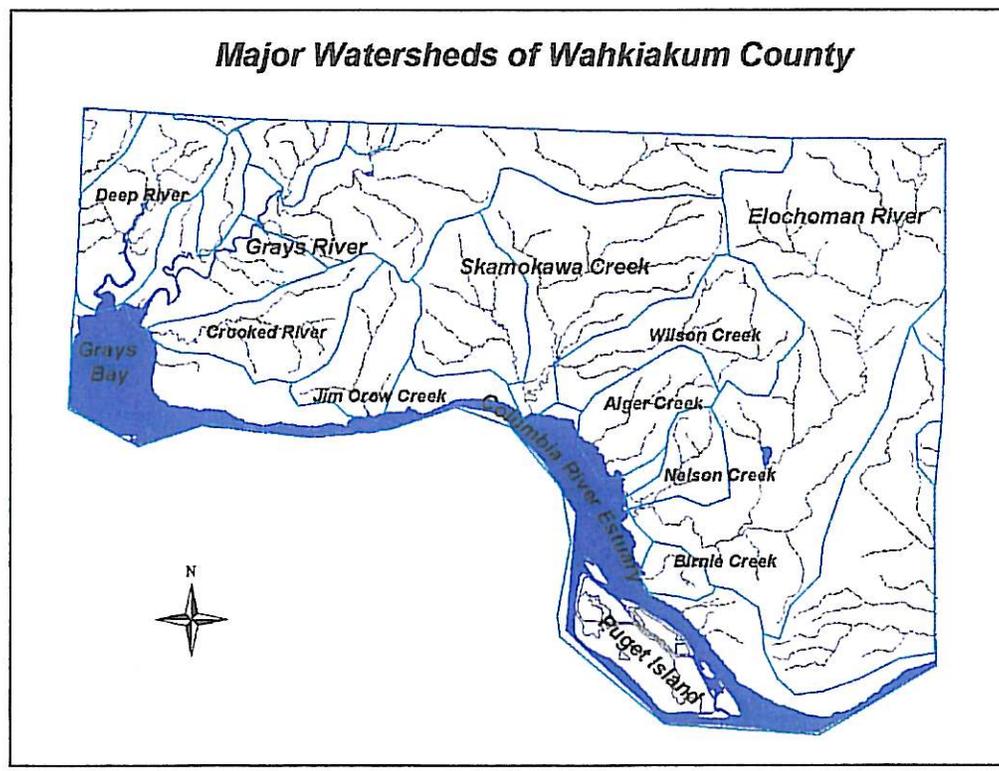


I. Introduction

A. Authority and Scope

The increased frequency of floods and associated flood hazard risk in the major basins of Wahkiakum County spurred local municipalities and special districts to initiate a comprehensive, watershed-based approach to addressing flood hazard related issues. This approach manifests in the development of a Comprehensive Flood Hazard Management Plan (CFHMP). The CFHMP takes a watershed approach to address the diversity of local community and State flood hazard concerns in Wahkiakum County. The County encompasses the major watersheds of Watershed Resource Inventory Area (WRIA) 25, which includes 3 major watershed areas: Grays River (includes Crooked River and Deep River), Skamokawa (includes Jim Crow Creek) and Elochoman. Significant portions of other basins, like Abernathy Creek, are located in Wahkiakum County, but to date, no flooding issues were identified within the jurisdiction of Wahkiakum County. The CFHMP also encompasses the unique flood-related issues on Puget Island that are in part, attributable to the landscape processes of the Columbia River Estuary. Figure 1.1 [from Wahkiakum Shoreline atlas] shows the break down of streams that nest within each subbasin. Using existing information developed from previous assessments, studies, and analyses, the focus of this document is to characterize the nature of flood events in these subbasins. This characterization helps inform the development of flood hazard alternatives and action items consistent with the Revised Code of Washington (RCW) Chapter 86.26 and Washington Administrative Code (WAC) Chapter 173-145.

