

## CHAPTER 2 – THE PHYSICAL SETTING

This section describes the physical setting in which the proposed action and alternatives will occur.

### ***2.1 Location of the Proposal and Alternatives***

The site is located in southerly Jefferson County on the shores of Hood Canal and Pleasant Harbor, a naturally occurring bay. The area is encompassed in the Brinnon Subarea Planning Area of the County.

### ***2.2 Brinnon Subarea***

Brinnon is an unincorporated community situated at the mouth of the Dosewallips River on both sides of US HWY 101, between the Olympic Mountains and Hood Canal. The Brinnon planning area is defined by the Forest Service's Rainbow Campground at Mount Walker on the north and the Jefferson County line to the south, and includes all the land in between Hood Canal west to the Olympic National Park. Within the Brinnon planning area the majority of the lands are forest lands owned by the federal and state government and private timber companies. There are also small concentrations of retail and commercial services in Brinnon and at Black Point/Pleasant Harbor.

With the exception of small lot subdivisions, the BSAP is characterized by low density residential development with a remote, rural character. Higher density residential lands tend to occur along or near the Hood Canal shoreline and portions of the Duckabush and Dosewallips Rivers. Current residential zoning is in the form of five-, ten-, and twenty-acre lots. At the time of adoption of the BSAP there was an anticipated 20-year demand for 280 residential lots to accommodate the projected population increase. There are approximately 900 vacant lots on record. Recent interest in canal and vacation housing, however, may accelerate the projected rate of absorption.

Current population for the BSAP is estimated at 1,320 people, based on the year 2000 population of approximately 1200 and 2.03% annual growth rate for five years. Local population may grow to 5,000 when summer and seasonal residents are counted in the peak summer season. Recent population trends in the area suggest the majority of this increase is from people retiring to the area who are 50 years of age and older. Ownership and occupancy trends also suggest that nearly half of developed lots are in seasonal or recreational use, and the percentage of seasonal ownership will likely increase, due to the overall growth of the Puget Sound region and the attractive natural amenities of west Hood Canal. This demand for recreational properties contributed to the doubling of average housing prices between 1990 and 2000. The demand for both permanent retirement and recreational homes continues to drive up local housing prices.

