Contents

List of Tables

Chapter 11
Land and Shoreline Use

11.1 Introduction

This chapter describes current land use and zoning in the project area and existing local, regional, and statewide land use plans and policies that regulate the siting of Brightwater. The relationship and consistency of the alternatives with shoreline regulations are also analyzed. Please note that all references and figures cited within this chapter can be found at the end of the chapter.

11.1.1 Overview of the Chapter

The organization of the EIS has been revised to present the proposed treatment plant sites, three conveyance corridors, and two outfall zones as complete systems – Route 9–195th Street System, Route 9–228th Street System, and Unocal System.

Text has been added throughout this chapter to address comments received in response to the Draft EIS. Primary issues raised in comment letters pertaining to the Land and Shoreline Use chapter focused on the following issues:

- The relationship between the RWSP and adopted land use plans of King County, Snohomish County, and cities within the service area
- How Brightwater will meet criteria in the adopted Snohomish County process for siting essential public facilities
- The incompatibility of siting a wastewater treatment plant at either the Route 9 or Unocal sites
- Growth inducing impacts
- Cumulative impacts

Portal siting areas have been designated as either primary portals or secondary portals. Construction is not anticipated to be required at secondary portals; however, this may change during final design to provide ground improvement, temporary ventilation, or supplying of backfill grout. If construction were required at secondary portals, less than one half acre would be used and an at-grade manhole would be the only feature located at the site once construction is complete.

The discussion of portal siting areas has been modified to correspond with the Level 2 portal screening that identified candidate portal sites along each conveyance corridor (see Appendix 2-B, Portal Screening Level 1 and 2 Documentation). Chapter 11 has been revised to include more detailed discussion of land use and zoning associated with the candidate sites that have been identified along the conveyance corridors for both the Route 9 and Unocal Systems.

In an effort to reduce the size of the Final EIS, the figures of the portal siting areas that were included in Chapter 11 of the Draft EIS have been eliminated from this chapter of the Final EIS. This was done for several reasons: 1) The aerial photos shown on these figures have been modified to identify the candidate portal sites and are located in Chapter 3 of this Final EIS; 2) the assessors' information for the existing land use within the portal siting areas was not always consistent with the current land use on the ground; and 3) more detailed information that describes specific land use and zoning for each of the candidate portal sites is provided in the Final EIS text.

11.2 Affected Environment

11.2.1 Affected Environment Common to All Systems

11.2.1.1 Regulatory Environment Common to All Systems

The Growth Management Act, Puget Sound Regional Council VISION 2020, Snohomish County Countywide Planning Policies, and King County Countywide Planning Policies set the general framework for the siting of EPFs, while the comprehensive plans and zoning and development regulations of local jurisdictions are the primary means of site specific land use regulation.

These documents are discussed to provide a description of the planning framework in which any utility service provider, such as King County, must conduct its operation in order to fulfill obligations under the laws. A more specific discussion of local policies and regulations is provided under the discussion for each Brightwater Regional Wastewater System: the Route 9–195th Street System, Route 9–228th Street System, and Unocal System. The regional planning context as it relates to the Regional Wastewater Services Plan and forecasts of population, employment, and wastewater flow is contained in Chapter 2. Additional information on plans and policies that relate to the siting of the Brightwater System is provided in Appendix 11-A, Land Use Plans and Policies: Brightwater Regional Wastewater Treatment System. This chapter includes a discussion of the extent to which the Brightwater project will be compatible with the plans and policies of the affected jurisdictions.

Washington State Growth Management Act

The basis of regional land use planning in the central Puget Sound area is the Washington State Growth Management Act (GMA) of 1990. The GMA established a structure for all future land use planning in Washington State. The Act required that all planning activities be based upon 20-year population and employment forecasts developed by the Office of Finance and Management (OFM) using 1990 census data. The OFM provided population and employment growth forecasts for each county. Counties and their cities then worked together to accommodate the projected numbers of future residents in their land use plans and policies.

The GMA requires the designation of urban growth boundaries (UGAs) and adoption of comprehensive plans by the region's counties and cities. Within the UGAs, adequate infrastructure (transportation, water, sewer, and other urban services) must be provided to achieve population and employment targets established by the region and in local comprehensive plans. Jurisdictions are required to support the concentration of growth within the UGAs by setting standards for concurrency and levels of service. Concurrency means that public facilities and services are provided at levels that keep up with the increased demand of the forecast growth.

Planning under GMA proceeds from a regional to a local level, with local plans detailing and expanding on the goals of broader regional plans. In the Puget Sound region, the Vision 2020 plan that was first adopted in 1990 by the Puget Sound Council of Governments, predecessor to the Puget Sound Regional Council, establishes the regional growth, economic, land use, and transportation strategy for King, Kitsap, Pierce, and Snohomish Counties. Each county has established a set of planning policies, referred to as Countywide Planning Policies (CPPs), that further the Vision 2020 goals.

Intergovernmental coordination is an important part of growth management. The GMA requires that "the comprehensive plan of each county or city that is adopted pursuant to RCW 36.70A.040 shall be coordinated with, and consistent with, the adopted comprehensive plans of other counties or cities with which the county or city has, in part, common borders or related regional issues." This includes the development of countywide and multi-county planning policies to provide a framework from which county and city comprehensive plans are developed and adopted.

"Essential public facilities" (EPFs) is a specialized term that pertains to large, potentially unpopular public capital facilities, and refers to facilities that are typically difficult to site (WAC 365-195-070(4)). The GMA provides some latitude in the identification of EPFs. WAC 365-195-340(2)(a)(i) states that "The broadest view should be taken of what constitutes a public facility, involving the full range of services to the public provided by government, substantially funded by government, contracted for by government, or provided by private entities subject to public service obligations." A regional wastewater treatment system meets the criteria of an EPF.

Under the GMA, local governments are charged with creating their own lists of EPFs guided by the examples set forth in RCW 36.70A.200, but not necessarily bound by those

examples. It also requires comprehensive plans of local jurisdictions to include a process for identifying and siting EPFs that focuses on the public need for the services involved (RCW 36.70A.200).

Both the legislature and courts have found that in the past EPFs have not been sited in the optimal locations. To ensure the siting and development of the region's EPFs, GMA provides that "No local comprehensive plan or development regulation may preclude the siting of EPFs" (RCW 36.70A.200(5)). Consequently, local jurisdictions have a duty to ensure that local plans and regulations allow for EPFs. While local jurisdictions cannot preclude EPFs, they can require reasonable mitigation of EPFs.

Puget Sound Regional Council – VISION 2020

The VISION 2020 strategy contains the following eight parts: urban growth areas; contiguous and orderly development; regional capital facilities; housing; rural areas; open space, resource protection and critical areas; economics; and transportation. Together, these eight parts constitute the Multicounty Policies for King, Kitsap, Pierce and Snohomish counties and meet the multicounty planning requirements of the Growth Management Act (RCW 36.70A.210).

In adopting VISION 2020, the elected officials that make up the Puget Sound Regional Council (PSRC) recognize that jurisdictions in the region are increasingly interdependent. VISION 2020 provides a regional framework for managing growth that builds upon and supports local, countywide, regional and state planning efforts. Countywide planning policies in each of the counties supply the local framework and provide additional guidance for individual county and city comprehensive plans (PSRC, 1995).

VISION 2020 recognizes the difficulty in siting regional capital facilities and calls for strategically locating major capital facilities to support the proposed growth pattern. Regional capital facilities, as defined in VISION 2020, include "transportation, recreation, education, human services, water, sewer and similar facilities that are significant to two or more counties." Specific policies that relate to the siting of the Brightwater wastewater treatment system are stated as follows:

RF-3 Strategically locate public facilities and amenities in a manner that adequately considers alternatives to new facilities, implements regional growth planning objectives, maximizes public benefit and minimizes and mitigates adverse impacts.

RF-3.3 Site specifically defined regional capital facilities in a manner that (1) reduces adverse societal, environmental and economic impacts on the host community; (2) equitably balances the location of new facilities; and (3) addresses regional growth planning objectives. Regionally share the burden and provide mitigation to communities impacted by regional capital facilities.

RF-3.4 Regional capital facilities proposed to be located in rural areas must either demonstrate that a non-urban site is the only appropriate location for the facility (for example, a dam) or (in the case of urban facilities) demonstrate that no urban sites are feasible as determined by siting processes. If rural siting is necessary, measures should be taken to mitigate adverse impacts and prohibit development incompatible with rural character (PSRC, 1995).

Countywide Planning Policies

The Countywide Planning Policies (CPPs) that directly relate to the study area were ratified by the King County and Snohomish County cities. King County's CPPs were adopted by the King County Council in 1992 and Snohomish County CPPs were adopted in 1993. The CPPs established the vision and framework for the said counties and their cities to incorporate into their comprehensive plans. These regional plans and policies are discussed further below.

Countywide planning policies developed under the mandates of the GMA establish Urban Growth Areas (UGAs) within which all urban growth is to be concentrated over the next 20 years. UGAs encompass all of the lands in existing cities and some peripheral areas. By directing growth into the UGAs – where transportation, utilities and other services are available and expandable – the policies seek to reduce urban sprawl and protect open space and rural lands.

GMA requires that county and city comprehensive plans include a process for identifying and siting EPFs. As previously described, EPFs include those facilities that are essential elements of the public infrastructure but are also typically difficult to site, such as airports, solid waste handling facilities, and correctional facilities. GMA provides that no local comprehensive plan or development regulation may preclude the siting of EPFs.

King County Countywide Planning Policies

The King County Countywide Planning Policies do not provide any specific direction for the siting of EPFs but do provide general direction that public capital facilities of a regional nature "shall be sited to support the Countywide land use pattern, support economic activities, mitigate environmental impacts, provide amenities or incentives, and minimize public costs " (King County Countywide Planning Policy FW-32). With this general direction in mind, King County developed the Regional Wastewater Services Plan (RWSP), which addresses the region's wastewater treatment needs. The RWSP is discussed further on in this chapter.

Snohomish County Countywide Planning Policies

Snohomish County's countywide planning policies are coordinated through Snohomish County Tomorrow (SCT). Snohomish County Tomorrow is the designated, countywide planning organization composed of Snohomish County, its 20 cities and towns, and the Tulalip Tribes. SCT provides a forum to discuss all aspects of land use planning,

transportation, and other issues facing the County and its cities and towns. SCT also works with the Counties of Pierce, King, and Kitsap to provide input to the PSRC regarding land use and transportation planning.

Snohomish County Countywide Planning Policies call for UGAs that can be supported by "an urban level of service consistent with capital facilities plans for public facilities and utilities" (Snohomish County Countywide Planning Policy UG-1(c)). "UGAs are to provide sufficient…public facilities and public services to accommodate most of the projected population and employment growth" (Snohomish County Countywide Planning Policy UG-8). In addition, the countywide planning policies encourage Snohomish County jurisdictions to "ensure the capital facilities plans of jurisdictions within an UGA will provide adequate level of service for planned growth" (Snohomish County Countywide Planning Policy OD-6). Each city's comprehensive plans "shall include strategies and land use policies to achieve urban densities and provide for urban governmental services and capital facilities" (Snohomish County Countywide Planning Policy OD-2(a)).

Snohomish County Tomorrow developed guidelines to assist jurisdictions with the GMA requirement that they develop their own EPF siting process (Appendix B of the Snohomish County GMA Comprehensive Plan, 2000). The EPF siting guidelines were developed in 1995. An interlocal agreement to formally consider local legislation to implement the EPF siting process was approved and executed on November 1, 2001, by Snohomish County and the Cities of Arlington, Bothell, Edmonds, Gold Bar, Marysville, Monroe, Mountlake Terrace, Mukilteo, Stanwood, and Sultan and the Town of Woodway (Snohomish County Motion No. 01-416). Snohomish County and many of these cities have taken action to adopt this process into their local comprehensive plans.

On February 13, 2003, the Snohomish County Council adopted Amended Ordinance No. 03-006 entitled Amending Snohomish County Code to Implement an Essential Public Facility Siting Process; Adding Chapter 30.42 SCC; Amending Chapter 30.22.020 (EPF Ordinance). The EPF Ordinance established a Conditional Use Permit (CUP) process that required an EPF project sponsor to participate in a hearing before a hearing examiner and to demonstrate that the proposed EPF would meet four preexisting CUP criteria and ten additional decision criteria established in the EPF Ordinance. These criteria included demonstration of need, investigation of alternative sites, public participation in the siting decision, and consistency and compatibility with Snohomish County's comprehensive plan and land use regulations. The hearing examiner was given the authority to approve, condition, or deny the CUP.

On April 16, 2003, King County challenged Snohomish County's adoption of the EPF Ordinance to the Central Puget Sound Growth Management Hearing Board ("Board"). King County alleged that the EPF Ordinance did not comply with the goals and requirements of the Growth Management Act (RCW Ch. 36.70C "GMA") because the EPF Ordinance would allow Snohomish County to deny a proposed EPF on the basis of the CUP criteria.

On October 13, 2003, the Board issued its decision on King County's appeal. It found that the EPF Ordinance did not comply with the GMA and issued a Declaration of Invalidity based on the EPF Ordinance's non-compliance. The Board has given Snohomish County until January 14, 2004 to take appropriate legislative action to bring the EPF provisions of its development regulations into compliance with the goals and requirements of the GMA.

In late October 2003, in response to the Central Puget Sound GMA Board ruling which invalidated Snohomish County's EPF ordinance, Snohomish County adopted a moratorium that will preclude the siting of any Brightwater Facilities at least until the moratorium is repealed. King County has requested the GMA Board to vote on whether or not the moratorium ordinance was lawfully adopted under GMA.

Until the Snohomish County Council takes action consistent with the Board's Order, it is not possible to ascertain the final form of Snohomish County's EPF regulations. Thus, King County will address Snohomish County's EPF development regulations when King County is ready to proceed with the Brightwater project.

Regional Wastewater Services Plan (RWSP)

The Brightwater Treatment Plant is part of a larger plan for meeting the region's wastewater treatment needs. King County developed the Regional Wastewater Services Plan (RWSP) after several years of analysis and extensive public review. The RWSP reflects the region's strong commitment to preserving water quality – before it becomes an emergency – and to intelligently recycle these water resources. As recognized in the King County and Snohomish County Comprehensive Plans, the RWSP is a core capital facility regional planning document. It was designed to meet GMA's requirements to plan for and provide utilities to serve growth planned in the urban areas and to ensure that public facilities and services meet locally established minimum standards of service (RCW 36.70A.020(12)).

The RWSP is a capital facility-planning document, designed to meet regional needs to ensure adequate wastewater treatment. It was adopted through a lengthy public participation process, with participation from local jurisdictions in both King and Snohomish counties. The RWSP has been amended since 1999. These amendments, which were designed to be consistent with the King County Comprehensive Plan, recognize that the RWSP is both a regional planning document and a siting document.

The siting issues raised in the RWSP address the fact that the County "should strive to site essential public facilities equitably ... should consider environmental equity and environmental, economic, technical and service area factors," and "should ensure that no racial, cultural or class group is unduly impacted by essential public facility siting ... decisions" (King County 2000 Comprehensive Plan Policy F-221).

The RWSP, its associated SEPA documents, and other planning documents include analysis of the issues below, also as directed by the King County Comprehensive Plan:

- An inventory of similar existing essential public facilities in King County and neighboring counties, including their locations and capacities
- A forecast of the future needs for the essential public facility
- An analysis of the potential social and economic impacts and benefits to jurisdictions receiving or surrounding the facilities
- An analysis of the proposal's consistency with policies F-219 through F-222 (discussed further below, under King County Comprehensive Plan)
- An analysis of alternatives to the facility, including decentralization, conservation, demand management and other strategies
- An analysis of economic and environmental impacts, including mitigation, of any existing essential public facility, as well as of any new site(s) under consideration as an alternative to expansion of an existing facility
- Extensive public involvement
- Consideration of any applicable prior review conducted by a public agency, local government, or citizen's group

Implementing ordinances that were adopted subsequent to the RWSP to help shape and define the Brightwater proposal, which would be the focus of detailed environmental review, are King County Ordinance 14043 and Ordinance 14107. Ordinance 14043 established the policy and procedural direction and Phase I screening criteria for the construction of a north treatment plant (NTP), conveyance facilities and outfall. Ordinance 14107 adopted candidate sites for the NTP and the Phase II criteria for selecting final candidate sites for evaluation in the EIS. These ordinances are summarized in Appendix 11-A.

In accordance with Ordinance 14043, the King County and Snohomish County executives jointly appointed a twenty-four-member siting advisory committee. The siting advisory committee was composed of representatives from two tribal governments, eleven cities and towns located in the approximate site selection area, three utility districts and representatives from environmental, labor, business, community and economic development organizations and agencies. This committee was responsible for the evaluation and refinement of the policy siting criteria established by Ordinance 14043. In addition, King County provided opportunity for public input on the criteria.

Comprehensive Plans

Comprehensive plans set the general direction of future land use within a jurisdiction. State laws, such as GMA, establish the scope of local comprehensive plans. Zoning codes identify what uses are permitted within a particular land use designation. Municipal codes typically contain zoning and other development regulations specific to shorelines, critical areas, and permit requirements.

King County Comprehensive Plan

The King County Comprehensive Plan includes policies requiring the County to ensure that "needed facilities and services are provided in the region" (King County, 2001a). Comprehensive Plan policies call for sharing EPFs with neighboring counties, where advantageous to both jurisdictions, "to increase efficiency of operation" (King County Comprehensive Plan, Policy F-220).

Public capital facilities of a countywide or statewide nature, as defined by King County, "generally have characteristics that make these facilities difficult to site. Characteristics include the number of jurisdictions affected or served by the facility, the size of the facility, and the facility's potential adverse impacts such as noise, odor, traffic and pollution generation" (King County, 2001a). Facilities with these types of characteristics include, but are not limited to, utility and transportation corridors, airports, wastewater treatment plants, solid waste landfills, higher educational facilities, correctional and in-patient treatment facilities, and energy-generating facilities.

King County Comprehensive Plan policies relevant to the siting of EPFs are listed below.

- F-219: Proposed new or expansions to existing essential public facilities should be sited consistent with the King County Comprehensive Plan. Listed existing essential public facilities should be preserved and maintained until alternatives or replacements for such facilities can be provided.
- F-220: King County and neighboring counties, if advantageous to both, should share essential public facilities to increase efficiency of operation. Efficiency of operation should take into account the overall value of the essential public facility to the region and the County and the extent to which, if properly mitigated, expansion of an existing essential public facility located in the County might be more economical and environmentally sound.
- F-221: King County should strive to site essential public facilities equitably so that no racial, cultural, or socio-economic group is unduly impacted by essential public facility siting or expansion decisions. No single community should absorb an inequitable share of these facilities and their impacts. Siting should consider environmental equity and environmental, economic, technical and service area factors. The net impact of siting new essential public facilities should be weighted against the net impact of expansion of existing essential public facilities, with appropriate buffering and mitigation. Essential public facilities that directly serve the public beyond their general vicinity shall be discouraged from locating in the Rural Area.
- F-222: A facility shall be determined to be an essential public facility if it has one or more of the following characteristics: a. The facility meets the Growth Management Act definition of an essential public facility; b. The facility is on a state, county or local community list of essential public facilities; c. The facility serves a significant portion of the County or metropolitan region or is part of a Countywide service system; or d. The facility is the sole existing facility in the County for providing that essential public service.

The King County Comprehensive Plan recognizes the RWSP, which plans for conveyance, treatment, and disposal of wastewater, as a Functional Plan, which is designed to "guide specific siting of facilities" (King County, 2001a). The King County Comprehensive Plan refers to the RWSP as follows:

> In 1999, King County adopted the RWSP, guiding the development of new facilities to manage wastewater into the future. The RWSP addresses four areas: wastewater treatment plants, combined sewer overflow control, wastewater reuse, and biosolids management. The RWSP outlines where new facilities will be built, the types of technology to be used and the future of reclaimed water and biosolids. Short-term needs through 2006 are specified, and long-term alternatives to the current Metro system are identified (King County, 2001a, definitions section).

This adopted regional plan was developed with input from King and Snohomish Counties, local jurisdictions in the region, federally recognized Tribal governments and utility districts. As recognized in the King County and Snohomish County Comprehensive Plans, the RWSP is a core capital facility (as well as an EPF) regional planning document. It was designed to meet GMA's requirements to plan for and provide utilities to ensure that public facilities and services meet locally established minimum standards of service. In recognition of the importance of providing sewer availability to urban areas, the King County Comprehensive Plan defines sewer availability as:

> The presence of sewers now or within six years through extensions is included in adopted sewer comprehensive plans. In the case of Urban Planning Development, 1) the capacity to intercept and treat wastewater as evidenced by a King County approved sewer system plan or a Metro utility plan, 2) a firm commitment to serve an area with sewer as evidenced by either a sewer availability certificate, utility extension agreement, or an approved sewer system plan, and 3) a firm financial commitment to provide sewer, as evidenced by either a capital improvement program or utility extension agreement.

Snohomish County Comprehensive Plan

The Snohomish County Comprehensive Plan considers water supply, wastewater collection and treatment, and electric power as essential infrastructure to support urban development. Comprehensive plan policies direct the County to develop wastewater treatment plants to support urban growth within designated UGAs in a manner consistent with the protection of the natural environment (Snohomish County, 2000, Goal UT-3).

The Comprehensive Plan contains specific policies and a process for siting of EPFs that were developed by Snohomish County Tomorrow. The EPF siting process was approved in 1995 and is an appendix to the County's adopted Comprehensive Plan. Eleven factors are considered in the siting process. These factors are summarized below:

- Factor 1 –The project sponsor must demonstrate a need for the EPF.
- Factor 2 – The facility must be consistent with the sponsor's long-range plans for facilities and operations.
- Factor 3 – The EPF should demonstrate its relationship to local, regional, and state plans, and should be consistent with the adopted plans of the host community.
- Factor 4 – The facility should include a significant share of the host community's population.
- Factor 5 – Sponsors are to submit documentation on the minimum siting requirements for proposed facilities, such as facility size, access, future expansion and mitigation needs.
- Factor 6 – The project sponsor should investigate alternative sites.
- Factor 7 – The overall concentration of essential public facilities in the County shall be reviewed to avoid an undue concentration in any one community.
- Factor 8 – Sponsors should encourage local public participation.
- Factor 9 – The project must be consistent with local land use regulations.
- Factor 10 – The project should be compatible with surrounding land uses.
- Factor 11 – Adequate mitigation must be provided.

