Comment on

Yakima River Basin Study – WaterSMART Program Subtask2.1: Water Needs for Out-of-Stream Uses. Draft, August 2010

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The Stated ultimate goal and proximate objectives of this water needs assessment are provided on page 5. The overall goal is "to contribute information for evaluating the benefits of a range of different combinations of water resource management actions to be considered in the Integrated Plan." The objective is "[T]o identify and quantify current water needs, focusing on uses that have experienced recurring water supply deficiencies." As stated in page 5, "[t]he assessment characterizes how water needs and supply deficiencies may change over a 50 year period from 2010 to 2060." The authors interpret their directive to require of them an assessment at "a general planning level on a regional (basinwide) scale."

An email memo from Andrew Graham of HDR Engineering (8/6/2010) characterizes the purpose of the study more clearly: "[t]he overall purpose of this study is to assist a Workgroup formed under Reclamation's YRBWEP program to evaluate the magnitude of actions needed in the Yakima River Basin, to improve supply, stream flow and habitat, especially under drought conditions. Various supply enhancements and management measures are under consideration as part of an integrated package of solutions. These include new storage reservoirs; enhanced storage at existing reservoirs; water conservation actions; market reallocation; and ground water recharge facilities. The Workgroup needs a basis for scaling these solutions over a period of one to three decades. Solutions that are on the table range from 20,000 acre feet to 200,000 acre feet in size, and would be combined in a package that could be larger than that."

Our assessment is that the methods used in this report are inadequate to provide a foundation to make sound economic decisions about the water supply (as noted in the previous paragraphs). The report contains estimates of past diversions and consumptive use based on crop production patterns in drought and non-drought years, and discussions about some factors that will affect water use and availability in the future. These estimates may be useful for some purposes, but are not adequate for making resource allocation decisions; whether the resource under consideration is water, taxpayer dollars, or both. Such an approach ignores current and future prices, which are dominate drivers of demand and crop mix (and for which past water project reports have been strongly criticized).

In our opinion what is needed to support the types of decisions stated in this report is a thorough economic assessment of the relative value of water across competing uses in the basin, and a cost/benefit analysis to assess economic efficacy of investments in water supply enhancement projects. Although some of the data summarized in the draft report can help *support* economic analyses of the type required to satisfy its purpose, the report as written contains effectively no economic analysis. Much is made in the report of the impact of drought years on agricultural producers in the basin, but there is no economic characterization of impact on them. One cannot infer from this type of analysis, for example, if the value of additional water in drought years to farmers in the Yakima Basin districts is as high as the value of additional water made available to other uses, or whether and to what extent such water shortfalls would justify any additional investment in water diversion capacity and/or storage to relax water constraints in drought years.

Simply put, water allocation decisions and supply enhancement projects imply economic tradeoffs among water users, and between water users and taxpayers. We urge that sound economic analysis be recognized and used as a foundation for making difficult and potentially costly water allocation and supply enhancement decisions.