023, to a total of 48,200. Based on current population to enrollment ratios, this would generate approximately 2,000 new students by Year 2023. The District estimates that it will need four to five new elementary schools and probably a new middle school, based on 2014 population projections. Development and siting of new schools could be more centrally located within the

centers, which would meet the goal of having schools as a focus amenity within centers. Under the Preferred Alternative, there may be a reduction in transportation needs by the School District, with many of the students living in centers near schools.

Mitigation Measures

Fire, Emergency Medical, and Police Services

The Fire, EMS, and Police Departments services should review their respective level of service standards to ensure that they have accounted for projected growth. Any adjustments in level of service standards should be reflected in future capital facilities plans. Continued monitoring of service demand is also recommended, particularly of per capita increases in EMS service demands associated with changing demographics and an aging population.

Parks

The City currently has a deficit in local parks, which will be made worse by projected population growth under any of the alternatives. The City should actively seek opportunities to acquire land for local parks, playgrounds, and plazas. Under Alternative 3, in which potential impacts will be the greatest, the City should integrate and prioritize identification of such opportunities in the Centers planning process. Future capital facilities plans should reflect the need to acquire and develop such properties.

Public Schools

The Bremerton School District should review current projections and update future Capital Facilities Plans to address population projections for the City and proposed centers. Future enrollment projections should reflect the population and housing targets adopted and used for planning purposes in the City's Comprehensive Plan. The City could consider the adoption of an impact fee ordinance, consistent with RCW 80.02.050, in order to address the impacts from projected growth.

Additional residential development would generate property tax revenues, which could be used to help support the growth needs of the School District.

Significant Unavoidable Adverse Impacts

Under any of the Comprehensive Plan alternatives, projected population growth will place increased demands on existing public services and facilities, creating a need for additional facilities, personnel, and equipment. Additional costs resulting from service increases will need to be planned for, and funding sources will need to be identified.

Utilities

Note: The City Services Element of the Comprehensive Plan Update includes both Utilities and Public Services. These topics are organized as separate sections in this Draft SEIS.

1. Water

Affected Environment

Existing System

The City of Bremerton Water Utility provides potable water within the City and the surrounding area. A complete inventory, analysis of need and capital improvement program is provided in the adopted 1999 City of Bremerton Water System Plan Update. The next update of this plan is scheduled for 2006. The water capital projects list through 2009 is included in Appendix C.

The Water Utility serves a population of approximately 56,000 in Bremerton and portions of Kitsap County (approximately 80 percent and 20 percent respectively). The service area is shown on Figure 7. The City contracts to supply water to the Puget Sound Naval Shipyard (PSNS) and to the City of Port Orchard. The Water Utility also provides water and operation and maintenance to the Tracyton and Rocky Point Water Districts. Other water districts that may have an interest in City water resources include Silverdale Water District, North Perry Avenue Water District, Erland Point Water District, and Sunnyslope Water District. The Kitsap County Coordinated Water System Plan documents water service areas and system responsibilities. The current service area encompasses approximately 13,800 acres. The service area includes the City's West 517 Zone (considered a separate system by the Washington State Department of Health).

Water sources include the Union River Reservoir behind Casade Dam, and 12 active production wells. Approximately 65 percent of water use comes from the Union River watershed, which is 98 percent controlled by the Water Utility. Wells in multiple aquifers supply approximately 35 percent of water use. There are four principal aquifers within or immediately adjacent to the boundaries of Bremerton. These aquifers include the Manette North Aquifer, located in East Bremerton; Gorst Aquifer, located along Gorst Creek; Anderson Creek Aquifer, located primarily in the City's watershed and utility lands; and North Lake Aquifer, located just south of the City's boundaries.

Average daily demand in 2003 was approximately 7.3 million gallons per day (MGD) and the 5-year average was 7.8 MGD, compared to an average capacity of 13.8 MGD and a maximum day capacity of 28.1 MGD. The 1999 Water System Plan projects that the average daily demand will increase to 12 MGD in 2019.

The Union River source is currently permitted by the Washington State Department of Health to supply the distribution system without filtration. During rainfall events, turbidity in the water makes the river source unavailable and the Water Utility must rely solely on the well sources.

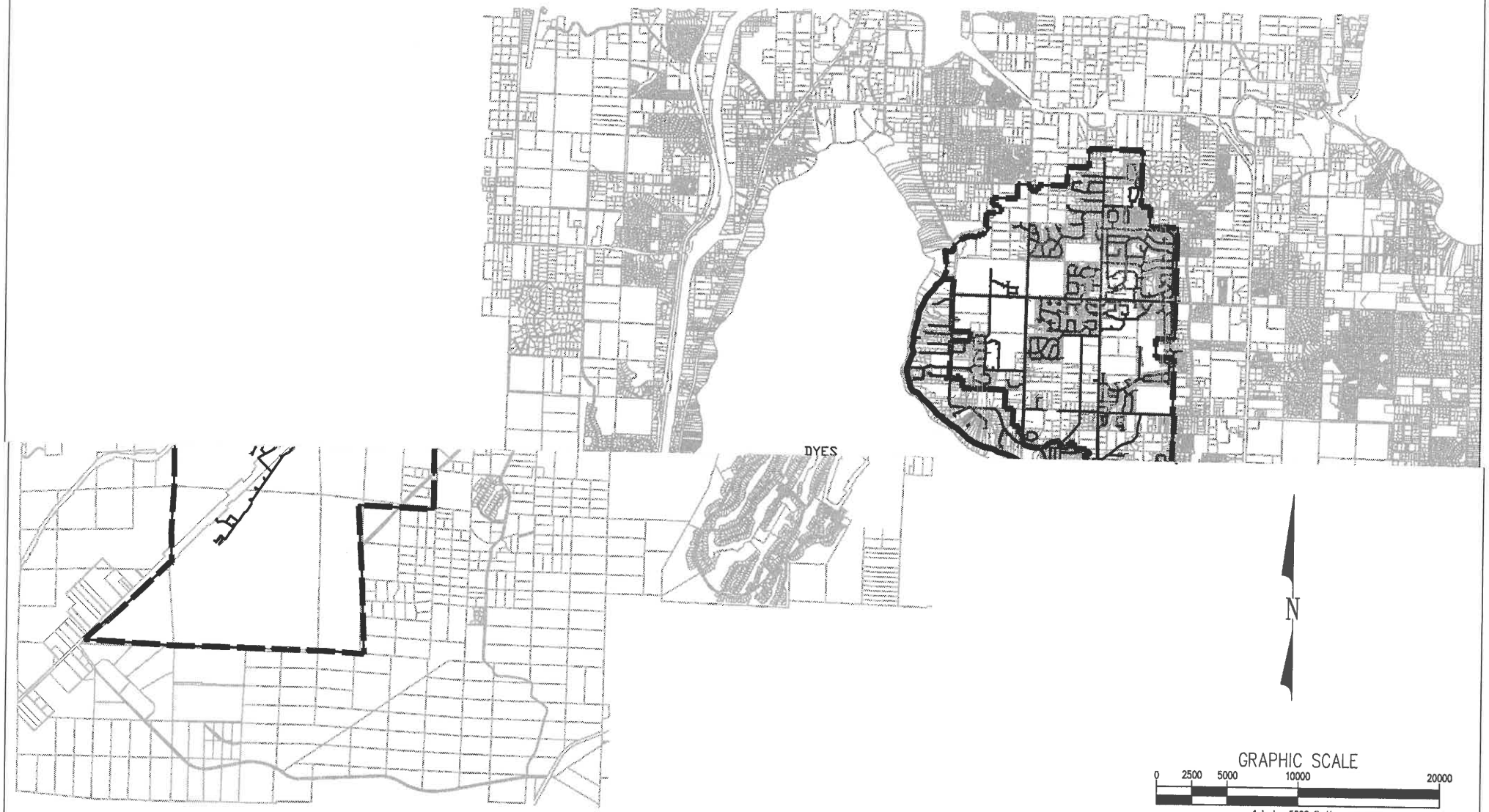


Figure 7
City of Bremerton
Water Service Area

The Union River source is also affected by drought conditions more significantly than the well sources. The estimated firm yield of the Union River is 5.6 MGD.

