

Let It Grow: Creating and Maintaining No Mow Zones

TEXAS
PARKS &
WILDLIFE

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An aerial photograph of a suburban neighborhood. The houses are arranged in a grid pattern, with each house having a large, green lawn. The streets are paved and have some cars parked along the sides. The overall scene is a typical example of a planned suburban community.

A BRIEF HISTORY OF THE LAWN

Where did lawns come from and why are we so obsessed with them?





Photo Credit: Joseph Sohm



Lawns for Everyone!

- Push mower invented in 1870
- Suburban landscape envisioned as blend of natural and manicured space
- “with our open-faced front lawns we declare our like-mindedness to our neighbors, and our distance from the English, who surround their yards with inhospitable brick wall” –Frank J. Scott



Modern American Lawns

- Civic duty and social pressure
- Over **40 million** acres
- **9 billion** gallons of water daily
- Homeowners use **10 times more pesticides** per acre than farmers
- Running a lawn mower for 1 hour creates as much pollution as a 100-mile car trip

The HOA when the grass on your lawn is 0.001 inches above the required height.



















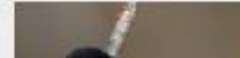
“Just a small park...”

- Cobblestone Trail Park in Fort Worth – 20 acres
- So far, 828 unique taxa documented

Observations

Search: Species Location Go Filters

Cobblestone Trail Park, Fort Worth 2,186 OBSERVATIONS 828 SPECIES 459 IDENTIFIERS 10 OBSERVERS

 <p>30 observations CC</p> <p>Aztec Dancer (<i>Zygia fulvicornis</i>)</p>	 <p>21 observations CC</p> <p>Post Oak (<i>Quercus stellata</i>)</p>	 <p>20 observations CC</p> <p>BlackJack Oak (<i>Quercus marilandica</i>)</p>	 <p>17 observations CC</p> <p>Blue Dasher (<i>Pachydiplax longipennis</i>)</p>	 <p>17 observations CC</p> <p>Bitterweed (<i>Helleborus amarus</i>)</p>
 <p>17 observations CC</p> <p>Coriberry (<i>Symphoricarpos orbiculata</i>)</p>	 <p>15 observations CC</p> <p>Fox Squirrel (<i>Sciurus niger</i>)</p>	 <p>14 observations CC</p> <p>Common Buckeye (<i>Limnitis lorpehea</i>)</p>	 <p>14 observations CC</p> <p>Yellow-rumped Warbler (<i>Setophaga coronata</i>)</p>	 <p>14 observations CC</p> <p>Quilhou Privet (<i>Ligustrum quihoui</i>)</p>
				



Plants rule the world.



Why does it matter?

- Human health benefits
 - **Reduced depression, stress, and anxiety**
 - Improved **cardiovascular and respiratory** health
- Nature Tourism
 - Corpus Christi estimates **\$987 million** in business revenue and **12,914 jobs**
 - **47%** of all visitor-trips
 - Birders spend **\$40 billion** annually
- Texas outdoor recreation economic impacts
 - Over **411,000 jobs**
 - **\$52.6 billion** in consumer spending
 - **\$3.5 billion** in tax revenue



The Proximate Principle

- People are willing to pay a **premium of 15-30% for homes that are near parks and green space**
- This impact is substantial within 500-600 feet of the park
- Cost of creating and maintaining the park is usually offset by financial benefits of the park

