

WATER-WISE PLANT SELECTIONS FOR OKLAHOMA



OSU OKLAHOMA COUNTY EXTENSION
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DIVISION OF
**AGRICULTURAL SCIENCES
AND NATURAL RESOURCES**

**Squeeze
Every
Drop.com**




**WE ALL
WANT
PLANTS THAT
PERFORM
WELL IN OUR
GARDENS**

**AND NO ONE
WANTS TO SPEND
ALL THEIR TIME
WATERING**





**AND THEN...
THERE IS
ANOTHER
REASON**

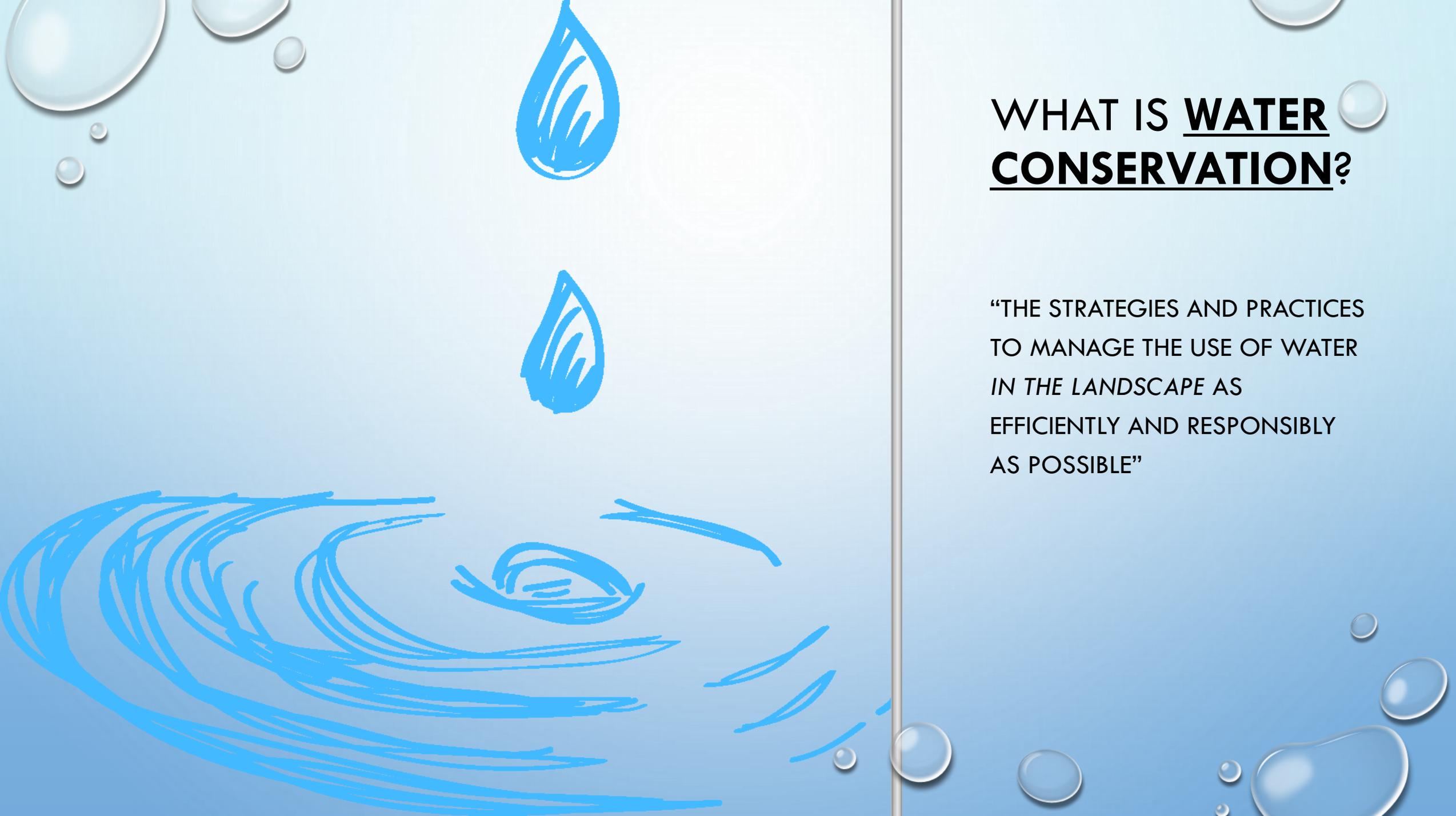


OUR SITUATION

- OKLAHOMA CITY METRO AREA POPULATION IN 1980 WAS ABOUT 600,000.
- TODAY THE POPULATION IS 1.4 MILLION AND GROWING
- HUGE GROWTH IN NEW HOMES, LANDSCAPES AND SPRINKLER SYSTEMS

