WATER USE & PRESERVATION ELEMENT

Good Stewards of Our Water Resources

To fulfill the requirements of Utah State Code 10-9a-403, Layton City has prepared this Water Use & Preservation element as part of the City's General Plan, "Layton Forward". The water use and preservation element is intended to assist the City as a guide in implementing policies by building upon actions that promote good stewardship of our water resources and help protect the region's water supply.

Layton City desires to continue to be a good steward of this irreplaceable resource. The City recognizes that in order to preserve our water resources, we must plan responsibly and seek out the best practices for water conservation. Layton City intends to decrease City-wide gallons per capita water usage to a point in line with the regional goal for Davis County of 200 gallons per capita (GPCD) by the year 2030. Therefore, improving existing water practices and establishing water-wise standards for future growth must be considered. The purpose of this chapter of Layton Forward is to create a greater connection between land use and water use to help achieve the following objectives:

1. Determine the effect of permitted development or development patterns on water demand and water infrastructure.
2. Identify methods of reducing water demand and per capita water use for existing development.
3. Identify methods of reducing water demand and per capita water use for future development.
4. Identify opportunities for the City to modify its operations to reduce and eliminate wasteful water practices.

5. Consider the impact of the City's water use on the Great Salt Lake and ways to support the survival of this vital local and regional resource.

CONSERVATION EFFORTS

Water Conservation Plan

Layton City initially created a Water Conservation Plan in 1998 and performs updates to the plan every 5 years as required by Utah State Code. The most recent update occurred in 2022. Updates occur every 5-7 years as deemed necessary. Consultation with the Plan and the City's Water Engineering Staff aided in the creation of this chapter.

Water Master Plan

Similar to the Water Conservation Plan, Layton City updates the Water Master Plan every 5-7 years. This plan analyzes water usage, growth patterns with the existing Water Conservation Plan to provide direction for capital improvements and water management over the coming years. Layton City is developing on an update of the Water Master Plan that will be completed by the end of 2025. Preliminary data informed the creation of this chapter of Layton Forward. Upon completion of the Master Plan update, the City will have an enhanced,

data-driven understanding of the impacts existing and future development has and will have on water demand and water infrastructure.

Water-Wise Landscaping Ordinance (June 2021)

In June 2021, Layton City adopted a water-wise landscaping ordinance to "promote water efficient landscaping to conserve water and reduce demand for current and future water resources." Through implementation of ordinance standards, the City has seen successful conversions of existing landscaping to water-wise landscaping and the installation of new water-wise landscapes as part of new development. The ordinance requires the use of water-wise plant materials as well as irrigation practices to reduce the demand for water while providing aesthetically pleasing landscapes to beautify the City.

Layton City continues to coordinate with Weber Basin Water Conservancy District (Weber Basin) to identify appropriate plant materials for landscapes and encourages the use of plant lists provided by Weber Basin and others to install plantings that will thrive in the area with lower water use. It is anticipated that future amendments to the ordinance are expected based on, this chapters recommendations and other initiatives, to further improve water-wise landscaping in Layton.

Growing Water Smart Workshop (November 2022)

In November 2022, Layton City attended the inaugural Utah Growing Water Smart Workshop. This workshop has become an ongoing collaborative effort between municipalities, local water providers, water districts, and state water agencies. The Utah State Legislature provided funding in 2022 to provide these workshops, which have been organized and run by staff from Utah State University and Western Resource Advocates. At the workshop, Layton City staff and officials collaborated to create an action plan aimed at making the City more water-wise in both its water use and future development practices.

Layton City Staff & Officials at the Growing Water Smart Workshop.

Lessons learned from that workshop have been incorporated into the City's Water Conservation Plan and other practices.

COMMUNITY/WATER PROFILE

Layton City's water supply is provided from three sources: 1) City-owned water rights accessed by City wells, 2) contracted water supply with Weber Basin, and 3) secondary water supply from Weber Basin, Kays Creek Irrigation, Holmes Creek Irrigation, and Davis & Weber County Canal Company. The population of Layton City is 88,130, which is the largest in Davis County, and the ninth largest in the State of Utah. Layton's population is expected to reach 110,000 by the year 2045. To provide the amount of water that will be used for current and future growth, the City continues to plan for future growth and ways to improve the efficiency of the water system.

This chapter provides information on current and future water use in Layton. Goals and recommended policies are provided to reduce the water demand for existing and future development. It is crucial for the City to protect the water supply and its quality to maintain sustainable

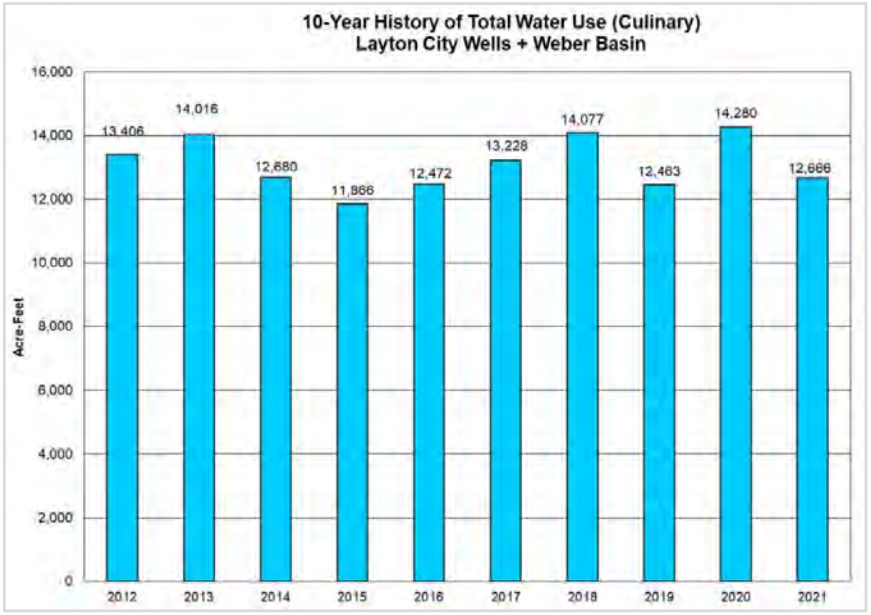
growth, and allow the City to achieve its development goals.