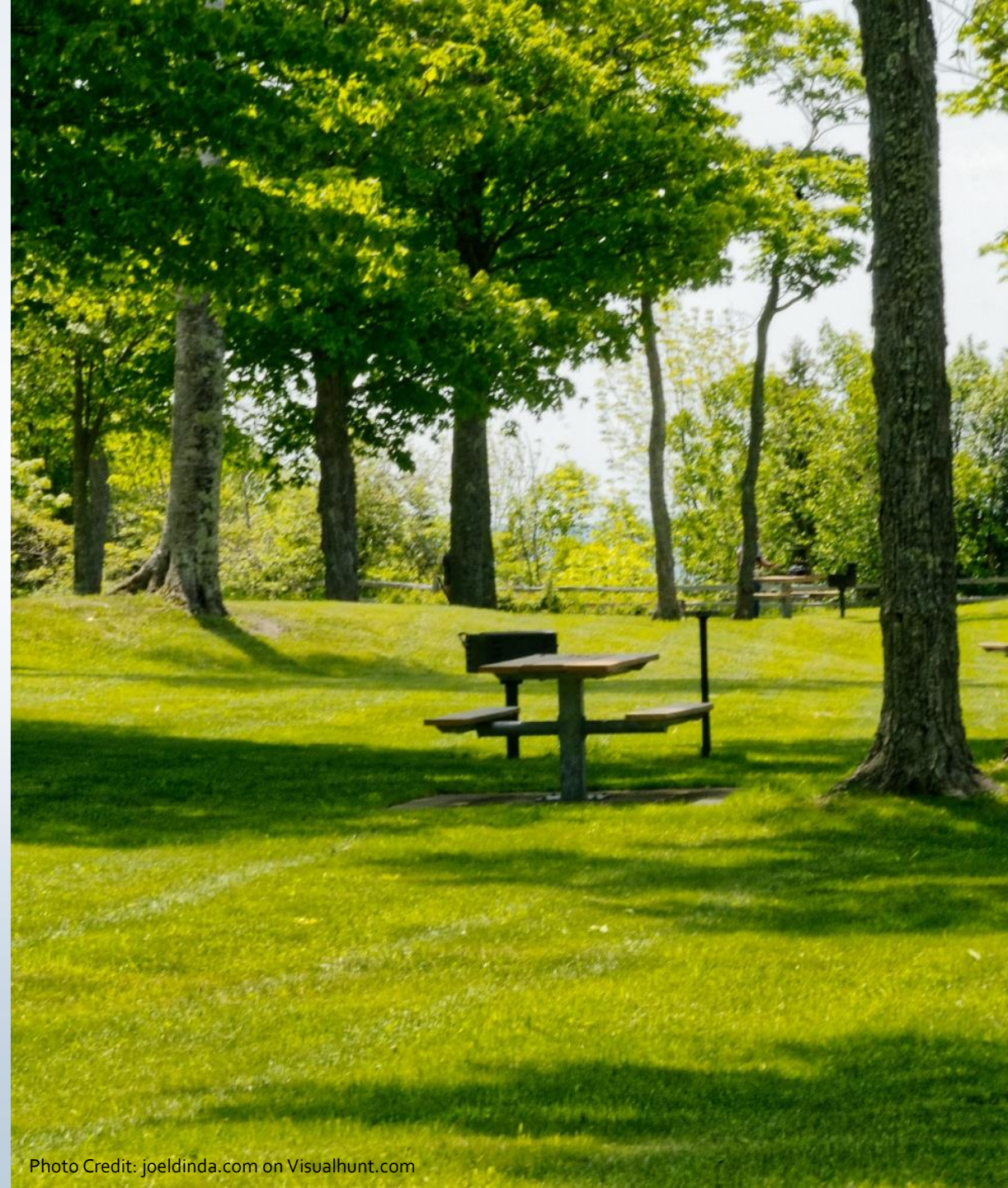


The Austin greenbelt
generates \$13.64 million
in additional property tax
revenue in just two
neighborhoods



DFW Area Study

- A 2001 study of 14 neighborhood parks on 3,200 residential sales over a 2.5 year period
- The parks were between 0.3-7.3 acres
- “...a standard of park quality well within the range of an even marginally committed developer.”
- Nearby homes received a premium of 22% relative to properties .5 miles away



Parks focused on natural features have a
greater positive impact



Water Quality

A person wearing a white cap and a dark shirt is kayaking in a yellow kayak on a river. The water is a vibrant green color, and the banks are rocky with some vegetation. The kayak has "DREYER" and "OCEAN KAYAK" written on it. A blue bag with "NFS" is attached to the back. The person is holding a black paddle. The background shows a rocky hillside under a blue sky.

Native vegetation stabilizes streams, reduces flooding, and filters out contaminants

Air Pollution



- Trees removed 17.4 million tons of air pollution in the U.S. in 2010 (Nowak et al. 2014)
 - 850 fewer deaths
 - 670,000 fewer cases of acute respiratory symptoms

Urban Heat Island Effect

- Mean air temperature of a city with 1 million people is 1.8-5.4°F higher
 - Difference can be as high as 22°F at night
- Impacts:
 - Increased energy consumption
 - Increased air pollution
 - Human health and comfort
 - Impaired water quality
 - Longer growing season



Urban Heat Island

- A 10% increase in tree canopy cover results in a 2°F reduction in temperature
- Connected and closely spaced greenspaces improve the flow of cooler air in a city

We can
change!



What doesn't work...

- “STOP MOWING!!!”
- Desiring the entire park (or entire park system) to be unmowed...
 - not going to happen (at least not right away!)