Figure 1.1: CFHMP Study Area



In short, the purpose of this plan is to create a comprehensive document that describes flood-related issues and proposes a variety of flood hazard management strategies. The CFHMP embodies the tenets of Flood Hazard Management which looks at the opportunities and constraints created by the unique conditions at a given watershed scale. This includes taking a holistic view of all the activities taking place within a basin implying that they cumulatively have an impact on flooding events. Specifically the benefits of a CFHMP are as follows:

- ❑ Presents a coordinated and comprehensive implementation strategy for activities and projects that reduce public exposure to flood risk;
- ❑ Organizes an inventory of all flood-related issues into a “catch all” product that the community can agree on;
- ❑ Identifies all the flood related policies at the federal, state, and local level;
- ❑ Characterizes the historical and current variables affecting flooding in the watershed;
- ❑ Provides a watershed-based plan that formulates multiple solutions to mitigate flood hazards;
- ❑ Recommends early implementation projects to provide flood control and habitat benefits;
- ❑ Provides a template for developing funding proposals using State and Federal Funds for on the ground projects.

The types of flood hazards that are within the scope of this plan include and are defined as follows:

- ✓ Shoreline and Streambank Erosion
- ✓ High flood elevations resulting from river-tidal interactions;
- ✓ High water tables in poorly drained lower valley areas;
- ✓ Sedimentation trends that limit conveyance capacity of channels;
- ✓ Structures in high-risk areas in the flood plain;
- ✓ Flooding events that sever access to services, private property, and public facilities.

B. Planning Area Boundaries

Wahkiakum County is partially surrounded on its Northwest borders by Pacific County, Lewis County to the Northeast, and Cowlitz County at its eastern border, with the Columbia River Estuary running along the southern edge. Previously a part of Lewis County, Wahkiakum County was formally established in 1854 by the Washington Territorial government. The County encompasses an area of 260.7 square miles and is the third smallest County in the state of Washington. The Town of Cathlamet is located on the Southeast portion of the County. Cathlamet is the County Seat and sole incorporated community in the County.

Wahkiakum Communities

The scope of this document encompasses all of Wahkiakum County, the City of Cathlamet, and the four major watershed areas (defined in Section IV) that include Grays River, Elochoman, Skamokawa, and Puget Island. Within these watersheds the plan covers the following communities:

- Altoona
- Dahlia
- Deep River
- Eagle Cliff
- Eden
- Family Camp
- Grays River
- Nassa
- Oneida
- Puget Island
- Rosburg
- Skamokawa
- Waterford

Special Districts

The plan also spans the jurisdictions of quasi-governmental bodies such as Special Districts. Special Districts are formed by a group of affected property owners and maintained by special assessment on those properties to provide particular services (i.e. flood control districts, diking and drainage districts). Each district has an elected governing body that ensures the needs of the district are met. Logically flood control districts are directly related to the scope of this plan. The purpose of a flood control district is to protect life and property, to preserve public health, and to conserve and develop the natural resources of the state. Their goal is to reduce floods and lessen the danger of flooding impacts to private property and lives. Flood Control Districts can acquire, purchase, sell, lease and manage real and personal property either inside or outside the district's boundary. They maintain and operate flood control works (e.g.

dams, dikes, levees, ditches, channels, canals, banks, revetments, etc.), including the planning, construction, improvement, replacement, repair, and/or acquisition of flood control works. The recognized Flood Control Districts in the County are:

<i>Diking District</i>	<i>Watershed Area</i>
Diking District #4	Elochoman
Grays River Habitat Enhancement District	Grays River
Diking District #1	Puget Island
Diking District #5	Skamokawa

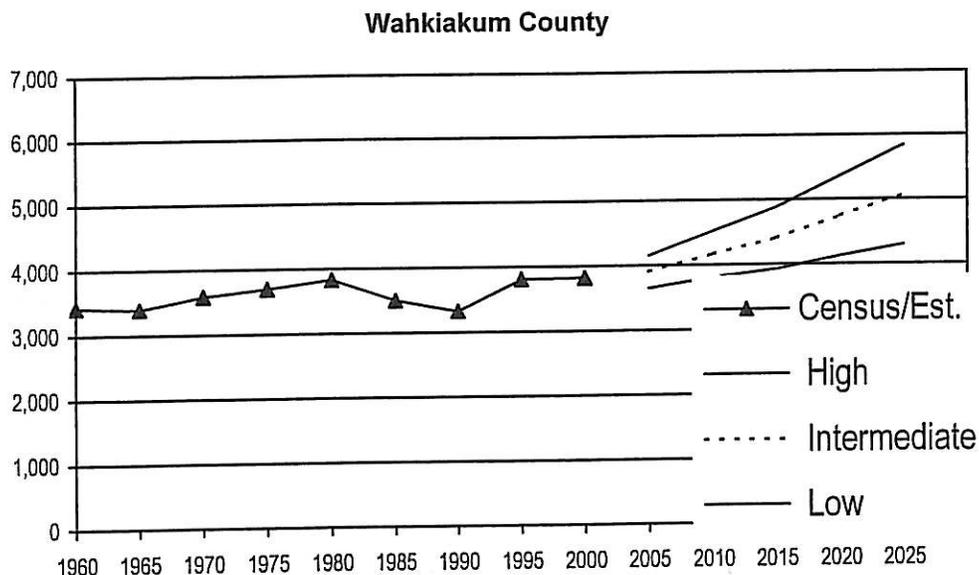
Other Special Districts that relate to the Goals of this plan include:

