# ordinance no. <u>0-2025</u>-0017

AN ORDINANCE OF THE OREM CITY COUNCIL ADOPTING CHAPTER 9 (WATER USE AND PRESERVATION) OF THE OREM GENERAL PLAN PURSUANT TO THE 2022 UTAH SENATE BILL 110, "WATER AS PART OF GENERAL PLAN."

WHEREAS on February 1, 2025, the Community Development Department filed an application with the City of Orem requesting the City Council to adopt Chapter 9 (Water Use and Preservation) of the Orem General Plan pursuant to the 2022 Utah Senate Bill 110, "Water as Part of General Plan"; and

WHEREAS a public hearing considering the subject application was held by the Planning Commission on August 20, 2025, and the Planning Commission recommended approval of the request; and

WHEREAS a public hearing considering the subject application was held by the City Council on December 9, 2025; and

WHEREAS the agenda of the City Council meeting at which the request was heard was posted on the Orem City webpage, at the City Offices at 56 North State Street and at utah.gov/pmn; and

WHEREAS the matter having been submitted and the City Council having fully considered the request as it relates to the health, safety and general welfare of the City; the orderly development of land in the City; the effect upon the surrounding neighborhoods; and the special conditions applicable to the request.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF OREM, UTAH, as follows:

- 1. The City Council finds that this request is in the best interest of the City because it will help fulfill the requirements of state law and plan for City water use and preservation.
- 2. The City Council hereby adopts Chapter 9 (Water Use and Preservation) of the Orem General Plan pursuant to the 2022 Utah Senate Bill 110, "Water as Part of General Plan".
- 3. If any part of this resolution shall be declared invalid, such decision shall not affect the validity of the remainder of this resolution. All other resolutions and policies in conflict herewith, either in whole or part, are hereby repealed.
- 4. This resolution shall take effect immediately upon passage.

PASSED and APPROVED this 9th day of December, 2025.

David A. Young, Mayor

ATTEST: Walletung

Teresa McKitrick, City Recorder

# COUNCILMEMBER

Mayor David A. Young	AYE	NAY
Jenn Gale	W.	
Chris Killpack	W	
Jeff Lambson		
Tom Macdonald	V	
LaNae Millett	V	
David Spencer	i P	

# Chapter 9 - Water Use and Preservation

# REGIONAL WATER CONSERVATION GOALS

The planning commission shall consider applicable regional water conservation goals recommended by the Utah Division of Water Resources.<sup>1</sup>

The regional goals for the Provo River Region, which includes Orem, were set in a 2019 statewide plan. These goals aim to decrease water use from the 2015 baseline:

- A 20% decrease by 2030.
- A 27% decrease by 2040.
- A 32% decrease by 2065.<sup>2</sup>

Due to its limited undeveloped land and lack of a secondary water system, Orem's water conservation plan adopts a goal that aligns with the Salt Lake Region's targets. The city has already made significant progress in conservation, with per capita water consumption declining and annual demand remaining flat despite a growing population.<sup>3</sup>

# OREM WATER CONSERVATION PLAN

The planning commission shall consider the municipality's water conservation plan.<sup>4</sup>

The policies, goals, and analyses contained within this General Plan element are founded upon the technical data and long-term planning strategies established in two adopted documents: the Orem City Water Master Plan (April 2021, amended April 2024) and the Orem City Water Conservation Plan (October 2022). This element serves to integrate the findings of these technical plans into the city's land use planning framework, as required by SB110.

<sup>&</sup>lt;sup>1</sup> Utah Code Ann. §10-9a-403(2)(f)(i)(A) (2025).

<sup>&</sup>lt;sup>2</sup> Orem City Water Conservation Plan, October 2022, p. 9.

<sup>&</sup>lt;sup>3</sup> Orem Water Master Plan, April 2021, amended April 2024, pp. 8, 27-28.

<sup>&</sup>lt;sup>4</sup> Utah Code Ann. §10-9a-403(2)(f)(i)(B) (2025).

### Integrating Water and Land Use Planning

The Water Master Plan reflects that the repeal of the State Street District Zones directly led to reductions in projected population growth and consequential changes in demand. The city currently has sufficient water resources to meet the current General Plan Land Use Map goals, provided these are combined with the city's mandated water conservation goals. Land use decisions must continue to be influenced by water availability, ensuring alignment with water conservation efforts.

### Effects of Development

While growth has led to changes in land development, the average per capita water demand over the same footprint may actually decrease with these developments. The plan specifically addresses the demands of large users, noting "Utah Valley University is a large water user," and incorporates new development areas, such as the 264 acres annexed in the Southwest area, to update future growth projections and infrastructure needs.