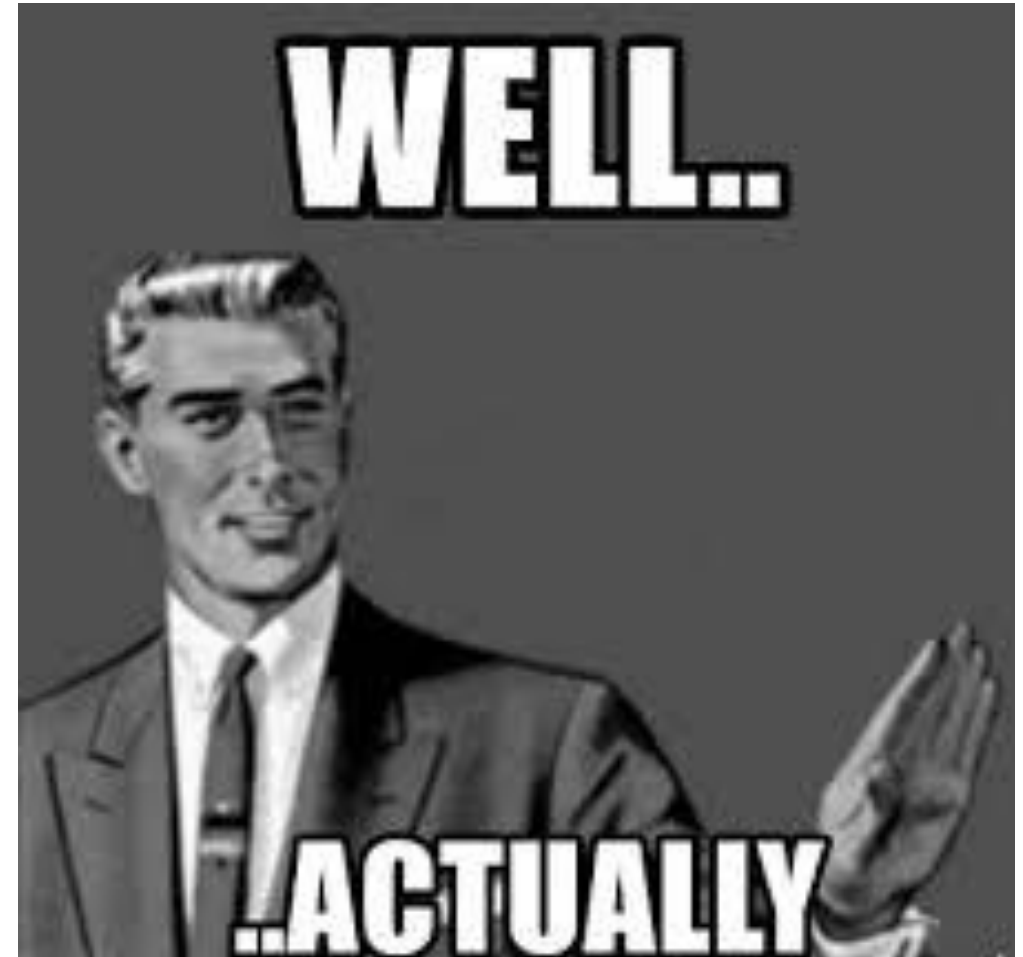
Tips for Success

- Get to know the park- really, really well
- Document the biodiversity (iNaturalist, eBird, etc.)
- Build a relationship with the Parks and Rec staff



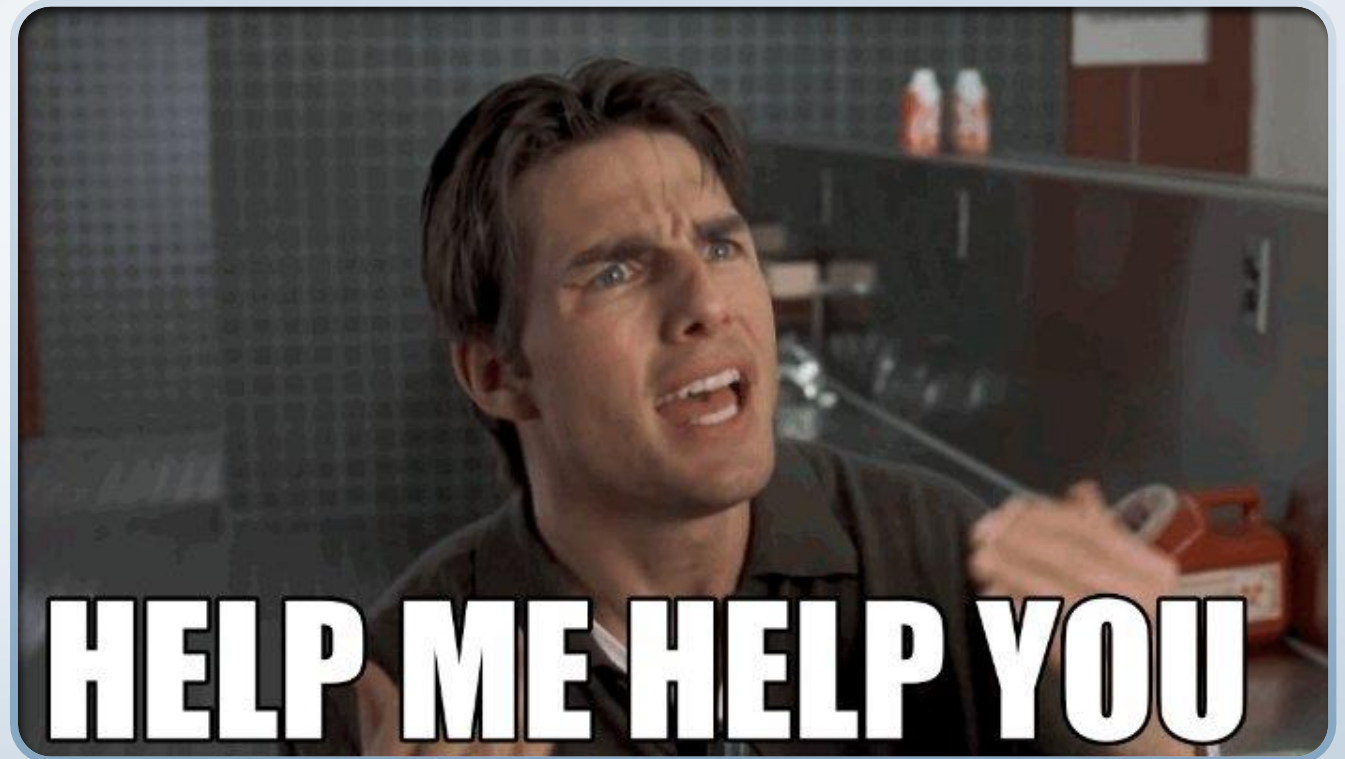
Email – be kind!