= A NEED FOR EFFICIENT WATER USAGE



The background is a light blue gradient. On the left side, there are several water droplets and bubbles of various sizes, some with highlights. In the center, two blue water droplets are falling vertically. At the bottom, there are blue brushstrokes representing ripples in water. On the right side, there are more water droplets and bubbles, some with highlights.

WHAT IS WATER CONSERVATION?

“THE STRATEGIES AND PRACTICES
TO MANAGE THE USE OF WATER
IN THE LANDSCAPE AS
EFFICIENTLY AND RESPONSIBLY
AS POSSIBLE”

• WATER EFFICIENT/DROUGHT TOLERANT LANDSCAPES:

- WELL ADAPTED PLANTS
- HEALTHY SOIL
- MULCH
- EFFICIENT WATERING SCHEDULE

XERISCAPE OR WATER-SMART LANDSCAPE



This is not what I mean by water conservation

WATER CONSERVATION IN THE LANDSCAPE



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EXTENSION

Drought-Tolerant Plant Selections for Oklahoma

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See Extension Circular **E-1051** for plant photographs and more information.

The plants listed are targeted for Oklahoma City specifically with many also suitable for the entire state of Oklahoma. All

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are also available on our website at:
<http://osufacts.okstate.edu>

selections were chosen for their heat and drought tolerance as well as commercial availability.

This list is separated by annuals, perennials, ornamental grasses, vines, groundcover, shrubs, trees, and turfgrasses. Each plant is listed alphabetically by its scientific name within each category. The mature height and width are listed, which should be kept in mind when planning a landscape. Each plant has the season(s) of interest shown and light requirements.

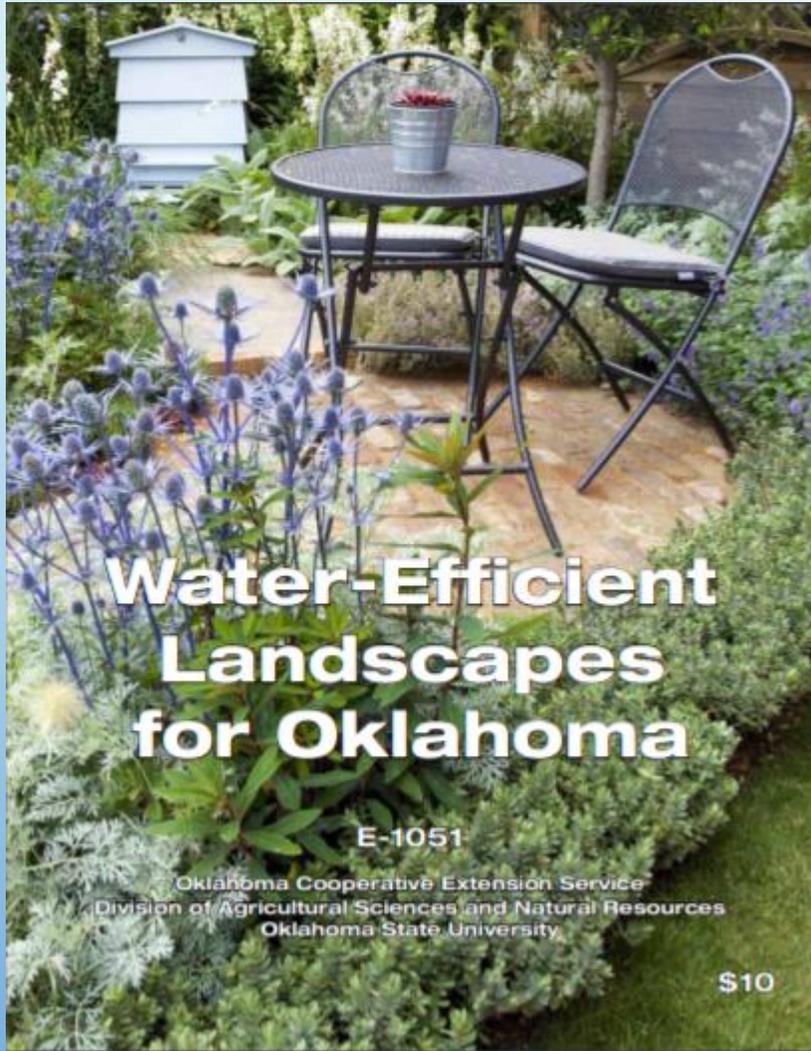
Many plants listed are considerably more drought resistant when properly mulched. Consumers should note that some listed plant materials can be toxic to pets and humans when ingested. Some plants may cause dermal reactions. People with young children or pets that may ingest landscape plants should check with their garden center or nursery professional if potential toxicity is a concern.

