## Contact Recreation Uses and Recreational Use-Attainability Analyses (RUAAs)

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#### Proposed Contact Recreation Uses

Category	Definition Summary	
Primary Contact*	Significant risk of ingestion (immersion activities) – swimming, diving, water skiing, etc.	
Secondary Contact - 1	No significant risk of ingestion (non-immersion activities) – wading, fishing, etc.  Generally, stream depth < 0.5 meters	
Secondary Contact - 2	No significant risk of ingestion; recreational activities occur less frequently because of physical characteristics or limited access	
Non-Contact*	Contact recreation should not occur because of unsafe conditions – heavy ship traffic, waterfowl area, etc.	

#### RUAAs in the Brazos Watershed

Segment #	Water Body	UAA year	RUAA Status
1209	Navasota River Below Lake Limestone	2010	Field work to begin in spring 2010
1209D	Country Club Branch	2010	Field work to begin in spring 2010
1209E	Wickson Creek	2010	Field work to begin in spring 2010
1209G	Cedar Creek	2010	Field work to begin in spring 2010
1209H	Duck Creek	2010	Field work to begin in spring 2010
12091	Gibbons Creek	2010	Field work to begin in spring 2010
1209J	Shepherd Creek	2010	Field work to begin in spring 2010
1209K	Steele Creek	2010	Field work to begin in spring 2010
1244	Brushy Creek	2010	Field work to begin in spring 2010
1245	Upper Oyster Creek	2009	RUAA complete; report submitted
1245C	Bullhead Bayou	2010	Field work to begin in spring 2010
1245D	Unnamed tributary of Bullhead Bayou	2010	Field work to begin in spring 2010



<sup>\*</sup>All streams are on the Texas 2008 303(d) List for not meeting their contact recreation uses due to exceedances of indicator bacteria (*E. coli*) criteria.

#### Why RUAAs?

- Standardized mechanism for capturing information on the types of recreational uses occurring in a water body.
- Document physical stream characteristics that affect recreational uses.
- Document observed, historical, and anecdotal recreational uses.
- Data used for regulatory decision-making about recreational use characterization.



#### How to Achieve the Best RUAAs?

- Work with local experts and stakeholder groups to identify all locations along the stream where recreation occurs.
- Photographic documentation, user interviews, and historical reviews to adequately and completely capture the types of recreational uses at each site.
- Extensive documentation of physical site characteristics and accessibility to describe suitability for recreational uses.

#### <u>Outcomes</u>

- Early identification of obvious primary contact recreation on impaired water bodies (helps to prioritize TMDL activity).
- Completed RUAAs used by TCEQ Water Quality Standards to assign updated recreational uses, if appropriate, in the 2013 Standards revisions.
- EPA must approve revisions to WQS.
- Future WQ assessments (2014?, 2016?) identify impairments based on updated uses and criteria.



## Total Maximum Daily Load (TMDL) Updates

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#### Total Maximum Daily Load is...

- What is the problem?
- Where is it coming from?
- When is it the worst?
- How to reduce it?









#### Bryan **College Station** Legend Cities Streams within the Watershed Carters Creek Watershed **Burton Creek Watershed** Urbanized Area (2000 census) **Brazos County Boundary**

# Carters/Burton Creeks Bacteria TMDL & I-Plan

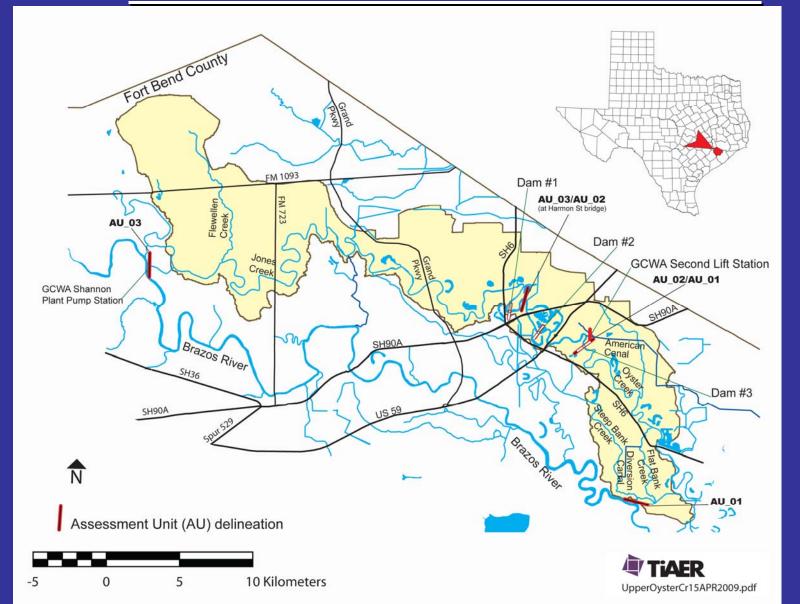


### Carters/Burton Creeks Bacteria TMDL & I-Plan

- A TMDL project was conducted for high bacteria levels in Carters and Burton Creeks, which indicate a potential health risk for swimmers and other recreational users of the water body.
- Complete draft TMDL document summer 2010.
- Initiating TMDL Implementation Plan development (TCEQ, TIAER, TWRI, City of Bryan, City of College Station, Brazos County, TAMU, TxDOT)
- First public meeting for the Implementation Plan will be held on April 29th @ 2:30 (Location TBD)
- Draft TMDL implementation plan to be completed by August 2011.



#### <u>Upper Oyster Creek</u> Bacteria/DO TMDL & I-Plan





#### <u>Upper Oyster Creek</u> Bacteria TMDL & I-Plan

- A TMDL project was conducted for high bacteria levels in Upper Oyster Creek, which indicate a potential health risk for swimmers and other recreational users of the water body.
- Intensive bacteria monitoring was conducted from 2002 through 2004.
- A TMDL for bacteria in Upper Oyster Creek was adopted by the Commission in August 2007, and subsequently approved by EPA in September 2007. In response to public comments, a recreational use attainability analysis was conducted in 2009.
- Local stakeholders will begin work on in implementation plan will begin in the fall of 2010 through efforts coordinated by the Houston-Galveston Area Council.



#### <u>Upper Oyster Creek</u> Dissolved Oxygen TMDL & I-Plan

- Low dissolved oxygen concentrations in some areas of Upper Oyster Creek indicate that conditions are not optimal for aquatic life.
- Intensive dissolved oxygen monitoring was conducted from 2002 through 2005 throughout the water body. A water quality model was developed to determine acceptable levels of oxygen-demanding substances discharged to Upper Oyster Creek.
- A draft TMDL document has been produced and presented to the public for comment.
- Local stakeholders will begin work on in implementation plan will begin in the fall of 2010 through efforts coordinated by the Houston-Galveston Area Council.