Depending on location, the water system must meet the City's and/or County's fire flow standards. Minimum fire flow standards are 1,000 gpm for 2 hours for residential uses; and 1,500 gpm for 2 hours for commercial uses.

Westpark

The master plan will include improvement or replacement of sewer and water systems. Sewer and water conveyance systems will likely need to be upgraded to accommodate the increased population and employment. A new stormwater management system, including water quality treatment, would be constructed consistent with applicable state and local standards.

Significant Impacts of the Alternatives

Alternative 1 (No Action) and Alternative 2 (Updated Plan without Centers)

The 1999 Comprehensive Water Plan indicates that the water system currently has the ability to serve in excess 50,000 equivalent residential units (ERUs). An ERU is defined as the amount of water consumed by a typical full-time single-family residence. The City of Bremerton Community Development Department uses a value of 2.0 persons per dwelling unit for multifamily housing and 2.8 persons per dwelling unit for single family housing for comprehensive planning purposes. Based on the above projections, the water system currently has the ability to serve a residential population in excess of 100,000. The stated capacity of the water system would permit the existing water supply, storage, transmission and distribution system to satisfy projected demand through 2023, with the mitigation measures noted below.

Alternative 3 - Updated Plan with Centers (Proposed Action)

Table 10 summarizes the effects of guiding growth to centers on the water system. The assumptions used for the analysis included the following: static pressure in the system is 40 psi, assumed as a minimum requirement; and looping of the system will reduce the required flow in the investigated main to half of the growth center flow.

The results show that the Oyster Bay and Manette Neighborhood Centers may require improvements to accommodate projected growth. In both cases, these results are due to significant differences in elevation within the center. The important assumption in these findings is that the pressure was assumed to be 40 psi. If the static pressure at the lowest elevation in the neighborhood center is 60 psi or greater, there would be no need for improvements. If not, system modifications are required to boost the pressure to a point that would enable the fire flow to be delivered at a pressure of 20 psi or more. These results would be verified through the use of the Utility's water system computer model. Other designated centers would not require significant system improvements.

Table 10. City of Bremerton Comprehensive Plan Option 3 Water Flow Analysis

Designation	Area, Acres	Min. 20-year Avg. Day Water Demand, gpm	Max. 20-year Avg. Day Water Demand, gpm	Min. 20-year Water Peak Hour Demand, gpm	Max. 20-year Water Peak Hour Demand, gpm	Min. 20-year Avg. Day Water Demand incl. Fireflow, gpm	Max. 20-year Avg. Day Water Demand incl. Fireflow, gpm	Ability to Deliver on Demand
Neighborhood Centers								
Haddon Callow Ave/N. 15th	27	8	8	60	60	1,008	1,008	Yes
Manette	33	37	37	149	149	1,037	1,037	Not In All Cases
Perry Ave. / NE Sheridan	27	15	15	61	61	1,015	1,015	Yes
Sylvan / Pine	30	8	8	34	34	1,008	1,008	Yes
Kitsap Lake ('Reserve Center") Kitsap Way / Harlow Dr.	48	0	0	0	0	1,000	1,000	Yes
Oyster Bay / Westpark ("Opportunity Site")	37	94	94	376	376	1,094	1,094	Not In All Cases
District Centers								
Wheaton / Riddell Riddell Rd. / Wheaton Way	106	135	135	540	540	1,135	1,135	Yes
Wheaton / Sheridan Sheridan Rd. / Wheaton Way	81	62	62	248	248	1,062	1,062	Yes
Charleston Callow Way/ N. 1st - N. 11th	39	20	20	79	79	1,020	1,020	Yes
Regional Centers								
Downtown	37	97	97	388	388	1,597	1,597	Yes
Employment Centers								
Harrison		0	0	0	0	1,500	1,500	Yes
NW Corporate Campus		0	0					No Demand
Port Blakely		0	0	0	0	1,500	1,500	No Infrastructure

Notes:

1. Peak flow based on Figure 3-13, Wastewater Engineering, Treatment and Reuse, 4th Edition, Metcalf and Eddy
2. Average Day Per Capita Residential Water Demand is 100 gpcpd
3. Average Day Per Capita Business Water Demand is 10 gpcpd
4. Fireflow in Neighborhood & District Centers is 1,000 gpm
5. Fireflow in Downtown Regional & Employment Centers 1,500 gpm
6. Based on pipe nominal diameter and pipe at 4 feet below grade.

Mitigation Measures

The following water system improvements could be required for any alternative. Refer to Appendix C for more information on projected water system improvements through 2009.

Regarding water supply, the Water Utility appears to have sufficient water rights for the near future. However, there are considerations that affect the Utility's ability to use all the water. Several wells need to be rehabilitated or replaced to use the water, and hydraulic circumstances do not allow all sources to be used simultaneously. Projects to address this issue are listed in the capital improvement program (CIP).

To insure reliability and redundancy, it is the Utility's goal to be able to meet demands with groundwater only. Future water rights will be provided from groundwater. Several water rights applications have been submitted to the Washington State Department of Ecology (WSDOE):

- Change application for five Domsea Wells with a priority date of 1992
- New application in Gorst for 1,000 gpm with a priority date of 1992
- One new application for Well 21 with a priority date of 1992
- One new application for Well 9 with a priority date of 1994

The schedule for action on these applications is uncertain.

To continue to use the unfiltered Union River Source, the City should continue to pursue either acquisition or controlling agreements over the remaining 2 percent of private lands within the watershed and should continue to implement the Watershed Control Plan. Significant changes in source water quality or regulations could force the City to provide filtration.

The upcoming federal Enhanced Surface Water Treatment Rule may require another disinfectant in addition to chlorine. The Utility's CIP includes installation of an ultra-violet light disinfection system.

Hydraulic modeling indicates that there will be a storage deficit by year 2019 in the three east-side pressure zones, which will be addressed by added storage and a possible new well in this area (included in the Utility's CIP).

Improvements in transmission and distribution mains will be necessary to improve flows and pressures in certain areas and to replace substandard mains. Specific large main improvements are listed in the CIP.

For Alternative 3, improvements to mitigate the impacts of the center concept will require higher pressure in the Manette and Oyster Bay Neighborhood Centers. Revisions to the pressure zone boundaries will be required to increase system pressure in these areas.

Significant Unavoidable Adverse Impacts

Population and employment growth anticipated for each of the alternatives will increase demands place on the regional wastewater collection and treatment facilities. The demand for water resources and improvements to delivery systems will increase under all of the above alternatives. Increase water demand is unavoidable, but the impact can be lessened with proper planning and coordination for more efficient land use patterns.

2. Sanitary Sewer

Affected Environment

Existing System

Sanitary sewer facilities are provided by the Bremerton Department of Public Works and Utilities. A complete inventory, analysis of need and capital improvements plan are included in the December 2003 Wastewater Comprehensive Plan. The wastewater capital projects list through 2009 is included in Appendix C. The Bremerton Wastewater Utility service area covers 13 drainage basins, of which four extend beyond the City limits into unincorporated Kitsap County: Tracyton Beach, Trenton Avenue, Sinclair Park, and Oyster Bay. The Utility provides wastewater collection and treatment to the service area through direct service and specific contractual agreements with the U.S. Navy and Kitsap County Sewer District No. 1 (Navy Yard City). The Bremerton Wastewater Utility service area is shown on Figure 8.

The City sewerage system consists of collection, transmission, treatment, effluent disposal and biosolids reuse facilities. Included are more than 188 miles of gravity sewers, approximately 16 miles of force mains and 35 pump stations. These facilities convey combined wastewater to a secondary wastewater treatment plant located just south of West Hills. Additionally, there are 16 combined sewer overflow (CSO) sites located within the sewer collection system. Approximately 60 percent of the collection system is comprised of combined sewers.

