

TMDL Alternatives

Chris Loft

TMDL Program

Texas Commission on Environmental Quality

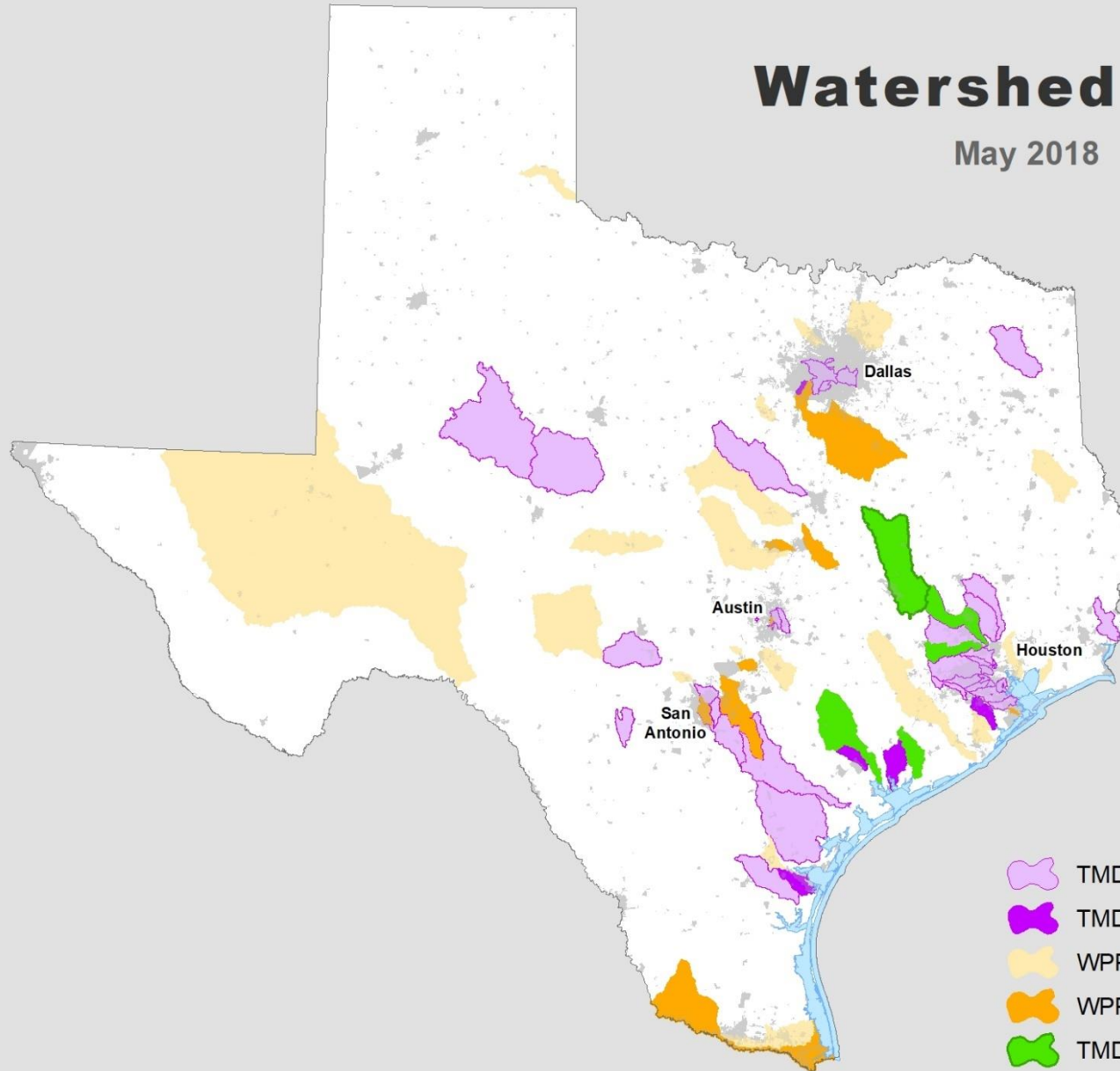


303(d) Vision

- ▶ Plans:
 - TMDL
 - Watershed Based Plans
 - Both
 - Other

Watershed Plans

May 2018



Watershed Action Planning

▶ Process

- Initiative of water quality programs in the state (SWQM, WQS, CRP, TMDL, NPS, TSSWCB)
- Coordinate and track program's activities in addressing water quality issues
- Review of water quality issues
- Determination of appropriate strategy for impaired waterbodies (monitoring, evaluation, WQ standards review, TMDL/I-Plan, WPP, other)

Education & Outreach

- ▶ Stakeholder meetings
- ▶ Programs:
 - Lone Star Healthy Streams
 - Texas Watershed Steward
 - Riparian and Stream Ecosystem Workshop
 - Feral Hog Management Workshop
 - OSSF Operation and Maintenance Workshop
 - Texas Well Owner Network

What Is a Watershed-Based Plan ??



