1.0 INTRODUCTION

1.1 <u>REPORT PURPOSE</u>

Jefferson County is updating its existing Shoreline Master Program (SMP) to comply with the Washington State Shoreline Management Act (SMA or the Act) requirements (Revised Code of Washington [RCW] 90.58), and its implementing guidelines (Washington Administrative Code [WAC] 173-26, Part III), which were adopted in 2003. The County's SMP includes policies and regulations for managing all fresh and saltwater shorelines of the state in Jefferson County. This report provides background information to be used in updating the existing goals, policies, and regulations for shoreline management.

The purpose of the report is to describe current shoreline conditions and characterize the ecosystem processes (also referred to as watershed processes) that shape and influence shoreline environments. As outlined by the state shoreline guidelines (see WAC 173-26-201(3)), shoreline inventory and analysis are two steps of the multi-step SMP update process. The other required steps are:

- Invite and encourage public participation in the development of shoreline goals and policies;
- Establish shoreline environment designations (SEDs);
- Establish shoreline policies; and
- Prepare shoreline regulations.

The County is in the process of completing all of the required steps in accordance with the terms and conditions of a grant agreement (Grant # G0600343) with the Washington State Department of Ecology (Ecology) (Appendix A). The County has also prepared a cumulative impact analysis and a shoreline restoration plan as required by the state shoreline guidelines. The cumulative impacts analysis and restoration plan were prepared as separate documents.

1.2 BACKGROUND AND LIMITATIONS

This report is based on published and unpublished literature pertaining to Jefferson County shorelines and shoreline management in general. Much of the information was derived from aerial photography, including the 2001 and 2006 shoreline oblique photos provided by Ecology (available at: http://apps.ecy.wa.gov/shorephotos/), and existing Geographic Information Systems (GIS) data compiled and collected primarily by Jefferson County Department of Community Development. This report updates the May 2007 and September 2006 Draft Shoreline Inventory and Characterization Reports (SICRs)(ESA Adolfson et al., 2007; Adolfson et al., 2006) as well as the County's previous shoreline inventory report titled *Jefferson County Shoreline Master Program Update: Shoreline Inventory and Analysis Report, CZM306 Grant G0400080*, prepared by Neil Harrington in October 2005. Much of the text from the Harrington report is included here verbatim, and maps referenced in that report are provided in Appendix B. Readers are advised that

the numbering convention for the maps used here (for the 2008 Inventory) differs from the numbering used in the Harrington (2005) report.

Although the scope of this effort did not include field verification of shoreline conditions, considerable effort was put forth to ensure that the information presented is complete and accurate as of the date of publication. This included soliciting information from numerous reliable sources and requesting peer review from local, state, and federal agency representatives, tribes, and non-governmental organizations with knowledge of the local shoreline conditions. Department of Ecology Staff and the County's Planning and other Department staff provided pertinent reference materials and reviewed the May 2007 STAC Draft Inventory and Characterization Report for accuracy and completeness. In addition, members of the County's Shoreline Technical Advisory Committee (STAC, see Acknowledgements section for a list of members) previously provided pertinent reference materials and reviewed the September 2006 Draft Inventory and Characterization Report. This final report addresses comments and suggestions provided by the Department of Ecology, County staff, and STAC members and suggestions that could not previously be accommodated due to schedule and/or budget limitations.

This report provides a general inventory description of existing conditions along approximately 250 miles of marine shoreline and approximately 22 miles of lakeshore on 14 lakes that are designated as shorelines of the state in Jefferson County. In addition, this report provides a general inventory of more than 742 'river miles' of stream and river shoreline, of which approximately 238 river miles are within County-regulated (non-federal and non-tribal) lands (based on 20 cubic feet per second [cfs] mapping from USGS, 1998). It also characterizes, in a general manner, the ecosystem processes that shape and influence conditions along each reach of the County's shoreline. A goal of the watershed or landscape-scale analysis is to determine which of the key shoreline-influencing processes have been altered or impaired, even if the factors contributing to the impairment occur outside or beyond the jurisdiction of the SMA. The intent of the shoreline reach-scale analysis is to identify how existing conditions at or near the shoreline have responded to watershed alterations, and how the alterations have affected the functions and values of the SMA-regulated shorelines.

While this report provides a basis for updating the policies and regulations contained in the County's SMP, it does not provide a complete blueprint for managing each individual shoreline parcel or property over time. Readers are reminded that much of the information presented herein (concerning water quality, protected/priority habitats and species, land cover, etc.) is from government-maintained databases, which are frequently updated to reflect changing conditions. Furthermore, some of the shoreline characteristics described or mapped in this report are ephemeral or seasonal. For example, eelgrass beds can change in response to changing weather or circulation patterns, and forage fish can commence spawning in areas where they have not previously been known to spawn. In many cases, decisions on how or whether specific shoreline areas should be used, developed, or restored will require additional, site-specific/time-specific data and/or analyses.

