

ORDINANCE #01-50

AN ORDINANCE AMENDING TITLE 15 OF THE REVISED ORDINANCES OF SANDY CITY (THE LAND DEVELOPMENT CODE) BY ADOPTING A NEW CHAPTER 15-41, ENTITLED "WATER EFFICIENT LANDSCAPE"; ALSO PROVIDING AN EFFECTIVE DATE FOR THE ORDINANCE.

WHEREAS, a request has been made to amend Title 15 of the Revised Ordinances of Sandy City (the Land Development Code) by adopting a new Chapter 15-41, entitled "Water Efficient Landscape", the purpose of which is to ensure that water efficient practices are used for outdoor landscapes and water features for new and remodeled commercial and multi-family projects; and

WHEREAS, the Sandy City Planning Commission discussed the proposal at a public meeting and recommended the amendment to the City Council; and

WHEREAS, a public hearing was held before the Sandy City Council on December 18 2001 to consider adoption of the proposed amendment, which hearing was preceded by public notice, posted in Sandy City Hall, Sandy Parks & Recreation, Sandy Library and Salt Lake Community College on November 26, 2001 and published in the Salt Lake Tribune on December 3, 2001; and

WHEREAS, the City Council has been given specific authority in Title 10, Chapter 9 Utah Code Ann. 1953 to adopt a zoning plan including an ordinance and map which divide the municipality into districts or zones and within such districts to regulate the erection, construction, reconstruction, alteration, repair and uses of buildings and structures and the uses of land; and

WHEREAS, the state legislature has granted general welfare power to the City Council, independent, apart from, and in addition to, its specific grants of legislative authority, which enables the city to pass ordinances which are reasonably and appropriately related to the objectives of that power, i.e. providing for the public safety, health, morals, and welfare; and

WHEREAS, the foregoing legitimate governmental objectives are achieved by reasonable means in that any adverse impact on private property value or use has been carefully balanced against the corresponding gain to the public; and the regulations have been calculated, on recommendation of City planning staff to permit property owners to beneficially use their properties for the practical purposes to which the property is reasonably adaptable; and procedures have been established by the Land Development Code and Utah Code Ann. where appeals can be heard and decided if it is alleged that there is legislative or administrative error or where a special exception or variance to the ordinance is required.

MICROFILMED

NOW, THEREFORE, BE IT ORDAINED by the City Council of Sandy City, State of Utah, as follows:

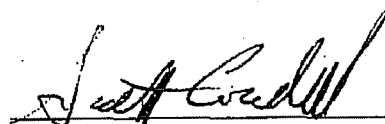
Section 1. Title 15 is amended as shown on Exhibit "A" which is attached hereto and by this reference made a part hereof.

Section 2. If any part of this ordinance or the application thereof to any person or circumstances shall, for any reason, be adjudged by a court of competent jurisdiction to be unconstitutional or invalid, such judgment shall not affect, impair or invalidate the remainder of this ordinance or the application thereof to other persons and circumstances, but shall be confined to its operation to the section, subdivision, sentence or part of the section and the persons and circumstances directly involved in the controversy in which such judgment shall have been rendered. It is hereby declared to be the intent of the City Council that this section would have been adopted if such invalid section, provisions, subdivision, sentence or part of a section or application had not been included.

Section 3. This ordinance shall become effective upon publication of a summary thereof.

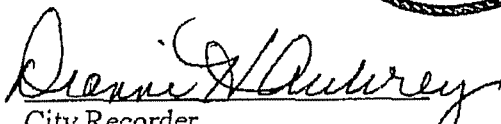
PASSED AND APPROVED this 18th day of December, 2001.





Scott L. Cowdell, Chairman
Sandy City Council

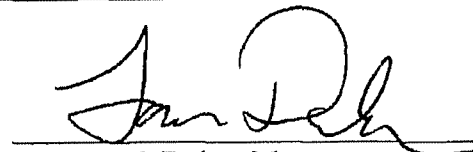
ATTEST:



Deanne H. Aubrey
City Recorder

PRESENTED to the Mayor of Sandy City for his approval this 29th day of December, 2001.

APPROVED this 29th day of December, 2001.



