

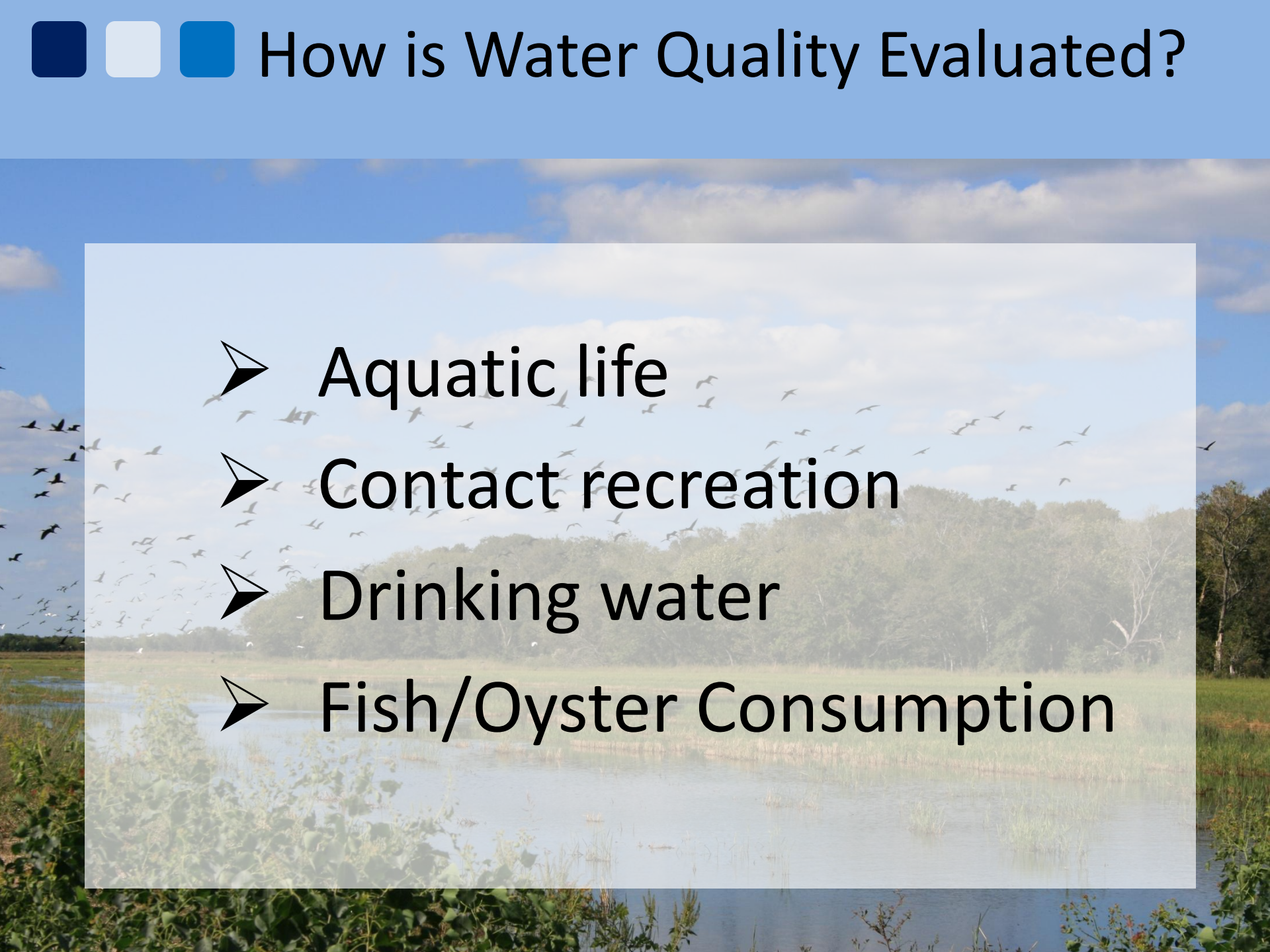
The Road Ahead for Armand Bayou



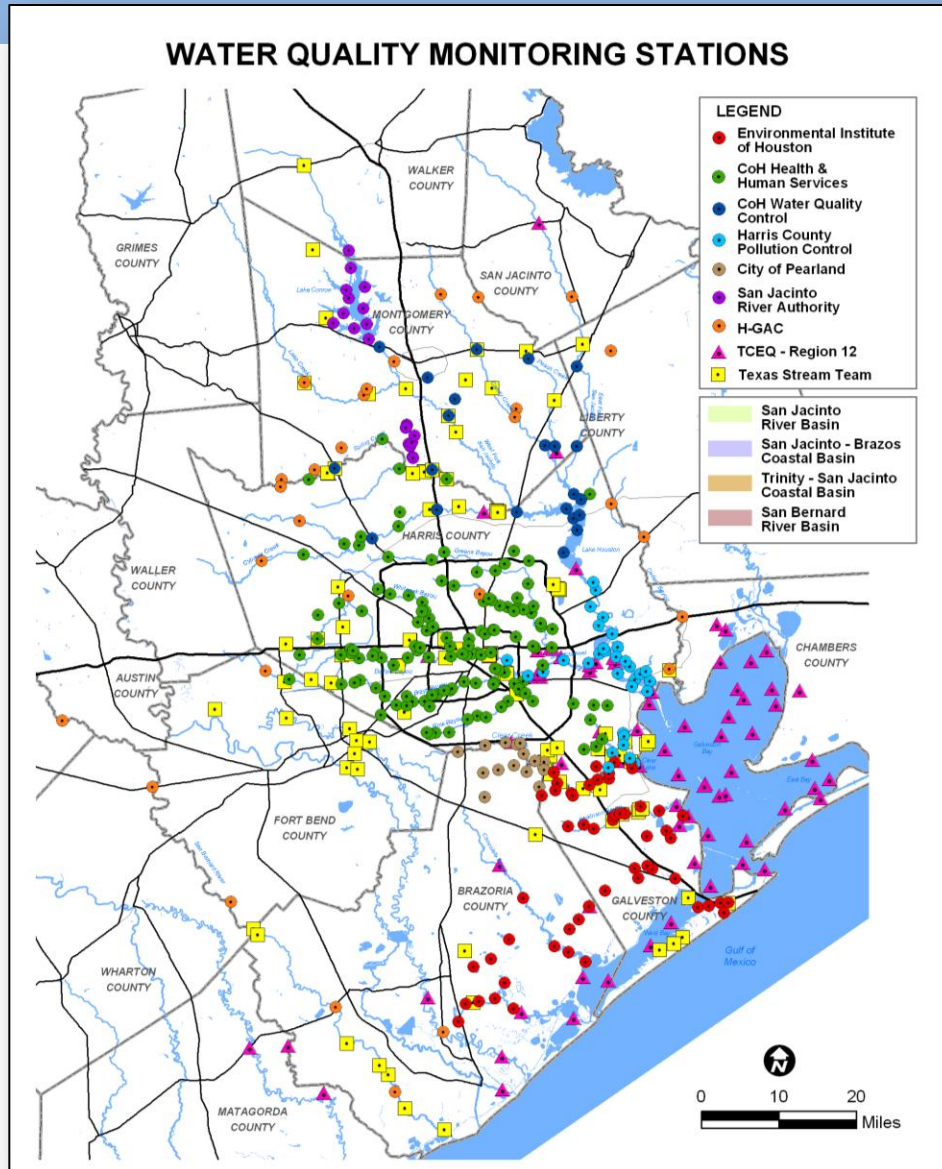
Aubin Phillips, Houston Galveston Area Council



How is Water Quality Evaluated?

- 
- Aquatic life
 - Contact recreation
 - Drinking water
 - Fish/Oyster Consumption

Regional Coordinated Monitoring



Professional Monitoring

- 8 local partners + TCEQ
- Over 370 Sites
- Monitored at Least Quarterly
- All Data Collected Under An Approved QAPP

Stream Team Monitoring

- 80 Volunteers
- 68 Sites

Requirements of the Clean Water Act (1972)



- Identify impaired water bodies
- Develop Plans (Total Maximum Daily Loads) to determine extent of problem
- Complete TMDLs and Implementation Plans to bring the water up to standards

Total Maximum Daily Load (TMDL) Has Two Meanings

A TMDL is a tool which:

Determines the maximum amount of a Particular pollutant (load) that a water body can absorb and still maintain its standards

A TMDL is also a document submitted to the EPA that:

Identifies the pollutant of concern and its sources, specifies the allowable amount and serves as a framework for corrective action

Why Create TMDLs?