The existing wastewater treatment plant was designed to treat an average daily flow of 10.1 million gallons per day (MGD) and to have a maximum hydraulic capacity of 29.5 MGD. Current annual average and maximum monthly flows to the wastewater treatment plant are about 60 percent of the average annual and maximum monthly flow for which they were designed.

Combined sewers convey a mixture of sanitary wastewater and stormwater in a single pipe. Combined sewer overflows occur when the wet weather storm flows exceed the capacity of the combined sewer and overflow into receiving waters. Large overflows can impact the receiving water quality and can prevent attainment of water quality standards. Recreational beach closings and shellfish bed closures have been attributed to CSOs. State regulations (WAC 173-245) mandate that CSOs be reduced to one CSO per year.

The City's CSO reduction plan is designed to reduce rainfall induced storm water flow to the collection system. After completion of the CSO reduction plan, the wastewater treatment plant will have capacity to serve approximately 58,000 customers.

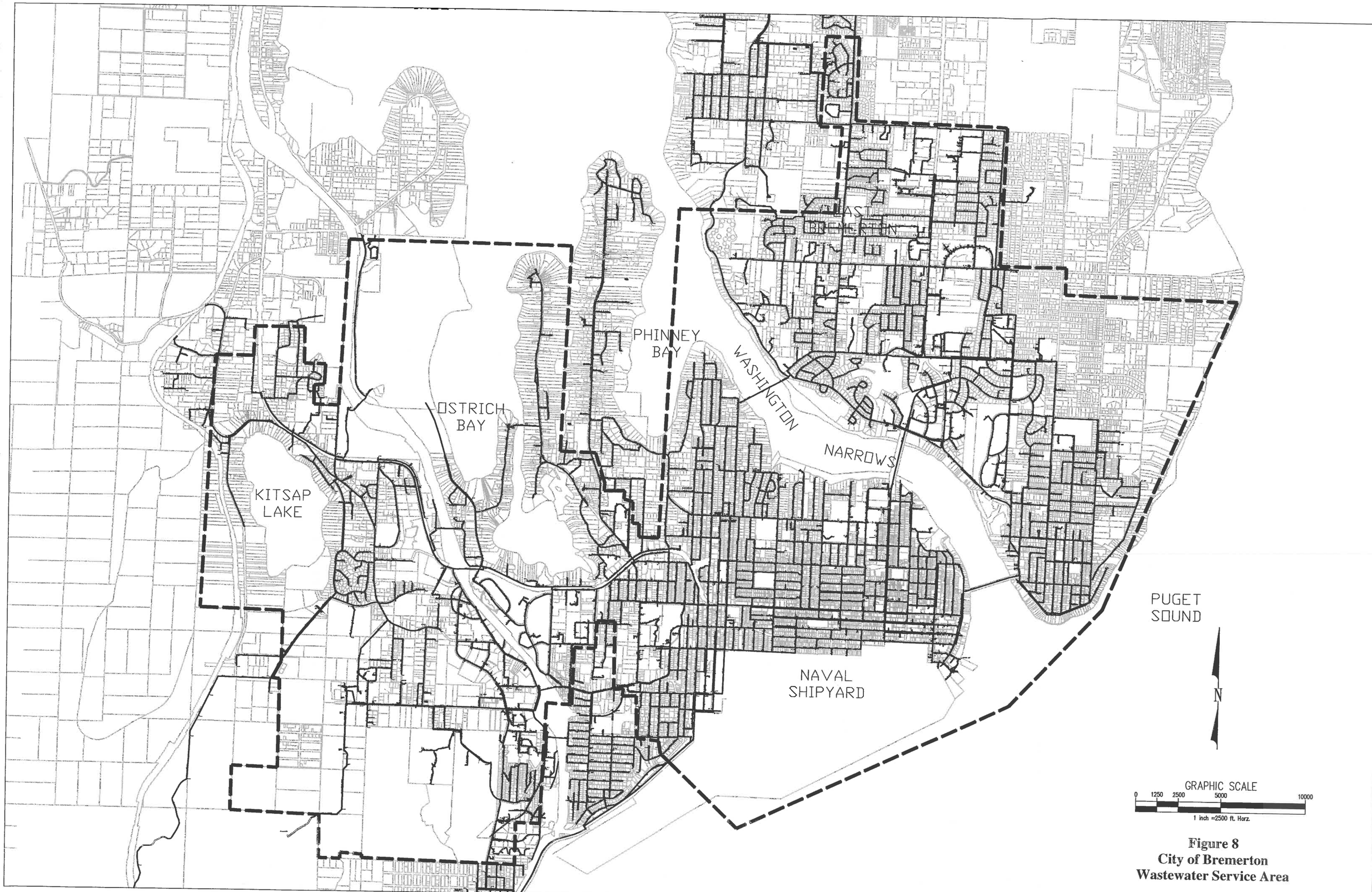


Figure 8
City of Bremerton
Wastewater Service Area

Approximately 5.8 million gallons a year of anaerobically digested biosolids are applied to COB owned Forest Enhancement Sites 1 and 2 near Gold Mountain Golf Course. The process has been in operation since 1992. One hundred percent of the wastewater treatment plant biosolids are applied to the forest sites.

Significant Impacts of the Alternatives

There are 9,242 existing connections serving approximately 22,500 customers in the City's service area, including several at the Puget Sound Naval Shipyard (PSNS). The annual average daily flow is 6.0 MGD at the wastewater treatment plant. Under wet weather conditions, reportedly, the WWTP currently approaches its maximum design capacity. After completion of the CSO reduction plan, the plant will have capacity to serve about 35,500 additional customers.

The capacity of the existing sewer facilities to serve future needs is determined by evaluating the number of existing connections and people served against the permitted flow of the wastewater treatment plant as defined in the NPDES permit. The estimated unit flow from the City is 100 gallons per capita per day.

Projected future demands are identified in the 1992 City of Bremerton Final Draft Wastewater Plan. Both the City and County estimates identify a probable deficit in WWTP capacity by 2014. The City is currently preparing a new wastewater comprehensive plan, which will provide an improved basis for estimating the timing of an upgrade to the WWTP. Currently, the planning horizon for the Wastewater Plan (2014) does not match the City's Comprehensive Plan horizon (2024). The Kitsap County Public Works Department is also preparing a county-wide wastewater facility plan.

Over the next six years the City projects a population increase of 10,237 within the service area. In addition, it was assumed that 30 percent (2,463) of the existing unsewered population would hook up to the system by year 2000. If this occurred, the remaining available capacity would be 5,725 customers. Table 11 summarizes future sewer system connections and needs.

The beach sewer below Washington Avenue and Highland Avenue between 2nd Street and 13th Street is in poor condition and will be replaced.

Alternative 1 (No Action) and Alternative 2 (Updated Plan without Centers)

The relatively low growth rate in the sewer service area will permit the existing wastewater collection, transmission and treatment system to satisfy projected loads through 2023, with the improvements noted below. A correspondingly greater demand would occur in systems serving unincorporated UGAs.

Table 11. Future Need: Sanitary Sewer

Time Period	Demand (Population in City-County Service Area)	Capacity (Population)	Average Daily Demand @ 100 GPCD
1994-2000			
1994 Sewered Population	37,000	21,000	3.70 MGD
Hookups for 30% of Unsewered Population (1)	2,463	18,537	0.25 MGD
1995-2000 New Population (2)	12,812	5,725	1.28 MGD
Total 2000 Sewered Population	52,275	5,725	5.23 MGD
1994-2014			
Hookups for 70% of Unsewered Population (3)	5,747	-22	0.57 MGD
2000-2014 New Population (4)	11,195	-11,217	1.12 MGD
Total 2014 Sewered Population	69,217	-11,217	6.92 MGD
Total 1994-2014 Increase	32,217	Not Applicable	Not Applicable

Notes: (1) 8,210 x 30% (2) 58,022 – 45,210 (3) 8,210 x 70% (4) 69,217 – 58,022

Alternative 3 – Updated Plan with Centers (Preferred Alternative)

The WWTP improvements, beach sewer replacement and CSO control projects required for Alternatives 1 and 2 identified below would also be required for Alternative 3. The WWTP improvements project could be required sooner than for Alternatives 1 and 2 due to the increased population locating in the service area.

