



ANNUAL WATER WITHDRAWAL
and USE REPORT
Calendar Year 2016



Presented to City Council: March 28, 2017

When discussing the City's water resources there are two components: first, the Resource itself; and second, the Demand placed on that resource. The City's resources include groundwater, surface water, and treated effluent. Demand relates to serving customers and making other allocations.

Resource

The City's Water Resources are recognized by the State of Arizona in a legal document known as a Decision and Order (2009 D&O). This sets forth the City's legal water portfolio.

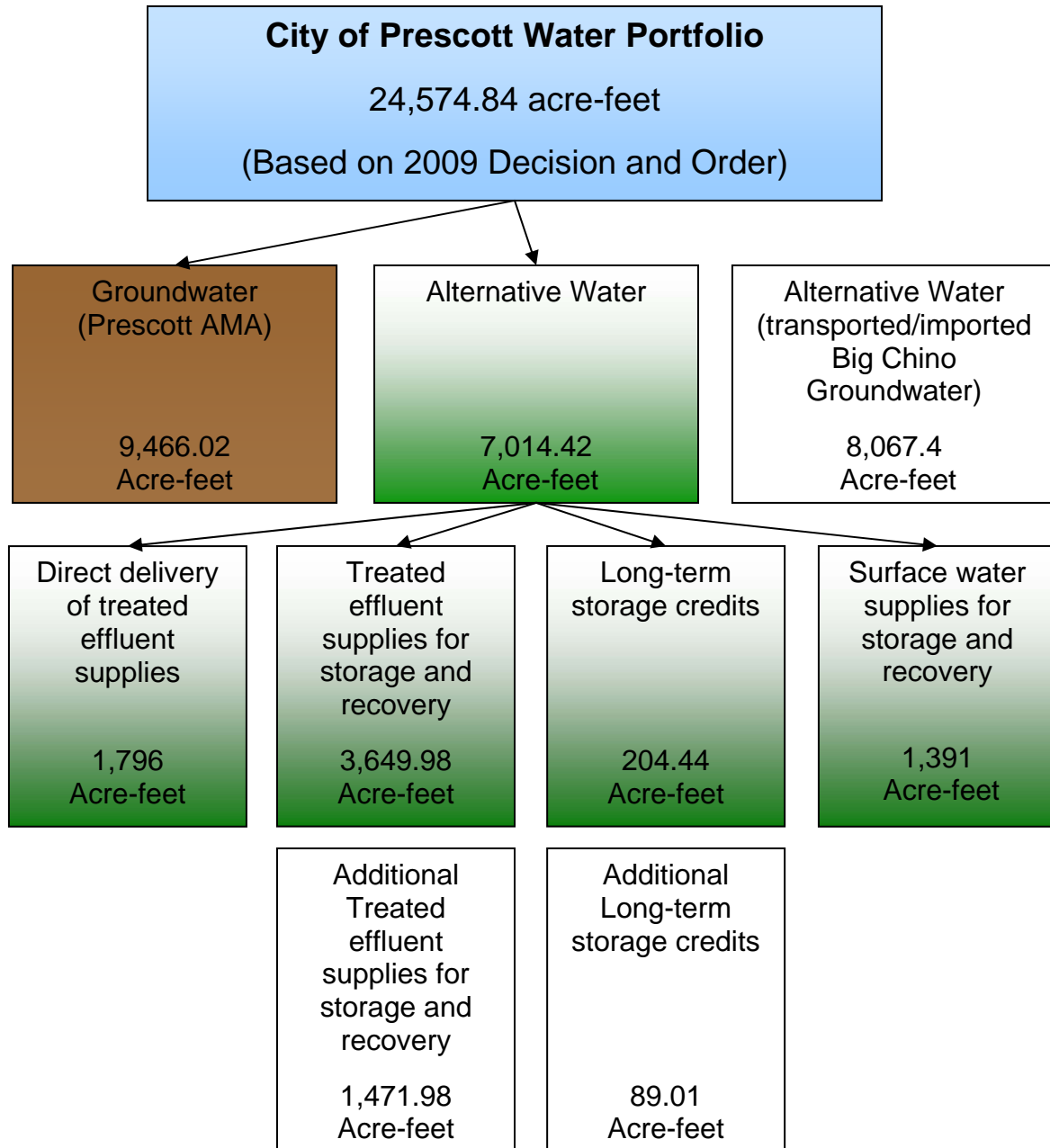
Demand

The City has current demand as well as committed demand on the resources in the portfolio. These demands are inside as well as outside of the City limits.

