



City of Prescott

City Council - Study Session

August 11, 2026 | 2:00 PM
201 N Montezuma Street
Council Chambers, 1st Floor
Prescott, AZ 86301

MINUTES

1. CALL TO ORDER

Mayor Rusing called the meeting to order at 2:00 p.m.

2. ROLL CALL

Cathey Rusing - Mayor
Lois Fruhwirth - Mayor Pro Tem
Mary Frederickson - Councilwoman
Ted Gambogi - Councilman
Jim Garing - Councilman
Patrick Grady - Councilman
Jay Ruby - Councilman

3. DISCUSSION

- A. Presentation & Discussion Regarding an Update on the Draft Long-Term Water Management Plan.

Water Resource Project Manager Leslie Graser provided a presentation to the Council regarding an update on the draft long-term water management plan and introduced Water Resource & Environmental Services Manager Brian Ruiz and Consultant Dylan Easthouse Senior Hydrogeologist with Matrix New World Engineering.

Plan Goals for 2026:

- * Modeling and results analysis
- * Infrastructure and results analysis
- * Draft Report Writing

Timeline:

- * October 2025-January 2026 - Plan Prework
- * January 2026-October 2026 - Planning Process
- * December 2026 - Draft Report
- * July 2027 - Final Report in alignment with the City's Strategic Plan

Stair Steps & Landings:

- * Determine all city commitments for water
- * Determine how the city has commitments to grow
- * Determine what city will need
- * Determine how the aquifer will react
- * Determine how to use water as efficiently as possible

* Analysis of options

Supply & Demand:

- * Supply and Demand Projections
- * Aquifer Modeling (Hydrogeology in Prescott AMA Sub-basin only) and Result Analysis
- * Demand Management Modeling and Result Analysis

Mr. Easthouse continued the presentation with an overview of the basic hydrogeology of the area and the city's well fields. Structural trough that is filled with alluvial materials comprised of sand, gravel, clay and reworked ash deposits that are interbedded with volcanic rocks; total thickness of aquifer units is generally less than 1,200 feet. There are five city supply wells located in Chino Valley and three near the airport. Prescott recharge facility is along Granite Creek east of the airport.

Geologic Cross-Section:

- * Upper alluvial unit (UAU) generally comprised of sand, gravel and clay
- * Lower volcanic unit (LVU) generally basalt flows of varied age
- * Lower alluvium beneath volcanics is not simulated in model
- * Underlying bedrock is not considered to be significantly water bearing
- * City production wells are installed in the LVU; fractures in the basalt provide secondary porosity that is an order of magnitude higher than UAU

Prescott AMA (PrAMA):

- * Comprised of two groundwater sub-basins - Little Chino Sub-Basin (LCS) and Upper Agua Fria Sub-Basin (UAF)
- * City wells are located entirely within the LCS
- * Groundwater in the LCS generally moves south to north
- * ADWR Groundwater Site Inventory includes index wells that are monitored routinely
- * Depth of water varies from a few feet to approximately 500 feet in Sullivan Buttes

Recent Trends:

- * Hydrographs for the period 2021-2026 show wells near the airport have both rising and falling trends
- * Wells with a rising trend of 0.33 to 2 feet per year are installed in the UAU which is an effect of recharge at the Prescott USF
- * Wells with a falling trend of 0.8 to 1.13 feet per year are installed in the LVU, this is the primary aquifer for city supply wells
- * Hydrographs for the period 2021-2026 show wells near the Chino well field in the LVU are falling at average rate of 0.9 ft/year
- * Wells in the UAU are generally stable or slightly rising likely due to decreased demand from other wells in the UAU
- * Wells with a falling trend of 0.8 to 1.13 feet per year are installed in the LVU, this is the primary aquifer for city supply wells
- * Decline trend of wells in the LCS can generally be described as 1 ft/year with a slightly higher rate near the southern boundary of the Prescott Valley well fields

PrAMA Models:

- * Active domain is 250 square miles that includes LCS and UAF
- * Cells are 1/2 mile by 1/2 mile
- * Two model layers
- * Calibrated for period 1940-2019
- * Limits are the 400-foot depth to bedrock contour, although groundwater is present in areas beyond
- * General head boundaries are assigned to selected model cells to simulate groundwater inflow to or outflow from the model domain
- * Each model cell is assigned values of hydraulic conductivity, specific yield, storativity and thickness for the respective layer
- * Inputs of recharge are assigned to model cells that are high elevations, along selected streams and at USFs
- * Groundwater movement in the Little Chino, in general moves northerly toward Del Rio Springs
- * Aquifer properties are established by pump testing
- * ADWR Index Wells are used as calibration targets to match changes to groundwater elevation over time