As outlined in this Plan, Layton City seeks to develop in urban, town, and business centers while maintaining single-family neighborhoods and preserving the agricultural heritage of the community. This vision strives for a balanced approach of growth that will have different levels of impact on the water supply. More concentrated development , that can be found in the different centers, will result in greater water efficiency and savings. The more rural and suburban areas of the City will continue to demand higher amounts of water use and less-efficient infrastructure.

Population Growth & Water Use

Since 2010, Layton City has grown from 67,311 residents to 88,130 residents. This represents a total growth of 30.9% and an average annual growth rate of 2.7%. The Kem C. Gardner Policy Institute estimates that the City could grow an additional 30% by 2035. Layton City grew more than any Davis County City between 2010 and 2020 followed by Syracuse, Farmington, Kaysville, and North Salt Lake. With Syracuse and Kaysville using similar water resources, it is important to ensure appropriate water use and supply for the future as all three communities will continue to grow.

According to the 2022 Water Conservation Plan, from 2012 to 2021 the ten year average use of culinary water as measured in acre feet was 13,115.4 acre feet. In 2021, the City used 12,666 acre feet with a ten-year high of 14,280 acre feet in 2020. Layton City and Weber Basin are working to install meters on all secondary water connections in the City with a deadline to have all connections completed by 2030. As such, data on the usage of secondary water is not currently available, however 2021 secondary water supply estimates from Weber Basin, Kay's Creek Irrigation, Holmes Creek Irrigation and Davis & Weber County Canal Company were 10,873 acre feet. Combined with the culinary use in 2021, there was approximately up to 23,539 acre feet of water used for culinary and secondary water use in 2021. Without a

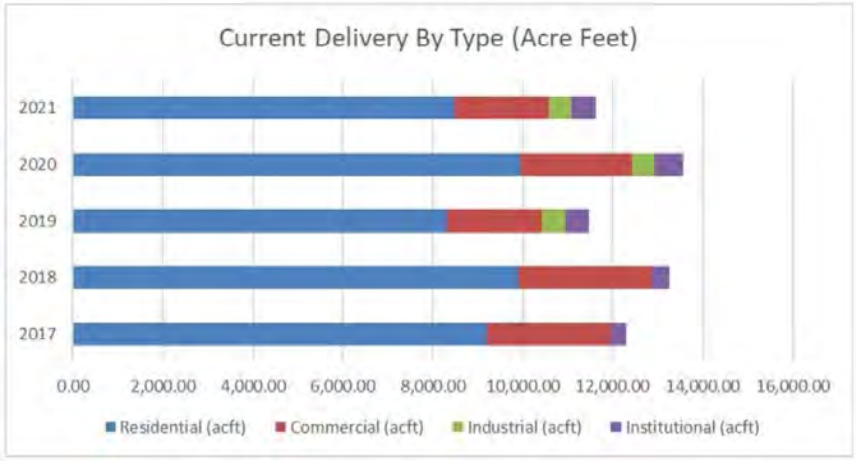


complete picture of water use due to the unmetered secondary water connections, it is not clear exactly what the full culinary and secondary water use was during that time. However, in accordance with Utah Code 73-10-34 secondary water connections will be metered by January 1st, 2030.

According to the 2017 Water Master Plan, the City indicated that 22,186 acre feet of water would be needed in 2060 for a projected population of 94,942 residents. This demand is being recalculated, as part of the update to the City's Water Master Plan. Current projections have Layton City reaching a population of nearly 112,000 by 2045, a full 15 years ahead and 17,058 people greater than the 2060 projected estimate from the 2017 Water Master Plan.

Water Use by Land Use

As part of the 2022 Conservation Plan, staff estimated the amount of culinary water used/delivered by following the uses shown in the chart (Current Delivery by Type): residential, commercial, industrial, and institutional. As shown in the chart, residential use accounts for the



majority of water use followed by commercial uses. The general categories are not broken down into further detail, but within the residential category there are various levels of water consumption based on the housing type. It has been proven that large lot developments consume more water than clustered or multiple unit housing developments. The following information on water consumption by use type is provided in the publication, "Integrating Water Efficiency Into Land Use Planning in the Interior West" written by Western Resource Advocates and the Land Use Law Center of Pace Law School. As stated in that publication, "Planners in Utah have determined that the daily per capita water demand of a development with a density of two units per acre is reduced by half" when increased to "a density of five units per acre. It has also been shown that increasing residential density by 20% can yield a 10% per capita water savings." It is later stated that, "No matter where they are, areas with low-density, large lots, and large lawns require more water than areas with high-density, small lots, and small lawns." Water conservation efforts in Layton City are supported with centered growth in town centers with higher densities and planned residential neighborhood developments with smaller lot sizes and compliance with the water-wise landscaping standards of City Code.