Finally, this report is not intended as a full evaluation of the effectiveness of the SMA or County's existing shoreline policies or regulations. Alterations and impairments described in this report could be the result of actions that occurred prior to the adoption of the SMP, actions that are

exempt from SMP regulation as dictated by the Act, illegal actions, and/or actions that occurred outside shoreline jurisdiction. That said, the inventory and characterization information can serve as a valuable tool for determining how future use and development might affect shoreline resources, where there are opportunities to restore or rectify past impacts, and where there are valuable or unaltered areas that need protection.

1.2.1 Mapping

Accompanying this text is an electronic map folio depicting some of the pertinent watershed-scale and reach-scale information described herein¹ (Appendix C). The maps were generated from a project-specific GIS database maintained by Jefferson County and updated throughout development of this report. The GIS database includes myriad datasets from a variety of sources. Using the GIS database, it is possible to plot and map virtually any shoreline attribute at any scale. Plotting all of the attributes at a fairly refined scale (e.g., 1:24,000 or larger) would require hundreds of maps. Because of the expense and logistical challenges associated with producing such a large quantity of maps, the map folio focuses on key features of interest for SMA-regulated shorelines.

In some cases, the report authors have consolidated information in the database to facilitate depiction of key information at a reasonable scale. For example, the project-specific database includes data from a recent study by the Point No Point Treaty Council (PNPTC) on the *Historical Changes to Estuaries, Spits, and Associated Tidal Wetland Habitats in the Hood Canal and Strait of Juan de Fuca Regions of Washington State* (Todd et al., 2006). Some of the data from this study were aggregated to create the maps in Appendix C (see Maps 26 and 27 for the PNPTC information). Readers are encouraged to review the map folio in conjunction with the text for better understanding, recognizing that the maps are only a subset of the data used to compile this analysis.

The County is divided into three general areas for purposes of displaying maps: southeast, northeast and west. For some attributes (e.g., aquatic vegetation, shoreline modifications, etc.), complete data layers are only available for eastern Jefferson County. In general, characteristics of the Pacific Coast shore and some of the major west coast tributaries (i.e., the Queets River) may not be fully represented on maps since they are outside County shoreline jurisdiction.

As a final reminder, the information presented in this report is not necessarily accurate to the parcel or property boundary scale. For this reason, **this report makes no representation as to the exact ownership (public or private) of specific areas of the County shoreline or adjacent tidelands, except for noting the general location of public parks and other public access points.** Similarly, the maps included here were prepared for planning purposes only. The regulatory extent of "shoreline jurisdiction" (described below) at any one location or property will require site-specific, field-based investigation.

¹ All of the referenced maps are contained in Appendix C. Figures are included in the body of the text.

1.3 **REGULATORY OVERVIEW**

Washington's Shoreline Management Act was passed by the State Legislature in 1971 and adopted by the public in a referendum. The SMA was created in response to a growing concern among residents of the state that unplanned and uncoordinated development was causing serious and permanent damage to shorelines. The purpose of the SMA is to "…provide for the management of the shorelines of the state by planning for and fostering all reasonable and appropriate uses²." Ecology administers the Act, but gives primary permitting authority for shoreline development to local governments.

Local governments also have responsibility for developing SMPs in accordance with Ecology's guidelines. The guidelines give local governments discretion to adopt master programs reflecting local circumstances and to develop other local regulatory and non-regulatory programs related to the goals of shoreline management as provided in the policy statements of RCW 90.58.020, WAC 173-26-176, and WAC 173-26-181.

Shoreline Master Programs balance and integrate the objectives and interests of local citizens and address the full variety of conditions on the shoreline. They have a planning function as well as a regulatory function. The planning function may take into account areas outside the territorial limits of the shorelines of the state. The regulatory function is limited to the areas subject to shoreline jurisdiction as defined by the Act (RCW 90.58.030(2)).

1.3.1 Jefferson County Shoreline Master Program

Jefferson County adopted its existing SMP in 1989 and amended it most recently in 1998. The SMP provides both policies and regulations to govern development and use of the County shorelines. The SMP is codified as Chapter 18.25 of the Jefferson County Code (JCC). The UDC regulates shoreline development by requiring shoreline substantial development permits, variances, conditional use permits, or statement of exemption according to the criteria established by the Act (RCW 90.58.140).

Local SMPs establish a system to classify shoreline areas into specific "environment designations." The purpose of shoreline environment designations (SEDs) is to provide a uniform basis for applying policies and use regulations within distinctly different shoreline areas. In a regulatory context, SEDs function similarly to zoning overlay districts. That is, they provide an additional layer of policy and regulation that applies, in conjunction with other development standards, to lands and waters within shoreline jurisdiction. Generally, environment designations are based on biological and physical capabilities and limitations of the shoreline, existing and planned development patterns, and a community's vision and objectives for future development.

