Summary and Schedule of the Yakima River Basin Plan of Study *(Excerpts from December 2009 Preliminary Integrated Plan)*

Reclamation and Ecology will conduct a Basin Study to further develop the technical basis and decision support for an IWRMP. . .

During 2010, the Basin Study effort will evaluate potential actions (or subgroups of those tools) identified by the YRBWEP Workgroup for addressing the water and aquatic resource needs of the Yakima River Basin. Upon completion of the Basin Study, the YRBWEP Workgroup will be asked to provide recommendations concerning the content of a Final IWRMP. It is anticipated that such recommendations will include identification of specific elements and projects to be included in the Final IWRMP as well as the timing (phasing) of those elements and projects.

The Basin Study and Final IWRMP are intended to accomplish the following objectives:

1) Achieve stakeholder consensus around a well defined set of strategies for resolving water supply and stream flow imbalances as well as other aquatic resource issues,
2) Delineate a clear pathway for short-term and long-term IWRMP implementation, and
3) Provide the basis for a request by Ecology and stakeholders for Congressional and State Legislative authorization and appropriations for the IWRMP.

The scope of the Basin Study is summarized as follows:

- **Task 1** – Characterize and quantify the water resources [Yakima and Columbia River] of the basin.
- **Task 2** – Determine the current and future water needs for out-of-stream uses for defined planning periods (phases). This includes the following water use components: municipal and industrial uses, domestic (exempt) well uses, domestic use not connected to municipal systems (i.e., rural residential), and demand for irrigated agriculture, particularly focusing on quantifying additional supplies needed to provide various levels of dry year/drought relief for proratable irrigation districts. The study shall identify the difference in demand that results from a "no action" scenario for conservation, efficiency, water markets, and groundwater management and one that incorporates the actions identified to date by the Workgroup as well as implementation of best management practices in agricultural, domestic, and municipal water use throughout the Basin. It shall also identify the benefits and costs of providing various levels of drought relief to the local and national economies, specifically comparing the cost of water management alternatives, including demand reduction, with the benefits accruing from those alternatives. Future irrigation needs will be predicated on no increase in irrigated acreage, which is consistent with YRBWEP legislation.
- **Task 3** – Quantify instream resource needs by major reach, by season.

- **Task 4** – Develop detailed descriptions for elements and projects identified in the preliminary IWRMP.
- **Task 5** – For each element and project, conduct an analysis of potential environmental, engineering, policy, and/or legal barriers to implementation and estimated costs. At the end of this task, the YRBWEP Workgroup may decide to modify or eliminate certain actions that it submitted for study at the outset of the Basin Study process. At the completion of this task, the Workgroup may decide to modify the preliminary IWRMP before proceeding to subsequent tasks.
- **Task 6** – Using models such as Yakima RiverWare and other analytical tools, evaluate the efficacy of various strategies for meeting out-of-stream and instream needs, including both storage (above ground and aquifer storage) and non-storage options [demand reduction; agricultural, municipal, non-municipal domestic (including exempt wells and rural residential) conservation measures; and water banking/marketing]. Evaluations will consider the cumulative effect of multiple water supply options implemented in combination, and will do so under different operation scenarios to optimize the IWRMP.
- **Task 7** – Using models and other analytical tools, evaluate the total ecosystem benefits of implementing instream water supply strategies in conjunction with efforts to achieve other aquatic resources objectives, including fish passage at major Reclamation reservoirs in the Basin and habitat restoration.
- **Task 8** – Using models and other analytical tools, evaluate the manner in which potential climate impacts might affect the selection and timing of elements and projects that may be included in the Final IWRMP. Such evaluations will also address means by which flexible approaches and adaptation to climate change and other uncertainties (such as population growth or changes in land use or land management) could be built into the IWRMP.
- **Task 9** – Based on the evaluations conducted as part of Tasks 6-8, develop recommendations for timing and sequencing of projects, including identification of triggers for commencing projects contained in the second phase of the IWRMP and identification of any projects that clearly lack merit in light of the Basin Study analysis.
- **Task 10** – Assist the Workgroup in developing final recommendations for the IWRMP. The final package of actions submitted by the Workgroup may be informed by the Basin Study findings, and the sensitivity of these to action-specific environmental and socioeconomic concerns and uncertainties.
- **Task 11** – Assuming the Workgroup agrees on a final package of actions, prepare Basin Study Report and Final Yakima River Basin IWRMP.