Since the publication of the Draft EIS, Snohomish County adopted Ordinance No. 03-006 as a development regulation to implement an Essential Public Facility Siting Process, adding Chapter 30.42D and amending Chapter 30.22.020 of the Snohomish County Code.

Comprehensive Plans for Affected Jurisdictions

The adopted land use plans and policies, and supporting SEPA documentation, for all of the jurisdictions within the Brightwater service area are incorporated by reference. The comprehensive plans and policies, zoning codes, shoreline master program policies, and development regulations were reviewed for Snohomish and King Counties and the Cities of Bothell, Brier, Edmonds, Kenmore, Lake Forest Park, Mountlake Terrace, Shoreline, and Woodinville and the Town of Woodway. The relevant comprehensive plan policies are discussed as they relate to the land use and zoning designations for the affected area; these are described under the Affected Environment for the Route 9 and Unocal Systems. The consistency with these plans and policies is discussed under the Impacts and Mitigation section for each system.

11.2.1.2 Conveyance Corridors

This section describes the existing land and shoreline uses within the identified corridors to provide the basis for analysis of impacts of constructing wastewater conveyance

facilities (pipelines, portals, a pump station, and other permanent facilities) within the identified portal siting areas. Only those land uses that potentially would be affected by surface construction are discussed. This information is detailed under the Route 9 and Unocal System discussions for conveyance corridors that follow. The identified portal siting areas reviewed in this EIS are 72 acres in size; however, for primary portals, a minimum of 1 to 2 acres of the 72-acre siting area would actually be required for construction. Depending on the location of each portal siting area and the parcels that comprise each area, some primary portals may be larger than 1 to 2 acres. For secondary portals, approximately one-half acre or less of the 72-acre siting area would actually be required for construction, should the secondary portal be needed.

Almost all of the portal siting areas have a combination of two or more of the following land uses:

- Established suburban or rural single family residential properties with medium- to large-sized lots and mature vegetation, including large trees
- Established urban/suburban single family and multifamily residential properties on smaller lots, with mature vegetation
- Established suburban and urban commercial centers located at arterial nodes bordered by both rural and suburban commercial areas
- Urban/suburban civic and commercial centers
- Urban/suburban business parks with hotels or motels
- Church and/or school buildings and grounds
- Public parkland and athletic fields
- Vacant land cleared of vegetation
- Public utilities such as substations, power lines, and sewer pump stations
- Existing light industrial/commercial land use
- Stream/lowland vegetation and habitat

Land use plans, policies, and regulations were reviewed to determine their applicability to the construction of conveyance facilities along the proposed alternate routes. This includes the evaluation of whether the underground conveyance facilities are permitted by the jurisdictions where they may be located. It should be noted that most jurisdictions address utility facilities such as water and sewer distribution and conveyance systems but do not specifically discuss tunneling.

Because tunnel construction would be the primary method incorporated in the construction of the selected conveyance system, surface impacts would be generally limited to portal locations. Surface impacts would also occur in the vicinity of microtunnel pits and any areas of open-cut construction.

Land use, zoning, and shoreline regulations, and general goals and policies were analyzed with regard to the construction of wastewater conveyance pipelines and associated facilities, within eleven jurisdictions. Specific permit requirements regulating the construction of conveyance facilities are summarized. Discussion is also provided on shoreline policies and regulations related to construction of these facilities, where applicable.

Comprehensive plans and policies, zoning codes, shoreline master program policies, and development regulations were reviewed for Snohomish and King Counties; the Cities of Bothell, Brier, Edmonds, Kenmore, Lake Forest Park, Mountlake Terrace, Shoreline, and Woodinville and the Town of Woodway. The majority of these jurisdictions also have general policies that apply to the development of utilities. Portal Siting Area 11 is the only portal siting area common to both the Route 9 and Unocal corridors. It is described under the Route 9 –195th Street section that follows.

Construction of a safety relief point would occur for any of the conveyance alternatives. The area identified for the safety relief point is located in and adjacent to the southeastern part of Portal Siting Area 11 and extends beyond to the Sammamish River. This area is characterized by industrial development and is zoned RB-Regional Business and is designated Urban Shoreline by the City of Kenmore.

11.2.2 Affected Environment: Route 9 System

11.2.2.1 Treatment Plant: Route 9

Existing Land Use

Various land uses occupy the Route 9 site, which consists of 114 acres in unincorporated Snohomish County. Most of the Route 9 site is located within the Maltby UGA in unincorporated Snohomish County. The Maltby UGA is also part of the "Grace Neighborhood" that is included in the proposed annexation area of City of Woodinville's UGA. The Route 9 site is not within the area that is proposed for annexation by the City of Woodinville.

Light industrial and commercial businesses and several residences occupy the portion of the site within the UGA boundary. Business uses include but are not limited to Mustang Ranch (Auto Recycling), Greenleaf Auto, Woody's Auto, C.T. Sales, Activate Excavator Rentals, Marco Best Cuts, Evergreen Utility Contractors, Aztech Electric Contractors, Rushent Sales, Quality Business Systems, Lydig Construction, HMS Electronics, Insurance Auto Auctions, Evergreen West Wholesale Lumber, Fitz Auto Imports, and a grange hall. Two properties located on the northern portion of the Route 9 site lie outside the UGA. One is occupied by Northwest Landscaping, and the other is an open land parcel recently purchased by King County from the Northshore School District.

The Route 9 site is located within two miles of the City of Bothell to the west and within one mile of the City of Woodinville to the south. Low-density single family residences occupy the majority of the area surrounding the site, except to the southwest, where light industrial businesses are located.

Comprehensive Plan Designations

The majority of the Route 9 site is located within the Maltby unincorporated urban growth area (UGA) for Snohomish County and the UGA for the City of Woodinville. Because these areas overlap, comprehensive plan policies for the City of Woodinville are also discussed.

About 69 acres of the Route 9 site is within the Maltby unincorporated UGA in Snohomish County. This area is also part of the Maltby/Cathcart/Clearview Subarea. The Maltby area is characterized by higher intensity land uses than typically found in unincorporated areas and as such, has been designated as an urban growth area.

The Snohomish County GMA Comprehensive Plan: General Policy Plan designates the Maltby UGA as Urban Industrial. This designation is meant for industrial uses that are served or can be served by a railway spur line (Snohomish County GMA Comprehensive Plan, 2000, LU2.B.7). The portion of the site outside of the UGA (approximately 37 acres) is designated Rural/Urban Transition Area with an underlying designation of Rural Residential (1 dwelling unit per 5 acres). The Rural/Urban Transition Area is intended to preserve open space tracts until such time as the land is included within a UGA, so that it may be used for future urban development. Sanitary systems located on this land must meet the criteria of Snohomish County GMA Comprehensive Plan Policy UT-3.C.1 (Snohomish County, 2000).

The Snohomish County GMA Comprehensive Plan (Snohomish County, 2000) lists several goals pertaining to development of public facilities.

- Wastewater collection and treatment should be located within urban growth areas (UT 3.C).
- New public facilities along the UGA boundary should include buffers (LU1.C.3).

As discussed previously, the majority of the Route 9 site is also located within the adopted UGA for the City of Woodinville that includes the Grace Neighborhood in Snohomish County. Because the UGAs overlap between Snohomish County and the City of Woodinville, the Woodinville Comprehensive Plan policies are discussed.

As part of a subarea plan for this area, the City of Woodinville is pursuing a joint planning agreement with Snohomish County to include the Grace Neighborhood within the City of Woodinville. This would occur though an interlocal agreement for joint planning and the annexation process.

The main reasons for annexation include the ability to increase the efficiency and reduce fragmentation in the delivery of municipal services, greater control of land use and service planning within a geographically related area, more logical city boundaries, and the desire of adjacent residents to be part of the city (Woodinville, 1996 and updates). The City's process for annexation of new lands would include the following:

1. Pre-annexation planning agreements negotiated between the County and City for proposed annexations of a significant size or nature
2. Pre-annexation planning agreements that address, at a minimum, the following issues in the proposed annexation area:
    a. Land use planning
    b. Transportation planning and mitigation
    c. Development standards and development review
    d. Surface water drainage
    e. Utilities planning and provision
    f. Housing, including affordable and fair housing
    g. Historic preservation
    h. Parks, trails and open space
    i. Environmentally sensitive areas including but not limited to, steep slopes, bodies of water, floodplains, and wetlands
    j. Fire protection
3. A joint City-County team comprised of appropriate staff from each jurisdiction shall be established to coordinate annexation and incorporation proposals and facilitate a smooth transition from County to City jurisdiction
4. Provisions for open spaces and urban separators should be included in large annexation proposals
5. Neighborhood goals that seek to preserve the unique characteristics of that neighborhood should be incorporated into annexation proposals
6. Strategy to address taxes, revenues and other financial considerations such as economic impact of the annexation upon the City (Woodinville, 1996 and updates)

Woodinville's Comprehensive Plan designates this area as Industrial. The industrial designation has been applied to areas located along major arterials that are currently suited for industrial and business park activities (Woodinville, 1996 and updates).

A number of policies within the Woodinville Comprehensive Plan pertain to the siting of EPFs. Goal LU-6 and supporting policies LU-6.1, 6.2 and 6.3 are aimed at ensuring that the City provides a process for siting EPFs. These include defining EPFs consistent with

the intent of the GMA; coordinating and participating in the interjurisdictional process established by the King County Growth Management Planning Council and adopted by the Snohomish County Tomorrow Steering Committee; and following the interim siting process to site EPFs. Woodinville also adopted the EPF siting guidelines developed by Snohomish County Tomorrow.

Zoning Designations

The majority of the Route 9 site is zoned Light Industrial (LI) under Snohomish County's development regulations, with small areas zoned Heavy Industrial (HI) and Freeway Service (FS). The portion of the site outside of the UGA is zoned Rural – 5 Acre (R-5) (Figure 11-1). Title 30, Section 30.22, of the Snohomish County Unified Development Code lists specific uses permitted within these zones. Wastewater treatment plants are permitted outright in the LI and HI zoned portions of the site. Wastewater treatment plants are permitted as a conditional use in the R-5 zoned area outside of the UGA and in the FS zone (see Table 11-1).

The City of Woodinville's pre-annexation zoning designation for the site is also Industrial. Regional public facilities are permitted within the industrial zone subject to the approval of a special use permit. Special use permits for EPFs are granted by the City's Hearing Examiner. The City's Municipal Code states, "No provisions of the City's regulations are to preclude the siting of essential public facilities" (Ord. 175 § 1, 1997).

Shoreline Master Program Policies and Regulations

Little Bear Creek is the only major waterway near the Route 9 site. The stream is located from 60 to 350 feet west of the western boundary of the site. Small drainages and unnamed streams drain to Little Bear Creek from the site; however, these waterways are not regulated under the Snohomish County Shoreline Master Program (1993). Data for Little Bear Creek indicate an average discharge of 19.69 cubic feet per second (cfs) at the mouth of the creek. Shorelines, as defined in the County's Shoreline Master Program, do not include "shorelines on segments of streams upstream of a point where the mean annual flow is 20 cfs or less" (Snohomish County, 1993). See Chapter 6 for a more detailed discussion of Little Bear Creek.

Table 11-1. Snohomish County Land Use, Zoning and Shoreline Designations, and Regulatory Requirements at the Route 9 Site

Land Use Designation	Zoning Designation	Shoreline Designation	Regulatory Requirements for Wastewater Treatment plant
Rural Urban Transition Area, Rural Residential (1DU/5 acres)	Rural – 5-acre (R-5)	N/A	CU [a]
Urban Industrial	Heavy Industrial (HI)	N/A	Permitted
	Light Industrial (LI)	N/A	Permitted
	Freeway Service (FS)	N/A	CU [a]

[a] Utility facilities are permitted as a conditional use in this zone.

11.2.2.2 Conveyance: Route 9

Affected Environment Common to Both Route 9 Corridors

Land Use

Major land uses along the influent portion of the Route 9 corridors include residential development, commercial centers in the Cities of Lake Forest Park and Kenmore; the Burke-Gilman/Sammamish River Trail; and the North Creek Business Park and Sportsfields. Each of these land uses is found within the portal siting areas along the influent portion of the Route 9 corridor (Table 11-2).

Table 11-2. Major Land Uses within the Route 9 Conveyance Corridors

Route 9 Corridors	Major Land Uses
Influent Portion	Residential development, Sammamish River/Burke-Gilman Trail, Swamp Creek Park, North Creek Business Park and Playfields
195th Street Effluent	Residential development, Aldercrest Learning Center, Bruggers Bog Park, Nile Temple Golf Course, Holyrood Cemetery, Sherwood Elementary School
228th Street Effluent	Residential development, Canyon Park Mobile Home Park, Brier Elementary School, and Ballinger Playfields and commercial areas in the Cities of Bothell and Edmonds

The dominant land use along the 195th Street and 228th Street corridors is residential. The Route 9 corridors would pass within close proximity to land uses such as schools, parks, trails, commercial areas, and cemeteries.

Because tunnel construction techniques would be used, the only surface disruptions generally would occur at the portal locations. Thus, there would be no significant adverse land use impacts except potentially where there would be surface disruptions.

Comprehensive Plan and Zoning Designations

The predominant land use and zoning designations for the portal siting areas along the Route 9 corridors are residential (Figure 11-2). Many portal siting areas also contain lands designated as commercial, office, and industrial. In general, most jurisdictions within the Route 9 corridors permit the siting of utility conveyance facilities, including underground facilities such as water and sewer lines, in residential areas through either a conditional or special use permit. It should be noted that comprehensive plan policies and zoning regulations do not contain specific language that addresses tunneling. Typically, when not listed as a use permitted outright or as a conditional or special use, an unclassified use permit is required by the local jurisdiction. In many jurisdictions, regulatory authority may not extend to the permitting of deep underground tunnels.

Shoreline Master Program Policies and Regulations

Most utility construction is permitted in shoreline jurisdictions through a shoreline substantial development permit. Shoreline policies and regulations would apply to any surface disruptions that occur within the shoreline zone such as construction of the safety relief point. Figure 11-3 shows the designated shorelines for all of the Route 9 corridors. Table 11-3 summarizes the shoreline designations and regulatory requirements for constructing wastewater conveyance facilities along each of the Route 9 corridors. The area identified for the safety relief point is located in and adjacent to Portal Siting Area 11 and is designated Urban shoreline by the City of Kenmore.

Table 11-3. Shoreline Designations and Regulatory Requirements along the Route 9 Corridors

Route 9 Corridor	Jurisdiction	Waterbody	Shoreline Designation	Regulatory Requirements for Conveyance Facilities
Influent	Bothell	North Creek	Urban	Permitted as a conditional use; Shoreline Substantial Development permit (SSD) required
	Bothell	Sammamish River	Conservancy	SSD required

Table 11-3. Shoreline Designations and Regulatory Requirements along the Route 9 Corridors (cont.)

Route 9 Corridor	Jurisdiction	Waterbody	Shoreline Designation	Regulatory Requirements for Conveyance Facilities
Influent (cont.)	Kenmore	Swamp Creek	Urban	Permitted subject to general requirements of KCC Section 25.16.030; SSD required
	Kenmore	Sammamish River	Urban	Permitted subject to general requirements of KCC Section 25.16.030; SSD required
	Kenmore/Lake Forest Park	Lake Washington	Urban	SSD required
195th Street Effluent	Bothell	North Creek	Urban	Permitted as a conditional use; SSD required
	Kenmore	Swamp Creek	Urban	Permitted subject to general requirements of King County Code Section 25.16.030; SSD required
	Edmonds	Lake Ballinger	Conservancy II Freshwater Environment Suburban Residential IV	SSD required
	Unincorporated Snohomish County	Puget Sound	Conservancy	SSD required
228th Street Effluent	Bothell	North Creek	Urban	Permitted as a conditional use; SSD required
	Unincorporated Snohomish County	Swamp Creek Puget Sound	Suburban Suburban-High Residential	Permitted subject to regulatory controls; SSD required
	Unincorporated Snohomish County	Puget Sound	Conservancy	SSD required

Affected Environment: Route 9 –195th Street Corridor

Existing Land Use

Existing land uses within each of the 72-acre portal siting areas along the 195th Street corridor and identified candidate sites are described below. In most cases, three candidate sites have been identified within each portal siting area unless noted. Figures showing the location of candidate sites are provided in Chapter 3.

Primary Portal Siting Areas

The primary portals along the Route 9–195th Street corridor include Portal Siting Areas 5, 11, 19, 41 and 44.

Portal Siting Area 5 – Portal Siting Area 5 is located within the Cities of Mountlake Terrace and Shoreline. The majority of this siting area is characterized by commercial uses (restaurants, hotel, theaters, and shopping center) with single family residential development in the northeastern quarter. Single family residential development is the predominant land use within 0.25-mile of the outer perimeter of Portal Siting Area 5. Other uses include higher density residential development and commercial uses located along Ballinger Way NE and I-5 to the west, and a golf course and single family residential uses beyond the freeway.

The three candidate sites that have been identified for this portal siting area, 5B, 5G, and 5X, are all located within the City of Shoreline and are zoned Community Business (CB). Both candidate Sites 5B and 5G are located just outside the 72-acre siting perimeter with the exception of a small portion of Site 5B. Site 5B is 3.3 acres in size, Site 5G is 1.8 acres, and Site 5X is 1.0 acre.

Portal Siting Area 11 – Located in the City of Kenmore, Portal Siting Area 11 is the only portal siting area common to both the Route 9 and Unocal corridors. The main influent tunnel begins at Portal Siting Area 11 for the Route 9 corridor. A local connection would be made from Kenmore along 175th Avenue and from the existing Kenmore Pump Station to Portal Siting Area 11 as necessary.

Land use within this portal siting area is characterized by a mix of commercial, retail, service, office, and industrial uses. The majority of these uses are concentrated north of Bothell Way NE. The area to the south of Bothell Way NE includes the Burke-Gilman/Sammamish River Trails, a large area with warehouse and industrial uses, and several small tracts occupied by commercial/retail uses. Within 0.25-mile of the outer perimeter of this siting area, land uses include single family residences to the northwest, higher density residential development to the north along 68th Avenue NE, commercial uses to the east with residential uses beyond, the Sammamish River to the south with residential uses beyond, Lake Washington to the southwest, and industrial and commercial uses to the west.

All three candidate sites identified for this portal siting area, 11A, 11B and 11C, are zoned RB-Regional Business. Both Sites 11A and 11B are located south of NE Bothell Way and Site C is located to the north. Site 11A is 2.3 acres in size and is occupied by several retail stores and an office building. Site 11B is 4.3 acres in size and is occupied by a warehouse. Site 11C is 4.1 acres in size and is occupied by a grocery store and neighborhood shopping center.

Portal Siting Area 11 and is designated Urban shoreline by the Cities of Lake Forest Park and Kenmore.

Portal Siting Area 19 – Portal Siting Area 19 is located in the Town of Woodway, the City of Shoreline, and unincorporated Snohomish County. The dominant land use within this area is the Chevron asphalt and bulk fuel storage facility at Point Wells. The Burlington Northern-Santa Fe Railroad crosses the siting area from north to south. Other land uses include single family residences, open space/vacant lands, and Puget Sound.

Land uses within 0.25-mile of the outer perimeter of this portal siting area include the Point Wells site, the railroad right-of-way and an open space corridor to the north, single family residential development to the east and south, and Puget Sound to the west.

Three candidate sites were evaluated for this portal siting area – 19A, 19C and 19E. Site 19C has been selected as the portal site location. Selection of a portal site was made to allow the outfall design work to proceed. Located in unincorporated Snohomish County, Site 19C (8.5 acres in size) is zoned Rural Use and is occupied by the Chevron operations.

Portal Siting Area 41 – Located within the City of Bothell, Portal Siting Area 41 is characterized by large parcels developed with office park, industrial, and service uses. Other uses include a small area of single family residential development located in the northwestern portion of the siting area and a portion of the North Creek sportsfields in the southern portion. Surrounding land use within 0.25-mile of the outer perimeter of this portal siting area is dominated by office park and light industrial uses to the north, west, and south. There is a large tract of undeveloped open space to the east with single family residential development beyond. This area also includes sensitive areas such as streams and wetlands.

Six candidate sites have been identified within this portal siting area – 41A, 41C, 41D, 41J, 41X, and 41W. Sites 41A and 41C are vacant, Site 41D is occupied by a sports field, Site 41J is occupied by a commercial building, Site 41X is occupied by King County's North Creek pump station and Site 41W is occupied by residential uses. Site 41A is bordered by North Creek on the north and wetland area on the east. Site 41A is 6.7 acres, Site 41C is 16.1 acres, 41D is 4.6 acres, 41J is 3.7 acres, 41X is 5.1 acres and 41W is 3.7 acres. The candidate sites are located in mixed-use zones. Candidate Sites 41A, 41C, 41D and 41X are zoned R-15: Residential 1 dwelling unit per 2,800 square foot of lot area, OP: Office Professional, CB: Community Business and LI: Light Industrial. Site 41A is bordered by North Creek which is zoned SMP: Shoreline Master Program. Site 41W is zoned R4: Residential 9,600 square foot minimum lot size and OP: Office Professional. Site 41J is zoned Light Industrial.

Portal Siting Area 44 – Portal Siting Area 44 is located in the City of Kenmore; it is characterized by large parcels that are either vacant or occupied by single family homes. There is a single family subdivision located in the southwest portion of the siting area, a farm in the southeast portion, and a small mobile home park in the eastern portion. Land use within 0.25-mile of the outer perimeter of this portal siting area includes large tracts of undeveloped land to the north, natural open space associated with a stream corridor to the west with residential and open space uses beyond, and large lot single family residential development to the south and west.

Three candidate sites have been identified within this portal siting area – 44C (3.6 acres), 44D (8.8 acres) and 44E (2.3 acres). Site 44C is vacant while 44D and 44E are occupied by single family residences. Candidate Sites 44C, 44D and 44E are zoned R6-Residential, 6 DU per acre. A portion of Site 44D is also zoned R-4-Residential, 4 DU per acre.

Secondary Portal Siting Areas

Secondary portals along the Route 9–195th Street corridor include Portal Siting Areas 7, 23, 27, and 45. Secondary portals are not likely to be used for Brightwater facilities.

Portal Siting Area 7 – Portal Siting Area 7 is a secondary portal for the Route 9–195th Street corridor. This portal siting area is located within the Cities of Lake Forest Park and Shoreline.