### Regional Water Goals & Consumption

Orem's official Water Conservation Plan adopts the regional goal for the Provo River Region to decrease water use by 32% by 2065. The city aligns with this aggressive target because, having limited undeveloped land, most future growth will occur through redevelopment. This conservation focus is already evident, as the city has achieved a 30% reduction in per capita consumption since 2012 (a consistent drop of about 6.5 gallons per capita per day, or gpcd). Consequently, the Water Master Plan reflects that future demand projections through 2065 have been significantly reduced.

## Addressing Inefficient Water Use

To systematically address inefficient water use, Orem has updated its landscaping ordinances. The most significant change was the 2020 modification of the xeriscaping ordinance, which decreased the required green cover on a property from 75% to 50%. Furthermore, the city adjusted the definition of "Landscaping" in its site plan requirements to include various ground plantings and credit the canopy of shrubs and trees, effectively eliminating the specific requirement for turf grass.

# Sustainable Landscaping

The Parks Division is demonstrating leadership in sustainable landscaping by replacing old, inefficient irrigation heads and galvanized systems with new PVC, and have upgraded to state-of-the-art smart controllers that use soil moisture and weather data for real-time adjustments. The city further ensures efficiency by performing water audits on every park.

# WATER CONSERVATION POLICIES

The Planning Commission shall include a recommendation for water conservation policies to be determined by the municipality.<sup>5</sup>

To ensure compliance with state statute, this Water and Preservation General Plan Element formally incorporates the objectives of the City Council-adopted Orem City Water Conservation Plan (WCP) dated October, 2022. While the WCP's programs (including the aspirational *goals* for future water reduction and the specific *measures* like AMI meter replacement and water reuse projects) already guide the City's water utility operations, they are explicitly recommended here to become the overarching legislative policies for the entire municipality. This translation ensures that our long-range General Plan officially adopts these commitments as foundational Water Conservation Policies that will direct future land use, zoning, and development decisions.

The following table translates the objectives and programs from the adopted Orem City Water Conservation Plan into the recommended policies for the General Plan, distinguishing between the desired Goals and the required Measures (Implementation).

<sup>&</sup>lt;sup>5</sup> Utah Code Ann. § 10-9a-403(2)(f)(ii)(A) (2025).

Policy Area	Overarching Policy Statement (The Directive)	Supporting Goal (The Desired Outcome)	Specific Measure/Action (The Implementation)
I. Regional & Target Reduction	Policy 1.0: Achieve Regional Water Conservation Goals. The City shall align its water use with the regional targets recommended by the Division of Water Resources.	GOAL #1: Reduce the City's water use to reflect the Regional Water Conservation Goals for 2030.	* The City commits to the regional goal of decreasing per capita water consumption by 20% to 209.1 gpcd by 2030, saving over 7.3 billion gallons of water.
II. Pricing and Financial	Policy 2.0: Maintain Conservation-Oriented Water Pricing. The City shall maintain a water pricing structure that encourages reduction and ensures financial sustainability.	GOAL #2: Maintain an effective conservation-oriented water pricing structure each year.	* A four-tier water rate structure will be recommended to the City Council for approval during the annual budgeting process.

III. Infrastructur e & Technology	Policy 3.0: Invest in Water-Efficient Infrastructure. The City shall prioritize projects that minimize water loss and maximize measurement accuracy.	GOAL #3: Complete the meter replacement project by the end of 2024.  AMI technology will provide consumers with daily information about their use, alerts for potential leaks, and offer water conservation tips	* Completed in 2024.
IV. Water Reuse	Policy 4.0: Implement Water Reuse for Select Non-Potable Applications. The City shall utilize its sewer effluent re-use rights to reduce culinary water demand for irrigation.	GOAL #4: Construct a tertiary treatment process at the Water Reclamation Facility to produce Type 1 reuse water for irrigation by 2025.	* The new treatment process will immediately supply water for landscape irrigation at The Links at Sleepy Ridge, Lakeside Sports Park, Springwater Park, and the Orem Water Reclamation Facility (OWRF) site.

