

Water Use and Preservation General Plan Element

1. Introduction

Spanish Fork City is committed to sustainable water resource management through proactive conservation planning and land use integration. Project 13 in the Implementation chapter of the Land Use Element of the General Plan sets a goal to reduce water usage in order to have sustainable development. As required under [SB110 \(2022\)](#), [SB76 \(2023\)](#), and [Utah Code § 73-10-32](#), this section outlines the City's water conservation goals and municipal policies, aligned with regional targets and local needs. Spanish Fork's strategy focuses on reducing per capita water use, eliminating waste, and promoting water-wise development patterns to ensure long-term supply resiliency.





The Water Conservation Plan functions not only as a foundational document for local water management but also as a compliance tool under Utah Code § 73-10-32, which mandates that public water systems with more than 500 connections adopt and regularly update a conservation plan. Spanish Fork's plan includes the following required components:

Clearly stated water use reduction goals	<u>179 gpcd by 2030</u> ; adopted regional target
Goals for implementing conservation measures	Established clear goals and have made steps to achieve them
Evaluation processes and performance metrics	Regular reporting tied to meter data, audits, and system use efficiency
Public outreach and education strategies	Ongoing communication through utility bills, social media, and city programs



Table 1. Summary of Existing Ordinances

Municipal Code	Title	Description
15.4.08.030 (C.40)	Application And Review Process	Grading plan with detailed elevations showing the drainage of the property. Sites shall be designed to eliminate drainage of water to adjacent properties. Site Grading Plan shall address soil types of material on the project site to ensure it is suitable for growth of landscaping and adequate percolation rates which are applicable to the design.
15.4.16.130 (B.3)	Landscaping, Buffering Walls, And Fences	Required landscaping in the park strips, front yards and side yards that are visible from the street shall be comprised of approved turf or live plant material with an automated irrigation system. Zero-scape may only be used in back yards that are not visible from the street. Water-conserving designs are encouraged.
15.4.16.130 (B.6)	Landscaping, Buffering Walls, And Fences	Lawn shall not be less than eight (8) feet wide at its narrowest point. Lawn and artificial turf shall not exceed 35% of the front and side-yard landscape area. The landscape area does not include footprints of buildings or structures, sidewalks, typical driveways, and other non-irrigated areas intentionally left undeveloped. Lawn and artificial turf shall not be installed in park strips. Lawn shall not be installed on paths, or on slopes greater than 25% or 4:1 grade.
15.4.16.130 (C.1)	Landscaping, Buffering Walls, And Fences	Water-conserving Landscape Design is encouraged. The Localscapes® Program, the Salt Lake City Plant List and Hydrozone Schedule 2013 prepared by Salt Lake City Public Utilities, and the Utah State University Center for Water-efficient Landscaping, shall be primary references for the design and installation of water-conserving plants and landscapes in Spanish Fork City.
15.4.16.130 (C.2.c)	Landscaping, Buffering Walls, And Fences	Fill remaining areas with planting beds composed of water-conserving plants and water-efficient irrigation systems.
15.4.16.130 (D.3)	Landscaping, Buffering Walls, And Fences	The standards are not intended to conflict with other landscape requirements as defined by Utah law, including stormwater retention requirements and low-impact development guidelines. Notwithstanding these outdoor standards, whenever any requirement may conflict with Utah law, such conflicting requirements shall not apply.