The environment designations in the County's current SMP were developed based on land use patterns, biophysical capabilities and limitations of the shorelines, and input from local citizens as well as the County comprehensive land use plan and Ecology guidelines as they existed at the time. The environment designations have not been updated since they were originally adopted.

² RCW 90.58.020

Five environment designations are currently in effecting Jefferson County: Aquatic, Natural, Conservancy, Suburban, and Urban.

All of the County's river and lake shorelines currently have a Conservancy designation. More intensively developed marine shorelines near Port Townsend, Port Ludlow and Port Hadlock are designated Urban. Other marine shores are generally designated Conservancy or Suburban or a combination of the two, with scattered areas designated as Natural. The Aquatic designation applies only to areas waterward of the ordinary high water mark (OHWM). As noted in Section 1.1, part of the SMP update process involves revisiting and revising these designations in accordance with the new state criteria and standards in WAC 173-26- 211. Preliminary recommendations for revised SEDs are provided in Chapter 5 of this report.

A variety of other regulatory programs, plans, and policies work in concert with the County's SMP to manage shoreline resources and regulate development near the shoreline. The Comprehensive Plan establishes the general land use pattern and vision of growth and development the County has adopted for areas both inside and outside the shoreline jurisdiction. The County development standards and use regulations for environmentally critical areas are particularly relevant to the SMP. Designated environmentally critical areas including wetlands, aquifer recharge areas, frequently flooded areas, fish and wildlife habitat conservation areas, and geologically hazardous areas are found throughout County shoreline jurisdiction. The County recently adopted a new critical areas ordinance (JCC 18.22) to meet the Washington Growth Management Act mandates.

1.3.2 Shoreline Jurisdiction and Definitions

SMA jurisdiction includes all *shorelines of the state* as defined in RCW 90.58.030. Shorelines of the state include the total of all *shorelines* and *shorelines of statewide significance*. Shorelines means all of the water areas of the state, including reservoirs, and their associated *shorelands*, together with the lands underlying them, except:

- Shorelines on segments of streams upstream of a point where the mean annual flow is 20 cubic feet per second (cfs) or less and the wetlands associated with such upstream segments; and
- Shorelines on lakes less than 20 acres in size and the wetlands associated with such small lakes.

1.3.2.1 County Shorelines

Rivers and streams in Jefferson County that are designated shorelines are shown on Maps 1A and 1B in Appendix C and include: Goodman Creek, numerous tributaries to the Hoh River, Mosquito Creek, Cedar Creek, Snahapish River, numerous tributaries to the Clearwater River, Solleks River and portions of the Salmon River and Matheny Creek in the west side of the County. In the eastern part of the County, rivers and streams that are designated shorelines: Salmon Creek, Snow Creek, Chimacum Creek, Little Quilcene River, Big Quilcene River, Dosewallips River, Duckabush River, and Fulton Creek (revised from WAC 173-20-200 to include all rivers and streams below 20 cfs limits determined by USGS, 1998). Map 1C documents shoreline planning areas for rivers and streams showing the current upstream limits of shoreline jurisdiction based on the WAC and the proposed limits as derived from the 1998 USGS 20 cfs mapping (USGS, 1998).

Jefferson County lakes that meet the size threshold for shorelines are also shown on Maps 1A and 1B in Appendix C and include: Anderson, Crocker, Gibbs, Leland, Lords, Peterson, Sandy Shore, Tarboo, Wahl, Beausite, Teal, Rice, and one unnamed lake (Ludlow Lake) in Section 16, Township 30N, Range 1W³.

Jefferson County marine shorelines include the waters of Puget Sound and Strait of Juan de Fuca and their underlying lands between the ordinary high water mark and extreme low tide.

1.3.2.2 Shorelands

Shorelands means those lands extending landward for 200 feet in all directions as measured on a horizontal plane from the OHWM; floodways and contiguous floodplain areas landward 200 feet from such floodways; and all wetlands and river deltas associated with such streams, lakes, and tidal waters.

In context of SMA, *associated wetlands* means wetlands that are in proximity to shorelines or that influence or are influenced by waters subject to the Act (WAC 173-22-030 (1)). These typically include wetlands that physically extend into the shoreline jurisdiction, and wetlands that are functionally related to the shoreline through a hydrologic connection or other factors. *Associated river deltas* include those lands formed as aggradational features at the mouths of streams where the streams enter a quieter body of water. The upstream extent of a river delta is where it no longer forms distributary channels.

A local jurisdiction may include all of the 100-year floodplain in its master program, or a portion thereof as long as such portion includes, at a minimum, the floodway and the adjacent land extending landward 200 feet within the floodplain.

