

**ITEM#: 1**

**Discussion and consideration of adoption of Guidelines for Native Plants**

## City of Mission Nativescapes Guidelines

Using native plants in your garden provides a multitude of benefits for people and wildlife, including water conservation, supporting birds and pollinators, cooling the environment, and aesthetic beauty.

There are many ways you can maximize those benefits in your space, and this document aims to equip you with the knowledge of best practices to maintain your garden.

### Water Conservation Best Practices

- Follow the City of Mission [Water Restrictions](#)
  - Violations may result in a \$50.00 to \$200.00 fine
- Water your plants as needed, rather than following a rigid irrigation schedule
  - If your plants are wilted in cooler morning hours, they may need supplemental irrigation
  - Use a soil moisture sensor to check water levels in your garden soil
- Irrigate in the evening or at night to avoid evaporative water loss
  - Watering on hot, windy days limits how well water infiltrates your garden soil and is water inefficient
- Use drip irrigation or sprinklers that form large water droplets, or hand water with a hose
  - Misting sprinklers tend to lose water to the wind more easily
- Use an organic mulch for your garden beds
  - Wood chip, bark, or other organic mulch not only helps trap moisture in the soil, but also eventually breaks down and increases your soil organic matter and provides compost for your plants.

### Cues for Care (based on [Wild Ones guidelines](#))

- Mown or trimmed edges
  - Maintaining mown groundcover or grass strips along pathways, driveways, or sidewalks helps indicate that your yard is a cared-for and purposeful space.
  - Using edgers – whether stone, plastic, or wood – helps visually delineate garden beds.

- Maintain open areas of groundcover plants, subshrubs, mulch, or other landscaping materials (rocks, pavers, etc.) that amount to around 30% of your front yard area.
  - Avoid obstruction of views or lines of sight
- Trimmed shrubs and trees (see [Texas A&M Agrilife Extension](#) and [Forest Service](#) recommendations)
  - Keep your garden beds trimmed to prevent shrubs or tree branches from sprawling over garden boundaries.
- Design your garden with discernable patterns and garden structure
  - Plant shrubs, wildflowers, groundcovers, or cacti along the foundation of your home.
  - Avoid blocking your windows, doors, or obstructing key lines of vision for you, your neighbors, and vehicles.
  - Plant clusters of plants in a balanced pattern over your yard. For example:
    - Islands: A larger shrub or tree in the center, surrounded by smaller plants.
    - Hedges: A series of plants of similar size and shape planted in a row.
    - Groundcovers: Low-growing plants forming a mat over the ground
  - Include plant species that have bright flowers and bloom often.
    - See recommended plant list for ideas.
- Include bird feeders, bird baths, or other designed wildlife homes in your garden.
  - See [Cornell Lab of Ornithology website](#) for bird feeding recommendations.

### **Wildlife-friendly Practices**

- Avoid using pesticides and herbicides in your garden
  - Pesticides are often non-specific, meaning that they can spread to beneficial animals as well.
- Don't heavily prune your plants while they are flowering or fruiting
  - Leave the birds and butterflies food resources