Table 12 summarizes the ability of the sewer collection system in the centers. No improvements to the sewer system are required to enable implementation of Scenario 3. These conclusions should be verified by the Scenario 3 flow increases to Utility's Hydra sewer system model.

Table 12. City of Bremerton Comprehensive Plan Option 3 Wastewater Flow Analysis

Designation	Area, Acres	Min. 20-year Sanitary Wastewater Avg. Day Flow, gpd	Max. 20-year Sanitary Wastewater Avg. Day Flow, gpd	Avg. Day to Peak Hour Peaking Factor[1]	Min. 20-year Sanitary Wastewater Peak Hour Flow, gpd	Max. 20-year Sanitary Wastewater Peak Hour Flow, gpd	Ability to Pass Flow[2]
Neighborhood Centers							
Haddon Callow Ave/N. 15th	27	10,900	11,200	4	43,6000	44,800	Yes
Manette	33	53,500	54,500	4	214,000	218,000	Yes
Perry Ave. / NE Sheridan	27	21,900	22,300	4	87,600	89,200	Yes
Sylvan / Pine	30	12,200	12,400	4	48,800	49,500	Yes
Kitsap Lake Kitsap Way/Harlow Dr.	48	0	0	4	0	0	Not applicable
Oyster Bay	37	135,500	139,000	4	542,000	556,000	Yes
District Centers							
Wheaton / Riddell Riddell Rd. / Wheaton Way	106	194,500	200,000	4	778,000	800,000	Yes
Wheaton / Sheridan Sheridan Rd. / Wheaton Way	81	89,000	91,700	4	356,800	366,800	Yes
Charleston Callow Way/ N. 1st - N. 11th	39	28,500	29,400	4	114,000	117,600	Yes
Regional Centers							
Downtown	37	139,700	139,700	4	558,800	558,800	Yes
Employment Centers							
Harrison		0	0	4	0	0	Not applicable
NW Corporate Campus		0	0	4			Not applicable
Port Blakely		0	0	4	0	0	Not applicable

Notes:

1. Peak flows based on Figure 3-13, Wastewater Engineering, Treatment and Reuse, 4th Edition, Metcalf and Eddy
2. Average Day Per Capita Residential Wastewater Flow is 100 gpcpd
3. Average Day Business Wastewater Flow is 10 gpcpd

Mitigation Measures

The following sewer system mitigation measures will be required regardless of which Comprehensive Plan alternative is implemented. Refer to the wastewater capital projects list in Appendix C for more information on the projected wastewater system improvements through 2009.

Alternatives for replacement include replacing the beach sewer in the current alignment and addressing exposed side sewers along the bluff above the beach, or constructing a new sewer in Washington and Highland Avenue with individual grinder pumps at each residence. No decision

has been made as to the design approach at this time. This project is scheduled for years 2004 and 2005 in the wastewater system improvements plan.

Additional CSO control projects will be constructed to minimize the impact of wet weather flows on the sewer system. Two CSO control projects (Pacific Avenue and Anderson Avenue) are scheduled for construction in 2004 under the wastewater system improvements plan.

Significant Unavoidable Adverse Impacts

Population and employment growth anticipated for each of the alternatives will increase demands place on the regional wastewater collection and treatment facilities.

3. Stormwater

Affected Environment

Existing System

The City's stormwater utility was created in 1994 as a funding source for the stormwater program. The stormwater service area is defined as the area within the City limits. A stormwater management plan was completed in August 1996. The mission of the program is to control flooding, enhance surface water quality, protect sensitive habitat areas, and optimize the recharge of local aquifers.

With a few exceptions based on recent developments, the existing stormwater drainage system can be characterized as a conveyance system of surface drainage swales and a series of pipes which collect and route drainage away from homes and businesses. All drainage facilities eventually drain to Sinclair Inlet, Dyes Inlet, or Port Washington Narrows.

The City adopted a CSO Plan as part of a compliance decree. The CSO control program identifies projects that will improve the combined sewer and drainage system capacity to limit CSOs to a maximum of one per year.

The Bremerton storm drainage system currently encompasses 14 drainage basins. These basins include swales, channels, creeks, ravines and natural drainage ways that discharge directly to marine waters.

Bremerton typically experiences between 39 to 50 inches of precipitation per year. Most of the precipitation occurs from October to May. For the most part, the drainage system works well, with the exception of the CSO control system. The focus of City funds in recent years has been on increasing the capacity of the collection system so that CSOs are limited to one overflow per year. The following projects were completed recently.

- The East Bremerton CSO Treatment Facility was constructed as an interim combined sewer overflow treatment plant. The treatment plant is automatically activated when combined storm and sanitary flows exceed the capacity of the collection system. The

combined storm and sanitary is treated to an acceptable quality level and discharged to Port Washington Narrows. The City has been actively seeking to disconnect all roof downspouts from the combined sewer system as a means of reducing CSO frequency.

- Callow Basin Improvements were included as part of three separate projects. The first project was a significant sewer separation project in the vicinity of Callow Avenue. The other two projects involved upgrades to wastewater pump stations WB-3 and WB-6.

- Trenton/Cherry Basin Improvements consist of improvement of sewer mains in selected locations, the reconstruction of a sewer pump station (EB-2) and the improvement of the force main from wastewater lift station EB-2.

Significant Impacts of the Alternatives

The 1996 Stormwater Plan identified 11 existing flooding areas and recommended remediation projects to alleviate these problems. Many of these projects were associated with CSO control sewer separation projects and have now been completed. The remaining flooding control projects include the Stevens Canyon Basin in the vicinity of Eagle Avenue and Dibb Street, and in the Pacific Avenue basin.

Alternative 1 (No Action) and Alternative 2 (Updated Plan without Centers)

The low amount of growth occurring within the City limits would permit the existing stormwater system to function effectively through 2023, with the improvements noted below.

Alternative 3 - Updated Plan with Centers (Preferred Alternative)

The stormwater improvement projects required for Alternatives 1 and 2 would also be required for Alternative 3. Stormwater improvements could be required sooner than for Alternatives 1 and 2 due to the increased focus of population growth in the City.

Mitigation Measures

The current 2004 to 2009 capital improvements plan includes the storm drainage improvements as shown in Table 13. These mitigation measures could apply under any of the alternatives. Also refer to the capital projects list in Appendix C.

Table 13. Storm Drainage Capital Improvement Projects and Costs

Project No.	Basin	Project	Cost, $
CIP No. 1	All basins	Upgrade piping and catch basins throughout the storm drainage collection system (annual cost).	225,000
CIP No. 2	Stevens Canyon	Piping improvements at Eagle Ave. and Dibb Street	245,000
CIP No. 3	Pacific Avenue	Piping Improvements along Park Ave., 5th St. to Burwell	200,000
CIP No. 4	All basins	Catch basin replacement program (annual cost)	30,000 to 40,000

Significant Unavoidable Adverse Impacts

Population and employment growth anticipated for each of the alternatives will lead to increased development, resulting in increased impervious surface area and consequent increased volumes of stormwater run-off.

REFERENCES

Booth, D.B. and C.R. Jackson. 1997. Urbanization of Aquatic Systems: Degradation Thresholds, Stormwater Detection, and the Limits of Mitigation. Journal of the American Water Resources Association 33(5):1077-1090.

City of Bremerton. 2004. Wastewater/CSO Website. Accessed at http://www.cityof bremerton.com/content/ww_history.html on October 20, 2004.