According to preliminary data of the Water Master Plan update, trends in Layton align with this assumption. The larger lots use more water for outdoor use than indoor use. As developments increase in density the outdoor use decreases and the indoor use increases. The greatest overall efficiency is achieved in mixed-use (MU) and transit-oriented (TOD) development locations. However, this water savings is not reflected in high density developments over 16 units to the acre and not located in mixed-use or TOD locations. As those developments generally have large landscaped open spaces combined with a high number of dwelling units. This combination leads to the greatest indoor usage and a moderate outdoor usage, which leads to the greatest overall usage of any land use type in the City. From this data, it can be learned that it is valuable for Layton City to continue to develop in mixed-use urban and town centers and around transit. These more urban environments lead to the greatest efficiency of water use and should continue to be pursued as outlined in Layton Forward.

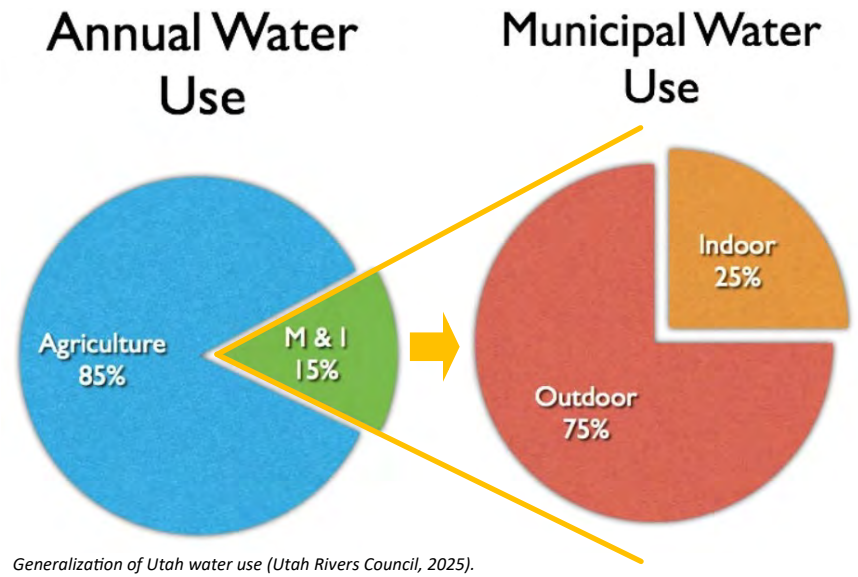
Between indoor and outdoor water use, indoor water use has the least amount of impact on Great Salt Lake as that water can be treated at the North Davis Sewer District (NDSD) and then discharged to the Lake. However, outdoor water use may only make it to Great Salt Lake if the water channels through underground aquifers. This process is effective

	Utah Code 15A-3-306(3)	Federal Standards	E.P.A WaterSense Products
Residential Toilets	1.6 gallons/flush	1.6 gallons/flush	1.28 gallons/flush
Bathroom Faucets	1.5 gallons/ minute @ 60psi	3.0 gallons/ minute	1.5 gallons/ minute
Showerheads	2.0 gallons/ minute @ 80psi	2.5 gallons/ minute	2.0 gallons/ minute
Urinals	0.5 gallons/flush	1.0 gallons/flush	0.5 gallons/flush

and is part of the overall water cycle; however, it is one that takes many years to accomplish.

The table on the previous page shows data on indoor water efficient fixtures as provided by the Growing Water Smart Workshop. As can be seen in this table, there have been great strides made to indoor water efficiency in Utah. State building code standards lead almost all federal building code standards. Additionally, Utah building code standards match all Environmental Protection Agency (E.P.A.) WaterSense products except for residential toilets. Utah Water Savers currently offers rebates for the replacement of residential toilets manufactured prior to 1994. This rebate, among others, has been promoted by Layton City. As a result of this element, Layton City can increase efforts to educate residents about this water-efficient rebates.

The data regarding indoor and outdoor water use within Layton City and within the State of Utah help illustrate where the greatest need of water conservation and efficiency needs to be focused. Indoor water use continues to be more efficient and much has been accomplished in the state to do so. As previously explained, once used and treated by the NDSD, indoor water eventually makes its way to Great Salt Lake. Outdoor water use is much less likely to make it to and improve water levels of Great Salt Lake.



Generalization of Utah water use (Utah Rivers Council, 2025).

The pie charts above from the Utah Rivers Council website are a good illustration of water use throughout the State of Utah. The chart on the left shows that the majority of water usage in the state goes towards agricultural use, with only 15% going towards municipal and industrial water uses. This further illustrates the need of Layton City and all municipalities to incorporate water-efficient landscaping watering practices for existing and future development. There are still improvements that can be made to indoor water use to be more efficient.

CONSIDERATIONS TO REDUCE WATER DEMAND AND USE

Utah State Code 10-9a-403 requires the identification of methods for reducing water demand and per capita water use in both existing and future development. The following recommendations are provided to satisfy this requirement and to serve as part of a regulatory and policy strategy for Citywide water conservation.

These considerations are preliminary in nature, developed from existing literature and current land-use planning practices. Each method has potential to reduce water demand and per capita

consumption if properly adapted to Layton's local context. To ensure effectiveness, further calibration using relevant Layton-specific data will be necessary.

Implementation of any method should be coordinated with, and informed by, the City's Engineering Department, Community and Economic Development Department, and Parks and Recreation Department. Potential implementation pathways include amending existing ordinances, drafting new ordinances, or establishing a comprehensive Water Conservation Title within Layton City Municipal Code.