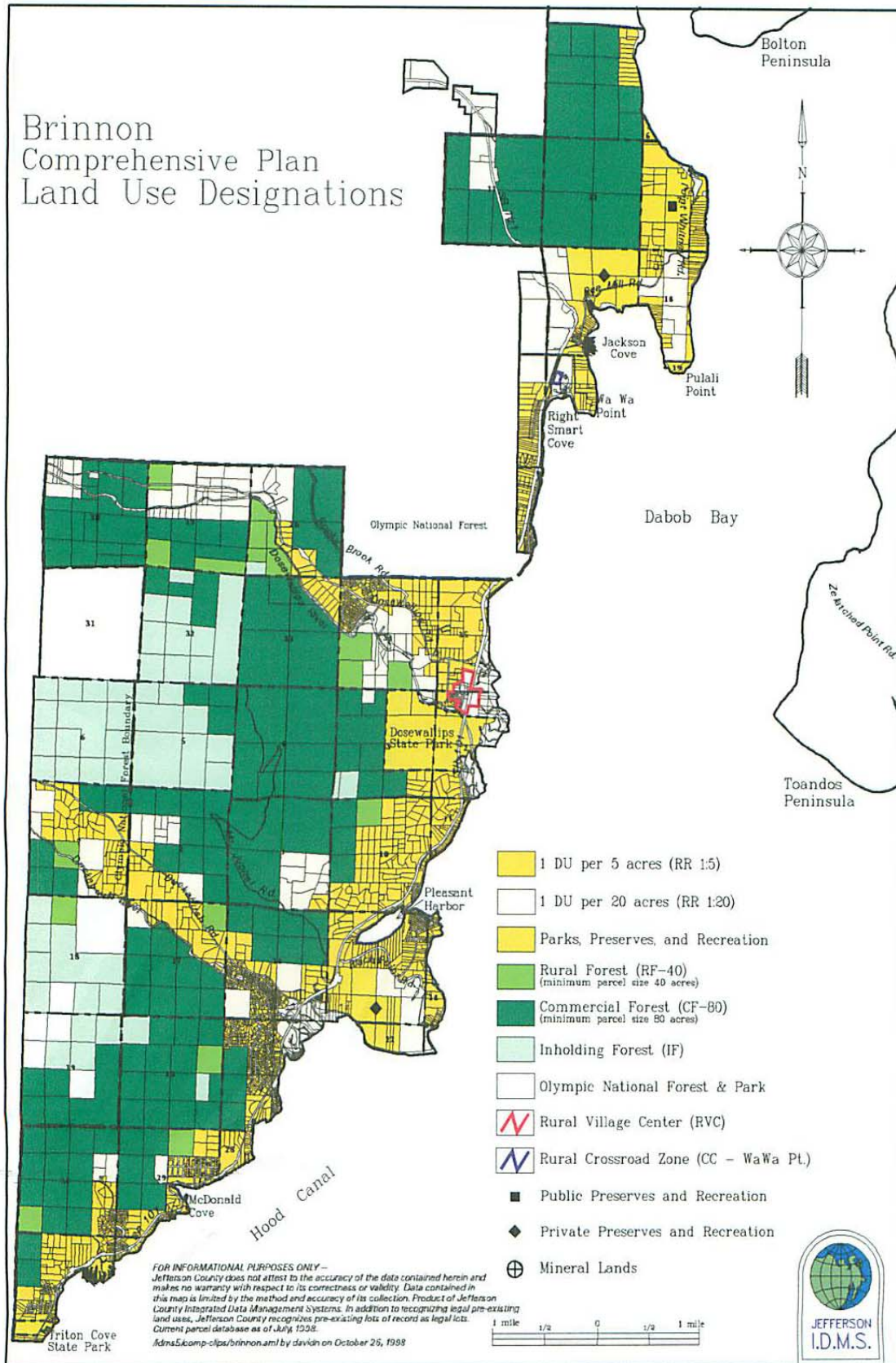


Figure 2-1 Brinnon Comprehensive Plan Land Use Designations

The Brinnon core is designated a Rural Village Center (a LAMIRD under GMA) in the Jefferson County Comprehensive Plan. This is an area of approximately 66 acres, with about 19 acres currently vacant. Developed land is a mix of residential and commercial uses such as a restaurant, motel, insurance office, grocery/gas station, nursery, and post office. The intent of the Rural Village Center (RVC) designation is to allow for commercial infill development to take advantage of what is expected to be an increase in local tourism from the overall growth of the Puget Sound region, and to allow for the possibility of higher density, lower income housing. Also in the RVC are the Brinnon School and the headquarters for the Brinnon Fire District #4.



**Figure 2-2 Aerial Photo, Black Point to Brinnon (Brinnon town site located just north of the river, not south as shown on the map)**

Brinnon has a large number of platted lots, but development in some areas is limited by a high ground water table, a lack of sewer facilities, and a flood plain/flood way (see Figure 2-3).

