Wenatchee Watershed Management Plan Executive Summary

INTRODUCTION

The Wenatchee Watershed Management Plan is the result of seven years of work by the Wenatchee Watershed Planning Unit (WWPU), which was formed in response to the 1998 Watershed Management Act (RCW 90.82). This statute provided the framework for locally-based watershed planning with a shared governance goal of giving local interests a voice and a forum for collaboration on water resource issues. The Act directs planning units to assess water supply and use, and develop strategies to meet current and future needs, including instream needs such as providing adequate aquatic habitat and out-of-stream needs such as irrigation, domestic and municipal supply. Through this process, stakeholders in the Wenatchee Watershed have reached a common ground in creating management strategies and recommending actions that address water quantity, water quality, instream flow, growth and land use, and habitat – as all of these components of watershed planning are linked. It is expected that the strategies presented in this Plan will be further refined in the implementation phase (Phase IV) of the watershed planning process.

The location of the Wenatchee Watershed (WRIA 45) and its component sub-watersheds is shown in Figure ES-1. The Wenatchee watershed lies completely within Chelan County and includes a number of cities and towns, agricultural lands primarily in fruit production, and private and public timber lands. Federal and State lands comprise over 80% of the WRIA. The entire watershed lies within the Yakama Nation's ceded lands wherein the Tribe has reserved rights to fish and hunt.

The 1370 square mile Wenatchee Watershed is unique. The WRIA extends from the snowfields, glaciers and steep, forested Cascade Mountains through orchards in the Wenatchee River Valley, to the shrub-steppe of the eastern watershed at the confluence of the Wenatchee and Columbia Rivers. The different climatic zones within the watershed are important because the largest irrigation and domestic water demands occur in the drier, lower valley near Wenatchee where streamflow can be limited in dry years. Due to the WRIA's diverse geography, climate, biology, human impacts, and human needs, the watershed has been divided into tributary areas, or sub-watersheds, as shown on Figure ES-1, to facilitate the application of water management strategies that are appropriate on a local scale.

Generally the watershed is in excellent condition; however, it has been impacted historically by concentrated development, transportation infrastructure and agriculture in the valley bottoms and along stream corridors. There continues to be development pressure near tributaries and the mainstem Wenatchee River. The highly variable and steep topography make the lower elevations and valley bottoms more attractive for development. In addition, less than 20% of the watershed is in private ownership, much of which is concentrated along valley bottoms.

The mission of the Wenatchee Planning Unit is 'to collaboratively develop a management plan for sustaining and improving watershed and community health by protecting water resources, habitat and water use in a way that balances the educational, economic and recreational values associated with a healthy community.' In keeping with this mission, the main objectives of this Plan are to: identify strategies that will help meet current and future needs for both in-stream and out-of-stream uses; to protect and enhance habitat of threatened, endangered and culturally important species thereby improving overall habitat function and connectivity in the watershed; and to address impacts to water bodies that do not meet state and federal water quality standards. The Planning Unit and other local interests have worked together to prescribe solutions that meet these objectives.

Recommended actions in the Plan focus on the greatest water-related challenges in the watershed as determined through Planning Unit workshops. These challenges are organized under five central components: a water resource management strategy that addresses instream flows, water quantity,

growth and land use, water quality and habitat. The Wenatchee Planning Unit has opted to address Watershed Planning at two scales, a watershed-wide scale and a sub-watershed or tributary scale. The Plan first prescribes recommended actions in the form of management strategies and potential projects at a watershed scale for the five components. To address local issues that are specific to individual tributaries, sub-watershed strategies have been developed where pending water issues require tailored and near-term action.

During the assessment phase (Phase II) of watershed planning, the WWPU gained information from a variety of technical studies to build a strong scientific basis for decisions that guide this Plan. These assessments provided a compilation of existing data and technical relationships that were considered by the Planning Unit in developing the overall Watershed Management Plan. Supporting technical documents are summarized in Section 1 of the Plan. It is important to note that the majority of the technical information has not been repeated unless it was necessary to understand the basis for a recommendation.

This Executive Summary provides an overview of the Wenatchee Watershed Plan. For additional summary information refer to the tables in Section 2 that summarize all of the actions prescribed in the Plan.

