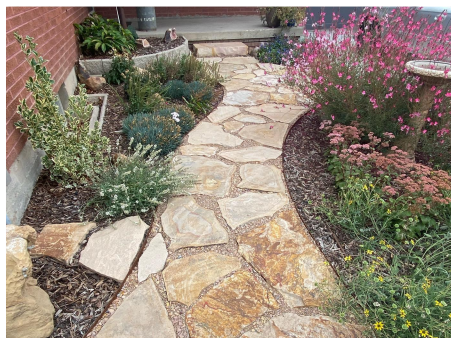




WATER-WISE LANDSCAPING REQUIREMENTS

PROPOSED UPDATES, IMPROVEMENTS, & NEW RESOURCES



May 2, 2023



Agenda

1. Project Recap
 2. Summary of Proposed Updates:
 - a. Landscape Regulations
 - b. Street & Shade Tree Lists
 - c. Residential Guidebook
 3. Questions/ Feedback
-



Project Recap

IMPETUS

- Long-lasting **drought** conditions;
 - Requests, most from businesses, **to be allowed to install different landscaping** than what the City currently requires;
 - Concerns about how deviating from the current requirements **would lead to ugly/unmaintained sites** in the City;
 - Efforts from other entities **to encourage or mandate reductions in water use.**
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Project Recap

MAIN PROJECT COMPONENTS

1. **New and updated landscape requirements** as well as changes to related portions of the Municipal Code that specifically address water-wise elements.
 2. Updated **Street and Shade Tree List** including a Prohibited Tree List.
 3. New **Residential Guidebook** targeted towards single-family home owners.
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Project Recap

PROPOSED CHANGE HIGHLIGHTS

- The creation of **distinct processes and requirements** for single-family homes on individual lots and other land uses;
 - Requirements for single-family homes on individual lots are left nearly, if not entirely, **the same as they are today.**
 - Changes to the submittal and improvement requirements **for non-residential and multi-family developments;**
 - Landscaping plans and landscape improvements for non-residential and multi-family developments would be **based on a maximum amount of water that a site would be allowed to use.**
 - **More consistent and less redundant** Municipal Code.
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PROPOSED LANDSCAPING REGULATIONS

- A. Purpose
 - B. Requirements for Single-family and Twin Home Residential Uses
 - C. Requirements for New and Rehabilitated Developer/Contractor Installed Landscapes for Residential Subdivisions, Professional Office, Public, Commercial and Industrial Uses
 - D. Requirements for All Project Types
 - E. Plan Review, Construction Inspection and Post-Construction Monitoring
 - F. Links and References
-

A. Purpose

- Conserving public water resources and promoting water efficient landscapes are made explicit in the purpose statement.

B. Requirements for Single-family and Twin Home Residential Uses

- Made separate and distinct from other uses in the code.
- Water-conserving designs are encouraged.
- If size permits, the landscaped areas of the front yard, side and rear yards should follow Locascapes® five-step process.

C. Landscape Requirements for New and Rehabilitated Developer/Contractor Installed Landscapes for Residential Subdivisions, Professional Office, Commercial and Industrial uses

- **New Water-Conserving Landscape Design Requirements for this section:**
 - General Water-conserving Design Considerations
 - Plant Selection
 - Landscape Plan Documentation Package