- ▶ Action plan designed to protect priority waters or restore waters already impaired by pollutants.
- ▶ Required by the EPA to have a WBP to be eligible for a large portion of 319 Grant funds.
- ▶ Specific components (9 Elements) required in WBP's.

Nine Key Elements

**Pollutant
Load &
Sources**

**Load
Reductions**

**Best
Management
Practices**

**Resources
Needed**

**Engagement
& Education**

**Schedule
For
Action**

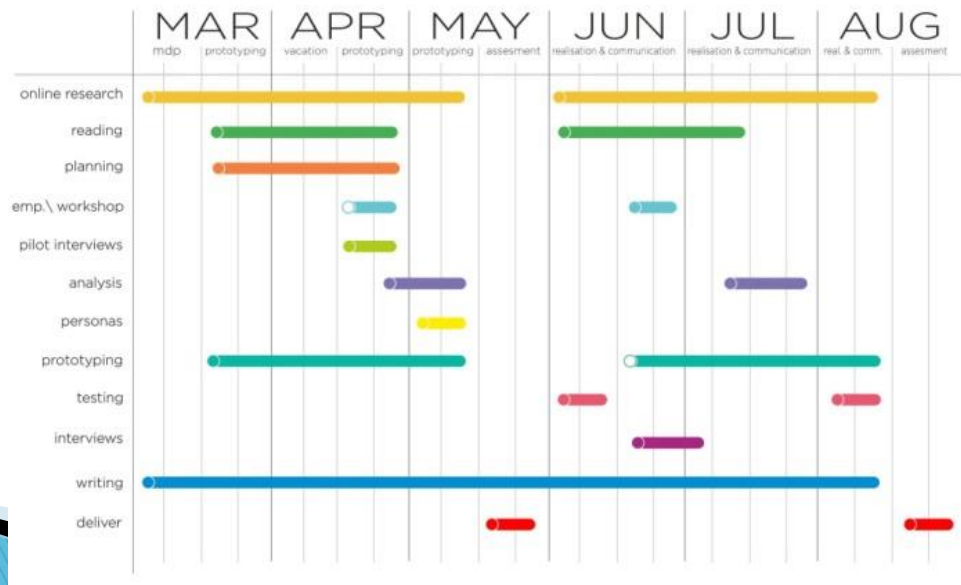
**Measureable
Milestones**

**Criteria for
Success**

**Monitoring
Progress**

Schedule for Implementation

- ▶ Basic timeline
- ▶ Responsible party
- ▶ Take into account when \$ will be available



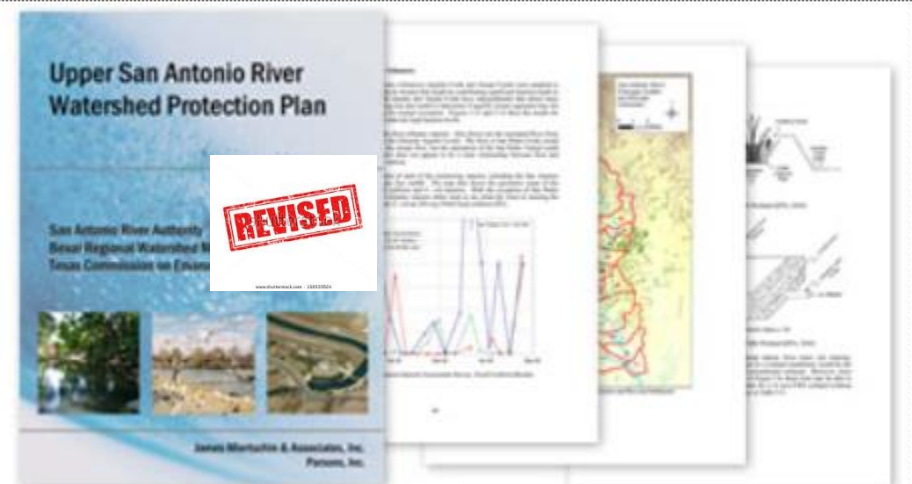
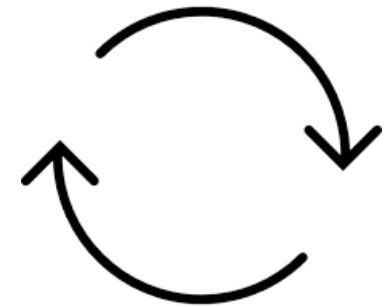
Monitor Progress

- ▶ Routine and targeted monitoring
- ▶ Document accomplishments
- ▶ Education/outreach
- ▶ Interim milestones (short, mid and long term)