Land use within this siting area includes single and multi-family residential development, an inactive public school, a public utility, and Bruggers Bog/headwaters of the west fork of Lyons Creek. Surrounding land use within 0.25-mile of the outer perimeter of this siting area is predominantly single family residential development with higher density residential and commercial development to the northwest along Ballinger Way NE.

Each of the candidate sites (7A, 7B and 7C) identified within this portal is located within the City of Shoreline. Land use at these locations includes track and sports fields associated with the Aldercrest Learning Center at Site 7A (9 acres), a public facility at 7B (2.9 acres) and a park at 7C (4.5 acres). Site 7A is zoned R-6: Residential, 6 units/acre, Site 7B is zoned R-24: Residential, 24 units/acre, and Site 7C is zoned Park.

Portal Siting Area 23 – Located within the Cities of Edmonds and Shoreline, this secondary portal siting area is characterized by single family residential development. The northeastern portion of the siting area contains a large tract and several smaller parcels with multi-family housing. Other land uses within this siting area include retail and professional food service uses and a nursery school. Single family residential development is the primary land use within 0.25-mile of the outer perimeter of this portal siting area. Woodway Elementary School is also located within 0.25-mile north of the site.

This secondary portal siting area includes two candidate sites (23A and 23D) located in the City of Edmonds and one candidate site (23F) located in the City of Shoreline. Site 23A is 3.1 acres in size and is occupied by retail uses. Site 23D is 2.2 acres and is occupied by single family residences. Site 23A is zoned BN-Neighborhood Business and Site 23D is zoned RS-8, Single Family 8,000 square foot lots. Site 23F is 1.5 acres and is occupied by a single family residence. Candidate Site 23F is zoned Residential (R-6). All of these sites are surrounded by residential uses. Each of the candidate sites identified for this secondary portal siting area appear to have enough open space adjacent to existing uses to accommodate a portal with minimal or no displacement of existing land use.

Portal Siting Area 27 – This secondary portal siting area is located in the Cities of Edmonds, Mountlake Terrace and Shoreline. Land uses in the southern half of the siting area include a cemetery and an apartment complex; land uses in the northern half include single family residential development along the shoreline of Lake Ballinger and a portion of the Nile Temple Golf Course. Surrounding land use within 0.25-mile of the outer perimeter of this portal siting area is primarily single family residential development. The I-5 corridor is to the east; a public open space and a school are to the south; and commercial development is predominant along Aurora Avenue North to the west.

Land use at the three identified candidate sites include a portion of the Nile Temple Golf Course (27A), a mortuary/cemetery/crematory (27B) and single family residences (27C). Site 27A (7.2 acres) is located in Mountlake Terrace and is zoned Recreation and Park District (REC). Site 27B (2.9 acres) is located in the City of Shoreline and zoned R-6: Residential 6 units/acre; the comprehensive plan designates this area as Private Open Space. Site 27C (2.6 acres) is located in the City of Edmonds and zoned RS-8 (8,000 square foot lots).

Portal Siting Area 45 – Single family residential development is the dominant use within this secondary portal siting area, which is located in the Cities of Kenmore and Lake Forest Park. Other uses within the siting area include community service uses (social and religious services), an office building, a portion of Linwood Park, and a private school site. Land use within 0.25-mile of the outer perimeter of this portal siting area is single family residential development.

Two of the three candidate portal sites (45A and 45D) are located in the City of Kenmore and are zoned R-6-Residential (6 du/ac). Site 45A is 1.9 acres and Site 45D is 3.3 acres. Located in the City of Lake Forest Park, single family residences are the predominant land use and zoning for Site 45C. Site 45C is 3.2 acres.

Comprehensive Plan and Zoning Designations

Table 11-4 indicates the predominant land use and zoning designations for the primary and secondary portal siting areas along the Route 9–195th Street corridor. These tables provide the broader context for the portal sites themselves by providing the comprehensive plan, zoning and regulatory requirements for the entire siting areas. Specific land use and zoning for each of the candidate sites is discussed below under the respective Portal Siting Area.

Table 11-4. Predominant Land Use and Zoning Designations and Regulatory Requirements Relating to the 195th Street Corridor

Portal Siting Area/s	Jurisdiction	Predominant Land Use Designation	Predominant Zoning Designation	Regulatory Requirements for Conveyance Facilities
Primary Portals				
5	Mountlake Terrace	Single Family Residential, Commercial	Single Household Residential (RS 7,200), Freeway/ Tourist	Public utility facilities are permitted as a conditional use.
5	Shoreline	Low Density Residential, High Density Residential, Community Business	Residential (R-6, R-24), Community Business (CB)	Utility facilities are permitted as a conditional use in residential zones and as a permitted use in the Commercial Business zone.
11	Kenmore	Residential (R-6, R-12, R-18), Regional Business (RB)	Residential (R-6, R-12, R-18), Regional Business (RB)	Utility facilities are permitted in both the RB and Residential zones (KC21A.08.060 A).
19	Shoreline	Low Density Residential	Residential (R-6)	Utility Facilities are permitted as a conditional use.
19	Snohomish County	Urban Industrial	Rural Use	Transmission wires or pipes and supports are permitted uses. Utility structures require a conditional use permit.
19	Woodway	Suburban Residential (R-14.5)	R-14.5 Residence	Utilities subject to review by the board of adjustment for special property use.
41	Bothell	R 2-5, R 11-15, OP (Office Professional), CB (Community Business), LI (Light Industrial), <OS> (Potential Dedicated Open Space)	R 15, OP, CB, LI, Shoreline Master Program (SMP)	Wastewater conveyance facilities are permitted in all zones as a conditional use.
44	Kenmore	Residential (R-1, R-4, R-6)	Residential (R-1, R-4, R-6)	Utility facilities are permitted in the residential zones (KC21A.08.060 A).

Table 11-4. Predominant Land Use and Zoning Designations and Regulatory Requirements Relating to the 195th Street Corridor (cont.)

Portal Siting Area/s	Jurisdiction	Predominant Land Use Designation	Predominant Zoning Designation	Regulatory Requirements for Conveyance Facilities
Secondary Portals				
7	Shoreline	Low Density Residential, Medium Density Residential, High Density Residential, Public Open Space	Residential (R-6, R-24, R-48), Park	Utility facilities are permitted as a conditional use in residential zones. The land use index does not indicate whether utilities are a permitted use in areas zoned as Park.
7,45	Lake Forest Park	Single Family Residential (moderate, moderate/high), Multi-family High, Multi-family Low	Single Family Residential (RS-7.2, RS-10, RS-15, RS-20)	Utilities are listed as a conditional use in residential zones; they are a permitted use in the Town Center zone.
23	Edmonds	Single Family, Multi-Family Medium Density, Multi-Family High Density	Single Family (RS-8), Multi-Family (RM-1.5), Neighborhood Business (NB)	Regional public facilities are permitted only in the P zoning district.
23, 27	Shoreline	Low Density Residential	Residential (R-6)	Utility Facilities are permitted as a conditional use.
27	Edmonds	Single Family	Single Family (RS-8, RSW-12)	Regional public facilities are permitted only in the P zoning district.
27	Mountlake Terrace	Park and Open Space (POS)	Recreation Park District (REC)	Public service facilities are permitted in the REC zone.
45	Kenmore	Residential (R-1, R-4, R-6)	Residential (R-1, R-4, R-6)	Utility facilities are permitted in the residential zones (KC21A.08.060 A).

With few exceptions, utility conveyance and transmission facilities such as those associated with the Brightwater project are permitted through a conditional or special use permit process. Typically, when not listed as a use permitted outright or as a conditional or special use, an unclassified use permit is required by the local jurisdiction.

Shoreline Master Program Policies and Regulations

Shoreline master program policies and regulations for the Route 9–195th Street corridor are discussed under the Affected Environment Common to All Systems.

Portal 41 Influent Pump Station Option

The affected environment for the Portal 41 IPS Option is the same as described for Portal Siting Area 41.

Above-ground wastewater conveyance facilities, such as pump stations, are allowed only with a conditional use approval under the City of Bothell's zoning code. The IPS would also be subject to City of Bothell site development standards including minimum setbacks, bulk design, landscaping, and signage. A portion of Candidate Site A is located within the shoreline management area for North Creek. New pump stations are prohibited within all environments in the shoreline management area. This would restrict the available area along the north perimeter of Candidate Site A for locating the IPS facilities.

Affected Environment: Route 9 – 228th Street Corridor

Land Use

The influent corridor for the 228th Street corridor is the same as the one for the 195th Street corridor. Land uses along the effluent portion of the 228th Street corridor are similar to those along the 195th Street corridor. Along the effluent portion of the 228th Street corridor, major land uses include residential development, a mobile home park, three elementary schools, a high school, an open space area in the Town of Woodway, neighborhood commercial center in the City of Edmonds, a regional park, a fish hatchery, playfields, and a high quality wetland.

Existing land use within each of the 72-acre portal siting areas associated with the effluent portion of the 228th Street corridor is described below. Primary portals are discussed first followed by secondary portals.

Primary Portal Siting Areas

Primary portals for the Route 9–228th Street corridor include Portal Siting Areas 11, 19, 26, 33, 39, 41 and 44. Portal Siting Areas 11, 19, 41 and 44 are discussed under the Route 9–195th Street corridor.

Portal Siting Area 26 – This portal siting area is located in the Cities of Mountlake Terrace and Edmonds, and in Snohomish County. The eastern half of this siting area is characterized by large tracts of land with condominiums and multi-family housing. Other uses within the siting area include medical/health services facilities and a portion of the Ballinger Playfields. Surrounding land use within 0.25-mile of the outer perimeter of this portal siting area includes light industrial and office park uses to the north, single family residential to the east, Ballinger Playfields to the south, and residential uses with commercial development along SR-99.

Candidate Sites 26A and a portion of 26D are located in the City of Mountlake Terrace. Site 26A is 3 acres, is occupied by a playground and sports fields and is zoned Recreation and Park District (REC). The majority of Site 26D (4.4 acres) is located in unincorporated Snohomish County; it is zoned Residential 8400 (R-8400) and is occupied by single family residential uses. The portion of the site that is within Mountlake Terrace is zoned Single Household Residential (RS 7200) and is also occupied by single family residences. Located in the City of Edmonds, Site 26C is 8.9 acres in size, is zoned CG General Commercial and BC Community Business, and is occupied by commercial businesses.

Portal Siting Area 33 – Single family residential development is the dominant use within this portal siting area located within the City of Brier and unincorporated Snohomish County. Other uses include a large natural open space area (Poplar Ravine), several large tracts of agricultural land, and smaller tracts with high density residential development (duplex, triplex, and apartments). Land use within 0.25-mile of the outer perimeter of this portal siting area includes single family residential development to the north-northeast with open space/vacant lands beyond, and large lot residential development to the south and west.

Candidate Site 33A is located in the City of Brier and Sites 33C and 33D are located in Snohomish County. All three sites are zoned for single family/low density residential development. Site 33A is 2.7 acres and Sites 33C and D are each 3 acres in size. Sites 33A and 33D are occupied by residences while 33C is occupied by agriculture uses.

Portal Siting Area 39 – Single family residential development is the dominant land use within this portal siting area, which is located within the City of Bothell. Specific uses include a mobile home park in the northeastern quarter of the siting area, a school training facility and miscellaneous services, and a few vacant parcels. Surrounding land use within 0.25-mile of the outer perimeter of this portal siting area includes office park and light industrial uses to the northwest, a mobile home park to the northeast with open space beyond, open space/vacant land and large lot single family residential development to the east and south, and open space/vacant land to the west with a large tract of higher density residential development to the southwest.

All three candidate sites identified for this portal siting area, 39B, 39C and 39E, are zoned R-1 Growth Reserve (Residential 1 du/ac) and are occupied by single family residences. Site 39B is 2.9 acres, Site 39C is 2.3 acres and Site 39D is 2.2 acres.

Secondary Portal Siting Areas

Secondary portals along the Route 9–228th Street corridor include Portal Siting Areas 22, 24, 30 and 37. Secondary portals are not expected to be used.

Portal Siting Area 22 – Land use within this secondary portal siting area, which is located in the Cities of Edmonds and Shoreline, is characterized by single family residential development. Land use within 0.25-mile of the outer perimeter of this portal siting area is also predominantly single family residential. There is a small neighborhood commercial area and higher density multi-family housing located to the east along 244th Street SW.

Candidate Sites 22A (3.1 acres), 22C (3.3 acres), 22E (2.4 acres) and Site 22F (1.5 acres) are located in the City of Shoreline and are zoned Residential (R-6). Each of these sites is surrounded by residential uses. Site 22D is located in the City of Edmonds and is zoned RS-8, Single Family 8,000 square foot lots.

Portal Siting Area 24 – Secondary Portal Siting Area 24 is located in the City of Edmonds; it is characterized by single family residential development, with higher density residential development and service uses concentrated along Edmonds Way. Specific uses include a retirement home, automobile parking lot, electric utility, gas station, real estate office, and religious institution. Land use within 0.25-mile of the outer perimeter of this portal siting area is predominantly single family residential development, with commercial/business uses concentrated in the Westgate commercial center near the intersection of Edmonds Way and 9th Avenue South.

Candidate Site 24A (2.4 acres) is zoned RM1.5 (Multifamily) and currently undeveloped. Site 24B (2.1 acres) and 24C (2.2 acres) are zoned RS-8 (8000 square foot lots). Site 24B is occupied by a church and single family residences and Site 24C by single family residences and a duplex.

Portal Siting Area 30 – This secondary portal siting area is located in the City of Brier. Single family residential development is the dominant land use within this siting area. Other uses include Brier Elementary School, a stormwater detention area, and vegetated open space. Land use within 0.25-mile of the outer perimeter of this portal siting area is primarily single family residential development. There are several city buildings and a park along 228th Street to the east and a public library to the southeast.

Candidates identified for this siting area are all zoned Single Family Residential (RS 12,500); Site 30A is 2.5 acres, Site 30B is 2 acres and Site 30C is 4.9 acres. Brier Elementary School occupies Site 30A and single family residences occupy Sites 30B and 30C.

Portal Siting Area 37 – Located in the City of Bothell, the predominant use within this secondary portal siting area is low to medium density residential development. Other uses include gas stations, restaurants, and automobile repair services. Adjacent uses within 0.25-mile of the outer perimeter of this portal siting area include low density residential development to the north, south, and west and developed office parks to the east.

Candidate Site 37A (2.7 acres) is zoned R 11-15 (Residential 11-15 du/ac), OP (Office-Professional) and CB (Community Business); Site 37 C (1.7 acres) is zoned R 2-5 (2-5 du/ac); and Site 37D (4.5 acres) is zoned R6-10 (6-10 du/ac). A portion of each of these sites is occupied by residential development.

Comprehensive Plan and Zoning Designations

Table 11-5 indicates the predominant land use and zoning designations for the primary and secondary portal siting areas along the Route 9–228th Street corridor. Information on Portal Siting Areas 11, 19, 41 and 44 are discussed under Affected Environment: Route 9–195th Street Corridor above.

Shoreline Master Program Policies and Regulations

Shoreline master program policies and regulations for the Route 9–228th Street corridor are discussed under the Affected Environment Common to Both Route 9 corridors above.

Portal 41 Influent Pump Station Option

The affected environment for the Route 9–228th Street Corridor IPS Option is the same as that described for the Route 9–195th Street Corridor IPS Option above.

11.2.2.3 Outfall: Route 9

Zone 7S is located within the Puget Sound shoreline area adjacent to Point Wells in unincorporated Snohomish County and residential neighborhoods in the City of Shoreline and Town of Woodway. The land use within this area is described under Portal Siting Area 19 for the 195th Street Corridor.

The proposed outfall alignment would begin at Portal 19 (Site 19C) on the Point Wells site, go 1,000 feet across the site, then west into Puget Sound on Washington State DNR land. The shoreline designation for the proposed Zone 7S alignment is Conservancy (Snohomish County). Any construction within 200 feet of the Puget Sound shoreline requires a shoreline substantial development permit.

Table 11-5. Predominant Land Use and Zoning Designations and Regulatory Requirements Relating to the 228th Street Corridor

Portal Siting Area/s	Jurisdiction	Predominant Land Use Designation	Predominant Zoning Designation	Regulatory Requirements for Conveyance Facilities
Primary Portals				
26	Edmonds	Commercial	CG (General Commercial)	Regional public facilities are permitted only in the P zoning district.
26	Mountlake Terrace	Single Family Residential (SFR), Low Density Multi Family (RML), Park and Open Space (POS)	Single Household Residential (RS 7200 & RS 8400), Low Density Multi Household (RML), RUD Low Density (RUD/L), Recreation and Park District (REC)	Public Utility Facilities are permitted as a conditional use.
26	Snohomish County	Urban Medium Density Residential (6-12 DU/AC)	Residential (R-8,400)	Utilities are permitted as a conditional use.
33	Snohomish County	Urban Low Density Residential (4-6 DU/AC)	Residential 9,600 (R-9,600)	Utilities are permitted as a conditional use.
33	Brier	Single Family Residential	Single Family Residential (RS 12,500)	Utilities permitted as a conditional use. Right-of-way use permit required for construction on public property.
39	Bothell	Residential (R-1, R 2-5, R6-10, R 11-15), Community Business (CB), Office Professional (OP), Light Industrial (LI), Potential Dedicated Open Space	Residential (R 1, R 4, R 8a, R 8d), Community Business (CB), Office Professional (OP), Light Industrial (LI)	Wastewater conveyance facilities are permitted in all zones.

Note: see Table 11-4 for Primary Portals 11, 19, 41 and 44

Table 11-5. Predominant Land Use and Zoning Designations and Regulatory Requirements Relating to the 228th Street Corridor (cont.)

Portal Siting Area/s	Jurisdiction	Predominant Land Use Designation	Predominant Zoning Designation	Regulatory Requirements for Conveyance Facilities
Secondary Portals				
22	Edmonds	Single Family	Single Family Residential (RS-8)	Regional public facilities are permitted only in the P zoning district.
22	Shoreline	Low Density Residential	R-4, R-6	Utility Facilities are permitted as a conditional use.
24	Unincorporated Snohomish County (near Edmonds)	Urban Medium Density Residential (6-12 DU/AC)	Residential (R-8,400)	Utilities are permitted as a conditional use.
24	Edmonds	Single Family, Multi Family-High Density, Neighborhood Commercial	Single Family Residential (RS-8), Multi-family Residential (RM-1.5), Planned Business (BP)	Regional public facilities are permitted only in the P zoning district.
30	Brier	Single Family Residential	Single Family Residential (RS 12,500)	Utilities permitted as a conditional use. Right-of-way use permit required for construction on public property.
37	Bothell	Residential (R-1, R 2-5, R6-10, R 11-15), Community Business (CB), Office Professional (OP), Light Industrial (LI), Potential Dedicated Open Space	Residential (R 1, R 4, R 8a, R 8d), Community Business (CB), Office Professional (OP), Light Industrial (LI)	Wastewater conveyance facilities are permitted in all zones.

11.2.3 Affected Environment: Unocal System

11.2.3.1 Treatment Plant: Unocal

Existing Land Use

The Unocal site, occupying 53 acres in the City of Edmonds, is currently undergoing environmental remediation supervised by Unocal staff that has offices onsite and the Washington State Department of Ecology. A small portion of the site is leased to Maul Foster Alongi, an environmental consulting and engineering firm. It was formerly a bulk fuel terminal, known as the Unocal Edmonds Bulk Fuel Terminal, used for storing and distributing fuel that arrived by ship. Although fuel operations were discontinued in 1991, Unocal continues to own the largest portion of the site located to the east of the railroad tracks and the City of Edmonds owns the small portion to the west of the tracks that is currently used as a public park.

During the summer and fall of 2001, the site underwent the first phases of interim clean-up activities. Oil storage tanks were removed from the southeastern portion of the site on the "upper yard" terrace. The site was to remain unoccupied during clean-up activities that were scheduled through the summer of 2002 (Unocal, 2002).

An application to develop 297 condominiums on the Unocal site has been submitted to the City of Edmonds. The project has undergone design review with approval to proceed with the building permit application (Clifton, personal communication, 2003).

Land use surrounding the proposed site includes commercial waterfront uses such as a marina, boat storage area, pier, and City Park to the northwest, a city park to the east, and single family residences directly east and south of the site boundary. The closest residences are located just east of SR 104 and south of Pine Street, which are less than ¼ mile from the site boundary. The site is also bounded by a Class 1 wetland known as Edmonds Marsh to the northeast and Puget Sound and its associated shoreline to the west.

Single family and higher density residential uses, including multi-family, are located within 0.25-mile northeast, east, and south of the site. The Edmonds business district is located approximately 0.5-mile north of the site.

Comprehensive Plan Designations

The City of Edmonds Comprehensive Plan provides policies requiring the City to "ensure that the siting of essential public facilities is not precluded by the implementation of this Comprehensive Plan" (Edmonds, 2001, Policy E.2). The Comprehensive Plan adopts the

same EPF siting guidelines developed by Snohomish County Tomorrow and notes, "the location of new or improved capital facilities should take into account existing service delivery systems and the location and access of service populations" (Edmonds, 2001, Policies E.3 and E.1).

The Edmonds Comprehensive Plan designates the Unocal site and adjacent areas to the north, east, and west as Downtown/Waterfront Activity Center, with a Master Plan Development Overlay. Activity centers are intended to provide for a variety of commercial and residential opportunities, including both multi-family and small-lot single family development. The Downtown/ Waterfront Activity Center designation was established in an effort to recognize and plan for the coordinated and mutually supporting development of the three dominant land uses in the downtown/waterfront area – the Port of Edmonds, multimodal transportation, and beach/open space uses (Edmonds, 2001). Redevelopment of the Point Edwards area, which includes the Unocal site, is a key component in implementing the plan and achieving the City's goal of enlarging the downtown area and economic base. In addition, the City of Edmonds has been working with the Washington State Department of Transportation since 1993 to plan for the eventual relocation of the Edmonds Ferry Terminal to the Unocal site. The site would be developed as part of a new regional multimodal transportation facility called "Edmonds Crossing." The Edmonds Crossing project has been a regionally coordinated effort and is supported by the Puget Sound Regional Council's Destination 2030: Metropolitan Transportation Plan for Central Puget Sound Region, Washington State Ferries Strategic Plan, Snohomish County GMA Comprehensive Plan: Transportation Element, City of Edmonds Comprehensive Plan and Port of Edmonds Strategic and Master Plans.