D. Requirements for All Project Types

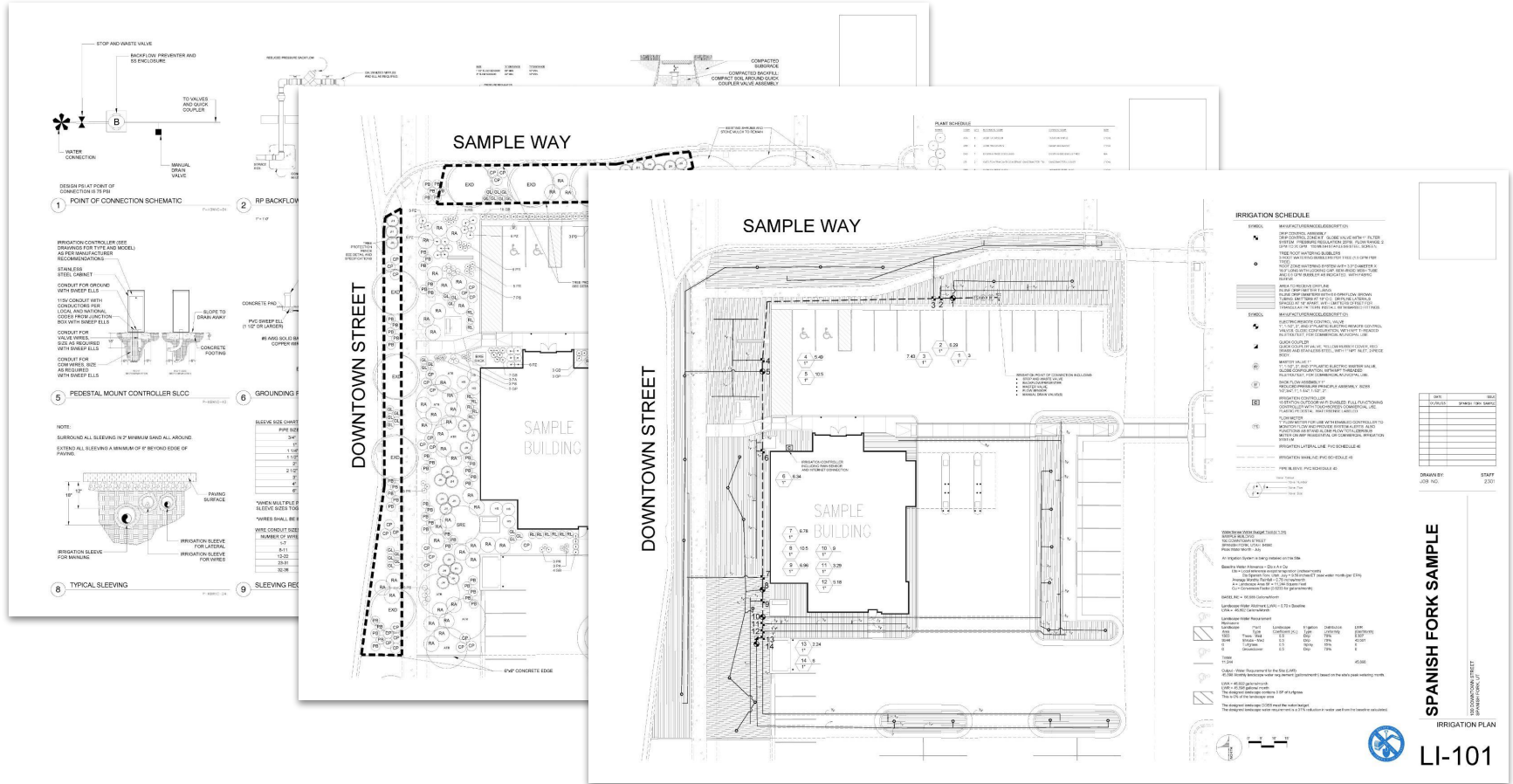
- **General requirements for:**
 - Irrigations systems
 - Mulch
 - Living plant cover at maturity
 - Lawn installation
- **Trees:**
 - Selection and Standards
 - Prohibited Tree List
 - Street Trees and Park Strip Design
- **Other Standards, Requirements and Maintenance Considerations:**
 - Artificial Turf as Ground Cover Zero-scape not permitted
 - Shrub maturity and landscape maintenance requirements
 - Discretion of the Community Development Director

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

- **Landscape Plan Documentation Package requirements**
 - Must be stamped by a professionally licensed landscape architect (PLA)
- **Landscape Irrigation System**
 - Should be installed by an IA certified irrigation contractor.
- **During construction, site inspection may be performed by the Community Development Department.**
- **A guarantee of the installation of landscaping as approved shall be made to the City**

F. Links and References

- **A comprehensive matrix and list of specific and relevant online websites, reports and references that support this chapter of the Zoning Ordinance will be provided.**



SAMPLE LANDSCAPE DOCUMENTATION PACKAGE ELEMENTS

OTHER LANDSCAPING REGULATIONS

- Fencing and Clear Vision Area
 - Street Trees and Park Strip Design (Incorporated into the revised Landscape Regulations)
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PROPOSED STREET & SHADE TREE LISTS

- A. Small Street And Shade Trees**
 - B. Medium Street And Shade Trees**
 - C. Large Street And Shade Trees**
 - D. Prohibited Trees**
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LIST A - SMALL STREET AND SHADE TREES