15.4.16.130 (D.5.b.7) 15.4.16.130 (D.5.c.7) 15.4.16.130 (D.5.d.7)	Landscaping, Buffering Walls, And Fences	No more than 20% (or 15% for industrial uses) of the required landscaping shall be irrigated turf grass outside of active recreation areas, and no turf area shall be less than eight (8) feet in width. At maturity, multi-family and non-residential landscapes are required to have enough plant material (perennials and shrubs) to create at least 50% living plant cover at maturity at the ground plane, not including tree canopies.
15.4.16.130 (D.5.b.8) 15.4.16.130 (D.5.c.8) 15.4.16.130 (D.5.d.8)	Landscaping, Buffering Walls, And Fences	Lawn and artificial turf shall not be installed in park strips. Lawn shall not be installed on paths or on slopes greater than 25% or 4:1 grade.
15.4.16.130 (E.1.a)	Landscaping, Buffering Walls, And Fences	All irrigation systems shall be appropriate for the designated plant material to achieve the highest water efficiency. Drip irrigation and bubbler systems shall be used in all landscape areas except those that contain lawn. Drip irrigation systems shall be equipped with a pressure regulator, filter, flush-end assembly, and any other appropriate components.
15.4.16.130 (E.1.b) 15.4.16.130 (D.6.a.i)	Landscaping, Buffering Walls, And Fences	Each irrigation valve shall irrigate landscaping with similar site, slope and soil conditions, and plant materials with similar watering needs. Lawn and planting beds shall be irrigated on separate irrigation valves. In addition, drip emitters and sprinklers shall be placed on separate irrigation valves. Plants with similar water needs shall be grouped together as much as possible.
15.4.16.130 (D.6.a.ii)	Landscaping, Buffering Walls, And Fences	Areas with slopes greater than 25% shall be landscaped with deep-rooting, water-conserving plants for erosion control and soil stabilization. No turf grasses or overhead irrigation is allowed on slopes greater than 25%.
15.4.16.130 (D.6.a.iv) 15.4.16.130 (E.1.c)	Landscaping, Buffering Walls, And Fences	Mulch after the completion of planting, all irrigated non-turf areas shall be covered with a minimum 3 inch to 4 inch layer of mulch to retain water, inhibit weed growth, and moderate soil temperature. Nonporous material shall not be placed under the mulch. Drip irrigation is required where turf grasses are not being utilized. Mulch permeable to air and water, shall be used in planting beds to control weeds and improve the appearance of the landscaping.

15.4.16.130 (D.6.a.v)	Landscaping, Buffering Walls, And Fences	Soil preparation will be suitable to provide healthy growing conditions for the plants and to encourage water infiltration and penetration. Soil preparation shall include scarifying the soil to a minimum depth of six inches (6") and amending the soil with organic material as per recommendations of the landscape designer/ landscape architect based on the required soils report.
15.4.16.130 (D.6.b)	Landscaping, Buffering Walls, And Fences	The Localscapes Program, the Salt Lake City Plant List and Hydrozone Schedule 2013 prepared by Salt Lake City Public Utilities, and the Utah State University Center for Water-efficient Landscaping shall be primary references for the design and installation of water-conserving plants and landscapes in Spanish Fork City.
15.4.16.130 (D.6.c.ii.c)	Landscaping, Buffering Walls, And Fences	A detailed irrigation plan shall be drawn at the same scale as the planting plan and shall contain: a layout of the irrigation system; a legend summarizing the type and size of all components of the system, including manufacturer name and model numbers; inclusion of a WaterSense labeled smart irrigation controller which automatically adjusts the frequency and/or duration of irrigation events in response to changing weather conditions. All controllers shall be equipped with automatic rain delay or rain shut-off capabilities; static water pressure in pounds per square inch (psi) at the point of connection to the public water supply; flow rate in gallons per minute and design operating pressure in psi for each valve and precipitation rate in inches per hour for each valve with sprinklers; EPA Water Allowance Table; and installation details for irrigation components.