- “Hello! My name is _____, and I am a resident of City and a frequent visitor to City Park. I love what you’ve done with _____. Just the other day I spotted a _____. I’m a huge fan of _____, and I so enjoy that there is a place in City where I can still see _____. Please extend my heartfelt gratitude to the management of the park here. Keep up the great work!”
- Short and sweet!



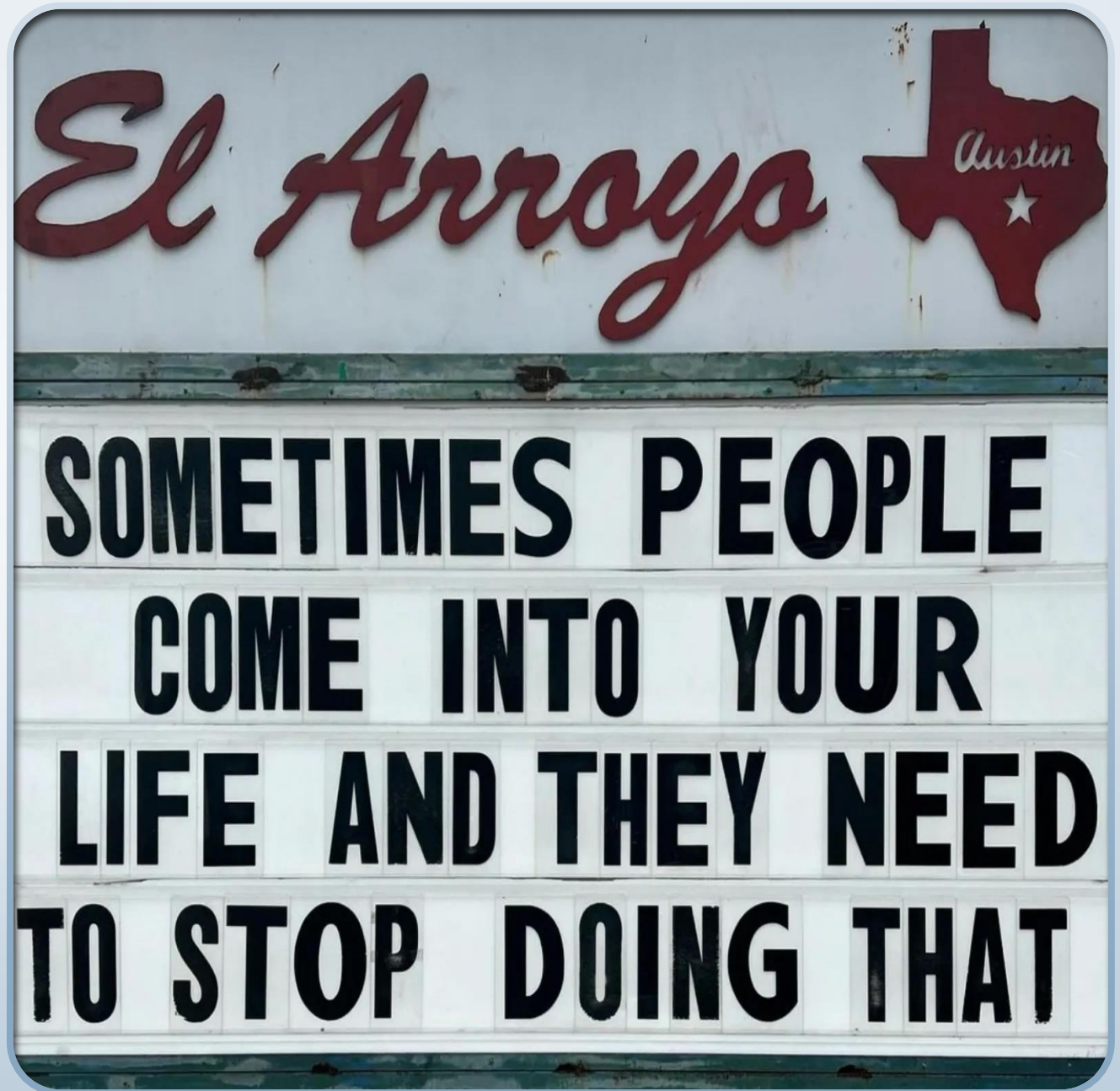
Offer to Volunteer!

