The Town of Paradise Valley integrates water conservation measures in many areas of operations including landscape design and maintenance, facilities and water systems, public outreach and external contracts.

Landscape and Facilities:

- Touchless water faucets were installed in all Town buildings. Studies show that touchless water faucets use an estimated 54% less water over time.
- Sloan touchless toilets and urinals were installed in all Town buildings. These low use fixtures use 20% less water (1.28 gallons per flush (GPF)) than the standard 1.6 GPF toilet. These fixtures meet Leadership in Energy and Environmental Design (LEED) building standards.
- Greywater irrigation systems were installed at Fire Stations #91 and #92. Greywater irrigation systems filter water coming out of bathtubs, shower stalls and washing machines from the fire stations and is used for Town landscape irrigation. These systems are LEED certified.
- The Town replaced the Police Department water cooled chiller with standalone heat pumps eliminating the use of water to cool the building.
- The Town replaced the Town Hall water cooled chiller with an air-cooled chiller reducing the use of water to cool this building.
- The Town uses drip irrigation systems to conserve water. Drip irrigation systems deliver small,
 precise amounts of water directly to the root zone of the plant where water is most needed and
 most efficiently used by the plant. Through a complex system of lines and emitters, drip
 irrigation systems deliver water drop by drop and reduce the amount of water needed to keep
 vegetation healthy.
- The Town inspects all irrigation systems quarterly to identify any waterline leaks, faulty multiports, leaking valves, backflow leaks, blocked driplines, and faulty timers. Malfunctions are immediately repaired.
- The Town utilizes LEIT 4000 Solar Station Controllers to program independent start and stop times for irrigation. The controllers have four independent programs, with three start times for each valve, so different schedules can be set for different species of plants on the same median. This personalized water schedule conserves water. The controller also has a rain stop feature to ensure irrigation does not occur when it is raining. The controller can be set up to 99 days with an automatic restart to accommodate multiple days of rain.
- A total of 7.9 acres of the Town campus and facilities are 100% covered in ¼ inch minus decomposed granite, eliminating the need for watering grass.
- The Town maintains 182 median islands (671,653 sq. ft.) which are 100% covered in ¼ inch minus decomposed granite, eliminating the need for watering grass.
- The Town has specific watering schedules that are used for winter and summer to reduce water usage in the winter.
 - Winter Both trees and plants are watered one time a week. Plants are watered for 45 minutes and trees are watered for 90 minutes.
 - Summer Plants are watered 4 times a week for 90 minutes and trees are watered 3 times a week for 3 hours.
 - Once trees are established (about 3 years old), the watering scheduled can be reduced to 1 time a week for approximately 3 hours.

• The Town uses low water-use desert plants, trees, shrubs and ground cover on all median islands, and the Town complex and facilities, as these plants require less water to maintain.

Public Outreach/External Contracts:

- The Town of Paradise Valley provides guidelines to public and private property owners in the preservation and enhancement of the community's natural environment. The Town Council has directed the Town Staff to provide these guidelines to applicants for land division approval, special use permits, and building permits. The Council also directs that Staff utilize these landscaping guidelines for all Town projects. The landscape guidelines provide a list of low water use desert plants, trees, shrubs and ground cover recommended for landscaping.
- The Town posts water conservation awareness resources on the Town website. These resources include guides on selecting and maintaining low water use plants, configuring effective irrigation systems, household water conservation ideas, maintaining evaporative coolers, testing for leaks, and links to external water conservation sites including:
 - Arizona Department of Water Resources
 <u>Arizona Department of Water Resources</u> mission is to ensure a long-term, sufficient, and secure water supply for the State. The site offers numerous water efficiency resources and information for Arizona businesses and residents.
 - United States Environmental Protection Agency
 The <u>Environmental Protection Agency</u> has primary jurisdiction over water quality. This site provides information on groundwater, drinking water, and water science.
 - Arizona Department of Environmental Quality (ADEQ)
 ADEQ provides links to reports on water management in Arizona and water quality.
 - Water-Use It Wisely
 <u>Water-Use It Wisely</u> offers tips on conservation and home water audits. View <u>100 water-saving tips.</u>
 - City of Scottsdale

Visit the <u>City of Scottsdale website</u> on water conservation.

City of Phoenix

Visit the City of Phoenix Water Services website.

The Desert Botanical Garden

The <u>Desert Botanical Garden</u> offers numerous workshops on desert landscaping.

EPCOR Water, USA

The EPCOR Water website offers water conservation tips.

o H2OUSE

Visit the H2OUSE website for more information about water conservation in the home.

o Earth 911.com

Visit the Earth911.com website for more information about water conservation.

Residential Water Conservation Created by SAHRA

Visit the <u>Residential Water Conservation website</u> created by SAHRA for more information about water conservation.

Liquid Assets

Visit the <u>Penn State Public Broadcasting website</u> to view a video on the nation's water infrastructure system.