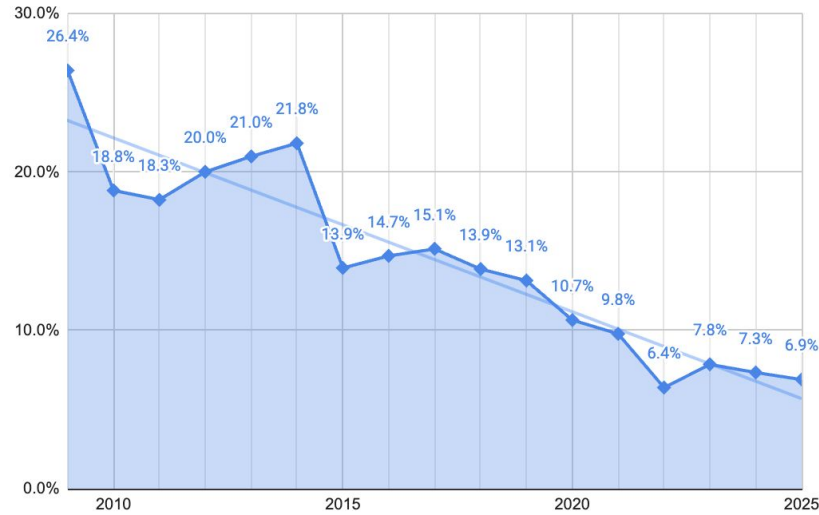
15.4.16.130 (D.6.c.ii.f)	Landscaping, Buffering Walls, And Fences	Use the WaterSense Water Budget Tool provided by the US Environmental Protection Agency to calculate the water allowance for the site.
15.4.16.130 (E.1.f)	Landscaping, Buffering Walls, And Fences	Lawn and artificial turf should not be installed in park strips. Lawn should not be installed on paths less than eight (8) feet in width, or on slopes greater than 25% or 4:1 gradient.
15.4.16.130 (E.2.b.iv)	Landscaping, Buffering Walls, And Fences	Newly planted trees need additional water during the first years of planting in order to become established. In addition to properly designed irrigation systems, other methods such as drip hoses and "gator bags" should be used to provide more water for new trees, particularly when irrigation water is unavailable.
15.4.16.130 (E.3.e)	Landscaping, Buffering Walls, And Fences	Landscaped areas shall be maintained in a neat, clean, and orderly condition. This includes the removal of litter, proper pruning, lawn mowing, weeding, deadheading for perennial plants, fertilizing, replacement of dead plants, and regular watering of all landscaped areas.



Table 4. Existing Water Conservation Efforts

Municipal Policy	Description & Intended Impact
Water Conservation Coordinator	Individual tasked with managing conservation efforts throughout Spanish Fork City, including staying informed on additional and potential future opportunities. Provides material for website and social aimed at public education.
Water Conservation Outreach Campaign	Public material is developed and shared on all available resources to help educate residents about water conservation opportunities.
Water Efficient Technology	The City provides information, rebates, and tips that help residents reduce water usage. Such rebates include more efficient fixtures and smart water controllers.
Tiered Water Pricing	Graduated water rates for both drinking water and pressurized irrigation water that charge more for higher usage tiers. This encourages responsible consumption and rewards efficiency.
System Metering	All residential and commercial connections are required to be metered. An AML technician is available to track meters and usage. The City has a meter maintenance tracking program. Furthermore, Spanish Fork City has received several grants to replaced outdated meters. This effort will help better track losses in the system.
Leak Detection and Repair	Tracking water production against metered usage in an attempt to reduce leaks and waste of water. The City has equipped a daily leak detection program. The utility department also notifies customers when water usage is higher than average. Additionally, the City has purchase and equipped Gutermann equipment on the spring.

Unaccounted for Water Waste



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Year	Waste	Comments
2009	26.4%	Cold Springs Leaking pipe detected and replaced. Main St SF River leak detected and fixed. Started to meter all City facilities
2010	18.8%	Western Distribution landscape meter found and added to billing, Canyon View Park metered. Sports Park pressure relief valve metered
2011	18.3%	
2012	20.0%	Arctic Circle landscape meter found and added to billing,
2013	21.0%	
2014	21.8%	Meter Fire Hydrants, Metered PI at fill stations. Malcomb Springs tank to Canyon Rd leaking pipe detected and lined.
2015	13.9%	Contractors flushing water new mains, Fire fighting and training, Water Main Breaks
2016	14.7%	Contractors flushing water new mains, Fire fighting and training, Water Main Breaks
2017	15.1%	Contractors flushing water new mains, Fire fighting and training, Water Main Breaks, aging water meters
2018	13.9%	Contractors flushing water new mains, Fire fighting and training, Water Main Breaks, aging water meters
2019	13.1%	Contractors flushing water new mains, Fire fighting and training, Water Main Breaks, aging water meters
2020	10.7%	Installation of new meters/grant
2021	9.8%	Installation of new meters/grant, Rachio Clocks, Aggressive leak detection program
2022	6.4%	Most water main breaks in a calendar year. Found two 4" drains in new construction that were left open and paved over while trying to fill the system
2023	7.8%	Two large water main breaks in May on 800 E. Multiple water main breaks throughout the year. PI system flushing
2024	7.3%	
2025	6.9%	



BOR Agreement Spanish Oaks Waterline



