

TEXAS SMARTSCAPE

**Landscape Design
and
Maintenance
for
Water Quality
Water Conservation**

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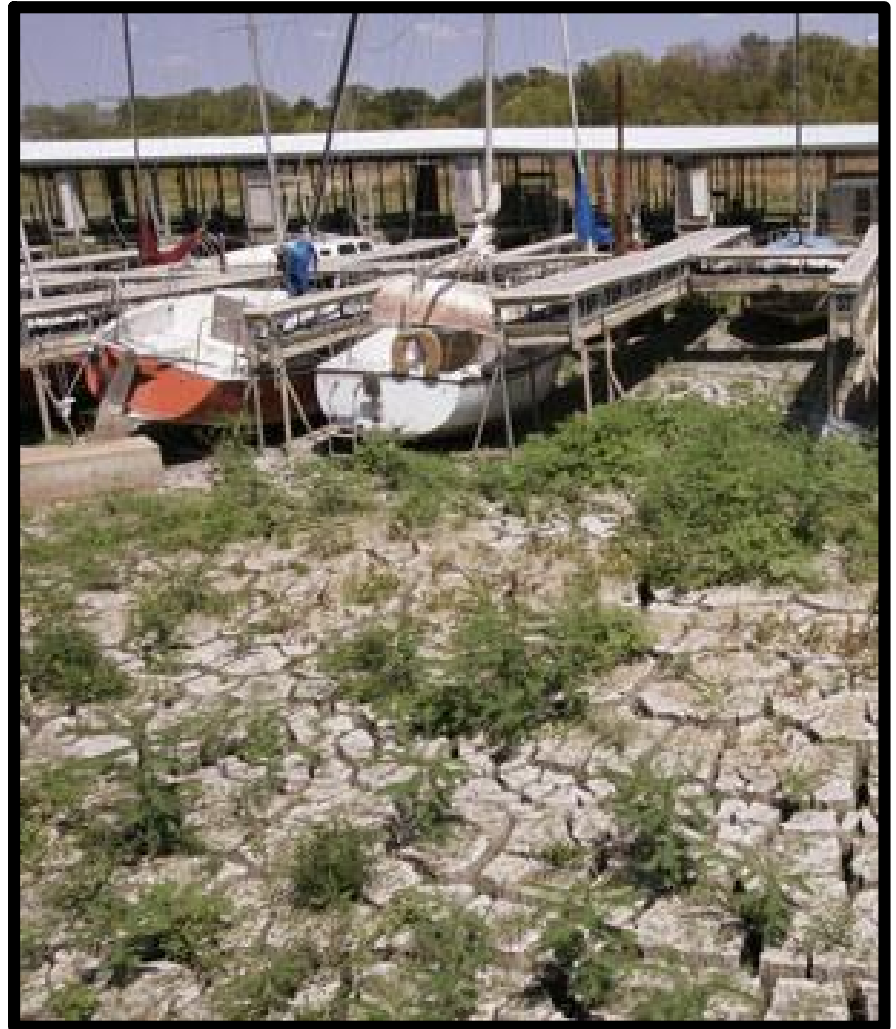
Texas SmartScape

- **Developed by North Central Texas Council of Governments**
- **Runoff from commercial and home landscapes is a major non-point source of water contamination**
- **Runoff carries**
 - **Fertilizer**
 - **Pesticides**
 - **Soil particles**