City of Bremerton. 2003. Public Works and Utilities, Resident Information, Gorst Creek Website. Accessed at http://www.ci.bremerton.wa.us/ display.php?id=716 on October 4, 2004.

Ecology (Washington State Department of Ecology). 2004. Washington State's Water Quality Assessment [303(d)] Website. Accessed at http://www.ecy.wa. gov/programs/wq/303d/index.html on October 4, 2004.

Haring, D. 2000. Salmonid Habitat Limiting Factors, Water Resource Inventory Area 15 (East), Final Report. Washington State Conservation Commission.

KCHD (Kitsap County Health District). 2004. Stream and Marine Water Quality Webpage. Accessed at http://www.kitsapcountyhealth.com/environmenta _health/water_quality/stream_marine.htm on October 4, 2004.

Mitsch, W.J. and J.G. Gosselink, 2000. Wetlands. Third Edition. John Wiley & Sons, New York, New York.

WDFW (Washington Department of Fish and Wildlife). 2004. Priority Habitats and Species Database Search, October 10, 2004. Washington Department of Fish and Wildlife, Olympia, Washington.

ANDES

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KNEB

CENTERS

Appendix B

Center	Characteristics
Haddon Neighborhood Center	Center. The existing land uses are mostly single family residential with some commercial development along 15th Street which bisects the center running east/west. At the intersection of 15th Street and Callow Avenue there is one mini-mart with a butcher shop and a large undeveloped parcel to the west. Haddon Park forms the northwest portion of the center with a sports court and lawn area. General. The area surrounding the center is characterized by small, older single family homes. North. The neighborhoods to the north of the center have a mix of older and newer small single family homes. The area northeast of the center has views of Anderson Cove and the Port Washington Narrows. East. To the east of the center there are small single family residences. The Ivy Green Cemetery borders the center near the intersection of 15th Street and Whitney Avenue. There are some views of Port Washington Narrows from this area. South. The Charleston District Center is located a few blocks south of the Haddon Neighborhood Center. The area between the two centers is characterized by small, poorly maintained single family homes and vacant lots. West. Haddon Elementary School is located to the west of the center, just outside of the city limits in Bremerton's Unincorporated Urban Growth Area (UGA). Corbet Drive has large-lot single family residences with some undeveloped areas
Manette Neighborhood Center	Center. The existing land uses include small restaurants and commercial uses on the main streets of Wheaton Way and 11th Street, in existing storefronts or converted residences. The northeast portion of the center is mostly single family residential. The southwest portion of the center has a mix of single and multi-family residences. Many residences have views of Puget Sound, west Bremerton, and the Olympics. General. The area surrounding the center is mostly well maintained single family residential. North. Older, smaller single family residences characterize the area to the north of the center, larger homes as you go up the hill from the center. The Harrison Employment Center and the East Park redevelopment site are located to the northeast of the Manette Center. East. Small lot single family residences characterize the area to the east of the center. The Manette Playfields and Senior Center are located a few blocks from the center at Vandalia Avenue and 13th Street. South. The area to the south of the center has smaller single family residences. West. The west border of Manette is the Port Washington Narrows. To the northeast of the center along Wheaton Way there are older houses that have been converted to commercial uses. There are also some older multi-family housing and an old bowling alley.
Oyster Bay Neighborhood Center	Center. Existing land uses include a mix of fast food restaurants and hotels bordering Kitsap Way. A grocery store is located in the core of the center along with some office buildings and some commercial uses.

	General. Residential, multi-family, light industrial and a technical college border the center. Westpark, the Bremerton Housing Authority owned redevelopment site, is located west of the center. North. Single family homes are located north of the center along Oyster Bay and continuing north to Marine Drive. East. To the east, along Kitsap Way, strip development and fast food characterize the area. To the southeast there are some single family residential neighborhoods and commercial uses. South. The Kitsap Peninsula Vocation Skills Center is located to the south of the center with other light industrial and commercial uses to the west of National Avenue. To the east of National Avenue there are single family residences. West. The Westpark opportunity site is located to the southwest of the center and contains 642 public housing units and an assisted living facility. Fast food restaurants and hotels characterize the area to the north of Kitsap Way.
Sylvan/Pine Neighborhood Center	Center. Existing land uses include a mix of older and newer multi-family housing on the southeast side of the intersection of Sylvan Way and Pine Road. Single-family residences are located on the north and southwest corners. The area to the north of Sylvan Way is mostly undeveloped. A mix of single and multi-family housing continues downhill to the south of the center. To the east Blueberry Park, a community garden, is included within the center. General. The area surrounding the center is mostly single family residential to the north, east and west. To the south there is multi-family housing. North. The area to the north of the center has mostly larger single family homes with some undeveloped parcels. A mobile home park is located just northeast of the center. East. A church and single family residences are located to the east of the center along the north portion of Sylvan Way. To the south of Sylvan Way there are older, small single family residences. An elementary school is located just southeast of the center surrounded by single family residential neighborhoods. South. Multi-family residences and an Alzheimer's care facility are located south of the center on Pine Road toward Port Washington Narrows, with some undeveloped parcels on the east side of the road. The multi-family housing takes advantage of the views offered of the Narrows and the Olympic Mountains. West. To the west of the center on Sylvan Way there is a mix of single and multi-family residences with some undeveloped parcels.
Kitsap Lake Reserve Neighborhood Center	Center. The east portion of the center includes the NAD Marine Park. There is a small commercial areas within the center that includes a Red Apple Market, several restaurants and other commercial uses. To the north of this area, within the center, there is a large parcel owned by Puget Sound Energy. General. The area surrounding the center along Kitsap Lake to the south has larger and newer single family residences. North. Single family residential development characterizes the area north of the center. East. To the southeast there are newer single family residences. Kitsap Lake Elementary School is also located in this area. South. Newer, mid-sized, lakefront, single family residences are located along the southern border of the center between Harlow Drive and Kitsap Lake, and

	continue around lake. West. To the immediate west of the center there is less intense development with a mix of older and newer single family residences on larger lots. Further west there is a large area of undeveloped land and the Port Blakely Employment Center.
North Wheaton District Center	Center. Existing land uses include auto-oriented retail along the east and west side of Wheaton Way. To the east of the developed Wheaton Way corridor there are several large parcels of undeveloped land. General. The area to the east and west of the center is mostly newer single family residences, with some undeveloped parcels. North. The area to the north of the center is located within Kitsap County, in the Non-Associated UGA, and is developed along Wheaton Way with large auto-oriented retail, including a large Fred Meyer retail complex. Kitsap County Parks owns a large area to the northeast that is undeveloped. East. Newer residential subdivisions with larger homes border the large parcel of undeveloped land, which is located immediately east of the center. To the southeast there are more single family residential areas with some multi-family residences interspersed. South. Strip development is located along Wheaton Way south of the center. Residential neighborhoods are located to the southeast and southwest of Wheaton Way. West. Single-family residences are located west of the center. There are also some undeveloped parcels interspersed within the residential neighborhoods.
Wheaton/Sheridan District Center	Center. Land uses include View Ridge Elementary School and the former Bremerton Middle School Site. A new grocery store is located on the corner of Sheridan Road and Wheaton Way. Strip development characterizes both sides of Wheaton Way with commercial, restaurant, and retail uses. General. The area surrounding the center is mostly single and multi-family residential, with commercial uses bordering the west side of Wheaton Way. North. Viewcrest Villages, a large, older multi-family housing complex, is located north and northeast of the center on Sylvan and Spruce. Auto-oriented retail is located along Wheaton Way to the northwest. East. The area to the east of the center slopes up to a ridge above the Wheaton Way corridor. The ridge contains larger single family residences that look out over the center and the Olympic Mountains. The pattern of larger residences continues to the southeast. South. The Harrison Economic Center borders the site directly to the south with residential uses to the southeast and southwest. West. The area immediately west of the center fronting on Wheaton way includes strip commercial, restaurants, motels and some small residences interspersed through the commercially developed area. Further west and downhill near the intersection of Dibb Street and Robin Avenue the residences are older and smaller.
Charleston District Center	Center. Callow Avenue bisects the center, which is located in a valley that runs north/south. Callow Avenue has storefronts, with a grocery at the north of the center. At the intersection of 6th Street and Montgomery Avenue strip mall development with some larger stores characterize the center. The Haddon Neighborhood Center is located a few blocks north. General. The area surrounding the center is mostly small, older single family homes. North. Small, poorly maintained single family homes characterize the area