PLAN ORGANIZATION

This Plan contains the following sections:

- **Section 1:** Introduction and background information regarding watershed planning in WRIA 45, a brief summary of physical aspects of the watershed and references to technical data that support this Watershed Management Plan.
- **Section 2:** Tables that summarize all of the actions recommended in the Plan.
- Section 3: Overview of current and future water use estimates developed for this planning effort and used to guide decisions regarding the distribution of the WRIA 45 water reservation.
- Sections 4 8: Background and recommended actions for each of the five water-related components identified by the Planning Unit, including (1) a water resource management strategy (WRMS) addressing instream flows and out-of-stream water needs; (2) water quantity actions that support the WRMS; (3) actions related to growth and land use policies; (4) water quality actions consistent with the Total Maximum Daily Load (TMDL) process; and, (5) habitat actions consistent with recovery planning efforts for fish in WRIA 45. Each section includes background information and recommended actions in the form of management strategies, recommendations, and projects.
- Section 9: Summary of Plan recommendations that apply specifically to local tributary areas, or sub-watersheds. Sub-watersheds that have unique, pending water issues that require near-term action are addressed.
- **Sections 10-12:** Implementation of the Plan, public outreach, and State Environmental Policy Act (SEPA) considerations, respectively.

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A WATER RESOURCE MANAGEMENT STRATEGY ADDRESSING INSTREAM FLOWS (SECTION 4)

The Wenatchee Watershed (WRIA 45) has been listed by the State Department of Ecology (Ecology) as one of 16 basins in the state with critical and inadequate streamflows for fish. Critical basins are also referred to as "over-appropriated," meaning that more water has been allocated to out-of-stream uses than is naturally available in some years. Snowmelt is a primary source of late summer and fall streamflow in the Wenatchee Watershed. Variability in winter precipitation results in highly variable streamflow, especially in late summer and early fall (July-October). Water demand is highest during the period when streamflows are lowest. Water is needed during this critical time of year for aquatic habitat, fruit production, fire protection, increased tourism needs, domestic irrigation and household needs, and municipal use.

The WWPU has developed a Water Resource Management Strategy (WRMS) to address concerns about protecting and enhancing flows for fish, while at the same time, providing a water reservation to accommodate future growth in the watershed. The WRMS includes proposed new management (instream) flows on the mainstem Wenatchee River and a number of tributaries; a water reservation to provide a year-round supply for future domestic and municipal use and stock water; and a seasonal supply of water (maximum allocation) for seasonal use and storage. The quantity of the water reserve has been determined based on both the protection of instream uses and the projected out-of-stream needs in the watershed.

The Plan recommends that a four (4) cfs water reservation from the mainstem Wenatchee River and its tributaries be made available to supply future municipal, domestic and stock water to the watershed. Currently, withdrawals for municipal and domestic use in the watershed total approximately 7.5 cfs. The reserve will be allocated between the upper and lower portions of the WRIA, and among sub-watersheds to ensure that the water available for servicing growth is distributed equitably and based on projected growth and future water needs. Additional limitations and sub-watershed allocations are based on protecting and sustaining local aquatic habitat needs.

The strategy also includes specific actions to be implemented at the local, or "sub-watershed" scale, as necessary. A number of actions are recommended to address water shortages in the Mission and Chumstick Sub-watersheds. The proposed water resource management strategy will not affect existing water rights and applies only to new water rights for new uses to be established in the future. Although the instream flows proposed as part of this strategy will not put water into streams, they will protect aquatic resources from degradation, and existing senior water rights from impairment.

WATER QUANTITY ACTIONS THAT SUPPORT THE WRMS (SECTION 5)

The Plan proposes watershed-wide measures to enhance the recommended water resource management strategy and help mitigate potential impacts of the water reservation established to support future growth. Many of the water quantity actions will provide additional water for both instream and out-of-stream purposes, help meet future water needs, and extend the life of the water reservation for WRIA 45.

Actions that address water right issues include recommendations to Ecology about the processing of water right applications and enforcement of existing regulations concerning water rights and use; development of a water bank for WRIA 45; and the purchase or lease of water rights within the WRIA.

Other Water Quantity Actions include the tracking of water availability and use for the reservation, metering of all new uses eligible under the reserve, studies and tracking of exempt well use, and conservation measures. Actions that will improve conservation efforts and prolong the life of the reserve include: requirements for developers to tie into irrigation water where available and practicable, encouraging City and County policies that require outdoor conservation measures as a condition of subdivision approval, and increasing the availability and accessibility of public information regarding conservation and water use. Other specific water quantity actions have been developed to address local issues in the Mission, Chumstick, and Peshastin Sub-watersheds, and the Northside Tributaries.