1. Diversity of Housing Options for New Development

Large-lot developments increase water demands, primarily because larger lots typically require more lawn care, swimming pool development, and other outdoor water uses. The majority of the area developed in west Layton consists of low density single-family residential. To advance water conservation goals, these areas could include PRUD development and town-center supportive housing, as outlined by the existing general plan.

In addition to reducing outdoor demand, denser development patterns can also decrease real system losses within the water distribution network. According to the Environmental Protection Agency (2006), highly dispersed communities require longer water systems, which leads to greater overall loss compared to more compact development. Similarly, the American Water Works Association water audit methodology identifies system pressure and pipe length as the most significant factors influencing unavoidable real loss (Nolon Blanchard et al., 2018). In other words, the larger and more sprawled the distribution system, the greater the amount of water that is lost.

A denser pattern of development therefore serves as a dual conservation strategy: it reduces per capita outdoor water use while also minimizing unavoidable distribution system losses, making it a critical approach to long-term water resource management.

2. Water Intensive Amenities in New Residential Development

Recent residential developments in Utah, such as the Still Water Subdivision in Syracuse, Southern Shores in Hurricane, and Zion Shores in Washington, have incorporated amenity spaces that place substantial demands on water resources. These amenities, which include man-made boat lakes, surf pools, cable lakes, and similar features, significantly increase water consumption. Within the context of Layton, such high water-demand amenities would be inconsistent with the City's objectives to manage and reduce residential water use.

To minimize water demand associated with new Planned Residential Unit Developments (PRUDs) or standard single-family subdivisions, common-space amenities that require substantial water use—beyond a limited common swimming pool for resident use—could be prohibited.

An example of water intensive amenities: Still Water Subdivision in Syracuse features an artificial boating lake. Image from Google Earth. Image Landsat/Copernicus. Image © 2025 Airbus.

3. Turf Grass Restrictions and Water-wise Landscaping for All Single-Family Development

Turf grass requires significant irrigation. Limiting its installation while promoting water-wise landscaping can substantially reduce water use. The City could reconsider restricting turf grass installation for existing and new single-family development. Restricting turf grass coverage on single-family lots to a maximum percentage, such as 35 percent, could reduce overall irrigation demand. This reduced need for irrigation could result in significant water savings across new development. Water demand may also be reduced in existing developments as homeowners gradually change their landscaping over time.

Implementing turf grass limitations for all development could allow Layton City residents to benefit from existing water-wise landscaping incentives, such as the Utah Water Savers turf replacement program. Layton City currently includes such restrictions for PRUD developments but not for other subdivisions throughout the City. Implementation of such regulations should be thoroughly vetted to determine the feasibility of literal enforcement of said regulations. Possible impacts of this type of restriction on all single-family developments (existing and future) could include the need for additional code compliance oversight, plan review requirements for new construction, etc. It is possible, however, that through the implementation of this code measure; additional residents would be eligible for water efficient landscape rebates/assistance that currently do not qualify.

Example of water-wise xeriscaping in the front yard of a single-family home (SpiritedMichelle, 2025).

4. Water-wise Landscaping for Existing Development

As stated in the Utah Division of Water Resources report on Utah's Regional M&I Water Conservation Goals, "Changes in the landscaping of future construction only will not save enough water to reach water conservation goals in most regions" (Hansen, Allen, & Luce, Inc. et al., 2019). In recognition of this, the City may explore strategies to transition existing developments to water-wise landscaping.

The City could reexamine the feasibility of landscape code updates, which allow City residents to benefit from existing water-wise landscaping incentives, such as the Utah Water Savers turf replacement program. The City could also evaluate opportunities to create incentives to encourage property owners to voluntarily update their landscaping to be water-wise.

The City could also amend the landscaping ordinance to require transition to water-wise landscaping, particularly in cases where previously approved landscaping has been removed or died. Requiring a property on which the landscaping has fallen into disrepair to update to water-wise landscaping will not only reduce water consumption, but will also enhance the aesthetic quality of neighborhoods and commercial areas.

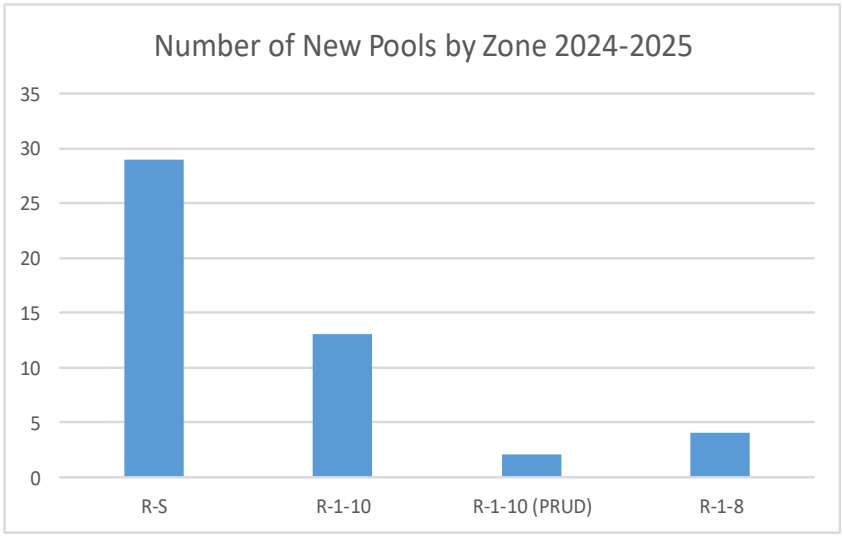
Additionally, the City could distribute educational materials to property owners about the benefits of water-wise landscaping. Informational handouts could be created to help property owners quickly understand that updating to water-wise landscaping is not only allowed, but encouraged.

