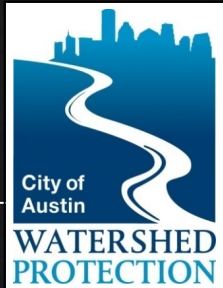


Community Engagement through Creekside Restoration:



An Update on the City of Austin Grow Zone Program



Erin Cord – City of Austin Watershed Protection Department



Program History...



Program History...

Erosion



Water Quantity

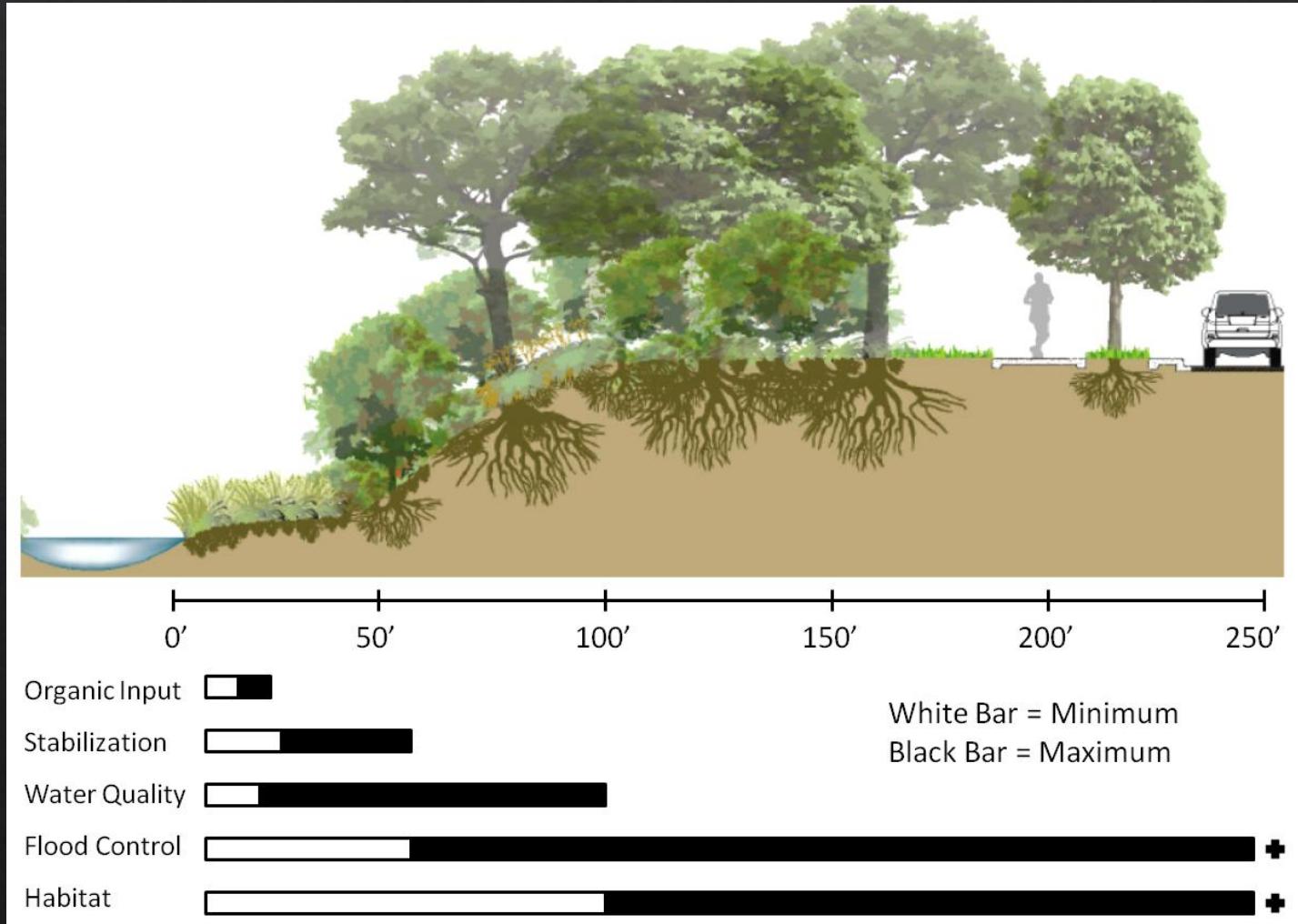


Water Quality



Program History...