1.3.2.3 County Shorelines of Statewide Significance

Freshwater shorelines of statewide significance include rivers with mean annual flow of 1,000 cfs or greater⁴, and freshwater lakes 1,000 acres or larger. In Jefferson County, this includes portions of the Bogachiel, Clearwater, Hoh, Queets, Elwha and Quinault Rivers all located in western Jefferson County. The Queets River passes completely within Olympic National Park (ONP) and Tribal lands and the Elwha River passes completely within the ONP. None of the County's lakes are designated shorelines of statewide significance. Marine shorelines of statewide significance include: the area from the ordinary high water mark to the western boundary of the state on the west side of the County (excluding lands under federal or tribal ownership), the areas of Puget Sound and Strait of Juan de Fuca seaward of extreme low tide, and the areas of Hood Canal between ordinary high water mark and extreme low tide.

In general, federal/tribal actions on federal/tribal lands do not require shoreline permits, even if they are conducted within the shoreline area. However, non-federal/tribal actions on shorelines within federal/tribal lands are generally subject to the Act. This can include fee ownership in-

³ Kah Tai Lake, which is also a shoreline of the state, is within the city of Port Townsend's municipal boundary and under city jurisdiction. Mill Pond is not a natural lake.

⁴For rivers west of the Cascade Range crest.

holdings (private property surrounded by national forest or other federal lands) or partial ownership such as mining claims. Applicability of the shoreline program within various federal land ownerships needs to be considered on a case-by-case basis. For some federal land holdings, the federal government has invoked "exclusive jurisdiction." For example, in Olympic National Park (ONP), the federal government has invoked exclusive jurisdiction over all lands and activities within the boundaries. The situation is variable with land under tribal ownership. Another type of exclusive federal status may be military installations where no non-federal activity is allowed, such as Indian Island.

For cities and counties updating their SMP maps, Ecology's general rule is to include shorelines of the state within federal lands in SMP maps except where exclusive federal or tribal jurisdiction is documented. Ecology cautions: "While SMP mapping within exclusive federal jurisdiction areas will not change any legal status of the lands, it could lead to confusion regarding applicability of the SMA." Map 1C (Appendix C) depicts rivers and streams within federal lands that would be jurisdictional under the SMA if a situation in which non-federal/tribal actions were to take place.

1.3.2.4 Potential Shorelines Not Designated by WAC 173-18 or 173-20

Following the passage of the Act in the early 1970s, Ecology developed a list of all known streams and lakes meeting the criteria for shorelines of the state⁵. The lists, which were codified in WAC 173-18 and 173-20, had not been updated since their initial development. Recently, Ecology revised the list of shoreline streams using data from several regional flow studies conducted by the U.S. Geological Survey (USGS 1998)⁶. The results of the USGS study showed that numerous streams that are not currently designated as shorelines of the state may actually meet the 20 cfs mean annual flow criterion and should be regulated as state shorelines. In other cases, the USGS study relocated the upstream boundary of the 20 cfs point further upstream or downstream from its WAC-designated location. In many cases the new stream flow data show the 20 cfs points in headwaters areas on federal lands, which may or may not be subject to County SMP jurisdiction. The revised list of streams in Jefferson County meeting the 20 cfs mean annual flow criterion is provided in Table 1-1. Mapping of rivers and streams depicted on Maps 1A and 1B in Appendix C have been updated to account for the USGS (1998) study, with most revisions to the codified list of WAC 173-18 and 173-20 occurring on streams located in the western portion of Jefferson County. For comparative purposes, Map 1C depicts shorelines of the state as designated by WAC 173-18 and 173-20 with the updated mapping of shorelines using the USGS 1998 information. All maps in Appendix C depicting the shoreline planning area associated with shorelines of the state include mapping updated per the 20 cfs information USGS (1998).

Bahls et al. (2006) initiated a similar effort to assess potential errors in state shoreline designation for lakes in Washington. The study attempted to estimate the error rate in current lake designation and develop a reliable and cost-effective method for local governments to use in identifying lakes that meet the 20-acre size threshold. The investigators used a three-phased approach to identify

⁵ The original U.S. Geological Survey stream flow report used by Ecology in the 1970s did not include streams above the first federal land boundary.

⁶ The revised list has not been codified, but Ecology is currently in the process of revising state jurisdiction regulations to allow for incorporation of new data during the local SMP amendment process.

lakes equal to or greater than 20 acres throughout the state. The first phase involved GIS analysis, the second phase involved aerial photo interpretation, and the final phase included field assessment of a small subset of the lakes analyzed. The study identified several currently undesignated lakes in Jefferson County that appear to meet the criteria for shorelines of the state (indicated by shading in Table 1-2). Not all lakes within the County were assessed.

As a result of Bahls et al., 2006 and additional analysis done for this report, four additional lakes (Beausite, Teal, Rice, and Ludlow Lakes) have been determined to be shorelines of the state (in addition to the ten lakes included within the County's 1998 SMP). These lakes are believed to meet the 20-acre size threshold.

The additional potential shoreline streams and lakes are identified herein so that they can be included in the County's SMP if they occur on County-controlled lands (outside federal/tribal jurisdiction).

