Watershed-Based Planning

Clean Waters Initiative

August 26, 2021
Acknowledgements

- TCEQ Total Maximum Daily Load (TMDL) Program – Austin
- TCEQ 319 Non-Point Source Program – Austin
- TSSWCB 319 Non-Point Source Program – Temple
Water Quality Management

- Monitoring
- Assessment
- Address Impairments
Watershed-based Planning

- Total Maximum Daily Load
  - TMDL = WLA + LA + FG + MOS
  - TMDL Implementation Plan (I-Plan)

- Watershed Protection Plan
Steps in a Watershed-Based Plan

- Characterize Watershed
- Estimate Pollutant Reductions
- Develop Watershed-based Plan
- Assess Results
- Stakeholder Engagement
- Plan Implementation
Water Quality Impairments

- TCEQ’s 2020 Integrated Report for Surface Water Quality
Watershed-Based Plan Development

- Voluntary
- Stakeholder Developed
- Identifies Management Measures
- Implementation Road Map

Implementation Plan for Two Total Maximum Daily Loads for Indicator Bacteria in the Chocolate Bayou Watershed

Segments: 1107 and 1108
Assessment Units: 1107_01 and 1108_01

January 2020
Management Measures

- Support Rural Land Management Initiatives
- Promote Safe OSSF Use and Maintenance
- Improve Wastewater Treatment Facility and Collection System Function
- Address Fecal Deposition of Feral Hog Populations
- Address Fecal Deposition of Dog Waste
- Support Urban Stormwater Management
Implementation

- Outreach
  - TrashBash®
  - Olin Take Child To Work Fair
  - Texas Stream Team Training
  - OSSF Workshops
  - Ag/Feral Hog Workshops
  - Green Infrastructure Workshops

- Structural
  - Pet Waste Stations
  - Evaluating/Repairing OSSFs
Bacteria Trends

Moving Seven-Year Geometric Mean - BIG Project Area
Expanded and Original BIG Area
Expressed as Multiple of Primary Contact Recreation Standard

Reference Line represents the Primary Contact Recreation Standard
Stations outside BIG area include basins 9, 10, 11, 24 Only
Exploration Green

Multi-Use
- Water Quality
- Flood Mitigation
- Recreation
- Wildlife Habitat

- Exploration Green Detention Facility | Clear Lake City Water Authority (clcwa.org)

https://www.explorationgreen.org/
Top Five/Least Five IDDE Model Program

- Three Phases
  - Rapid Survey
  - Wet/Dry Weather Source Identification
  - Notify Local Jurisdictions

- Quality Assured Data

- Model IDDE Program

https://h-gac.com/bacteria-implementation-group/reports
Galveston Bay Action Network

- Online Pollution Reporting Tool
- Phone App
- Reporting:
  - Boater Wastes
  - Construction Run-off
  - Sanitary Sewer Overflows
  - Septic System Failures

https://m3.mappler.net/gban/
ALDINE WESTFIELD
CASE STUDY

- Coordinated Partner Effort
  - Harris County
  - East Aldine Management District

- Monitoring Sites
  • Halls Bayou
  • Greens Bayou
Thank You

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