- The wider the buffer the greater the function



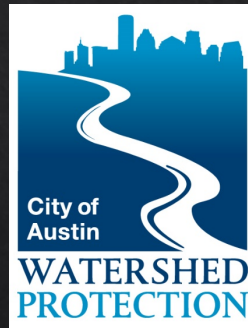
Program History...

- Willowbrook Reach (2010)
 - Restoration pilot project
 - Active restoration with community input
 - Not scalable



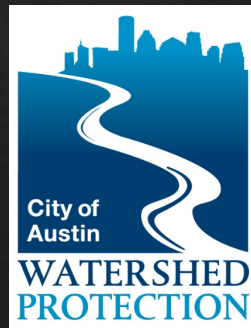
Program History...

- Grow Zone Program (2012)
 - No Mow
 - Agreement with COA PARD
 - Passive restoration
 - 12 pilot parks



Program History...

- Grow Zone Program (2013)
 - One program manager
 - Volunteer-driven restoration
 - Partner organizations
 - One restoration events calendar
 - 21 Grow Zones



Program History

- Keep Austin Beautiful co-sponsorship (2014)
 - Overlap with existing Adopt-a-Creek Program
 - Mobilize volunteers to drive riparian restoration efforts
 - Train AAC Coordinator



Program History...

- Keys to initial program success
 - 311 call routing
 - Park District Managers and mowers
 - Lots of outreach!



Future Creekside Forest

Grow Zone (No Mowing!)

The City of Austin is working to **restore the native forests** that used to flourish beside creeks by creating "grow zones" in city parks. *This area was designated as a "grow zone" in 2012 and it will take several years for seedlings to become large trees.* Volunteers, birds and squirrels are taking care of the planting – the City of Austin won't hamper this natural process by mowing.

Benefits of a creekside forest:

- Improves the natural and beneficial functions of the floodplain
- Prevents stream bank erosion
- Filters storm runoff, removing pollutants before they reach the creek
- Provides habitat and food for a diverse group of animals
- Provides shade that cools air and water temperatures
- Creates a greenbelt forest with diverse tree and plant communities for outdoor enthusiasts
- Reduces the City's carbon footprint
- Reduces maintenance so park staff can focus on other park projects

Mowed

First Year of Growth

5 to 10 Years

www.austintexas.gov/watershed/creekside **512-974-2550**

The graphic is a vertical rectangular poster with a green background. It features a logo on the left with a bird and a branch. The text is arranged in columns. On the right side, there are three small photographs showing the progression of a creek from a mowed state to a fully developed forest over time. The bottom of the graphic contains a website URL and a phone number.

Program History...

2012



2015



Dottie Jordan Park Grow Zone

Program History...



Azie Morton Grow Zone

Program History...



Boggy Creek at Hargrave St. Grow Zone

Program History

- Restoration Plan
 - Begin initial conversation about restoration
 - Guide volunteers in a meaningful way
 - Provide options
 - Living document
 - Schedule





Grow Zone Restoration Plan

Site Name			
Creek Name			
Watershed Name			
Volunteer Contact	Name _____	Phone: _____	
		Email: _____	
Associated Volunteer Group(s)	<input type="checkbox"/> Keep Austin Beautiful	<input type="checkbox"/> None	
	<input type="checkbox"/> Austin Parks Foundation	<input type="checkbox"/> Other: _____	
Moisture and Canopy	<i>Check which of the four conditions are present at the site:</i>	<input type="checkbox"/> upland/open	<input type="checkbox"/> floodplain/open
		<input type="checkbox"/> upland/closed canopy	<input type="checkbox"/> floodplain/closed canopy
	<i>Check which invasives are present at the site:</i>		
Invasives	<input type="checkbox"/> woody	<input type="checkbox"/> bamboo/cane	<input type="checkbox"/> johnsongrass
List the <i>dominant</i> invasives on the site:			
Identify other important aspects of the site:			
<input type="checkbox"/> There are opportunities for native seeding <input type="checkbox"/> There are opportunities for tree seedling planting <input type="checkbox"/> Vegetation is poor along banks or other erosion-prone areas <input type="checkbox"/> Ragweed is dominant on the site <input type="checkbox"/> There are other dominant invasive species on the site (such as vines) <input type="checkbox"/> There may be a need for haul-off of plant material after events <input type="checkbox"/> There are footpaths in sensitive areas <input type="checkbox"/> There are creek access points or crossings affecting the banks <input type="checkbox"/> There is significant woody debris in or near the channel <input type="checkbox"/> There are potential "tree islands" on site <input type="checkbox"/> There are opportunities for green stormwater methods (berms, swales, etc)			

Grow Zone Restoration Planning Calendar

Site Name:

Place check marks for each month you would like to plan an event. Gray boxes are months that are not recommended for specific activities.