Stream or River * indicates shoreline of statewide significance. B = Branch; E = East; F = Fork; M = Middle; N = North; P = Prong; S = South; T = Tributary; U = Unnamed; W = West	USGS 7.5 Minute Series Map where Point is Located	Currently Designated in WAC 173-18?	Total River Miles of Stream or River	River Miles on Federal Lands	20 cfs Upstream Limit on Federal Land?
Alder Creek	Winfield Creek	No	1.7	0	No
Alta Creek	Kimta Peak	No	3.8	3.8	Yes
Alta Creek, U T	Bob Creek	No	0.6	0.6	Yes
Alta Creek, U T	Kimta Peak	No	0.4	0.4	Yes
Anderson Creek	Anderson Creek	No	1.5	0.5	Yes
Big Creek	Bunch Lake	No	12	11.5	Yes
Big Creek, U T	Bunch Lake	No	1.8	1.8	Yes
Big Quilcene River	Mount Townsend	Yes	15	11.5	Yes
Blue Glacier	Mount Olympus	No	No information	No information	Yes
Bob Creek	Bob Creek	No	1.9	1.9	Yes
Bogachiel River - Entire length in Jefferson County is a Shoreline	Indian Pass	Yes	9	4.6	Yes
Braden Creek	Kalaloch Ridge	No	0.7	0	No
Buckinghorse Creek	Chimney Peak	No	3.2	3.2	Yes
Cabin Creek	Eldon	No	1.3	1.3	Yes
Cameron Creek	Wellesley Peak	No	0.6	0.6	Yes
Cannings Creek - Entire length in Jefferson County is a Shoreline	Bunch Lake	No			Yes
Canoe Creek	Finley Creek	No	1.3	1.3	Yes
Cedar Creek	Kalaloch Ridge	Yes	2.4	0	No
Chimacum Creek	Center	Yes	5.4	0	No

Table 1-1. Ecology's Updated List of Streams/Rivers Meeting the Definition of Shorelines of the State in Jefferson County

Stream or River * indicates shoreline of statewide significance. B = Branch; E = East; F = Fork; M = Middle; N = North; P = Prong; S = South; T = Tributary; U = Unnamed; W = West	USGS 7.5 Minute Series Map where Point is Located	Currently Designated in WAC 173-18?	Total River Miles of Stream or River	River Miles on Federal Lands	20 cfs Upstream Limit on Federal Land?
Christmas Creek	Christmas Creek	Yes	6.4	0	No
Clearwater River - From confluence with U T	Kloochman Rock	Yes	35	1.4	Yes
Clearwater River *	Christmas Creek	Yes		0	No
Clearwater River, U T	Kloochman Rock	No	0.9	0	Yes
Clearwater River, U T	Kloochman Rock	No	No information	No information	Yes
Crazy Creek	Mount Steel	No	2.9	2.9	Yes
Cream Lake Creek	Mount Queets	No	2	2	Yes
Deception Creek	Christmas Creek	No	1.2	1.2	No
Delabarre Creek	Chimney Peak	No	3.1	3.1	Yes
Delabarre Creek, U T	Mount Christie	No	0.9	0.9	Yes
Dosewallips River	Wellesley Peak	Yes	26.1	19.1	Yes
Dosewallips River, W F	Mount Steel	No	No information	No information	Yes
Dowans Creek	Anderson Creek	No	1.4	0	No
Duckabush River	Mount Steel	Yes	24.3	20.7	Yes
Duckabush River, U T	The Brothers	No	0.8	0.8	Yes
Dungeness River	Mount Deception	No	5.1	5.1	Yes
Elip Creek	Kimta Peak	No	1.7	1.7	Yes
Elk Creek	Queets	No	4.6	1	No
Elk Lick Creek	Mount Steel	No	0,6	0.6	Yes
Elkhorn River	Mount Queets	No	2	2	Yes
Elwha River	Mount Queets	No	17.8	17.8	Yes
Elwha River, U T	Mount Queets	No	0.3	0.3	Yes
Finley Creek	Finley Creek	No	5.2	5.2	Yes
Finley Creek, U T	Finley Creek	No	2.1	2.1	Yes
Fletcher Canyon - Entire length in Jefferson County is a Shoreline	Bunch Lake	No	0.5	0	No
Fox Creek	Bunch Lake	No	1.2	1.2	Yes
Fulton Creek	Brinnon	Yes	1	0	No
Geoduck Creek	Mount Christie	No	1.9	1.9	Yes
Geoduck Creek, U T	Mount Christie	No	0.6	0.6	Yes
Godkin Creek	Chimney Peak	No	6.9	6.9	Yes
Godkin Creek, U T	Chimney Peak	No	1	1	Yes
Godkin Creek, U T	Chimney Peak	No	1.4	1.4	Yes
Goldie River	Mount Queets	No	7.4	7.4	Yes
Goldie River, U T	Mount Queets	No	1.6	1.6	Yes
Goldie River, U T	Mount Queets	No	1.5	1.5	Yes
Goldie River, U T	Mount Queets	No	3.1	3.1	Yes
Goldie River, U T	Mount Queets	No	1.7	1.7	Yes
Goodman Creek	Anderson Creek	Yes	9.9	9.9	No
Graves Creek	Mount Hoquiam	No	5.2	5.2	Yes
Gray Wolf River	Wellesley Peak	No	1.2	1.2	Yes

