Appendix C

Regional Conservation Analysis

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APPENDIX C

Regional Conservation Analysis

As discussed in the assessment report, neither of the existing DCM&I demand projections (IDWR, 2001; IDWR, 1999) incorporated any benefits related to increased conservation. At the request of stakeholders, estimated benefits from conservation were incorporated into the assessment.

For the Boise River system, although the need for watershed-wide DCM&I conservation effort was identified during the Treasure Valley Water Summit in 2002 (COMPASS, 2002), no such planning is currently being conducted. Because large-scale conservation programs typically take a number of years to be developed and effectively implemented, future demands were not adjusted for conservation until 2015. At that point, a 0.6 percent annual reduction to total DCM&I demands was applied, with the effectiveness of conservation decreasing to 0.4 percent per year by 2050. For the Payette River Basin, where water suppliers and private wells are much more decentralized, given the primarily rural population, a 0.4 percent annual conservation target was applied between 2015 and 2050.

These ranges of conservation estimates were based on conservation programs in similar areas as follows:

- Nevada. Localized conservation programs implemented in the 1990s resulted in conservation savings of between 0.6 percent and 1.3 percent on a per capita basis (Nevada Division of Water Resources, 1999). On a larger geographic scale, statewide municipal and industrial water use decreased at an annual rate of 1.2 percent on a per capita basis. Future regional conservation efforts over a 25-year planning period are targeting overall water withdrawal reductions of 15 percent (Nevada Division of Water Resources, 1999). This estimate builds on existing conservation programs and translates to an overall annual conservation goal of 0.6 percent.
- Utah. On a statewide basis, the Division of Water Resources has set a municipal and industrial (M&I) per capita water conservation goal of 12.5 percent for public water supplies by 2025 (0.5 percent/year) and 25 percent by 2050 (Utah Natural Resources, 2001). This estimate is based on plans developed by large conservancy districts and water retailers (which cover more than 90 percent of the State's population) in response to the 1998-1999 State Water Conservation Plan Act.
- Albuquerque, New Mexico. Between 1995 and 2004, an overall (and per capita) reduction in water demands of 30 percent (3.8 percent/year) was achieved based on an aggressive conservation plan. Subsequent planning periods are targeting an additional 10 percent overall reduction.

It is important to note that currently there is no Federal, State, local agency, or interested party that is conducting conservation planning in either basin. More effective conservation might occur as better conservation programs are developed over a 50-year planning horizon.

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