Storage opportunities are also discussed as tools that can be used to maximize the beneficial use of water while minimizing instream impacts. A general feasibility analysis has been completed that identifies potential opportunities across the watershed. These opportunities include (1) small-scale opportunities such as channel restoration and repair and small water storage tanks for fire protection and (2) larger-scale opportunities such as instream reservoirs and lakes, off-channel impoundments, and optimization of high alpine lakes. The next steps in the evaluation of water storage opportunities include a needs and alternatives analysis in each of the tributary areas.

GROWTH AND LAND USE ACTIONS (SECTION 6)

The Planning Unit recognizes the need to integrate the water resource management strategy proposed in this Plan with land use planning processes and decisions to ensure that reservation allocation and eligible uses are considered. As such, actions have been proposed that establish a technical water-resource base for use in land use change decisions, and when considering land use permit applications. The Plan also recommends that water availability be considered as part of Urban Growth Area (UGA) boundary decisions and encourages local governments to consider protection measures and strategies identified in the Watershed Plan as non-regulatory mechanisms to protect critical areas watershed-wide.

WATER QUALITY ACTIONS (SECTION 7)

Water quality monitoring has indicated that there are locations on the Wenatchee River and its tributaries where State and Federal water quality standards have been exceeded for temperature, fecal coliform bacteria, DDT, dissolved oxygen (DO) and pH. These water quality problems are likely due to development and historic land use practices. A Total Maximum Daily Load (TMDL) study and implementation plan are being completed to address these water quality issues. The Water Quality component of this Watershed Plan is the product of an effort to coordinate the TMDL process and watershed planning with local stakeholders in the watershed. The actions in this Plan reflect those that have been identified in the implementation strategy of the TMDL and subsequently agreed upon by the Planning Unit. The recommendations include actions that apply watershed-wide, and subwatershed specific actions to address local exceedances of water quality standards.

ACTIONS ADDRESSING HABITAT (SECTION 8)

The habitat component of the Wenatchee Watershed Plan builds upon existing research, reports, and programs to initiate habitat improvement actions in WRIA 45. The Draft Upper Columbia Spring Chinook Salmon, Steelhead, and Bull Trout Recovery Plan identifies actions to address habitat needs for these species in the Wenatchee Watershed and is used in conjunction with the Biological Strategy to identify both the restoration and protection actions prescribed in this Plan.

Actions are identified that will improve the function and connectivity of habitat throughout the watershed. Generally, the approach is to protect high quality habitat in the upper watershed and pursue opportunities to enhance habitat in the middle and lower watershed. As specified in the Watershed Planning Act, the Plan emphasizes salmonid and aquatic habitat. However, to benefit both aquatic and terrestrial species, upland habitat is considered as it relates to aquatic processes. Actions are based on the biological needs of each specific sub-watershed in the WRIA.

SUB-WATERSHED SPECIFIC ACTIONS (SECTION 9)

Members of the Planning Unit have chosen to address water-related planning activities more specifically at a sub-watershed level. Locally applied management strategies that are recommended for specific tributaries are outlined in Section 9. Sub-watershed specific actions vary across the watershed, and address unique, pending water issues that may require near-term action. These summaries may be particularly useful for community members that live in these areas.

STATE ENVIRONMENTAL POLICY ACT

Chelan County is the SEPA lead agency for this Watershed Management Plan, and must comply with a SEPA review of the Plan. The Final Environmental Impact Statement for Watershed Planning under Chapter 90.82 RCW (Ecology, 2003) summarizes a variety of SEPA related issues. All of the proposed actions outlined in the Plan that may trigger SEPA are consistent with actions evaluated in the statewide EIS. It is intended that Chelan County, as lead SEPA agency, adopt the statewide EIS with a Determination of Significance for the Watershed Plan to meet its responsibility to prepare a SEPA compliant review. A SEPA gap analysis is presented in Section 12.

IMPLEMENTATION OF THE PLAN

Phase IV of the watershed planning process is implementation, which commences when the final Watershed Plan is adopted by Chelan County. The Implementation section (Section 10) identifies actions that need additional assessment and planning before implementation can proceed and responsibilities can be assumed. The roles of the WWPU and Subcommittees will be preserved during Phase IV, Implementation; however, these entities will address any needed reorganization as necessary to successfully implement the Plan.

Effective implementation, including coordination and oversight, is critical to the success of this planning effort and the long-term future of the watershed. The Watershed Plan for the Wenatchee Watershed consists of a number of programs, plans and studies that will be implemented over time through numerous implementing agencies. Funding for these efforts will ebb and flow. At the same time, the voluntary efforts of many individuals and groups will continue to play a significant role.