COMMON NAME	BOTANICAL NAME	ACCEPTABLE CULTIVARS	*MATURE HEIGHT*	*CANOPY SPREAD*
Maple, Trident	Acer buergerianum	Greenwise	20-30'	15-20'
Maple, Tatarian*	Acer tataricum	Hot Wings, Pattern Perfect, Rugged Charm*	20-25'	15-20'
Maple, Shantung	Acer truncatum	*Pacific Sunset, Norwegian Sunset*	20-30'	20-30'
Maple, Shantung	Acer truncatum	Ruby Sunset	20-25'	18-30'
Hedge* Hedgeberry*	Celtis reticulata		20-25'	20-25'
Eastern Redbud*	Cercis canadensis		15-25'	20-30'
Fringetree, Chinese*	Chionanthus retusus		20-25'	20-25'
Fringetree*	Chionanthus virginicus*		20-25'	20-25'
Hawthorn*	Crataegus binniana	Pink Scarlet, Crimson Cloud	20-25'	15-20'
Hawthorn, Winter King*	Crataegus viridis	Winter King	20-30'	20-30'
Hawthorn, Lavale*	Crataegus lavalei	Lavale	20-30'	15-20'
*Hawthorn, Thornless Cockspur**	Crataegus crus-galli	Thornless Cockspur	20-30'	20-35'
Maackia	Maackia amurensis		20-30'	15-20'
Flowering Crabapple*	Malus sp.	*Spring Snow, Snow Crisp, Sargent, Zumi*	15-25'	15-20'

Notes:
 All parkstrip trees must be a single trunk form unless approved by Community Development Director.
 Other tree species may be appropriate with approval from the Community Development Director.

* Proven Performer
 ** Trees to be planted under utility lines

LIST B - MEDIUM STREET AND SHADE TREES

COMMON NAME	BOTANICAL NAME	ACCEPTABLE CULTIVARS	*MATURE HEIGHT*	*CANOPY SPREAD*	USDA HARDINESS ZONE	SALT TOLERANCE	DROUGHT TOLERANCE	POOR DRAINAGE TOLERANCE	ALKALINITY TOLERANCE	SHAPE	FLOWERS	FRUIT	FALL COLOR	ADDITIONAL NOTES
Mulberry, Fruitless	Morus alba	Fruitless Mulberry	30-50'	30-50'						Upright				
Hophornbeam	Cotoneaster virginiana	Autumn Treasure, Sun Beam	25-40'	20-30'										
Amur Corktree*	Phellodendron amurense	Macho, Eye Stopper, His Majesty	30-45'	30-60'										
Mayday Tree	Prunus padus	Merlot	30-40'	18-30'										
Flowering Pear	Pyrus calleryana	Autumnriot, Autumn Blaze, Captain Chameleon, Trinity	30-40'	12-30'										
Littleleaf Linden	Tilia cordata	Greenspire	40'	35'										
Linden, Crimean	Tilia x euchlora		40-60'	20-30'										
Elm, Emerald Flair	Ulmus parvifolia	Emerald Flair	40-45'	30-35'										
Elm, Emerald Sunshine	Ulmus prostrata	Emerald Sunshine	30-35'	20-25'										
Elm, Frontier*	*Ulmus carpinifolia and U. parvifolia*	Frontier	30-40'	20-30'										

LIST C - LARGE STREET AND SHADE TREES

COMMON NAME	BOTANICAL NAME	ACCEPTABLE CULTIVARS	*MATURE HEIGHT*	*CANOPY SPREAD*	USDA HARDINESS ZONE	SALT TOLERANCE	DROUGHT TOLERANCE	POOR DRAINAGE TOLERANCE	ALKALINITY TOLERANCE	SHAPE	FLOWERS	FRUIT	FALL COLOR	ADDITIONAL NOTES
Black Maple	Acer nigrum		60-75'	40-50'										
Maple, Sycamore	Acer pseudoplatanus		40-55'	35-55'										
Hornbeam	Carpinus betulus	'Emerald Avenue, Paris, Fontaine'	40-60'	15-40'										
Catalpa*	Catalpa speciosa		50-70'	20-50'										
Hackberry*	Celtis occidentalis	Chicagoland	40-60'	40-60'										
Honeylocust*	Gleditsia triacanthos inermis	'Street Keeper, Spire, Northern Scallam'	40-45'	20-35'										
Kentucky Coffee*	Commodorus obovatus	'Espresso, Prairie Titan, Steady Manor'	60-80'	40-45'										
Tulip Tree	Liriodendron tulipifera		60-70'	30-50'										
Oak, English*	Quercus robur		50-70'	50-70'										
Oak, Chinquapin	Quercus muhlenbergii	Red Autumn	40-60'	50-60'										
Oak, Shumard	Quercus shumardii		40-60'	30-40'										
Japanese Pagoda Tree	Sophora japonica	Halka Millstone	45'	35'										
Linden, Silver*	Tilia tomentosa	'Sterling Silver, Green Mountain, Satin Shadow'	50-70'	25-40'										