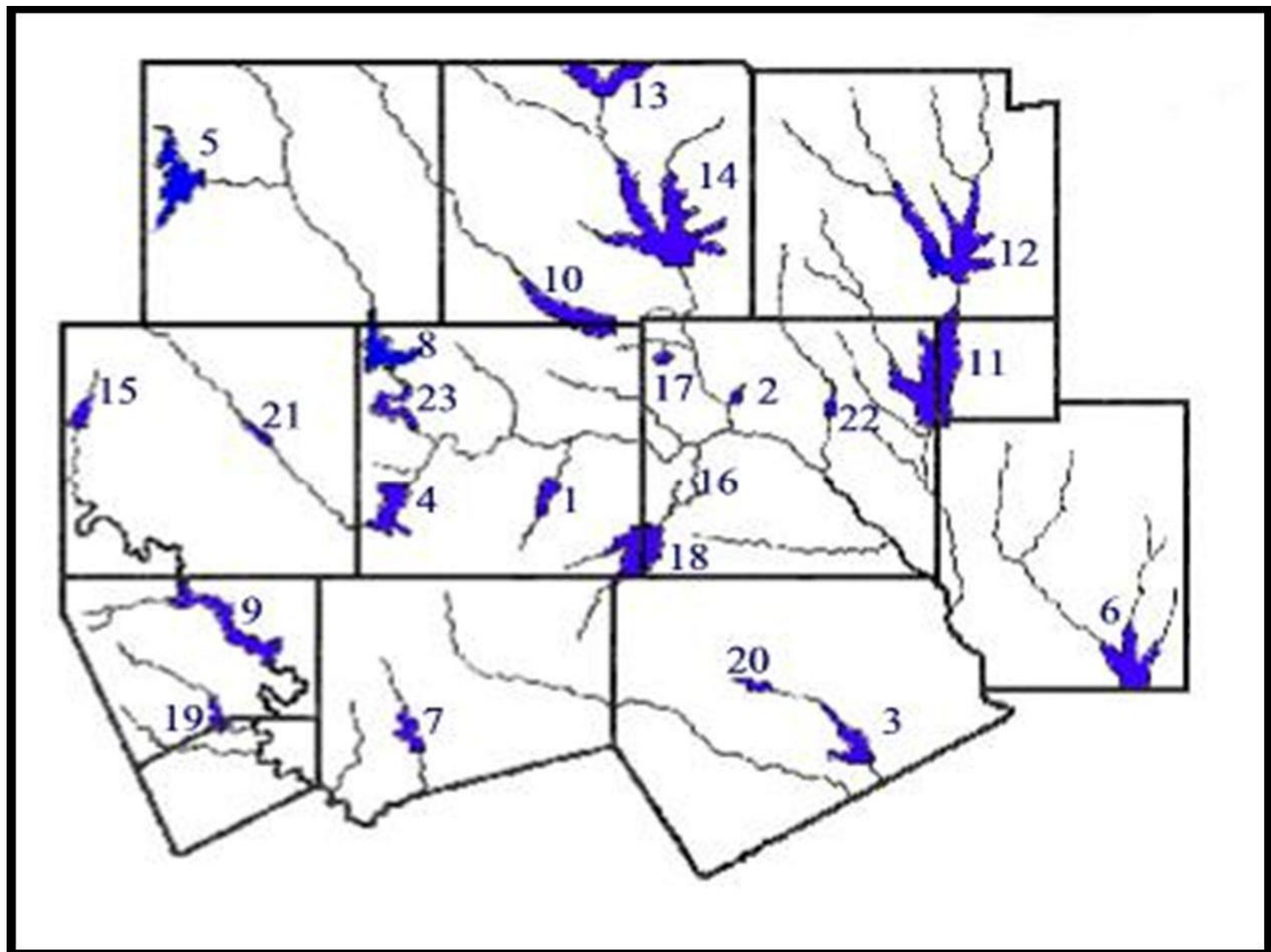


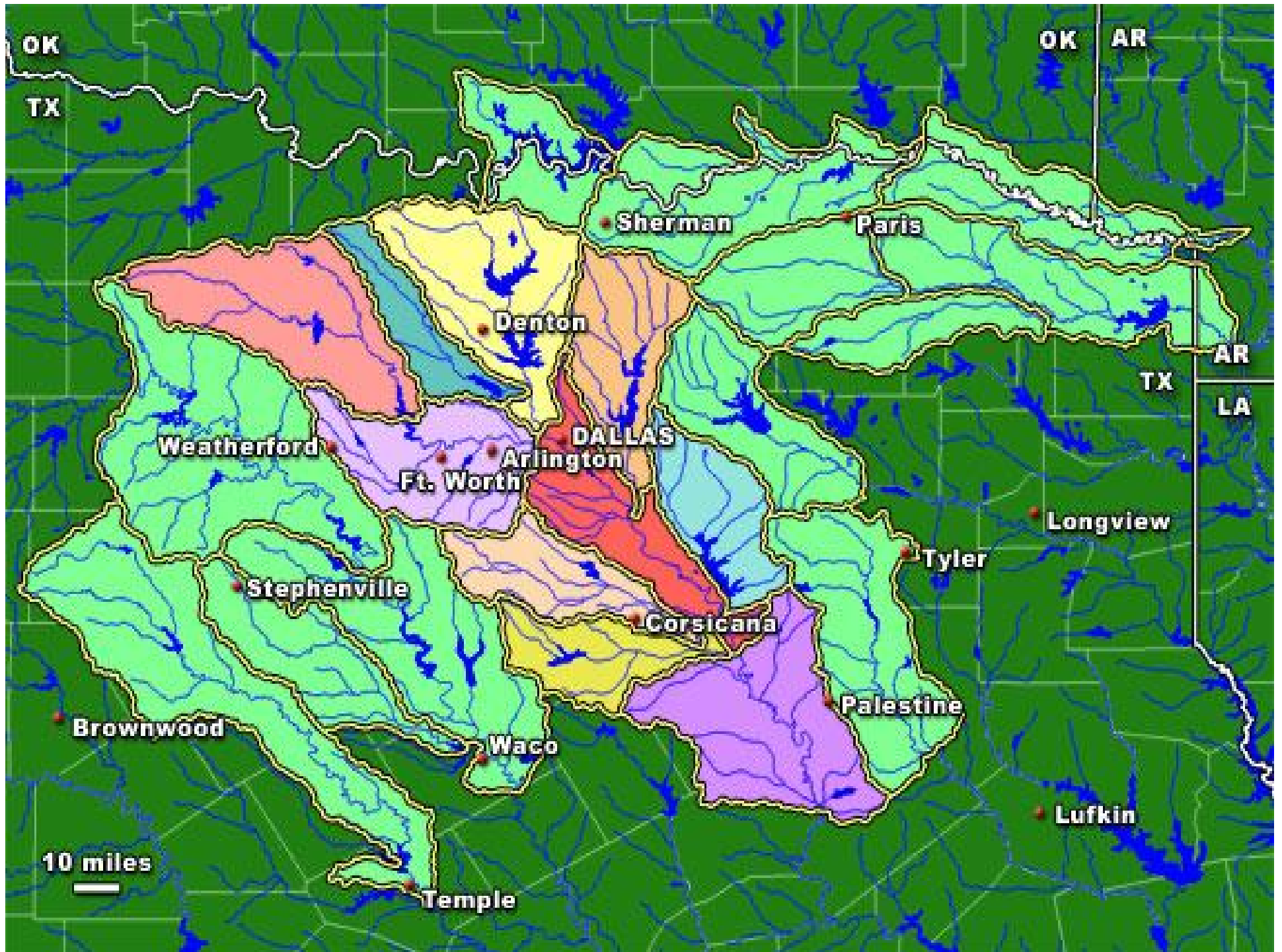
Got Water?

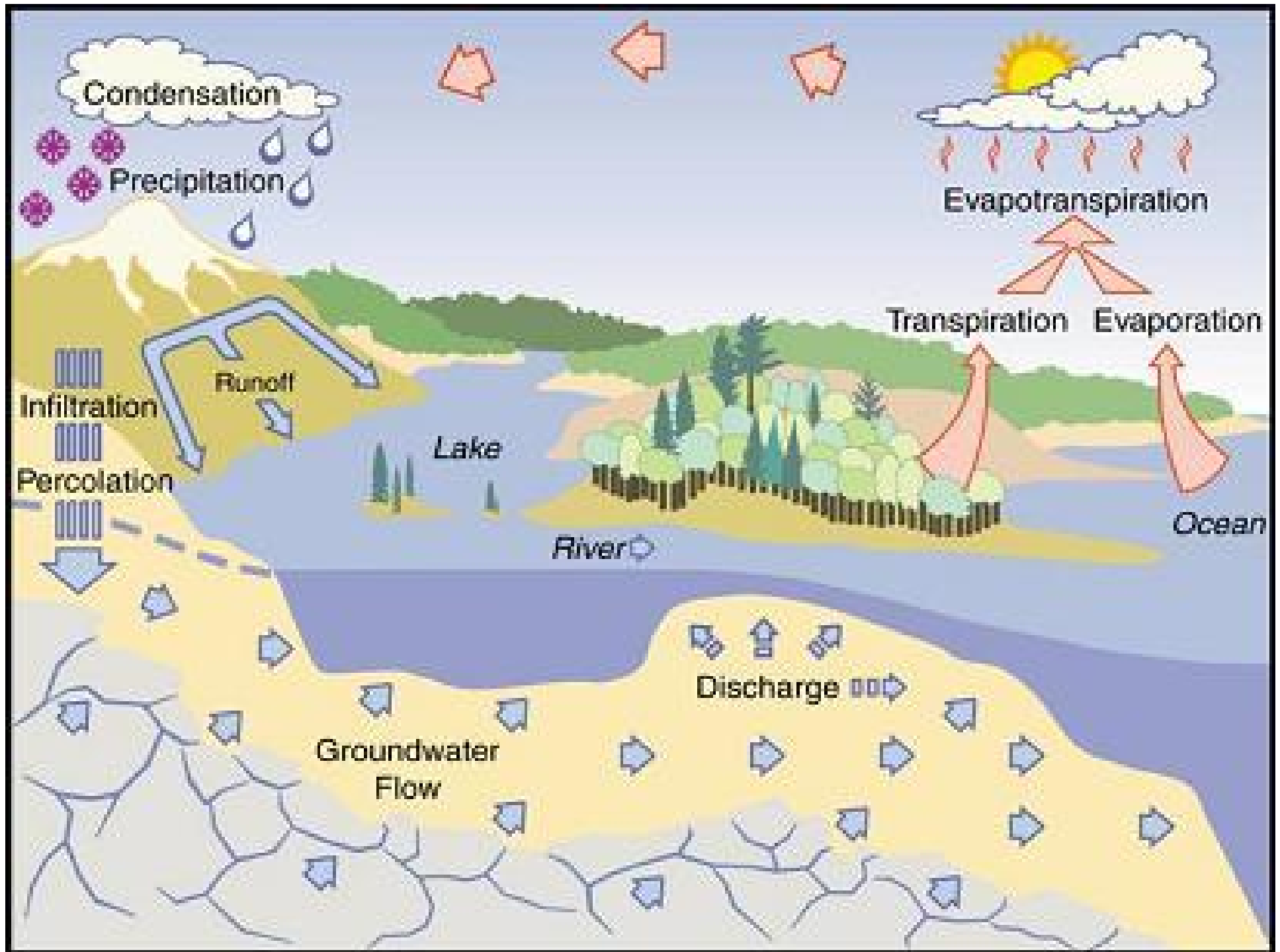
- **Extended Drought – not enough water going into system**
- **Population and Growth**
- **Older Lakes Filling with Sediment**



