

## **1.0 INTRODUCTION**

This report results from a Washington State Legislature appropriation to study the feasibility of storing additional water in Lake Wenatchee. The appropriation was provided to the Department of Ecology to administer the study. The Legislature acted upon recommendations of the State’s Water Storage Task Force to study the issue of water storage across the State. Many other Watersheds throughout the State are also performing studies of the potential for increased water storage to meet the increasing competitive needs of fish, farms and people. The focus on reviewing all potential solutions to shortfalls in instream flow and water supply was sharpened in the drought year of 2001, when streamflows dropped to historic lows in late summer and many water users across the state had their water supply interrupted as a result.

The Legislature appropriated funds for this study because of its location within the Wenatchee River Watershed (see Figure 1.0-1), the history of past water storage studies and permits on Lake Wenatchee and ongoing efforts in Watershed Planning undertaken by the Wenatchee Watershed Planning Unit. The Wenatchee River Watershed is listed as one of the State’s sixteen “critical basins” because of the presence of Endangered Species Act (ESA) listed species, development pressures and the potential for future water shortages. Previous studies and planning on water storage in Lake Wenatchee were performed by the Wenatchee Reclamation District and Chelan County PUD. The Wenatchee Reclamation District initiated a water storage project in 1930 in response to drought conditions in the Wenatchee River Watershed. They obtained permits to construct a low dam near the mouth of the Lake which would impound water to the normal high water elevation. The project was not completed and Chelan County PUD acquired the permits from the District. The PUD envisioned a water storage project that was a component of a larger hydroelectric project. That project was dropped in the 1970’s and the rights reassigned back to the District.

Chelan County Natural Resources Department is leading the Wenatchee Watershed Planning effort, which purpose is to identify and study solutions to watershed problems such as instream flow, water quantity, water quality and fish and wildlife habitat. The County is also the recipient of the water storage grant from the Department of Ecology and is administering the process of completing this feasibility study.

After receiving the grant, the County started a process of assembling a project team to oversee the scope of the feasibility study and obtain public comment on the scope. An initial public meeting was held on September 13, 2001 to obtain input on the scope. The project team was then assembled from a diverse group of public, local agency (city and county), irrigation, conservation, state, federal and tribal interests. The project team is listed in Appendix A. Project team meetings were then held on March 27; April 30 and June 27, 2002 to refine a scope of work for the feasibility study. The final scope of work that was agreed to by the project team is contained in Appendix A. Chelan County then advertised for consultant services to prepare the feasibility study. MWH was selected for the project in September 2002 and began work shortly thereafter.

Five broad study areas were selected by the project team to cover the scope of the feasibility study. They are noted below as well as the objective they are intended to address:

- **Water Needs.** The objective is to determine the water needs of the Wenatchee River watershed and how additional water supplies should be apportioned between fish and community interests.
- **Technical Feasibility.** The objective is to evaluate the technical feasibility of constructing a dam on Lake Wenatchee that will comply with current fish passage standards, will not result in storage above the normal High Water Mark, or result in increased damaged to private, state, or federal property on the lake and downriver.
- **Legal Feasibility.** The objective is to evaluate the legal feasibility of constructing the dam taking into account federal, state, and local laws, and Tribal Nations rights. A further objective is to establish the permitting requirements and the status of the existing storage permit.
- **Socioeconomic Impacts.** The objective is to evaluate the impacts of the project on private lake front property and other private landowners, and state and federal lands. Assessment of impacts would include recreation, cultural resources, tourism, fishing, rafting, and other uses of the river. The assessment would include costs and benefits.
- **Environmental Impact.** The objective is to determine the impacts of storing additional water on flood water levels, lands inundated for longer periods around the lake (including wetlands), and on the fishery resources of the lake and river with particular emphasis on endangered species. The beneficial impacts of releasing stored water later in the year would also be evaluated.

During the feasibility study, project team meetings were held on December 11, 2002; February 26; April 30 and June 4, 2003. Presentations of interim work products by the MWH team were made to the project team during those meetings and discussions held on a number of issues. A draft report was issued on June 4 for a review by the project team. Comments from the project team were received and incorporated as much as possible within the scope of work. Following the project team meetings, a public workshop was held on June 19, 2003 to present the report. Comments received at and subsequent to that meeting were compiled by Chelan County and are included in this report as a separate chapter (Chapter 9).

The following chapters contain our analysis and findings for those study areas. A summary of this feasibility study is contained in Chapter 7.