Thomas M. Dolan, Mayor

PUBLISHED this 16th day of January, 2002

EXHIBIT "A"

Chapter 15-41 Water Efficient Landscape Ordinance

- 15-41-01 Purpose
- 15-41-02 Definitions
- 14-41-03 Commercial, Industrial & Multi-Family Development
- 15-41-04 Residential (Single Family) Development
- 15-41-05 Prohibited Watering Practices
- 15-41-06 Enforcement, Penalty for Violations

15-41-01 **Purpose.** The City Council has found that:

- Water is an increasingly scarce resource;
- Nearly two-thirds of the City's culinary water resources are used for outdoor use, including watering landscapes;
- The City desires to promote the design, installation and maintenance of landscapes that are both attractive and water efficient.

Furthermore, the City Council has determined that it is in the public interest to conserve the public's water resources and to promote water efficient landscaping. The purpose of this ordinance is to protect and enhance the community's environmental, economic, recreational, and aesthetic resources by promoting efficient use of water in the community's landscapes, reduce water waste and establish a structure for designing, installing and maintaining of water efficient landscapes throughout the City.

15-41-02 Definitions

The following definitions shall apply to this Chapter:

Administrative Standards shall mean the set of rules, procedures and requirements set forth in a landscape ordinance associated with making permit application, assembling materials for public review, meeting the requirements of the landscape ordinance, seeking approvals, enforcement, conducting site inspections and filing reports.

Bubbler shall mean an irrigation head that delivers water to the root zone by "flooding" the planted area, usually measured in gallons per minute. Bubblers exhibit a trickle, umbrella or short stream

pattern.

Drip Emitter shall mean a drip irrigation fitting that delivers water slowly at the root zone of the plant, usually measured in gallons per hour.

Evapotranspiration (ET) shall mean the quantity of water evaporated from adjacent soil surfaces and transpired by plants during a specific time, expressed in inches per day, month or year (see also Reference Evapotranspiration Rate).

Extra-Drought Tolerant Plant shall mean a plant that can survive without irrigation throughout the year once established, although supplemental water may be desirable during drought periods for improved appearance and disease resistance.

Ground Cover shall mean material planted in such a way as to form a continuous cover over the ground that can be maintained at a height not more than twelve [12] inches.

Hardscape shall mean patios, decks and paths. Does not include driveways, parking lots and sidewalks.

Irrigated Landscaped Area shall mean all portions of a development site to be improved with planting and irrigation. Natural open space areas shall not be included in the Irrigated Landscaped Area.

Irrigation Efficiency shall mean the measurement of the amount of water beneficially applied, divided by the total amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system hardware characteristics and management practices.

Irrigation Contractor shall mean a person who has been certified by The Irrigation Association to install irrigation systems or as otherwise approved by the Department of Public Utilities.

Irrigation Designer shall mean a person who has been certified by The Irrigation Association to prepare irrigation system designs, or a Landscape Architect or as otherwise approved by the Department of Public Utilities.

Irrigation Plan shall mean the plan which shows the

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Soils Report shall mean a report by a soils laboratory indicating soil type(s), soil depth, uniformity, composition, bulk density, infiltration rates, and pH for the top soil and subsoil for a given site. The soils report also includes recommendations for soil amendments.

Spray Sprinkler shall mean an irrigation head that sprays water through a nozzle.

Stream Sprinkler shall mean an irrigation head that projects water through a gear rotor in single or multiple streams.

Turf shall mean a surface layer of earth containing mowed grass with its roots.

Waste of Water shall mean and include, but not be limited to:

- ❑ The use of water for any purpose, including landscape irrigation, which consumes or for which is applied substantial amounts of excess water beyond the reasonable amount required by the use, whether such excess water remains on the site, evaporates, percolates underground, goes into the sewer system, or is allowed to run into the gutter or street. Every water consumer is deemed to have under his control at all times the water lines and facilities, other than water utility facilities, through which water is being supplied and used to his premises, and to know the manner and extent of his water use and excess runoff.
- ❑ The excessive use, loss or escape of water through breaks, leaks or malfunctions in the water user's plumbing for any period of time after such escape of water should reasonably have been discovered and corrected. It shall be presumed that a period of 48 hours after the water user discovers such break, leak or malfunction or receives notice from the City of such condition, whichever occurs first, is a reasonable time to correct such condition.
- ❑ Washing sidewalks, driveways, parking areas, tennis courts, patios or other paved areas except to alleviate immediate fire, health or safety hazards.