Lake Lavon 2006







North Central Texas Water Issue

- **3.3 million:** Projected acre-feet of water North Texas will need in 2060
- **1.7 million:** Acre-feet of water now available to North Texas
- SOURCE: Texas Water Development Board

Water Rates

2006 Rates for Fort Worth Water Department			
Residential Rates in Fort Worth		Residential Rates outside Fort Worth	
First 8 ccf (5984 gallons)	\$1.77	First 8 ccf	\$2.21
Next 12 ccf	\$2.44	Next 12 ccf	\$3.05
Over 20 ccf	\$3.00	Over 20 ccf	\$3.75
Irrigation (including gas drilling)	\$2.33	Irrigation (including gas drilling)	\$ 2.91
Source: Fort Worth Water Department			
1 cf = 7.48 gallons; 1 ccf = 100 cubic feet = 748 gallons			

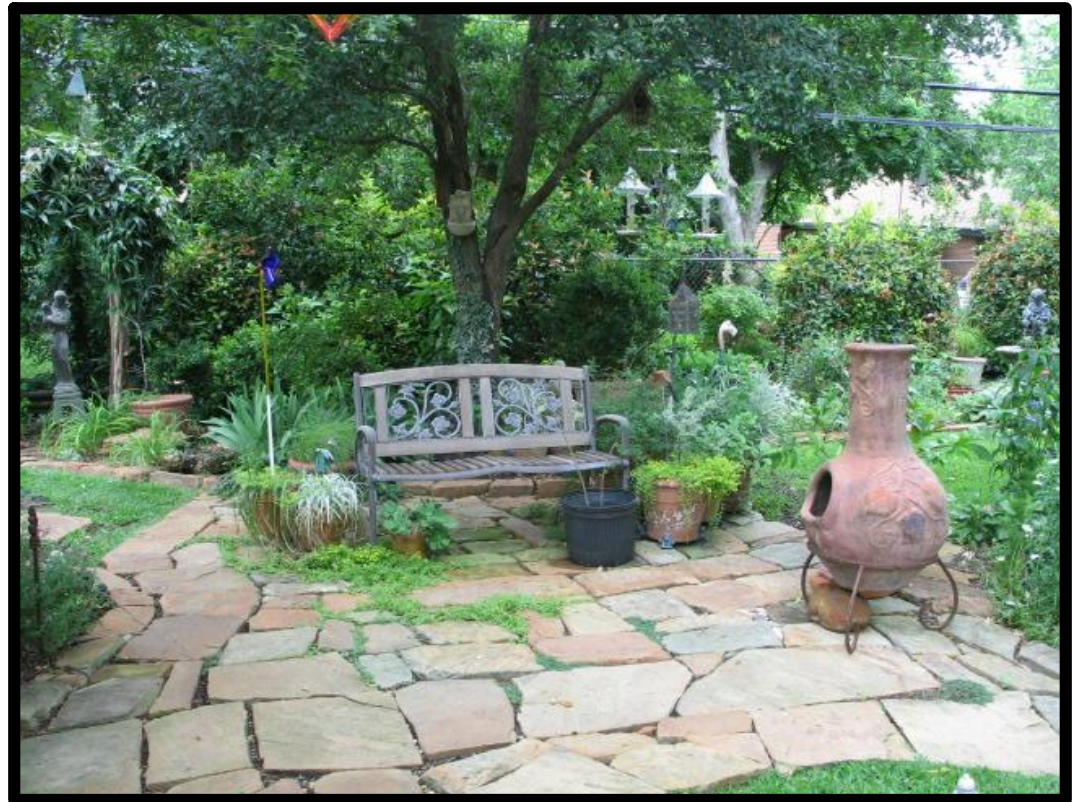
Landscape Water Conservation

- Texas SmartScape
- EarthKind
- Xeriscape
- Waterwise
- Water Smart
- Yard Smart