The list of plants can be found in Exhibit A

Examples of acceptable Nativescapes can be found in Exhibit B

Type	Botanical Name	Common Name	Flower Color	Comments
TREES	<i>Ebenopsis ebano</i>	Texas Ebony; Ebano	White	Shade tree; fragrant flowers; edible fruit; host for Large Orange Sulfur
	<i>Leucaena puberulenta</i>	Lead Tree; Tepeguaje	White	Fast-growing and tall
	<i>Prosopis glandulosa</i>	Honey Mesquite	White/light yellow	Shade tree; fruit edible
	<i>Fraxinus berlandieriana</i>	Rio Grande Ash	White	Shade tree
	<i>Ehretia anacua</i>	Anacua; Sandpaper Tree	White	Shade tree; fruit edible
	<i>Celtis pallida</i>	Spiny Hackberry; Granjeno	Yellow/white	Fruit edible
	<i>Pithecellobium pallens</i>	Tenaza	White	Fragrant blooms; butterfly nectar source
	<i>Vachella farnesiana</i>	Texas Huisache	Yellow	Fragrant blooms
	<i>Senegalia berlandieri</i>	Guajillo	White	Small tree; stays a dark shade of green all year
	<i>Parinsonia aculeata</i>	Retama; Lluvia de Oro	Yellow	Long leaf stem with tiny leaflets
	<i>Cercidium texanum</i>	Texas Palo Verde	Yellow	Similar flower to Retama; prominent green bark
	<i>Caesalpinia mexicana</i>	Mexican Caesalpinia	Yellow	Host for Curve-Wing Metalmark butterfly
	<i>Esenbeckia berlandieri</i>	Limoncillo	White	
	<i>Sapindus drummondii</i>	West soapberry; Jaboncillo	White	Leaves change color in the fall
	<i>Condalia hookeri</i>	Brasil	Green	Shrubby; edible fruit
	<i>Sideroxylon celastrinum</i>	Coma	White	Shrubby; edible fruit
	<i>Diospyros texana</i>	Persimmon; Chapote	White	Edible fruit in female trees
	<i>Cordia boissierei</i>	Wild Olive; Anacahuita	White	Big white flowers, small tree
	<i>Sabal mexicana</i>	Sabal Palm	White	If left untrimmed, provides shelter for bats and other life
	<i>Adelia vaseyi</i>	Vasey's Adelia	White	Shrubby tree; host for Mexican Bluewing butterfly
	<i>Yucca treculeana</i>	Spanish Dagger; Palma Pita	White	Flowers edible; pollinated by small moth
	<i>Ulmus crassiflora</i>	Cedar Elm	White	Requires moist area
<i>Taxodium mucronatum</i>	Montezuma bald cypress	None	Requires moist area	
SHRUBS				
	<i>Sophora secundiflora</i>	Texas Mountain Laurel	Purple	Fragrant blooms
	<i>Leucophyllum frutescens</i>	Purple Sage; Cenizo	Pink/Purple	Blooms with the rains; host for Theona Checkerspot butterfly
	<i>Xylosma flexuosa</i>	Brush Holly; Coronillo	White	Fruits good source for birds
	<i>Acacia rigidula</i>	Black Brush	White	
	<i>Citharexylum berlandieri</i>	Berlandier's Fiddlewood	White	Leaves turn orange when water-stressed

<i>Citharexylum spathulatum</i>	Mission Fiddlewood	White	
<i>Schaefferia cuneifolia</i>	Desert Yaupon; Capul	White	
<i>Viguiera stenoloba</i>	Skeleton Leaf Golden Eye	Yellow	Bloom spring, summer and fall
<i>Coursetia axillaris</i>	Texas Baby Bonnets	Light Pink	Host for Southern Dogface butterfly
<i>Salvia ballotiflora</i>	Shrubby Blue Sage; Mejorana	Blue	Aromatic leaves
<i>Malpighia glabra</i>	Manzanita; Barbados Cherry	Red	Edible berries, attracts specialist bees
<i>Croton humilis</i>	Low Croton	White	Crotons attract butterflies
<i>Guaiacum angustifolium</i>	Soapbush; Guayacán	Purple	Host for Lycide Sulfur butterfly
<i>Lantana urticoides</i>	Texas Lantana	Yellow/Red	
<i>Lantana achyranthifolia</i>	Brushland Lantana	White	
<i>Eysenhardtia texana</i>	Texas Kidneywood	White	Host for Southern Dogface butterfly
<i>Aloysia gratissima</i>	White Brush	White	Small fragrant white flowers
<i>Malvaviscus drummondii</i>	Turk's Cap	Red	Host Mallow Scrub-hairstreak, Turk's Cap White-Skipper
<i>Melochia tomentosa</i>	Pyramid Bush	Pink	Excellent butterfly nectar plant; pink flowers
<i>Trixis inula</i>	Trixis	Yellow	Can be hedged
<i>Forestiera angustifolia</i>	Elbow Bush	White	Thornless; food for wildlife
<i>Lycium berlandieri</i>	Berlandier's Wolfberry	White	Edible berries
<i>Telosiphonia lanuginosa</i>	Flor De San Juan; Woolly Rocktrumpet	White	
<i>Hibiscus martianus</i>	Heart Leaf Hibiscus; Tulipán Del Monte	Red	Fragrant flowers; pollinated by hawk moths
<i>Amyris texana</i>	Torchwood	White	Likes shade; requires little water; red flower
<i>Colubrina texensis</i>	Hogplum	White	Flowers attract evening pollinators, like Hawk moths
<i>Helianthus annuus</i>	Common Sunflower; Mirasol	Yellow	Seeds eaten by goldfinches
<i>Salvia coccinea</i>	Red Sage; Scarlet Sage	Red	Butterflies, hummingbird nectar; full sun to partial shade
<i>Ruellia nudiflora</i>	Ruellia; Wild Petunia	Purple	
<i>Palafoxia texana</i>	Palafoxia	Pink	Annual; attracts butterflies; seeds eaten by lesser goldfinch
<i>Wedelia acapulcensis</i>	Hairy Wedelia	Yellow	Host for Bordered Patch butterfly
<i>Rivina humilis</i>	Pigeon Berry	White	Shade tolerant
<i>Verbesina enceloides</i>	Cow Pen Daisy	Yellow	Host for Bordered Patch butterfly
<i>Chromolaena odorata</i>	Crucita	Purple	Host for Rounded Metalmark and other butterflies
<i>Tamulipa azurea</i>	Spray Mistflower	Purple	
<i>Lippia graveolens</i>	Mexican Oregano	White	Leaves used in cooking like oregano
<i>Asclepias oenotheroides</i>	Prairie Milkweed	White	Monarch butterfly larvae