- Cathlamet Fire Department
- Fire Districts #1-4
- Port Districts #1 and #2
- Public Utility District #1
- Skamokawa Park and Recreation District
- Skamokawa Water and Sewer District
- Wahkiakum County Planning Commission
- Wahkiakum County Weed Board
- Wahkiakum-Cowlitz Council of Governments
- Wahkiakum-Cowlitz Soil Conservation District

C. Current Population, and Land Use

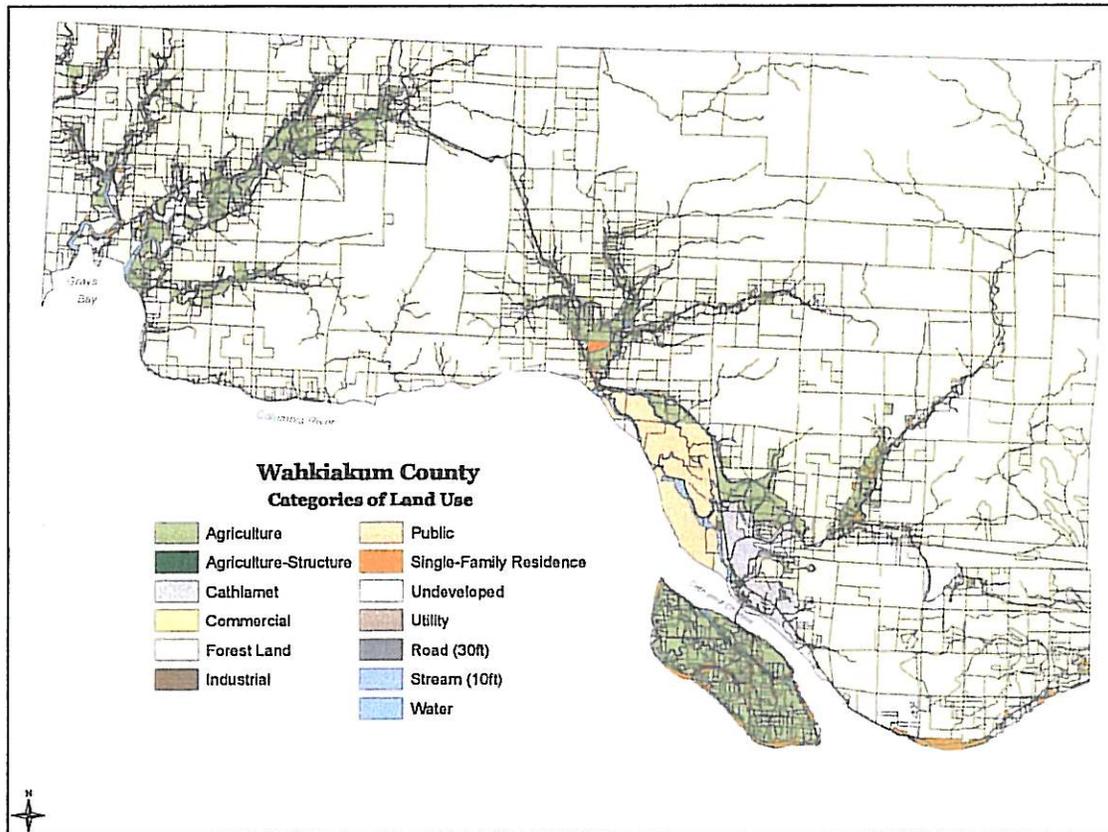
Wahkiakum County is an extremely rural environment with only a small percentage of people living in established municipalities. Currently Data compiled by the State's Office of Financial Management depict population projections through 2025 for Growth Management purposes. (Figure 1.3)

Figure 1.3: Wahkiakum County Populations and Trends (Washington Office of Financial Management)



Land use in the area is dominated by upland forestry practices and valley-bottom agriculture activities as figure 1.4 shows.