Texas SmartScape

- Create and maintain a beautiful landscape using native and adapted plants



Native and Adapted Plants

- **Require less water**
- **Require little or no pesticides**
- **Require less fertilizer**
- **Save \$\$\$**



Landscape Water Conservation

Basic Principles

- Planning and Design
- Soil Analysis and Preparation
- Plant Selection
- Practical Turf Areas
- Irrigation Efficiency
- Mulch
- Landscape Best Management Practices

Texas SmartScape

Provides

- **Landscape Design Information**
- **Plant Selection**
- **Landscape Maintenance Information**
 - Don't Bag It
 - Proper Irrigation
 - Fertilizer
 - Pest control
 - Mulch
- **Contacts**
- **Resources**



Texas SmartScape





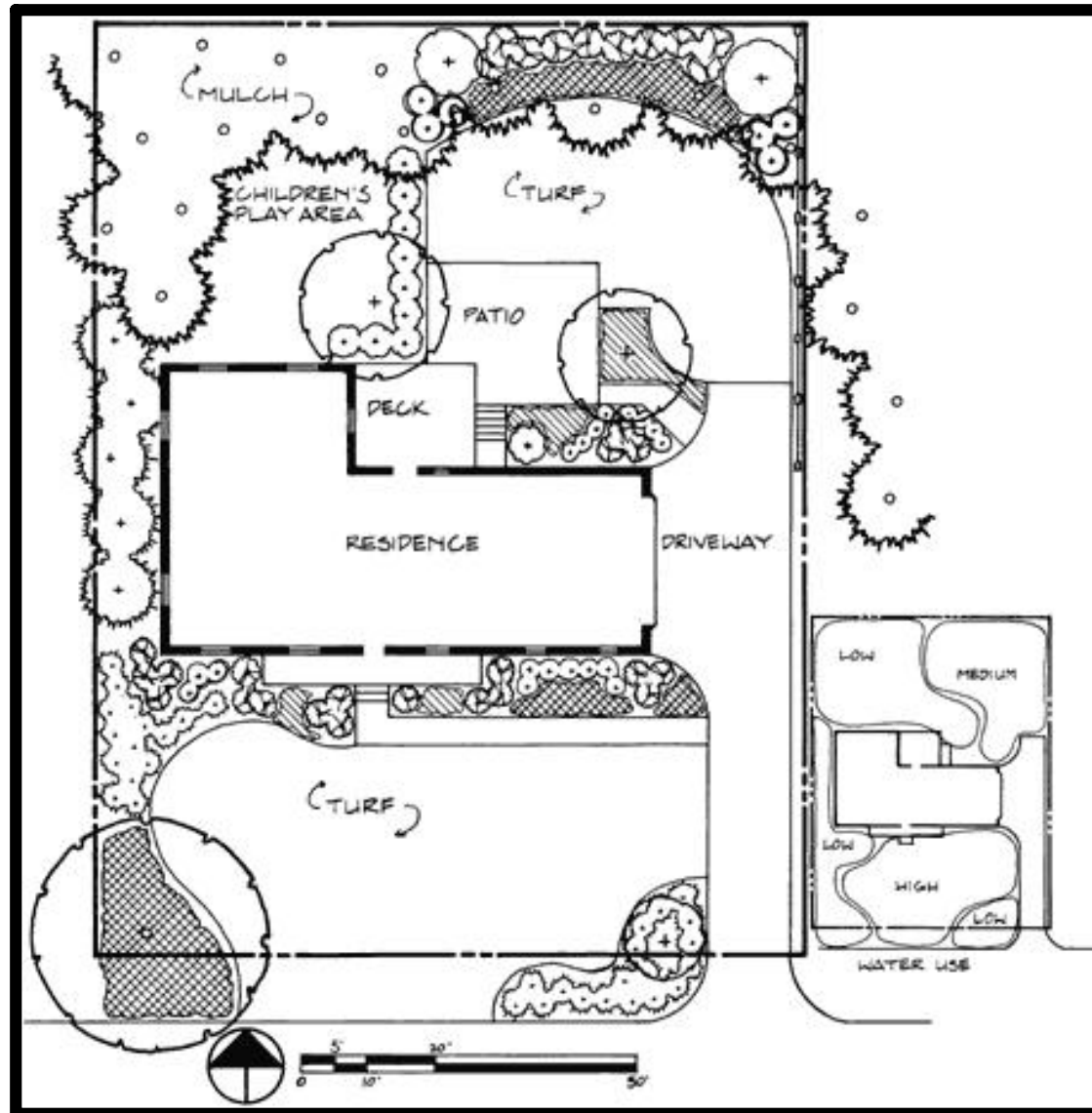
678
RENTALS
Vacation RENTALS
PROPERTY MANAGEMENT
WOODFIELD
The Pampered Pool