V. Public Education	Policy 5.0: Sustain Continuous Water Conservation Education. The City shall conduct regular, broad-based education efforts to promote wise water use.  Policy 5.1: Promote responsible and proper use of herbicides, pesticides, and fertilizers to protect water sources.	GOAL #5: Continue education efforts to the public regarding water quality, conservation and wise water use across all ages.	* Use various methods, including social media, newsletters, utility bill inserts, visiting schools, and teaming with organizations like CUWCD.  * Information on efficient outdoor and indoor water use will be made available through the City website, Library, and flyers.
VI. City Operations	Policy 6.0: Ensure Water Efficiency in Municipal Landscaping. The City shall utilize current technology and best practices for the irrigation of its parks and open spaces.	GOAL #6: Upgrade Cityowned properties to newer, EPA WaterSense approved technology.	* Replace automatic sprinkler controllers on all City-owned properties to newer technology by 2025.  * The Parks Section will conduct water audits on every park and replace old, inefficient irrigation components.
	Policy 6.1: Water Main and Service Line Integrity. The City shall coordinate infrastructure projects to minimize water loss and maximize efficiency.	GOAL #6.1 (implied): Minimize water loss and improve system integrity.	* The Water Section and the Streets Section will work together to coordinate water main, service line, and street resurfacing projects.

VII. Land Use & Regulation	Policy 7.0: Promote Water- Efficient Landscaping through Ordinance. The City shall amend its municipal code to minimize inefficient water use in development.	GOAL #7 (implied): Reduce overall outdoor water demand through regulation. The City commits to reviewing and updating plumbing codes to encourage the use of low-flow plumbing fixtures.	* The City previously modified its xeriscaping ordinance in 2020 to decrease the required amount of green cover on a property from 75% to 50%.
	Policy 7.1: Development Consultation. The City shall ensure water supply is considered in all land-use decisions.	GOAL #7 (implied):: Ensure alignment of land use decisions with water conservation efforts.	* The WCP recommends policy leaders support necessary land use changes (e.g., reducing overall lot sizes and the amount of turf grass allowed).  * Water suppliers should be consulted in land-use decisions to ensure alignment with water conservation efforts.
VIII. Water Shortage Management	Policy 8.0: Execute Water Shortage Management. The City shall maintain and implement a plan to manage water shortages and emergencies.	GOAL #8 (implied):: Protect water supply during shortage.	* The Water Shortage Management Plan includes a phased approach (Advisory, Mild, Moderate, Severe, Critical) to implement conservation measures during shortages.

The Planning Commission shall include a recommendation for landscaping options within a public street for current and future development that do not require the use of lawn or turf in a parkstrip.<sup>6</sup>

# Landscaping Definition

Orem City Code explicitly defines "Landscaping" broadly to include "some combination of grass, shrubs, trees, flowers, vines, or other living plants, bark chips, mulches, peat moss, rocks, boulders, gravel, synthetic turf, fountains, pools, statues, retaining walls, and benches."

This comprehensive definition already allows for multiple combinations of materials that facilitate the state's intent to reduce turf use. Further supporting this, the City modified its xeriscaping ordinance in 2020, decreasing the required amount of green cover on a property from 75% to 50%.8

### Residential Zone Parkstrips

While residential zones require that "the entire front yard and side yard adjacent to a street (excluding driveways and sidewalks) of developed lots... shall be landscaped", the code's definition of "Landscaping" ensures that the parkstrip does not need turf, allowing low-water alternatives, including artificial turf.<sup>9</sup>

### Incentive Programs and Regional Partnerships

As of 2025, the Central Utah Water Conservancy District (CUWCD), through the Utah Water Savers program, offers specific landscape incentives for residential properties in designated "Central Utah Rural" areas. These incentives are designed to encourage replacing high-water-use turf with water-efficient landscaping. The program details include:

- Turf Replacement: An incentive of \$1.50 per square foot is available for replacing existing, living lawn. This requires a minimum project size of 200 square feet, a preproject site visit, and submission of a landscape design.
- **Switch to Drip:** An incentive of \$0.50 per square foot is offered for converting existing overhead spray irrigation in planting beds to a drip irrigation system. This also has a 200-square-foot minimum.
- **Treebate:** A rebate of \$50 per tree is available, but it cannot be a stand-alone project; it must be done in conjunction with either a turf replacement or drip conversion project.

All projects must be pre-approved before any work begins, and specific requirements apply, such as minimum plant coverage and irrigation standards.

<sup>&</sup>lt;sup>6</sup> Utah Code Ann. § 10-9a-403(2)(f)(ii)(B) (2025).

<sup>&</sup>lt;sup>7</sup> Orem City Code § 22-2-1, "Landscaping".

<sup>&</sup>lt;sup>8</sup> Orem City Water Conservation Plan, October 2022, p. 22.

<sup>&</sup>lt;sup>9</sup> Orem City Code § 22-14-13(B).

