

## **Senate Bill 2 Update Middle Trinity River Instream Flow Study**

### **Overview**

The Texas Instream Flow Program (TIFP) was established by Senate Bill 2 in 2001 by the 77th Texas Legislature. Senate Bill 2 (SB2) is a tri-agency program administered jointly by the Texas Commission on Environmental Quality, Texas Parks and Wildlife Department, and the Texas Water Development Board to establish and continuously maintain an instream flow data collection and evaluation program.

The Middle Trinity River Instream Flow Study is a collaborative effort between the TIFP and the Trinity River Authority (TRA) with the purpose of conducting technical studies to develop flow-ecology relationships for use in generating flow regime recommendations that support a sound ecological environment.

### **Activities, Status Update, and Timeline**

#### **Stakeholder Coordination**

- Public stakeholder meetings were held at two locations within the Trinity River basin. The first meeting was at the Gus Engeling Wildlife Management Area near Tennessee Colony, Texas on March 26, 2013. The second meeting was at the Dogwood Canyon Audubon Center near Cedar Hill, Texas on March 27, 2013. The meetings provided an overview of the TIFP program and stakeholder process; opportunities to document the values, priorities, issues, and concerns of Stakeholders; and a means of recruiting Stakeholders to participate in Study Design Workgroups.
- A two-day Study Design workshop was conducted at the Gus Engeling WMA near Tennessee Colony, Texas on April 25 – 26, 2013. Study Design Workgroup members collaborated with TIFP partners to develop: a goal/vision for the middle Trinity River Basin; specific objectives to accomplish the study goal within the disciplines of hydrology/hydraulics, biology, physical processes/geomorphology, and water quality; and indicators to implement those objectives.

#### **Data Collection and Analysis**

- TRA, with participation and assistance from TWDB and TCEQ, conducted a middle Trinity River Reconnaissance in 2011. That effort provided coarse-scale relative measures of instream habitat, cross-section data every two river miles, continuous longitudinal depth profiles, flow within specified reaches, bank stability assessment mesohabitat characterization (water quality, velocity, cross section data, sediment samples, and slope of water surface) and more than 2,500 geo-referenced photographs.
- Baseline biological sampling for fishes, benthic macroinvertebrates, and mussels was conducted at six sites during summer of 2012 (Fig. 1) and was designed to provide broad geographical coverage within the study area and also repeat historical collections. The effort provided information to assess the current condition of the middle Trinity River, evaluate longitudinal trends in biological communities, conduct comparative analysis with historical information, and identify potential sites for TIFP technical studies.
- Substrate mapping has been completed for all sites.
- 1 level of flow dependent sampling has been completed at the HWY 21 site. An additional flow dependent sampling events has been scheduled for November of 2014.
- Water Quality monitoring and modeling study currently underway.
- Additional Research and Planning Fund special studies for benthic macroinvertebrates and algal productivity currently under development.

#### **Study Design**

- A draft study design is being prepared and is expected to be completed in Winter of 2014.
- After review by the Stakeholders, the draft Study Design will undergo scientific peer review around Spring of 2014.

#### **Important Dates and Proposed Timelines**

- Winter 2014 - Draft Study Design.

- Early 2014 – Stakeholder and Scientific peer review.
- 2013 to 2014 - Final Study Design
- 2014 through 2015 - Conduct technical studies.
- 2016 – Draft Study Report for review.
- 2016 –Final Instream Flow Study Report