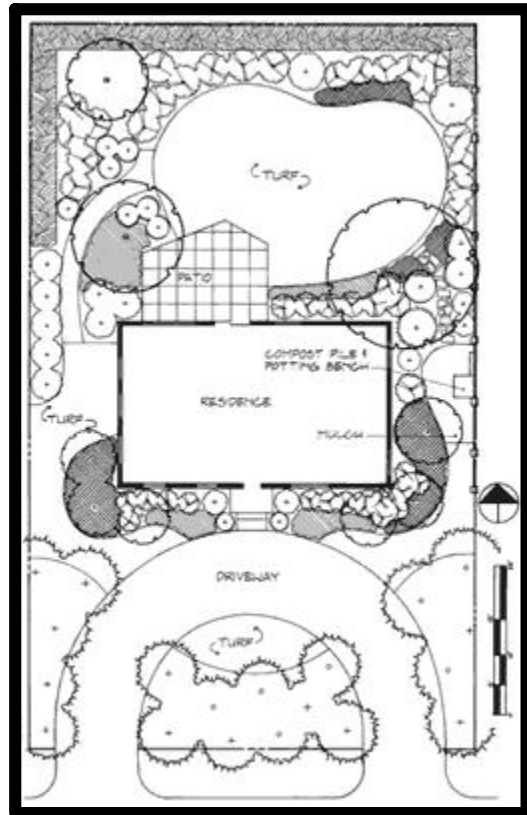




Planning and Design



Design



Soil Analysis and Preparation



Texas SmartScape



Garden Tool Box

Plant Type

All

Ornamental Color

All

Light Requirements

All

Water Demand

All

Plant Form

All

Plant Spread (ft.)

All

Plant Height (ft.)

All

Native TX
Plant?

All

Wildlife Value

Any

Blooming

All

Deciduous or
Evergreen?

All

Enter search text for a phrase to
be found in the plant's common
name (e.g. lily).

Click To Show
Listing Of Plants

Return To Select Menu

Plant Selection

- **Plant Type**
- **Plant Form**
- **Ornamental Color**
- **Light Requirement**
- **Water Demand**
- **Plant Spread (ft.)**
- **Min. Max. Plant Height (ft.)**
- **Native Texas or Adapted Plant**
- **Wildlife Value**
- **Blooming Season**
- **Deciduous Or Evergreen**

Plant Selection



SmartScape™ Plant Search - Garden Toolbox

Click on photo to enlarge it.



Photo provided by: Randy Weston,
Weston Gardens Inc.

[Return To
Search Results](#)

[Print Plant Info](#)

[New Search](#)

[Return To
Main Menu](#)

Information On Butterfly Bush

<i>Botanical Name:</i>	Buddleia davidii
<i>Plant Type:</i>	Perennial
<i>Plant Form:</i>	Upright
<i>Light Required:</i>	Full Sun
<i>Water Demand:</i>	Medium
<i>Plant Height (ft.):</i>	6'
<i>Plant Spread (ft.):</i>	4'
<i>Ornamental Value:</i>	White, Pink, Purple, Red
<i>Months Of Bloom:</i>	Jun - Sept
<i>Native Texas Plant:</i>	Adapted
<i>Deciduous / Evergreen:</i>	Deciduous
<i>Wildlife Value:</i>	Birds (including Hummingbirds), Butterflies (nectar source)
<i>Notes:</i>	As name implies, this shrub will attract a myriad of butterflies for much of summer. Wet feet will rot the root system. Cut back every year for best bloom and shape.