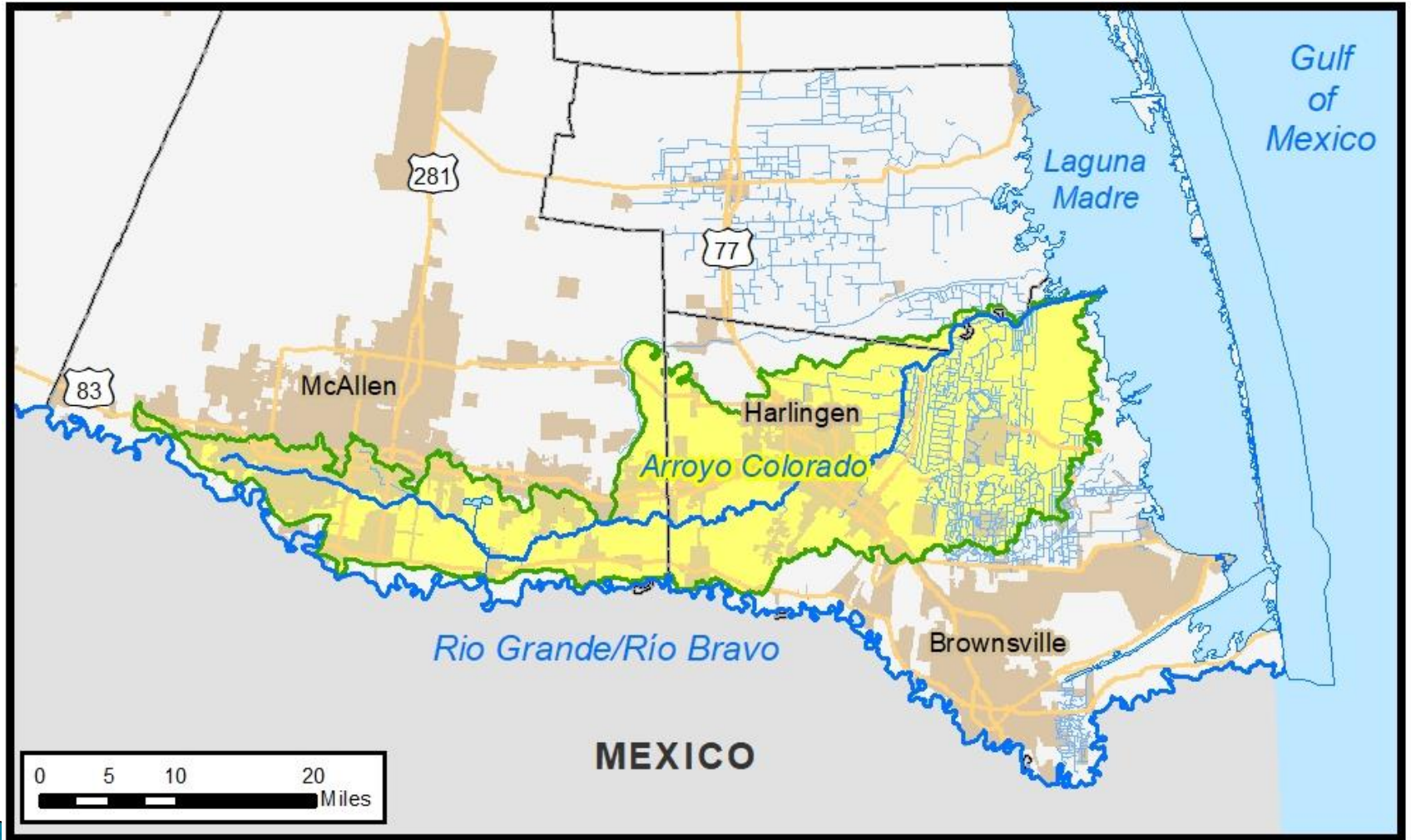


Adaptive Management

- ▶ Sustainable group to implement plan
- ▶ Reconvene stakeholders; check progress
- ▶ Apply for funding
- ▶ Revise WBP strategies, modify plan