5. Pool Cover Requirement

Pool covers, such as that seen above, reduce water loss due to evaporation (Montague, 2025).

Swimming pools contribute to water loss through evaporation and refilling. By covering swimming pools when they are not in use, water loss from the pool due to evaporation can be significantly reduced. According to the Southern Nevada Water Authority (2025), "pool covers reduce evaporation by 90 percent." This reduced loss means that the pool will require less refilling. A decreased need for refilling means a reduction in total water use for residential swimming pools.

All new pools which are permitted in the City could be required to have a pool cover installed. Cover installation could be effectively verified by City staff during building inspections, which are required for newly permitted pools. Pools could also be required to be covered whenever they are not being used for enjoyment for a period exceeding one hour.



Between January 1, 2024, and July 30, 2025, the vast majority of new swimming pools were built on R-S and R-1-10 zoned properties.

6. Size of Pools on Single-Family Residential Lots

The majority of new private swimming pools in Layton have been constructed within the R-1-10 and R-S zoning districts, which together accounted for 87.5% of all new pools between 2024 and 2025. According to the Layton Forward General Plan, most undeveloped land in west Layton is designated for future low-density residential uses, with anticipated zoning districts including R-S, R-1-10, and R-1-8 (Layton Forward, Appendix B – Residential and Mixed Use Land Use Densities). If these areas are developed as planned, it is likely that new single-family homes will include private swimming pools. Because of this, the City may consider placing a limitation on the size of private swimming pools in single-family residential areas. This measure could yield significant water savings.

An example of pool size limitations comes from Las Vegas, Nevada, which limits new residential pools to a maximum area of 600 square feet. It has been estimated that Las Vegas' limitation on the size of new pools will conserve approximately 32 million gallons of water over

ten years (Southern Nevada Water Authority, 2025).

Between January 1, 2024, and July 30, 2025, Layton City approved 48 permits for new single-family pools, with an average area of 732.25 square feet and a combined surface area of 35,148.08 square feet. Assuming a standard pool depth of 5.5 feet, these pools have an estimated total volume of 1,446,100 gallons. If a 600-square-foot pool limitation had been in effect, an estimated 335,800 gallons of water could have been conserved during this period. Because residential pools are periodically drained and refilled, reducing pool sizes could yield substantial cumulative water savings over the lifespan of new pools.

7. Water-intensive Land Uses such as Data Centers

Data centers represent a novel land use not explicitly identified within the current municipal code. Despite their increasing presence in the water-scarce American Southwest, data centers can be highly water-intensive. Many facilities rely on water-based cooling systems to maintain server temperatures, and their demands can be substantial. A medium-sized data center may consume upwards of 110 million gallons of water per year, while some larger facilities can use as much as 1.8 billion gallons annually (Yañez-Barnuevo, 2025). In addition, data centers indirectly contribute to water consumption through withdrawals required for electrical generation to meet their significant power demands (Yañez-Barnuevo, 2025), though this latter concern is more regional in scope.

Because of their high water-use intensity and the absence of specific regulations in the municipal code, the City should evaluate new regulations for uses such as data centers. Potential measures include requiring pre-development estimates of projected water use, restricting development to appropriate zoning districts, establishing special conditions that mandate less water-intensive operations, or adopting other regulatory approaches that reduce the overall water impacts of these facilities.

CONSIDERATIONS TO PRESERVE AND PROTECT WATER QUALITY

Utah State Code 10-9a-403 (2)(iv)(B-C) requires the City to consider principles of sustainable landscaping. These principles include the promotion of site-specific landscape design that decreases stormwater runoff and preserves healthy trees that have a reasonable water requirement or are resistant to dry soil conditions.

The following considerations examine potential methods for decreasing stormwater runoff, which in turn could reduce pollutant loads into the City's water ways. As with the methods to reduce water demand, these considerations are preliminary in nature, having been developed from existing literature and current land-use planning practices. Implementation of these considerations would require calibration to the context of Layton City.

Parking lot adjacent bios-wales reduce stormwater runoff and pollution (California State University, Fullerton, 2015).

1. Parking Lot Pollution Abatement

Impervious surfaces, such as parking lots, increase stormwater runoff, which carries accumulated pollutants including oil, antifreeze, metals, and debris. Reducing the volume of stormwater runoff and filtering out contaminants is critical for maintaining the quality of both surface water and groundwater resources.

One proven method for addressing stormwater runoff and pollution is

the use of bioswales. A bioswale is a layered drainage feature with a porous bottom and a vegetated soil surface designed to capture and filter runoff. Research by the United States Forest Service has shown that bioswales can reduce stormwater runoff by nearly 89 percent and pollutant loads by more than 95 percent (Xiao et al., 2009). The U.S. Environmental Protection Agency has also recognized bioswales as an effective strategy for filtering stormwater contaminants in the Semi-Arid West (Green Infrastructure in the Semi-Arid West | US EPA, 2025). Increasing tree canopy coverage in parking lots is another effective method, as tree canopies intercept rainfall before it reaches the ground, further reducing total runoff and pollution (Xiao et al., 2009).

To help preserve local water quality, the City could consider updating its parking standards to include bioswales, expanded tree canopy requirements, or other effective stormwater management practices.