Butterfly Bush



Practical Turf Areas



Practical Turf Areas



Irrigation Efficiency

- **Residential and commercial landscapes use more than 25 percent of the total water consumption in urban areas of Texas**
- **Water usage increases 25 to 60% during the summer**
- **50% of irrigation water is lost due to evaporation**
- **40 to 60% of the summer water bill is irrigation**



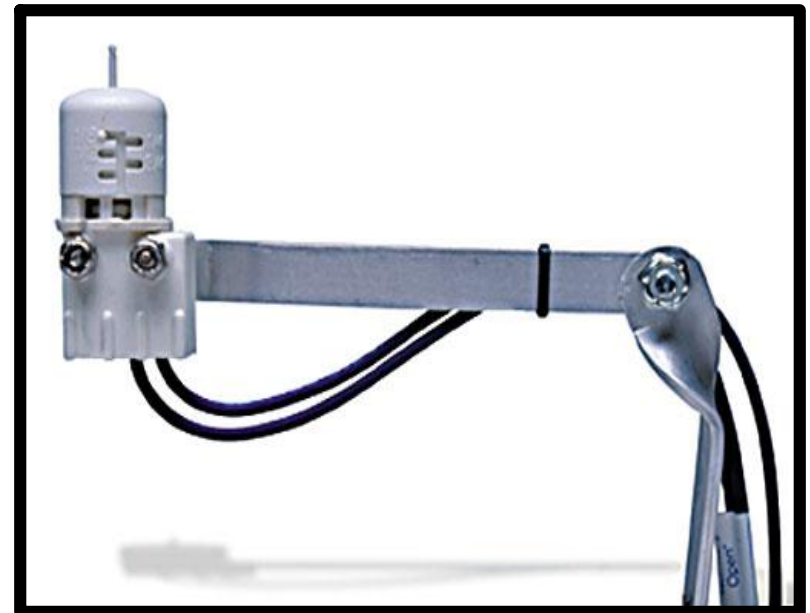
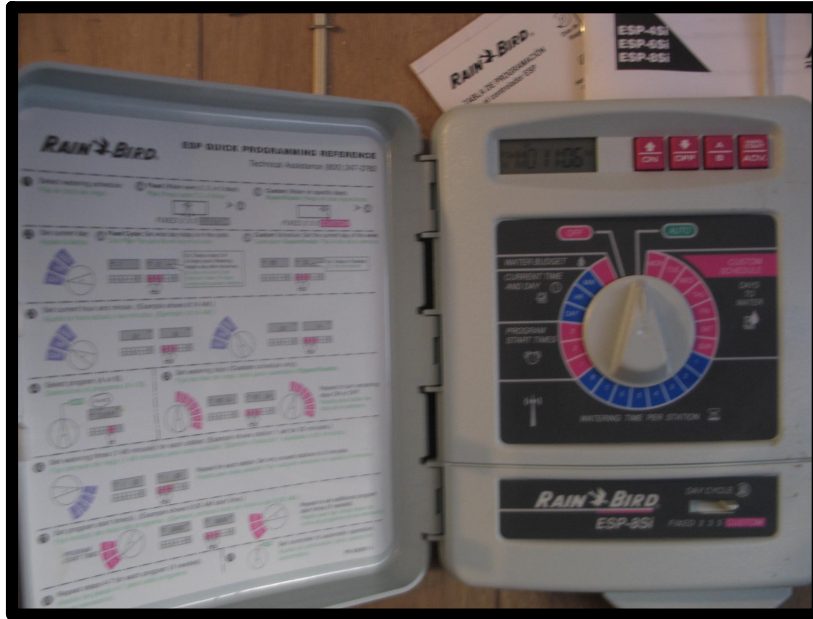