The following plant list is not comprehensive and many other plants not listed in this guide may be appropriate for the landscape.

<i>Common Name</i>	<i>Scientific Name</i>	<i>Height X Width (in)</i>	<i>Light Requirement</i>	<i>Season of Interest</i>	<i>Comments</i>
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ANNUALS

WATER EFFICIENT LANDSCAPES FOR OKLAHOMA GUIDEBOOK



 		 	
Evening Primrose <i>Oenothera macrocarpa</i>		Prickly Pear <i>Opuntia macrochiza</i>	
SUM pt N		ALL pt L	
9" ↑	12" →	6-12" ↑	6-12" →
OK-Native		OK-Native	
Can work as a dense foliage groundcover in shade, but won't bloom without adequate sunlight.		2-3 inch spines and tufts of bristles can be harmful to humans and pets. Spineless prickly pear are commercially available.	
 		 	
Foxglove Beardtongue <i>Penstemon digitalis</i>		Mexican Beardtongue <i>Penstemon mexicali</i>	
SUM pt N		SUM pt H	
36-48" ↑	18-24" →	12-24" ↑	12-24" →
OK-Native		Not Native	
Avoid wet, poorly drained soils. Attracts hummingbirds.		Good tolerance for drought, summer heat, and humidity. Avoid wet, poorly drained soils.	



Oklahoma Proven!

UNIVERSITY LINKS [+]