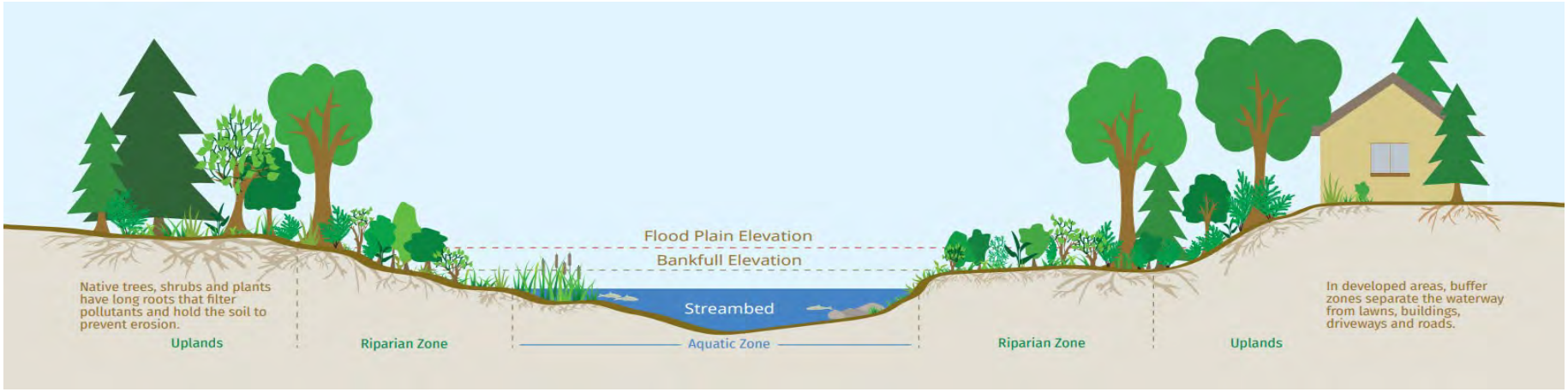
2. Water Quality in Riparian Corridors

To reduce non-point source pollution and support increased groundwater recharge, the City may consider establishing riparian setbacks along rivers, streams, and other sensitive watercourses. These setbacks would create a buffer between new development and sensitive riparian ecosystems, allowing pollutants from impervious surfaces and other development-related sources to be intercepted before reaching primary water channels (*Setbacks Protecting Sensitive Habitats and Water Quality – Sustainable Development Code*, 2025).

Preservation of existing native vegetation within these setback areas could also be required. Native vegetation along riparian corridors could result in lower water consumption, as native vegetation is adapted to the local environment and hydrological conditions (*Vegetation Protection Areas – Sustainable Development Code*, 2025).

In addition to environmental and water conservation benefits, riparian setbacks can help preserve open space and enhance recreational opportunities. Riparian setbacks adjacent to Layton City's future trail section can provide aesthetic and recreational value while aligning with the objectives of the Layton City Parks, Recreation, Trails, Open Space & Cultural Facilities Master Plan.

Below: Diagram of typical riparian corridor with setback development (RiparianZone | EcoVision2025, 2025).



OPPORTUNITIES TO REDUCE AND ELIMINATE WASTEFUL WATER PRACTICES WITHIN CITY OPERATIONS

Beyond a regulatory and policy strategy, the City also seeks to advance its direct role in conserving water and eliminating wasteful water practices. This water use and preservation chapter identifies those future conservation practices and goals outlined in the City Water Conservation Plan as the best opportunities for the City to directly reduce and eliminate wasteful water practices. Those practices and goals include:

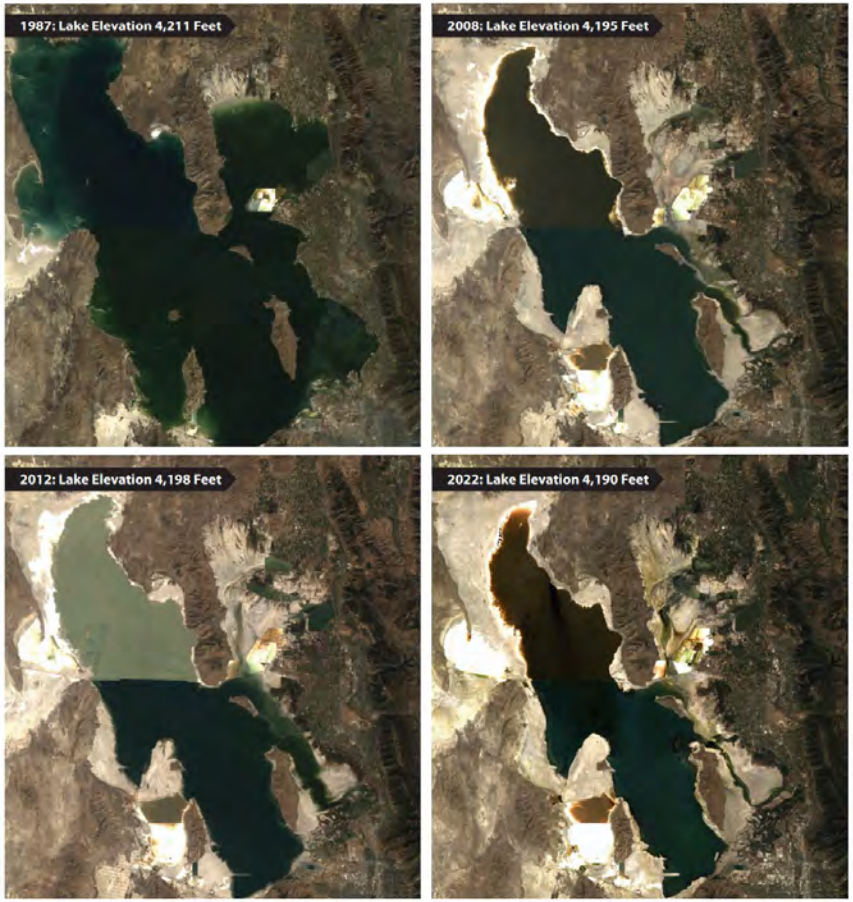
- Continued secondary water meter installation.
- Continued advanced metering infrastructure installation.
- Customer portal which encourages water conservation and alerts customers of overconsumption and leaks.
- Evaluation of water rate structures.
- City website water conservation information page.
- Water use reports for City properties and additional customer groups.
- On-going water-wise upgrades across Layton City Parks.