An Annual Water Withdrawal and Use Report accounting for both the resources and demand is required to be submitted to the Arizona Department of Water Resources no later than March 31st. (A.R.S. §45-632)

Resource: The Water Portfolio

Figure 1



The uncolored boxes and connecting arrows pertain to resources which will be addressed a Long-term Water Management Plan. Certain volumes have existing contracts or reservations.

1 Acre-foot = 325,851 gallons

Demand: 2016 Water Withdrawal and Use

Figure 2

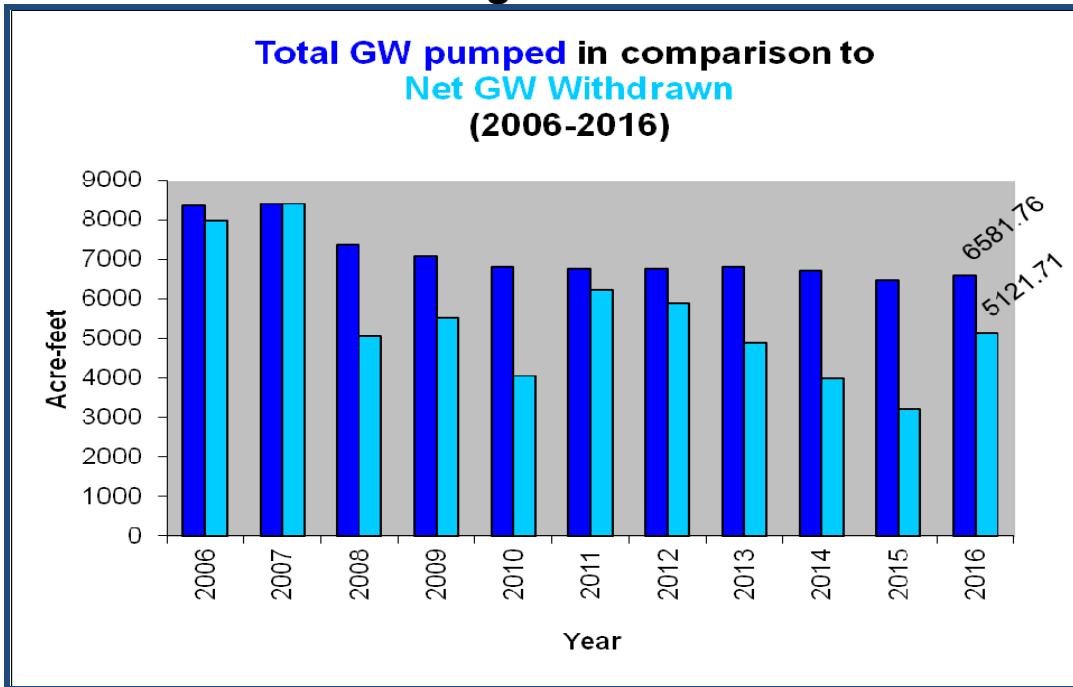


Figure 3