Model Projection Assumptions for 10, 25 and 50 Years:

- * City potable demand (Dishlip consulting) distributed to 65% to Chino well field and 35% to airport well field
- * Pumping at existing Town of Chino Valley supply wells (3) and Town of Prescott Valley supply wells (27) increased 2% annually
- * Pumping for irrigation or other non-exempt well uses is held constant at 2024 reported volumes
- * Simulated demand of 0.5 AF per year for 6,900 exempt is increased 2% annually
- * Inputs of natural recharge assigned an average value from the recent historical period
- * City supply of surface water and effluent assigned to USF model cells at annual volume estimated by Dishlip Consulting; other municipal USFs are increased 1.3% year over year that is 65% of pumping

2024 Baseline Conditions:

- * With 2021 PrAMA Model is updated with reported pumping by non-exempt and municipal wells, and artificial recharge through 2024
- * Model generally does a good job to simulate groundwater conditions, but actual water levels in certain areas may be as much as 100 feet different than actual conditions
- * Matrix adjusted the aquifer parameter of hydraulic conductivity in Layer 1 in the vicinity of Prescott Recharge Facility to better simulate actual rise in the UAU
- * Maps show that depth to water is shallow on basin margins where saturated thickness (Bsat) is least; city wells are in an area of moderate Bsat where hydraulic conductivity is high

Draft Technical Memo 4:

- * Technical memo to provide a brief summary of conditions and present the 2024 baseline conditions of the model; matrix will present maps and tables describing changes to water levels and Bsat in the airport and chino well fields at 10, 25

and 50 years

- * The 2024 model simulated Bsat in both well fields is approximately 400 feet; preliminary results indicate that the 50-year simulated decline in water level in Chino well field is approx. 80 feet and 40 at the airport well field
- * Estimated effect that projected water level declines will have to production capacity of the well fields
- * Model results may be used to evaluate changes to aquifer thickness in areas beyond the city well fields

Draft Technical Model 5:

- * Long-term supply of water for city includes the legal authority to transport groundwater from wells in the Big Chino Sub-basin (BCS) into PrAMA
- * Tech Memo 5 will present a high-level summary of hydrogeology in the BCS with emphasis on city-owned Big Chino Water Ranch; including a 2024 groundwater level map and hydrographs for index wells with trendlines for recent 10-15 year period of record
- * Memo will not discuss BECAUSE model that is being developed for the Comprehensive Agreement No. 1 (CA1) parties

Analysis Summary:

- * Supply and Demand Analysis - legal supplies (AWS), existing committed and projected demands
- * Water Budget how much water is needed and how much is available
- * Groundwater Modeling - pumping rates and recharge amounts
- * How the aquifer responds and projected groundwater levels
- * Complete water picture - powerful decision and support framework

Plan Components:

- * Technical Memorandums - city baseline conditions, water demand projections, water demand practices, hydrogeology and modeling, big chino sub-basin study
- * Chapter 1 - executive summary, introduction, physical setting, regulatory environment, obligations, rate structure and other water uses
- * Chapter 2 - flow projections and demand management, efforts to defer cost on increasing water supply through reduced losses from infrastructure and improved efficiencies by customers
- * Chapter 3 - infrastructure plan, maximize utilization of current water supplies from potable water and wastewater infrastructure
- * Chapter 4 - water supply options, evaluation of supplemental water supply through new airport wells, septic to sewer, stormwater and lakes

Objectives:

- * Long-term water management plan
- * Clear & easy to understand
- * Recommendations - demand management, infrastructure management, supplemental water, 10-year emphasis
- * Strategic Plan - by July 2027 through development of a LTWMP that includes focus on infrastructure, distribution and delivery, conservation, capacity and safety the community will experience safe potable water within the water service area boundary

This item was for discussion only, no formal action was taken.

4. ADJOURNMENT

There being no further business to discuss, Mayor Rusing adjourned the meeting at 2:58 p.m.

Cathey Rusing

CATHEY RUSING, Mayor

ATTEST:

Sarah M. Thornhill

SARAH M. THORNHILL, City Clerk



CERTIFICATION

I hereby certify that the foregoing minutes are a true and correct copy of the minutes of the Voting Meeting of the City Council Voting Meeting of the City of Prescott, Arizona held on August 11, 2026. I further certify the meeting was duly called and held and that a quorum was present.

Sarah M. Thornhill

Sarah M. Thornhill, City Clerk