TCEQ: Bacteria and I-Plans

The Nature of Bacteria: Widespread and transient

Need multiple strategies, watershed-wide approach, sustained over many years, iterative: evaluated annually and revised as needed

Dealing with bacteria is not like a fad diet; it's about changing lifestyles

We're looking for a sustained effort over time in changing peoples' behaviors in the watershed to help improve water quality.

The Standard:

The Contact Recreation standard is the ultimate goal – and we do all we can on the way to that goal

The I-Plan describes strategies (mitigation activities) to improve water quality issues in the watershed – what needs to be done to make the current measures better?

We are looking for a continuing effort in the community, on the way to reaching the standard.

The Implementation Actions table (over) captures the level of detail needed for an implementation strategy to be eligible for certain funding possibilities – it also clarifies how progress toward meeting the strategy will be accomplished.

Best Management Practices (BMPs) from other I-Plans in other parts of Texas are listed in the PowerPoint as examples of strategies, management measures or control actions.

Table 3. On-Site Sewage Facilities Management Measure Summary

Causes and Sources: Nonpoint sources from malfunctioning OSSF

Key Elements

(1) Management Measure	**Identify, prioritize, inspect, and bring into compliance malfunctioning OSSFs in the Gilleland Creek watershed.**			
(2) Potential Load Reduction (cfu/day)	1.05×10^{11} cfu/day	Estimated using an equation from EPA's 2001 *Protocol for Developing Pathogen TMDLs*.	Appendix C provides additional calculation information.	
(3) Technical and Financial Assistance Needed	Technical Two workshops to educate OSSF owners about maintenance and malfunctioning systems.	Financial The inspection of prioritized systems will be performed as a routine duty. No additional financial outlay of resources is expected.	Resources needed to repair malfunctioning systems will vary with each system.	The system owner is responsible for repairing the system. Funding assistance information will be provided.
(4) Education Component	Workshops for OSSF owners.	Distribute educational materials.	Existing web sites show proper OSSF maintenance. LCRA educational booklets are available for distribution by Travis County and COA.	Status updates through TCEQ-hosted annual stakeholder meeting.
(5) Schedule of Implementation	Year One: Map OSSFs and prioritize for inspections. Distribute educational materials. Hold one workshop. Inspect up to 10% of highest priority OSSFs.	Year Two: Inspect up to 15% of the systems. Distribute educational materials. Hold second workshop. Repair or replace malfunctioning OSSFs.	Year Three and Four: Inspect up to 25% of systems; distribute educational materials. Malfunctioning OSSFs repaired or replaced.	Year Five: Partners evaluate and make adjustments. Remaining priority OSSFs inspected.
(6) Interim, Measurable Milestones	Number of OSSFs inspected.	The number of malfunctioning OSSFs repaired or replaced.	Partners performing inspections will create a map of OSSF systems within the watershed from GIS points collected at inspections and from historical data.	
(7) Progress Indicators	A reduction in *E. coli* concentrations in 4 creek AUs.	Contributions reduced due to repair or replacement of malfunctioning OSSFs.		
(8) Monitoring Component	LCRA- and TCEQ-approved QAPP routine water quality monitoring.	Other sources of data including COA, the Colorado River Watch Network (CRWN), and other affiliated citizen-monitoring efforts.		
(9) Responsible Organization	Travis County and COA Perform inspections. Distribute educational materials.	TCEQ Perform inspections and host annual meetings.	LCRA Provide two technical workshops to OSSF owners. Provide educational materials.	OSSF owners Repair malfunctioning systems.