CHAPTER 17.92

WATER EFFICIENT LANDSCAPING AND CONSERVATION STANDARDS

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17.92.010: APPLICABILITY:

The provisions of this title are applicable to all new construction, development (including redevelopment), and landscape improvements in the city, except for (a) permitted uses in the Open Space zone; (b) permitted agricultural, horticultural, and gardening uses (including fruit trees) in any zone; (c) public parks or playgrounds, or public or school-owned active recreation areas, in any zone; however, all new uses which fall under (c) must be required to be served by secondary and not culinary municipal water. Landscape improvements to be irrigated solely with private, non-municipal water may be exempt from certain provisions of this chapter as noted. The provisions of this chapter are severable and if any provision, clause, sentence, word, or part thereof is held illegal, invalid, unconstitutional, or inapplicable to any person or circumstances, such illegality, invalidity, unconstitutionality, or inapplicability must not affect or impair any of the remaining provisions, clauses, sentences, sections, words, or parts of this chapter or their applicability to other persons or circumstances. (Ord. 2022-05)

17.92.020: DEFINITIONS:

ACTIVE RECREATION AREA:	An area that is dedicated to active play where lawn may be used as the playing surface. Examples of active recreation areas include sports fields, play areas, and other similar uses designated for physical activity.
CONTROLLER:	A device used in irrigation systems to automatically control when and how long sprinklers or drip irrigation systems operate.
DRIP IRRIGATION:	An irrigation system that delivers water by adding water at the plant's base and root zone, usually measured in gallons per hour. Drip irrigation exhibits a droplet, trickle, umbrella or short stream pattern, to reduce evaporation, overspray, and water use, and improving water conservation.
DRIP EMITTER:	A drip irrigation fitting that delivers water slowly at the root zone of the plant, usually measured in gallons per hour.
GRADING PLAN:	The grading plan shows all finish grades, spot elevations, drainage as necessary, and new and existing contours with the developed landscaped area.
GROUND COVER:	Material planted in such a way as to form a continuous cover over ground that can be maintained at a height no more than twelve inches (12").
HARDSCAPE:	Elements of landscape constructed from non-living materials such as concrete, boulders, brick, blacktop, and lumber. Includes patios, decks, and paths, but does not include driveways and sidewalks.
HYDROZONE:	Portion of landscape area having plants with similar water needs and rooting depth. A hydrozone may be irrigated or non-irrigated.
IRRIGATION PLAN:	A plan that shows the components of the irrigation system with water meter size, backflow prevention, precipitation rates, flow rate, and operating pressure for each irrigation circuit, and identification of all irrigation equipment.
IRRIGATION RUNOFF:	Irrigation water that is not absorbed by the soil or landscape area to which it is applied, and that flows onto other areas.
LANDSCAPE ARCHITECT:	A person who holds a professional license to practice landscape architecture in the state of Utah. Pursuant to Utah Code, licensed landscape architects, licensed architects, licensed land surveyors, and licensed engineers can professionally stamp plans that fall under the practice of landscape architecture. This includes commercial landscape and irrigation plans.