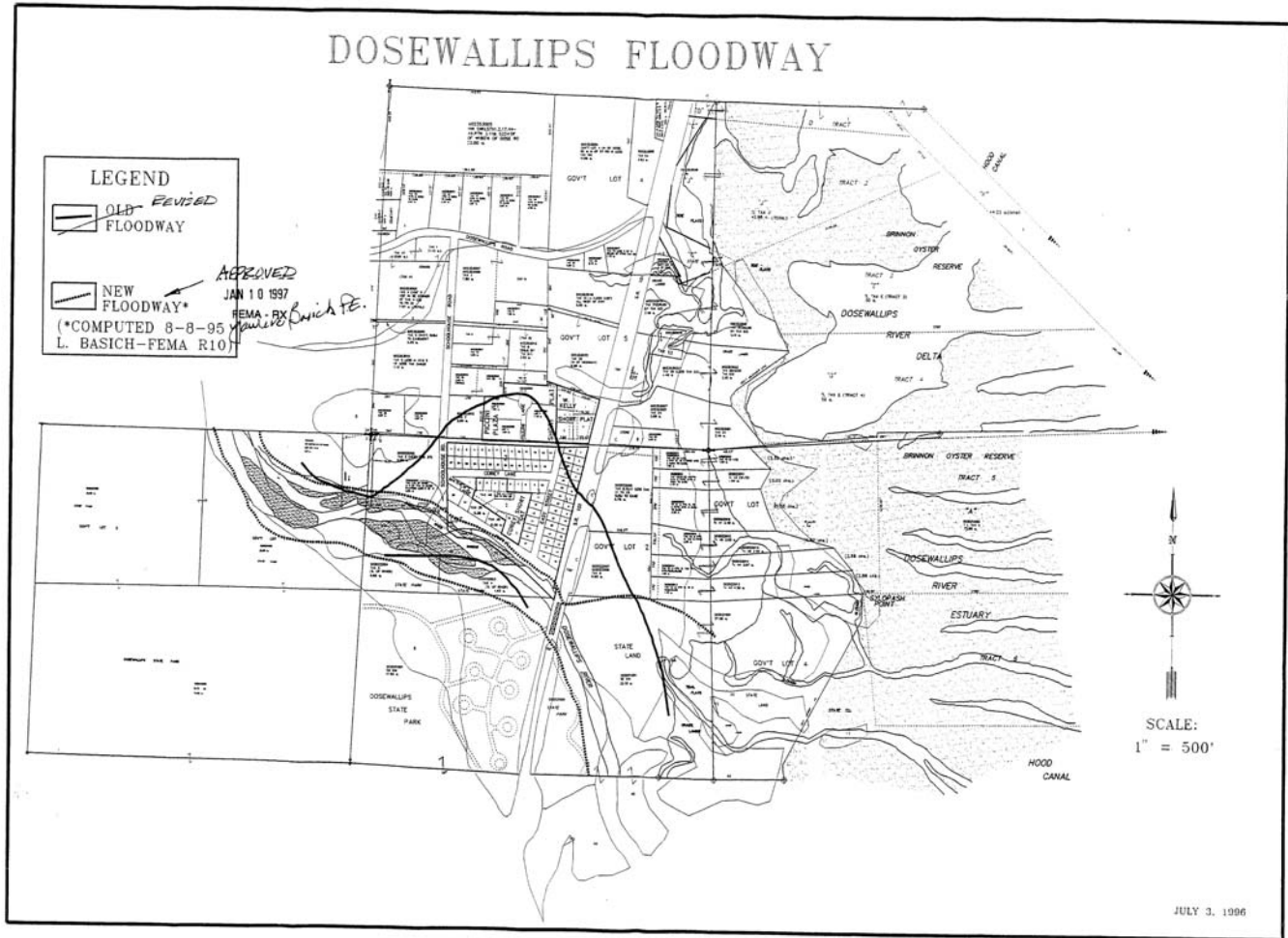


Figure 2-3 Dosewallips Floodway

### 2.3 Existing Site Conditions (Black Point/Pleasant Harbor)

The area known as Black Point is an approximately 710-acre peninsula that is surrounded on the north, south, and east by the waters of Hood Canal. Pleasant Harbor is formed by the west shore of Black Point and the mainland and is connected to Hood Canal by a narrow channel at the harbor's north end. US HWY 101 defines the remaining western edge of Black Point.

#### 2.3.1 Black Point (Figure 2-4)

Land use on Black Point itself is comprised of full-time and seasonal residences; vacant residential parcels; a previous, nonconforming 500-unit RV campground that is currently used in the summer season and is permitted for 60 RV sites; a real estate office; and approximately 30 acres of forest owned by the Washington State Department of Fish and Wildlife (WDFW), which has a boat ramp and picnic facilities at the south end of Pleasant Harbor. There are 246 platted parcels on Black Point. Of the remaining parcels, 158 are developed with some kind of residence, 72 are vacant, 4 are set aside for community use, and 4 are owned by the WDFW.

According to the 2000 Census there are 107 permanent residents on Black Point, which represent approximately 57 full-time dwelling units. This suggests the other 101 developed residential lots are for seasonal or recreational use. The majority of the existing lots (225) are zoned for one dwelling per five acres, so the existing lot configuration is not expected to increase. The Black Point subdivisions are served by a public water system and onsite sewage



**Figure 2-4 Black Point Properties**



**Figure 2-5 Pleasant Harbor**

disposal systems (septic tanks and drainfields) on individual lots. There are two subdivisions of significantly smaller lots in this zoning district: a larger concentration along Rhododendron Lane at the northeast tip of Black Point and a smaller concentration off of Roberts Road at the southeast corner adjacent to US HWY 101. The majority of these smaller lots are developed with residences and serviced by Pleasant Tides water system and individual septic systems.

Undeveloped areas of Black Point are dominated by stands of mature second and third growth forest composed of indigenous coniferous and deciduous trees, along with a healthy community of understory plants and shrubs.

### 2.3.2 Pleasant Harbor Marina

Pleasant Harbor (see Figure 2-5) is an all-weather, deep-water harbor that contains two marinas and is accessed through a narrow channel from Hood Canal. A State Park overnight moorage dock and ten private docks share the shoreline of Pleasant Harbor with the two marinas. A public boat launch is also located at the southernmost extent of Pleasant Harbor on Washington Department of Fish & Wildlife lands. A new boat ramp has been constructed in the southwest corner of the harbor by the WDFW to promote access to the Hood Canal fishery (see Figures 2-6 and 2-7).

