

6 | WATER + PRESERVATION ELEMENT

Introduction

Bountiful's semi-arid climate demands effective water resource management to sustain a population. This element identifies the City's water resources and seeks to align its strategy with state and regional water conservation goals. Bountiful will strengthen its resilience and long-term sustainability as it implements the water-wise recommendations in this Plan.



State Requirements Overview

The State of Utah requires cities to incorporate water use and preservation into a general plan per Utah Code 10-9a-403. These are the state-mandated requirements:

- Analysis of the effect of existing and future development patterns on water demand and water infrastructure.
- Identification of methods for reducing water demand and per capita consumption for existing and future development.
- Identification of opportunities within city operations to eliminate water wasting practices and conditions.
- Evaluation of the land use ordinance and recommended changes to ordinances that promote water efficiency, including lawn-free park strip landscape requirements.
- Consideration of how the future land use plan may affect water supply and distribution planning with water providers.
- Use of the Utah Division of Water Resources to help meet regional water conservation goals and Great Salt Lake preservation efforts.
- Recommendations for landscaping standards that promote low water use in commercial, industrial, institutional, multifamily and condo development.

Existing Resources

Bountiful is part of the Weber River water supply basin planning area. Utah's 2021 Water Resources Plan projects that demand will exceed supply by 2050 without changes in consumption; however if changes are made, it projects demand can be met beyond 2070. Thus, changes to water demand in the Weber River Basin area will have a large impact on the future. Wise management of surface and groundwater-based water resources for irrigation and culinary use in the City can benefit the region.

Culinary water within the city is delivered to residents primarily by Bountiful City, with the exception of the Val Verda area in the southwest portion of the city which is serviced by the South Davis Water District. Bountiful City's supply is sourced from eight wells throughout the town. Bountiful also operates a surface water treatment plant in Mueller Park which supplies

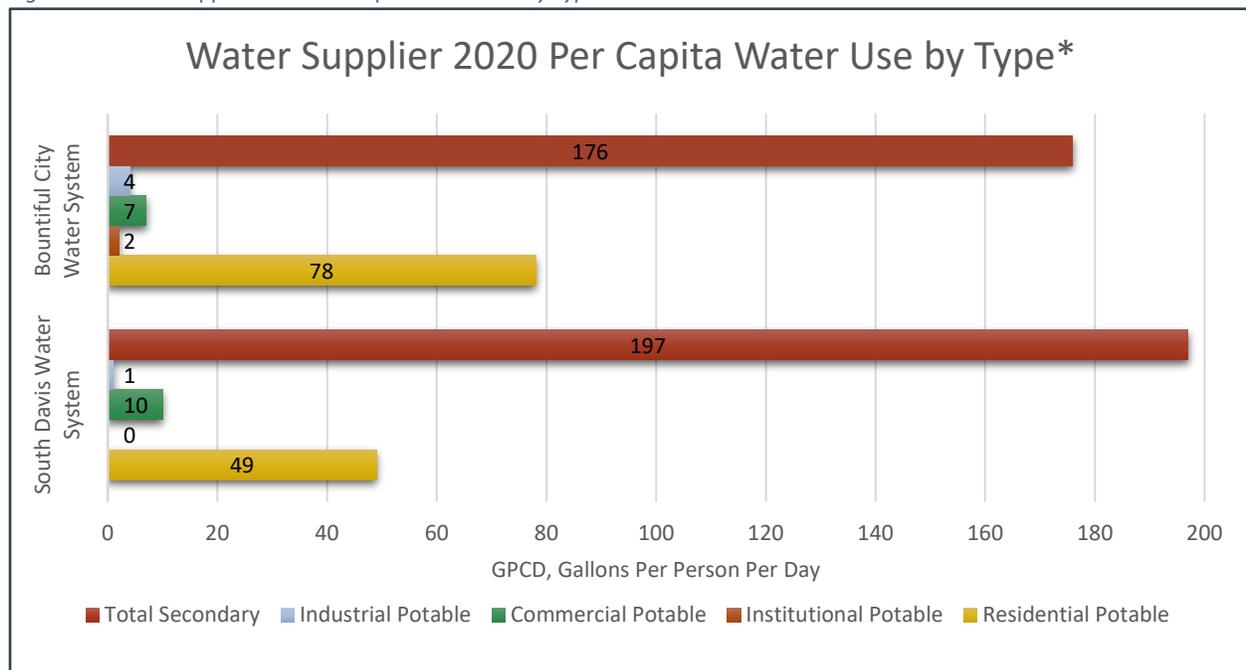
culinary water to the City’s system. The Bountiful Water Department has developed a water source protection plan to ensure water quality remains high.

