

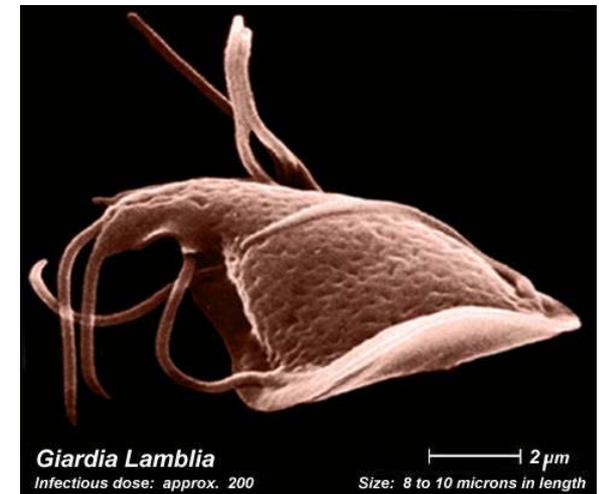
EPA's Draft Recreational Water Quality Criteria

Overview of Proposals and Possible Developments

Water Quality Advisory Work Group
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Slide information from Tracy Bone, USEPA



Background and History

- Water quality criteria for indicator organisms (fecal contamination)
- Protective of contact recreation uses
- Last criteria issued in 1986
- BEACH Act (2000) requires additional study and publish criteria based on newer studies
 - Improve scientific foundation
 - Ease implementation for BEACH Act States
- 2012 is Consent Decree deadline
 - “EPA must conduct studies on pathogens and pathogen indicators in coastal recreational waters and publish water quality criteria recommendations based on those studies”



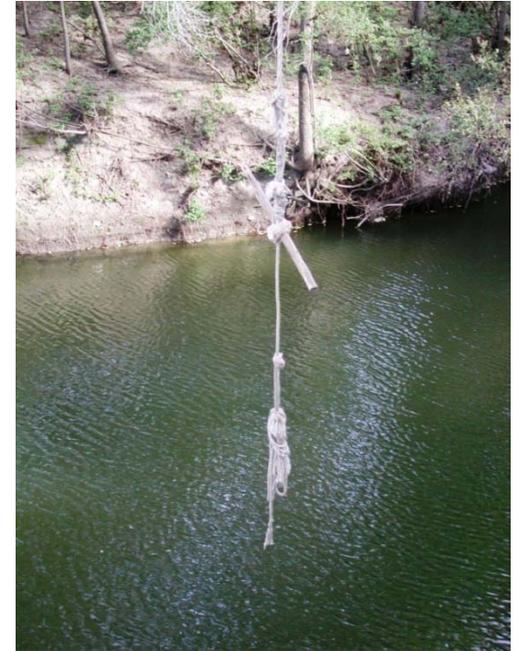
Uses of Recreational Criteria

- Two main uses
 - Related, but different
- Protection of water bodies designated for recreational uses in State WQS
 - TPDES
 - Texas Integrated Report for CWA 305(b) and 303(d)
 - TMDLs
- Beach Monitoring and notification programs
 - Protect public health
 - Aid in determining when to issue advisories or close beaches



Major Areas of Revision

- Epidemiology Studies
 - Revised symptom definitions
 - Maintain same level of water quality
 - Remove use intensity
- Indicators/Method Development
 - qPCR
 - Enterococcus
 - *E. coli*
- Better Site Characterization
 - Temperate beaches
 - Impacts from POTWs
- Frequency and Duration need to be included in WQS



Texas' Current vs. EPA Draft Guidelines

Water Body	PCR Indicator / Statistic	TCEQ 2010 TSWQS (CFU/ 100mL)	2012 Draft EPA Guideline (CFU/100 mL)
Freshwater	E. Coli / Geomean	126	126
Freshwater	E. Coli / STV*	399	235
Freshwater	Enterococcus/ Geomean	33	33
Freshwater	Enterococcus / STV*	78	61
Marine	Enterococcus/ Geomean	35	35
Marine	Enterococcus / STV*	104	104

* STV = Single Threshold Value, 2012 Draft Guidance. TCEQ uses Single Sample Maximum

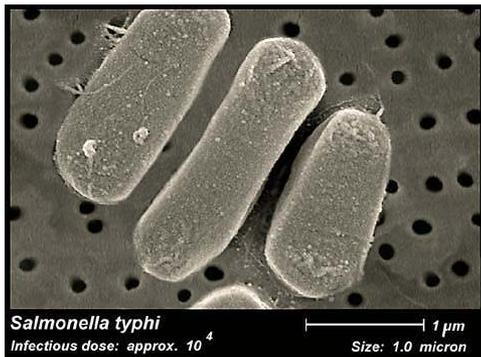
Texas Beach Monitoring

- BEACH Act
 - Requires development and implementation of monitoring program for coastal rec. waters
- GLO Texas Beach Watch Program
 - Sample Enterococcus at 163 locations in coastal counties
 - Weekly from May – Sept.
 - Bi-weekly from Oct. - April
- Advisories
 - >104 CFU/ 100 mL
 - Sampled every 24hrs under advisory
- <http://www.texasbeachwatch.com/>



Bacteria and Permits

- The monthly average bacteria effluent limitation in a Texas Pollutant Discharge Elimination System (TPDES) permit must be the applicable geometric mean for the most stringent contact recreation category
- The daily maximum bacteria effluent limitation in a TPDES permit must be the applicable single grab sample for the most stringent contact recreation category



Initial Impressions

- Recommended numeric guidelines not vastly different from what TX already has in place
- Overall approach emphasizes beach monitoring component
- qPCR not likely to be implemented soon by many States
- Frequency and duration implications unclear
- May increase pressure on use of bacteria single sample maximum (STV) as a method
- Recent EPA approval of TCEQ's new recreational criteria proposals decreases likelihood of immediate impact from recommended guidance



Questions?

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<http://water.epa.gov/scitech/swguidance/standards/criteria/health/recreation/>