Comprehensive Plan policies for the Downtown/Waterfront Activity Center promote an extension of downtown westward to the water. Activities envisioned for this area are mixed-use development; retail, office, and entertainment businesses; and recreational and park-like shoreline features. Development and redevelopment for the area including this site are meant to reinforce "Edmonds' attractive, small town pedestrian oriented character" (Edmonds, 2001, Downtown/Waterfront Activity Center Policies A.1, A.2, A.4, and A.6).

The Master Plan Development Overlay provides for "areas dominated by a special set of circumstances with a highly coordinated, planned development, with phasing over time" (Edmonds, 2001). Master Planned Developments must be consistent with the goals and policies of the underlying Downtown/Waterfront Activity Center.

Edmonds Comprehensive Plan policies related to the siting of utilities are intended to ensure that utility structures are located with similar types of structures, wherever possible, to minimize impacts on surrounding neighborhoods. "When such locations are not available, utility structures should be located or sited so that they are as unobtrusive as possible and are integrated with the design of their site and surrounding area. Free-standing structures should be discouraged when other siting opportunities are available" (Utilities Element, Policy A.3).

The area to the south of the site, located within the Town of Woodway corporate limits, is designated Forested Residential Park. The primary purpose of this designation is to provide for single family residential development.

Zoning Designations

Title 16 and Title 17 of the City of Edmonds Municipal Code regulate the type of development permitted within each land use zone. Figure 11-4 shows the City of Edmonds' zoning for the Unocal site. The City of Edmonds recently added two new zoning designations to its zoning code, Master Plan Hillside Mixed Use 1 and 2 (MP1 and MP2) [Ord. 3402 § 1, 2002], and applied these zones to the Unocal site under the terms of a contract rezone proposed by the Unocal property owner. It should be noted that the City of Edmonds' current zoning map does not show this overlay zone. The contract rezone allows development subject to conditions in a Master Plan, which was adopted along with the contract rezone. The contract rezone includes a covenant providing that the Master Plan can be amended, but restricting the initiation of rezones by the property owner, Unocal, during the next five years.

The MP1 zone provides for a variety of uses such as residential, office, restaurant, parks, and local public facilities, but not regional facilities. MP2 provides for almost all the uses in the MP1 zone, and also includes uses such as educational facilities and a multimodal transportation center. The adopted Master Plan for the Unocal site identifies potential development on the site, which includes options for development with or without a multimodal transportation facility. Whether or not the multimodal transportation facility is built, the Master Plan provides for multi-family residential, commercial, and office uses, which are accompanied by various development standards. The Master Plan was designed to implement the Edmonds Comprehensive Plan and the Downtown Waterfront Plan. The Port of Edmonds Master Plan and Strategic Master Plan also support these plans and policies set forth by the City.

Edmonds' Municipal Code establishes regulations and standards for the various classes of "community facilities" that are allowed or conditionally permitted within each of the City's zoning districts. These standards relate to local public facilities (including water and sewer) that are planned, designated, and sited in the City's capital improvement plan. The Municipal Code indicates that regional public facilities should be "allowed only within the public P zoning district" and "sited pursuant to the comprehensive planning process" (Title 17, Chapter 17.100.060, Regional public facilities). The Unocal site is not presently designated as a "P" zone.

The Town of Woodway zoned the residential area south of the site as Forest Residential Park R-43. This zone is intended to provide for single family residential development at a density of one dwelling unit per acre.

Shoreline Master Program Policies and Regulations

A portion of the southeastern edge of the Unocal site is located within the Natural Environment shoreline designation. The majority of the smaller triangular portion of the Unocal site, west of the Burlington Northern-Santa Fe Railroad, is located within the Urban Mixed Use 1 and 2 shoreline designation (Figure 11-5).

The City of Edmonds Shoreline Master Program (Edmonds, 2002, Chapter 23.10) states that utilities and government facilities are permitted within 200 feet of the ordinary high water mark in the Natural Environment designated area subject to approval of a Shoreline Conditional Use Permit. Development within the Urban Mixed Use 1 and 2 designated areas would require a Shoreline Substantial Development Permit. The Shoreline Master Program definition of a "public utility" includes government agencies that provide infrastructure and services to the public that include but are not limited to water supply, wastewater treatment, stormwater treatment, electric power, telephone, cablevision, gas, and transportation.

Use regulations established for utilities state that such facilities "…may not be located within shoreline areas unless this location is reasonably necessary for the efficient operation of the utility, government facility or services or transportation system" and "…may not be located waterward of the ordinary high water mark or anywhere in the conservancy shoreline environment unless no practicable alternative exists and the location is essential to the operation of the utility, government service or facility, or transportation system" (Edmonds, 2002). The term "conservancy shoreline" is defined as sparsely developed areas exhibiting some natural constraints such as wetland conditions. These are further classified into saltwater and upland areas generally lying waterward of the western boundary of the "urban railroad environment, and freshwater areas associated with Lake Ballinger."

11.2.3.2 Conveyance: Unocal

There are four primary portal siting areas and four secondary portal siting areas along the Unocal corridor, one of which would include a pump station (Portal Siting Area 11, adjacent to the existing Kenmore Pump Station). The predominant land use along the corridor is residential. This corridor also crosses or is within the vicinity of other types of land uses in the Cities of Bothell, Kenmore, Lake Forest Park, Mountlake Terrace, Shoreline, and Edmonds and the Town of Woodway. These include a major regional trail system and other trails; two active-use parks and sportsfields; a high school, an elementary school and learning center for children; a marina; cemeteries; golf courses; and prominent commercial and industrial areas. Portions of this corridor fall within the buffer of Shoreline Management Act water bodies that include the Sammamish River, Lake Washington, Lake Ballinger and Puget Sound. Specific land uses within the Unocal corridor include:

- Residential development
- North Creek Sportsfields
- Sammamish River Trail
- Edmonds Marina, Marina Beach Park
- Park at Bothell Landing
- Commercial centers in the cities of Bothell, Kenmore, Lake Forest Park, Mountlake Terrace, Shoreline, and Edmonds
- Lake Forest Park Elementary School
- Aldercrest Learning Center
- Edmonds Woodway High School

Existing and surrounding land use for each of the 72-acre portal siting areas and the identified candidate sites along the Unocal corridor are described below.

Primary Portal Siting Areas

Primary portals along the Unocal corridor include Portal Siting Areas 3, 7, 11 and 14.

Portal Siting Area 3 – Located within the City of Edmonds and Snohomish County, Portal Siting Area 3 is characterized by residential development. Single family residential is the primary use with several large parcels containing a multi-family development and a mobile home park. Other uses within this siting area include a church, medical and health service facilities, and an animal clinic along Edmonds Way. Land use within 0.25-mile of the outer perimeter of this portal siting area is primarily single family residential with higher density residential development along Edmonds Way. Woodway Elementary School is located just south of the siting area.

All of the candidate sites identified for this portal siting area, Candidate Sites 3D (1.9 acres), 3E (2.3 acres) and 3F (2.0 acres) are located within the City of Edmonds. Land uses at these sites include single family residences and vacant parcels at Site 3D, single family residences, medical/health services and a veterinary clinic at Site 3E, and a single family residence at Site 3F. Site 3D is zoned RS-8 Single Family (8,000 square foot lots) and RM-1.5 Multi-Family (1,500 square foot of lot area/DU). Site 3E is zoned RS-8 and BN (Neighborhood Business). Site 3F is zoned RS-8.

Portal Siting Area 7 – Portal Siting Area 7 is a primary portal for the Unocal corridor. This portal siting area is located within the Cities of Lake Forest Park and Shoreline. The existing land use for this portal siting area is discussed under the Route 9–195th Street corridor.

Portal Siting Area 11 – Located in the City of Kenmore, Portal Siting Area 11 is common to both the Unocal and Route 9 corridors. This portal would include a pump

station adjacent to the existing Kenmore pump station for the Unocal System. The existing land use and zoning for Portal Siting Area 11 is discussed under the Affected Environment for the Route 9–195th Street Corridor.

Portal Siting Area 14 – Portal Siting Area 14 is located in the City of Bothell. It includes all or portions of 21 parcels. The majority of the siting area is developed with office park and industrial uses. There are also parcels with two ball fields. The southern-most portion of the site is undeveloped. One of the undeveloped parcels is associated with a large retail store that is located just outside of the siting area. Land use within 0.25-mile of the outer perimeter of Portal Siting Area 14 includes two ball fields to the immediate north with office park uses beyond; industrial uses to the north and east with an open space corridor and residential uses beyond; vacant industrial lands and higher density residential uses to the southeast; and SR-522 and I-405 highways and interchange to the south and west.

Candidate Sites 14A (4 acres) and 14B (3.7 acres) are zoned P (Park) and are occupied by ball fields. Site 14D (3.2 acres) is currently undeveloped/vacant land and is zoned R11-15 (Residential 11-15 du/ac), OP (Office-Professional) and CB (Community Business) and LI (Light Industrial).

Secondary Portal Siting Areas

Secondary portals along the Unocal corridor include Portal Siting Areas 5, 10, 12 and 13. Portal Siting Area 5 is discussed under the Route 9–195th Street corridor. Secondary portals are not expected to be used.

Portal Siting Area 10 – Secondary Portal Siting Area 10 is located in the City of Lake Forest Park. Single family residential development is the predominant land use within this siting area. A commercial shopping center is located in the southeastern part of the siting area. Land use within 0.25-mile of the outer perimeter of Portal Siting Area 10 is single family residential development to the north, east, and west, and a commercial shopping center to the southeast with single family residences and Lake Washington beyond.

Four candidate sites have been identified for this portal siting area (Sites 10A, 10C, 10D and 10E). Site 10A (5.5 acres) is zoned Single Family Residential, Low. Sites 10C (3.8 acres) and 10E (1.7 acres) are zoned Single Family Residential, Moderate and a portion of Site 10E is also designated Recreation/Open Space. Site 10D (4 acres) is located in the City of Lake Forest Park designated Town Center and is zoned Corridor Commercial.

Portal Siting Area 12 – This secondary portal siting area is located in the City of Kenmore. The predominant land use within this siting area is low density single family residential development on large lots with tracts of vacant land. Land use within 0.25-mile of the outer perimeter of Portal Siting Area 12 includes low density residential development to the north, east, and southeast; a large tract of open space beyond the residential development to the east; commercial and business uses to the south; and open space to the west.

Both candidate sites (12C and 12E) are zoned R-1-Residential (one dwelling unit per acre) and are occupied by single family residences. Site 12C is 3.1 acres and Site 12E is 2.1 acres.

Portal Siting Area 13 – Secondary Portal Siting Area 13 is located in a commercial business district in the City of Bothell and is characterized by a variety of land uses. The southwestern half of the siting area is comprised of larger parcels of land while the northeastern quarter is made up of smaller parcels. Land use within the northeastern quarter of the siting area includes a small amount of residential development (single family lots, a four-plex, and apartments), commercial and business uses (bank, art gallery, restaurants), community services/organizations (social and religious services), and office uses. The remaining portion of the siting area includes a small amount of residential development, office, commercial, and retail uses (grocery store, government service, and group home); park and public use (Sammamish River Trail and Park, Park at Bothell Landing, Triangle Park); and vacant parcels. Land use within 0.25-mile of the outer perimeter of Portal Siting Area 13 includes residential development to the north and east, the Sammamish River Trail, Sammamish River Park and Sammamish River to the south, and commercial and service oriented uses to the immediate west with single family residential development beyond.

Candidate Site 13A (2 acres) is occupied by a parking lot, and is zoned P (Park). Sites 13B (3 acres) and 13C (2.7 acres) are zoned R11-15, OP (Office Professional) and CB (Community Business) and are occupied by business uses.

Comprehensive Plan and Zoning Designations

The predominant land use and zoning designations for the portal siting areas along the Unocal corridor are residential (Figure 11-6). With few exceptions, utility conveyance and transmission facilities such as those associated with the Brightwater project are permitted through a conditional or special use permit process. Typically, when not listed as a use permitted outright or as a conditional or special use, an unclassified use permit is required by the local jurisdiction. Table 11-6 summarizes comprehensive plan land use and zoning designations within the portal siting areas for the Unocal corridor.

Shoreline Master Program Policies and Regulations

The Unocal corridor would cross the Sammamish River, North Creek and Swamp Creek many feet below the surface before terminating at the Unocal site (Figure 11-7). The shoreline designations range from Conservancy to Urban Mixed Use. Most utility construction is permitted in shoreline jurisdictions through a shoreline substantial development permit. This would apply to the conveyance corridor if construction associated with open cut construction or portal locations occurs within 200 feet of a designated shoreline.

Table 11-6. Predominant Land Use and Zoning Designations and Regulatory Requirements Relating to the Unocal Corridor

Portal Siting Areas	Jurisdiction	Predominant Land Use Designation	Predominant Zoning Designation	Regulatory Requirements for Conveyance Facilities
Primary Portals				
3	Edmonds	Corridor Development, Single Family Residential	Neighborhood Business, Multi-Family Residential (RM-1.5), Single Family Residential (RS-8)	Local public facilities that are planned, designated, and sited in the capital improvement plan are allowed uses in all residential, business, and commercial zones. Regional public facilities are permitted only in the public use P zoning district.
3	Snohomish County	Urban Medium Density Residential (8-12 DU/AC)	Residential 8,400 (R-8,400)	Transmission wires or pipes and supports are a permitted use.
7	Lake Forest Park	Single Family Residential (moderate, moderate/high), Multi-family High, Multi-family Low	Single Family Residential (RS-7.2, RS-10, RS-15, RS-20)	Utilities are listed as a conditional use in residential zones.
7	Shoreline	Low Density Residential, Medium Density Residential, High Density Residential, Public Open Space	Residential (R-6, R-24, R-48), Park	Utility facilities are permitted as a conditional use in residential zones. The land use index does not indicate whether utilities are a permitted use in areas zoned as Park.
14	Bothell	Civic Educational, Park, Residential (11-15 du/ac), Office Professional (OP), Community Business (CB), Light Industrial (LI)	Residential (R-15), Community Business (CB), Office Professional (OP), Light Industrial (LI)	Wastewater conveyance facilities are permitted in all zones.
Secondary Portals				
5	Mountlake Terrace	Single Family Residential, Commercial	Single Household Residential (RS 7,200), Freeway/ Tourist	Public utility facilities are permitted as a conditional use.
5	Shoreline	Low Density Residential, High Density Residential, Community Business	Residential (R-6, R-24), Community Business (CB)	Utility facilities are permitted as a conditional use in residential zones and as a permitted use in the Commercial Business zone.

Table 11-6. Predominant Land Use and Zoning Designations and Regulatory Requirements Relating to the Unocal Corridor (cont.)

Portal Siting Areas	Jurisdiction	Predominant Land Use Designation	Predominant Zoning Designation	Regulatory Requirements for Conveyance Facilities
10	Lake Forest Park	Single Family Residential (low, moderate, high), Mixed-Use Towne Centre	Single Family Residential (RS-7.2, RS-10, RS-15, RS-20), Town Center	Utilities are listed as a conditional use in residential zones; they are a permitted use in the Town Center zone.
12	Kenmore	Residential (R-1, R-4, R-8, R-12)	Residential (R-1, R-4, R-8, R-12)	Utility facilities are permitted in the residential zones (KC21A.08.060 A).
13	Bothell	Civic Educational, Park, Residential (11-15 du/ac), Office Professional (OP), Community Business (CB), Light Industrial (LI)	Residential (R-15), Community Business (CB), Office Professional (OP), Light Industrial (LI)	Wastewater conveyance facilities are permitted in all zones.

Note: See Table 11-4 for Primary Portal 11

Table 11-7 summarizes the shoreline designations and regulations for constructing wastewater conveyance facilities along the Unocal corridor.

Table 11-7. Shoreline Designations and Regulatory Requirements along the Unocal Corridor

Jurisdiction	Waterbody	Shoreline Designation	Regulatory Requirements for Conveyance Facilities
Bothell	Sammamish River	Conservancy	Shoreline Substantial Development permit (SSD) required
Bothell	North Creek	Urban	Permitted as a conditional use; SSD required
Kenmore	Sammamish River	Urban	Permitted subject to general requirements of King County Code Section 25.16.030; SSD required
Kenmore	Swamp Creek	Urban	Permitted subject to general requirements of King County Code Section 25.16.030; SSD required
Edmonds	Lake Ballinger	Conservancy II Freshwater Environment Suburban Residential IV	SSD required
Edmonds	Puget Sound	Urban Mixed Use I Urban Mixed Use II	SSD required

11.2.3.3 Outfall: Unocal

Outfall Zone 6 is located within the shoreline area of the City of Edmonds, just west of the Unocal site. Adjacent land use includes the Port of Edmonds Marina, Marina Beach Park and Olympic View Park to the north, the Burlington Northern-Santa Fe Railroad to the east and residences and shoreline to the southeast and south within the Town of Woodway.

The current comprehensive plan designation for the shoreline within the outfall zone is Downtown/Waterfront Activity Center. Activities envisioned for this area are mixed-use development; retail, office, and entertainment businesses; and recreational and park-like shoreline features. The zoning for the shoreline area within the outfall zone is Commercial Waterfront. The Commercial Waterfront zone is intended to reserve areas for water-dependent and water-related uses as well as to protect and enhance the natural features of the waterfront. The outfall facilities are not at present permitted outright or as a conditional use in this zone. The Edmonds Zoning Code indicates that regional public facilities are permitted only within the P zoning district. The P zoning district requires a conditional use permit for wastewater treatment plants.

11.3 Impacts and Mitigation

Land use impacts can be direct, indirect and cumulative. Direct impacts involve property acquisition for the project, changes to existing land use, and conflicts between existing and proposed land uses. Indirect impacts could result from redevelopment of properties adjacent to the proposed Brightwater System and from noise, visual and access impacts. Cumulative impacts relate to the combined effects of the proposed action and other planned projects in the project vicinity.

The construction and operation of Brightwater would directly and indirectly affect land and shoreline use. Impacts relate to the project's consistency with adopted land use plans and development regulations and its direct effect on existing and surrounding land use. Direct impacts would result if the treatment plant, conveyance portals or pump station, or outfall facilities physically infringe upon or displace current or planned land uses. Indirect impacts would occur during construction if roadways providing access to surrounding uses are disrupted, or if noise, dust, or construction light and glare affect adjacent uses. The treatment plant, pump station or other above ground facilities would primarily affect adjacent residents in relation to proximity and land use compatibility issues. Operation impacts primarily relate to the views toward such facilities and the potential for noise, odor, and transportation impacts. These impacts are discussed in Chapters 5, 10, 12, 13 and 16.

11.3.1 Impacts and Mitigation Common to All Systems

11.3.1.1 Study Methodology

The adopted land use plans and policies, and supporting SEPA documentation, for all of the jurisdictions within the Brightwater service area are incorporated by reference. The comprehensive plans and policies, zoning codes, shoreline master program policies, and development regulations were reviewed for Snohomish and King Counties and the Cities of Bothell, Brier, Edmonds, Kenmore, Lake Forest Park, Mountlake Terrace, Shoreline, Woodinville and the Town of Woodway.

These plans and regulations were examined to determine the potential impacts associated with construction and operation of a treatment plant at the Unocal or Route 9 site and associated conveyance corridors and outfall zones. The consistency with these plans and policies is discussed below under the Impacts and Mitigation section for each system. Additional information on plans and policies that relate to the siting of the Brightwater System is provided in Appendix 11-A.

In addition, site reconnaissance, aerial photos, and Assessors' data were reviewed to confirm existing and surrounding land use for treatment plant sites, conveyance corridors, portal siting areas, and outfall zones.

11.3.1.2 Land Use and Growth Impacts

Both King County and Snohomish County Tomorrow recently completed an analysis of the buildable land capacity within their jurisdictions as mandated by the GMA (RCW 36.70A.215) – King County Buildable Lands Evaluation Report (King County, 2002a) and Snohomish County Tomorrow 2002 Growth Monitoring/Buildable Lands Report (Snohomish County, 2003b).

Report findings indicate that there is sufficient residential and employment land capacity within each County's existing UGAs to accommodate the remaining portion of the adopted 2012 population and employment growth targets. That is, land needed for commercial, industrial and housing uses can be met through the 2012 horizon year with the UGAs and zoning densities in adopted city and county comprehensive plans. A few individual cities in each county have a potential shortfall with respect to their target; however, none of the identified cities are jurisdictions affected by the Brightwater System.

11.3.1.3 Proposed Mitigation Common to All Systems

Impacts that are common to the Brightwater System are discussed under each system component– treatment plant, conveyance and outfall – because the impacts differ for each of these components. However, a number of mitigation measures are common to all Brightwater System components. Both construction and operation mitigation common to all systems are discussed below.

Construction Mitigation Common to All Systems

Following issuance of the Final EIS and selection of a specific Brightwater System, King County will proceed to apply for regulatory permits and approvals and will be demonstrating compliance with permit criteria. In all cases, the Brightwater facilities will be constructed under applicable laws.

The Brightwater Treatment Plant, conveyance facilities, and outfall would follow applicable local, state and federal development regulations and site development standards for mitigating the impacts of such facilities. Public notification of construction hours; utilization of technologically efficient equipment and processes that minimize odors, noise, and dust; and notification of impacts to roadways are some of the mitigation measures that would be implemented at either site. King County will work with local jurisdictions to meet or exceed development requirements and minimize potential impacts

to surrounding land uses. See Chapters 5, 10, 12, 13, and 16 for a discussion of specific mitigation related to these issues.

Activities at portal locations for both the Unocal and Route 9 corridors could potentially impact adjacent land uses during construction. In addition to all applicable development regulations in host jurisdictions and the additional permit requirements and conditions imposed by local, state and federal regulating agencies, which contain many mitigation elements, the following mitigation measures would be implemented for the selected treatment plant site, conveyance corridor, and outfall zone:

- Specific primary portal sites would be chosen from within the 72-acre siting areas analyzed in this Final EIS to avoid displacing existing land uses when feasible.
- King County would coordinate with affected jurisdictions to procure all necessary land and shoreline permits to site and construct the Brightwater Treatment Plant and associated conveyance and outfall facilities once the sites for regional Brightwater facilities are selected. Where amendments to existing regulations and comprehensive plan policies are required, King County would ask host jurisdictions to enact any needed amendments, unless they do so on their own initiative, pursuant to applicable state law.
- King County would coordinate with affected jurisdictions regarding site development standards and appropriate mitigation.
- King County would coordinate with affected jurisdictions to design facilities that would blend in with the character of the surrounding areas.
- Compensation for property and property rights acquired and relocation assistance for eligible displacement impacts would be provided in accordance with applicable federal and state regulations.
- Construction impacts from odor, noise, and light and glare would be mitigated to the greatest extent possible as described in Chapters 5, 10, and 13, respectively.
- King County would implement best management practices during construction and operation of facilities.

