

# 1. BACKGROUND AND PURPOSE OF THE REPORT

Clallam County is undergoing a comprehensive update of its shoreline master program (SMP) in 2011-12 to improve protection of the shoreline environments and ensure their continued use and enjoyment. The County adopted its first SMP in 1976 and has not undertaken a comprehensive review of the program in more than 35 years. The update is also required by the Shoreline Management Act (SMA) of 1971 and the implementing rules known as the shoreline guidelines<sup>1</sup>.

One of the first steps in the SMP update process is to inventory and characterize shoreline conditions (Figure 1-1). This involves assessing the lakes, rivers and marine waters that are classified as “shorelines of the state” and their adjoining “shorelands” and characterizing the broader landscape surrounding these lands and waters. The Inventory and Characterization Report (ICR) must be based on the most current, accurate, and complete scientific and technical information available that is applicable to the issues of concern. The ICR serves multiple purposes, such as:

- Identify shoreline resources and areas that provide value to County residents, recreationists, property owners, businesses and other stakeholders to ensure they are managed appropriately according to the goals of the SMA;
- Assess and document current shoreline conditions to establish a baseline against which future conditions can be compared;
- Provide a basis of information to assign of Shoreline Environment Designations (which is one of the next tasks in the update process), and;
- Present information for future SMP policy and regulatory decisions related to shoreline use and development, shoreline ecology, and public access.

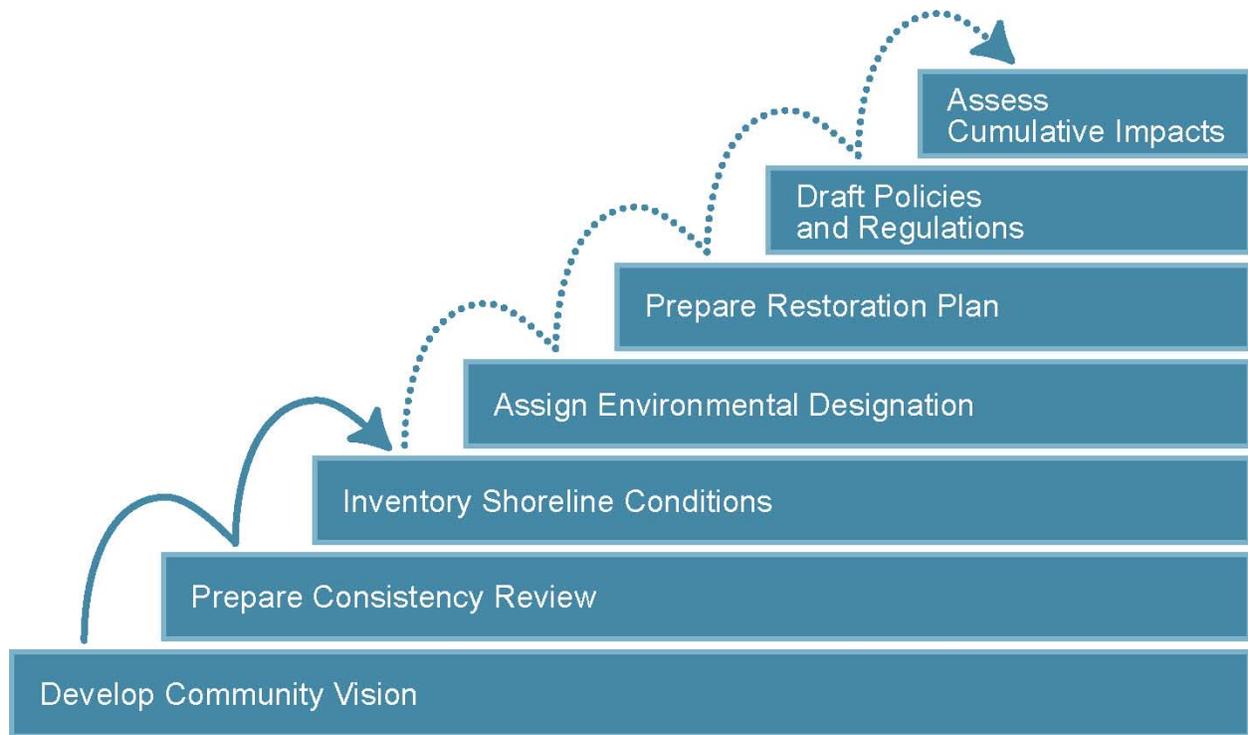
A team of consultants<sup>2</sup> prepared this ICR at the request of the County, using grant funds provided by the Washington Department of Ecology (Ecology). This report also presents initial information to support the County’s assessment of “no net loss,” which is funded by a grant from the Environmental Protection Agency (EPA).