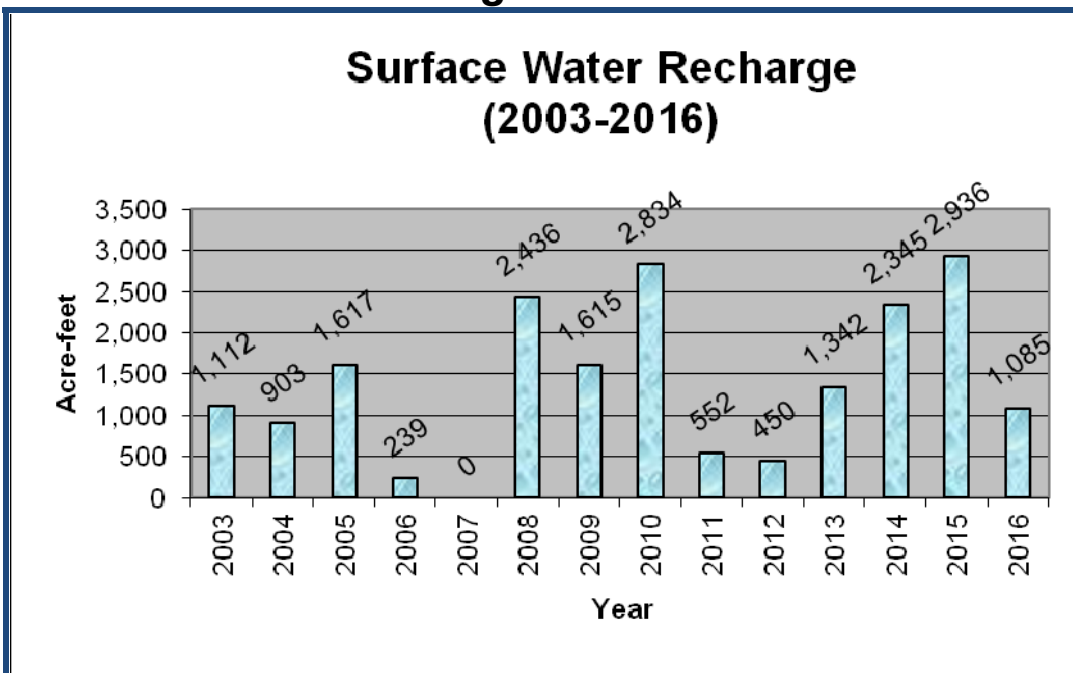


Table 1

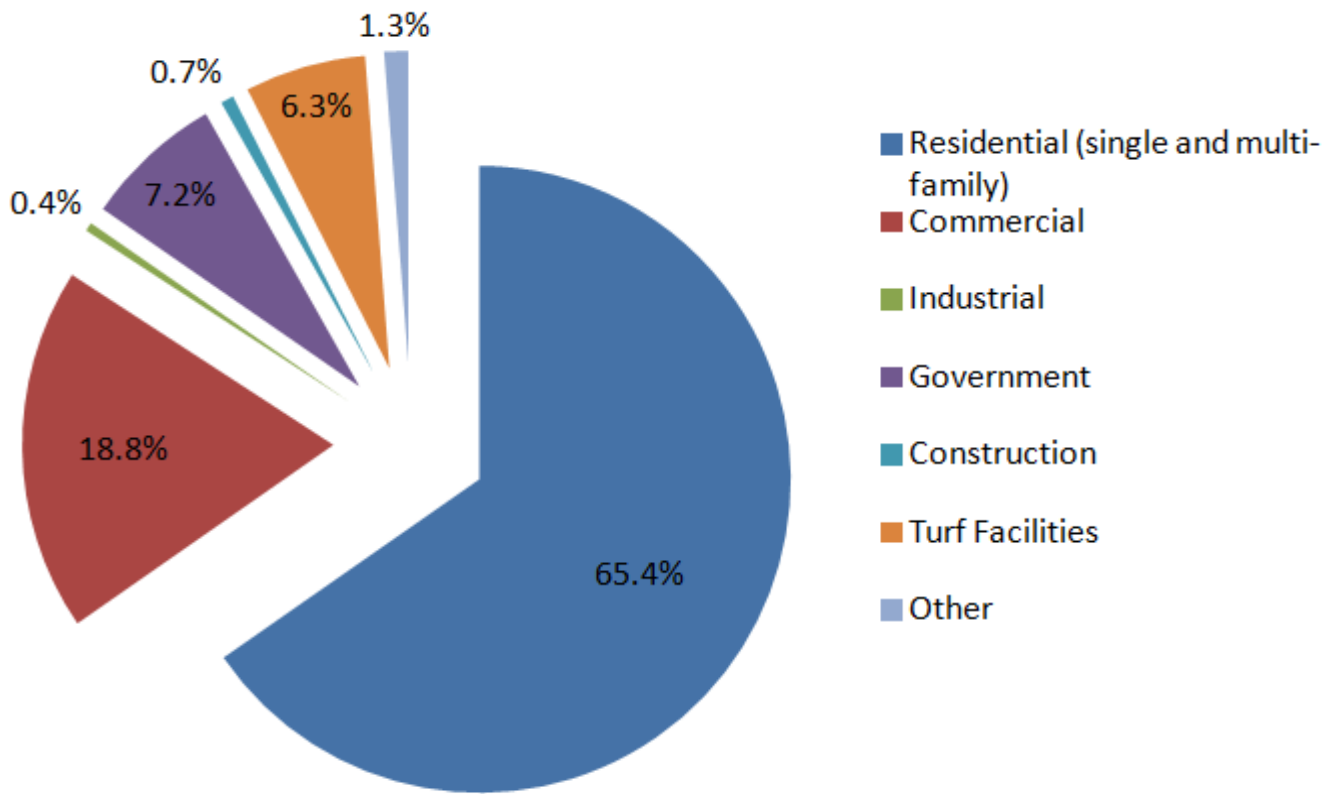
2016 Total Treated Effluent Recharge and Direct Delivery: 4,146 acre-feet	
<u>Place of Use</u>	<u>Volume (acre-feet)</u>
Airport WRF deliveries to the Recharge Facility	1,098
Sundog WWTP deliveries to the Recharge Facility	1,858
Total Volume to Recharge	2,956
Direct delivery to Antelope Hills Golf Course	630
Direct delivery to Prescott Lakes Golf Course	344
Direct delivery to Hassayampa Golf Course	152
Direct delivery to Hanson	64
Total Volume to direct delivery	1,190