Notes:
 Other tree species may be prohibited at the discretion of the Community Development Director.

LIST D - PROHIBITED TREES

COMMON NAME	BOTANICAL NAME	ADDITIONAL NOTES
American Elm	Ulmus americana	Exceptions are provided for species and cultivars that are resistant to Dutch Elm disease, such as 'Frontier', 'New Harmony' and 'New Horizon' cultivars.
Birch	Betula sp.	
Box Elder	Acer negundo	Exception provided for Acer negundo 'Sensation', an improved cultivar with characteristics that may be suitable for street trees in particular.
Russian Olive	Elaeagnus angustifolia	
Siberian Elm	Ulmus pumila	
Silver Maple	Acer saccharinum	
Tree of Heaven	Ailanthus	
Blue Spruce	Picea sp.	

For questions regarding the Spanish Fork City Approved Street and Shade Trees Lists, please contact:

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PROPOSED RESIDENTIAL GUIDEBOOK

- A. Introduction
- B. Landscape Design Simplified
- C. The Localscapes Approach
- D. Principles of Water-Wise Landscaping
- E. Inspiration & Resources
- F. Resource Matrix
- G. Works Cited

PRIMARY PURPOSE: to educate and encourage single-family home-owners interested in converting their yards with water-conserving landscape approaches.



RESIDENTIAL
GUIDEBOOK
 WATER-WISE LANDSCAPE DESIGN
 ELEMENTS & PRINCIPLES

Landscape Design Simplified

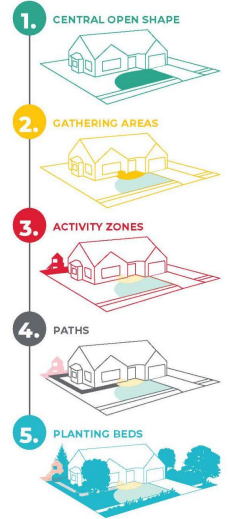
WHO IS THIS GUIDEBOOK FOR?

The water conservation mindset begins with individual water users and while this guidebook is targeted towards single family home owners, it is meant to provide a foundation for anyone seeking to transform their landscape into a water conserving one. It is important to note that **Spanish Fork City does not require single family home owners to install water-wise landscapes**. Rather, the concepts and principles described here are meant to provide guidance, inspiration, and encouragement. Multi-family, commercial, and industrial uses are required to implement water-conserving landscapes (see Spanish Fork's Landscaping Regulations in [City Code 15.4.16.130](#)).

THE LOCALSCAPES APPROACH

Implementing a water-wise landscape begins by utilizing designs and practices that take into account Utah's unique climate. **Localscapes** is a program that offers a simplified, practical approach to creating water-conserving landscapes and yards and the first section of this guidebook was adapted from the [Localscapes Introductory Guide](#). What follows are five simple steps for transforming your yard into a practical, water-wise landscape.

This approach can be customized to fit any yard size, shape, or location and can be scaled to meet any budget. If renovating an entire yard isn't feasible, try starting small by installing one segment at a time or by focusing on a park strip or side yard. Remember, the Localscapes Approach is meant to be customizable to meet your needs and should be used in companion with principles of water-wise landscaping (see page 11).



1. Central Open Shape

- ☑ Creates a focal point
- ☑ A simple, practical shape
- ☑ Often flat



A **central open shape** creates a focal point that makes your landscape appear organized and well maintained. It allows sprinklers to work more efficiently by not forcing them to water oddly-shaped or inefficient lawn areas. The central open space can be made of materials such as turfgrass, ground cover, gravel, pavement, pavers, or any low-lying relatively flat material.



