

West Salt River Valley Basin Study

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The West Salt River Valley (WSRV) is located in central Arizona in the western portion of the Phoenix metropolitan area along the Salt River before the confluence of the Gila River. This is one of the fastest growing areas in the Phoenix metropolitan area. It consists of several small to midsize cities and towns. The WSRV is located in the Basin and Range physiography. Sharp jutting mountains are inter-spaced with broad alluvial basins. These alluvial basins contain large aquifers of varying water quality. The WSRV Basin, along with the bordering sub-basins of the Hassayampa, Rainbow Valley, Agua Fria, and Lake Pleasant are the sub-basins which influence ground and surface water conditions in the WSRV Basin. These include groundwater inflow and outflow, depth to groundwater, withdrawals and recharge, surface water conditions, subsidence potential, and quality of groundwater. The aquifers located in these sub-basins have been a source of ground water for agriculture and potable uses for over 100 years. Developing renewable water supplies, such as surface water and effluent, will be important in slowing the existing groundwater overdraft.

Because of the rapidly expanding population, water supplies are a primary concern. The cities in the WSRV are dependent on groundwater to meet a sizable portion of their water demands. All of the water providers have subcontracts for Central Arizona Project water but most do not have conveyance system to deliver the surface water to their service areas. The cost share partner for this study is the West Central Arizona Project Subcontractors (WESTCAPS). WESTCAPS is a coalition of 11 cities and water providers who have CAP subcontracts who collectively are attempting to best utilize waters from the Colorado River through the CAP.

Increasing demand and potentially decreasing supplies may exacerbate the imbalances in the WSRV. The objectives for this study are:

- Examine and update water supplies and demands
- Model groundwater and potential recharge
- Develop alternatives to deliver surface water
- Climate change adaptations

The estimated cost for this Basin Study is \$1,700,000 with Reclamation contributing \$840,000 and the WESTCAPS members and contributors adding \$860,000 of direct or in-kind funding.