Stream or River * indicates shoreline of statewide significance. B = Branch; E = East; F = Fork; M = Middle; N = North; P = Prong; S = South; T = Tributary; U = Unnamed; W = West	USGS 7.5 Minute Series Map where Point is Located	Currently Designated in WAC 173-18?	Total River Miles of Stream or River	River Miles on Federal Lands	20 cfs Upstream Limit on Federal Land?
Hades Creek	Winfield Creek	No	1.4	1.4	Yes
Harlow Creek - Entire length in Jefferson County is a Shoreline	Salmon River West	No	7.6	7.6	Yesw
Hayes River	Chimney Peak	No	8.0	8.0	Yes
Hee Haw Creek	Kimta Peak	No	3.8	3.8	Yes
Hee Haw River	Kimta Peak	No	No information	No information	Yes
Hell Roaring Creek, E F	Anderson Creek	No	No information	No information	Unclear
Hoh River	Mount Olympus	No	58.3	30.5	Yes
Hoh River *	Owl Mountain	Yes	No information	No information	Yes
Hoh River, S F	Mount Olympus	Yes	14.9	14.9	Yes
Hoh River, S F, U T	Bob Creek	No	0.3	0.3	Yes
Hoh River, S F, U T	Kloochman Rock	No	1.8	1.8	Yes
Hoh River, S F, U T	Mount Olympus	No	0.3	0.3	Yes
Hoh River, S F, U T	Mount Tom	No	2.5	2.5	Yes
Hoh River, S F, U T	Mount Tom	No	No information	No information	Yes
Hoh River, U T	Mount Queets	No	1.1	1.1	Yes
Hoh River, U T	Mount Tom	No	0.8	0.8	Yes
Hoh River, U T	Mount Tom	No	3.0	3.0	Yes
Hoh River, U T	Owl Mountain	No	0.5	0.5	Yes
Hoh River, U T	Owl Mountain	No	No information	No information	Yes
Hook Branch Creek	Matheny Ridge	No	2.3	2.3	Yes
Howe Creek - Entire length in Jefferson County is a Shoreline	Bunch Lake	No	No information	No information	Yes
Hungry Creek	The Brothers	No	0.7	0.7	Yes
Hurst Creek	Salmon River West	Yes	4.3	0	No
Ice River	Mount Olympus	No	1.6	1.6	Yes
Irely Creek	Bunch Lake	No	0.2	0.2	Yes
Jackson Creek	Owl Mountain	No	3.5	3.5	Yes
Jeffers Glacier	Mount Olympus	No	No information	No information	Yes
Jemrod Creek	Mount Olympus	No	0.8	0.8	Yes
Kalaloch Creek	Kalaloch Ridge	Yes	6.2	0	No
Kalaloch Creek, E F	Kalaloch Ridge	No	No information	No information	Yes
Kimta Creek	Kimta Peak	No	3.0	3.0	Yes
Kunamakst Creek	Stequaleho Creek	No	0.8	0.0	Yes
Lena Creek	The Brothers	No	2.5	2.5	Yes
Litchy Creek	Mount Hoquiam	No	3.5	3.5	Yes
Litchy Creek, U T	Mount Hoquiam	No	0.5	0.5	Yes
Little Quilcene River - Entire length in Jefferson County is a Shoreline	Mount Walker	Yes	5.8	0	No
Long Creek	Mount Queets	No	1.1	1.1	Yes