Figure 1.4: Wahkiakum County Land Use (Draft Coverage Wahkiakum-Cowlitz Council of Governments)



D. Background

Nationwide traditional approaches to solving flooding problems often involved “controlling” floods with man-made structures with only limited success. The CFHMP attempts to look not only at structural solutions, but also a combination of other measures that parallel the current understanding of larger watershed processes. This includes a variety of activities that work in concert with the natural processes of a given basin, such as: natural resource conservation, floodplain restoration, flood damage protection, land use development policy recommendations, and public education.

Flood hazard mitigation project planning is currently underway at various sites throughout the County. Special Districts and other local municipalities have been seeking technical assistance from various sources to generate conceptual ideas for flood plain management in the different subbasins. While it is important to apply existing knowledge in order to protect private property and livelihood, a more comprehensive approach linking project ideas to larger landscape factors contributing to improved

management of flood risks in Wahkiakum County. This connects flood hazard issues with existing flood plain processes and how they may manifest in other areas of the watershed. Through this process this plan looks at the diversity of project ideas within a given basin and weighs its aggregate benefit to reducing overall flood hazard risk.

The flooding problems compelled the need for a single document that the County could use to justify projects that supported a more coordinated flood hazard mitigation strategy. The eventual adoption of this plan by the State of Washington will allow groups in Wahkiakum County to leverage future federal and state resources for flood hazard projects.

E. Planning Process and Methodology

Recognizing the need for decreasing flood hazard risk, Wahkiakum County contracted the Columbia River Estuary Study Taskforce (CREST), a local council of governments to initiate local watershed based discussions on flood related issues. CREST staff facilitated this discussion through meetings with individual landowners, district members, County staff and through the establishment of a Steering Committee (described below). During this process, overall goals and objectives were defined to give direction to the plan based on existing flood related topics. These were reviewed by the project committee and eventually presented at a countywide River Summit.

a. Role of the Steering Committee

The development of this plan was guided by an assembled Steering Committee comprised of representatives from the major sub-basins of the County. Members assisted in characterizing the range of flood-related issues throughout the County. The identification of these issues leads to the development of the broad **Goals** (Chapter II) that serve as the guiding framework for Flood Hazards in Wahkiakum County. Finally, members of the Steering Committee also served as reviewers of CFHMP drafts in coordination with the larger community.

A project survey was distributed to Steering Committee members to inventory the existing list of potential flood hazard mitigation projects generated at the local level. The process served to highlight the range of flood related issues and projects being discussed at various levels of development. Another role of Steering Committee members was to serve as liaisons to the areas and communities they represent. They were charged with the responsibility of interacting with community interests from their respective areas about flood-related issues and bringing these topics to Steering Committee meetings for discussion. To formally characterize these issues, flood hazard surveys were distributed to the community via Steering Committee members.

b. Agency/NGOs/District Coordination

Plan development has brought diverse groups together to discuss common concerns related to flooding in Wahkiakum County. The County is currently increasing its capacity to coordinate multiple parties, including local citizens, to work together to resolve flooding issues through a more transparent process. In 2004, a "River Summit"

was held that brought local, state, and federal interests together to better manage Wahkiakum watersheds through enhanced communication and understanding about permit policies and regulation. Several groups are installing a new process that are working for flooding solutions through open forums and discussion with the hope of creating new partnership opportunities for on the ground flood related projects. For instance, the “Stakeholders Group”, a newly formed community-based group, began working closely with Columbia Land Trust on their restoration planning in the Grays Bay area. The group has since expanded to cover projects for all the watersheds of Wahkiakum County in concert with the State’s Land Management Agencies. Another group, lead by the County Commissioners is the “Puget Island Solutions Group” that deals specifically with flooding conditions unique to the Columbia River Navigation Channel maintenance issues. They are currently working with the Portland District of the Army Corps of Engineers and NOAA Fisheries to develop solutions consistent with existing federal regulations.

These groups serve as important templates for the type of process needed for effective flood hazard management in the County. All of the action items recommended in this plan will need the continued capacity of these groups and others like it, in order to successfully reduce flooding risk for the citizens of Wahkiakum County.