

Water Quality Standards for Recreation: Options for Revision - Summary
TCEQ Staff Draft May 5, 2008

Options:

- Expand the existing categories recreational uses and associated criteria
- Assess and recommend options for applying expanded recreational categories

Summary of Recreational Uses and Selected Criteria:

Uses	Criteria and Estimated Risk*					
	<i>E. coli</i> (FW)		Enterococci (SW)		Fecal coli (FW & SW)	
	G. mean	Risk	G. mean	Risk	G. mean	Risk
Existing Standards:						
Contact recreation	126	8	35	19	200	--
Noncontact rec.	605	~14	168	~27	2000	--
Proposed Standards:						
Primary CR 1	126	8	35	19	--	--
Primary CR 2	206	10	--	--	--	--
Secondary CR	630	14-15	175	27-28	--	--
Noncontact Rec.	1260	17-18	350	31-32	--	--

* G. mean = Geometric mean of bacteria per 100 ml

Risk = Risk of illness (gastroenteritis) per 1000 swimmers (from EPA 1986 guidance criteria)

High saline inland water bodies with conductivity values greater than or equal to 9,000 micromhos:

Uses	Criteria and Estimated Risk*	
	Enterococci (FW)	
	G. mean	Risk
Proposed Standards:		
Primary CR 1	33	8
Primary CR 2	54	10
Secondary CR	165	14-15
Noncontact Rec.	330	17-18

* G. mean = Geometric mean of bacteria per 100 ml

Risk = Risk of illness (gastroenteritis) per 1000 swimmers (from EPA 1986 guidance criteria)

Applying Recreational-Use Categories:

Applicability – Recommended Options:

- Contact 1: Classified segments
- Contact 1: Unclassified reservoirs, tidal rivers, bays and unclassified freshwater streams & rivers that are located in national and state parks
- Contact 2: Unclassified perennial streams or pools
- Secondary: Unclassified intermittent streams and nontidal wetlands
- Noncontact: Segments now designated noncontact

Applicability – Additional Options:

- Contact 2: Also apply to classified streams and rivers ?
- Secondary: Also apply to unclassified streams < 18” deep ?

Uses less stringent: based on a use-attainability analysis and a site-specific standards change

Non-human Sources (Include language in Implementation Procedures):

In situations where sanitary surveys, Bacteria Source Tracking or similar studies demonstrate that there are limited areas where wildlife sources of bacteria are unavoidably high, such as in wildlife preserves with very large waterfowl populations and limited aquatic recreational potential, site-specific uses, such as secondary contact recreation, may be designated for individual water bodies in the Texas Surface Water Quality Standards.

Flow-Dependent Applications of Standards in Streams [307.8(a)(1)(A) & (F)]:

Remove low-flow standards exemptions [307.8(a)(1)(A) & (F)] for recreational criteria (geometric mean) for all perennial streams that should be applicable during all but negligible flow conditions (e.g., <0.1 CFS in perennial streams).

Sampling periodicity and evaluation [307.9(e)(3)]:

For bacteria, base standards attainment on geometric mean criteria. Use single-sample maximum criteria for swimmer safety notification and for evaluating maximum limits in wastewater permits.

Effluent limits:

Leave fecal coliform as an alternative indicator in effluent limits for wastewater discharges for one year after the adoption of the TSWQS. Address permitting and bacteria in the Implementation Procedures.

Minor editorial changes