

City of Prescott

Long-Term Water Management Plan

2024 Baseline - Supplies



October 2025

Introduction

Long-term water management planning benefits from the use and review of baseline data. Baseline data is the information that helps explain starting conditions, and recent trends. For this Plan, the baseline year is 2024, and trends are from 2015-2024.

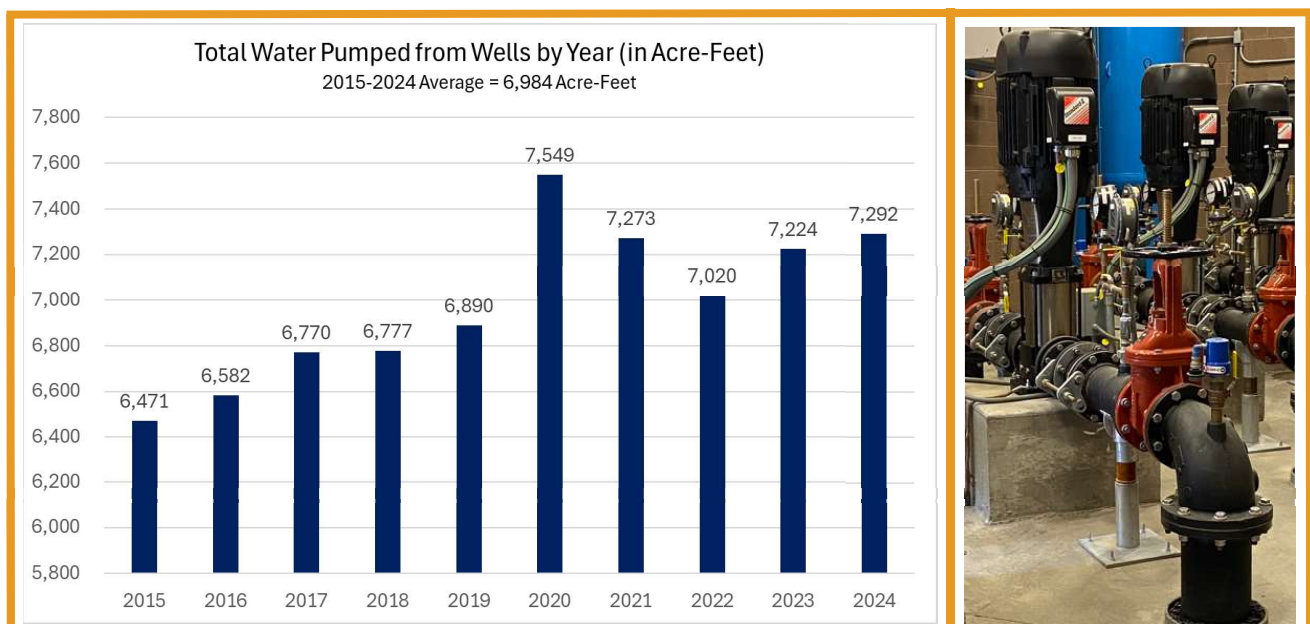
Baseline supplies for the City consist of groundwater, surface water, and reclaimed water. Groundwater is used solely for serving potable water customers (drinking water to homes and businesses). Surface water and reclaimed water supplies are recharged to the aquifer, and can be recovered (pumped out of the aquifer). Reclaimed water is also delivered directly to large irrigation and industrial customers.

Did you know, the City legally has a 4th water supply? The Big Chino Water Ranch are lands in a neighboring groundwater subbasin that the City can install wells, pump water, and transport in a pipeline to its in-town water production facility. The Big Chino Water Ranch, a possible additional, imported groundwater supply for City customers will be discussed in a future information sheet.

Groundwater Supplies

Where does the City pump potable water supplies to meet customer demands? How much?

Prescott's potable water system consists of six wells in the Chino Valley area wellfield and five wells in the Airport area wellfield. In 2024, water was pumped from four wells in Chino Valley and two wells in the Airport area totaling 7,292 AF. *Note: 1 Acre-Foot (AF) = 325,851 gallons.*