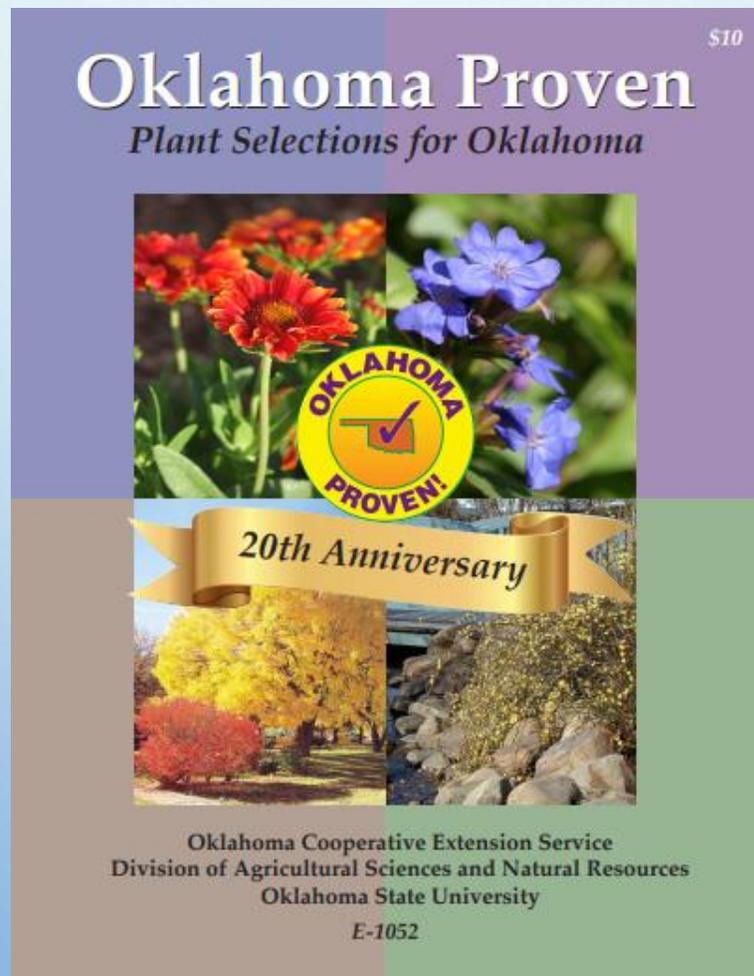
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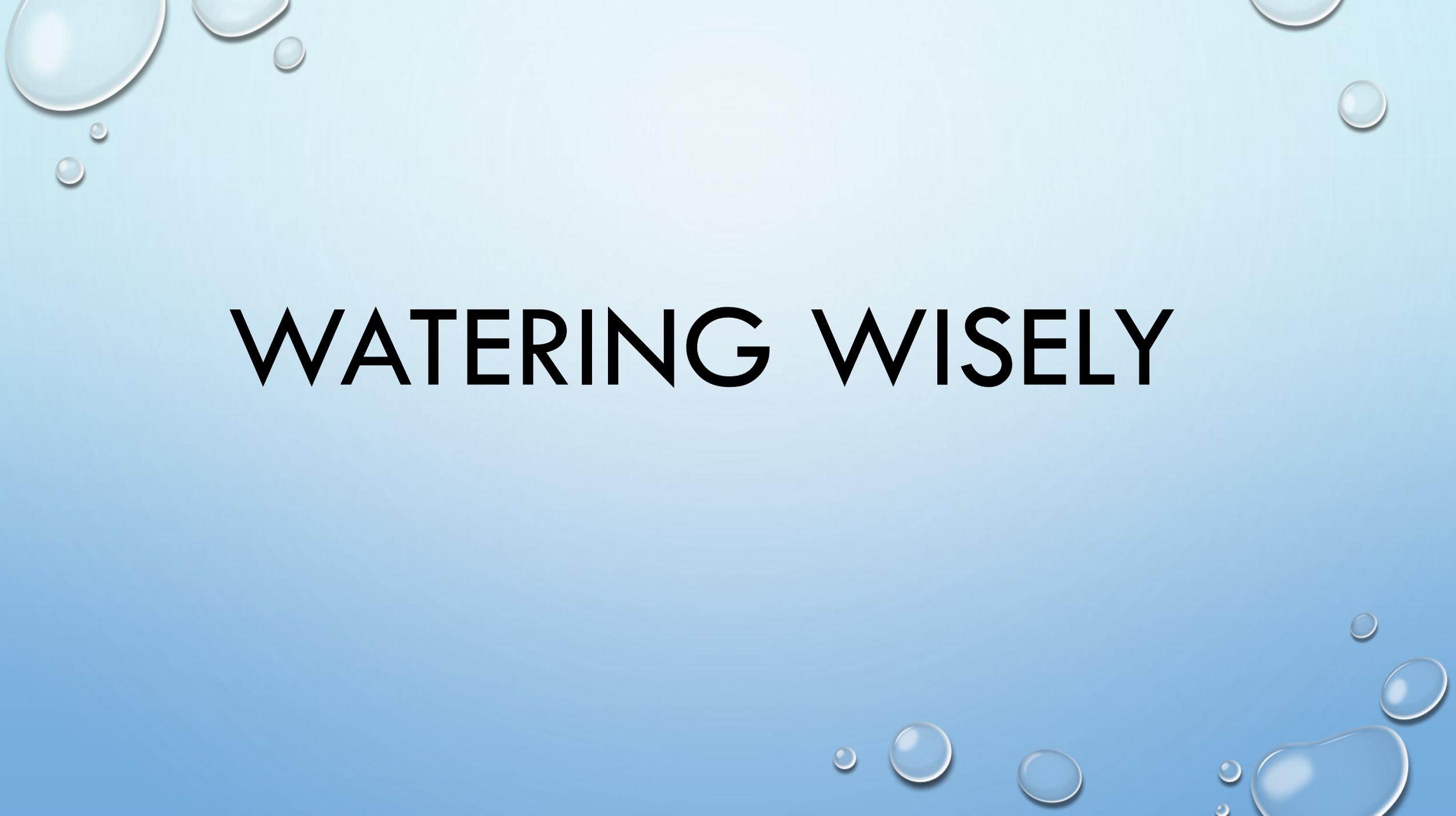


Oklahoma Proven is a plant evaluation and marketing program designed to help consumers select the best plants for Oklahoma gardens. The goal has been to select plants that are tolerant of the varied and diverse environmental conditions found throughout Oklahoma. Consequently, using well-adapted plants should lead to greater gardening success and more environmentally-friendly gardens. Although the plants presented here are among the best for use in Oklahoma, this is just a place to start. There are many plants suited for use in Oklahoma and it is always imperative to match the environmental tolerance of the plant with the environmental conditions in a particular garden or even a particular spot within that garden. Oklahoma Proven plants have been selected to withstand environmental stress but remember that all plants need special attention during the establishment phase or during periods of environmental extremes.