Operation Mitigation Common to All Systems

In addition to meeting applicable local, state and federal regulations governing the operation of Brightwater facilities, the following measures would be implemented to reduce potential visual impacts related to the proximity of Brightwater facilities to adjacent land uses.

- Buffers would be established to limit the exposure of the treatment plant and any permanent above-ground conveyance facilities to adjacent developed areas; this would include vegetative buffers and setbacks from adjacent properties.

- All above-ground structures would be designed to visually blend with adjacent properties, including recreational areas. Refer to Chapter 12, for a discussion of visual mitigation measures.

11.3.1.4 Treatment Plant Impacts and Mitigation Common to All Systems

The treatment plant would include a variety of facilities and buildings that are described in Chapter 3. Most buildings would range from one to three stories in height except where indicated under the discussion for the Route 9 and Unocal Systems. A fence and exterior buffer would separate the treatment plant from adjacent land use.

Construction Impacts Common to All Systems: Treatment Plant

Construction impacts relate to the consistency of the proposed action with adopted land use plans and development regulations, and the direct impact of converting existing or planned land uses to a regional EPF use.

During construction, increased levels of dust, noise, odors, and traffic associated with construction vehicles and machinery could impact adjacent residential, commercial and recreational land use. Traffic associated with the construction phase of the wastewater treatment plant would use existing roads that are also used to access adjacent residential and commercial areas and businesses. These impacts would likely be intermittent over the course of project construction, which is anticipated to last up to 6 years. Access to residential areas and businesses would not be eliminated but could be temporarily diverted or re-routed at times. Residents may experience inconvenience during peak construction periods. Refer to Chapter 16 for a more detailed discussion of impacts to local traffic during construction and operation of the facilities.

The King County Comprehensive Plan includes policies requiring the County to ensure that “needed facilities and services are provided in the region” (King County, 2001a). Brightwater is necessary to provide adequate wastewater treatment services for the communities served by King County, which include areas in both Snohomish County and King County. When the treatment plant goes into service, about 63 percent of the wastewater treated at the plant will come from Snohomish County. Comprehensive Plan policies call for sharing EPFs with neighboring counties, where advantageous to both jurisdictions, “to increase efficiency of operation” (King County Comprehensive Plan Policy F-220). The Brightwater site locations are designed to increase operational efficiency, as planned for in the RWSP. Here, the two-year siting process conducted by King County has concluded that the Brightwater facility locations identified in the Final EIS are the optimal and most efficient locations.

The King County and Snohomish County comprehensive plans are predicated on the development of adequate wastewater capacity through projects such as Brightwater, as planned growth in the UGAs is dependent on the provision of adequate wastewater

treatment capacity. The utilities element of the Snohomish County comprehensive plan specifically states:

> Another important service provider is King County METRO, which provides wastewater treatment for sections of south Snohomish County within drainage basins served by its West Point Treatment Plant. This is a major regional facility that serves large areas of northwest King County and north Seattle in addition to the relatively small but growing sections of south Snohomish County. King County METRO is currently upgrading its two large treatment plants and is considering the construction of a third plant within the next 10-15 years. One location under consideration for this plant is near the King/Snohomish County line (Snohomish County, 2000).
>
> Snohomish County's Comprehensive Plan directs the County to develop wastewater treatment facilities to support urban growth within UGAs in a manner consistent with the protection of the natural environment. (Snohomish County Comprehensive Plan, Goal UT-3.) The 2001 Snohomish County Capital Facilities Plan also makes specific note of Brightwater, for purposes of planning for Snohomish County needs:
>
> King County has identified a need for a third regional treatment plant at the north end of its service area and is now in the process of selecting a site. Part of the demand for this additional treatment capacity is originating in south Snohomish County where wastewater flows from the Alderwood and Cross Valley service areas southward into the King County system. Existing state and local regulations will ensure that planning, designing, and construction of necessary treatment capacity is completed before new development is allowed to connect to wastewater systems that are at or over treatment plant capacity (Snohomish County, 2000).

The additional wastewater treatment capacity to be provided by Brightwater supports growth anticipated within Snohomish County UGAs in the local and County GMA comprehensive plans.

The Brightwater siting process has been generally consistent with the criteria and process for siting EPFs that was developed by Snohomish County Tomorrow and adopted by Snohomish County and the majority of its cities, including the City of Edmonds. Snohomish County has recently amended its zoning code to implement the EPF process (SCC 30.42D). As discussed above, the EPF Ordinance was recently overturned by a state GMA Board and declared invalid. Nonetheless, factors that existed in the Ordinance, many of which remain as Snohomish County Comprehensive Plan policies and are considered as part of the County's siting process, have been applied below to the Brightwater project:

> ***Factor 1 –The project sponsor must demonstrate a need for the EPF.*** The need for the Brightwater facilities is identified in the RWSP, which considers the issues identified in this criterion.

Factor 2 – The facility must be consistent with the sponsor's long range plans for facilities and operations. Here, the RWSP is regional in scope and elaborates on the need for Brightwater and its consistency with King County's long range plans. The RWSP is incorporated by reference into this EIS.

Factor 3 – The EPF should demonstrate its relationship to local, regional, and state plans, and should be consistent with the adopted plans of the host community. The Brightwater facilities carry out the mandate found in various state laws to provide adequate wastewater treatment facilities for regional, county and local residents. Regionally, King County provides wastewater services to 33 cities and sewer districts in both King and Snohomish Counties. However, very few local plans contemplate the siting of a regional wastewater treatment plant at present. As part of the siting and permit process, King County will be discussing with the host jurisdiction any modifications to its development regulations or comprehensive plan required to achieve the desired consistency. Once the locations for the regional Brightwater System have been determined by King County, following its four year regional siting process, host jurisdictions may choose to, at that point, pursuant to applicable state law, initiate any plan or regulatory changes required to accommodate the regional essential public facilities. Reasonable mitigation will be provided to help make Brightwater as compatible as feasible with the vision of land development within each local jurisdiction as discussed in this EIS. Additional discussion on specific land use policies and zoning currently in place on the Unocal and Route 9 sites is located earlier in this land use section.

Factor 4 – The facility should include a significant share of the host community's population. The Brightwater facilities encompass a large part of South Snohomish County and North King County. Generally speaking, most of the jurisdictions in which components of the Brightwater System are proposed fall within the King County service area. At present, a small portion of the service area in the vicinity of Edmonds would not be included in the service area. However, King County has offered to combine any treatment plant located in Edmonds with the two existing treatment plants in Edmonds operated by the Cities of Edmonds and Lynnwood. The Agreement for Sewage Treatment between King County and Edmonds provides that in 2012, King County will be treating wastewater from most of the eastern area of the Edmonds wastewater service area year round in an arrangement whereby an equal amount of sewage from King County's service area would be treated at Edmonds.

Factor 5 – Sponsors are to submit documentation on the minimum siting requirements for Brightwater, such as facility size, and mitigation needs. These siting requirements are documented in the RWSP, implementing ordinances, Phase 1 and 2 siting documents, and this EIS.

Factor 6 – The project sponsor should investigate alternative sites. King County has engaged in an extensive 4-year siting process evaluating alternative sites. This

evaluation process has been the subject of much public discussion and environmental review, which continues in this EIS.

Factor 7 – The overall concentration of EPFs in the County shall be reviewed to avoid an undue concentration in any one community. EPFs take many forms, as reflected in the state legislation found at RCW 36.70A.200. These include jails, schools, regional facilities, treatment plants, airports, etc. The City of Edmonds has two existing wastewater treatment facilities serving local and regional needs, a Washington State Ferry terminal, an Amtrak station and soon a Sound Transit station. There is not a concentration of EPFs in the vicinity of the Route 9 site.

Factor 8 – Sponsors should encourage local public participation. King County has conducted a multiple year series of public participation activities that exceeds applicable legal requirements. Public outreach and involvement activities are documented in the following King County publications:

- Public Involvement Summary for the Second Part of Phase 3 Siting Process, (2003c)
- Public Involvement Summary for the First Part of Phase 3 Siting Process, (2002c)
- Public Involvement Supplement for Phase 2 Siting Process, (2001d)
- Public Involvement Summary for Phase 2 Siting Process, (2001c)
- Public Involvement Summary for Phase 1 Siting Process (2001b)
- Summary of October 2001 Public Workshops
- Summary of April 2001 Public Workshops; Final Public Involvement Program, August 2000
- Stakeholder Workshop Summary, August 2000
- Focus Group Report, July 2000
- Summary of Introductory Open Houses, June 2000
- Community Leader Interviews, May 2000
- Brightwater newsletters – Fall 2003, Spring 2003, Winter 2003, Summer 2002, Spring 2002

Factor 9 – The project must be consistent with local land use regulations. See analysis in Factor 3.

Factor 10 – The project should be compatible with surrounding land uses. Extensive analysis on the efforts to make Brightwater as compatible as feasible with surrounding land uses is included in documents such as the RWSP, Phase 1 and 2 siting documents, and this EIS.

Factor 11 – Adequate mitigation must be provided. In addition to environmental mitigation policies for wastewater treatment established by King County Code,

Chapter 28 (K.C.C. 28.86.140), this EIS identifies reasonable mitigation measures in a wide variety of areas. Other mitigation measures are expected to be identified during the permitting phase.

In late October 2003, in response to the Central Puget Sound GMA Board ruling which invalidated Snohomish County's EPF ordinance, Snohomish County adopted a moratorium that will preclude the siting of any Brightwater Facilities at least until the moratorium is repealed.

Until the Snohomish County Council takes action consistent with the Central Puget Sound Growth Management Hearing Board's Order, it is not possible to ascertain the final form of Snohomish County's EPF regulations. Thus, King County will address Snohomish County's EPF development regulations when King County is ready to proceed with the Brightwater project.

Throughout the planning of Brightwater, King County has worked with affected jurisdictions on the siting and evaluation of Brightwater. This is demonstrated through Ordinance 14043 and 14107 that were adopted to implement the RWSP and refine and develop the Brightwater proposal. As indicated in earlier discussion, Snohomish County and the affected jurisdictions were involved in the development of the siting criteria that were adopted into these ordinances.

Development of Brightwater at either treatment plant site would displace current uses with a treatment plant. Siting Brightwater at either the Route 9 or Unocal location would not significantly impact the host jurisdiction's ability to accommodate current housing or job growth targets. These conclusions are supported by recent land capacity data for King and Snohomish Counties and are discussed in more detail for each treatment plant site.

Operation Impacts Common to All Systems: Treatment Plant

Operation impacts of the Brightwater Treatment Plant are discussed separately for the Route 9 and Unocal sites later in this chapter. Impacts of the treatment plant may be experienced by and affect nearby land uses. Please refer to chapters 5, 10, 12, 13, and 16 for a detailed discussion of potential impacts and mitigation measures to minimize those impacts.

Proposed Construction Mitigation Common to All Systems: Treatment Plant

In addition to proposed mitigation discussed under Construction Mitigation Common to All Systems, the following measures are proposed to mitigate potential impacts associated with the construction of the Brightwater Treatment Plant.

Several Draft EIS comments focused on the extent to which current development regulations or EPF criteria may not ultimately be met by the Brightwater Project. In some instances, as identified in the EIS, legislative changes (i.e., rezone) may be required for the Brightwater facility to be built. This is not unusual at this stage in the siting process for large regional facilities. In other instances, King County will, following issuance of the Final EIS and selection of a specific Brightwater System, proceed to apply for regulatory permits and approvals and will be demonstrating compliance with permit criteria. In all cases, the Brightwater facilities will be constructed under applicable laws.

As previously stated, on October 13, 2003, the Central Puget Sound Growth Management Hearing Board issued its decision on King County's appeal of Snohomish County's EPF Ordinance. It found that the EPF Ordinance did not comply with the GMA and issued a Declaration of Invalidity based on the EPF Ordinance's non-compliance. The Board has given Snohomish County until January 14, 2004 to take appropriate legislative action to bring the EPF provisions of its development regulations into compliance with the goals and requirements of the GMA. In the meantime, Snohomish County's existing comprehensive plan policies and land use regulations govern the siting of EPFs, to the extent that those policies and regulations do not preclude EPF siting.

Until the Snohomish County Council takes action consistent with the Central Puget Sound Growth Management Hearing Board's Order, it is not possible to ascertain the final form of Snohomish County's EPF regulations. Thus, King County will address Snohomish County's EPF development regulations when King County is ready to proceed with the Brightwater project. Until the issues in these cases are resolved, permitting of Brightwater facilities in Snohomish County will be uncertain.

Proposed Operation Mitigation Common to All Systems: Treatment Plant

In addition to proposed mitigation discussed under Operation Mitigation Common to All Systems, the following measures are proposed to mitigate potential impacts associated with the Brightwater Treatment Plant operations:

- King County would coordinate closely with affected jurisdictions to meet development requirements and minimize potential visual impacts to surrounding land uses.
- Setbacks and buffers would be used to limit the exposure of the treatment plant to adjacent developed areas.
- Compliance with applicable policies and processes relating to EPFs, subject to the limitations set forth under state law and GMA.

11.3.1.5 Conveyance Impacts and Mitigation Common to All Systems

Construction Impacts Common to All Systems: Conveyance

Because the conveyance corridors would utilize tunnel construction, surface disruptions generally would occur only at the portal locations. Thus, there would be no significant adverse land use impacts except potentially where there would be surface disruptions. Surface impacts would occur in the vicinity of microtunnel pits and any areas of open-cut construction.

A safety relief point would be constructed along the shoreline of the Sammamish River near Portal 11, to provide emergency relief under severe conditions. Construction of the structure would require a shoreline substantial development permit from the City of Kenmore for construction activities proposed within 200 feet of the shoreline. Construction of this facility would result in surface disruptions; however no displacements of existing land uses are anticipated.

The identified portal siting areas reviewed in this EIS are 72 acres in size; however, in most cases only about 2 acres of the 72-acre siting area would actually be required for construction of primary portals. In some cases, between 2 and 10 acres could be used for primary portals if available (see Chapter 3 for more detail). Recent Level 2 portal screening that was conducted as part of the Brightwater conveyance predesign identified candidate sites to carry forward for further screening. These sites met engineering needs and minimized environmental and community impacts. The Brightwater conveyance predesign Level 2 portal screening process is described in Chapter 2 and included in Appendix 2-B.

In a worst-case evaluation, construction within each primary portal siting area could result in the displacement of all or a portion of existing land uses at candidate sites. Existing uses would be replaced with a public facility use. Depending on the corridor selected and the exact location of the portal, pump station or dechlorination facility, construction has the potential to displace some residences, businesses, or recreational areas.

The use of secondary portals is unlikely and depends on additional geotechnical analysis of the selected Brightwater Conveyance System. If secondary portals are required along the selected conveyance corridor, construction activities would impact one-half acre or less. Secondary portal sites would be selected to avoid displacing existing land uses. Permanent facilities at the secondary portal siting areas would be limited to a manhole structure; no other above-ground facilities would be required.

With the exception of the City of Edmonds, conveyance facilities are either permitted as a primary or conditional use within potentially affected jurisdictions. A rezone to the P zoning district would be required to site regional public facilities within the City of

Edmonds. A shoreline substantial development permit would be required if a portal is sited within regulated shorelines.

A 24 hour-per-day construction period may occur in some portal locations where compatible land uses exist and such a construction schedule is acceptable to local permitting agencies. Land use impacts would relate to dust, odor, noise, and light and glare generated by construction equipment and traffic. Refer to Chapter 3 for a discussion of proposed construction methods, phasing, and duration.

In addition to activities at portals, pipes will need to be installed to connect existing conveyance facilities to the new influent tunnels at Portal Siting Areas 11 and either Portal Siting Area 14 (for Unocal) or 41 and 44 (for Route 9). The pipes would be installed in existing public rights-of-way and King County property.

Residences could experience disruption of daily activities, such as outdoor activities, during peak construction periods. Residents who sleep during the day could be disrupted by noise. Businesses along the corridor may have temporary delays to access caused by construction vehicles. Construction-related dust would settle on vehicles, outdoor furniture, etc., with increased frequency. Temporary impacts during construction could alter daily activities of local residents, particularly during peak construction periods. Construction impacts would cease when the project is completed. Refer to Chapters 5, 10, 13, and 16 for further discussion of construction impacts associated with air quality, noise and vibration, light and glare, and transportation.

Most of the tunneling impacts would not have significant land use impacts since they would occur under existing or potential future uses.

Operation Impacts Common to All Systems: Conveyance

At the completion of the project, the portal areas could be restored and made available for other uses; unused portions could be surplused and developed by future owners; or used for permanent odor control and/or tunnel access facilities. Since the exact locations of the portals have not been determined, the following discussion represents a worst-case evaluation, by assuming that portals would be located near high-density residential or commercial business uses. It is not expected that portals would significantly influence the character of the surrounding areas or how the surrounding areas would develop in the future.

All three corridors include primary portal siting areas that could affect densely developed residential and/or commercial areas. Some primary portals and any secondary portals that are used along each corridor will be at grade structures that would not be noticeable from surrounding areas. At most primary portal locations, permanent odor control and/or tunnel access facilities would be constructed. Potential noise and odor impacts would be mitigated through facility design, and facilities would be designed to blend architecturally with surrounding land uses. Since the portals would only require periodic maintenance, traffic impacts to adjacent land use would be minimal.

Operation of the safety relief point would not change or influence the character of the surrounding land use.

Proposed Construction Mitigation Common to All Systems: Conveyance

In addition to proposed mitigation discussed under Construction Mitigation Common to All Systems, the following measures are proposed to mitigate potential construction impacts associated with conveyance facilities.

Portals and any permanent above-ground facilities would be sited to avoid displacing existing land uses when feasible. In addition, these facilities would be sited near compatible land uses or where the facilities would have the least impact. For facilities sited adjacent to residential areas, King County would work with local jurisdictions to ensure that appropriate buffers and facility design are implemented to minimize impacts. (Refer to Chapter 12.) In commercial areas, King County would develop construction traffic plans in accordance with local permitting requirements, including street use permits that minimize impacts to local businesses. (Refer to Chapter 16.)

Proposed Operation Mitigation Common to All Systems: Conveyance

In addition to proposed mitigation discussed under Operation Mitigation Common to All Systems, the following measures are proposed to mitigate potential operational impacts associated with conveyance facilities:

- At completion of portal construction, much of the portal area could be restored and made available for other uses
- The design of all permanent facilities will be coordinated with local jurisdictions and will incorporate architectural details to blend with surrounding uses
- Potential noise, odor and aesthetic impacts would be mitigated through facility design

11.3.1.6 Outfall Impacts and Mitigation Common to All Systems

Construction Impacts Common to All Systems: Outfall

No significant long-term land use impacts are anticipated from the construction of the outfall in Zone 6 or Zone 7S. Shoreline areas adjacent to the outfall zones include recreational, industrial and residential uses. During construction, recreational activities

would be temporarily disrupted along the shoreline within Zone 6. Refer to Chapter 14 for a discussion of impacts. Construction would occur both onshore and offshore. A shoreline substantial development permit would be required for all construction activities within 200 feet of the shoreline. In addition, outfall construction will be regulated under the Clean Water Act (CWA) 404 permit from the U.S. Army Corps of Engineers, a CWA 401 permit from the Washington State Department of Ecology, Aquatic Land Use Authorization from Washington State Department of Natural Resources, and Hydraulic Project Approval from the Washington State Department of Fish and Wildlife.

Construction impacts common to both Zones 6 and 7S relate to the potential noise and dust impacts associated with onshore and offshore construction activities. Noise and dust generated by heavy equipment may disrupt nearby recreational uses or residential areas. Light and glare associated with nighttime construction activities could impact adjacent residential areas if the outfall is located in the southern part of Zone 7S.

Adjacent recreational areas tend to be more heavily used during the summer months, particularly in Zone 6. Construction of the outfall would likely include summer construction. During the construction period, which is expected to last 10 to 12 months, over a period of up to two years, it is likely that shoreline uses in the vicinity of the outfall zones would be temporarily disrupted.

Operation Impacts Common to All Systems: Outfall

No significant land use impacts are anticipated from the operation of the outfall in Zone 6 or Zone 7S, since the outfall and diffuser would be submerged well offshore. Operation of the outfall, diffuser or safety relief system is not expected to change or influence the character of the surrounding land use.

Regular maintenance and inspection of the facilities would result in occasional vehicle trips to the site; however, this would not significantly impact adjacent land use. If a restriction zone is established for the in-water portion of the outfall, underwater diving or exploration of the marine environment in these areas may be precluded (see Chapter 14).

Proposed Construction Mitigation Common to All Systems: Outfall

In addition to proposed mitigation discussed under Construction Mitigation Common to All Systems, the following measures are proposed to mitigate potential impacts associated with the outfall construction. Construction areas will be clearly marked to ensure that the public does not enter areas that may be hazardous. Temporary and permanent access routes will be developed to minimize disruption of park and beach access as much as possible (see Chapter 16).

Best management practices (BMPs) will be used through completion of the outfall and diffuser construction and used throughout the operation of the outfall as described in

Chapter 6 of this EIS. These practices will be used to protect the health of adjacent residential neighborhoods and recreational areas (see Chapter 9).

Proposed Construction Mitigation Common to All Systems: Outfall

In addition to proposed mitigation discussed under Operation Mitigation Common to All Systems, the following measures are proposed to mitigate potential impacts associated with the outfall operations:

- Permanent access routes will be developed to ensure park and beach access are maintained, if currently available.
- Best management practices (BMPs) will be used throughout the operation of the outfall as described in Chapter 6 of this EIS. These practices will be used to protect the health of adjacent residential neighborhoods and recreational areas (see Chapter 9).

11.3.2 Impacts and Mitigation: Route 9 System

11.3.2.1 Treatment Plant: Route 9

Construction Impacts: Route 9 Treatment Plant

Construction of the Brightwater Treatment Plant at the Route 9 site would involve the conversion of approximately 114 acres from rural residential, industrial, and commercial uses to a public facility use. This would also result in a permanent reduction of industrial zoned land supply in the local area. Conversion of the property would also displace multiple businesses and several residential occupants that are located within the site. The occupants currently located on the site include: Northwest Landscaping, StockPot, Inc., Mustang Ranch (Auto Recycling), Greenleaf Auto, Woody's Auto, C.T. Sales, Activate Excavator Rentals, Marco Best Cuts, Evergreen Utility Contractors, Aztech Electric Contractors, Rushent Sales, Quality Business Systems, Lydig Construction, HMS Electronics, Insurance Auto Auctions, Evergreen West Wholesale Lumber, Fitz Auto Imports and two residential tenant households.