LANDSCAPE AREA:	Area of a Lot not including any building footprints, driveways, sidewalks, and patios; also not including areas of agricultural, horticultural, or gardening uses which are permitted by applicable zoning.
LANDSCAPE DESIGNER:	A person who may or may not hold professional certificates for landscape design/architecture, and who generally focuses on residential design and horticultural needs of home landscapes. Landscape designers may assist developers and property owners with landscape design but may not submit landscape plans for multifamily residential or nonresidential properties and projects under this chapter unless certified by a landscape architect.
LANDSCAPE DOCUMENTATION PACKAGE:	The documentation of graphic and written criteria, specifications, and detailed plans to arrange and modify the effects of natural features to comply with the provisions of this chapter. The Landscape Documentation Package must include a project data sheet, a site plan, a planting plan, an irrigation plan, construction details, and a grading plan.
LANDSCAPE OR LANDSCAPING:	Any combination of berms; living plants, such as trees, shrubs, vines, ground cover, annuals, perennials, ornamental grass, or seeding; natural features such as rock, stone, or bark chips; and structural features, including but not limited to, fountains, reflecting pools, outdoor artwork, screen walls, fences, or benches that create an attractive and pleasing environment.
LANDSCAPE OR LANDSCAPING MAINTENANCE:	Maintaining or keeping any landscaping, or any area required to be landscaped: A. In a live and thriving condition, with consideration for normal growth and water needs; and B. Fertilized, mowed, trimmed, edged, mulched and free from weeds, dead plants, litter, refuse, or debris in compliance with regionally accepted horticultural practice and city ordinances.
LANDSCAPE PLAN:	A plan that clearly and accurately identifies the location and species of new and existing trees, shrubs, ground cover, and other plants on a site, and any other landscape element, and includes an irrigation plan.
LAWN:	A surface layer of earth containing mowed grass with its roots; includes grass turf.
MULCH:	Any organic material such as leaves, bark, wood chips, straw; inorganic material such as crushed stone or gravel; other materials left loose and applied to the soil surface for the beneficial purpose of controlling weeds and conserving soil moisture.
MULTIFAMILY:	Any residential use comprised of a dwelling or dwellings designed for occupation by more than one family in any zone, but for purposes of this Chapter, excludes single-family dwellings, two-family dwellings, dwellings containing an approved internal accessory dwelling unit, or dwellings which are an approved accessory dwelling unit to a primary dwelling.
PARK STRIP:	A typically narrow landscaped area located between the back-of-curb and sidewalk.
PLANTING PLAN:	A planting plan that clearly and accurately identifies the type, size, and locations for new and existing trees, shrubs, planting beds, ground cover, lawn areas, driveways, sidewalks, hardscape features, and fences.
PRECIPITATION RATE:	The depth of water applied to a given area, usually measured in inches per hour.
PRESSURE REGULATING VALVE:	A valve installed in an irrigation mainline that reduces a higher supply pressure at the inlet down to a regulated lower pressure at the outlet.
REHABILITATED LANDSCAPE:	Landscape area in which over fifty percent (50%) of existing landscaping is removed and replaced. Includes all landscaping funded in part, or completely, by Washington County Water Conservancy District's landscape conversion program.
SECONDARY IRRIGATION WATER:	Non-potable water that is untreated and used for irrigation of outdoor landscaping.
SINGLE FAMILY:	Any residential use comprised of a dwelling designed for occupation by only one family in any zone, and for purposes of this Chapter includes primary dwellings, dwellings containing an approved internal accessory dwelling unit, and approved accessory dwelling units.

SLOPE:	A vertical rise in feet measured over a horizontal distance, expressed as a percentage, measured generally at right angles to contour lines.
TWO-FAMILY:	Any residential use comprised of a dwelling designed for occupation by two families in any zone, but for purposes of this Chapter excludes dwellings containing an approved internal accessory dwelling unit, or dwellings which are an approved accessory dwelling unit to a primary dwelling.
WATER-CONSERVING PLANT:	A plant that can generally survive with available rainfall once established, with possible supplemental irrigation needed or desirable during spring and summer months or during drought periods. (Ord. 2022-05)

17.92.030: SINGLE FAMILY AND TWO-FAMILY RESIDENTIAL WATER EFFICIENCY STANDARDS:

The provisions of this section are applicable to all new single family or two-family residential development or redevelopment in any zone.

A. Construction Standards:

- 1. New single family or two-family dwellings, including accessory dwelling units, having at least one thousand (1,000) square feet of living space must have installed a hot water recirculation system or systems, unless hot water delivery can be demonstrated to occur without first displacing more than 0.5 gallons of system water.
- 2. New single family or two-family residential dwellings, including accessory dwelling units, must use WaterSense labeled fixtures, including but not limited to faucets, showerheads, toilets, and urinals.
- B. Landscape Standards: For all residential construction and development which is subject to this section, except where landscaping will be irrigated solely with a private, non-municipal water source, landscaping must meet the following requirements:
- 1. The total irrigated landscape area must not exceed sixteen percent (16%) of the lot square footage. Lawn area must not exceed eight percent (8%) of the lot square footage, up to a maximum of two thousand five hundred (2,500) square feet of lawn area.
- 2. Lawn is prohibited in park strips, in all landscape areas less than eight feet wide, and on any slope that exceeds twenty percent (20%).
- 3. Any lot in any zone which is larger than one-half (½) acre must use secondary irrigation to irrigate any agricultural, horticultural, or gardening uses which are permitted in the applicable zone. (Ord. 2022-05)

17.92.040: MULTIFAMILY RESIDENTIAL AND NONRESIDENTIAL WATER EFFICIENCY STANDARDS:

The provisions of this section are applicable to all new multifamily residential and nonresidential development or redevelopment in any zone.