WWW.OKLAHOMAPROVEN.ORG



The background is a light blue gradient. There are several realistic water droplets of various sizes scattered in the corners: top-left, top-right, and bottom-right. The droplets have highlights and shadows, giving them a 3D appearance.

WATERING WISELY

TIME OF DAY IS A FACTOR

- Watering in the early morning assists in less water evaporation
- Automatic Watering Systems allow you to control how often you water and the amount used
- Program to begin watering at 4:00 am or after, but before 9 am.
- After the first watering of all the zones, go back and water each zone again as needed, this is called “Cycle and Soak” method. This is especially helpful on poorly drained soils.





HOW MUCH TO WATER?

- Generally plants need 1 inch of water per week
- Spray heads generally put out 1-1.5 inches of water every 1 hour you run your system
- So, 3 x 20 mins per week equals 1 inch of water
- Very High Temperatures *MAY* need 2 inches per week **ESPECIALLY** on newly planted landscape plants

MEASURE THE AMOUNT OF WATER PUT DOWN BY YOUR WATER SYSTEM

- Place 5-8 flat bottom containers (tuna can, or plastic container) on ground
- Mark 1 inch with a sharpie and ruler on inside of container
- Automatic System measure after the 20 minutes, average the amounts and multiply times 3 to find out how much you get in 1 hour.
- Adjust time accordingly to put down the recommended amount



SOIL MOISTURE CHECK

- Use a screwdriver to check soil moisture
 - If it goes in easily, do not water
 - If it does not pass through dry soil, it needs moisture



The background is a light blue gradient with several realistic water droplets of various sizes scattered in the corners. The droplets have highlights and shadows, giving them a three-dimensional appearance. The text is centered in the middle of the page.

KNOWING YOUR SOIL

WE CAN HELP YOU DETERMINE YOUR SOIL TEXTURE

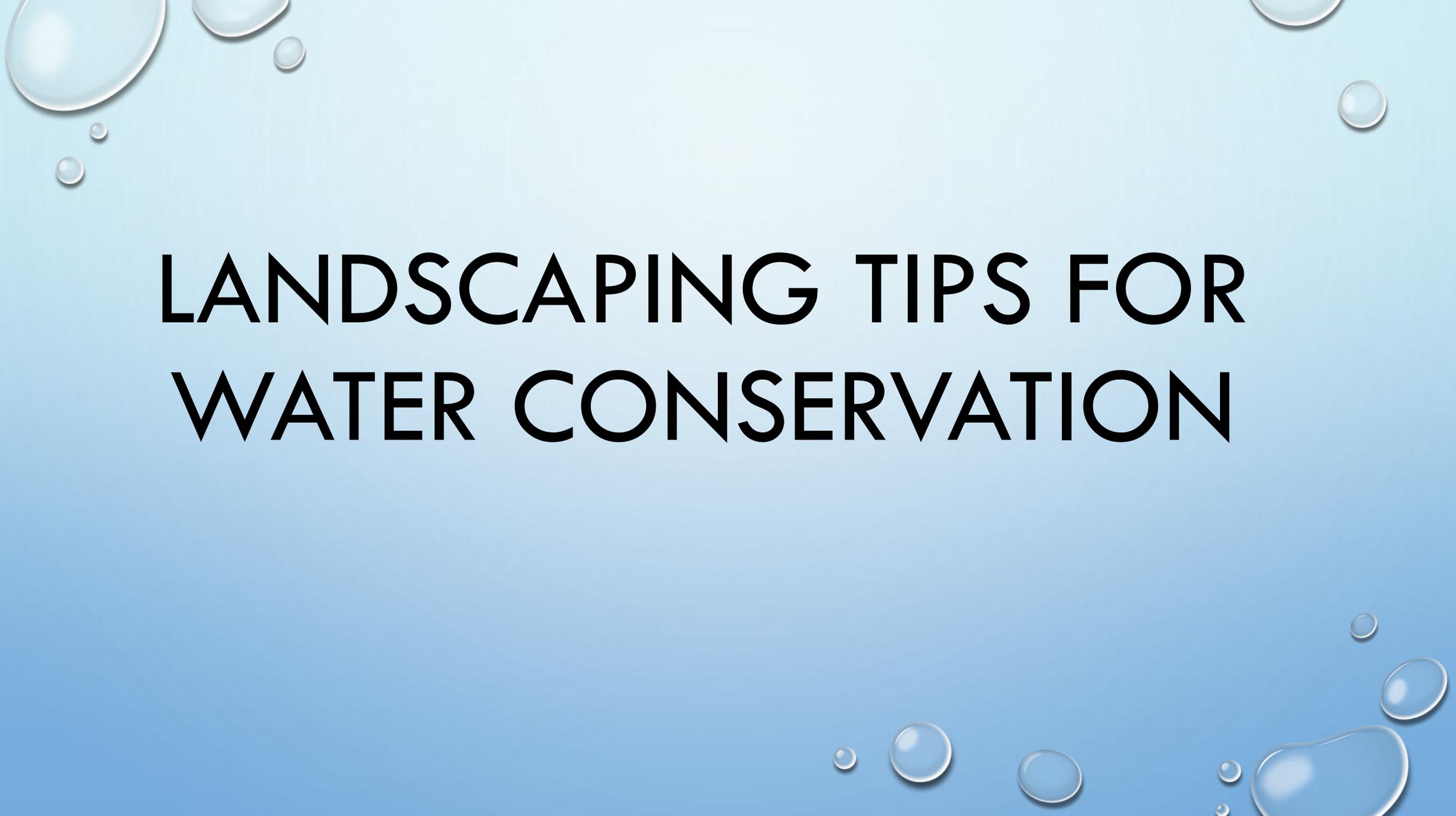
Sand, Silt and Clay based soils:

Sandy soils dry out faster and Clay soils stay wet longer...



SOIL SAMPLE PROCEDURE

- COLLECT FROM 10 – 15 SPOTS IN A FIELD/AREA
- TAKE FROM 6 INCHES DEEP
- MIX TOGETHER
- COLLECT AT LEAST ONE PINT
- MAKE SURE THE SAMPLE IS DRY
- TAKE TO YOUR COUNTY EXTENSION OFFICE
- COST IS \$10 AND IT TAKE ABOUT 2 WEEKS
- PH ANALYSES
- MACRO NUTRIENTS AND MORE BY REQUEST

The background is a light blue gradient with several realistic water droplets of various sizes scattered across the top and bottom edges. The droplets have highlights and shadows, giving them a three-dimensional appearance.

LANDSCAPING TIPS FOR WATER CONSERVATION

MULCHING HELPS REATAIN MOISTURE IN THE SOIL



- Use what ever mulch you like or can easily get
 - The heavier it is, the lighter you apply it, usually from 1-3 inches
 - Course mulches can be added up to 4 or 5 inches
 - Drip systems need to be under the mulch layer
 - DO NOT create volcanoes!

What's
wrong with
this picture?



GROUP SAME WATER REQUIRMENT PLANT TOGETHER

- Placement of plants within the planting bed is a factor
 - Place taller plants in the background and graduate down to the front of the bed.





HEAT AND DRAUGHT TOLERANT PLANTS

ANNUALS

The image features a light blue gradient background. The word "ANNUALS" is centered in a bold, black, sans-serif font. In the corners, there are several realistic-looking water droplets of various sizes, some with highlights and shadows, giving a fresh and clean aesthetic.



Lantana camara 'Dallas Red'

- Irresistible to pollinators!
- Blooms best while the heat is strong
- Truest-red flowers of available lantana hybrids



Sun Coleus 'Alabama Sunset'

- ALL sun coleus
- MANY colors/mixed colors
- Drought tolerant
- Showy leaves all season



Zinnia angustifolia
Mexican Zinnia

- Very drought tolerant
- Showy plants bloom all summer
- No serious insect or disease problems



Pentas lanceolata
Pentas



- Graffiti® considered most uniform in habit as well as bloom time
- Comes in pink, purple, bright red, rose and white
- 16” high and 12” wide
- Very heat and drought resistant



Cleome
Spider flower

- Interesting fragrant flowers
- Colors come in shades of white, pink and purple
- 3-6' tall
- Attracts butterflies and hummingbirds
- Dwarf Hybrids include the Sparkler series, the Spirit series



Angelonia angustifolia
Summer Snapdragon

- Tolerant of heat and humidity
- Good container plant
- 12"-18" tall
- Cultivars available in white, blue, light pink and bicolor flower colors





Cuphea ignea
Firecracker Plant

- Colors come in Orange, red, purple, yellow or pink
- Bloom from June- September
- Full Sun
- Bonus:Edible leaves and flowers



Ipomoea batatas
Sweet potato vine



- Containers or ground cover
- Many colors of foliage
- Full Sun
- Takes heat and humidity
- ‘Margarita’ is Ok Proven



Sweet potato
"Tricolor"



Salvia leucantha
Mexican sage

- Lavender colored flowers bloom late summer.
- Drought tolerant
- Full sun
- 4'hight x 3'wide
- Pollinators love it!

