City of Prescott

Long-Term Water Management Plan



Project Overview

Project Description

Why do we need a long-term water management plan?

In order to maintain our economy and quality of life for current and future generations, Prescott must have a stable water supply. Water planning is an ongoing commitment. In the City Council Strategic Plan FY 2025-2029 it states, "...the development of a long-term Water Management Plan that includes a focus on infrastructure, distribution and delivery, conservation and safety, the community will experience safe potable water within the water service area boundary" (see City's Directives section). The plan is intended to provide continuity, to be a resource for planning across City departments, and be updated regularly.

Meet current customer needs

Meet future water obligations

Sustain groundwater & surface water supplies

Background

Founded in 1864, the City of Prescott is located in the Central Highlands of Arizona. Our history includes ongoing efforts to secure, plan, and maintain water supplies, (see Prescott's Water Supply & Planning History on last page). The Long-Term Water Management Plan (Plan) is the next step, building on decades of City water planning efforts, and once again examining future water supply and demand needs.

Communities can develop and thrive to the extent that infrastructure can be constructed, and the water supplies for those systems are available. The Plan will create a vision for the future of the City's water resources and programs.

Process

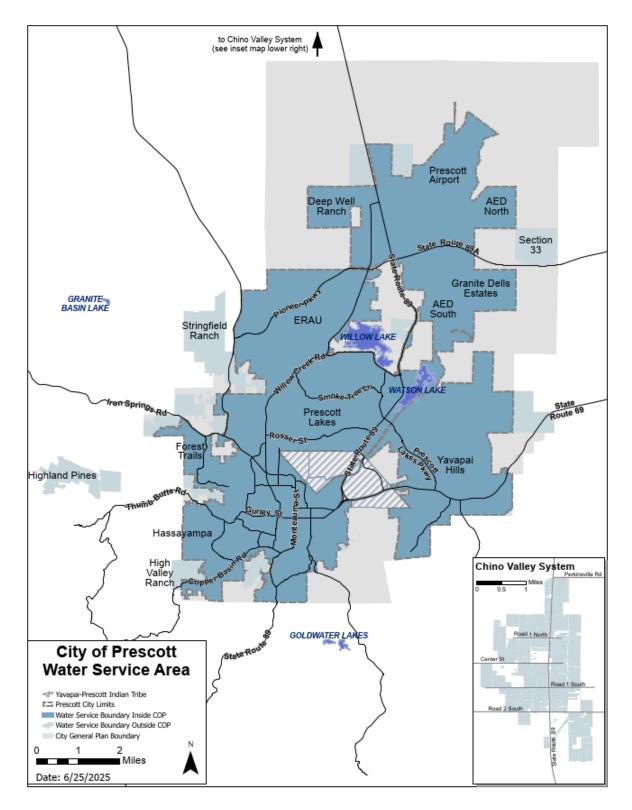
We must address legal, technical, and institutional questions in order to make strategic decisions regarding how to manage existing supplies, and how to identify and proactively prepare for future additional water supplies. Focus will be placed on the strategies that the City and its citizens are in a position to recommend and implement. Updating codes and policies will be a necessary part of the process. We will analyze pertinent existing studies, and explore new, forward-thinking strategies.

City's Directives

In 2024, three City documents sought completion of a Plan: City Council Resolution No. 2024-1875 (Additional Recommendations), Council Strategic Plan 2025-2029, and 2025 General Plan (draft). A U.S. Bureau of Reclamation grant was sought and awarded to help defray costs (Water Conservation Field Services Program Notice of Funding Opportunity No. R24AS00250).

Planning Area

The Plan will address the City's current (2024) water service area, which extends into the Town of Chino Valley and other areas outside the city limits, along with documented water obligations (through 2024). It will also examine the possibility of future water request beyond the 2024 water service area. The City has service area rights in the Little Chino Sub-basin and authorization in state statutes to import water from the Big Chino Sub-basin. Although not shown on the map below, Big Chino Sub-basin supplies will be examined in the Plan.