A draft ICR was submitted for public review in December 2011. This final ICR incorporates and reflects the input obtained during the public review.

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<sup>1</sup> Revised Code of Washington (RCW) 90.58 and Washington Administrative Code (WAC) 173-26, Part III.

<sup>2</sup> ESA is the lead consultant for the SMP update with support from Coastal Geologic Services, Kramer Consulting, Carol Macilroy Consulting, and Ann Seiter Technical Writing and Editing.



**Figure 1-1. Steps in the shoreline master program update process; the public will have opportunities to review and comment on each of the technical products shown here.**

Unless stated otherwise, the information presented in this report is limited to that portion of Water Resource Inventory Areas (WRIAs) 17, 18 and 19 within unincorporated Clallam County that drain to the Strait of Juan de Fuca. The emphasis is on portions of the study area that area subject to the Shoreline Management Act (see box). In general is a relatively narrow zone of land and water associated with designated shorelines of the state.

The shorelines within the municipal limits of the cities of Port Angeles and Sequim are not included in this analysis as these shores are under the management of the respective cities. Lands owned by the Jamestown S'Klallam Tribe and Lower Elwha Klallam Tribe are included in the inventory even though tribal lands are not subject to Shoreline Management Act jurisdiction. The Makah Reservation is not included in the inventory because it is geographically fairly isolated.

### Shoreline Jurisdiction – Definitions and Terminology

The County's SMP governs all non-federal and non-tribal shorelines of the state as defined in RCW 90.58.030, including shorelines and shorelines of statewide significance.

Shorelines are rivers and streams (or segments thereof) with a mean annual flow of 20 cubic feet per second (cfs) or more, lakes greater than 20 acres, and marine waters between the ordinary high water line and extreme low tide, together with their underlying lands and associated shorelands.

Shorelines of Statewide Significance include rivers with mean annual flow of 1,000 cfs or more; lakes 1,000 acres or larger; and marine waters seaward of extreme low tide.

Shorelands refers to the lands extending landward for 200 feet in all directions from the ordinary high water line; floodways and contiguous floodplain areas landward 200 feet from such floodways; and all associated wetlands and river deltas. Shorelands can include critical areas that occur within shoreline jurisdiction and their buffers.

The shoreline water bodies described in this report include: Dungeness River, McDonald Creek, Morse Creek, Elwha River, Salt Creek, Lyre River/Boundary Creek, Indian Creek/Little River, East Twin River, West Twin River, Deep Creek, Pysht River, Clallam River, Little Hoko River, Hoko River, Sekiu River (and North and South Forks), Bullman Creek; Lake Sutherland; and the Strait of Juan de Fuca. The Strait of Juan de Fuca and the Elwha River are also Shorelines of Statewide Significance.

For information concerning shorelines in WRIA 20 refer to [http://www.clallam.net/RealEstate/html/shoreline\\_management.htm](http://www.clallam.net/RealEstate/html/shoreline_management.htm)

As shown in Figure 1-2, portions of Clallam County that drain to the Pacific Coast (WRIA 20) are addressed in a separate inventory and characterization report being prepared by the Olympic Natural Resources Center (ORNC)<sup>3</sup> for Clallam County.