Stream or River * indicates shoreline of statewide significance. B = Branch; E = East; F = Fork; M = Middle; N = North; P = Prong; S = South; T = Tributary; U = Unnamed; W = West	USGS 7.5 Minute Series Map where Point is Located	Currently Designated in WAC 173-18?	Total River Miles of Stream or River	River Miles on Federal Lands	20 cfs Upstream Limit on Federal Land?
Long Creek, U T	Hurricane Hill	No	No information	No information	Yes
Lost River	Mc Cartney Peak	No	5.5	5.5	Yes
Manor Creek, S F	Stequaleho Creek	No	2.4	0	No
Maple Creek	Spruce Mountain	Yes	3.4	0	No
Matheny Creek	Finley Creek	Yes	17.1	12.5	Yes
Matheny Creek, U T	Finley Creek	No	4.4	4.4	Yes
Matheny Creek, U T	Matheny Ridge	No	No information	No information	Yes
Matheny Creek, U T	Matheny Ridge	No	No information	No information	Yes
Mckinnon Creek	Salmon River West	No	0.8	0.5	Yes
Miller Creek	Kalaloch Ridge	Yes	4.8	0	No
Miller Creek, E F	Christmas Creek	Yes	No information	No information	Yes
Minter Creek	Hoh Head	Yes	3.0	0	No
Mosquito Creek	Hoh Head	Yes	4.8	0	No
Mosquito Creek, N F	Hoh Head	No	1.2	0	No
Mount Tom Creek - From its' confluence with U T	Mount Tom	No	8.3	8.3	Yes
Mount Tom Creek, U T	Mount Tom	No	0.7	0.7	Yes
Mount Tom Creek, U T	Mount Tom	No	0.9	0.9	Yes
Mount Tom Creek, U T	Mount Tom	No	No information	No information	Yes
Mud Creek	Salmon River East	No	2.2	0.5	Yes
Murphy Creek	Quillayute Prairie	No	No information	No information	Unclear
Nolan Creek	Christmas Creek	Yes	4.4	0.0	Yes
Noname Creek	Chimney Peak	No	0.7	0.7	Yes
O'Neil Creek	Mount Olson	No	No information	No information	Yes
Owl Creek	Spruce Mountain	Yes	5.7	0	No
Paradise Creek	Bob Creek	No	0.6	0.6	Yes
Paull Creek	Mount Olympus	No	1.3	1.3	Yes
Promise Creek	Kimta Peak	No	2.4	2.4	Yes
Pyrites Creek	Chimney Peak	No	1.3	1.3	Yes
Queets River	Mount Queets	No	53.7	53.7	Yes
Queets River *	Kloochman Rock	No	No information	No information	Yes
Queets River, U T	Bob Creek	No	0.4	0.4	Yes
Queets River, U T	Kimta Peak	No	0.0	0	No
Queets River, U T	Kimta Peak	No	0.6	0.6	Yes
Queets River, U T	Mount Queets	No	0.1	0.1	Yes
Queets River, U T	Mount Queets	No	0.9	0.9	Yes
Queets River, U T	Mount Queets	No	0.9	0.9	Yes
Queets River, U T	Salmon River East	No	0.8	0.8	Yes
Quinault River	Mount Steel	No	16.5	14.3	Yes
Quinault River *	Bunch Lake	Yes	No information	No information	Yes
Quinault River, N F	Mount Christie	Yes	18.5	18.5	Yes
Quinault River, N F, U T	Mount Christie	No	1.0	1.0	Yes

Stream or River * indicates shoreline of statewide significance. B = Branch; E = East; F = Fork; M = Middle; N = North; P = Prong; S = South; T = Tributary; U = Unnamed; W = West	USGS 7.5 Minute Series Map where Point is Located	Currently Designated in WAC 173-18?	Total River Miles of Stream or River	River Miles on Federal Lands	20 cfs Upstream Limit on Federal Land?
Quinault River, N F, U T	Mount Christie	No	No information	No information	Yes
Quinault River, U T	Mount Hoquiam	No	0.6	0.6	Yes
Quinault River, U T - Entire length in Jefferson County is a Shoreline	Mount Olson	No	No information	No information	Yes
Rocky Brook	Brinnon	No	2.2	1.8	Yes
Royal Creek	Mount Deception	No	0.8	0.8	Yes
Rustler Creek	Chimney Peak	No	9.2	9.2	Yes
Rustler Creek, U T	Mount Christie	No	0.7	0.7	Yes
Rustler Creek, U T	Mount Christie	No	1.5	1.5	Yes
Rustler Creek, U T	Mount Christie	No	0.3	0.3	Yes
Saghalie Creek	Mount Christie	No	3.2	3.2	Yes
Salmon Creek	Uncas	Yes	1.6	0.0	No
Salmon River, M F	Matheny Ridge	No	4.8	3.3	Yes
Salmon River, N F	Matheny Ridge	No	2.6	2.6	Yes
Sams River	Finley Creek	No	14.9	14.3	Yes
Sams River, U T	Matheny Ridge	No	1.4	1.4	Yes
Seattle Creek	Mount Christie	No	1.5	1.5	Yes
Shale Creek	Christmas Creek	Yes	3.4	0	No
Silt River	Wellesley Peak	No	5.1	5.1	Yes
Silt River, U T	Wellesley Peak	No	0.7	0.7	Yes
Snahapish River	Winfield Creek	Yes	11.9	0	No
Snahapish River, U T	Christmas Creek	No	0.8	0	No
Snow Creek	Uncas	Yes	3.5	0	No
Solleks River, U T	Stequaleho Creek	Yes	0.9	0.0	Yes
Solleks River	Kloochman Rock	No	9.0	0.0	Yes
Stalding Creek	Kimta Peak	No	1.1	1.1	Yes
Stequaleho Creek	Stequaleho Creek	Yes	5.9	0.0	Yes
Tacoma Creek	Salmon River West	No	1.5	0.6	Yes
Three Prune Creek	Kimta Peak	No	2.4	2.4	Yes
Townsend Creek	Mount Walker	No	6.2	6.2	Yes
Tsheltshy Creek	Bunch Lake	No	12.6	12.6	Yes
Tshletshy Creek, U T	Bob Creek	No	0.7	0.7	Yes
Tshletshy Creek, U T	Bob Creek	No	1.0	1.0	Yes
Tshletshy Creek, U T	Bob Creek	No	1.7	1.7	Yes
Tshletshy Creek, U T	Bob Creek	No	1.0	1.0	Yes
Tshletshy Creek, U T	Bob Creek	No	1.5	1.5	Yes
Tshletshy Creek, U T	Kloochman Rock	No	0.4	0.4	Yes
Tumwata Creek	Spruce Mountain	No	2.7	2.7	Yes
Tunnel Creek	Mount Townsend	No	No information	No information	Yes
Tunnel Creek, U T	Mount Townsend	No	0.7	0.7	Yes
Twin Creek	Spruce Mountain	No	1.0	1.0	Yes
Upper O'Neil Creek	Chimney Peak	No	0.8	0.8	Yes

