### **CENTRAL YAVAPAI HIGHLANDS WATER RESOURCES MANAGEMENT STUDY**

#### **PURPOSE:**

Quantify the future water demand of communities within the Central Highlands of Yavapai County and identify water resource management strategies to address projected water supply needs.

#### **CENTRAL YAVAPAI COUNTY STUDY AREA:**

- City of Prescott, Town of Prescott Valley, Town of Chino Valley, Town of Dewey-Humboldt, unincorporated county lands, and the Yavapai-Prescott Indian Tribe
- Big Chino area encompassing Williamson Valley, Paulden and ranch developments
- Verde Valley communities of Camp Verde, Cottonwood, Sedona, Clarkdale, unincorporated county lands, and the Yavapai-Apache Indian Tribe

#### **STUDY OBJECTIVES:**

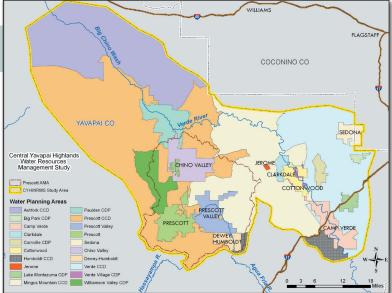
- Identify stakeholders
- Document present population, water demand and supply
- Project future population and water demand
- Identify potential future water supplies
- Establish evaluation criteria
- Identify water supply alternatives
- Recommend next steps

#### **STUDY PARTNERS:**

Technical Advisory Committee comprised of regional experts and those with responsibility for management of water resources; United States Bureau of Reclamation; Arizona Department of Water Resources.

#### **PROJECTED COMPLETION DATE:**

Fall 2013



# Water Smart

## **Comprehensive Agreement #1 Big Chino Monitoring and Modeling**

#### **BACKGROUND:**

Comprehensive Agreement #1 (CA #1) is the first detailed agreement outlined by a broader water rights settlement agreement (the Agreement in Principle, or AIP) between Prescott, Prescott Valley and Salt River Project (SRP). The AIP unwound litigation between the parties, amended ARS §45-555(E) and outlined several actions that the parties would take to mitigate potential pumping impacts on the Upper Verde River. CA #1 is the first of these actions.

#### **PURPOSE:**

Install a hydrologic monitoring network in the Big Chino sub-basin and use the information to create a detailed groundwater model of the sub-basin. The monitoring network and model will be useful for developing a mitigation strategy and to act as an early warning system of pumping impacts on spring flow.

#### CA #1 STUDY AREA:

• The Big Chino sub-basin, specifically focused on the area between the Big Chino Water Ranch and Paulden.

#### **PROJECT OBJECTIVES:**

- Install stream gages, groundwater monitoring wells, and weather stations as determined by knowledge gaps in the existing USGS model and detailed in the monitoring plan
- Development of a detailed, corrected groundwater flow model
- Create an early warning system for the Upper Verde Springs
- Use data and corrected model to guide development of a mitigation strategy

#### **STUDY PARTNERS:**

SRP, Prescott, Prescott Valley, Arizona Department of Water Resources, US Geological Survey.

#### **PROJECTED COMPLETION DATE:**

Monitoring network completed in 2017, model completion in 2019, monitoring on-going

#### **PROJECT COST AND FUNDING:**

Total project cost (first eight years) approximately \$5.6 million; operations and maintenance cost approximately \$318,000 per year after that. SRP is paying for 1/3 of the cost, Prescott and Prescott Valley pay for 2/3 of the cost.