<sup>3</sup> Access the ONRC website at: <http://www.onrc.washington.edu/>

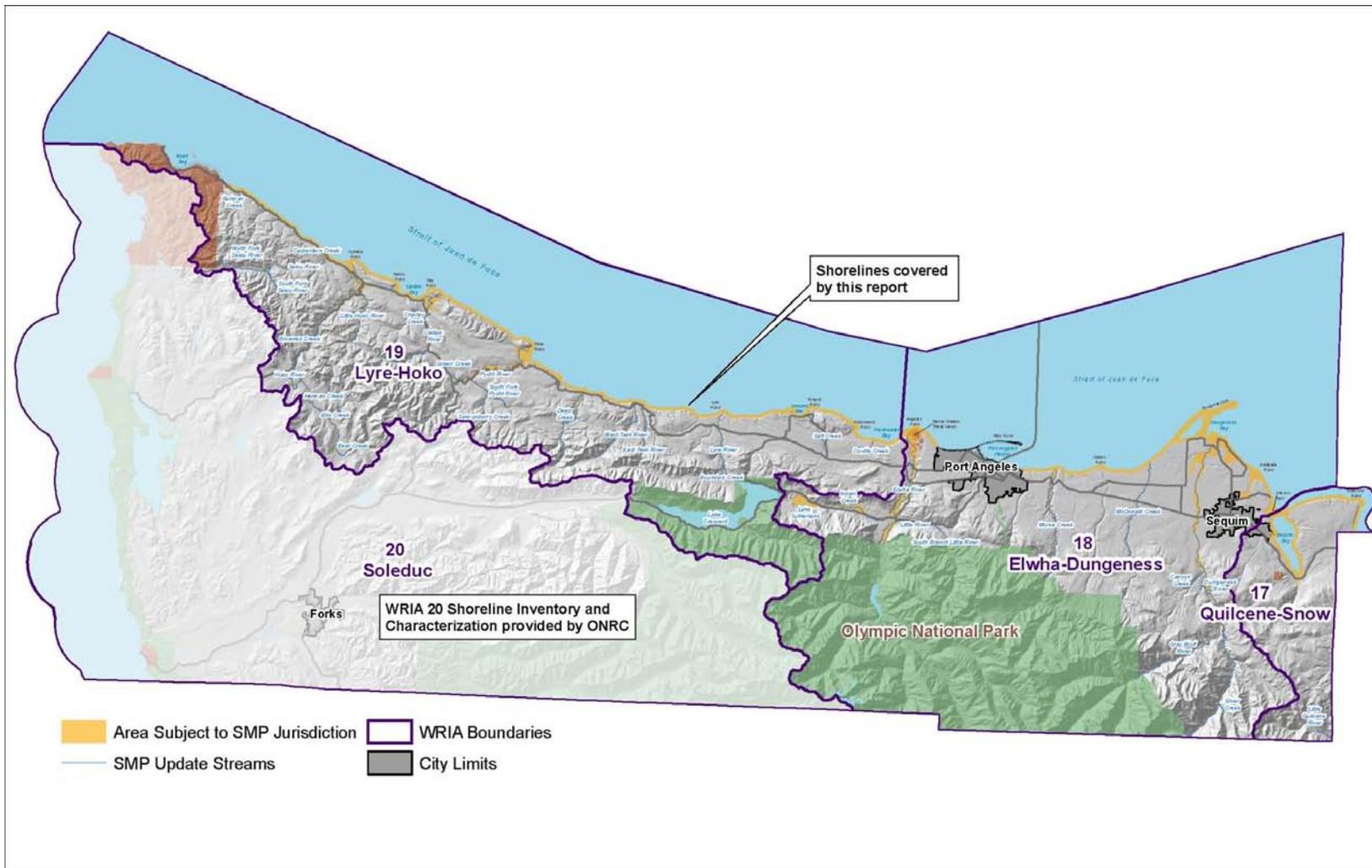


Figure 1-2. Clallam County Shorelines of the State in WRIs 17, 18 and 19 (purple outline shows the areas covered by this report)

The ICR is one of several sources of information the County will consider in deciding which, if any, shoreline master program policies or regulations need to change. Other sources of information that contribute to the SMP update include the County's Consistency Review report (ESA 2011), public comment and testimony (gathered in accordance with the Public Participation Plan), review of other regulatory plans and programs, and comments from the Department of Ecology. State law requires that Ecology review and approve the updated SMP before it takes effect.

The County and consultant team are working on a separate shoreline restoration plan that will identify and describe restoration needs and opportunities. That report will be issued for public review and comment in March 2012.