<i>Asclepias linearis</i>	Slim Milkweed	White	Monarch butterfly larvae
<i>Bernardia myricifolia</i>	Oreja de Ratón	White	Host for Lacy's Scrub-hairstreak butterfly

GROUND COVER

<i>Portulaca oleracea</i>	Common Purslane	Yellow	Shade tolerant
<i>Portulaca pilosa</i>	Chisme	Red	Related to moss rose
<i>Nama parvifolium</i>	Nama	Purple	Leaves fragrant when rubbed
<i>Heliotropium angiospermum</i>	Scorpion's Tail Heliotrope	White	Butterfly nectar plant
<i>Phyla nodiflora</i>	Texas Frog Fruit	White	
<i>Justicia pilosella</i>	Tube Tongue	Purple	Host Tiny & Elida Checkerspot, TX Crescent, Vesta Crescent
<i>Thymophylla tenuiloba</i>	Tiny Tim; Dogweed	Yellow	Leaves aromatic

VINES

<i>Passiflora foetida</i>	Corona De Cristo	Blue	Host Heliconia, Gulf Fritillary, Mexican Silverspot butterflies
<i>Passiflora suberosa</i>	Corky Stemmed Passion Flower	White	Host Heliconia; Gulf Fritillary; Mexican Silverspot butterflies

CACTI

<i>Opuntia engelmannii</i>	Texas Prickly Pear	Yellow/Orange/Pink/Red	Edible pads and fruit
<i>Ferocactus hamatacanthus</i>	Lower Rio Grande Valley Barrel	Yellow	Likes shade
<i>Echinocereus enneacanthus</i>	Strawberry Cactus	Pink	Partial shade; Edible fruit
<i>Mammillaria sphaerica</i>	Yellow Mammillaria	Yellow	Shade
<i>Echinocactus texensis</i>	Horse Crippler	Pink	Shade to full sun

GRASSES

<i>Aristida</i> sp.	Rio Grande Threecawn		
<i>Setaria macrostachya</i>	Bristlegrass		
<i>Buchloe dactyloides</i>	Buffalograss		
<i>Bouteloua hirsuta</i>	Hairy Grama		
<i>Setaria leucopila</i>	Plains Bristlegrass		
<i>Chloris cucullata</i>	Hooded Windmillgrass		
<i>Digitaria californica</i>	Arizona Cottontop		

<i>Pappophorum bicolor</i>	Pink Pappusgrass	
<i>Sporobolus wrightii</i>	Big Zacatón	

**References and Resources:**

Plants of Deep South Texas by Alfred Richardson and Ken King

The Grasses of Texas by Frank W. Gould

Native Plant Project at [nativeplantproject.com](http://nativeplantproject.com)

Bentsen State Park, World Birding Center, Mission, Texas

Quinta Mazatlán, World Birding Center, McAllen, Texas

**Nurseries that Carry Native Plants:**

**Mission:**

Oleander Nursery

National Butterfly Center

**Edinburg:**

Hui-xochitl Nursery

**Harlingen:**

Heep's LRGV Native Plant Nursery

The following photos used with permission: Pam Penick/Digging





© 2023 Pam Penick