Conversion of the Route 9 site from industrial to a public facility use would not significantly impact the regional supply of industrial land. In 1998, Puget Sound Regional Council and the Center for Community Development and Real Estate at the University of Washington completed a study of long-term industrial land supply and demand. The study defined "industrial land" as urban land designated in comprehensive plans for manufacturing, heavy and light industry, research and development, wholesale trade, warehousing and distribution, and business parks (PSRC, 1998).

The study estimated the net industrial land supply for the region at 21,500 acres. The net industrial land supply is the amount of land potentially available for future development and excludes already developed areas, designated critical areas, certain public purpose lands, and future road right-of-way needs (PSRC, 1998). Half of the region's net industrial land supply is located in Snohomish (28 percent) and King (21 percent) counties. The projected regional demand for industrial land through the year 2020 was estimated to be between 5,600 and 7,100 acres.

The Route 9 site represents about 0.5 percent of the net industrial land supply in the region and 1.8 percent of the supply in Snohomish County. Given the regional demand, which represents about 26 to 33 percent of the net industrial land supply, there appears to be an adequate supply of land to relocate existing industrial uses in the Puget Sound region.

Land capacity analysis that was recently completed for Snohomish County Tomorrow's 2002 Growth Monitoring/Buildable Lands Report (Snohomish County, 2003b), indicate there is sufficient individual and collective residential and employment capacity within the existing urban growth areas (UGAs) to accommodate the remaining portion of the adopted 2012 population and employment targets (Snohomish County, 2003b). For the Southwest County UGA, the County has capacity for 27,650 additional jobs beyond the 2012 employment target.

The City of Woodinville also prepared a land capacity analysis as part of its 2002 Comprehensive Plan Update. The results of this analysis indicate that the City needs an additional 16.77 acres within the Industrial zone to meet its remaining projected employment allocation.

Woodinville currently has about 67 acres of industrial zoned land within its UGA that is either vacant or redevelopable; 12 of these acres are within the Grace Neighborhood. About 17 acres would be required to meet the remaining projected employment allocation, which is beyond the City's 2012 planning horizon. This could be accomplished on the 55 acres that would remain after subtracting out the Grace Neighborhood. These findings are consistent with the Carrying Capacity Analysis that was conducted as part of the City's 2002 Comprehensive Plan Update (Woodinville, 1996 and updates).

The majority of the Route 9 site is within the joint planning area for the Maltby UGA in unincorporated Snohomish County and City of Woodinville's UGA. Although the site is within the approved UGA for the City of Woodinville, it is currently governed by Snohomish County. At this time, Woodinville currently proposes annexation of an area within its UGA that does not include the Route 9 plant site.

As discussed under Impacts Common to All Systems: Treatment Plant, Snohomish County's Comprehensive Plan directs the County to develop wastewater treatment facilities to support urban growth within UGAs in a manner consistent with the protection of the natural environment (Goal UT-3; Snohomish County, 2000). It also adopted the EPF siting process developed by Snohomish County Tomorrow. Because the Route 9 site

is located within a designated UGA, use of the site for the Brightwater Treatment Plant would be consistent with comprehensive plan policies that encourage development in areas where urban facilities and services can be provided. A more detailed analysis of how the EPFs siting guidelines are applied to the Brightwater proposal in general is found above under the discussion of Impacts Common to All Systems: Treatment Plant.

The Brightwater treatment plant would also be a continuation of land use trends in the vicinity of the Route 9 site that are making a transition from rural to industrial uses. Up until late October 2003, construction of a wastewater treatment plant at the Route 9 site would have been consistent with the Snohomish County zoning for the portions of the site that are zoned Light Industrial (LI) and Heavy Industrial (HI). A conditional use permit would be required to construct treatment plant facilities in the R-5 and FS zones; however, no facilities are proposed in either the R-5 or FS zones. Compensatory wetland mitigation and fishpond replacement would occur in the R-5 zone and a new wetland would be created in the FS zone.

In late October 2003, in response to the Central Puget Sound GMA Board ruling which invalidated Snohomish County's EPF ordinance, Snohomish County adopted a moratorium that will preclude the siting of any Brightwater Facilities at least until the moratorium is repealed.

Although not presently proposed for annexation, if the Route 9 site were annexed by the City of Woodinville in the future, a wastewater treatment plant would be consistent with the City's proposed land use and zoning for the site. The City of Woodinville future land use map designates the portion of the Route 9 site within its UGA as Industrial. This is documented in the recent City of Woodinville 2002 Comprehensive Plan Update and EIS Addendum. Regional public facilities are permitted within the industrial zone and would require a special use permit. Although Brightwater is classified as an EPF, it also meets the intent of industrial zone – "to provide for the location and grouping of enterprises and activities involving manufacturing, assembly, fabrication, processing, bulk handling and storage, research facilities, warehousing and heavy trucking" (WMC 21.04.130). From a land use compatibility viewpoint, Brightwater is more compatible in an industrial zone than in other zones such as office, commercial or residential.

Development of the site would be subject to development standards (e.g., access, bulk, landscaping, signs, off-street parking) as outlined in the Snohomish County Code (SCC). Specific bulk, landscaping, signage, and parking requirements are summarized below for each zoning district on the Route 9 site:

> **Minimum Setbacks –** A minimum setback of 50 feet is required between residential zones and industrial zones. There are no minimum setbacks required between industrial uses and adjacent commercial and industrial zones.
>
> **Height –** The maximum height is 45 feet in the R-5 zone, 50 feet in the LI zone, and 65 feet in the HI zone.

Lot Coverage – The maximum lot coverage is 35 percent in the R-5 zone; however, special requirements for government and utility structures and facilities state that such facilities "shall have no minimum lot area" (SCC 18.42.050).

Landscaping – LI and HI zoned lands that abut residential zones must provide a 20-foot wide Type II landscape buffer. The Type II buffer shall be a minimum height of 5 feet and consist of plant materials spaced to form a sight-obscuring screen (SCC 18.43.040).

Signs – Signs for identification purposes are permitted to have an area not to exceed one square foot for each linear foot of business property frontage (SCC 18.44.040).

Off Street Parking – Parking requirements are not specified for a wastewater treatment plant and would therefore be determined by the planning director (SCC 18.45.050).

No significant impacts associated with site layout and design are anticipated. The Brightwater Treatment Plant would be subject to the site development standards described above, which are aimed at mitigating the impacts of such facilities. It is assumed that close coordination between King County and Snohomish County would result in a facility that is designed to both meet the SCC requirements and minimize potential visual impacts to surrounding residential areas. Because the Route 9 site is also located within the City of Woodinville UGA and could be annexed into the city at some future date, the updated treatment plant site layout has been developed in accordance with the City of Woodinville design standards as well. Refer to Chapter 12 for a detailed discussion of impacts and mitigation associated with the facility design and views toward the proposed facility.

Operation Impacts: Route 9 Treatment Plant

Operation of the Brightwater Treatment Plant at the Route 9 site would preclude the development of other industrial uses at the site as envisioned in both the Snohomish County Comprehensive Plan and the proposed annexation area of City of Woodinville Comprehensive Plan (Woodinville, 1996 and updates).

Proposed Mitigation: Route 9 Treatment Plant

The applicability of local, state and federal regulations and permit conditions which address mitigation requirements and other general mitigation are described under Operation Mitigation Common to All Systems. In addition, the Brightwater Treatment Plant would be sited on the portion of the Route 9 site that is located within a designated Urban Growth Boundary that is a joint planning area for Snohomish County and the City of Woodinville.

11.3.2.2 Conveyance: Route 9

Impacts and Mitigation Common to Both Route 9 Corridors

Construction Impacts Common to Both Corridors

Major land uses along the influent portion of the Route 9 corridors include commercial centers in the Cities of Lake Forest Park and Kenmore; the Burke-Gilman/Sammamish River Trail; and the North Creek Sportsfields. Each of these land uses would potentially be affected by the portal locations along the influent portion of the Route 9 corridors. In most cases, primary portal construction would require about 2 acres; however, for some portal sites that are larger than 2 acres, the entire site may be used for construction staging in an effort to reduce offsite impacts and the overall construction schedule.

Portal Siting Area 11 – Common to both the Route 9 and Unocal corridors, this primary portal siting area is located within a commercial business district. The northern half of this siting area is the most densely developed.

Based on the candidate sites identified for this portal siting area, between 2.3 and 4.3 acres of retail, office or warehouse uses could be displaced. All candidate sites are relatively close to one another. Development at candidate Site 11A could displace two retail stores and an office building; Site 11B could displace a warehouse, and Site 11C could displace a grocery store and adjacent retail uses. Sites 11A and 11B would likely have fewer impacts on adjacent land use given their more industrial location away from residential neighborhoods and the more intensely developed commercial areas to the north of NE Bothell Way. Site 11C is surrounded by more intense commercial development and has a greater potential to impact adjacent land use.

Portal Siting Area 19 – Candidate Site 19C has been selected as the site for portal construction. Construction at this portal siting area could displace up to 8.5 acres of industrial land use located in unincorporated Snohomish County. A conditional use permit would be required to site the portal or a dechlorination facility and a shoreline permit would be required if either facility were sited within the Puget Sound shoreline.

Portal Siting Area 41 – Construction at any of the candidate portal sites is not expected to significantly impact existing land uses. Sites 41A and 41C would not result in the displacement of any existing land use, as these sites are vacant. Similarly, Site 41X is occupied by King County's North Creek pump station. Construction at Site 41A has a greater potential to affect natural areas, as the site is bordered by North Creek on the north and wetland area on the east. Site 41D would result in the displacement of one of the highly-used North Creek Sportsfields. Portal construction at Site 41J would likely displace the commercial building that currently occupies the site. Site 41W is occupied by residential uses and would result in the displacement of up to 5 residences. Depending on which site is selected, development at Sites 41A, C, D, J or X would replace land that is designated for high density residential, office, business and industrial uses with a

public facility use. Development at Site 41W could remove up to 3.7 acres of land capacity for single family residential and office uses. However, as previously stated, unused portions of the portal site can be made available for other uses thereby minimizing impacts associated with development capacity.

A shoreline permit would be required if the portal were sited within the North Creek shoreline.

Portal Siting Area 44 – Construction at the candidate portal sites would result in the displacement of 2.3 to 8.7 acres of residentially zoned land. Site 44C would not displace any land use while Site 44D could displace a farm and a single family residence and 44E could displace a single family residence. Given the more rural nature of this area, construction is not expected to significantly impact adjacent land use.

Portal 41 Influent Pump Station Option

Potential land use and displacement impacts would be the same as discussed for Portal Siting Area 41. Under the Portal 41 IPS Option, there would be temporary impacts to adjacent land uses due to the increased intensity of construction. Nearby business and recreational users could expect to experience increased inconveniences due to noise, dust and traffic disruptions over the 2-year construction period for the IPS, similar to those impacts identified for portal construction, which is expected to occur for an additional 1.5 years after construction of the IPS.

Operation Impacts Common to Both Corridors

Operation impacts would be similar to those discussed under Impacts Common to All Systems: Conveyance.

A dechlorination facility would be located in Portal Siting Area 5 for the 195th Street corridor and in Portal Siting Area 26 for the 228th Street corridor. The overall site for the permanent structure would be 0.5 acre or less and would include an access road, loading area, and space for landscaping and security around the building. This facility would be designed to blend into the surrounding area in which it is sited.

Odor control facilities would be located at Portal Siting Areas 11, 41 and 44 which are common to both corridors and at Portal 5 for the 195th Street corridor and Portal Siting Area 26 for the 228th Street Corridor. The overall site for the permanent structure would be about 1 acre for Portal Siting Areas 11, 41 and 44 and the height of the structure would be approximately 20 feet. Portal Siting Areas 5 and 26 would require less than 1 acre to site the structure and the building height would be approximately 15 feet.

Portal 41 Influent Pump Station Option

At the completion of the project, permanent structures for the pump station, odor control, standby power, and electrical substation facilities would be located at the site. The structures would be of similar height as adjacent structures, and would be designed to

architecturally blend with surrounding land uses. Potential noise and odor impacts would be mitigated through facility design. (Refer to Chapter 5 and Chapter 10 for discussion on Air and Noise).

Relocating the IPS to Portal Siting Area 41 provides a corresponding reduction in density at the treatment plant site and potentially more open space.

Proposed Mitigation Common to Both Corridors

Mitigation for construction and operation of the influent portion of the Route 9–195th Street and Route 9–228th Street Corridors is discussed under Impacts and Mitigation Common to All Systems.

Mitigation for construction-related land use impacts for the Portal 41 Influent Pump Station (IPS) Option would be similar to that described for the portal at Portal Siting Area 41. Mitigation for displacement of the recreational use at Candidate Site D would be developed in coordination with the City of Bothell. With facility layout, design and landscaping to be compatible with adjacent land uses as proposed, other operation impacts are expected to be minimal; therefore, no additional mitigation is proposed. (See related Chapters 5, 10, 14, and 16.)

11.3.2.3 Route 9 – 195th Street Corridor

Construction and operation impacts associated with Portal Siting Areas 11, 19, 41, and 44 are discussed under Impacts and Mitigation Common to Both Route 9 Corridors.

Construction Impacts: Route 9 – 195th Street Corridor

Construction of the influent and effluent portions of the 195th Street corridor could result in the displacement of various land uses within the primary portal siting areas along the corridor. Dechlorination and odor control facilities would be located at Portal Siting Area 5.

Secondary Portal Siting Areas 7, 23, 27 and 45, if used, would require one-half acre or less and thus could potentially avoid displacing or disrupting existing land uses even though these areas are developed at higher densities with little vacant land. As previously discussed, construction is not anticipated at secondary portals.

Primary Portal Siting Areas

Portal Siting Area 5 – This portal siting area contains a mix of business uses with a small amount of residential development. Construction at this portal siting could result in the displacement of between 1.0 and 3.3 acres of existing land use. Candidate Site 5B could displace a service building/business; Site 5G could displace a service building and business and an office building; and Site 5X could displace a service station and bank.

Given the density of development within this siting area, surrounding land use has a greater potential to be impacted by dust, odor or noise generated by construction activities and traffic than less developed portal siting areas.

Portal Siting Area 19 – Land use impacts associated with this portal siting area are discussed under Impacts Common to Both Route 9 Corridors.

Portal Siting Area 41 – Land use impacts associated with this portal siting area are discussed under Impacts Common to Both Route 9 Corridors.

Portal Siting Area 44 – Land use impacts associated with this portal siting area are discussed under Impacts Common to Both Route 9 Corridors.

Secondary Portal Siting Areas

As previously noted, secondary portal siting areas are not likely to be needed.

Portal Siting Area 7 – Secondary Portal Siting Area 7 is located in an area dominated by residential development in the Cities of Lake Forest Park and Shoreline. Because secondary portal construction would require one-half acre or less, the potential for displacements and/or disruptions to existing land uses at candidate sites could be avoided. Each of the candidate sites in Secondary Portal Siting Area 7 appears to have adequate land to accommodate a portal without displacing existing uses. Utility facilities are permitted as a conditional use in residential zones within the City of Shoreline.

Given the density of development within this siting area, noise, and light and glare from nighttime construction activities has a greater potential to impact adjacent residences than less developed portal siting areas.

Portal Siting Area 23 – Construction at secondary Portal Siting Area 23, if needed, could result in the displacement of one-half acre or less of the current land use. Each of the candidate sites identified for this portal siting area appear to have enough open space adjacent to existing uses to accommodate a portal with minimal or no displacement of existing land use.

As with other densely developed portal siting areas, construction activities would likely affect surrounding land uses. As each of these candidate sites are located within the City of Edmonds, a rezone to the P district would be required to site a portal facility in Edmonds.

Portal Siting Area 27 – Lake Ballinger and a cemetery occupy nearly half of this siting area. Construction at secondary Portal Siting Area 27, if needed, could displace one-half acre or less of current land use. Construction at Candidate Sites 27A or Site 27B are not expected to result in any displacements or significant disruptions to site uses. Development at Site 27C could potentially displace between one and three single family residences. Each of the candidate sites identified for this portal siting area appear to have

enough open space adjacent to existing uses to accommodate a portal with minimal or no displacement of existing land use.

A rezone to the P district would be required for the portal to be consistent with local zoning in Edmonds, and a conditional use permit would be required if it were sited in the cities of Mountlake Terrace or Shoreline. A shoreline substantial development permit would be required to site either a portal or dechlorination facility within the Conservancy II Freshwater Environment or Suburban Residential IV shoreline designations for the City of Edmonds.

Although this area is less densely developed, dust, odor, noise, light and glare generated by construction activities would be noticeable from adjacent residential neighborhoods.

Portal Siting Area 45 – Construction at secondary Portal Siting Area 45, if needed, would require one-half acre or less and is not expected to displace existing residential land uses given the low density of development. A conditional use permit would be required to construct facilities at Candidate Site 45C.

Noise, and light and glare from nighttime construction activities would be noticeable from adjacent residences.

Operation Impacts: Route 9 – 195th Street Corridor

Operation impacts would be similar to those discussed under Impacts and Mitigation Common to Both Route 9 Corridors.

Proposed Mitigation: Route 9 – 195th Street Corridor

Mitigation for construction and operation of the Route 9–195th Street Corridor is discussed under Impacts and Mitigation Common to All Systems. Mitigation for the Portal 41 Influent Pump Station (IPS) Option is discussed under Proposed Mitigation Common to Both Corridors.

11.3.2.4 Route 9 – 228th Street Corridor

The dominant land use along the effluent portion of the 228th Street corridor is residential. Construction in the 228th Street corridor could result in the displacement of various land uses within the primary portal siting areas along the corridor.

Primary Portal Siting Area 26 is developed at higher densities and has a greater potential to displace existing land uses. Primary Portal Siting Areas 39, 33 and 19 are developed at relatively lower densities.

Construction and operation impacts associated with primary portals 11, 19, 41 and 44 are discussed under Impacts and Mitigation Common to Both Route 9 Corridors.

Construction Impacts: Route 9 – 228th Street Corridor

Primary Portal Siting Areas

Portal Siting Area 26 – Based on the candidate sites identified for this portal siting area, construction of a portal could result in the displacement of playgrounds and athletic fields (Site 26A), retail stores (Site 26C) or up to 6 single family residences (Site 26D).

Adjacent multi-family uses would likely be disrupted by construction noise, dust, and traffic. A rezone of a portal area to the P zoning district would be required for a dechlorination facility to be consistent with local zoning within the City of Edmonds, and a conditional use permit would be required for a dechlorination facility in the City of Mountlake Terrace.

Portal Siting Area 33 – The western half of this siting area is currently developed at a lower density than the eastern half. Given the lower density of development within this portal siting area, significant impacts to land use are not anticipated. Candidate Site 33A is vacant and would not result in the displacement of any uses; Site 33C could displace agricultural uses and Site 33D could displace one single family residence. Noise, light and glare from construction activities could be noticeable from adjacent homes.

Portal Siting Area 39 – Construction impacts would be similar to those discussed for Portal Siting Area 33. Due to the low density of development, construction impacts to adjacent land use would be limited, but noise, dust, and light and glare could be noticeable from adjacent homes. Construction of a portal at either Site 39B, 39C or 39D could displace one single family residence.

Secondary Portal Siting Areas

As previously noted, secondary portal siting areas are not likely to be needed.

Portal Siting Area 22 – Impacts would be similar to secondary Portal Siting Area 23 for the Route 9–195th Street Corridor. One-half acre or less would be required for secondary portal construction.

A rezone to the P district would be required to site a portal facility in Edmonds. A conditional use permit would be required if a portal is sited in the City of Shoreline.

Portal Siting Area 24 – Development of a portal within this secondary portal siting area is not expected to result in the displacement of residential or business uses. Each of the candidate sites identified for this portal siting area appear to have enough open space adjacent to existing uses to accommodate a portal. Candidate Site 24C has the greatest potential to displace a residence; however, a portion of the site is vacant and only one-

half acre or less would be required for secondary portal construction. Therefore minimal to no displacements of existing land uses are expected.

A rezone of a portal area to the P zoning district would be required for a portal to be consistent with local zoning within the City of Edmonds. Noise and light and glare from construction activities could be noticeable from adjacent homes and businesses.

Portal Siting Area 30 – Construction at one of the candidate sites identified for secondary Portal Siting Area 30 could result in the disruption of the following land uses depending on which site is selected: a playfield associated with a school facility (Site 30A), two single family residences and a mobile home (Site 30B) and a single family residence (Site 30C). Only one-half acre or less would be required for secondary portal construction thereby minimizing the potential for displacements. Given the density of development in this portal siting area, surrounding residents could be impacted by dust, odor, noise, and light and glare generated by construction activities.

Portal Siting Area 37 – There are currently few vacant parcels within Portal Siting Area 37. The identified candidate sites are located in the eastern half of the siting area, which is characterized by larger parcels and low-density development. Only one-half acre or less would be required for secondary portal construction. Given the low density of development on the candidate sites, displacements of existing land uses are not expected. Noise and light and glare from construction activities could be noticeable from adjacent homes.

Operation Impacts: Route 9 – 228th Street Corridor

Operation impacts would be the same as those discussed under Impacts and Mitigation Common to Both Route 9 Corridors.

Proposed Mitigation: Route 9 – 228th Street Corridor

Mitigation for construction and operation of the Route 9–228th Street Corridor is discussed under Impacts and Mitigation Common to All Systems: Conveyance.

11.3.2.5 Outfall: Route 9

Construction Impacts: Route 9 Outfall

Construction impacts for Zone 7S would be similar to those discussed under Impacts Common to All Systems: Outfall impacts. Staging for outfall construction may temporarily disrupt some industrial activities as well as residential recreational uses given

the limited access to Zone 7S through the Richmond Beach neighborhood in Shoreline (see Chapter 16). Construction of the outfall would not displace residential or commercial uses.

Operation Impacts: Route 9 Outfall

Operation impacts for the Zone 7S outfall are the same as those discussed under Impacts and Mitigation Common to All Systems: Outfall.

Proposed Mitigation: Route 9 Outfall

Mitigation for construction and operation of the Zone 7S outfall is discussed under Impacts and Mitigation Common to All Systems: Outfall.

