

TIFP Study Design Workgroup Meeting Notes
Lower San Antonio River
June 30, 2009

The following reflect the chart notes taken by facilitators during the meeting.

In addition to these notes, participants marked possible study sites and provided information on such sites on a wall map and charts, which the San Antonio River Authority now has.

Site Selection

Cibolo Creek Candidate Study Site

- SH¹ - USGS Study of a well near FM 539. Concern – location may not catch info from Sutherland Springs; 13 springs exist between 90° turn in the creek and FM539. Extend study boundary to include spring near Lavernia.
 - Significant data at USGS location. Habitat study has broader area.
- SH - 5 springs adding quite a bit of water to the creek
 - USGS Data shows accretion from springs.
 - Fish data did not show a significant difference between locations.

LSA Reach 3

- SH - Long segment. Study area at end. Is the study area representative of the segment?
 - Yes, comfortable with representation. Chose site also for mussel bed. Fish are same on segment. Why are mussels doing well there? Compare to upper watershed.

LSA Reach 1

- SH - Concern that there is no study site. Sensitive area. Silt data. River may be changing course. Affect of logjams pronounced. Affect on geomorphology.
 - Discussed how woody debris ends up here. What is happening up river to contribute to woody debris accumulation? Stream capture difficulty; potential tidal influences. What kind of assessment could be done? (*this was a question from the agency to SH*)
- SH - Attention to factors mentioned, such as the relationship to geomorphology. Logjam currently cleared. If not cleared again, could change river. Sand bar - could re-route river.
- SH - Could this reach have species adapted to tidal influences?
 - Site at reach 2 has a similar fish assemblage, but different from other sites.
- SH - Riparian area (forest) 100 acres dying from lack of oxygen, inundation and silt. Concern about acting now.
 - Does the flow affect this?

¹ SH is used as an abbreviation of Stakeholder to attempt to differentiate comments or questions from stakeholder participants as opposed to agency personnel

- SH - Overbank flows.
 - Agencies expressed need to prioritize the study, and concern about the ability to adequately study and characterize overbank flows in this reach.
- SH: Where are the resources?
 - Bay Portion studied by B&E, River portion studied by TIFP, lower part with tidal influence, marsh and delta less resources to study; B&E starting to look at marshes.
 - At delta-- River changes channel frequently. Separate set of expertise on delta.
 - Expanded floodplain. Potential for tidal influence.
- SH - Can what is studied at reach 2 be moved to reach 1? Overbank flow. How often & deep, what affect on area?
- SH - Does overbank flow information at 15 mile mark tell us about the influence of overbank flows lower down?
 - Fish study at mouth of confluence and at Elm Bayou. Same as Hwy 77 location.
 - Stars- indicate a representative area may be responsive to changes in flow or show change in aquatic ecology as it relates to variations in flow.
- SH - Seek elaboration on various plans/studies. Springs recovery, ISF, B&E. Clarified - not seeking to move the 15 mile site, concerned that LSA1 not being studied.
 - Some data in LSA2 may provide info on LSA1. May take a different study to address his concerns.
- SH - Do TSU and UTSA studies address these areas?
 - Yes. Delta- variation, geomorphology, deltaic.
- SUMMARY AGREEMENT: Will continue to talk, but may not change to look at area in LSA1. Provide written comments about concern. May be able to embellish study on that reach.

Draft Study Design

Conceptual Model:

Agreed: Change wording related to Ecological Processes - Base Flows - to read: "elevated in recent years, **may be** partially due"

Biological Component

- SH: Why pug nose minnow as a species to study?
 - Tim Bonner at TSU studied area. 2 species showed decline, pug nose minnow a better choice.
 - EPA says they are sensitive to environmental changes. TPWD has, in contrast, found some in bad areas.
- SH: American Eel?
 - TPWD has not collected but has heard several community reports re: presence in Cibolo Creek.
 - May use eel pots.

Geomorphology- Physical Processes

- Agency comment: Large woody debris can be studied at locations/scale other than at sites specified in the study.
 - Could encompass down to confluence; also important upstream.
 - Work will be at reach-type level.

Water Quality

- SH: How will data points/dynamics in upper basin be included since they impact lower?
 - Will be modeled.
- SH: How will dissolved oxygen (DO) be considered?
 - At 24hr continuous model sites to capture diurnal swings of DO.
- SH: Chlorophyl A & DO swings- are they coordinated and will it be used?
 - Not a priority for standards or monitoring.
- SH: Wilson, Karnes counties, etc- waste water discharges don't make it to SA River.
 - Map shows major permitted discharges of 1 mgd or greater.

Next Steps

Agreed: Comments on draft study design due August 3, (rather than July 17)

Peer review

- SH: Will USGS peer review consider TO &/or study design?
 - Both
- SH: Will stakeholders be able to comment on peer review?
 - Agencies will keep SH aware of USGS comments. Expects USGS to add to rather than subtract. Official comments will come in 2010, but will have informal comment earlier.

Fieldwork

Agencies will begin low-flow collection NOW without awaiting finalization.

- SH: How, when will SH input on draft study *report* be coordinated with peer review?
 - After