RUAA

Recreational Use Attainability Analysis
Purpose

- UAAs are assessments of the physical, chemical, biological, and economic factors affecting attainment of a waterbody use.
- UAAs are used to identify and assign attainable uses and criteria to individual waterbodies.
- Applicable uses and associated criteria are defined in the Texas Surface Water Quality Standards.
- So, UAAs are used to set the most appropriate water quality standard for each particular waterbody taking into account its unique characteristics.
Current Water Quality Standards

- **Contact Recreation**
  - Recreational activities involving a significant risk of ingestion of water, including wading by children, swimming, water skiing, diving, and surfing.

- **Non-Contact Recreation**
  - Aquatic recreational pursuits not involving a significant risk of water ingestion; including fishing, commercial and recreational boating, and limited body contact incidental or shoreline activity.
Primary Contact Recreation
- Water recreation involving a significant risk of ingestion of water.

Secondary Contact Recreation 1
- Water recreation activities with limited incidental body contact not involving a significant risk of water ingestion.
Secondary Contact Recreation 2

- Water recreation activities with limited incidental body contact not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (a) physical characteristics of the waterbody and/or (2) limited public access.

Non-Contact Recreation

- Activities, such as ship and barge traffic, birding, and using hike and bike trails near a water body, not involving a significant risk of water ingestion, and where primary and secondary contact recreation should not occur because of unsafe conditions.
Bacteria Criteria

- Current water quality standards apply contact recreation to all waterbodies uniformly across the state (with very few exceptions like the Houston Ship Channel).
- So every waterbody must achieve 126.
- These new proposed water quality standards would create a tiered set of criteria for the 4 categories:
  - PCR = 206
  - SCR1 = 630
  - SCR2 = 1,030
  - NCR = 2,060
- But to put these proposed water quality standards in place, after they are adopted, an RUAA must be performed to determine what level of recreation is actually occurring.
Recreational Use-Attainability Analysis (RUAA) Components

- **Sampling Conditions**
  - conducted during normal warm season (March-October) during baseflow conditions.

- **Site Reconnaissance**:
  - Locate areas in which the water body is accessible to the public and have the highest potential for recreational use.
  - Show the locations of TCEQ-permitted wastewater treatment facilities
  - Describe hydrologic characteristics, such as stream type, stream flow, hydrologic alterations, etc.

- **Site Selection**:
  - Survey sites should be located in areas where the water body is accessible to the public and has the highest potential for recreational use.
  - In general, choose 3 sites per every 5 miles of stream.
Recreational Use-Attainability Analysis (RUAA) Components

- **Stream Surveys**
  - Measure the width and depth of the stream to assess if recreation can physically take place
  - Measure the stream flow
  - Assess the condition of the riparian area and ease of bank access to the stream

- **Photographic Record**
  - A photographic record must be made of each site during the site survey. Photographs should include an upstream view, left and right bank views, downstream view, any evidence of observed uses or indications of human use, hydrologic modifications, etc.
Recreational Use-Attainability Analysis (RUAA) Components

- **Historical Information**
  
  - A thorough historical information review of the recreational uses of the water body back to November 28, 1975 should be conducted. Examine historical resources such as photographic evidence, museum collections, published reports, historical society records, and accounts of long term landowners. This review will provide a characterization of the historical uses of the given area.
Recreational Use-Attainability Analysis (RUAA) Components

- **Interviews:**
  - Interviews from users present during the field survey, streamside landowners and local residents should be conducted in order to obtain information on existing and historical uses and stream type (e.g. ephemeral, intermittent, intermittent with perennial pools, perennial) of the water body in question.
RUAA work for this project

- NETMWD & WMS perform 2 stream surveys per site (spring & summer 2010), conduct interviews of landowners and recreational users, & historical information search

- Proposed stream survey sites
  - Big Cypress Creek – 9 locations over 18 miles
  - Tankersley Creek – 6 locations over 8 miles
  - Hart Creek – 6 locations over 15 miles
Questions?

TCEQ RUAA Guidance document
http://www.tceq.state.tx.us/permitting/water_quality/stakeholders/swqsawg_handouts.html#proc