- Restore Water Quality
- Determine Sources of Pollution
- Determine Corrective Strategies
- Comply With Federal Law

TMDL: The Parts List



- The Problem
- The Endpoint: The Measurable Goal
- The Sources of Pollution
- Links Between Pollution Sources and Water

■ ■ ■ TMDL Parts List (Continued)



- Contribution of Each Pollution Source
- Margin of Safety
- Public Participation
- Corrective Action

■ ■ ■ The Process



1. Determine allowable loading via technical analysis with stakeholder input
2. Allocate load among sources
3. Implementation Plan (description & schedule of management measures)

Stakeholders



- Interested citizens
- Local government
- Environmental groups
- Individuals with relevant expertise
- Regulated community
- Natural Resource agencies
- Other state and federal agencies



Elements of an Implementation Plan (I-Plan)

Implementation Plan

For Total Maximum Daily Loads for Bacteria
in the Houston-Galveston Region



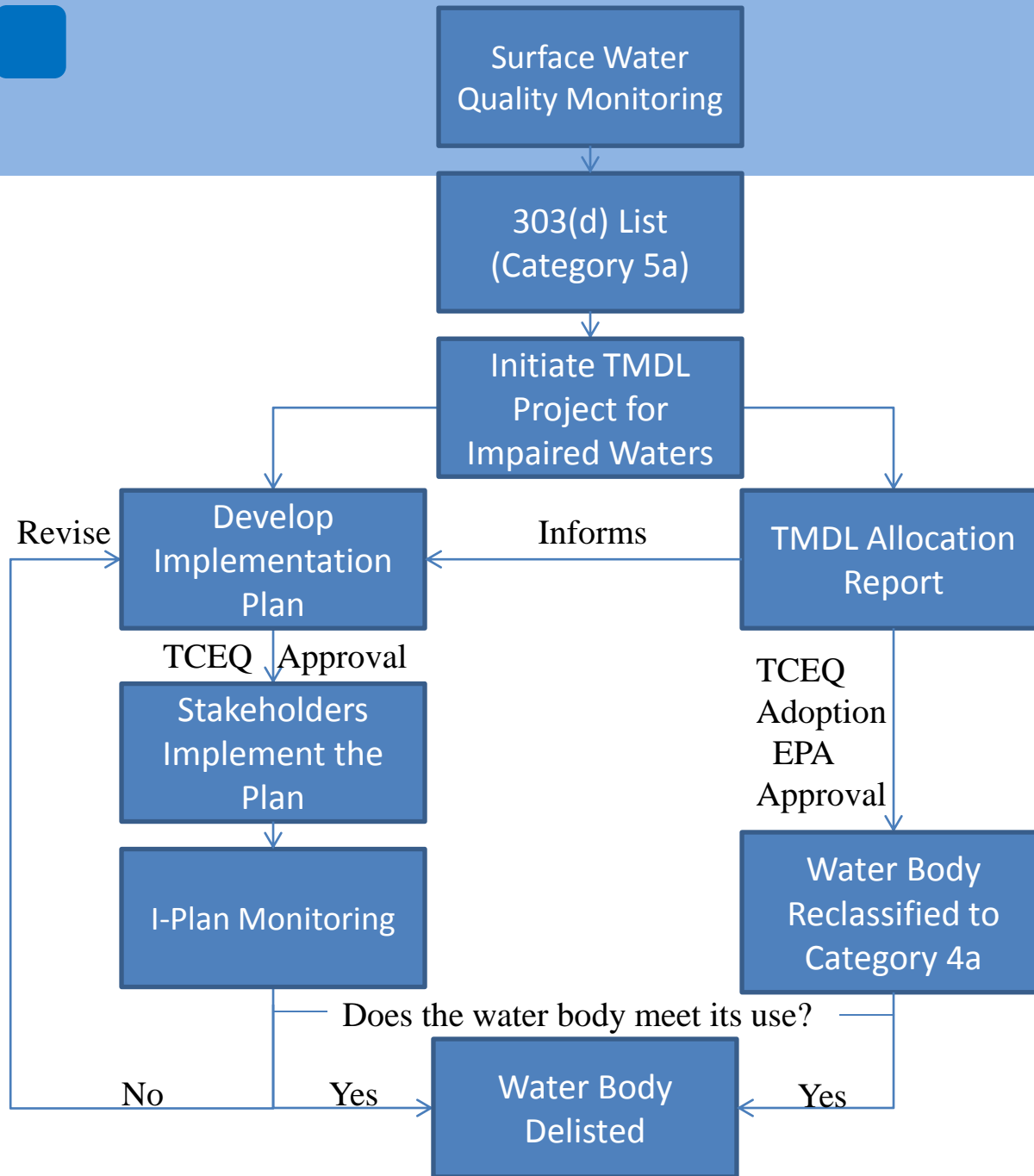
Bacteria Implementation Group
August 2011

- Management Measures
- Control Actions
- Implementation Schedule
- Follow-up Monitoring Plan

I-Plan (Continued)



- Voluntary Implementation on Non-Point Source Pollution
- Measurable Outcomes



Areas Where I-Plans are Completed



■ ■ ■ TMDL Conclusions



- Mechanism to address regulated sources
- Mechanism to address complex water quality issues of NPS pollution
- Promote intergovernmental cooperation
- Require community support and input



 **Thank You!**

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