- Invasive species control
- Trash clean up
- Booths
- Nature walks
- Nature programming
- BioBlitzes



Focus on the Relationship

- This is when you can **ask** about the **possibility** of putting in a “no mow area.”
- Remain dedicated to the park, even if the answer is no



Define Your Objectives



IMPROVE WATER
QUALITY



REDUCE EROSION



IMPROVE NATIVE
PLANT DIVERSITY



CREATE HABITAT
FOR POLLINATORS



INCREASE PARK
VISITATION



SAVE TIME AND
MONEY

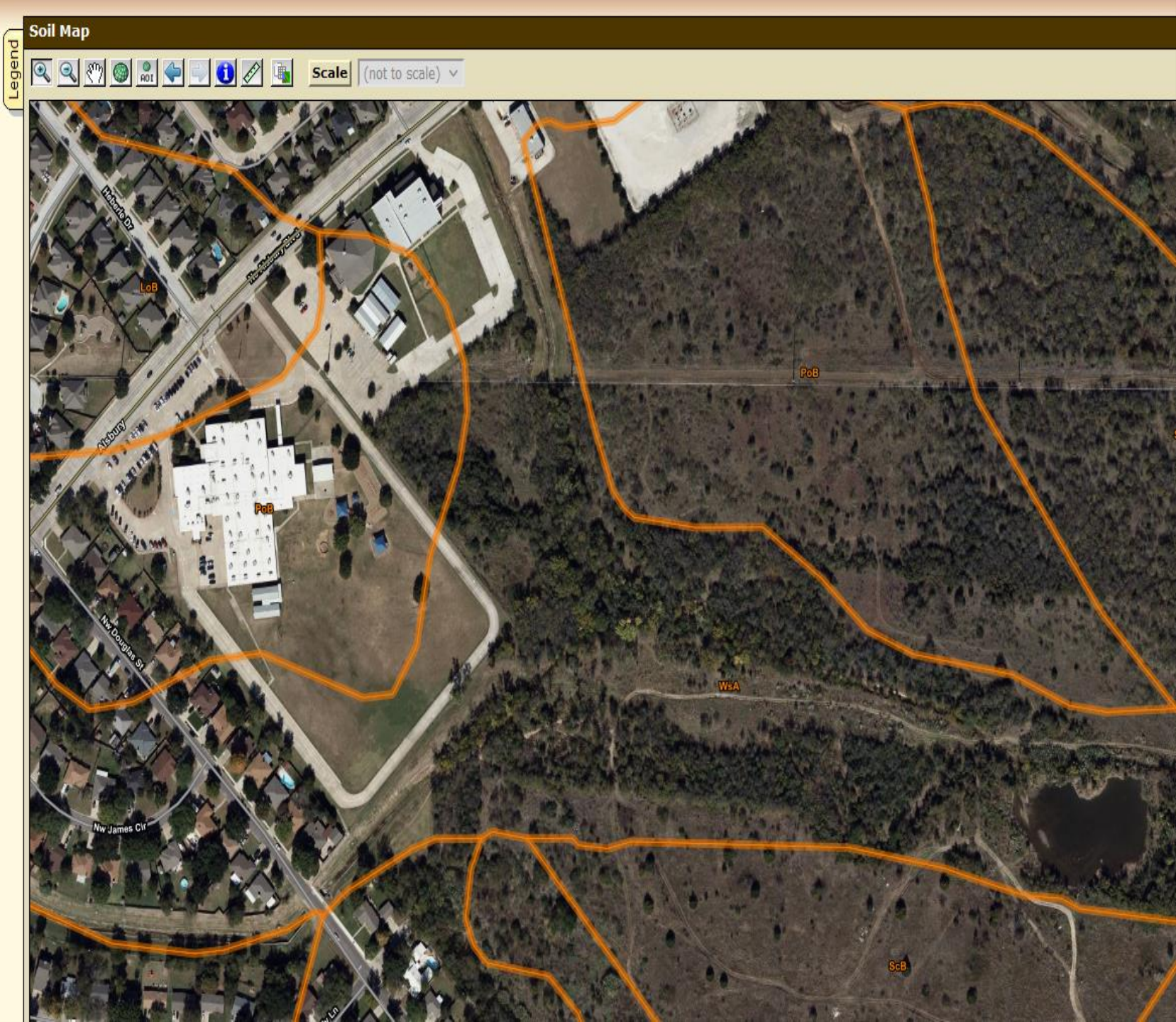
Site Selection

- Prioritize:
 - Riparian zones and wetlands
 - Areas with high native biodiversity
 - Open areas with little infrastructure



Habitat Assessment

- What used to be there?
 - Consider topography, tree abundance, presence of water
 - Soil survey information offers insight for historical habitat type



Habitat Assessment

- What is there now?
 - Is it similar to what it looked like in the past?
 - What were the historic land use practices?
 - Are the plants mostly native or invasive?
 - How are people using the space?
 - Consider homes, hike/bike trails, playgrounds and other infrastructure



Establish Boundaries

- Maps
- Flags
- Spray paint
- Walk area with maintenance crew
- Markings needed until mow line is visible
- Maintain a mowed boundary









Is seeding necessary?