11.3.3 Impacts and Mitigation: Unocal System

11.3.3.1 Treatment Plant: Unocal

Construction Impacts: Unocal Treatment Plant

Land use impacts associated with the construction of the Brightwater treatment plant at the Unocal site would be similar to those discussed under Impacts and Mitigation Common to All Systems, Treatment Plant.

Direct impacts related to the Brightwater treatment plant construction at the Unocal site would involve the conversion of approximately 48.5 acres east of the BNSF Railroad from past industrial land use to a public facility use. No permanent facilities would be constructed on the 4.5 acres of the Unocal property that lie west of the BNSF Railroad.

Although the Unocal site has historically been occupied by an industrial use, the City's long-range vision for the site and surrounding area as outlined in its current comprehensive plan, is to provide for the expansion of the downtown area and economic base and to meet future housing demand. This is reflected by the recent rezone of the site to the Master Plan Hillside Mixed Use 1 and 2 (MP1 and MP2) zones. Conversion of the site to a public facility use would result in a loss of potential economic opportunities and housing capacity that could be accommodated at the site through mixed use development. In addition, if the condominium project that is currently under review by the City of Edmonds is approved and constructed, construction of Brightwater would result in the displacement of this development, which is currently proposed to include 297 condominiums.

Current land capacity data for the City of Edmonds and Snohomish County indicate that the City has adequate residential and employment capacity within its UGA to accommodate the remaining portion of the adopted 2012 population and employment growth targets. Given the City of Edmonds' population target of 36,930, the City has the capacity to accommodate an additional 7,679 to 8,407 people beyond the forecast growth.

The development of Brightwater would not preclude the City from meeting its 2012 housing or employment targets. Mapped data specific to the City of Edmonds indicate that the Unocal site has capacity for 50 to 220 additional housing units and 100 to 499 jobs. This represents between 1.6 and 7 percent of the housing capacity and 1.3 and 5.6 percent of the employment capacity within the city. This is based on land capacity data contained in the City of Edmonds Comprehensive Plan (Edmonds, 2001), which is supported by the recent Snohomish County Tomorrow 2002 Growth Monitoring/Buildable Lands Report (Snohomish County, 2003b).

The City of Edmonds Comprehensive Plan provides policies requiring the City to "ensure that the siting of essential public facilities is not precluded by the implementation of this Comprehensive Plan" (Edmonds, 2001, Policy E.2). Edmonds Comprehensive Plan, Policies E.3 and E.1 note that "the location of new or improved capital facilities should take into account existing service delivery systems and the location and access of service populations." While Edmonds is not in the Brightwater service area, the Brightwater treatment plant site selections at the Unocal and Route 9 site are consistent with this policy, as they are located in the same general geographic areas that will be served by the facility, which include primarily South Snohomish County and North King County. A more detailed analysis of how the EPFs siting guidelines are applied to the Brightwater proposal in general is found above under the discussion of Impacts Common to Both Sites.

Development of a wastewater treatment plant at the Unocal site would be inconsistent with certain aspects of the present Edmonds Comprehensive Plan designation for the site (Downtown Waterfront Activity Center) and some of the uses presently envisioned by the City for this area (a multimodal transportation facility, higher density housing, mixed-use development, retail, office, entertainment, and recreational uses). A wastewater treatment plant at the Unocal site also would be inconsistent with selected Edmonds comprehensive plan policies and zoning requirements for siting regional public facilities. Thus, applicable development regulations and comprehensive plan policies would need to be revised to accommodate Brightwater facilities on the Unocal site, either by the request of the project sponsor, King County, or on the initiative of the City of Edmonds itself, in the event that the regional siting process for Brightwater concludes that Unocal is the optimal site for a regional treatment plant.

The siting and present design of the Edmonds Crossing regional multimodal transportation facility at the Unocal site would also be affected by the Brightwater project. One of the options being considered for the Brightwater project and which is evaluated in this EIS is designing the treatment plant in a manner that would allow the multimodal facilities to be co-located on the site with the treatment plant. This is a

feasible option; co-location can be accommodated by constructing a structural lid over the Brightwater plant. Since the publication of the Draft EIS, additional analysis and design was completed to demonstrate the feasibility of the Unocal Structural Lid sub-alternative (see Chapter 3). Co-location of the Brightwater treatment plant with the Edmonds Crossing project would be consistent with the intent of the Edmonds Comprehensive Plan, Utilities Element, Goal A.3 that encourages new utility systems to be located with similar types of structures to minimize impacts on surrounding neighborhoods. Co-location would reduce the amount of land required for these facilities and would limit the impact to surrounding land use when compared to the alternative of constructing on separate sites.

The Edmonds Zoning Code indicates that regional public facilities should be allowed only within the public use (P) zoning district. The Unocal site was recently rezoned to Master Plan Hillside Mixed Use 1 and 2 (MP1 and MP2) and in order to accommodate Brightwater, would require a rezone to the P zoning district to meet the Edmonds Community Development Code (ECDC) requirements. Several buildings (maintenance and electrical substation) and process structures (digesters, thickening and dewatering, and filtration) would exceed the maximum 35-foot height standards of these zones. Under the P (public use) zone, the maximum structure height standard of 25 feet would be exceeded; however, there are provisions for a conditional use, allowing heights up to 60 feet.

In mid-2002, King County filed appeals before the Central Puget Sound Growth Management Hearings Board (GMA Board) and Snohomish County Superior Court regarding Edmonds' recent rezone actions at the Unocal site. The parties to the appeal all stipulated to the GMA Board an Order stating that King County need not bring an appeal at this time, as the final regional decision has not been made, and the recent rezones do not prevent the City from revising its plan and regulations in the future to allow siting Brightwater facilities at Unocal. Based on the agreement of all parties, the Board, on September 12, 2002, entered an Order to this effect. As noted above, current zoning designations on the Unocal property would need to be amended to accommodate a regional wastewater treatment plant.

The City of Edmonds Comprehensive Plan adopts the same guidelines for the siting of EPFs as those developed by Snohomish County Tomorrow, (discussed above) and notes that "the location of new or improved capital facilities should take into account existing service delivery systems and the location and access of service populations" (Edmonds, 2001, Policies E.3 and E.1).

The Brightwater Treatment Plant would be subject to the site development standards described below, which are aimed at mitigating the impacts of such facilities. It is assumed that close coordination between King County and City of Edmonds staff and Architectural Design Board would result in a facility that is designed to meet the ECDC requirements to the greatest extent practical for a regional EPF and minimize potential visual impacts to surrounding residential areas. Refer to Chapter 12, for a detailed

discussion of impacts and mitigation associated with the facility design and views toward the proposed facility.

Public uses are also subject to extensive review by the City's Architectural Design Board to evaluate the relationship of a proposed use to its surrounding neighbors (ECDC 16.80.030). Minimum development standards are required in the design of public facilities; however, a variance to the standards can be granted subject to the provisions of review criteria and procedures established in Edmonds Community Development Code (ECDC 20.85.000). The ECDC establishes the following minimum standards for the public use zone:

- **Minimum Setbacks –** A minimum landscaped setback of 20 feet shall be maintained from a public street or other property lines except that a setback of 25 feet maintained from adjacent residentially zoned properties, for all structures, structured play areas and structured athletic fields. This setback shall be fully landscaped.
- **Height –** The maximum height of a building in this zone shall be 25 feet, unless a conditional use permit has been obtained. A conditional use permit for additional height may permit structures up to a maximum height of 60 feet.
- **Lot Coverage –** The maximum lot coverage by buildings and other structures shall not exceed 35 percent unless a conditional use permit has been obtained.
- **Signs –** All signs shall be subject to Architectural Design Board approval. Signs shall be kept to a minimum size, which is compatible with the surrounding neighborhood and uses, while providing adequate visibility.
- **Landscaping –** Site landscaping requirements shall be reviewed pursuant to Chapter 20.12 ECDC.
- **Parking –** All regional public facilities shall comply with:
  - All onsite parking lots shall be screened from adjacent residential properties with a solid wall or sight-obscuring fence not less than six feet in height. Such walls or fences may be built progressively as the parking facilities are installed. Landscaping shall be installed in accordance with ECDC 20.12.025.
  - Regional public facilities shall submit a transportation management plan for approval by the city. The plan shall address the following: traffic control, parking management, mitigation measures for overflow parking into adjoining residential areas, and traffic movement to the nearest arterial street.
- **Orientation to Transportation Facilities –** All regional public facilities must be located adjacent to or within 500 feet of a principal or major arterial street.
- **Transit –** All regional public facilities shall be located within 1,500 feet of an existing transit center. At least one onsite transit stop or station shall be required. The transit stop or station shall include a turnout of suitable size and location to accommodate public buses.

- **Lighting –** All exterior lighting shall be arranged and directed so as to direct the light away from adjacent residential uses.
- **Screening –** Electrical substations, water/sewer pump stations, wastewater treatment plants, solid waste facilities, commuter parking lots, and maintenance and storage yards shall be adequately screened from adjacent residential properties with a solid wall or sight-obscuring fence not less than six feet in height. Landscaping shall be provided in accordance with Chapter 20.12 ECDC. [Ord. 3353 § 8, 2001].

The City of Edmonds Shoreline Master Program (Edmonds, 2002, Chapter 23.10) regulations indicate that a Shoreline Conditional Use Permit would be required to develop utilities and government facilities in the Natural Environment shoreline environment and a Shoreline Substantial Development Permit would be required to develop within the Urban Mixed Use 1 and 2 shoreline environments.

Operation Impacts: Unocal Treatment Plant

Impacts associated with the operation of the Brightwater Treatment Plant at the Unocal site are similar to those discussed under Impacts and Mitigation Common to All Systems, Treatment Plant. Operation of the Brightwater Treatment Plant at the Unocal site would result in the loss of housing capacity that otherwise could be accommodated at the Unocal site.

Proposed Mitigation: Unocal Treatment Plant

As evaluated in this EIS, construction and co-location of the Brightwater treatment plant with the Edmonds Crossing multimodal transportation facility on the Unocal site would provide significant mitigation by reducing the need to site each of these facilities at separate locations. Similarly, consolidation of smaller wastewater treatment plants at the Unocal site would mitigate the impacts of a Brightwater Treatment Plant by opening up the land at these small plants for new development.

Mitigation measures that would be implemented to minimize impacts to residential neighborhoods and recreational facilities adjacent to the Unocal site include the general mitigation measures identified above, applicable local, state and federal regulations and permit conditions, as well as the following:

- King County would apply for all appropriate land use and shoreline permits required for construction of the Brightwater Treatment Plant at the Unocal site.
- King County would coordinate with the City of Edmonds staff and Architectural Design Board and the affected community regarding site development standards and appropriate design mitigation.

Consistency with local zoning provisions would be pursued to the extent practicable to permit the facility to be constructed on schedule and with reasonable mitigation. King County will work with the City of Edmonds to discuss how best to expeditiously conduct any necessary review and secure the necessary approvals or legislative changes. Regulatory approval may be required, consistent with state law, to site this EPF and have it operational by 2010. The P zoning district in the City of Edmonds requires a conditional use permit for a wastewater treatment plant. The following considerations are made in determining whether a conditional use permit will be granted (City of Edmonds, Ord. 3353 § 8, 2001):

- Impact of the proposal on the visual and aesthetic character of the neighborhood
- Orientation of facilities to developed or undeveloped residential areas
- Preservation or re-establishment of natural vegetation and/or other natural features
- Hours of operation
- Performance standards
- Conformance of the proposal with the city's noise ordinance
- Ability of the proposal to provide for adequate onsite parking
- Traffic impacts of the proposal on the neighborhood

Public uses are also subject to extensive review by the City's Architectural Design Board to evaluate the relationship of a proposed use to its surrounding neighbors (ECDC 16.80.030). Minimum development standards are required in the design of public facilities; however, a variance to the standards can be granted subject to the provisions of review criteria and procedures established in Edmonds Community Development Code (ECDC 20.85.000). The minimum standards for the public use zone are described above, under Unocal System Construction Impacts.

Unless the City acts on its own initiative, following a decision to site the regional treatment plant at the Unocal site, any comprehensive plan amendments or rezones would be submitted in accordance with ECDC Chapter 20 Review Criteria and Procedures. According to GMA requirements, the City is to consider comprehensive plan amendments on an annual basis (ECDC Chapter 20.00). The City requires that requests for comprehensive plan amendments be submitted prior to December 31 of each year. No set schedule is established for submittal of rezone requests.

11.3.3.2 Conveyance: Unocal

Construction Impacts: Unocal Conveyance

Land use impacts associated with construction at Portal Siting Area 11, a primary portal for the Unocal corridor, are discussed under the Impacts and Mitigation Common to Both Route 9 Corridors.

The majority of portal siting areas along the Unocal corridor provide opportunities to locate a portal without displacing a significant number of residential or business uses. Based on the candidate sites identified for this corridor, under a worst case, construction of the complete Unocal corridor could result in the displacement of various land uses within the four primary portal siting areas. Portal Siting Areas 13 and 10 are secondary portals that are developed at higher densities and have a greater potential to displace land uses; however, construction at secondary portals is not likely and, if needed, would only require one-half acre or less thereby minimizing the potential for displacements.

Primary Portal Siting Areas

Portal Siting Area 3 – Depending on which candidate site is selected construction at Portal Siting Area 3 could result in the displacement of residential or services uses. As a worst case, construction at candidate Site 3D could displace single family residences and candidate Site 3E could displace single family residences or medical and veterinary service facilities. Between 1.9 and 2.3 acres would be converted to a public facility use. A rezone or variance would be required for the portal area to be consistent with local zoning within the City of Edmonds because regional utilities are permitted only within the P zoning district.

Portal Siting Area 7 – Construction at this portal result in the displacement of a portion of track or sports field (Site 7A), a public utility (Site 7B) or a parkland (Site 7C). An odor control facility would be constructed within this portal siting area. A conditional use permit from the City of Shoreline would be required to construct the odor control facility.

Portal Siting Area 11 – Construction impacts for Portal Siting Area 11 are discussed under Impacts and Mitigation Common to All Systems. Utility facilities such as conveyance facilities are permitted in the Regional Business zone. A pump station would be constructed within this portal siting area for the Unocal corridor resulting in a prolonged construction period, which is estimated at 3.5 to 4 years.

Portal Siting Area 14 – No significant construction impacts to surrounding land use are anticipated for this portal siting area, which is characterized by office park and industrial uses. The City of Bothell permits wastewater conveyance facilities in all zoning districts. Selection of either candidate portal Site 14A or Site 14B could displace a ball field. Site 14D could displace industrial uses on a portion of the site.

Secondary Portal Siting Areas

As previously stated, secondary portal siting areas are not likely to be used. If needed, the following impacts to land use could occur.

Portal Siting Area 5 – Located within a commercial business setting, no significant impacts associated with secondary portal construction are anticipated. Only one-half acre or less would be required for secondary portal construction. Each of the candidate sites identified for this portal siting area (5B, 5G and 5X) appear to have enough open space adjacent to existing uses to accommodate a portal with minimal or no displacement of existing land use.

Given the density of development within this siting area, surrounding land use has a greater potential to be impacted by dust, odor or noise generated by construction activities than less developed portal siting areas.

Portal Siting Area 10 – This secondary portal siting area is located within a densely developed residential area near the Lake Forest Park Town Center. Each of the candidate sites identified for this portal siting area appear to have enough open space adjacent to existing uses to accommodate a portal with minimal or no displacement of existing land use. Candidate Sites 10A and 10E have the greatest potential to displace residential uses; however, only one-half acre or less would be required for secondary portal construction. Therefore minimal to no displacements or disruptions to existing land uses are expected.

Utilities are not permitted as a primary use within residential zones and a conditional use permit would be required. Utilities are permitted within the Town Center zone.

Given the density of development, both daytime and nighttime construction activities could result in dust, odor, noise, and light and glare impacts to adjacent residences. Daytime construction activities could also impact adjacent businesses.

Portal Siting Area 12 – This secondary siting area is developed at a much lower density than other siting areas. Candidate sites identified for this portal siting area (Sites 12C and 12E) have adequate space to accommodate a portal and are not expected to result in displacements. Only one-half acre or less would be required for secondary portal construction. Although this area is developed at a lower density, noise, and light and glare from nighttime construction activities could be noticed from adjacent residences if a portal is sited in close proximity.

Portal Siting Area 13 –Construction at either Candidate Sites 13A, 13B, or 13C are not expected to require the displacement of business uses. Each of the candidate sites appears to have adequate space to accommodate a portal without displacing existing land uses. As previously stated, construction at secondary portals is not likely and, if needed, would only require one-half acre or less thereby minimizing the potential for displacements. Construction within areas of the Sammamish River shoreline that are designated Conservancy would require a shoreline substantial development permit.

Given the density of development within this siting area, surrounding land use could be affected by dust, light and glare, odor, or noise generated by construction activities if impacts are not mitigated.

Operation Impacts: Unocal Conveyance

Operation impacts would be similar to Impacts Common to All Systems: Conveyance discussed above. One offsite pump station would be constructed within Portal Siting Area 11. The pump station would be an above-ground structure built near the existing Kenmore Pump Station; the scale of the structure would be similar to surrounding land uses. No significant change to the character of surrounding areas is expected.

Proposed Mitigation: Unocal Conveyance

Construction and operation mitigation would be the same as that described under Impacts and Mitigation Common to All Systems: Conveyance.

11.3.3.3 Outfall: Unocal

Construction Impacts: Unocal Outfall

See Impacts and Mitigation Common to All Systems: Outfall for a discussion of construction related outfall impacts. Construction activities in Zone 6 could disrupt recreational uses that are located adjacent to this outfall zone. (See Chapter 14 for a discussion of recreation impacts.) Construction of the outfall would not displace residential or business uses.

For the Unocal site a safety relief system will be provided to discharge influent wastewater to Puget Sound in the unlikely event of a catastrophic failure at the plant. The safety release would occur from the main marine outfall at 605 feet below MLLW approximately 5,750 feet from the shore. There will be a stormwater outfall installed that will discharge about 50 feet below MLLW. As with the outfall construction, a shoreline substantial development permit would be required.

Operation Impacts: Unocal Outfall

Operation impacts associated with the Zone 6 outfall are the same as those discussed under Impacts and Mitigation Common to All Systems: Outfall.

Proposed Mitigation: Unocal Outfall

Mitigation for construction and operation of the Zone 6 outfall is discussed under Impacts and Mitigation Common to All Systems: Outfall.

11.3.4 Impacts: No Action Alternative

No construction or operation impacts would occur with the selection of the No Action Alternative. No displacement of land use would occur. Future development would not be precluded at treatment plant sites, along conveyance corridors, or at outfall zones. However, there would be significant indirect impacts if planned development could not occur in urban areas, and the resulting possibility of more sprawl and development in rural areas.

Washington's Growth Management Act mandates that public services must be planned for and made available concurrent with forecast growth. Without the Brightwater project, expansion of the regional wastewater treatment capacity would be limited. Existing King County wastewater treatment plants are nearing capacity and would be unable to accommodate increased flows by 2010. This could result in increased overflows within the existing wastewater treatment system, including increased discharges of untreated wastewater into area streams, rivers, and lakes. The discharge of additional untreated wastewater would have a potentially adverse impact on the quality of these water resources by increasing concentrations of bacteria, nutrients, and toxicants, and decreasing concentrations of dissolved oxygen. These impacts would extend beyond the emergency overflow period because of pollutants retained in sediments. Consequently, growth moratoria would likely be required in areas where wastewater treatment capacities are reached. This could result in slowed economic growth as well as increased dependency on septic tanks or other onsite systems. The RWSP EIS and Appendix 3-J, Evaluation of the No Action Alternative, elaborate on the possible system failures that could result if Brightwater is not constructed.

11.3.5 Cumulative Impacts

Both Brightwater and other development being proposed in the region will proceed within the growth projected and planned for under the adopted land use plans of the city or county in the service area and region. Thus, the earlier GMA and related SEPA processes utilized to develop the comprehensive plans of each jurisdiction have considered the cumulative environmental impacts of the development allowed under each comprehensive plan. These plans, and the related SEPA documents for each plan, are incorporated by reference into this EIS.

As previously discussed under Treatment Plant Impacts Common to All Systems, the treatment plant capacity provided by Brightwater supports growth that is anticipated

within the Urban Growth Area in the adopted GMA comprehensive plans of the affected jurisdictions. During the Draft EIS comment period, questions were raised as to whether Brightwater would result in unplanned development in previously unsewered areas. This is not the case. Decisions to install sewers in specific areas are made by local planning agencies as part of comprehensive plan updates or in response to septic system failures in certain areas. Those new local sewers are owned and installed by local sewer agencies, not King County.

Flow projections that established the need for the Brightwater facilities were derived from local land use plans developed under the GMA. Thus, facility sizing is to support growth that is already planned for by local governments for the area to be served. As stated above, the cumulative impacts of planned future growth have been evaluated in the SEPA environmental review documents that supported the local GMA plans. Moreover each jurisdiction also has in place development regulations adopted under GMA, which have an important role, explicitly recognized by SEPA, in mitigating impacts of any growth contemplated under a city's or county's comprehensive plan. WAC 197-11-158; RCW 43.21C.240. With Brightwater facilities in place, future growth that is anticipated and planned for in the GMA comprehensive plans of the affected jurisdictions within the King County service area would be supported by adequate treatment capacity.

11.4 Significant Unavoidable Adverse Impacts

11.4.1 Treatment Plant Sites

Development of a treatment plant at either the Route 9 or Unocal sites would displace existing onsite uses and would preclude the development of other uses at these sites.

Construction of the Brightwater Treatment Plant at the Route 9 site would restrict the long-term development and use of the site for industrial purposes as envisioned by Snohomish County and the City of Woodinville.

Construction of the Brightwater Treatment Plant at the Unocal site would restrict the long-term development and use of the site for a master planned community as envisioned by the City of Edmonds; however, development at the site would not preclude development of a multimodal transportation facility.

11.4.2 Conveyance Corridors

Construction of the portals and any permanent facilities would result in the unavoidable displacement of the existing land uses within the portal siting areas required for staging areas during construction and for operation of any permanent facilities. As a result, other land uses would not be able to locate within portions of some of these areas in the future. During the construction period, adjacent land uses may be significantly disrupted by noise, dust, traffic, and light and glare.

11.4.3 Outfall Zones

No significant unavoidable adverse land use impacts associated with outfall construction or operation are expected.