The Pleasant Harbor Marina is a commercial marina located on the harbor's north side. The marina contains 285 boat slips. The marina is equipped with a fuel dock for marine fueling for both boats and float planes. Pump-out facilities are located on the gas dock, providing sewage disposal for boats in the harbor.



**Figure 2-6 New WDFW Boat Launch**

A second, smaller marina, the Home Port Marina, is located northeast of the Pleasant Harbor Marina near the entrance to the harbor. Another marina is located more than four miles away on the east shore of Hood Canal in Seabeck. Marinas are limited on Hood Canal, so Pleasant Harbor acts as an important fueling, mooring, and sewage disposal site for boaters on the Canal.



Figure 2-7 WDFW Boat Launch

### 2.4 Hood Canal

Hood Canal is a dominant environmental feature of the proposal area. Unlike a true canal, it is a sixty-mile long narrow, deep, body of water much like a fjord. The freshwater sources of the Canal include snow and glacier melt from the Olympic Mountains, and numerous spring fed lakes and wetlands of the Kitsap Peninsula, all of which are carried to the Canal by a number of rivers and many small streams. There are also points along the Canal that directly receive groundwater. Figure 2-8 shows the extent of the Hood Canal drainage basin.

Hood Canal supports multiple natural environments, along with recreational and commercial interests. The Canal has long been known for its diversity and abundance of wildlife. It contains several types of fisheries, including salmon and shellfish, which are an important part of the local economy and of particular commercial interest to local Tribes. Tourism is a significant part of the Hood Canal Region's economy, attracting people for recreation such as sailing, fishing, orca and bird watching, and for camping and hiking in the nearby state and national parks and forests. It is a strategic waterway and home to the Bangor Naval Submarine Base. Its shores and near uplands have also become home for an increasing number of people as the Puget Sound region has continued to grow.

The geology and underwater topography of the Canal play a key role in overall water quality and the dynamics of how its waters circulate. Compared to the rest of the Canal, the entrance is relatively shallow at approximately 150 feet in depth. Immediately south of the entrance the

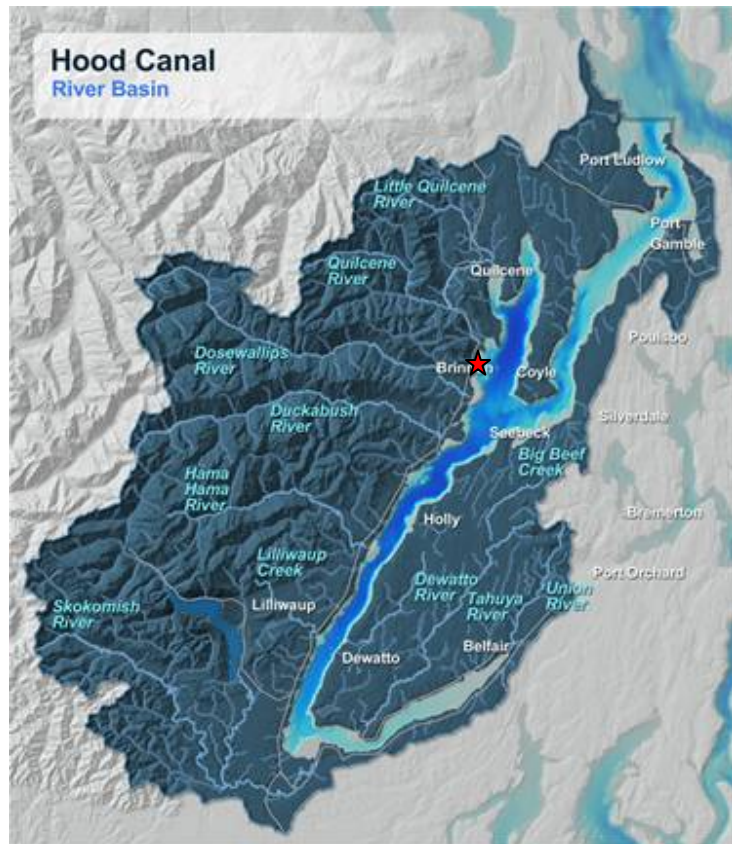


Figure 2-8 Hood Canal – River Basin

Canal becomes very deep, averaging between 500 and 600 feet. The geology creates a bottle-neck in the Canal that restricts water flow and the ability to exchange or 'flush' with the changing tides and seasons. Estimates of the length of time for complete water exchange range as high as thirty years. In addition, the waters of Hood Canal are often highly stratified. Fresh water from the surrounding drainage basin tends to remain near the surface and creates an upper layer of water that has a different temperature and salinity than the deeper layer. This stratified water mixes poorly, making oxygen and nutrient exchange difficult. The end result is that Hood Canal is highly susceptible to impacts of surrounding development and "high impact" human activities that introduce sediments, chemicals, and organic material into the Canal's waters. For this reason, any resultant development must focus on low impact, zero discharge designs where possible.