	north of the center, with a few multi-family units interspersed throughout the center. East. Small, single family homes characterize the neighborhood to the east of Montgomery Avenue. The Naval Avenue Elementary School is located approximately two blocks east of the center in a residential neighborhood. The east portion slopes down from 11th Street to Burwell Street with the north portion overlooking the Safeway located below. There are some small multi-family buildings in this area. South. Older, small single family residential neighborhoods are located to the South of Burwell Street between the center and the Puget Sound Naval Shipyard (PSNS). The entry to Bremerton and PSNS is located South of 1st St with a four-lane road and landscaping. West. The area along Wycoff Avenue to the west of the center, is on a hill above the center and has some territorial views. This area is characterized by small, single family homes with some multi-family development. Uphill, to the west of Kitsap Way there is a neighborhood of larger, newer, single family homes that take advantage of the views over Charleston to the Puget Sound.
Harrison Employment Center	Center. The center includes the Harrison Hospital complex and many other supporting medical offices. The topography slopes from a high near the hospital, down toward Warren Ave and the Port Washington Narrows. General. The area surrounding the center is characterized by single family residences to the east and west, with commercial uses to the north. The center is bordered by Warren Ave to the west and Port Washington Narrows to the south. East Park Nature Reserve is located to the east of the center. North. The Lower Wheaton District Center is directly north of the Harrison center, and is developed with a new grocery store and existing strip development along Wheaton Way. Two schools are located north of the center with associated open space for ball fields. East. The East Park Nature Reserve is the eastern boundary of the center with the old East Park Naval Reservation east of the nature area. East Park was a naval housing facility that is currently under redevelopment to include 300 residential units to be completed in 2007. The northeast boundary, above the hospital, has larger single family residences that take advantage of the views to Port Washington Narrows and the Olympic Mountains. South. The southern boundary of the center is the Port Washington Narrows. West. The area to the west of Warren Avenue slopes from the bridge to the narrows and has a mix of single and multi-family homes. Along Lebo Blvd. there is a large multi-family complex on the south side with an assisted living facility to the north. To the west of the assisted living facility there are mostly single family residences with the residences facing south to take advantage of the views.
Port Blakely Employment Center	The Port Blakely Economic Center is a large undeveloped center located to the west of Bremerton. The area currently is wooded.

Westpark	Center. Westpark, built in the 1940's, includes 642 single story public housing units with open space and community center. It is owned and operated by the Bremerton Housing Authority. The area is currently being planned for redeveloped as a mixed-use urban village. General. Westpark is located on the top of a hill with a four-lane freeway downhill to the west and the Oyster Bay Neighborhood Center downhill to the east. A Fire Station borders the northwest triangle between Kitsap Way and Highway 3. North. Kitsap Way is the northern boundary of Westpark and is commercially developed with restaurants and auto-oriented services. East. Oyster Bay Neighborhood Center borders Westpark and continues the strip mall development along Kitsap Way to the east. South. The southern boundary of Westpark forms a triangle between Oyster Bay Avenue and Highway 3. To the southeast there are some single family residences on the ridge above Highway 3. West. The west border is made up entirely of Highway 3, a four-lane freeway. To the west of the highway is a commercially developed area with auto dealers located along Auto Center Way.

APPENDIX C

WATER CAPITAL PROJECTS LIST

WATER CAPITAL PROJECTS		CIP REQUESTED	FUNDED
1) Water Main Replacement Program		250,000	250,000
2) Water Resources Miscellaneous Capital Improvements		75,000	75,000
3) Eastside Flow & Pressure (E240 Zone)		900,000	900,000
4) Water System Security Improvements		50,000	30,000
5) 2004 Taps/Meters		0	65,000
6) Water Meters		50,000	50,000
7) Road Maintenance and Abandonment Plan (RMAP)		20,000	20,000
8) Pump Station 4 Reconstruction		100,000	1,058,700
9) Stabilize McKenna Falls road at entrance to watershed		20,000	20,000
10) Stabilize Slope at NAD Park to protect water main		75,000	75,000
11) Well 22 Pump, Motor, Piping, Telemetry and Chlorination		120,000	120,000
12) Source & Pump Station Flow Meters		30,000	30,000
13) Tracyton Water District Improvement Phase II		640,000	725,000
14) Casad Dam Early Warning		75,000	75,000
15) Casad Dam Intake Tower Seismic Upgrade		0	150,000
16) Anderson Creek Area West 580 Zone Development		1,500,000	1,500,000
17) Anderson Creek Wellfield On-Site Hypochlorite Generator		105,000	105,000
18) Heins Creek Bridge		75,000	75,000
19) Olympus Facility - Recoat & Re-vent Roof		0	27,000
20) Fire Hydrants		0	15,000
21) Reservoir #17, 20, 15, 18 - Seismic Repair/Upgrade		0	120,000
22) Reservoir # 5 Seismic Isolation Valve		0	115,000
23) Miscellaneous Equipment		0	10,000
The following Water Capital Projects did not get funding in 2004:			
* 8" Submarine Main from Madrona Point to Marine Drive		64,000	0
* Design and Construction of Seismic Upgrade of Anchorage and for Res. 22, Res 21 and Res. 10N & 10S	Foundation	550,000	0
TOTAL 2004 WATER CAPITAL PROJECTS		4,699,000	5,610,700

		CIP REQUESTED	FUNDED
WASTEWATER CAPITAL PROJECTS			
1) Sewer Main Replacement Program		220,000	220,000
2) WWTP Improvements		0	1,000,000
3) WWTP & Pump stations improvement program		250,000	250,000
Includes Fuel Tank Replacement	20,000		
KL-1, 2 & PB-1 - Upgrades	500,000		
Sluice Gates			
Class A Water Filter	60,000		
4) Wastewater Treatment Solids Management (Dewatering Unit)		300,000	300,000
5) Methane Boiler		100,000	100,000
6) Trenton & Cherry Avenue Basin Combined Sewer Overflow Reduction Project (OF-7 & OF-3)		800,000	1,000,000
7) Pacific Avenue CSO Project (OF-16)		500,000	6,750,000
8) Anderson Cove Inflow & Filtration Study		200,000	200,000
9) Miscellaneous Equipment		0	10,000
10) Quality & Quantity Meters		0	10,000
11) Beach Access @ Main Street		0	50,000
12) Tracyton PS (EB6) - Construction		0	100,000
The following Wastewater Capital Projects did not receive 2004 funding:			
* Automatic power switch gear. Replace automatic electrical switch gear for emergency power		25,000	0
* Emergency Power Supply		25,000	0
* Washington Street - Beachmain Abandonment		150,000	0
* New roof on control building		15,000	0
* Anderson Cove Basin Combined Sewer Separation Project (OF-12)		500,000	0
TOTAL 2004 WASTEWATER CAPITAL PROJECTS		**3,085,000**	**9,990,000**
STORMWATER CAPITAL PROJECTS			
1) Storm Drainage main replacement program		50,000	30,000
2) Catch Basin Replacement Program		30,000	20,000
3) Eagle Avenue Storm drainage		245,000	0
4) Pacific Avenue CSO Storm Water Separation		100,000	0
TOTAL 2004 STORMWATER CAPITAL PROJECTS		**425,000**	**50,000**
TOTAL 2004 ALL CAPITAL PROJECTS		**55,038,000**	**65,373,463**