	UPLAND/OPEN					UPLAND/CLOSED CANOPY				
	Native Seeding	Seed Islands	Seedling Planting	Johnsongrass/Ragweed Management	Bamboo/Arundo Management	Native Seeding	Seed Islands	Seedling Planting	Woody Invasive Management	
January	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
February	<input type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	
March									<input type="checkbox"/>	
April				<input type="checkbox"/>					<input type="checkbox"/>	
May				<input type="checkbox"/>					<input type="checkbox"/>	
June				<input type="checkbox"/>					<input type="checkbox"/>	
July				<input type="checkbox"/>					<input type="checkbox"/>	
August				<input type="checkbox"/>					<input type="checkbox"/>	
September				<input type="checkbox"/>					<input type="checkbox"/>	
October	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	
November	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
December	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

	FLOODPLAIN/OPEN					FLOODPLAIN/CLOSED CANOPY				
	Native Seeding	Seed Islands	Seedling Planting	Johnsongrass/Ragweed Management	Bamboo/Arundo Management	Native Seeding	Seed Islands	Seedling Planting	Woody Invasive Management	
January	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
February	<input type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	
March									<input type="checkbox"/>	
April				<input type="checkbox"/>					<input type="checkbox"/>	
May				<input type="checkbox"/>					<input type="checkbox"/>	
June				<input type="checkbox"/>					<input type="checkbox"/>	
July				<input type="checkbox"/>					<input type="checkbox"/>	
August				<input type="checkbox"/>					<input type="checkbox"/>	
September				<input type="checkbox"/>					<input type="checkbox"/>	
October	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	

Volunteer Techniques

- City website (austintexas.gov/creekside)
- Instructional videos
- Trainings
- “How To” documents
- Invasive species field guide



Central Texas Invasive Plants



www.austintexas.gov/invasive

Community Creekside Monitoring

- Derived from the Riparian Functional Assessment (RFA)
- Once per year between April and October
- 9 categories for data collection

COMMUNITY CREEKSIDE MONITORING PROTOCOL WORKSHEET				
SITE NAME _____		CREEK _____		
WATERSHED _____		DATE _____		
1 Channel Shading	Upstream Point	Midstream Point	Downstream Point	Score (average of all three plots) _____
	0 = < 25 %	0 = < 25 %	0 = < 25 %	
	1 = 26-50 %	1 = 26-50 %	1 = 26-50 %	
	2 = 51-75 %	2 = 51-75 %	2 = 51-75 %	
	3 = 75-100 %	3 = 75-100 %	3 = 75-100 %	
2 Riparian Zone Width	Upstream Plot	Midstream Plot	Downstream Plot	Score (average of all three plots)
	0 = < 25 ft.	0 = < 25 ft.	0 = < 25 ft.	
	1 = 26-60 ft.	1 = 26-60 ft.	1 = 26-60 ft.	
	2 = 60-100 ft.	2 = 60-100 ft.	2 = 60-100 ft.	
	3 = > 100 ft.	3 = > 100 ft.	3 = > 100 ft.	

Community Creekside Monitoring

- Riparian Score based on parameter scores

7 Defining Species	<hr/> <hr/> <hr/> <hr/> <hr/>			1 = 2-3 species 2 = 4-5 species 3 = > 5 species _____
8 Large Woody Debris	Score 0 = no LWD pieces 1 = 1-3 LWD pieces 2 = 4-6 LWD pieces 3 = > 6 LWD pieces _____			
9 Number of Snags	Score 0 = 0 snags 1 = 1-3 snags 2 = 4-6 snags 3 = > 6 snags _____			
Add the scores for each parameter and circle the overall Riparian Score below				
Riparian Score	Optimal > 24	Suboptimal 17-24	Marginal 8-16	Poor 0-7

Community Creekside Monitoring

- Training



Rewarding Dedicated Creek Adopters



Rewarding Dedicated Adopters

- Ready? Set. Plant!
 - Partnership with local non-profits
 - ~10 sites/year
 - Over 11,000 seedlings planted this season alone!