Water Use Efficiency Review shall mean an on-site survey and measurement of irrigation equipment and management efficiency, and the generation of

recommendations to improve efficiency.

Water Check (see Water Use Efficiency Review)

Water Conserving Plant shall mean a plant that can generally survive with available rainfall once established although supplemental irrigation may be needed or desirable during the growing season.

15-41-03 Commercial, Industrial & Multi-Family Development

A. Applicability. The provisions of this section shall apply to landscaping for all new and reconstructed landscaping for public agency projects, private commercial and industrial projects, developer-installed landscaping in multi-family residential projects, and developer-installed landscaping in single family projects that require project review and approval by the City. Such review includes site plan review, modified conditional use permit review, and building permits issued for exterior modifications to commercial and multi-family buildings.

This section does not apply to:

- Homeowner provided landscaping at single family projects (see §15-41-04)
- Registered Historical Sites

B. Documentation to be Submitted for Plan Approval. Landscape Plan Documentation Package shall be submitted to and approved by the Sandy City Public Utilities Department prior to the issuance of any permit. A copy of the approved Landscape Plan Documentation Package shall be provided to the property owner or site manager and to the local retail water purveyor. The Landscape Plan Documentation Package shall be prepared by a registered Landscape Architect or a Landscape Designer. The Irrigation Plan shall be prepared by an Irrigation Designer or a Landscape Architect. The Landscape Plan Documentation Package shall consist of the following items:

1. Project Data Sheet. The Project Data Sheet shall contain the following:

- a. Project name and address;
- b. Applicant or applicant's agent name, address, phone and fax number;
- c. Landscape Designer/Landscape

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Architect's name, address, phone and fax number; and

d. Landscape contractor's name, address, phone and fax number.

2. Planting Plan. A detailed Planting Plan shall be drawn at a scale that clearly identifies the following:

- a. Location of all plant materials, a legend with botanical and common names, and size of plant materials;
- b. Property lines and street names;
- c. Existing and proposed buildings, walls, fences, light poles, utilities, paved areas and other site improvements;
- d. Existing trees and plant materials to be removed or retained; and
- e. Designation of Landscape Zones

3. Irrigation Plan. A detailed Irrigation Plan shall be drawn at the same scale as the planting plan and shall contain the following information:

- a. 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;
- b. Static water pressure in pounds per square inch (psi) at the point of connection to the public water supply; and
- c. 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.

4. Grading Plan. A Grading Plan shall be drawn at the same scale as the Planting Plan and shall contain the following information:

- a. Property lines and street names, existing and proposed buildings, walls, fences, utilities, paved areas and other site improvements; and
- b. Existing and finished contour lines and spot elevations as necessary for the proposed site improvements.

5. Soils Report. A Soils Report will be required where irrigated landscaped areas consisting of grass or similar turf exceed 33% of the overall landscaped area. The Soils Report shall describe the depth, composition,

and bulk density of the top soil and subsoil at the site, and shall include recommendations for soil amendments. The Planting Plan shall incorporate the recommendations of the Soils Report into the planting specifications.

6. Landscape Water Allowance. The annual Landscape Water Allowance shall be calculated using the following equation:

$$\text{Landscape Water Allowance} = ET_o \times 1.0 \times 0.62 \times A$$

Where Landscape Water Allowance is in gallons per growing season

- ET_o = Reference Evapotranspiration in inches per growing season
1.0 = ET_o adjustment factor, 100% of turf grass ET_o (growing season adjustment factor)
0.62 = conversion factor
A = total Irrigated Landscape Area in square feet

7. Irrigation Schedule. A monthly Irrigation Schedule shall be prepared that covers the initial 90-day plant establishment period and the typical long-term use period. This schedule shall consist of a table with the following information for each valve:

- a. Plant type (for example, turf, trees, low water use plants);
- b. Irrigation type (for example, sprinklers, drip, bubblers);
- c. Flow rate in gallons per minute;
- d. Precipitation rate in inches per hour (sprinklers only);
- e. Run times in minutes per day;
- f. Number of water days per week; and
- g. Cycle time to avoid runoff.