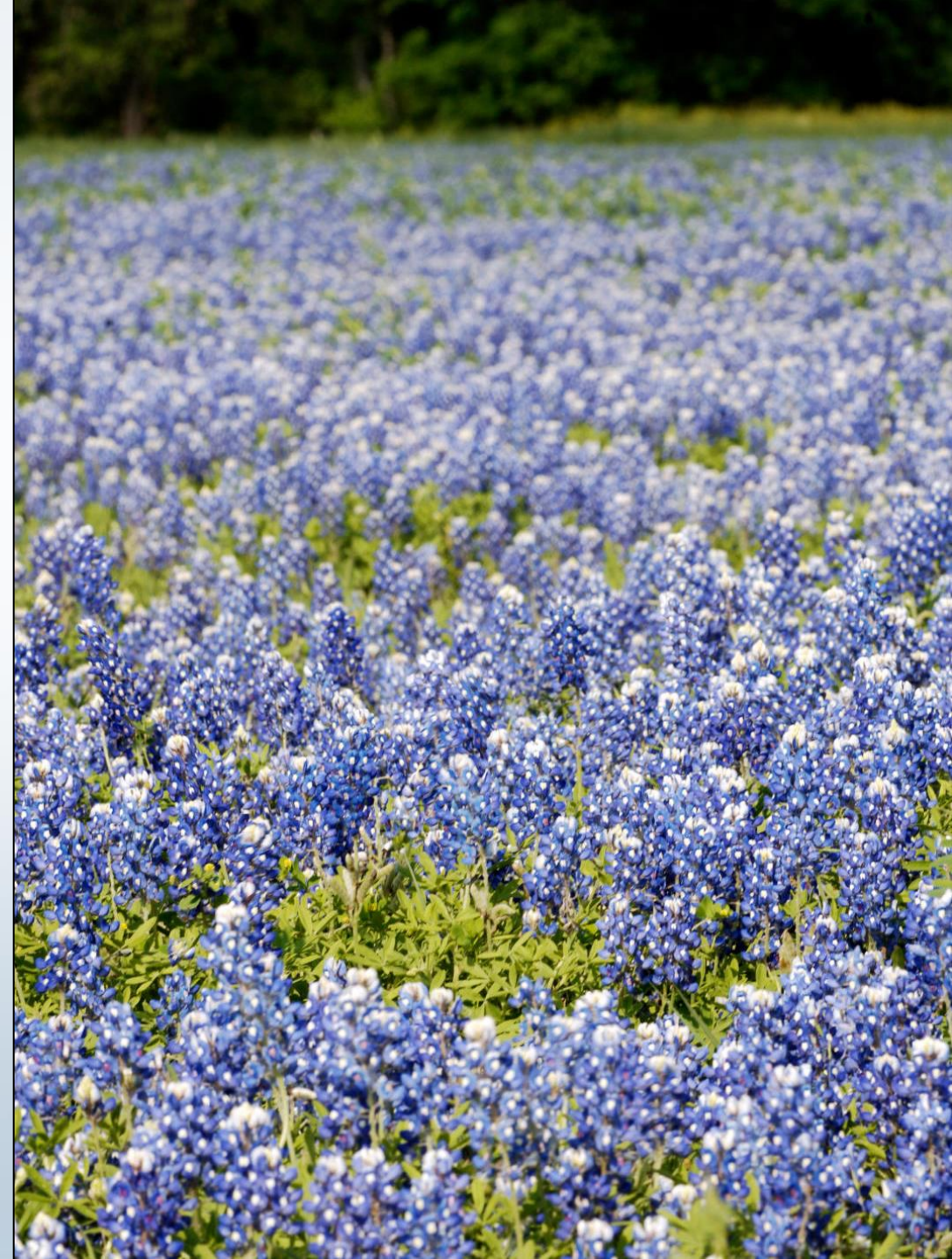
- Allow areas to grow for 6-12 months
- Vegetation surveys
- Native seeds may already be present in soil