CONSIDERATION FOR IMPACTS ON GREAT SALT LAKE

Layton City is located within the Great Salt Lake Watershed, in which all released water eventually flows into Great Salt Lake. For this reason, the water use patterns of the City are inherently linked to the water levels of the Great Salt Lake.

These water levels are increased by whatever amount of water is allowed to flow through the City to the lake bed. The water levels of the lake decrease as a result of water loss due to evaporation and decreased water input due to human-caused consumption. If less water is allowed to flow to the Great Salt Lake and evaporation outpaces water input, the level of the lake's waters will decline.

Declining lake levels are worrisome for our community, as the lakebed dust which becomes exposed contains man-made toxins as well as cyanotoxins including: arsenic, cadmium, lead, copper, and mercury (Utah State University, 2025). As water levels reduce, more of this toxic dust is exposed and can be blown into the air, reducing air quality along the Wasatch Front, and by extension, Layton. This reduction in air quality negatively impacts the health, well-being, and quality of life of Layton City residents.



Changing levels of the Great Salt Lake throughout the years. Aerial phots from U.S. Geological Survey as cited by Great Salt Lake Strike Team et al., (2024)

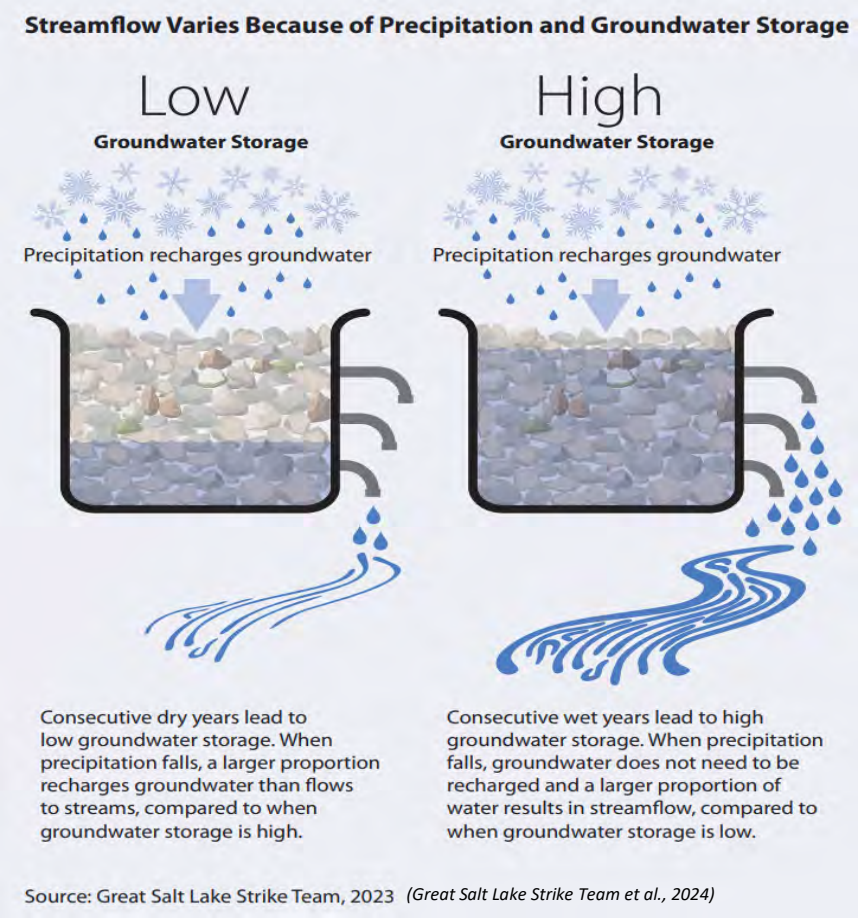
Additionally, Great Salt Lake provides critical habitat for migratory birds and many other species who depend on the ecosystem provided by the lake. If the lake dries up, wildlife populations will suffer. Local amenities which allow community members to enjoy the peaceful environments of Great Salt Lake, such as Great Salt Lake Shore bird preserve, will be damaged. This degradation of natural environments and wildlife in and around Layton diminishes the quality of life and recreational opportunities available to residents.

Because of these concerns, it is critical that the City takes steps and develop strategies which mitigate the impacts of human development on the Great Salt Lake and enables more water to flow to the Great Salt Lake.

Layton obtains most of its water from City-owned wells that pump groundwater. Because of this, when residents and businesses use less water, more remains in underground storage, meaning less precipitation is needed to recharge groundwater supplies. This can help increase the share of precipitation that eventually flows into the Great Salt Lake.

Migratory birds, such as this Wilson's Phalarope, depend on the Great Salt Lake and its brine shrimp as a critical food resource (Becky Matsubara, 2017).

Still, conserving water by itself is not enough to meaningfully raise lake levels. For conservation to make a more meaningful difference, the saved water must also be managed so that it is tracked, protected, and shepherded all the way to the Great Salt Lake.