	YEAR	AMOUNT
Maintenance Road Improvements		
Improve the road that leads to the maintenance facility.	2006	10,000
	2007	10,000
	2008	10,000
Covered storage at maintenance facility		
There is currently not enough covered storage for all of Gold Mountain's maintenance equipment. As a result expensive equipment is exposed to the elements on a year round basis. Construction of this facility will extend the life of this expensive equipment.	2007	10,000
TOTAL GOLD MOUNTAIN GOLF COMPLEX CAPITAL PROJECTS		1,050,000
WATER CAPITAL PROJECTS		
Water Main Replacement Program		
Provide a program of annual upgrade of inferior water mains.	2004	250,000
	2005	275,000
	2006	275,000
	2007	300,000
	2008	300,000
	2009	300,000
Water Resources Miscellaneous Capital Improvements		
Provide minor capital expenditures to maintain uninterrupted water service.	2004	75,000
	2005	75,000
	2006	100,000
	2007	100,000
	2008	100,000
	2009	100,000
East side flow & pressure (E240 Zone)		
Evaluate need to provide additional pumping, transmission main and/or a new reservoir to meet peak requirements in north end of system. Design and Construction Improvements. PWTF Loan	2004	900,000
Water System Security Improvements		
Results of the water system vulnerability assessment will identify areas of improvement for water system security.	2004	50,000
	2005	50,000
Meters		
Acquire replacement water meters on an annual basis.	2004	50,000
	2005	50,000
	2006	50,000
	2007	50,000
	2008	50,000
	2009	50,000
Road Maintenance and Abandonment Plan (RMAP)		
DNR mandated road maintenance and improvement program required for ESA and Washington State Forest Practices Act Compliance.	2004	20,000
	2005	20,000
	2006	20,000
	2007	20,000
	2008	20,000
	2009	20,000
Pump Station 4 Reconstruction		
Replace existing pump station No. 4 by upgrading in-place, and construct necessary distribution main improvements to provide capacity to feed Werner Road reservoir No. 8 and new pump station No. 8 (W-650 Zone pump station). Funded by DWSRF Loan	2004	100,000
	2005	940,000
Stabilize McKenna Falls road at entrance to watershed.		
Replace aging wooden abutment at entrance to watershed. Stability of existing abutment is questionable.	2004	20,000
	2005	80,000

	YEAR	AMOUNT
Stabilize Slope at NAD Park to protect water main. Design and construct facility to stabilize existing slope failure area where water main is located in NAD Park. Funded by DWSRF Loan	2004 2005	75,000 425,000
Well 22 Pump, Motor, Piping, Telemetry and Chlorination The project consists on installation of pumping equipment and associated control and chlorination equipment, and the connection to the Water System. Development of a larger diameter production well. Replace the existing small diameter wells located at the Utility Forestry Operation Center well field on Old Belfair Highway. Well was drilled in 1993. Implement when Dept. of Ecology water rights approval is granted (will be carried over each year).	2004	120,000
8" Submarine Main from Madrona Point to Marine Drive. Install 8" water main across Oyster Bay to increase flow and pressure and loop system.	2004 2005	64,000 550,000
Design and Construction of Seismic Upgrade of Anchorage and Foundation for Res. 22, Res 21 and Res. 10N & 10S Design and install anchorage and foundation improvements to the reservoirs to eliminate uplift and the resulting buckling damage during a seismic event.	2004	550,000
Install restrained expansion joints and bracing for Warren Avenue Bridge main. Replace failing expansion joints, and install seismic restraining bracing.	2004	150,000
Source & Pump Station Flow Meters New regulation requires better control of source water flows. Several pump stations also require replacement flow meters to ensure accuracy of flow accounting for the water system.	2004 2005	30,000 30,000
Tracyton Water District Improvement Phase II Replace various sub-standard water mains as per the Tracyton District Water Plan. Funded by a DWSRF Loan.	2004	640,000
Casad Dam Early Warning Early warning alarms in the event of problems or failure at Casad Dam. Project will coordinate with other dam safety improvements and the City's Dam Emergency Action Plan in compliance with Washington State Dam Safety regulations.	2004	75,000
Anderson Creek Area West 580 Zone Development Construct Clifton Road reservoir, 12" transmission main in Anderson Hill Road/Clifton Road and 500 GPM Pump Station 2A. Provide facilities to water service area bounded by Anderson Hill Road, Clifton Road, SR16 and Gorst.	2004	1,500,000
Anderson Creek Wellfield On-Site Hypochlorite Generator Provide water disinfection by chlorination for water produced at the Anderson Creek Wellfield.	2004	105,000
Heins Creek Bridge Proposed replacement of undersized culvert with approximately 35' full span bridge within watershed. New structure will correct partial fish blockage as identified by WDFW.	2004	75,000
Res. 17/20 and 15/18 Seismic Isolation valves and flex coupling on Inlet and Outlet for Res. 15 & 18. Install an automatic valve on one of each pair of reservoirs and other improvements to maintain water in one of the reservoirs for firefighting should water mains fail downstream during a seismic event. A DWSRF Loan has been requested.	2005 2006	20,000 120,000
Res 5N/5S Seismic Isolation valve installation. Install an automatic valve in one of the reservoirs to maintain water in one of the reservoirs for firefighting should water mains fail downstream during a seismic event. Also, investigation of cracking and design of anchorage of the roofs to the walls.	2005	100,000

	YEAR	AMOUNT
Seismic Anchorage of Reservoir 12 Roof. Anchor reservoir roof to walls to eliminate uplift and resulting damage during a seismic event. DWSRF Application pending	2005	150,000
Design and Construction of Ultraviolet Treatment Design and construction of ultraviolet treatment will be required to meet the mandates of the Long Term 2 Enhanced Surface Water Treatment Rule and allow the City to remain unfiltered. Pre-design will include review of existing chlorine feed and mixing along with sediment trap issues downstream of McKenna Falls head wall. This is anticipated to be funded by Loans or Grants.	2005 2006 2007	300,000 1,000,000 1,000,000
12" distribution water main - Shorewood Drive to Res. 21 Construct a 12" water transmission main from the north end of Shorewood Drive to Austin Drive (vicinity of Res. 21). Increase use of Res. 21 by allowing flows to enter W256 pressure zone on Shorewood Drive.	2005	215,000
3000 Road Culvert Replacement Replace old wooden culvert on perennial stream with DMP or short span bridge. Provides access to a main forestry road within Water Utility forest for purpose of timber haul.	2005	20,000
Seismic Upgrade of Reservoir 8 Upgrade Reservoir 8 to meet current seismic codes	2005	200,000
24" Pipe on C Street from Oyster Bay to National Avenue Construct a 24" pipe to provide redundancy from the source to the main part of Bremerton. This pipe will go under SR3.	2005	1,000,000
Twin Lakes Diversion Improvements Automatic control, dechlorination and relocation of chlorine analyzer.	2005	50,000
Cover for Dewatering Facility Install a cover over the existing biosolids platform located in the forestry area. Necessity of project currently under review.	2006	150,000
Loop Main on West Kitsap Lake Road Install 1" Distribution Main from West Kitsap Lake Road to Price Road to loop system and improve flow and pressure.	2006	240,000
12" Main on Pine from Flagstone to Pinewood Dr. Extend E490 pressure zone to increase flow and pressure.	2006	115,000
Replacement of Well 18 Pump & Motor Replace the pump and motor for Well 18 with double the capacity of this well.	2006	40,000
Bypass tunnel below McKenna Falls weir Construct tunnel below transmission main to eliminate ponding downstream of existing weir for system intake.	2006 2008	100,000 100,000
Booster Station 3 (Lafayette) & PRV Upgrade Reconstruct and upgrade booster station #3 and associated PRV. These facilities are aged and need upgrading.	2006	50,000
Loop Lakehurst Drive and Puget Sound Energy Install 8" water main to loop dead end and increase flow and pressure.	2007	50,000
490 Zone extension on Sylvan from Pine Road to Reymont Way. Extend higher pressure zone to resolve pressure problem.	2007	300,000