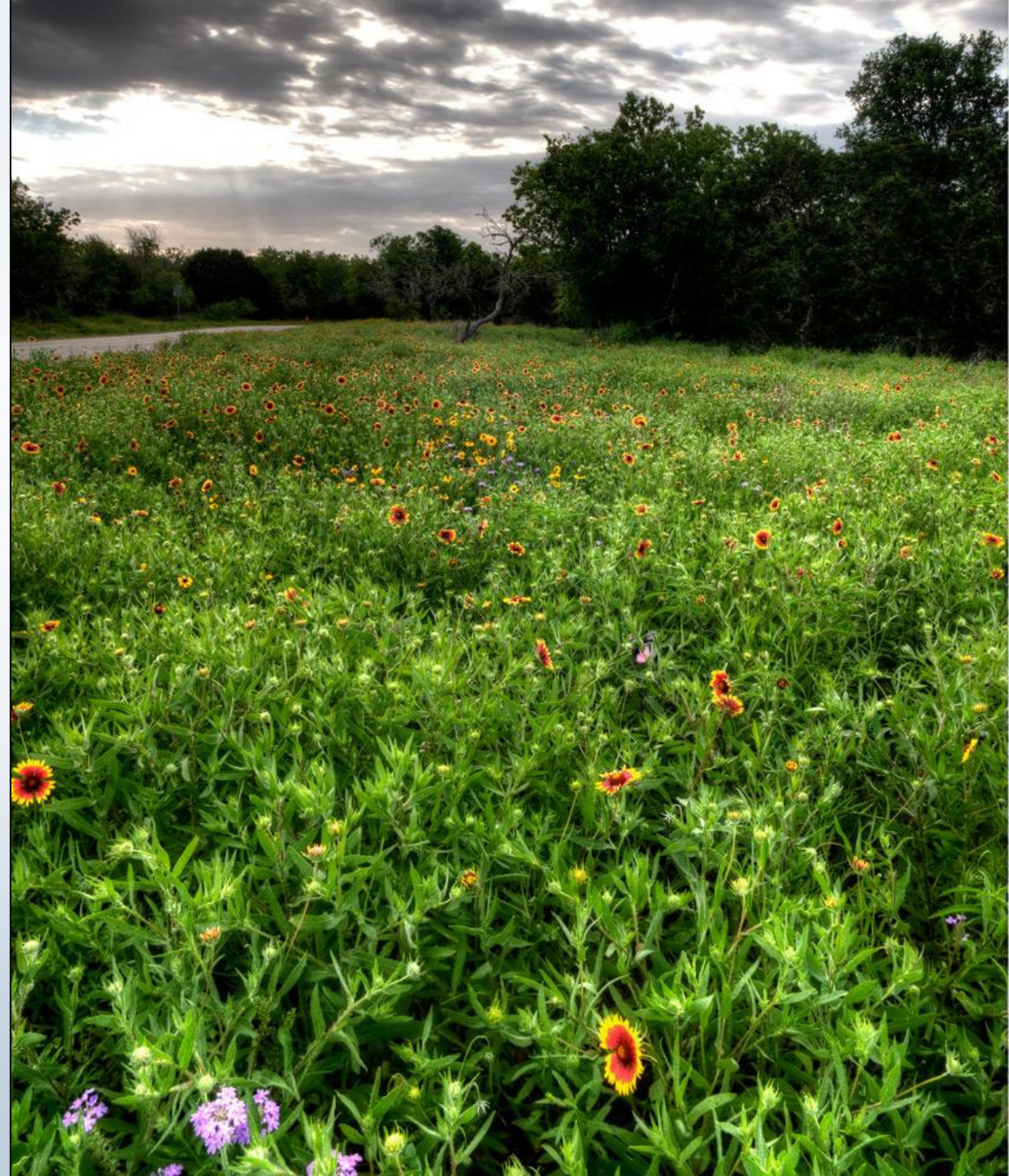
Deciding What to Plant

- Test the soils
- Consider your objectives
- Find a supplier
- Make sure that the species are native to the area
- Start small



Monitor

- Cool-season grasses and weeds will have an advantage for the first two years
- Mowing can remove weeds and reduce competition for seedlings
- Spot treat invasives
- May take 2-3 years for desired results



Mowing Frequency: Prairie

- Infrequent mowing replicates historic disturbances that shaped the prairie
- Prairie areas should be mowed 1/year in January or February
 - High mow
 - Removes thatch and woody species
 - Little impact on plant vigor
 - Adjust mowing routine as needed
- Additional mowing may be necessary
 - Reduce wildfire risk during drought
 - Alter species composition



Mowing Frequency: Riparian

- Ideally, stream buffers are never mowed
 - Restoring the floodplain
- Mowing may sometimes be necessary for maintenance or access



“We want NO nature in our
park!!!”