A. Construction Standards:

- 1. Hot water recirculation systems must be installed, unless hot water delivery can be demonstrated to occur without first displacing more than 0.5 gallons of system water.
 - 2. WaterSense labeled fixtures must be installed, including but not limited to faucets, showerheads, toilets, and urinals.
- 3. All units located partially or completely on a ground floor, and which are individually subdivided, must be separately metered, sub metered, or equipped with alternative technology capable of tracking the water use of the individual unit, and the information must be made available to the resident of each unit. Individually platted condominium units are excepted if a condominium owners' association owns and maintains the water lines and meters. All nonresidential projects require separate water meters for all outdoor water usage, including landscaping.
- 4. All commercial car washes must utilize a wastewater recirculation system and limit water use to a maximum amount of thirty-five (35) gallons per vehicle washed.
- 5. Exterior, decorative water features in any project must be limited to an aggregate capacity of fifty (50) gallons or less for all features in the project, and recirculating pumps are required in each feature.
- 6. All golf courses using water district or municipal water supplies must irrigate with secondary irrigation water and must have separate water meters for the golf course. Irrigation with potable water is prohibited. Each golf course development must submit and follow a water budget with the Landscape Documentation Package and identify water conservation measures for city approval.
- 7. Outdoor misting systems may only be operated during the May through September time period where the daily high temperature is ninety degrees (90°) Fahrenheit or greater.
- B. Landscape Standards: For all multifamily residential and nonresidential development subject to this section, except where landscaping will be irrigated solely with a private, non-municipal water source, landscaping must meet the following requirements:
- 1. Lawn is not permitted outside of an active recreation area. Lawn is prohibited in park strips, all landscape areas less than eight feet wide, and on any slope that exceeds twenty percent (20%).
 - 2. Landscape and irrigation installers must follow plans that have been signed and approved by the city.

- 3. Each project must propose and comply with an approved planting plan that has a minimum of forty percent (40%) vegetative cover of a landscaped area with water-efficient shade trees and bushes adequate in number and configuration to visually enhance the project, prevent heat islands, and prevent soil erosion. The city has sole discretion to approve or require adjustments to the configuration of vegetation in the planting plan.
- 4. If secondary irrigation water is available, each project shall connect to the system for all outdoor water use. The city may make minor exceptions, allowing use of treated water for outdoor plantings in small beautification areas, in its sole discretion.

C. Required Documentation:

- 1. Landscape Documentation Package: A copy of a Landscape Documentation Package must be submitted to and approved by the city prior to the issue of any building permit. A copy of the approved Landscape Documentation Package must be provided to the property owner or site manager. The Landscape Documentation Package must be prepared by a professional landscape architect (PLA) and must consist of the following items:
 - a. Project Data Sheet containing the following:
 - (1) Project name and address;
 - (2) Applicant or applicant agent's name, address, phone number, and email address;
 - (3) Landscape architect's name, address, phone number, and email address; and
 - (4) Landscape contractor's name, address, phone number and email address, if available currently.
 - b. Planting Plan. A detailed planting plan must be drawn at a scale that clearly identifies the following:
 - (1) Location of all plant materials, a legend with common and botanical names, and size of plant materials;
 - (2) Property lines and street names;
 - (3) Existing and proposed buildings, walls, fences, utilities, paved areas and other site improvements;
 - (4) Existing trees and plant materials to be removed or retained;
 - (5) Scale: graphic and written;
 - (6) Date of design;
 - (7) Designation of hydrozones; and
 - (8) Details and specifications for tree staking, soil preparation, and other planting work.
- c. Irrigation Plan. A detailed irrigation plan must be drawn at the same scale as the planting plan and contain the following information:
- (1) Layout of the irrigation system and a legend summarizing the type and size of all components of the system, including manufacturer name and model numbers;
 - (2) Static water pressure in pounds per square inch (psi) at the point of connection to the public water supply;
- (3) 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 irrigation equipment (i.e., sprinklers, drip emitters, bubblers, etc.); and
 - (4) Installation details for irrigation components.
- d. Grading Plan. A grading plan must be drawn at the same scale as the planting plan and must contain the following information:
- (1) Property lines and street names, existing and proposed buildings, walls, fences, utilities, paved areas, and other site improvements; and
- (2) Existing and finished contour lines and spot elevations as necessary for the proposed site improvements, as well as drainage.
 - 2. Plan Review, Construction Inspection, and Post-Construction Monitoring:
- a. As part of the building permit approval process, a copy of the Landscape Documentation Package must be submitted with a city provided pre-submittal checklist completed for the city to initiate a review and approval process before construction begins.
- b. All installers and designers must meet state and local license, insurance, and bonding requirements, and be able to show proof of such.
- c. During construction, site inspection of the landscaping may be performed by the Building Department or other city official tasked with such inspections.
- d. Following construction and prior to issuing an occupancy permit, an inspection must be scheduled with the Building Department or other city official tasked with such inspections to verify compliance with the approved landscape plans. The Certificate of Substantial Completion must be completed by the property owner, developer, contractor, or landscape architect and submitted to the city. The Certificate of Substantial Completion must be accompanied by a certification from the landscape architect that the landscaping, irrigation, and related improvements have been installed consistent with the approved Landscape Documentation Package.

e. The Building Department or other city official tasked with such inspections reserves the right to perform site inspections at any time before, during, or after the irrigation system and landscape installation, and to require corrective measures if requirements of this chapter are not satisfied. (Ord. 2022-05)

17.92.050: LANDSCAPE AND IRRIGATION DESIGN AND OPERATION STANDARDS:

The provisions of this section shall apply to all new landscaping and irrigation in the City which is subject to this chapter, except where landscaping will solely be irrigated with a private, non-municipal source of water. Any landscape area to be converted from private, non-municipal to municipal water, whether culinary or secondary, must first be brought into compliance with this section.