11.5 Summary of Impacts and Mitigation

Table 11-8 summarizes impacts and mitigation for land and shoreline use. It should be noted that extensive mitigation is already, as recognized under RCW 43.21C.240 and WAC 197-11-158, incorporated into the local, state, and federal regulations and permit requirements and conditions that will apply to Brightwater facilities. The EIS and this summary identify possible additional mitigation measures, based on the EIS analysis, which could be utilized.

Table 11-8. Summary of Potential Impacts to Land and Shoreline Use and Proposed Mitigation for Brightwater Systems

Brightwater System	System Component	Impacts	Mitigation
Common to All Systems	Treatment Plant	Construction • During construction increased levels of dust, noise, and traffic associated with construction vehicles and machinery could impact adjacent land uses, such as residences, businesses and recreation. • Access to residential areas and businesses could be temporarily diverted or re-routed at times.	Construction • King County would coordinate with affected jurisdictions to procure all necessary land and shoreline permits to site and construct the Brightwater Treatment Plant. Where amendments to existing regulations and comprehensive plan policies are required, King County would ask host jurisdictions to enact any needed amendments, unless they do so on their own initiative, pursuant to applicable state law once the sites for regional Brightwater facilities are selected. • Mitigation measures that minimize noise, dust, odor and traffic impacts would be required at all construction sites. • Compliance with applicable local, state and federal regulations and permit conditions.
		Operation • Treatment plant use of either site would preclude other planned uses for the foreseeable future and could influence how surrounding lands develop in the future.	Operation • King County would coordinate closely with affected jurisdictions to meet development requirements and minimize potential visual impacts to surrounding land uses. • Impacts from noise, light, glare and odor would be mitigated to the greatest possible extent as described in Chapters 5, 10 and 13, respectively. • Setbacks and buffers would be used to limit the exposure of the treatment plant to adjacent developed areas. • Compliance with applicable local, state and federal regulations and permit conditions. • Compliance with applicable policies and processes relating to EPFs, subject to the limitations set forth under state law and GMA.

Table 11-8. Summary of Potential Impacts to Land and Shoreline Use and Proposed Mitigation for Brightwater Systems (cont.)

Brightwater System	System Component	Impacts	Mitigation
Common to All Systems (cont.)	Conveyance	Construction • In most cases, construction within each Portal Siting Area would potentially displace existing land uses, replacing them with public facility use. • Construction could displace some residences, businesses or recreational areas. • Nearby residences, businesses and recreational facilities could be affected by dust, noise, light, glare, and traffic disruption. • Outdoor activities would be particularly affected. • Round-the-clock construction may be necessary for portals; this would affect nearby residences with noise, light and glare, potentially disturbing sleep. • Portal Siting Area 11 (a primary portal) is included in all three system alternatives under consideration. Portal Siting Area 11 is located within a commercial business district in the City of Kenmore, and has a high potential to displace business uses. Between 2.3 and 4.3 acres of retail, office or warehouse uses could be displaced.	Construction • When feasible, portals would be designed so that any permanent above ground facilities would be compatible with surrounding uses and displacement of existing land uses would be avoided. • Develop facilities that blend in with the character of surrounding areas. • Compensation and relocation assistance for displacement impacts would be provided in accordance with applicable federal, state and King County regulations. • Construction impacts from noise, light, glare and odor would be mitigated to the greatest possible extent as described in Chapters 5, 10 and 13, respectively. • Comply with applicable local, state and federal regulations and permit conditions. • King County will develop Traffic Management Plans in cooperation with local governments to minimize impacts to surrounding land uses (refer to Chapter 6).

Table 11-8. Summary of Potential Impacts to Land and Shoreline Use and Proposed Mitigation for Brightwater Systems (cont.)

Brightwater System	System Component	Impacts	Mitigation
Common to All Systems (cont.)	Conveyance (cont.)	Operation • After construction, a portion of the portal siting area could be used as a facility for permanent odor control and/or tunnel access to the conveyance system, precluding its use for other purposes. • It is not expected that portals would significantly influence the character of the surrounding areas or how the surrounding areas would develop in the future.	Operation • At completion of portal construction, much of the portal area could be restored and made available for other uses. • The design of all facilities will be coordinated with local jurisdictions and will incorporate architectural details to blend with surrounding uses. • Potential noise, odor and aesthetic impacts would be mitigated through facility design. • Comply with applicable local, state and federal regulations and permit conditions.
	Outfall Zones	Construction • Noise and dust generated by heavy equipment may disrupt nearby recreational uses or residential areas.	Construction • Federal, state and local regulations will be followed to ensure the safety of the public and to minimize access restrictions, noise pollution and other potential impacts to nearby residents and recreational areas. • A shoreline substantial development permit would be required for all construction activities within 200 feet of the shoreline. • Temporary access routes will be developed to ensure park and beach access are maintained.
		Operation • No land or shoreline use impacts are expected to occur associated with operation of the outfall at either Zone 6 or 7S.	Operation • King County will follow best management practices in operating the outfall to protect the health of adjacent residential neighborhoods and recreational areas. • Permanent access routes will be developed to ensure park and beach access are maintained. • Comply with applicable local, state and federal regulations and permit conditions.

Table 11-8. Summary of Potential Impacts to Land and Shoreline Use and Proposed Mitigation for Brightwater Systems (cont.)

Brightwater System	System Component	Impacts	Mitigation
Route 9–195th Street System	Treatment Plant	Construction • About 114 acres of rural residential, industrial and commercial uses would be converted to public facility use. • Multiple businesses and residential occupants that are located within the site would be displaced. • Under Snohomish County zoning, public facility uses are allowed outright in the Light Industrial and Heavy Industrial zones. • Woodinville has zoned the site industrial (as part of its UGA outside the city limits). Regional public facilities are allowed in that zone with a special use permit.	Construction • Development would be subject to development standards outlined in the Snohomish County Code (SCC) and, as applicable, City of Woodinville development standards that address minimum setbacks, height, lot coverage, landscaping, signage, off-street parking requirements, and other project elements. • King County would closely coordinate with Snohomish County and, as applicable, the City of Woodinville to design a facility to meet the SCC and Woodinville Municipal Code requirements and minimize potential visual impacts to surrounding residential areas. • If required, King County will seek any amendments to the Snohomish County Comprehensive Plan and development regulations to allow construction of a treatment plant.
		Operation • In addition to impacts discussed under Common to All Systems, operation of the Brightwater Treatment Plant at the Route 9 site would preclude the development of other industrial uses at the site as envisioned in both the Snohomish County Comprehensive Plan and the proposed annexation area of City of Woodinville Comprehensive Plan.	Operation • In addition to mitigation discussed under Common to All Systems, the Brightwater Treatment Plant would be sited on the portion of the Route 9 site that is located within a designated Urban Growth Boundary that is a joint planning area for Snohomish County and the City of Woodinville.

Table 11-8. Summary of Potential Impacts to Land and Shoreline Use and Proposed Mitigation for Brightwater Systems (cont.)

Brightwater System	System Component	Impacts	Mitigation
Route 9–195th Street System (cont.)	Conveyance	Construction • Construction of the influent and effluent portions of the 195th Street corridor could displace various land uses within primary portals along the corridor. A dechlorination facility would be located at Portal Siting Area 5. Portal Siting Area 11 is discussed above under common impacts. • Depending on the candidate sites selected, the following uses could be displaced within the primary portals shown: – Portal Siting Area 5 – office, service or business uses. – Portal Siting Area 11 – retail, office or warehouse uses. – Portal Siting Area's 19 and 41– industrial, commercial, residential use, public facility. – Portal Siting Area 44 – up to 2 single family residences.	Construction • Same as mitigation as discussed under Common to All Systems.
		Operation • Operation impacts are similar to those common to all systems. In addition, a dechlorination facility would be constructed at Portal Siting Area 5.	Operation • Same as mitigation as discussed under Common to All Systems.
	Outfall	Construction • Impacts at outfall Zone 7S would be similar to those common to all systems. Staging for outfall construction may temporarily disrupt some industrial activities or residential or recreational uses because of construction traffic.	Construction • Same as mitigation as discussed under Common to All Systems.

Table 11-8. Summary of Potential Impacts to Land and Shoreline Use and Proposed Mitigation for Brightwater Systems (cont.)

Brightwater System	System Component	Impacts	Mitigation
Route 9–195th Street System (cont.)	Outfall (cont.)	Operation • Same as impacts discussed under Common to All Systems.	Operation • Same as mitigation as discussed under Common to All Systems.
Route 9–228th Street System	Treatment Plant	Construction • Same as Route 9–195th Street System.	Construction • Same as Route 9–195th Street System.
		Operation • Same as Route 9–195th Street System.	Operation • Same as Route 9–195th Street System.
	Conveyance	Construction • Construction of the influent and effluent portions of the 228th Street conveyance could displace various land use within primary portals. Impacts associated with candidate sites in Portal Siting Area (11 are discussed under Common to All Systems. Portal Siting Areas 11, 19, 41 and 44 are discussed under the Route 9–195th Street System. • Depending on which candidate sites are selected within primary portals, the following uses could be displaced: – Portal Siting Area 26 – 6 residences, playfields or retail uses. – Portal Siting Area 33 – 1 residence or agricultural uses. – Portal Siting Area 39 – 1 residence.	Construction • Same as mitigation as discussed under Common to All Systems.
		Operation • Operation impacts would be similar to those discussed under Common to All Systems. In addition, a dechlorination facility would be constructed at Portal Siting Area 26.	Operation • Same as mitigation as discussed under Common to All Systems.

Table 11-8. Summary of Potential Impacts to Land and Shoreline Use and Proposed Mitigation for Brightwater Systems (cont.)

Brightwater System	System Component	Impacts	Mitigation
Route 9–228th Street System (cont.)	Outfall	Construction • Same as Route 9–195th Street System. Operation • Same as impacts discussed under Common to All Systems.	Construction • Same as Route 9–195th Street System. Operation • Same as mitigation as discussed under Common to All Systems.
Unocal System	Treatment Plant	Construction • 48.5 acres of industrial land use east of the BNSF RAILROAD would be converted to public facility use. A portion of the 4.5 acres that lie west of the BNSF RAILROAD would be used for a staging area during construction, but no permanent facilities would be constructed in this area. • A Shoreline Substantial Development permit would be required for construction of utility facilities in the Urban Mixed Use 1 and 2 shoreline environments and a Shoreline Conditional Use permit would be required in the Natural shoreline environment. • The proposed use would be inconsistent with the Edmonds Comprehensive Plan and the uses envisioned by the city for this area. It would also be inconsistent with Edmonds' comprehensive plan policies and zoning requirements for siting public facilities.	Construction • Consistency with local zoning provisions would be pursued to the extent practicable to permit the facility to be constructed on schedule and with reasonable mitigation. • King County will work with the City of Edmonds to discuss how best to expeditiously conduct any necessary review and secure the necessary approvals or legislative changes. • King County would coordinate closely with City of Edmonds staff and the Architectural Design Board so that the facility is designed to meet the Edmonds Community Development Code requirements and minimize potential visual impacts to surrounding residential areas to the greatest extent practicable for a regional EPF. • Development would be subject to Edmonds Community Development Code standards that address minimum setbacks, height, lot coverage, signs, landscaping, parking, orientation to transportation facilities, transit, lighting and screening.

Table 11-8. Summary of Potential Impacts to Land and Shoreline Use and Proposed Mitigation for Brightwater Systems (cont.)

Brightwater System	System Component	Impacts	Mitigation
Unocal System (cont.)	Treatment Plant (cont.)	Operation • Placing the treatment plant at the site would result in the loss of housing capacity that could otherwise be accommodated at the site. It would not preclude co-location of the multimodal facility proposed by WSDOT. Constructing a structural lid over the Brightwater plant can accommodate co-location. • Current land capacity data for the City of Edmonds and Snohomish County indicate that the City has adequate residential and employment capacity within its UGA to accommodate the remaining portion of the adopted 2012 population and employment growth targets. • The development of Brightwater would not preclude the City from meeting its 2012 housing or employment targets. The City has capacity to accommodate an additional 7,679 to 8,407 people beyond forecast growth.	Operation • King County would coordinate with City of Edmonds staff and the Architectural Design Board regarding site development standards and appropriate design mitigation. • King County would obtain a site rezone and if required, a comprehensive plan amendment and/or conditional use permit from Edmonds for the treatment plant.
	Conveyance	Construction • Construction of the Unocal corridor could displace various land uses within primary portals. Portal Siting Area 11 is discussed under Common to All Systems. • Depending on the candidate sites selected within primary portals, displacements could include: – Portal Siting Area 3 – up to 6 residences, religious institution or medical/health facility. – Portal Siting Area 7 – school, park facilities or utility. – Portal Siting Area 14 – industrial uses, ball field.	Construction • Same as mitigation as discussed under Common to All Systems.

Table 11-8. Summary of Potential Impacts to Land and Shoreline Use and Proposed Mitigation for Brightwater Systems (cont.)

Brightwater System	System Component	Impacts	Mitigation
Unocal System (cont.)	Conveyance (cont.)	Operation • Operation impacts would be similar to those discussed under Common to All Systems. • One offsite pump station would be constructed and located in Portal Siting Area 11.	Operation • The pump station in Portal Siting Area 11 would be designed to be similar in scale to surrounding land uses. Design standards would be followed as discussed under mitigation common to all systems. Setbacks and buffers will be incorporated in the site layout and the entire site will be landscaped.
	Outfall	Construction • Impacts at outfall Zone 6 would be similar to those common to all systems. Shoreline recreational activities may be disrupted and nearby residents and businesses could be disrupted during construction.	Construction • Same as mitigation as discussed under Common to All Systems.
		Operation • Same as impacts discussed under Common to All Systems.	Operation • Same as mitigation as discussed under Common to All Systems.
No Action Alternative	Treatment Plant	Construction • No displacement of existing land use would occur. Future development would not be precluded at treatment plant sites. • Impacts associated with construction noise, light, glare and odor would not occur as described in Chapters 5, 10 and 13, respectively.	Construction • No mitigation would be required.

Table 11-8. Summary of Potential Impacts to Land and Shoreline Use and Proposed Mitigation for Brightwater Systems (cont.)

Brightwater System	System Component	Impacts	Mitigation
No Action Alternative (cont.)	Treatment Plant (cont.)	Operation • Without the Brightwater project, expansion of the regional wastewater treatment capacity would be limited. Consequently, growth moratoria would likely be required in areas where wastewater treatment capacities are reached; possibly resulting in slowed economic growth as well as increased dependency on septic tanks or onsite disposal systems. • Land use impacts associated with noise, light, glare and odor would not occur as described in Chapters 5, 10 and 13 respectively.	Operation • No mitigation would be required.
	Conveyance	Construction • No displacement of existing land use would occur within Portal Siting Areas. Future development would not be precluded in Portal Siting Areas. • Impacts associated with construction noise, light, glare and odor would not occur as described in Chapters 5, 10 and 13, respectively.	Construction • No mitigation would be required.
		Operation • No operation impacts associated with the conveyance system would occur under the No Action Alternative. Future land use development would not be precluded in the Portal Siting Areas.	Operation • No mitigation would be required.
	Outfall	Construction • No displacement of existing land use or disruption of the marine environment would occur. Future development or activities would not be precluded at outfall zones. • Impacts associated with construction noise, light, glare and odor would not occur as described in Chapters 5, 10 and 13, respectively.	Construction • No mitigation would be required.

Table 11-8. Summary of Potential Impacts to Land and Shoreline Use and Proposed Mitigation for Brightwater Systems (cont.)

Brightwater System	System Component	Impacts	Mitigation
No Action Alternative (cont.)	Outfall (cont.)	Operation • No operation impacts associated with outfall facilities at either Zone 6 or 7S would occur. Existing uses within the outfall zones would continue.	Operation • No mitigation would be required.

11.6 References

Bothell (City of Bothell, WA). 1996. *Title 13, Shoreline Management.* Current through Ordinance 1630, March 21, 1996.

Bothell (City of Bothell, WA). 1997a. *City of Bothell Municipal Code.* Current through Ordinance 1904 §1 2003. Retrieved from http://www.mrsc.org/codes.aspx

Bothell (City of Bothell, WA). 1997b. *Imagine Bothell. City of Bothell Comprehensive Plan.* Adopted June 30, 1997.

Brier (City of Brier, WA). 1988. *City of Brier Municipal Code* (Ord. 209 §1, 1988). Current through Ordinance 293.A § 5 2001. Retrieved from http://www.ci.brier.wa.us/municipalcode

Brier (City of Brier, WA). 2000. *City of Brier 2000 Comprehensive Plan Update.* Adopted November 28 2000.

Clifton, S. 2003. Personal communication in meeting with Ikuno Masterson. June 18 2003.

Edmonds (City of Edmonds, WA). 2001. *City of Edmonds Comprehensive Plan.*

Edmonds (City of Edmonds, WA). 2002. *Edmonds Municipal Code. Vol. II, Community Development.* Adopted December 2, 1980. Current through Ordinance 3452 § 4 2003. Retrieved from http://www.mrsc.org/codes.aspx

Kenmore (City of Kenmore, WA). 2001. *Final Integrated Comprehensive Plan and Environmental Impact Statement.* March 2001. Retrieved from http://www.cityofkenmore.com/dept/cd/compplan/compplan.html

Kenmore (City of Kenmore, WA). 2002. *City of Kenmore Municipal Code.* Current through Ordinance 02-0161 § 12 2002. Retrieved from http://www.mrsc.org/codes.aspx

King County. 1981. *King County Code.* Current through June 24 2002, as amended. Seattle, WA.

King County. 1997a. *Draft Environmental Impact Statement for the Regional Wastewater Services Plan*. Seattle, WA: King County Department of Natural Resources, Wastewater Treatment Division. May 1997.

King County. 2001a. *King County Comprehensive Plan 2000.* Adopted February 12, 2001. Seattle, WA.

King County. 2001b. *Public involvement summary for Phase 1 of siting process.* Prepared by E. Peterson. Seattle, WA: King County Department of Natural Resources and Parks, Wastewater Treatment Division. January 2001

King County. 2001c. *Public involvement summary for Phase 2.* Prepared by E. Peterson. Seattle, WA: King County, Department of Natural Resources and Parks, Wastewater Treatment Division. September 2001.

King County. 2001d. *Public involvement supplement for Phase 2.* Prepared by E. Peterson. Seattle, WA: King County Department of Natural Resources and Parks, Wastewater Treatment Division. December 2001.

King County. 2002a. *King County buildable lands evaluation report.* Seattle, WA: King County Office of Regional Policy Planning. September 5.

King County. 2002b. *King County countywide planning policies.* Updated November 2002. Seattle, WA: King County Office of Regional Policy and Planning.

King County. 2002c. *Public involvement summary for the first part of Phase 3.* Prepared by E. Peterson. Seattle, WA: King County Department of Natural Resources and Parks, Wastewater Treatment Division. September 2002.

King County. 2003a. *Property acquisition and relocation information for businesses, farms, and non-profit organizations.* Seattle, WA: King County Department of Natural Resources and Parks, Wastewater Treatment Division. March 2003.

King County. 2003b. *Property acquisition and relocation information for residential owners and tenants.* Seattle, WA: King County Department of Natural Resources and Parks, Wastewater Treatment Division. March 2003.

King County. 2003c. *Public involvement summary for the second part of Phase 3.* Seattle, WA: King County Department of Natural Resources and Parks, Wastewater Treatment Division.

Lake Forest Park (City of Lake Forest Park, WA). 1995 and updates. *City of Lake Forest Park Comprehensive Plan.* Adopted April 19, 1995 and updated November 29, 2001.

Lake Forest Park (City of Lake Forest Park, WA). 2002. *Lake Forest Park City Code.* Current through Ordinance 900 § 1, 2003. Retrieved from http://www.mrsc.org/codes.aspx

Mountlake Terrace (City of Mountlake Terrace, WA). 1996. *Updated Comprehensive Policy Plan.* Adopted December 16, 1996.

Mountlake Terrace (City of Mountlake Terrace, WA). 2002. *Municipal Code.* Current through Ordinance 2236 § 1, 2000. Retrieved from http://www.mrsc.org/codes.aspx

PSRC (Puget Sound Regional Council). 1995. *VISION 2020 1995 update: Growth management, economic and transportation strategy for the central Puget Sound region.* Seattle, WA.

PSRC (Puget Sound Regional Council). 1998. *Industrial land supply and demand in the central Puget Sound Region.* Seattle, WA.

Shoreline (City of Shoreline, WA). 1998. *Final Plan, Shoreline's Comprehensive Plan.* Adopted November 23, 1998.

Shoreline (City of Shoreline, WA). 2002. *Shoreline Municipal Code.* Current through Ordinance 329 §4, 2003. Retrieved from http://www.mrsc.org/codes.aspx

Smith, C. 2003. C. Smith, City of Woodinville, WA. Personal communications, April 28 and August 20, 2003.

Snohomish County. 1993. *Snohomish County Shoreline Management Master Program.* Adopted May 31, 1988; amended 1993. Everett, WA.

Snohomish County. 2000. *Snohomish County Growth Management Act Comprehensive Plan.* Adopted June 28, 1995; updated 2000. Everett, WA.

Snohomish County. 2001. *Capital Facilities Plan for Snohomish County.* August 29, 2001. Everett, WA.

Snohomish County. 2002. *Snohomish County Tomorrow Buildable Lands Project.* Retrieved September 12, 2002 from http://www.co.snohomish.wa.us/pds/1000-SCT/UGA_Profiles.asp#edmonds

Snohomish County. 2003a. *Snohomish County Title 30 Unified Development Code.* Adopted February 1, 2003. Current through Ord. 02-064, December 9, 2002, as amended. Everett, WA.

Snohomish County. 2003b. *Snohomish County Tomorrow 2002 growth monitoring/buildable lands report*. *Final.* Everett, WA. January 2003.

Unocal. 2002. *Interim clean-up activities Unocal Edmonds Bulk Fuel Tank Site.* February 2002.

Woodinville (City of Woodinville, WA). 1996. *Woodinville Municipal Code.* Current through Ordinance 334 § 2003. Retrieved from http://www.mrsc.org/codes.aspx

Woodinville (City of Woodinville, WA). 1996 and updates. *City of Woodinville Comprehensive Plan.* Adopted May 1996 and amended in July 1999 and May 2002.

Woodway (Town of Woodway, WA). 2000. *Capital facilities element. The Town of Woodway Comprehensive Plan, Year 2000 Update.*

The figures for this chapter are provided as separate files on this web site.

Click here to view.

LIST OF FIGURES