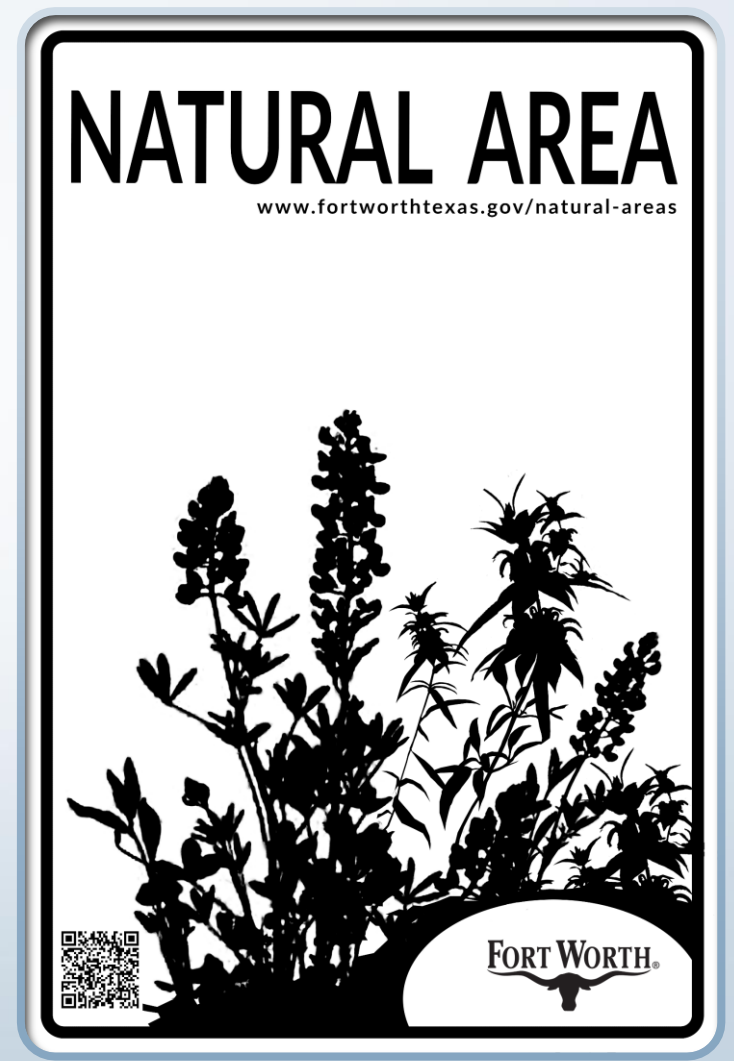
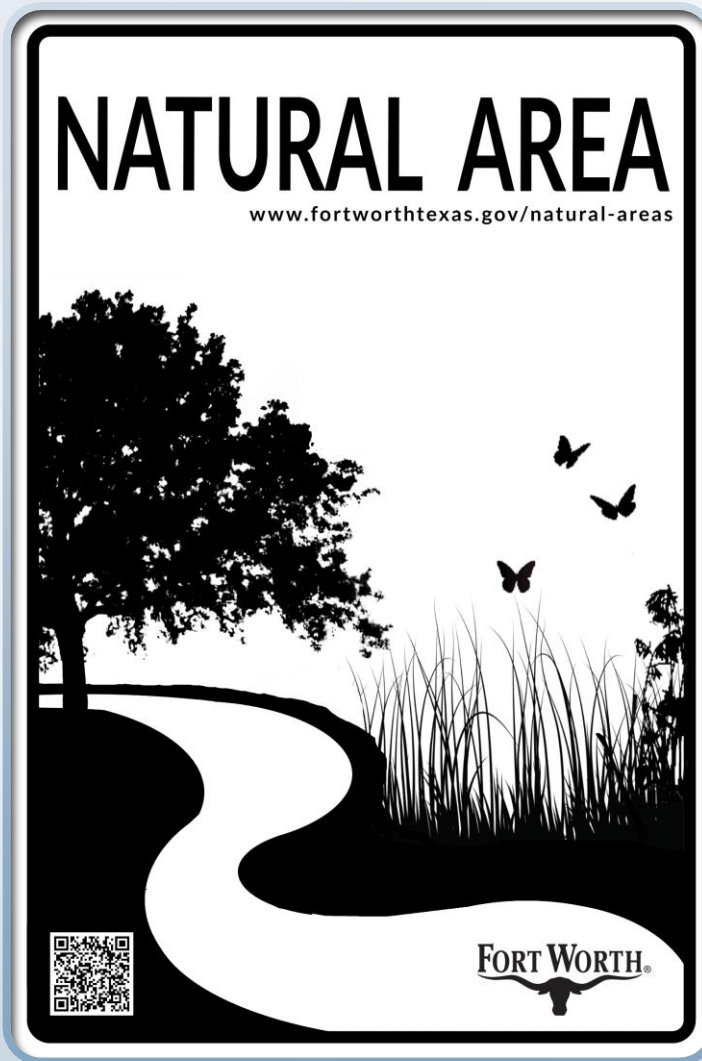
Common Concerns

- Will this attract critters?
- Is this area being maintained?
- Does this create a fire risk?
- I don't like the plants that are growing.
- Does the tall vegetation create hiding places for illegal activities?
- Is this a flood risk?
- Mosquitoes!



Educating the Public

- Signs
- FAQs on website
- Email nearby HOAs
- Newsletters, social media posts
- Meet with critics on site





How to deal with disappointment....



Hope

Questions?

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