THE CITY OF AUSTIN GROW ZONE PROGRAM:
RESTORING ECOLOGICAL FUNCTION AND
PRESERVING VALUABLE ASSETS IN CITY PARKS

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Riparian areas as assets

• Most municipal land is in City parks
• Most municipal riparian land is in City parks
• Austin -
  • 260 parks
  • 20,000 acres
Land Management vs Asset Management

- Park managers and planners are important stakeholders
  - Water quality protection and ecosystem services are low priorities for these groups

- What challenges do parks systems face that can be addressed through riparian management?
  - How can we help park managers and planners protect and enhance their assets?
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Erosion issues
- Creeks
- Shoreline
- Threat to assets
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Stormwater issues

- Localized flooding
- Trail washout
- Gullies
- Poor drainage
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Non-contact Recreation

• Does it look like a healthy, natural channel?
• Odors
• Algae
• Turbidity

Contact Recreation

• Are you ok with people getting in the water?
Mowing
• Direct costs associated with mowing
• Emissions
Riparian Zone Issues - Urban Stream Syndrome

- Flashier hydrograph
- Elevated concentrations of nutrients and contaminants
- Altered channel morphology
- Compromised bank stability
- Nonpoint source pollution
- Disconnected floodplains
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The solution - ecological restoration with minimal management

• Create No Mow Zones (eliminate main disturbance)
• Seed with herbaceous native plant mixes
• Selective invasive species control
• Plant native woody seedlings
• Soil erosion control as needed
• Soil amendments as needed

Future Creekside Forest

Grow Zone
(No 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

www.austintexas.gov/watershed/creekside  512-974-2550
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How – Outreach, education and volunteer mobilization

- Organize volunteer workdays
- Develop educational materials
- Educate staff
- Talk to local stakeholders
- Perform creek walks
- Post informational signs
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Benefits beyond water quality and erosion control

• Healthy and calming natural spaces
• Shade for recreation
• Promotes diversity and stewardship
• Education
• Contributes to carbon neutrality
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Original MOU (2012) – 19 parks
Addendum (2014) – 12 more parks
Other (flood buyouts, etc) – 7 areas

- **158 acres** of recovering riparian area
- **13 miles** of streams and shoreline with GZ on one or both sides
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How the City of Austin supports volunteer efforts -

• Developing techniques appropriate for volunteers – safe, simple tools that have minimal adverse impacts
• Developing planning templates and assessment measures – so citizens can implement and evaluate their own projects
• Providing restoration materials – seeds, seedlings, erosion control fabric, mulch
• Providing expert advice
Keep Austin Beautiful

- More than 50 Adopt-A-Creek groups
- Over 30 miles of stream adopted

Austin Parks Foundation

- Organizes training events and has large pool of volunteers - 98 events for 2014 It’s My Park Day

TreeFolks

- Helps us plant 9,000 seedlings per year in City parks
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Green Infrastructure

PHASE 3

Raingarden #1

Weir

Raingarden #2

Concrete Cut

Swale re-route

Pipe
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Green Infrastructure - Rain Gardens
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Green Infrastructure - Pump House Discharge
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Green Infrastructure - Pump House Discharge
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Green Infrastructure - Shoreline Restoration
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Green Infrastructure - Swales
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Green Infrastructure - Swales
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Additional Recommendations -

• Start small
• Start early on education and outreach
• Get to know your stakeholders – for and against
• Level of service
  • How much time and effort should go to management?
  • Framework for
    • Deciding on management actions
    • Responding to stakeholder requests
• Metrics – how do you measure success?
  • Inventory – stream length, number, acres
  • How well are they functioning?
  • Are they impacting other uses? Creating issues?