### 1.1 *Report Organization*

The SMP guidelines require a description of existing data, shoreline conditions, and development patterns (inventory), as well as a characterization of the ecological processes and functions of the shoreline and management considerations. The information presented here for the north coast of Clallam County is generally divided geographically, from east to west (Figure 1-2), and is divided into separate "reaches" or segments of marine and freshwater shorelines. **For each reach, a summary sheet illustrating the key inventory features provides an 'at-a-glance' reference to accompany the characterization text.** These "reach sheets" supplement the text—a *Reach Sheet Explainer* is provided to explain the information and data sources used to create both the marine and freshwater reach sheets. Information on cultural/archeological/historic resources will be provided in the final report.

**Chapter 2** provides an overview the North Olympic Coast study area describing population, existing land use and zoning. The chapter also examines the future development potential of the lands under the jurisdiction of the County's shoreline master program.

**Chapter 3** contains an overview of the marine shoreline processes pertinent to the Strait of Juan de Fuca in Clallam County. This chapter describes physical shore types, feeder bluffs, landslide/erosion hazards and provides a summary of baseline conditions according to specific indicators of ecological function. Potential implications of future development on marine shoreline conditions are also described. Initial shoreline management considerations are summarized in this chapter.

**Chapter 4** contains detailed reach-by-reach descriptions of the 18 marine shoreline segments, with baseline conditions, future land use potential, and management issues and opportunities specific to that reach. At the end of this chapter are the "reach sheets" describing each marine reach.

**Chapter 5** is overview of the freshwater processes pertinent to WRIAs 17, 18 and 19 in Clallam County. This chapter provides a summary of baseline conditions according to specific indicators of ecological function. Potential implications of future development on freshwater shoreline conditions are also described. Initial shoreline management considerations are summarized in this chapter.

**Chapter 6** contains detailed reach-by-reach descriptions of the freshwater shoreline segments with baseline conditions, future land use potential, and management issues and opportunities specific to that reach. “Reach sheets” for Lake Sutherland and each river and stream are included at the end of Chapter 6.

**Chapter 7** summarizes the relationship between the shoreline master program and other land use / regulatory plans and programs.

**Chapter 8** is a list of the references used to prepare this report.

Abbreviations and terms are explained in the **Glossary and Abbreviations** section. **Maps** depicting important information referenced in the text are provided in Appendices A and B (Table 1-1).

**Table 1-1. Clallam County Shoreline Inventory Map Themes and Numbers**

Map Theme*	Content	Region of the County		
		East	Central	West
Physical Characteristics	<ul style="list-style-type: none"> <li>• Feeder bluffs</li> <li>• Drift cells</li> <li>• Shoreform types</li> <li>• Stream confinement</li> </ul>	1a	1b	1c
Hazard Areas**	<ul style="list-style-type: none"> <li>• Shoreline slope stability</li> <li>• Erosion and landslide hazards</li> <li>• Floodplains</li> <li>• Tsunami hazards</li> </ul>	2a	2b	2c
Ecological Characteristics (Marine)	<ul style="list-style-type: none"> <li>• Fish distribution</li> <li>• Eelgrass and kelp</li> <li>• Forage fish</li> <li>• Marine mammal haulouts</li> <li>• Wetlands</li> </ul>	3a	3b	3c
Ecological Characteristics (Freshwater)	<ul style="list-style-type: none"> <li>• Fish distribution</li> <li>• Bald eagle habitat</li> <li>• Wetlands</li> <li>• Waterfowl habitat</li> <li>• Shorebird concentrations</li> </ul>	4a	4b	4c
Land Use	<ul style="list-style-type: none"> <li>• Public and private land ownership</li> <li>• Commercial forests</li> <li>• Land Use</li> </ul>	5a	5b	5c
Shoreline Modifications	<ul style="list-style-type: none"> <li>• Fish passage barriers</li> <li>• Armoring</li> <li>• Breakwaters/Jetties</li> <li>• Dikes/Levees/Riprap</li> <li>• Overwater structures</li> <li>• Nearshore fill</li> </ul>	6a	6b	6c
<p>*See Appendix A. Inventory maps cover only portions of WRIAs 17, 18, and 19 under County jurisdiction. Federal Land and Incorporated Areas are excluded. WRIA 20 is covered separately.</p> <p>**Channel Migration Zone (CMZ) mapping is presented in Appendix B.</p>				