

## CHAPTER 8

# CONSERVATION LANDSCAPE REQUIREMENTS

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### 8-8-1: GENERAL PROVISIONS:

#### 8-8-1-1: SHORT TITLE:

This Chapter shall be known as "Conservation Landscape Requirements". (Ord. 2022-08, 9-7-2022)

#### 8-8-1-2: CONFLICT:

The terms and requirements of this Chapter and those of the currently-adopted Building Related Codes identified in Chapter 1 of Title 9 shall be read and applied together. Any conflict between the terms and requirements of this Chapter and those of the Building Related Codes shall be resolved in favor of the latter. (Ord. 2022-08, 9-7-2022)

#### 8-8-1-3: APPLICABILITY:

The provisions of this Chapter are applicable to all new construction, development and major landscape improvements (a) on the Top Side and (b) in the residential areas within the main land area of the City that are not connected to or reasonably able to connect to and be served by the City's secondary water system. (Ord. 2022-08, 9-7-2022)

#### 8-8-1-4: SEVERABILITY:

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 shall not affect or impair any of the remaining provisions, clauses, sentences, sections, words or parts thereof of this chapter or their applicability to other persons or circumstances. (Ord. 2022-08, 9-7-2022)

### 8-8-2: DEFINITIONS:

The following definitions shall apply to this chapter:

ACTIVE RECREATION AREA:	An area that is dedicated to active play where grass 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.
CHECK VALVE:	A device used in sprinkler heads or pipe to prevent water from draining out of the pipe through gravity flow.
CONTROLLER:	A device used in irrigation systems to automatically control when and how long sprinklers or drip irrigation systems operate.
DRIP EMITTER:	A drip irrigation fitting that delivers water slowly at the root zone of the plant, usually measured in gallons per hour.
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.

GRADING PLAN:	The grading plan shows all finish grades, spot elevations, drainage as necessary, and new and existing contours with the developed landscaped area.
GRASS:	A surface layer of earth containing mowed grass with its roots.
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 (12) inches.
HARDSCAPE:	Elements of landscape constructed from non-living materials such as concrete, boulders, brick, blacktop, and lumber. It 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. Per State 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 within a lot or parcel that is not the home footprint, driveway, sidewalk or patio.
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 cannot legally create commercial landscape plans.
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 shall 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 covers, annuals, perennials, ornamental grass, or seeding; natural features such as rock, stone, or bark chips; and structural features, including but not limited to 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 covers, and other plants on a site, and any other landscape element, and includes an irrigation plan.
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.
PARK STRIP:	A typically narrow landscaped area located between the back-of-curb and sidewalk.
PLANT LIST:	A list of locally adaptable and environmentally sustainable plants for compliant Planting Plans as provided by the Washington County Water Conservancy District (see current version of the Washington County, Utah, Plant Guide, or successor thereof, available at the Washington County Water Conservancy District, or online at <a href="http://www.wcwcd.org">www.wcwcd.org</a> ).

PLANTING PLAN:	A Planting Plan that clearly and accurately identifies the type, size, and locations for new and existing trees, shrubs, planting beds, ground covers, grass 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 COMPENSATING:	A drip irrigation system that compensates for fluctuating water pressure by only allowing a fixed volume of water through drip emitters.
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 LANDSCAPING:	Landscape area in which over 50% percent 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.
SLOPE:	A vertical rise in feet measured over a horizontal distance, expressed as a percentage, measured generally at right angles to contour lines.
TOP SIDE:	the area of the city situated atop the cliffs that line the easterly portions of the City, designated as "Top side / East Bench" in the City's General Plan.
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. 2022-08, 9-7-2022)

**8-8-3: SINGLE-FAMILY AND MULTIPLE-FAMILY RESIDENTIAL WATER EFFICIENCY STANDARDS:**

These provisions are applicable to all new construction, and new development in any residential zone, or for any single family or multiple family residential development in any zone located in the areas identified in Section 8-8-1-3 above. (Ord. 2022-08, 9-7-2022)

**8-8-3-1: CONSTRUCTION STANDARDS:**

A. The following shall be installed in new single-family and multiple-family dwellings of 1,000 square feet or greater: tankless water heater (unless hot water delivery can be demonstrated to occur without first displacing more than 0.6 gallons of system water).

B. The following shall be installed in all new single-family and multiple-family dwellings:

1. Water Sense labeled fixtures, including, but not limited to faucets, showerheads, toilets, and urinals.
2. Energy Star qualified appliances.