Planning Elements

Legal Review	Supply Review	
Examine Federal, State, and Local requirements related to supply and use	Review all current supply types (groundwater, surface water, and reclaimed) quantity and quality, and existing infrastructure	
Compile all City rights (groundwater, surface water, reclaimed and imported)	Investigate importation, stormwater, Advanced Water Purification (AWP)/Direct Potable Reuse (DPR), expanded sewer, and other emerging opportunities	
Demands (Current) and Obligations	Strategies	
Current demands (2024) will be the baseline data	Demand management (conservation)	
All documented demand obligations will be examined	Future studies that focus on imported supplies,	
Planning horizons will be 10, 25, and 50 years	AWP/DPR, and other viable options	

Proposed Resulting Document and Databases

Document: A public-friendly report with supporting technical memos that include the 4 Planning Elements (above) and components in the Proposed Project Milestones (below).

Databases: A supply and demand model (Water Resources Management Model), a water obligation catalog, and regulatory master list of legal requirements. All will have documentation for regular updates.

Proposed Project Milestones

Nov 2024 -Dec 2024	Jan 2025- Dec 2025	Jan 2026 - Dec 2026
Plan Pre-work	Planning Process	Evaluate Water Management Options
 Determine consultants Establish staff and stakeholder work groups Determine existing and needed information 	 Consultant contracting Staff and stakeholder engagement Finalize outline Supplies Demands Strategies Draft Actions/Implementations 	 Stakeholder workshops/reviews Draft report Final report

Prescott's Water Supply & Planning History

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1864	Prescott founded as the Territorial Capital of Arizona "since then the problem of an adequate water supply has been an ever-present concern." (Krieger, 1965)
1881- 1884	 Prescott becomes incorporated. Water supplies come from shallow wells. A dam is built on Miller Creek. Individual shallow wells still in use.
1891- 1899	 Supplies are insufficient. An infiltration gallery is installed in Granite Creek. Supplies remain insufficient. A second infiltration gallery is installed in Granite Creek.
1901	Supplies remain insufficient. Water is piped from Del Rio Springs area.
1923- 1940	 Del Rio supplies are too expensive. Dams are built on Bannon Creek and its tributaries. The Del Rio Springs pipeline becomes inactive. City's 1st wastewater system/plant is constructed.
1945- 1948	 Prescott is primarily dependent on surface water supplies. USGS determines supplies are not adequate. City contracts with Leeds, Hill, and Jewett who produce "Development of Water Supplies for City of Prescott, AZ", November 1946. Inadequate supplies are confirmed, and three recommendations are provided. 1) Acquire Watson Lake; 2) Develop wells in unincorporated Chino Valley; 3) Reconstruct Del Rio Springs pipeline. Water supplies from two wells in unincorporated Chino Valley help serve Prescott and others.
1950's	Reclaimed water are used on the City golf course (Antelope Hills).
1974- 1979	 Prescott required by a Superior Court decision to prepare a comprehensive study of the water resources available (Gookin, 1977). Two supply sources are in use, Southern (S) and Northern (N). Three future options: 1) Big Chino Supplies 2) Additions to S & N sources 3) Watson & Willow Acquisition. Airport Water Reclamation Facility constructed.
1980- 1988	 Arizona codifies the Groundwater Management Act, which includes creation of ADWR. City CAP allocation = 7,127 AFA. Tribe CAP allocation = 500 AFA. City's 1st recharge facility permitted.
1991- 1999	 Groundwater Transportation Act - identifies Big Chino Sub-basin water supplies for importation. Yavapai-Prescott Indian Tribe Water Settlement. ADWR declares the Prescott AMA (Prescott, Prescott Valley, Chino Valley, Dewey-Humboldt, and portions of unincorporated Yavapai County) to be out of safe-yield (pumping more water than is recharged). City becomes an ADWR "Designated" water provider and purchases Watson and Willow Lake reservoirs for surface water recharge.
2004- 2006	 City purchases lands known as the Big Chino Water Ranch (BCWR) in the Big Chino Sub-basin. City and Town of Prescott Valley enter into an Intergovernmental Agreement (IGA) for cost participation for a portion of the supply. Additional water supply wells drilled in the Airport area to serve City customers (inside and outside City limits).
2009- 2021	Along with groundwater, surface water, and reclaimed supplies, BCWR importation supplies are recognized in the City's Designation of Assured Water Supply.

For Additional Information: City of Prescott webpage: prescott-az.gov Participate Prescott: participateprescott.com