Principles of Water-Wise Landscaping

An effective water-wise landscape design requires the application of water-conserving principles such as grouping plants with similar water requirements together or applying mulch around plants to retain moisture.

The following section describes seven water-wise principles from the [Utah State University Extensions Center for Water-Efficient Landscaping](#) which are meant to support and complement the Localscape design elements. As we design, install, and manage our yards and landscapes, it is critical to utilize the following principles of water-wise landscaping.

PRINCIPLE #1: Start with a plan

The planning and design stage is an opportunity to consider the needs of those who will use and maintain the space while also acknowledging existing environmental conditions found on the site.

For a landscape design to be water-conserving, it needs to use water efficiently. The planning stage is the optimal time to decide which water efficiency strategies will be used.

KEY PLANNING & DESIGN CONSIDERATIONS

- **Develop a Plot Plan:** A plot plan is simply a map of your property that includes existing buildings, structures, trees, shrubs, property lines, driveways, gardens, utility lines, slopes, and other possible design limitations.
- **Site Analysis:** Look for the environmental assets and constraints of your landscapes such as soil conditions, slopes, wind direction, and views.
- **Planning the Design:** Based on your site analysis, decide where to place the various elements of your landscape in order to optimize water conservation as well as to enhance aesthetic qualities of your property.

Planning & Design Resources

- [Localscapes® Program](#)
- [USU Center for Water-efficient Landscaping](#)
- [Conservation Garden Park](#)
- [Flip Your Strip Program](#)
- [Utah Water Savers](#)
- [SLC Plant List & Hydrozone Schedule](#)

DESIGN INSPIRATION

The following are three examples of different sized lots that have been converted into water-conserving yards. Each reflects the specific needs and desires of the particular owner, illustrating that no lot is too small or too large, and no idea is too divergent to be incorporated into your own personal expression.

Once your new landscape is installed, you are likely to understand that the value of a water-wise landscape far exceeds the obvious reduction in water use. Some of the unanticipated joys include new splashes and unexpected splashes of vegetative color in your yard, cooler air temperatures, accommodation of a wider range of outdoor activities in your yard, and the pride knowing that you achieved this on your own!

LARGE LOT

ALL ABOUT AGRICULTURE



This is an example of a 3/4 acre lot. The large lot is carefully designed to provide a range of activities suited to the needs and personality of the homeowner. In this example, "agriculture" is the primary theme, as illustrated by the rows of plants in the rear yard, the extensive orchards in the furthest reaches of the rear yard, and the incorporation of a vegetable garden and chickens completing the "edible garden".



RESOURCE MATRIX

Click on the resource links below to learn more about specific water-wise landscape design principles, resources, programs, funding, and classes.

Resources	Planning & Design	Turfgrass	Soil/ Topsoil	Plant Selection	Mulch	Irrigation	Landscape Maintenance	Resources/ Programs/ Funding	Classes
Spanish Fork Water-wise Landscape Design Elements & Principles Guidebook (2022)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Localscapes® Program	✓		✓	✓	✓		✓	✓	✓
The Turfgrass Water Conservation Alliance		✓							
Utah State University Center for Water-efficient Landscaping	✓	✓	✓	✓	✓	✓		✓	
Utah State University Extension Sustainable Turf		✓						✓	
Utah State University Cooperative Extension Tree Browser				✓					
Utah State University Climate Center		✓				✓		✓	
Conserve Water Utah Grass Removal Rebates		✓						✓	
Soil Testing Laboratory at Utah State University			✓						
Topsoil Quality Guidelines for Landscaping			✓						
Water-Wise Plants for Utah Landscapes				✓					
Conservation Garden Park	✓			✓					✓
USDA Plant Hardiness Zone Map				✓					
Water-Wise Landscaping - Mulch					✓				
Flip Your Strip Program	✓							✓	
Utah Water Savers	✓								✓
Salt Lake City Plant List and Hydrozone Schedule 2013, Salt Lake City Public Utilities	✓	✓	✓	✓	✓			✓	✓
EPA Landscape Water Budget Tool – Download excel tool (xls)						✓		✓	
EPA Landscape Water Budget Tool –Additional links and narratives						✓		✓	
EPA Landscape Water Budget Data Finder – by Zip Code Peak Month Eto and Rainfall						✓		✓	

QUESTIONS/ FEEDBACK?