#### **2.4.1 Recreation on Hood Canal**

The state recreational areas near the proposed master plan are both significant and popular, with more than one half million visitors to the area annually, principally in the summer season.

Washington State Parks has developed a Management Plan for the state-managed parks in the Dosewallips Area, near Brinnon:

- (1) Dosewallips State Park, 424.5-acres/5,500 feet of shoreline – has picnicking, hiking, boating, fishing, public recreational shellfishing for oysters, clams, crabs, shrimp (387,221 visitors in 2004);
- (2) Triton Cove State Park, 28.5 acres/593 feet of shoreline – has picnicking, shore fishing, public recreational shellfishing, and boating (42,212 visitors in 2004);
- (3) Pleasant Harbor State Park, 1 acre/100 feet of shoreline – has sheltered moorage (2,439 visitors in 2004);
- (4) Toandos Peninsula, with 10,000 feet of shoreline, has public recreational shellfishing with boat access;
- (5) Point Whitney Shellfish Laboratory on the tip of Pt. Whitney has a boat launch available for public use.
- (6) Right Smart Cove, 1 acre/200 feet of shoreline – has kayaking and limited access.

An on-line version of the approved June 2006 Dosewallips State Park Area Management Plan may be obtained at: <http://www.parks.wa.gov/plans/dose/Dosewallips%20Final%20Plan.pdf>. See also the Dosewallips State Park web site at <http://www.parks.wa.gov/parkpage.asp?selectedpark=Dosewallips>.

Additionally, the state-owned Duckabush Tidelands, located off US HWY 101 about 3.9 miles south of Brinnon, are open year-round for public recreational shellfish harvesting.

## 2.5 The Olympic Mountains

The other outstanding natural and recreational features of the area are the Olympic Mountains, and its combination of National Forest, National Park, and recreation areas.



Figure 2-9 Olympic National Park

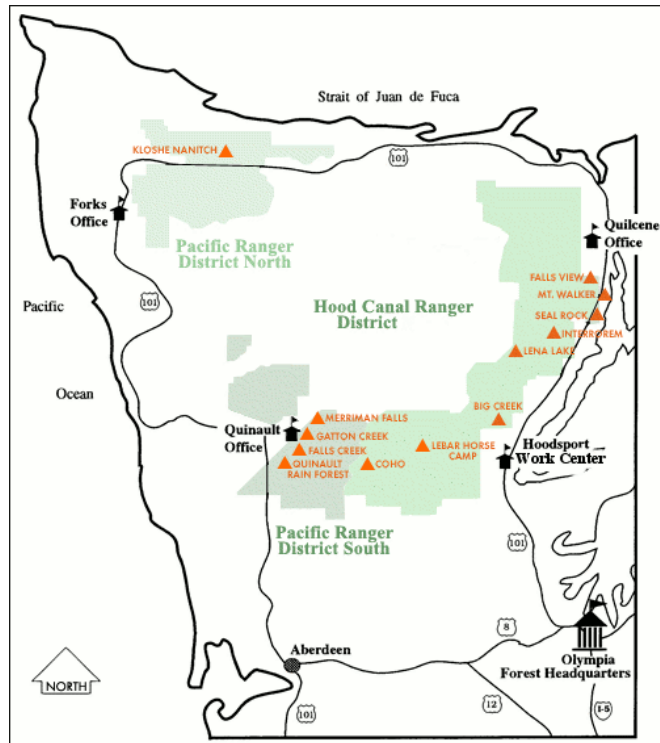


Figure 2-10 Olympic National Forest

The Brinnon Subarea includes access to the Olympics through three trailhead systems: the Duckabush and the Dosewallips to the north, and the Hamma Hamma to the south. The Seal Rock Park campground, located just north of Brinnon, provides public access to the shoreline.

The Olympic National Forest is managed by the U.S. Forest Service, and the Olympic National Park by the National Park Service.

Significant information about both systems is available on line:

Olympic National Forest website: <http://www.fs.fed.us/r6/olympic/>

Olympic National Park website: <http://www.nps.gov/olym>

Published reports identify more than four million tourists per year visit the National Forest and National Park annually, and here again, the use is heavily skewed to the tourist season from May to October. See: <http://www.olympicpeninsula.org/research.html>. Access to the Olympic National Forest and Olympic National Park will be one of the attractions of the resort.





**Figure 2-11 National Forest/National Park Trail Systems Near Brinnon**

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