PERENNIALS



Agastache
Hyssop

- Flowers are fragrant
- Attract bees
- Several cultivars available





Amsonia hubrichtii
Arkansas Bluestar



- Blue flowers in summer
- Yellow/orange foliage in fall
- Full sun
- Drought tolerant native



Nepeta
Catmint “Walkers Low”



- Full sun to part shade
- 2' high x 2-3' spread
- Drought tolerant
- Pollinator favorite



Gaura lindheimeri

- Very Showy
- Blooms for a long period
- 30 inches tall
- Several cultivars available
- 'Siskiyou Pink' is Ok Proven





- Full sun
- Low maintenance
- Beautiful summer blooms
- Tolerant of poor soils
- 18" tall x 24" spread

Achillea millefolium 'Paprika'



Concilium greggii
Blue Mist Flower

- Many blossoms
- Attracts butterflies
- Native
- Grows in a variety of soils



Salvia greggii (microphylla)
'Pink Preference'



- Unusual two-toned flowers bloom all summer
- Drought tolerant
- Full sun
- 4'high x 3'wide



Sedum
Autumn Joy

- Extraordinary foliage
- Attracts pollinators
- Late summer blooms
- Full to part sun
- 2' x2'



More Sedums!



- Beautiful spring color (Creeping)
- Beautiful Summer color (Garden)
- “Volcano” series of garden phlox is Ok Proven
- Grows in a variety of soils

Phlox spp.
Creeping and Garden Phlox



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VINES



Bignonia capreolata
Cross vine

- Evergreen
- Vigorous Vine
- Beautiful orange flowers in spring



Wisteria frutescens
American wisteria

- Beautiful flowers the same time as crossvine
- Not as invasive as Chinese wisteria