C. Landscape Design Standards.

1. Plant Selection. Plants selected for landscape areas shall consist of plants that are well-suited to the microclimate and soil conditions at the project site. Plants with similar water needs shall be grouped together as much as possible.

For projects located at the interface between

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urban areas and natural open space (non-irrigated), Extra-Drought Tolerant Plants shall be selected that will blend with the native vegetation and are fire resistant or fire retardant. Plants with low fuel volume or high moisture content shall be emphasized. Plants that tend to accumulate excessive amounts of dead wood or debris shall be avoided.

Areas with slopes greater than 30% shall be landscaped with deep-rooting, Water Conserving Plants for erosion control and soil stabilization.

Park strips and other landscaped areas less than eight [8] feet wide shall be landscaped with Water Conserving Plants and/or grass.

2. Mulch. After completion of all planting, all irrigated non-turf areas shall be covered with a minimum layer of four [4] inches of Mulch to retain water, inhibit weed growth, and moderate soil temperature. Non-porous material shall not be placed under the mulch.

3. Soil Preparation. Soil preparation shall 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 [6] inches and amending the soil with organic material as per specific recommendations of the Landscape Designer/Landscape Architect based on the Soils Report.

D. Irrigation Design Standards

1. Irrigation design standards for this ordinance shall be as outlined in the latest version of the "Minimum Standards for Efficient Landscape Irrigation System Design and Installation" as specified in the Sandy City Standard Specifications and Details for Municipal Construction. In addition, the following portions of this section shall also be applicable.

2. **Landscape Water Meter.** A water meter and backflow prevention assembly that are in compliance with state code shall be installed for landscape irrigation systems, and the landscape water meter and backflow prevention assembly shall be separate from the

water meter and backflow prevention assembly installed for indoor uses. The size of the meter shall be determined based on irrigation demand.

3. **Pressure Regulation.** A pressure regulating valve shall be installed and maintained by the consumer if the static service pressure exceeds 80 pounds per square inch (psi). The pressure-regulating valve shall be located between the landscape water 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 sprinklers.

4. **Automatic Controller.** All irrigation systems shall include an electric automatic controller with multiple program and multiple repeat cycle capabilities and a flexible calendar program. All controllers shall be equipped with an automatic Rain Shut-off Device.

5. On slopes exceeding 30%, the irrigation system shall consist of Drip Emitters, Bubblers, or sprinklers with a maximum Precipitation Rate of 0.85 inches per hour and adjusted sprinkler cycle to eliminate Runoff.

6. Each valve shall irrigate a landscape with similar site, slope and soil conditions and plant materials with similar watering needs. Turf and non-turf areas shall be irrigated on separate valves.

7. **Drip Emitters or a Bubbler** shall be provided for each tree where practicable. Bubblers shall not exceed 1.5 gallons per minute per device. Bubblers for trees shall be placed on a separate valve unless specifically exempted by the Sandy City Public Utilities Department due to the limited number of trees on the project site.

8. Sprinklers shall have matched Precipitation Rates with each control valve circuit.

9. Check valves shall be required where elevation differences will cause low-head drainage. Pressure compensating valves and sprinklers shall be required where a significant variation in water pressure will occur within the irrigation system due to elevation differences.

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10. Drip Irrigation lines shall be placed underground or otherwise permanently covered, except for Drip Emitters and where approved as a temporary installation. Filters and end flush valves shall be provided as necessary.

11. Irrigation zones with overhead spray or stream sprinklers shall be designed to operate between 6:00 p.m. and 10:00 a.m. to reduce water loss from wind and evaporation. This would exclude drip or bubbler zones.

12. Program valves for multiple repeat cycles where necessary to reduce runoff, particularly slopes and soils with slow infiltration rates.

E. Plan Review, Construction Inspection and Post-Construction Monitoring.

1. As part of the Site Plan Approval and Building Permit Process, a copy of the Landscape Plan Documentation Package shall be submitted to the City for review and approval before construction begins. With the Landscape Plan Documentation Package, a copy of the Landscape Water Allowance Worksheet shall be completed by a Landscape Designer and submitted to the City.