### Non-Residential Zone Parkstrips

The codified design standards for parkstrips in non-residential zones require a specific, structured format, mandating trees spaced at a maximum of 40 feet on center and placed midway between the curb and sidewalk.<sup>10</sup>

This existing requirement directly aligns with the state's broader principles of sustainable landscaping, specifically the "preservation and use of healthy trees that have a reasonable water requirement or are resistant to dry soil conditions." Research supports that trees enhance water conservation by improving infiltration and reducing stormwater runoff, and reduce the urban heat island effect. 12

### Utah H.B. 11, "Water Efficient Landscaping Requirements" (2024)

To comply with state law and promote efficient water use, the City will align its municipal code and public works standards with the requirements of Utah's H.B. 11 (2024). This includes prohibiting the installation and use of overhead spray irrigation (pop-up sprinklers) on all city-owned property in park strips or any landscaped area less than eight feet wide, requiring drip irrigation or other high-efficiency methods in these areas.

### Related City Code Provisions

Codified requirements for water conservation extend beyond landscaping to include engineering solutions for stormwater. Many developments are required to have Storm Water Runoff Plans and on-site detention systems.

Furthermore, Low Impact Developments (LIDs) (systems that mimic natural processes) are encouraged to manage runoff. These requirements are a critical conservation strategy, as they ensure rainwater is captured for reuse or infiltrated back into the ground. This process recharges local groundwater aquifers that supply municipal drinking water and reduces the overall demand on the city's water systems.

<sup>&</sup>lt;sup>10</sup> Orem City Code § 22-14-13(C)(1),(4)).

<sup>11</sup> Utah Code Ann. § 10-9a-403(2)(f)(iv)(C).

<sup>&</sup>lt;sup>12</sup> Benefits of Trees and Vegetation | US EPA, October 3, 2025. (Online: https://www.epa.gov/heatislands/benefits-trees-and-vegetation Resource).

# LAND USE ORDINANCES AND PRINCIPLES OF SUSTAINABLE LANDSCAPING

The Planning Commission shall review the municipality's land use ordinances and include a recommendation for changes to any ordinance that promotes the inefficient use of water.<sup>13</sup>

### Limiting Water-Intensive (Live) Turf

The City has already made legislative strides by modifying its xeriscaping ordinance in 2020, decreasing the required amount of living ground cover from 75% to 50%. However, the current city land use ordinance merely encourages the use of drought-tolerant plants (xeriscape) and water-saving non-living materials like mulch and gravel, rather than mandating them for a significant portion of the landscape area.

#### Potential Ordinance Amendment

Low Water Use Standards: The City may consider further changes to its landscaping and development ordinances that would encourage water conservation.

Promotion of site-specific landscape design that decreases stormwater runoff or runoff of water used for irrigation.

The City's current ordinances promote efficient water management primarily by mandating the installation of permanent underground sprinkling systems for all landscaped areas in major developments, such as Planned Residential Developments (PRDs) and Affordable Senior Housing (ASH) overlay zones. Extensive regulations govern surface water by requiring detailed Storm Water Runoff Plans and detention systems designed for significant storm events. The design requirements currently support water retention by explicitly defining and permitting Low-Impact Development (LIDs) methods, such as the use of low-profile curbs in commercial and mixed-use areas, which are intended to promote the infiltration and evapotranspiration of stormwater.

Preservation and use of healthy trees that have a reasonable water requirement or are resistant to dry soil conditions.

The City Code supports the preservation and use of water-wise trees by establishing resource conservation and the reduction of heat, noise, and glare as key objectives for all landscaping requirements. To meet these objectives, the regulations explicitly encourage the use of native, low maintenance, drought-tolerant plants (xeriscape), guiding selection through a published, non-exhaustive list of drought-tolerant trees located in Appendix "VV" of the Land Use Ordinance.

<sup>&</sup>lt;sup>13</sup> Utah Code Ann. § 10-9a-403(2)(f)(iii) (2025).

Elimination or regulation of ponds, pools, and other features that promote unnecessary water evaporation.

The City of Orem's current zoning code permits and often encourages pools, ponds, and fountains, classifying them as acceptable amenities and components of required "open space" in various developments. While the code aims for resource conservation, it lacks direct regulations on the surface area or operation of these water features. Noncommercial pools are permitted as accessory uses, and elaborate water features are encouraged in high-density zones, demonstrating a historical prioritization of amenity over strict evaporative conservation.

### Potential Ordinance Amendment

Regulation of Evaporative Water Features: The City may initiate an ordinance amendment to introduce specific regulations on the size and operation of permitted evaporative water features (e.g., ponds, pools) in all zones. This amendment is necessary to eliminate conditions that promote unnecessary water evaporation.