NATIVES / WILDFLOWERS



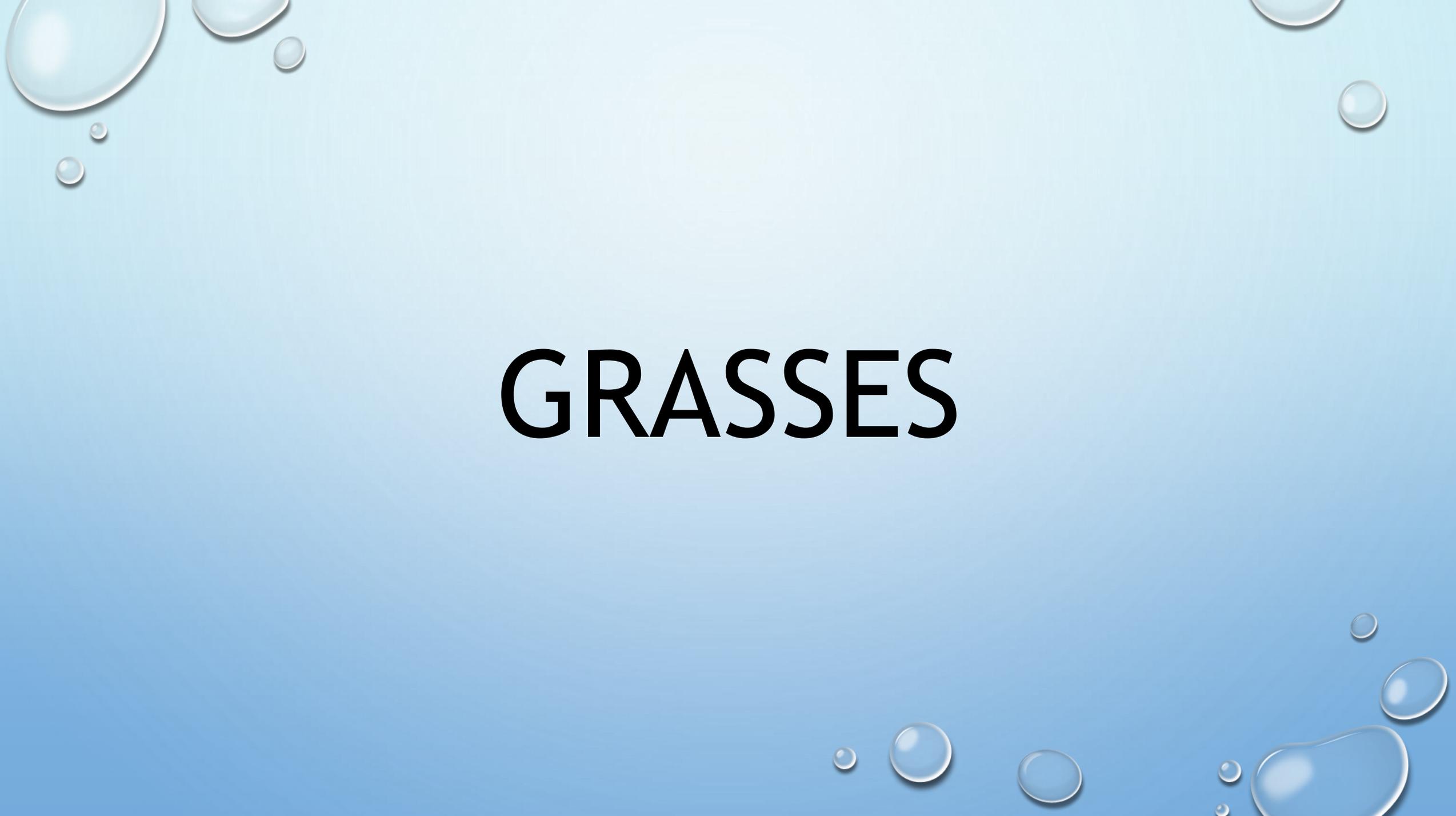
Asclepias species
Milkweed

- Milkweeds are host plants for Monarchs
- Native
- Well adapted to many soil types
- Full sun or part shade





Oklahoma State Wildflower

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GRASSES



Muhlenbergia capillaris
Pink Muhly

- Very drought tolerant
- Native grass
- Deer resistant
- Stunning pink to lavender floral display

SHRUBS AND TREES



Vitex angus-castus
Chaste Tree

- Flowers attract bees
- Full Sun
- Can be pruned to ground in spring
- Various cultivars





Chaenomeles speciosa
'Double Take' series
Flowering Quince



- Profusion of early spring double flowers that resemble camellias
- Flowers are scarlet, orange, pink or peach
- Drought tolerant; Does well in variety of soils
- 4'-5' high and wide



Juniperus vars.
“Grey Owl” Juniper

- Amazing silver- grey foliage
- Drought tolerant
- Full sun
- 3’ tall and 6’ wide





Rhus typhina
'Tiger Eyes'

- Amazing color!
- 3-6' tall and wide
- Drought tolerant
- Full Sun



Callicarpa americana
American Beautyberry



- Fantastic purple fruit in the fall/winter
- Sun to partial shade
- 4-6' x 4-6'
- Native
- Other berry colors available



Chilopsis linearis
Desert Willow

- 15' – 30' T 15' – 25' W
- Can be grown as a Shrub
- May To September White, Pink or Violet flowers
- Sun to Part Shade





Hibiscus syriacus
Rose of Sharon or Shrub Althea

- Bloom all summer
- Old fashioned favorite but new varieties are seedless:
 - ‘Aphrodite’ (Deep Rose Pink), ‘Diana’ (White), ‘Helene’ (White with Maroon Eye),
 - Doubles: ‘Strawberry Smoothie’ ‘Blueberry Smoothie’



Malus
'Prairifire' Crabapple

- Rose pink flowers in spring
- Disease resistant
- Has pretty red fruit





Cupressus arizonica
Arizona Cypress

- Amazing silver-grey foliage
- Interesting bark
- Drought tolerant
- Full sun
- Medium sized tree





Cotinus coggygria
Smoke Tree

- Fuzzy clusters of flowers in summer look like smoke
- Different leaf colors
- Full sun
- Medium sized tree





Chilopsis linearis
Desert Willow cultivars

- Not really a willow
- Small tree - 15'x20'
- Showy flowers in early summer and the keeps blooming intermittently





Quercus shumardii
Shumard Oak

- REALLY any of the Oaks
- Burr, Sawtooth, Chinkapin all very good
- Flowering in spring are gorgeous
- Does well in variety of soils





- REALLY any of the redbuds
- ‘Oklahoma” cultivar is Ok Proven
- Flowering in spring are gorgeous
- Does well in variety of soils



Cercis canadensis ‘Ruby Falls’