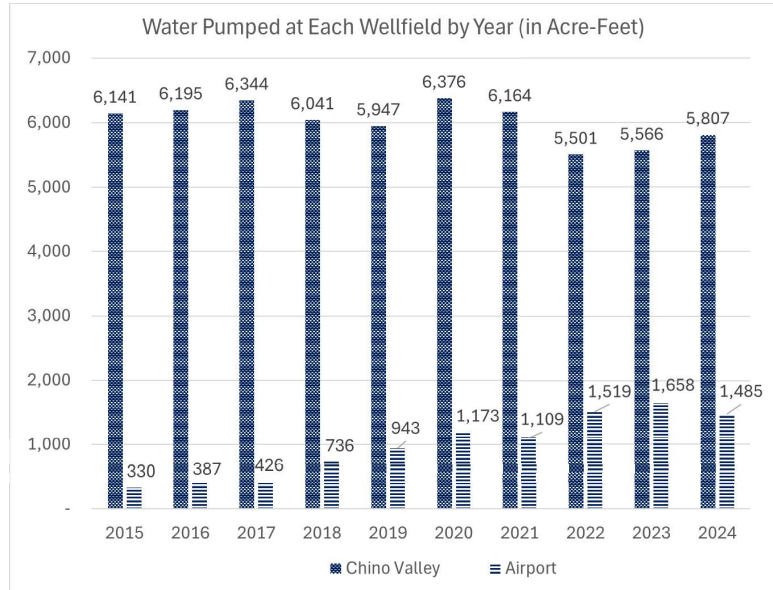


How much water was pumped from each of the two wellfields?

In 2024, the Chino Valley area wells provide 80% (5,807 AF) of the total supply while the Airport area wells provide 20% (1,485 AF). The ten-year percentages from 2015 to 2024 for the two wellfields are shown in the table below.

Percentage Pumped by Each Wellfield

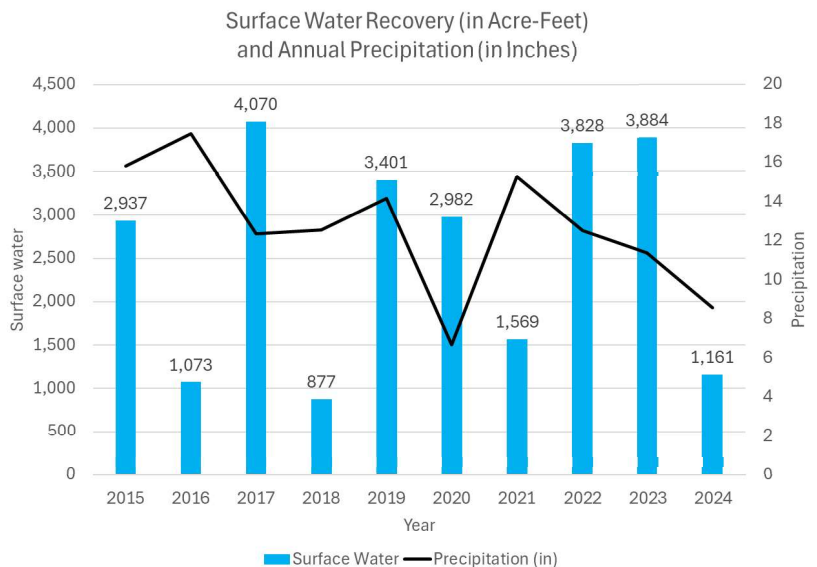
Year	Chino Valley	Airport
2015	95%	5%
2016	94%	6%
2017	94%	6%
2018	89%	11%
2019	86%	14%
2020	84%	16%
2021	85%	15%
2022	78%	22%
2023	77%	23%
2024	80%	20%



Surface Water Supplies

Of the surface water that was captured and subsequently recharged, how much was recovered in 2024? How did that volume compare to the ten-year period 2015-2024?

The water available from Granite and Willow Creeks are highly variable depending upon precipitation and runoff. In 2024, there was 1,161 AF of surface water recharged and subsequently recovered. *Note: A.R.S. 45-851.01(B) requires annual recovery of recharged surface water supplies.*