- A. Plants must be well-suited to the microclimate and soil conditions at the project site. Native, locally adaptable, and environmentally sustainable plants are acceptable. See the Washington County Water Conservancy District's recommended plant list on https://wcwcd.org. Plants with similar water needs must be grouped together as much as possible into hydrozones for efficient irrigation. Invasive plant species as identified by Washington County must not be planted.
- 1. Areas with slopes greater than twenty percent (20%) slope must be landscaped with deep-rooting, water-conserving plants that do not include lawn.
- 2. Park strips and other landscaped areas less than eight feet (8') wide must be landscaped with water-conserving plants and/or mulch that do not include lawn.
- B. Tree species must be selected based on growth characteristics and site conditions, including available space, overhead clearance, soil conditions, exposure, and desired color and appearance. Trees should be suited for water-efficient landscapes; however, fruit trees are allowed where permitted by zoning. Trees must be selected and planted in accordance with the following city guidance:
 - 1. Broad canopy trees may be selected where shade or screening of tall objects is desired.
 - 2. Low-growing trees must be selected for spaces under utility wires.
- 3. Select trees from which lower branches will be trimmed to maintain a healthy growth habit where visual clearance and natural surveillance is a concern.
- 4. Narrow or columnar trees are recommended for small spaces, or where awnings or other building features limit growth, or where greater visibility is desired between buildings and the street for natural surveillance.
- 5. Tree placement must provide canopy cover (shade) and avoid conflicts with existing trees, retaining walls, above and below ground utilities, lighting, and other obstructions.
 - C. Irrigation Design Standards:
- 1. Pressure Regulation. A pressure regulating valve must be installed by the builder or developer, and maintained by the owner, if the static service pressure exceeds ninety (90) pounds per square inch (psi). The pressure regulating valve must be located between the meter and the first point of water use, or first point of division in the pipe, and must be set at the manufacturer's recommended pressure for the sprinklers.
- 2. Irrigation Controller. It is required that landscaped areas use 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 must be equipped with automatic rain delay or rain shut-off capabilities. All controllers must have memory retention capability to retained pre-programmed irrigation schedules. Sites are not exempt from water waste prohibitions.
 - 3. Low-volume irrigation equipment (i.e., drip emitters, bubblers) must be provided for each tree.
 - 4. Drip irrigation must be used to irrigate plants in non-lawn areas.
 - 5. High conservation efficiency spray nozzles are required for sprinkler applications.
 - 6. Sprinkler heads must have matched precipitation rates with each control valve circuit.
 - 7. Filters and end-flush valves must be provided for drip irrigation lines.
 - D. Irrigation Operation Standards:
- 1. Landscape watering with potable (treated) water is prohibited from 10 a.m. to 8 p.m., from June 1 to October 1, to maximize irrigation efficiency.
- 2. Water waste is prohibited. Waste includes overwatering, irrigating during a precipitation event, water that sprays or flows off your property, failure to comply with drought restrictions and/or a failure to repair irrigation system leaks and/or malfunctions in a timely manner.
- 3. Overwatering can be avoided by following the water district's recommended irrigation schedule and practices as noted on wcwcd.org. The generally recommended schedule is:
- a. Winter (Nov Feb) sprinkler and drip irrigation up to 1 day a week. Irrigation is typically not needed in December and January
 - b. Spring (Mar April) sprinkler irrigation up to 3 days a week and drip irrigation up to 2 days a week
 - c. Summer (May Aug) sprinkler irrigation up to 4 days a week and drip irrigation up to 3 days a week
 - d. Fall (Sept Oct) sprinkler irrigation up to 3 days a week and drip irrigation up to 2 days a week

4. Program valves for multiple repeat cycles are required to reduce runoff on slopes and for soils with slow infiltration rates. (Ord. 2022-05)

17.92.060: RESTRICTIVE COVENANTS IN CONFLICT WITH WATER EFFICIENCY STANDARDS:

Any homeowners', condominium owners', or property owners' association governing documents, such as bylaws, operating rules, covenants, conditions, and restrictions that govern the operation of a common interest development, recorded after passage of this chapter, are void and unenforceable if they conflict with the water efficiency standards in this chapter, or if they have the effect of prohibiting or restricting compliance with this chapter. (Ord. 2022-05)