2. All Landscape Plan Documentation Packages submitted must be certified by a licensed Landscape Architect or approved Landscape Designer. The Irrigation Plan must be prepared by an approved Irrigation Designer or a Landscape Architect.

3. All landscape irrigation systems shall be installed by an Irrigation Contractor. The person representing the contracting firm shall be a full-time employee of the firm and shall be directly involved with the project including at least weekly site visits during construction.

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

5. During construction, site inspection of the landscaping may be performed by the City (see 15-41-06A).

6. Following construction and prior to the release of the secondary bond guarantee posted for the project, an inspection shall be scheduled with the Public Utilities Department to verify compliance with the approved landscape and irrigation plans. A Certificate of Substantial Completion as defined in the Sandy City Standard Specifications and Details of Municipal Construction manual shall be completed by the property owner, contractor or Landscape Designer/Landscape Architect and submitted to the City.

7. Following construction and prior to release of the secondary bond guarantee posted for the project, a Water Use Efficiency Review will be conducted by a Landscape Irrigation Auditor. The auditor shall be independent of the contractor, design firm, and owner/developer of the project. The water performance audit will verify that the irrigation system complies with the minimum standards required by this ordinance. The minimum efficiency required for the irrigation system is 60% for distribution efficiency for all fixed spray systems and 70% distribution efficiency for all rotor systems. The auditor shall furnish a certificate to the City, designer, installer and owner/developer certifying compliance with the minimum distribution requirements, and an irrigation schedule. Compliance with this provision is required before the City will release the bond for the project.

15-41-04 Residential (Single Family) Development

A. The provisions of this section apply to landscaping for all new and reconstructed landscaping for single family residential dwellings. This section does not apply to:

- Residential developments with developer installed landscapes (see §15-41-03); or
- Registered historical sites.

B. Provisions for New or Reconstructed Landscapes.

1. Landscape Education Package. A copy of a Landscape Education Package shall be given to all new single-family homeowners by the City at the time of application for a building permit and all new or modified water account owners. The

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Landscape Education Package, prepared by the Public Utilities Department, shall consist of the following items:

- a. Principals of water efficient landscape design
- b. Listing of Water-Conserving Plants
- c. Listing of certified Landscape Designers, certified Irrigation System Designers and suppliers, and certified Landscape Irrigation Contractors.
- d. Information Packet about the various area Demonstration Gardens.
- e. Information Packet about the City's water rate schedule, billing format for water use, and the economics of installing and maintaining a water efficient landscape.

2. Post Installation. After the landscaping has been installed, the homeowner shall notify the Department of Public Utilities of its completion and request a listing of Landscape Auditors who can perform a Water Use Efficiency Review, also called a Water Check. The Water Check will determine the irrigation system efficiency, make recommendations for improvements, and provide the homeowner with an irrigation schedule.

C. Park strips and other landscaped areas less than eight [8] feet wide shall be landscaped with Water Conserving Plants and/or grass.

15-41-05 Prohibited Watering Practices

- A. Waste of Water. Regardless of the age of a development (commercial, industrial, office or residential), water shall be properly used. Waste of Water is prohibited.
- B. Restricted Watering Time. Watering time is restricted as specified in Title 14, Chapter 2 of the Revised Ordinances of Sandy City.

15-41-06 Enforcement, Penalty for Violations

A. Enforcement Authority. The Sandy City Public Utilities Director and other employees of the Public Utilities Department are authorized to enforce all provisions of this Chapter.

B. Violation of this Chapter. Any consumer who violates any provisions of this Chapter shall be issued a written notice of violation. The written notice shall be affixed to the property where the violation occurred and mailed to the consumer of record and to any other person known to the City who is responsible for the violation and its corrections. Such notice shall describe the violation and order that it be corrected, cured or abated immediately or within such specified time as the City determines is reasonable under the circumstances. Failure to receive such notice shall not invalidate further actions by the City. If the order is not complied with, the City may terminate water service to the customer and/or issue a class "C" misdemeanor citation.