Photos by TreeFolks

Rewarding Dedicated Adopters



Rewarding Dedicated Adopters

- Texas Conservation Corps
 - Certain qualifying sites
 - 30% canopy reduction
 - Focus clearing around larger native trees



Photos by TXCC

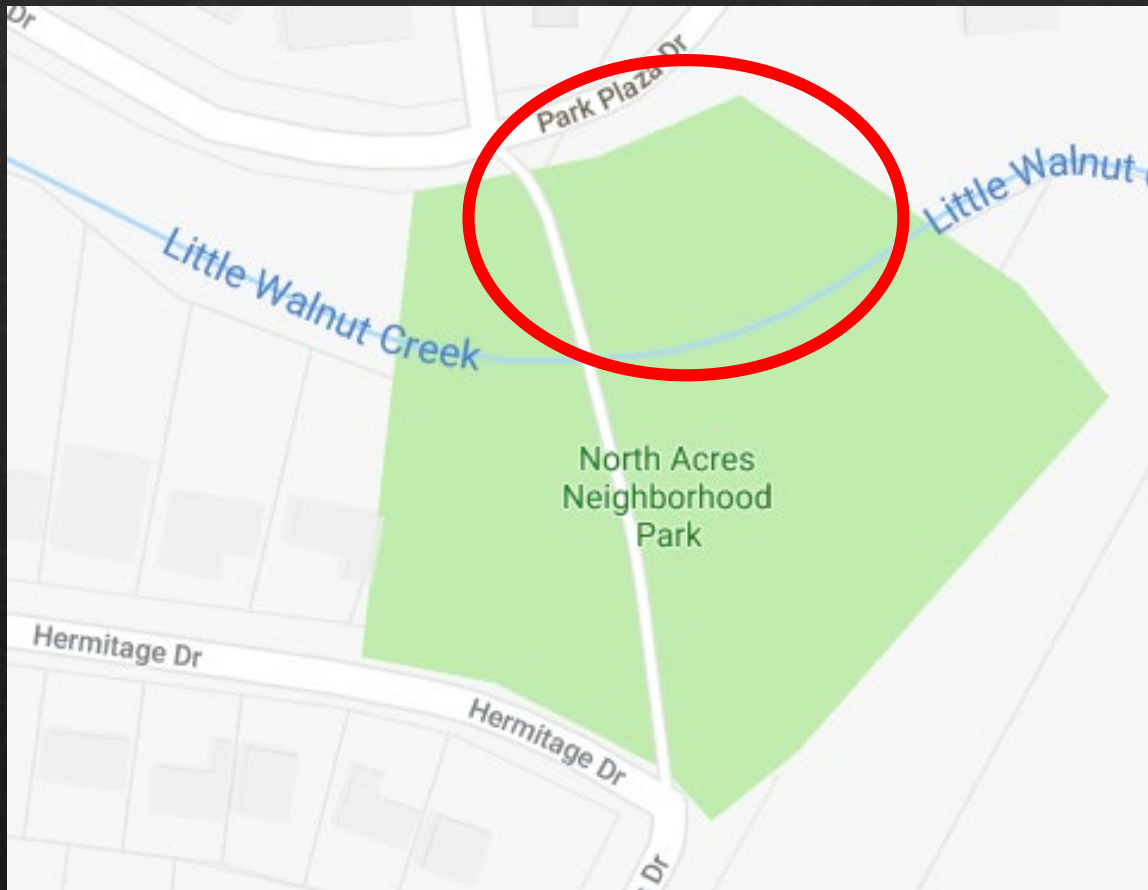
Rewarding Dedicated Adopters

- ~6.5 acres managed this year



Rewarding Dedicated Adopters

- North Acres Park



Rewarding Dedicated Adopters

- North Acres Park



Photos by TreeFolks



The Future of the Grow Zone Program



Stewardship Plans

- Jumping off point from the Restoration Plan
- More in depth and site specific
- Menu options with direction
- Sets expectations of city services



And Beyond...

- Adding more Grow Zones in Austin
- Grow Zones on AISD property
- Restoration manual for volunteers
- Sharing the program with other cities/municipalities





Questions?

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