### Reduction of yard waste.

Using yard waste, such as mulching grass clippings, is a landscaping practice that directly supports water conservation. It drastically reduces soil water evaporation, while composting and incorporating it into the soil boosts water retention, directly reducing the need for supplementary irrigation. Educational programs may be implemented to encourage these practices.

### Current Code Alignment and Gap

The City's Zoning Code lacks specific ordinances mandating yard waste reduction. While existing xeriscape principles encourage using drought-tolerant plants with non-living materials (like mulch or decorative gravel) for moisture retention.

### Potential Ordinance Amendment

The City may consider adopting a new ordinance mandating the use of yard waste on-site as mulch or its incorporation into the soil in landscaped areas to directly increase soil water retention, thereby reducing the need for supplementary irrigation.

Use of an irrigation system, including drip irrigation, best adapted to provide the optimal amount of water to the plants being irrigated.

Shifting from inefficient overhead watering toward site-specific design, which minimizes waste by mandating efficient technologies is a water-saving method. The current ordinances already promote efficient water delivery by requiring permanent underground sprinkling systems and automatic control in all major developments, and they also mandate drip irrigation for non-turf areas and require comprehensive landscaping plans.

# LAND USE AND WATER PRESERVATION

The Planning Commission shall consult with the public water system or systems serving the municipality with drinking water regarding how implementation of the land use element and water use and preservation element may affect water supply planning and water distribution planning.<sup>14</sup>

### Water Supply Planning

This element focuses on ensuring adequate drinking water sources and storage capacity.

### Source Capacity

Plans assess current and future sources (springs, wells, treated surface water) against demand. The analysis concludes the city will have sufficient annual supply, provided conservation goals are met and planned wells (Heritage Park and 1600 North) are completed to boost peak day capacity.

### Water Distribution Planning

This focuses on how land use and growth affect the physical infrastructure needed to deliver water.

### Infrastructure Improvements

Consultation resulted in a detailed Water Master Plan update that incorporates land use changes and growth projections (e.g., the Southwest Annexation Area). The plan identifies conveyance improvements to pipelines essential for addressing pressure deficiencies and delivering water throughout the city.

## Impact on Capital Plan

New development is directly linked to the need for capital improvements. The Water Reclamation Facility (WRF) Reuse project, for instance, is deemed "essential to the long-term conveyance plan" because satisfying peak irrigation demands with secondary water in the southwest allows the City to postpone other expensive conveyance projects.<sup>15</sup>

<sup>&</sup>lt;sup>14</sup> Utah Code Ann. § 10-9a-403(2)(f)(i)

<sup>&</sup>lt;sup>15</sup> Orem Water Master Plan, April 2021, p. 8.

# Regional Conservation and Land Use Impacts

The Planning Commission shall consult with the Division of Water Resources for information and technical resources regarding regional water conservation goals, including how implementation of the land use element and the water use and preservation element may affect the Great Salt Lake.<sup>16</sup>

The DWR established the Regional Water Conservation Goals (32% decrease by 2065 in the Provo River region) as the primary conservation target. These goals are inextricably linked to the Great Salt Lake (GSL), as the Provo River system is definitively part of the larger GSL watershed. The DWR's Great Salt Lake Basin Integrated Plan confirms that Orem's water consumption, which is driven by land use, reduces GSL inflow, making the city's local conservation and efficient return flows essential to the DWR's official strategy for protecting the lake.<sup>17</sup>

<sup>&</sup>lt;sup>16</sup> Utah Code Ann. § 10-9a-403(2)(f)(vi) (2025).

<sup>&</sup>lt;sup>17</sup> Utah Division of Water Resources, Utah's Regional M&I Water Conservation Goals Report, 2019, <a href="https://conservewater.utah.gov/wp-content/uploads/2021/05/Regional-Water-Conservation-Goals-Report-Final.pdf">https://conservewater.utah.gov/wp-content/uploads/2021/05/Regional-Water-Conservation-Goals-Report-Final.pdf</a>
Utah Division of Water Resources, "Utah's Regional Water Conservation Goals - Dashboard," ArcGIS Hub, <a href="https://www.arcgis.com/apps/dashboards/1eee737fc5094b06a5c71ac3f1716055">https://www.arcgis.com/apps/dashboards/1eee737fc5094b06a5c71ac3f1716055</a>

Utah Division of Water Resources, "Water Reports," <a href="https://water.utah.gov/water-reports/">https://water.utah.gov/water-reports/</a>.

Utah Division of Water Resources, "Great Salt Lake Basin Integrated Plan," <a href="https://water.utah.gov/gsl-basin-integrated-plan/">https://water.utah.gov/gsl-basin-integrated-plan/</a>