Irrigation running during rain and watering the street

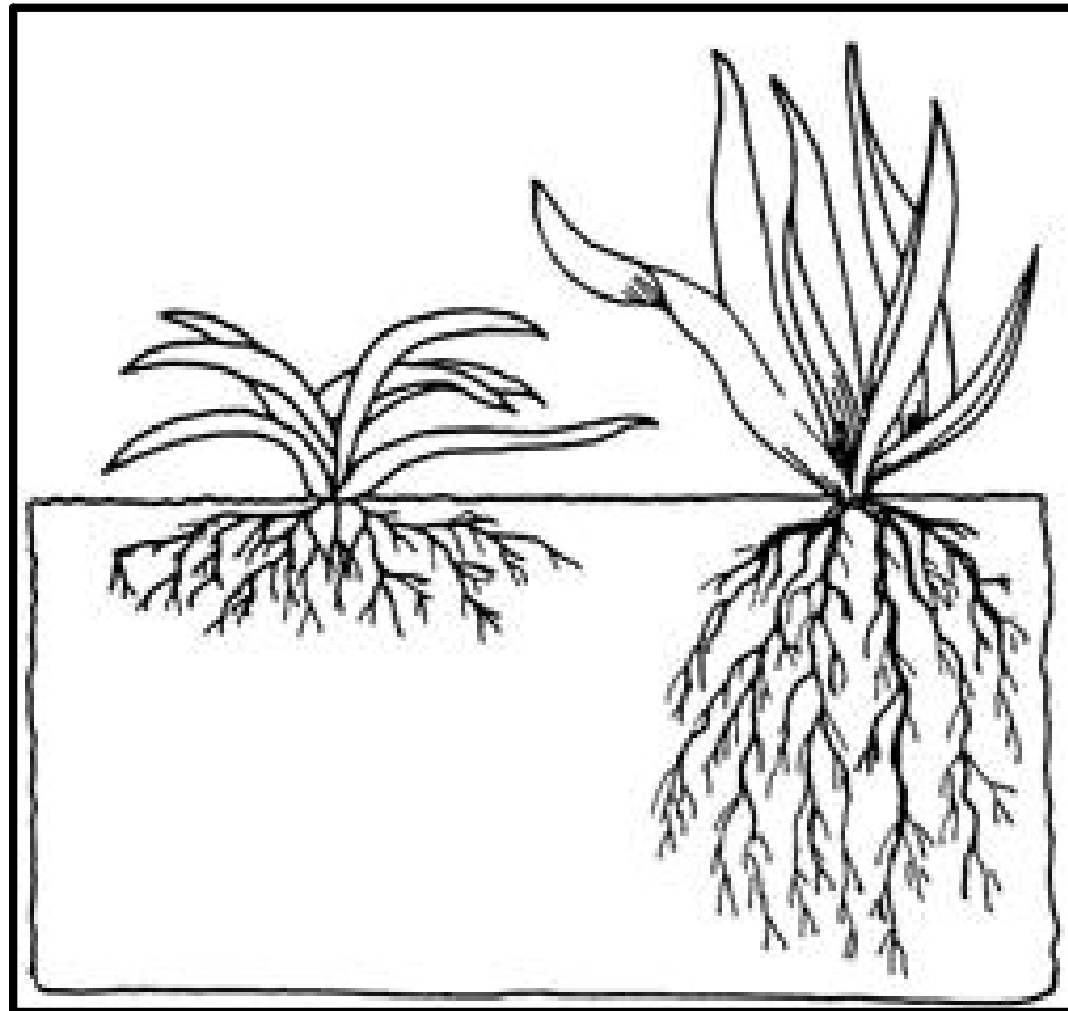
Irrigation Efficiency

- **Water deep and infrequently**
- **Avoid runoff**
- **Water between 6 PM and 10:00 AM**
- **Use rain and freeze sensor**
- **Use drip irrigation or soaker hoses in shrub, groundcover and flower beds**
- **Water every 5 to 7 days in the summer and 15 to 20 days in the winter**
- **Keep a 3” layer of mulch around shrubs and flowerbeds**

Irrigation Efficiency



Irrigation Efficiency



Drip Irrigation



Irrigation Audit

How Often and How Long

- **Check every sprinkler head**
- **Make any repairs**
- **Run and time system with catchment cans**
- **Correct any poor distribution**
- **Time how long each station needs to run**
- **Set controller**
- **Change Controller each season**



MULCH

Keep a 3 to 4 inch layer of mulch

- **Reduces evaporation**
- **Moderates soil temperature**
- **Reduces erosion**
- **Increases water absorption**
- **Weed control**
- **Decomposes**



Compost All Yard Waste Don't Bag It



Best Management Practices

- **Mowing**
 - Remove 1/3 leaf blade
 - Shape blades
 - Don't Bag It



Best Management Practices

- **Fertilizer**
 - **Soil test**
 - **Slow Release**
 - **Do not apply when rain is expected**



Drop spreader

Best Management Practices

- **Pest Control**
 - Identification
 - Low Toxicity Pesticides



Resources

- Texas AgriLife Extension
- Aggie-Horticulture.tamu.edu
- North Central Texas Council of Government
- Texas SmartScape web site:
www.txsmartscape.com
- Water Districts
- Texas Nursery and Landscape Association
- Water Providers
- Landscape Water Conservation Demonstrations
- Compost Demonstrations
- Weston Gardens in Bloom
- Texas Super Stars
- Earth Kind Roses
- <http://urbanlandscapeguide.tamu.edu/>





For More Information
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