	YEAR	AMOUNT
12" Main on McWilliams Rd. from McWilliams Ct. to Pine Rd. Construct parallel 8" main on McWilliams to provide additional capacity of McWilliams Court when Well 21 main extension is constructed.	2007	106,000
E 18th St. Loop 8" Main extension on E 18th St. from Winfield to Wheaton Way to loop the north end of the E240 Zone.	2007	70,000
36" Main Davis Street Connector Extend 24" Steel TM on Kent Street from end north of Earhart and connect to 36" main on 3rd Stree	2007	50,000
Gold Mountain Golf Course Irrigation Install new transmission main, along with modifications to Pump Station No. 3 to convey non-potable surface supply water for use in irrigating the golf course. Project reduces summer demands on the W517 water zone and associated wells.	2007	400,000
Storage Improvements W440 & 398 Zones Design and construct the required reservoirs in W440 and E398 Zones.	2008	250,000
Reservoir No. 14 Demolition Demolish existing failing reservoir that is below zone HGL.	2008	205,000
Re-drill Well 9 Replace deep well with higher capacity well. Install pump/motor, connect to power. Implement when Department of Ecology water rights approved and granted. (Will be carried over each year.)	2008	200,000
Well #9 Chlorination & Telemetry Provide chlorination facility for disinfection of water from well #9	2008	100,000
Manette Bridge Water main Provide pipe and fittings to WDOT for installation on new Manette Bridge.	2008	75,000
12" Distribution water main - 13th Street (High to Warren) & High (11th to 13th) & Ohio (13th to 15th). Upsize existing water main to a 12" main.	2009	375,000
Pine Road - McWilliams to Well 21 12" Water Main Upsize existing water main to 12" main	2009	80,000
398 - 490 Zone Conversion & PRV Construct PRV to regulate water pressure.	2009	165,000
Marine Drive From Cedar Dr. North 8" Water Main Replace existing water main with new 8" water main.	2009	186,000
TOTAL WATER CAPITAL PROJECTS		16,781,000

WASTEWATER CAPITAL PROJECTS

Sewer Main Replacement Program Continuous program of renewal, replacement and upgrade of inferior mains in various locations.	2004	220,000
	2005	220,000
	2006	220,000
	2007	350,000
	2008	350,000
	2009	350,000

	YEAR	AMOUNT
WWTP & Pump stations improvement program		
Continuous program of renewal, replacement and upgrade of pump stations.	2004	250,000
	2005	270,000
	2006	300,000
	2007	350,000
	2008	400,000
	2009	450,000
Fuel Tank Replacement		
Replace underground fuel tanks at WWTP and pump stations, in compliance with State law and necessary upgrades.	2004	20,000
	2005	20,000
	2006	20,000
	2007	20,000
	2008	20,000
	2009	20,000
Automatic power switch gear. Replace automatic electrical switch gear for emergency power.		
Design and install automatic switch gear and emergency power switch located in the Wastewater Treatment Plant. NPDES compliance. Renewal and replacement.	2004	25,000
	2005	25,000
	2006	30,000
	2007	30,000
	2008	30,000
	2009	30,000
Emergency Power Supply		
Over several years, purchase and install emergency power generating equipment at several pump stations.	2004	25,000
	2005	25,000
	2006	22,000
Washington Street - Beachmain Abandonment		
Construct sanitary sewer extension on Washington Avenue from existing manhole at the extension of 7th Street, north to the approximate location of the extension of 9th Street. Install individual grinder pumps for all current connections to the existing low pressure beach main below Washington Avenue. Abandon the beach main which is prone to plugging. Private laterals connected to the main are in various condition. Failure of laterals is common. Design from Rates, Construction from PWTF Loan	2004	150,000
	2005	850,000
KL-1, 2 & PB-1 Pump Station Upgrade		
Replace existing pumps and controls.	2004	500,000
	2005	100,000
New roof on control building		
Place new roof on control building at Wastewater Treatment Plant. Renewal and replacement.	2004	15,000
Wastewater treatment solids management. (Dewatering Unit)		
Concentrate wastewater solids with a dewatering process. NPDES compliance.	2004	300,000
	2005	150,000
Class A Water Filter		
Add Class A water filter system to Charleston WWTP effluent.	2004	60,000
Methane Boiler		
Design and install new hot water boiler that will use digester or commercial grade gas.	2004	100,000
Anderson Cove Basin Combined Sewer Separation Project (OF-12)		
Upgrade pump station CW4, and construct diversion from OF-11 to OF-12 to reduce overflows from the Anderson Cove Basin. The Anderson Cove Basin Project will provide for combined sewer overflow reduction pursuant to WAD 173-245.	2004	500,000

	YEAR	AMOUNT
Trenton & Cherry Avenue Basin Combined Sewer Overflow Reduction Project (OF-7 & OF-3). Construct CSO reduction facilities which includes stormwater mains, Beach Forcemain construction, pump station upgrades, and sanitary sewer modifications and upgrades. The Trenton Avenue Basin project will provide for CSO reduction pursuant to WAS 173-245. SRF Loan applied for 2004 Construction	2004	800,000
Pacific Avenue CSO Project (OF-16) Construct CSO reduction facilities which may consist of stormwater mains, detention, or other facilities. This project will provide CSO reduction pursuant to WAC 173-245.	2004	500,000
Anderson Cove Inflow & Infiltration Study Investigate sanitary sewer system in the Anderson Cove Basin to identify high contributors of inflow and infiltration for capital improvement consideration.	2004	200,000
Headwork's Mechanical Bar Screen Add third mechanical bar screen to headwork's at the WWTP to increase removal of trash and provide for additional capacity.	2005	100,000
WWTP Upgrade Design and construction of a high-rate clarifier at the WWTP to be able to treat the peak storm flows. Required for CSO Reduction.	2005	4,500,000
Gravity Belt Thickener Purchase and install new gravity belt thickener for biosolids dewatering.	2005	200,000
WWTP Frontage Improvements Provide frontage improvements to WWTP along Oyster Bay Avenue; curb, gutter, sidewalk, street lighting and storm drainage. Project provides for widening the roadway and major road repairs. Frontage improvements are needed as part of the building permit for the odor control project. They were deferred to coincide with the redevelopment of property to the north.	2006 2007	150,000 150,000
Wastewater Collection and Transmission System Improvements - Oyster Bay Basin Interceptor. Install approximately 1100 feet of 27" Gravity Pressure sewer main and the subsequent connection to the Wastewater Treatment Plant Headwork's facilities. The Oyster Bay Basin project will provide for the replacement of an existing 10" Gravity Pressure sewer main along the east margin of the Wastewater Treatment Plant from "C" Street and Bayview Avenue to the Wastewater Treatment Plant Headwork's.	2009	550,000
TOTAL WASTEWATER CAPITAL PROJECTS		13,967,000

STORMWATER CAPITAL PROJECTS

Storm Drainage main replacement program Implement an annual program to upgrade inferior mains in various locations.	2004	50,000
	2005	225,000
	2006	225,000
	2007	225,000
	2008	225,000
	2009	225,000
Catch Basin Replacement Program Provide for the replacement and upgrade of deteriorated and inferior catch basins at various locations.	2004	30,000
	2005	30,000
	2006	30,000
	2007	40,000
	2008	40,000
	2009	40,000

	YEAR	AMOUNT
Eagle Avenue storm drainage		
Construct storm drain in Eagle Avenue from E 31st Street to E 29th Street to correct storm drainage flooding at Robin Avenue & E 31st Street.	2004	245,000
Pacific Avenue CSO Storm Water Separation		
PWTF Loan in process. Installation of storm sewer mains in the Pacific Avenue Basin to remove and separate stormwater from sewer wastewater.	2004	100,000
	2005	100,000
TOTAL STORMWATER CAPITAL PROJECTS		1,830,000
TOTAL ALL CAPITAL PROJECTS		**143,043,000**