# Daybreak's Sustainable Approach to Water Conservation

Daybreak, a master-planned community located in South Jordan, Utah, has been carefully planned to incorporate key social and environmental features in its design. Sustainability goes beyond environmental considerations and takes into account the economic and social implications of the decisions we make.



## Founding Principles

From the very beginning, the goal of Daybreak was to set a new standard for sustainable, high-quality development in the Salt Lake Valley. The following new urbanist design principles still lead our efforts almost 20 years later:

- Quality architecture & urban design
- Mixed-use development and diversity
- Sustainability
- Walkability
- Smart transportation

#### Sustainability in the landscape

- Smaller lot sizes.
- Use of native, drought-tolerant and water-wise planting materials and turf.
- Turf may not cover more than 35% of a homeowner's yard. There is no minimum turf requirement.
- To reduce turf, planter beds are required to surround fences, tree trunks and foundations.
- Mulch is required in planting beds to maintain soil moisture, minimize evaporation and keep plant roots cool.
- Use of high-efficient irrigation systems throughout the community.
- In response to drought conditions, in-progress parks and open space plans, such as The Watercourse, were revised to significantly reduce irrigation needs and increase drought tolerance.

- All builder and homeowner landscape plans are reviewed to make sure they comply with the community's landscape/water-wise guidelines.
  These guidelines have been adapted to allow less turf and more waterwise plants in open spaces.
  When necessary, the developer has replaced approved designs for parks and common areas to reduce turf.
- Use of an innovative secondary water collection and distribution system irrigates 80% of parks and open spaces.
  - o Parks and open spaces use only 2.25 acrefeet of water per acre vs. 4 acre-feet of water per acre that is needed for agriculture watering.
  - o All secondary water is metered at the point of connection.
- 100% of storm water is retained onsite. This is an important effort to preserve and replenish the aquifer.
- Daybreak is committed to planting 100,000 trees in the community, which will reduce urban heat island effect.
  - o Trees can lower the ambient temperature by five to ten degrees on a hot day and provide shade that conserves water by avoiding evaporation.
  - o Trees also increase capacity for the soil to store stormwater as deeper roots break up compacted soil.

# Water Conservation Efforts

Daybreak continues to focus on sustainability and water conservation. Utah is one of the driest states in the nation, which makes water conservation critical. While Daybreak has always been a good steward of water, in recent years, the developer and association have implemented several best practices.

- WeatherTRAK monitoring systems have been added to most parks and open spaces.
- Secondary water meters have been updated with new technology that remotely monitors usage and notifies of leaks or malfunctions.
- The number of watering stations has been increased to allow for more precise control in watering.
- Reduced watering to native plants.
- Implementation of Daybreak Direct, an app that residents can use to alert the Daybreak Community Association (HOA) of irrigation leaks.
- Delay the start of watering season for parks and open spaces.
- To prevent evaporation, parks and open spaces will not be watered during the hottest hours of the day, when possible.
- Mowed turf in parks and open spaces at a longer length to improve moisture retention.
- The developer has updated new home landscape requirements to include new water efficiency standards that affect park strips, front and side yard landscaping for single and multi-family housing.

This update aligns with South Jordan City's Municipal Code 16.30.

The HOA has increased the budget to monitor and replace older components of the irrigation system. This increases efficiency and reduces leakage and waste.

The HOA has also implemented a three year plan to replace dead trees, improve irrigation to trees in less watered areas, and treat trees in the community to prevent or mitigate disease and stress that would require more water and may also permanently damage the trees.

These efforts continue to reduce secondary water usage saving millions of gallons each year.



## Forward Thinking

Under the leadership of Larry H. Miller Real Estate, Daybreak will continues to take a thoughtful and forward-thinking approach to sustainability, water conservation and smart design principles.

We recognize that our responsibility doesn't stop here. We will continue to collaborate with thought leaders on this topic and do our part as a responsible developer.

Learn more at daybreakutah.com or lhmre.com