Arroyo Colorado



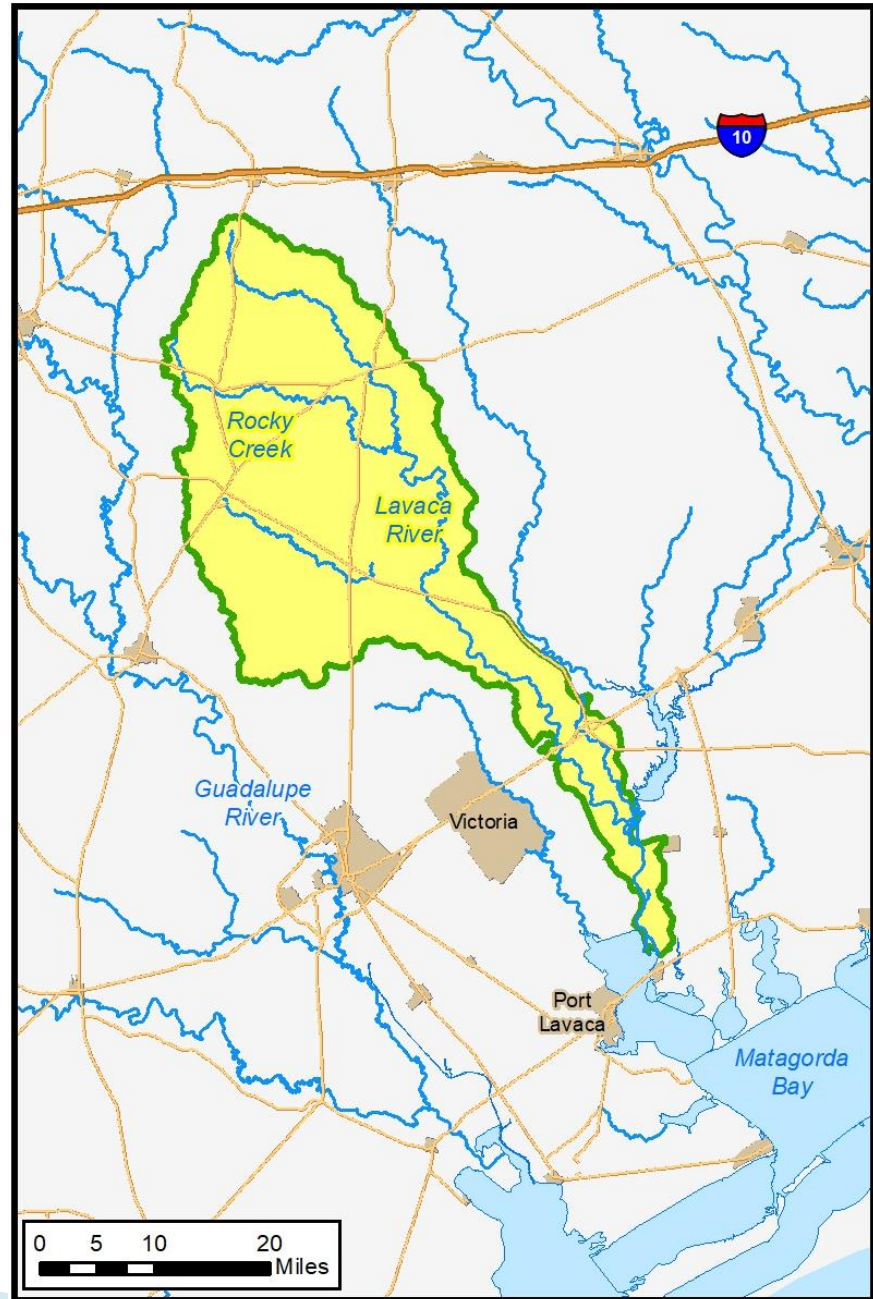
Arroyo Colorado WPP

- Started as a TMDL study to address DO
- Arroyo Colorado Watershed Partnership formed
- Resistance from Ag community
- Stakeholders decided on a WPP
- Plan completed in 2007 but never officially accepted by EPA
- However, implementation activities ongoing

Arroyo Colorado WPP continued

- Stakeholders wanted to revise the WPP
- Arroyo Colorado Watershed Partnership held 46 meetings from 2012–2016
- 10 year plan
- Watershed Coordinator in place
- Management Measures – implement conservation plans, address SSO's, expand wastewater treatment, address OSSFs, stormwater management, habitat management, outreach and education
- Monitoring by TCEQ and NRA

Lavaca River



Lavaca River

- Rural watershed
- Stakeholder meetings initiated in 2016
- Outreach and Education efforts
- Both WPP and TMDL and I-Plan
- Stakeholders included: local residents, landowners, businesses, local and county governments, regional entities (LNRA, SWCD staff), state and federal agencies

Lavaca River continued

- 10 year Plan
- Watershed Coordinator
- Semi-annual meetings
- Monitoring conducted by LNRA and TCEQ
- Continue outreach and education

Lavaca River continued

- ▶ Management Measures:
 - Implement WQMPs or conservation plans
 - Feral Hog Control
 - Repair or replace failing OSSFs
 - Increase proper pet waste management
 - Implement and expand urban stormwater runoff management
 - Address inflow and infiltration
 - Reduce illicit dumping

Lavaca River continued

- ▶ Potential Funding sources:
 - TGLO – Coastal Mgmt Program
 - USDA
 - TDA
 - EPA – 319(h) Grants
 - TSSWCB
 - TPWD
 - TWDB



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