C. All multiple-family units shall be separately metered, sub-metered, or equipped with alternative technology capable of tracking the water use of the individual unit; and the information related thereto shall be made available to the resident of each unit.

D. All multiple-family projects shall be equipped with separate water meters for all outdoor water usage, including landscaping. (Ord. 2022-08, 9-7-2022)

**8-8-3-2: LANDSCAPE STANDARDS:**

A. For all new residential construction or development, landscaping shall meet the following requirements:

1. Single-Family Dwellings, and Multiple-Family Dwelling Projects with Ten Units or Less:

a. The total grass area shall not exceed the following:

Lot size	Maximum grass
Up to 10,000 sf	800 sf
10,000+ to 25,000 sf	8% of lot sf
25,000+ sf	2,000 sf

b. Grass is prohibited in park strips, in landscape areas less than eight feet wide, and on any slope that exceeds 15%; and

c. Each single-family dwelling shall have a minimum of two water-efficient shade trees with a minimum one-and-one-half-inch (1½") caliper trunk. Each multiple-family development with ten units or less shall follow city approved landscape planting plans for number of shade trees.

2. Multiple-Family Dwelling Projects with More than Ten Units: Comply with the Landscape Standards in 8-8-4-2, below.

B. The Plant List, as defined in Section 8-8-2, shall be consulted in determining appropriate, adaptable and environmentally

sustainable trees, shrubs, and other plants to be planted and maintained. (Ord. 2022-08, 9-7-2022)

**8-8-3-3: RESTRICTIVE COVENANTS IN CONFLICT WITH WATER EFFICIENCY STANDARDS:**

To the extent permitted by applicable law, any homeowners 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 adoption of this Chapter, are deemed 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. 2022-08, 9-7-2022)

**8-8-4: NONRESIDENTIAL ZONES AND DEVELOPMENT WATER EFFICIENCY STANDARDS:**

These provisions are applicable to all new construction and new development in all nonresidential zones, and nonresidential development in any zone located in the areas identified in Section 8-8-1-3 above. (Ord. 2022-08, 9-7-2022)

**8-8-4-1: CONSTRUCTION STANDARDS:**

A. Tankless water heaters shall be installed, unless hot water delivery can be demonstrated to occur without first displacing more than 0.6 gallons of system water.

B. Water Sense labeled fixtures shall be installed, including, but not limited to faucets, showerheads toilets, and urinals.

C. Energy Star qualified appliances shall be installed.

D. All shell units with ground floor square footage, or which are individually platted, shall be separately metered, sub-metered, or equipped with alternative technology capable of tracking the water use of the individual unit,; and the information related thereto shall be made available to the individual unit.

1. Individually-platted condominium units are excepted if a property owners association owns and maintains the water lines and meters.

2. All nonresidential projects require separate water meters for all outdoor water usage, including landscaping.

E. All carwash projects shall recirculate and limit the maximum amount of water to 35 gallons per vehicle washed.

F. Exterior, decorative water features are prohibited, except up to five decorative water features with 50 gallon or less capacity and maintained recirculating pumps.

G. All golf courses using water district or municipal water supplies shall irrigate with secondary irrigation water and shall have separate water meters for the golf course. Irrigation with potable water is prohibited. Each golf course development shall submit and follow a water budget with the Landscape Documentation Packet and identify water conservation measures for city approval.

H. Outside misting systems shall only operate during the May through August time period where the daily high temperature is 90 degrees Fahrenheit or greater. (Ord. 2022-08, 9-7-2022)

**8-8-4-2: LANDSCAPED STANDARDS:**

A. All new construction and new development shall meet the Landscape Design Standards and Irrigation Design Standards of this Chapter.

1. Grass is not permitted outside of an active recreation area.

2. Grass is prohibited in park strips, in landscape areas less than eight feet wide, and on any slope that exceeds fifteen percent (15%).

3. Landscape and irrigation installers shall follow the plans that have been signed and approved by the city.

4. Each project shall propose and follow an approved Planting Plan. At least forty percent (40%) of the project's proposed (and installed) landscaped area shall contain vegetative cover consisting of water-efficient shade trees and/or bushes adequate in number and configuration to visually enhance the project, prevent heat islands, and prevent soil erosion. The configuration of the vegetation in the Planting Plan is in the sole discretion of the city.