Residents also benefit from a secondary non-potable irrigation system. Secondary water is provided by Weber Basin Water Conservancy District and is distributed in Bountiful via three different water providers: South Davis Water, Deuel Creek Irrigation, and Bountiful Irrigation. Secondary water is available in most parts of the city; however, it is largely unavailable east of Bountiful Boulevard, which area uses culinary drinking water provided by Bountiful City Water for outdoor use.

Water Usage

Bountiful’s service providers report* that most of the water consumption is through secondary water and residential uses. Industrial, institutional, and commercial potable water account for under 5% of all consumption. Residential potable water uses accounts for approximately 25% of water consumption, but by far the largest consumptive category is secondary water. Secondary water is non-potable and is primarily used for agriculture and landscaping uses. Given that Bountiful has no significant agricultural land uses, landscaping accounts for most of the secondary water use. Historically, much of the secondary water was not metered, however recent meter installation efforts should provide future data on where to target secondary consumption conservation.

Figure 6.1 Water Supplier 2020 Per Capita Water Use by Type



*Source: Utah Division of Water Resources 2020 Municipal and Industrial Water Use Data App

Conservation Approach

Utah's 2021 Water Resources Plan highlights the importance of continued and ongoing water conservation along the Wasatch Front to meet projected water needs. Bountiful has current conservation policies and regulations in place. However, continued development and implementation of water conservation strategies is needed to meet state and regional conservation targets. To ensure Bountiful is playing its part in efforts to manage, preserve, and maintain the City's groundwater and



surface water resources and the Great Salt Lake and maintain water supplies for future demands, this Plan follows the recommendations provided by the Utah Division of Water Resources. As this Plan is implemented, the actions and recommendations within should be regularly reviewed and updated with the most current data and recommendations from the Utah Division of Water Resources.

Bountiful employs a tiered water pricing structure to encourage conservation. The rate is determined by elevation and water meter diameter. As Bountiful's water infrastructure ages, replacing water lines and expanding capacity will be needed. This should be done considering the existing demands and the planned future land uses of the area to maximize efficiency. Extensions of service areas to low-density developments on the fringes of the network should be discouraged. Areas with additional development capacity as outlined in the future land use map should be considered in projected demands when replacing or upgrading existing water distribution and storage infrastructure.

Water consumption in Bountiful is dominated by secondary water uses, primarily for landscape purposes, highlighting the importance of conservation efforts in landscaping. The current landscaping code includes several conservation friendly elements including:

- Limiting water-intensive lawn areas to 20% for commercial and multi-family developments.
- Requiring street trees for non-residential and multifamily uses.
- Prohibiting lawn in areas less than 8' in width for new development and non-residential remodels.
- Allowing xeriscaping in park strips and public rights-of-way.

In the future, Bountiful can further encourage and extend conservation efforts in landscape codes. These are outlined in the recommended actions of this Plan and are in efforts to be in alignment with the Utah Division of Water Resources recommendations. These regulatory recommendations include:

- Reassess Water Conservation Plan's secondary water exemptions.
- Assess City parks and facilities for water consumption and make water-wise updates starting with facilities that have high potential for reduced water consumption.

- Evaluate street tree and shrub requirements to ensure approved species are not water intensive.
- Reconsider exemptions on maximum lawn areas for residential uses.
- Consider further limiting non-functional lawns for non-residential development.

Bountiful has promoted water conservation initiatives and educational resources through Bountiful City's website in recent years. These include information on programs such as flip the strip, water wise, water district guidelines, and many general tips on how residents can conserve water. Consistent and ongoing education and informational resources about water conservation and resources available such as rebate programs will help maximize the effectiveness of these efforts:

- Landscaping Regulations: Regularly reassess landscaping regulations to encourage water-efficient landscaping.
- Watering Restrictions: If applicable, establish or revise watering restrictions to optimize water use efficiency, considering time of day and frequency of irrigation.
- Infrastructure Improvements: Invest in water infrastructure improvements to minimize leaks and losses in the distribution system, contributing to overall water conservation efforts.
- Collaboration: Collaborate with local water providers, state agencies, and community organizations to exchange information related to surface water and groundwater resource management; share best practices; and stay informed about evolving policy changes and water conservation strategies.
- Policy Updates: Regularly review and update local policies based on changes in state guidelines, technological advancements, and the evolving understanding of efficient water use practices.