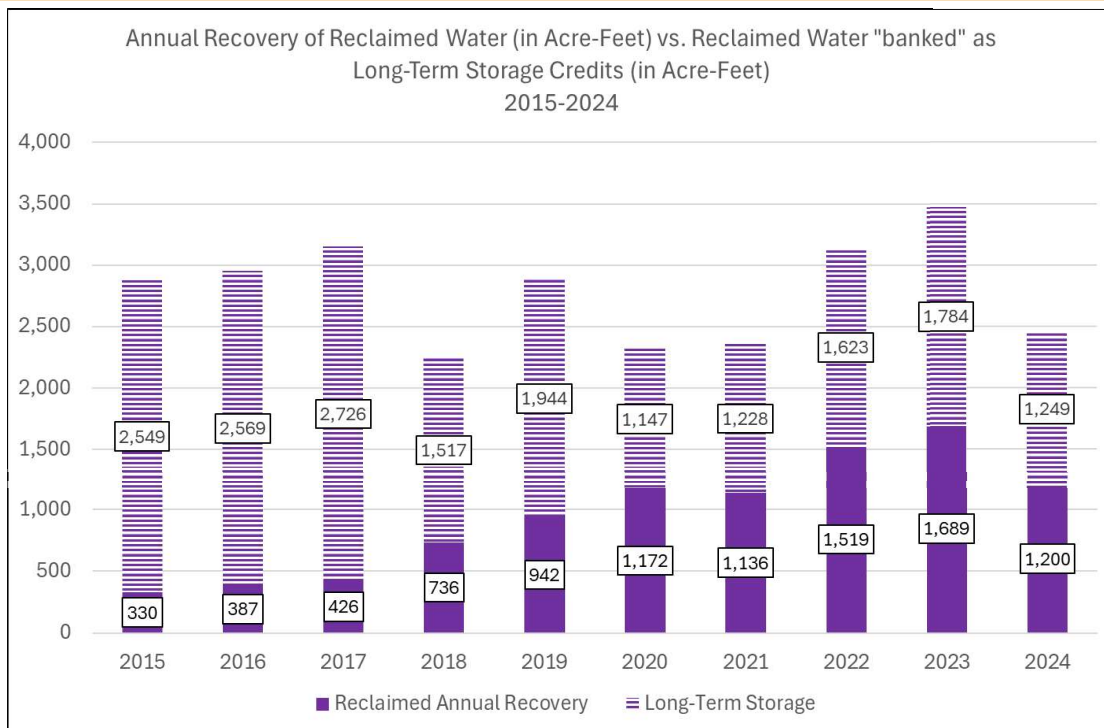


Reclaimed Water Supplies

Prescott owns and operates a sanitary sewer system which captures and treats water that is then legally considered effluent (reclaimed water). Some of that water is delivered directly to customers through the City's non-potable water system. The balance of the reclaimed water is sent to the City's Underground Storage Facility (recharge facility) where it seeps into the ground and stored in the aquifer. A portion of the recharged water is recovered (pumped out) the same calendar year that it was stored using the legal mechanism of "annual storage and recovery". The remainder is banked for future use as "long-term storage credits".

In 2024, how much reclaimed water was pumped as annual recovery and how much was stored for long-term storage credits? How did those volumes compare in the ten-year period 2015-2024?

In 2024, a total of 2,449 AF was recharged. Subsequently, 1,200 AF was recovered the same year to offset the City's groundwater pumping. The remainder, 1,249 AF stayed in the aquifer being "banked" as long-term water storage credits.



In 2024, the City's potable water demand was 7,292 AF, of that water delivered, 4,676 AF was returned to the City's wastewater treatment plants. This results in a 64% return of supplies. The average return during the 2015-2024 timeframe the was 67%

Note: In 2024, approximately 18% of the City's water customers were not connected to the City's sewer system.



Why is groundwater aquifer management with surface water and reclaimed supplies important?

A city with multiple supply types can enact various water management strategies. Additionally, from a regulatory standpoint, in 1998, the Prescott Active Management Area (PrAMA) was declared by the Arizona Department of Water Resources (ADWR) to be out of safe-yield (pumping more water than was naturally or artificially recharged to the aquifer). This declaration included a management strategy where additional growth was to be accomplished with alternative water supplies, not groundwater. In the City's case, it made investments in surface water and reclaimed supplies.

The City has a long history in managing groundwater supplies and participating in PrAMA safe-yield efforts. Since the mid-1950s, the City's effluent (reclaimed water) supply has been applied to golf courses to reduce the volume of groundwater pumped. In 1998, the City purchased Watson and Willow Lakes (surface water reservoirs) and the associated water rights, in part, for recharge purposes. Circa 1998, the City also sought ADWR permits to commence recharge and recovery of surface water and effluent (reclaimed supplies) to offset the amount of groundwater pumped. Later, in 2005, City voters adopted a requirement to permanently recharge reclaimed supplies that are returned from annexations of 250 acres or more.

The City's long-term water management planning will be examining more opportunities such as increased conservation practices, modified surface water and reclaimed water management, and more. Since 1864, creating supply flexibility for a growing community has been an ongoing effort.

In 2024, what percentage of the overall potable supply was legally categorized as groundwater, recovered surface water or recovered reclaimed water? How did the 2024 percentage compare with those from the ten-year period 2015-2024?

The percentage of the 2024 supply that was groundwater was 68%, while surface water was 16%, and recovered effluent (reclaimed) was 16%. In the table below you can see how the percentages can vary based on conditions during any given year.

Percentage Pumped by Legal Classification by Year

Year	Groundwater	Surface Water Recovery	Reclaimed Annual Recovery
2015	49%	46%	5%
2016	77%	17%	6%
2017	33%	61%	6%
2018	69%	17%	14%
2019	37%	49%	14%
2020	45%	40%	15%
2021	63%	21%	16%
2022	24%	55%	21%
2023	23%	54%	23%
2024	68%	16%	16%



For Additional Information:

City of Prescott webpage: [prescott-az.gov](https://www.prescott-az.gov)
Participate Prescott: [participateprescott.com](https://www.participateprescott.com)