Table 2

2016 Current & Committed Demand (acre-feet)	
Groundwater	
Current Demand (2000-2016 avg)	7,279
Pre-1998 Unbuilt Final Plats	940
Pre-1998 Preliminary Plats	1,234
Total Current & Committed Groundwater Demand: 9,453	
Alternative (Alt) Water	
Total Current & Committed Alt Water Treated effluent storage and recovery, direct use, reservations, long-term storage credits and surface water	5,126
Unallocated 1999-2016 Water Mgt Budget	239
Unallocated 2009 D&O Alt Water 1,471 AF – 500 AF Deep Well – 92 AF made available to general pool	879
Unallocated 2009 D&O Alt (transport) Water 8067 AF – 3,702 Prescott Valley portion -- 900 AF Deep Well 3 settlement	3,465*

*Refer to City Council Presentation 1/6/2015 titled, Alternative Water Portfolio and Budget for Calendar Year 2015

Figure 4
2016 Potable Use by Customer Type



The City has been regulated under the State’s “Modified Non-Per Capita Conservation Program” from 2009 through Calendar Year 2016. Each year the City was required to implement a public education program that identified five water conservation measures (Best Management Practices), the program was summarized in the State’s Conservation Efforts Report. In 2017, the State’s Prescott AMA Fourth Management Plan became effective. Starting in Calendar 2017, the City returned to the State’s GPCD (gallons per capita per day) program. The City will continue to provide a water conservation program to meet the changing water efficiency needs and opportunities in this community.

Table 3

Best Management Practice	2016 Water Conservation Activities and Results
Local and/or Regional Messaging	Continued communication program through: <ul style="list-style-type: none"> • Water Smart racks (9 locations – information cards, Conservation Handbook, and other water related materials) • Radio commercials (seasonally appropriate announcements) • Participation and/or sponsorship at community education venues including Earth Day, Highland Center’s native plant sale, and Yavapai County Contractors Association 2016 Home show • City Conservation webpage
Youth Conservation Education Program	<ul style="list-style-type: none"> • The City of Prescott funded the UA Cooperative Extension Project WET: Wild Over Water outreach for all Prescott 4th grade classes (20 classes) . The program includes 4 classroom activities offered during multiple visits to each class. • Yearly water conservation content in the Prescott Public Library Viewerie
Residential Interior Retrofit Programs	<ul style="list-style-type: none"> • The City’s incentive program to replace high water use interior plumbing fixtures with low and/or high-efficiency fixtures has had consistent participation by customers • Toilet replacement and turf removal continue to be the most popular credits processed.
Landscape Water Restrictions	Time of Day-Outdoor Watering Restrictions, City Code 3-10-14 (effective April 15 to November 1) limits outdoor watering with sprinkler systems between the hours of 8pm and 8am
Incentives (Outdoor) – Landscape Conservation Rebate/Incentive	Turf removal remains a component of the conservation incentive program. In CY2016, the rebate program sponsored the removal turf for an estimated annual savings of 53.5 AF.
Public Education – Outdoor Landscaping	The City’s <i>Prescott Water Smart Landscaping</i> , an interactive web application provides both the private homeowner and the landscaping trade a tool to view low water plant materials, analyze and create watering zones, and develop landscaping plans that are both pleasing and low water use.

In FY15, 125 applications were processed resulting in 39 AF of water savings. Overall the incentive program water savings (FY 2006 to FY2016) = 1,072 acre-feet.

Table 4

Summary of 2016 Water Withdrawals (acre-feet) and associated fees	
Water pumped by City wells	6,581.76
Surface water storage and recovery	1,073.01
Treated effluent recovery	387.04
Net Groundwater Withdrawal	5121.71

Volume (acre-feet)	Fee	Result
5,121.71	\$2/acre-foot	\$10,243.42
Total 2016 Withdrawal and Use Fee		\$10,243.42

For Calendar Years 2015 and 2014, the City paid water withdrawal fees in the amounts of \$6,410.14 and \$7,938.08, respectively.