CITATIONS (APA Format)

Green infrastructure in the Semi-Arid West | US EPA. (2025, May 9). US EPA. https://www.epa.gov/green-infrastructure/green-infrastructure-semi-arid-west#4

Hack, G. (2009). *Local planning contemporary principles and practice*. http://ci.nii.ac.jp/ncid/BB0194350X

Nolon Blanchard, J. C., Esq. ,. MEM, LEED AP +. BD&C, Elliott, D. L., Nolon, J. R., Land Use Law Center, Western Resource Advocates, Beckwith, D., Nuding, A., Betan, F., Gamils, D., Grzegorzewski, R., Velger, A., Pace Law School, Yale School of Forestry & Environmental Studies, Berggren, J., The Text Doctor LLC, & Nancy Maysmith. (2018). *Integrating Water Efficiency into Land Use Planning in the Interior West: A Guidebook for local Planners*. https://westernresourceadvocates.org/wp-content/uploads/2019/06/Integrating-Water-Efficiency-into-Land-Use-Planning_6.3.2019.pdf

Setbacks Protecting sensitive habitats and water quality – Sustainable Development Code. (2025, September 9). Sustainable Development Code. Retrieved September 9, 2025, from https://sustainablecitycode.org/brief/setbacks-protecting-sensitive-habitats/

Vegetation Protection Areas – Sustainable Development Code. (2025, September 9). Sustainable Development Code. Retrieved September 9, 2025, from https://sustainablecitycode.org/brief/vegetation-protection-areas-3/

Xiao, Q., University of California, Davis, McPherson, E. G., & Center for Urban Forest Research, USDA Forest Service. (2009). *Testing a Bioswale to treat and reduce parking lot runoff*. https://www.fs.usda.gov/psw/topics/urban_forestry/products/psw_cufr761_P47ReportLRes_AC.pdf

Yañez-Barnuevo, M. (2025, June 25). *Data centers and water consumption | article | EESI*. Retrieved September 10, 2025, from https://www.eesi.org/articles/view/data-centers-and-water-consumption

IMAGE CITATIONS (By Order of Appearance)

Layton City Community and Economic Development. (2024, October 21). *A better quality of life: recreation*. Retrieved October 16, 2025, from https://www.laytonecon.org/quality-of-place/recreation/

Layton City Community and Economic Development. (2024). *Layton City Staff & Officials at the Growing Water Smart Workshop*.

Lead Nurture Close Web Marketing. (2025, March 20). *Grow Your Sprinkler & Irrigation Biz with Expert Marketing*. LeadNurtureClose® Web Marketing. https://leadnurtureclose.com/marketing-sprinklers-irrigations/

Utah Rivers Council. (2025). *Are we running out of water?* Retrieved October 16, 2025, from https://utahrivers.org/are-we-running-out-of-water

Google Earth, Landsat/Copernicus, & Airbus. (2025). *Still Water Subdivision*. Google Earth.

SpiritedMichelle. (2025, May 19). *File:Roseville xeriscaping 03.jpg*. Wikimedia Commons. https://commons.wikimedia.org/wiki/File:Roseville_xeriscaping_03.jpg. This file is licensed under the Creative Commons Attribution 4.0 International (licensehttps://creativecommons.org/licenses/by/4.0/deed.en.)

Montague, J. (2025, October 14). *Pool Cover*.

California State University, Fullerton. (2015, April 22). *Sustainability at CSUF*. Flickr. https://www.flickr.com/photos/csufnewsphotos/17022792257

RiparianZone | EcoVision2025. (2025, September 10). EcoVision2025. https://ecovision2025.ca/riparianzone/

Becky Matsubara. (2017, May 24). File:Wilson's Phalarope (34090102774).jpg*jpg*. Wikimedia Commons. https://commons.wikimedia.org/wiki/File:Wilson%27s_Phalarope_%2834090102774%29.jpg. This file is licensed under the Creative Commons Attribution 2.0 International (https://creativecommons.org/licenses/by/2.0/deed.en)

IMAGE CITATIONS (Continued)

Great Salt Lake Strike Team, Anderegg, W., Buttars, C., Ferry, J., Gochnour, N., Shelley, K., Steed, B., Tarboton, D., Ahmadi, L., Albers, E., Bingham, B., Brooks, P., Davis, T., Dixon, E., Endter-Wada, J., Flint, T., Hasenyager, C., Hawkes, T., Johnson, W., . . . Yost, M. (2024). Great Salt Lake Data and Insights Summary. https://www.usu.edu/today/pdf/great-salt-lake-strike-tream-report-2024.pdf

ACKNOWLEDGEMENTS

Community Development

Weston Applonie, Director

Brad McIlrath, City Planner

Zachary Kadin, Planner II

Jeffrey Montague, Planner I

Public Works

Stephen Jackson, Director

Briant Jacobs, City Engineer

Stacy Majewski, Water Engineer

Legal

Jadyn Applonie, Assistant City Attorney

Administration

Alex Jensen, City Manager

Tori Campbell, Executive Assistant

Angelia Camper, Admin. Assistant

Mayor & City Council

Joy Petro, Mayor

Zach Bloxham

Bettina Smith Edmondson

Clint Morris

Tyson Roberts

Dave Thomas

Planning Commission

Trevor Steenblick, Chair

Justin Whitworth, Vice-Chair

Scott Carter

Wesley Felice

Peter McDonough

Bret Neilsen

Julie Pierce

Chase Freebairn, Alternate

Zachary Heslop, Alternate