5. If secondary irrigation water is reasonably available, each project shall connect to the system for all outdoor water use. A city may make minor exceptions, allowing use of treated water for outdoor plantings in small beautification areas, in its sole discretion.

B. The Plant List, as defined in Section 8-8-2, shall be consulted in determining appropriate, adaptable and environmentally sustainable trees, shrubs, and other plants to be planted and maintained.

C. Required Documentation

1. Landscape Documentation Package: A copy of a Landscape Documentation Package shall be submitted to and approved by the city prior to the issue of any building permit. A copy of the approved Landscape Documentation Package shall be provided to the property owner or site manager. The Landscape Documentation Package shall be prepared by a professional landscape architect (PLA) and shall 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 at this time.

b. Planting Plan. A detailed Planting Plan shall 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 shall be drawn at the same scale as the Planting Plan and shall 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 shall be drawn at the same scale as the Planting Plan and shall 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 shall be submitted with a city-provided pre-submittal checklist completed to initiate a review and approval process before construction begins.

b. All installers and designers shall meet state and local license, insurance, and bonding requirements, and shall be able to show proof of such.

c. During construction, site inspection of the landscaping may be performed by the city Building Inspection Department or another entity tasked with approvals.

d. Following construction, and prior to issuance of an occupancy permit, an inspection shall be scheduled with the Building Inspection Department or other appointed entity to verify compliance with the approved landscape plans. The Certificate of Substantial Completion shall be completed by the property owner, developer, contractor or landscape architect, and submitted to the city.

e. The city or other appointed entity 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. 2022-08, 9-7-2022)

### **8-8-4-3: IRRIGATION DESIGN STANDARDS:**

A. Pressure Regulation. A pressure regulating valve shall be installed by the builder or developer, and maintained by the owner, if the static service pressure exceeds 90 pounds per square inch (psi). The pressure-regulating valve shall be located between the meter and the first point of water use, or first point of division in the pipe, and shall be set at the manufacturer's recommended pressure for the sprinklers.

B. Irrigation Controller. It is required that landscaped areas use a Water Sense 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 and shall have memory retention capability to retain pre-programmed irrigation schedules. Sites are not exempt from water waste prohibitions.

C. Each valve shall irrigate a landscape with a similar site, slope and soil conditions, and plant materials with similar watering needs. Grass, trees and non-grass areas shall be irrigated on separate valves. Drip emitters and sprinklers shall be placed on separate valves.

D. Low-volume irrigation equipment (i.e., drip emitters, bubblers) shall be provided for each tree.

E. Drip irrigation shall be used to irrigate plants in non-grass areas. Spray head to drip conversion for rehabilitated landscape sites may be acceptable with city approval of Irrigation Plans.

F. High conservation efficiency spray nozzles are required for sprinkler applications.

G. Sprinkler heads shall have matched precipitation rates with each control valve circuit.

H. Sprinkler heads shall be attached to rigid lateral lines with flexible material (swing joints) to reduce potential for breakage.

I. Check valves are required. Pressure compensating valves and sprinklers are required where a significant variation in water pressure occurs within the irrigation system due to elevation differences.

J. Filters and end-flush valves shall be provided for drip irrigation lines.

K. Landscape watering with potable (treated) water is prohibited from 10:00 a.m. to 6:00 p.m., June 1 to September 1, to maximize irrigation efficiency; and it should be limited to the hours of 6:00 p.m. to 10:00 a.m. during times of low wind, year-round, to avoid excessive loss of water through evapotranspiration, with treated or untreated (secondary) water. (c.f., Section 8-6-6)

L. Water waste is prohibited.

1. 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. [See Section 8-1-17.]

2. Overwatering can be avoided by following the water district's recommended irrigation schedule and practices as noted on [wcwcd.org](http://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

M. Program valves for multiple repeat cycles are required to reduce runoff on slopes and for soils with slow infiltration rates. (Ord. 2022-08, 9-7-2022)

**8-8-5: RELIEF FROM APPLICATION OF PROVISIONS OF CHAPTER:**

Any landowner or developer of property located within the main land area of the City-for which new construction, development and/or major landscape improvements are desired, but which the landowner or developer asserts is not connected and cannot reasonably connect to and be served by the City's secondary water system-may submit a written request for relief to the City Administrator, who shall review the request within ten (10) business days and grant such relief as he or she deems necessary and proper, and in accordance with application state and local law. If aggrieved by the decision of the City Administrator, such landowner or developer may make application to appear before the City Council to request relief. (Ord. 2022-08, 9-7-2022)