YAKIMA RIVER BASIN WATER STORAGE FEASIBILITY STUDY

ECONOMIC ANALYSIS

**Final Product:** Estimates of economic benefits produced by alternatives in the Yakima River Basin Water Storage Feasibility Study (Storage Study).

The Storage Study economic analyses will show the economic impacts of the alternatives related to agriculture production, recreation, fish habitat and production, municipal water supplies, and power production. All these items will be combined to determine the economic viability of each alternative.

**Agriculture Benefits**

As of June 2005, the unit values for the crops in the Yakima basin have been prepared. The unit values will be applied to the estimated production impacts identified for each alternative. The production impacts of the alternatives will be determined through computer models showing when and how much water can be made available to the agricultural users. This analysis will be done as a part of plan formulation and used in the selection of alternatives for detailed evaluation in the feasibility phase of the Storage Study.

**Anadromous Fish Benefits**

This task has several components. The components include recreational fishing, commercial fishing, cultural fishing, and benefits of keeping a fish species from going into extinction. The benefits of fishing can be calculated by determining how much a person is willing to pay to catch a fish and how much a business makes on commercial fishing. The components difficult to calculate are the values of cultural fishing and maintaining threatened and endangered fisheries. As much as possible, the economic benefit will be determined in dollars and then the intangible benefits will be described rather than quantified. Reclamation economists have been discussing these benefits with the State of Washington and others who have previously made these benefit analyses. There will be a collaborative effort to determine the economic benefit for the Yakima River basin. Reclamation will continue to discuss these economic issues with interested parties and will develop fishery benefits for the Yakima River basin.

**Recreation Benefits**

Currently, a recreation demand analysis is being conducted with Reclamation staff and a consultant. Once the demand for recreation is established, the ability of different alternatives to meet the demand can be determined and used to estimate the economic benefit attributable to recreation. Unit values for each recreation use (boating, swimming, camping, etc.) will be determined and applied to the ability of an alternative to provide that use.
Municipal Water Benefits

The ability of the alternatives to supply surface water for municipal water purposes and the economic benefit of that use will be determined. This analysis will take into account population projections and other potential changes to municipal use.

Power Benefits

The ability of each alternative to provide power will be analyzed along with how much power will be used for that alternative and the potential impact on current hydroelectric generation resulting from diversion of water to meet the Storage Study water supply goals. The work will consist of calculating the unit values for power production and coordinating the work with Reclamation staff, Bonneville Power Administration, the appropriate public utility districts and other appropriate entities.

For further information regarding the Yakima River Basin Storage Study, visit www.usbr.gov/pn/programs/storage_study/index.html.