Stream or River * indicates shoreline of statewide significance. B = Branch; E = East; F = Fork; M = Middle; N = North; P = Prong; S = South; T = Tributary; U = Unnamed; W = West	USGS 7.5 Minute Series Map where Point is Located	Currently Designated in WAC 173-18?	Total River Miles of Stream or River	River Miles on Federal Lands	20 cfs Upstream Limit on Federal Land?
White Glacier	Mount Olympus	No	6.0	6.0	Yes
Wild Rose Creek	Bunch Lake	No	1.3	1.3	Yes
Willoughby Creek	Winfield Creek	No	0.4	0	No
Winfield Creek	Winfield Creek	Yes	4.3	0	No
Winfield Creek, U T	Winfield Creek	No	1.2	0	No
Wynoochee River	Mount Hoquiam	No	0.6	0.6	Yes

Table 1-2. Comparison of 1998 SMP Listed Lakes, WAC 173-20 Listed Lakes, and Bahls etal. (2006) Results; and Recommended Shoreline of the State Status (Includes Only Lakeswithin County Jurisdiction)

Recommended Shorelines of the State are indicated in Red Text							
Lake Name	1998 SMP Listing	WAC Listing	Results of Bahls et al. 2006	Recommended Status			
Anderson	Listed	Listed	Not Assessed	Shoreline of the State			
Crocker	Listed	Listed	Not Assessed	Shoreline of the State			
Gibbs	Listed	Listed	Not Assessed	Shoreline of the State			
Leland	Listed	Listed	Not Assessed	Shoreline of the State			
Lords	Listed	Listed	Not Assessed	Shoreline of the State			
Peterson	Listed	Listed	Not Assessed	Shoreline of the State			
Sandy Shore	Listed	Listed	Not Assessed	Shoreline of the State			
Tarboo	Listed	Listed	Not Assessed	Shoreline of the State			
Unnamed Lake (commonly called Mill Pond)	Listed	Listed	Not Assessed	Shoreline of the State			
Wahl	Listed	Listed	Not Assessed	Shoreline of the State			
Beausite	Not Listed	Not Listed	Open Water 10-19 Acres, Possible Shoreline	Shoreline of the State			
Rice	Not Listed	Not Listed	Open Water 20+ Acres, Possible Shoreline	Shoreline of the State			
Teal	Not Listed	Not Listed	Open Water 10-19 Acres, Possible Shoreline	Shoreline of the State			
Ludlow	Not Listed	Not Listed	Open Water 10-19 Acres, Possible Shoreline	Shoreline of the State			
Browns	Not Listed	Not Listed	Open Water 1-9 Acres, Not Shoreline	Not a Shoreline of the State			
Delaney	Not Listed	Not Listed	Open Water 1-9 Acres, Possible Shoreline	Not a Shoreline of the State			

Recommended Shorelines of the State are indicated in Red Text						
Lake Name	1998 SMP Listing	WAC Listing	Results of Bahls et al. 2006	Recommended Status		
East Wahl (Twin Lakes)	Not Listed	Not Listed	Open Water 1-9 Acres, Possible Shoreline	Not a Shoreline of the State		
Embody	Not Listed	Not Listed	Open Water 1-9 Acres, Possible Shoreline	Not a Shoreline of the State		
Horseshoe	Not Listed	Not Listed	Open Water 10-19 Acres, Possible Shoreline	Not a Shoreline of the State		
Thorndyke	Not Listed	Not Listed	Not Found – <1 Acre Open Water	Not a Shoreline of the State		
Larson	Not Listed	Not Listed	Not Assessed	Not a Shoreline of the State		