

Study Design Workgroups

Texas Instream Flow Program

Three state agencies (*Texas Commission on Environmental Quality, Texas Parks and Wildlife Department and Texas Water Development Board*) will conduct studies of specific Texas rivers to develop sound science that can be used for later decisions about river management. For each portion of river being studied, the agencies will collaborate with a workgroup of stakeholders and members of the public in order to develop a study design.

Study Design Workgroups – Role

The Study Design Workgroup will help the state agencies decide how the studies will be conducted. The workgroup will help the agencies:

- Understand what the public values about the specific river (goal and vision)
- Define healthy conditions for that river
- Identify unique and important features of the river
- Identify study sites
- Develop study goals and objectives
- Identify the types of data that should be collected
- List measures that can be used for monitoring
- Prioritize study elements

Who can participate?

- Everyone is welcome to participate
- Technical expertise is not required, but is useful. The agencies will strive to make workshops accessible to people with a range of backgrounds.

What is the time commitment?

- Multiple meetings – approximately 4 – are anticipated
- Members are encouraged to participate in all meetings to provide continuity
- Each meeting likely will last most of a day
- First meeting will be scheduled by the agencies
- Workgroup will decide dates and times of future meetings

What will a meeting be like?

- Information and ideas will be shared to allow informed discussion and decisions
- Facilitators will encourage collaborative decisions
- Public input will be accepted at each meeting, in addition to the input of those who are workgroup members

How do I sign-up to participate?

- At the orientation meeting in your basin
- By mail: Texas Instream Flow Program, P.O. Box 13231, Austin, TX 78711
- E-mail: tifp@twdb.state.tx.us

Useful Definitions

Aquatic life – All organisms living in or on the water.

Base flows – The component of an instream flow regime that represents normal flow conditions (including variability) between precipitation events. Base flows provide a range of suitable habitat conditions that support the natural biological community.

Discharge – The rate of streamflow or the volume of water flowing at a location within a specified time interval. Usually expressed as cubic meters per second (cms) or cubic feet per second (cfs).

Flow Regime – The distribution of surface runoff from a watershed over time such as hours, days, or months; may include groundwater contributions.

High Flow Pulses – The component of an instream flow regime that represents short-duration, in-channel, high flow events following storm events. They maintain important physical habitat features and longitudinal connectivity along the river channel.

Geomorphology – The study of physical processes that shape the land surface. For instream flow studies, we are particularly interested in the processes that create and maintain habitats for biological resources such as fish, mussels, and riparian plants.

Indicator – Measures, such as dissolved oxygen, which can be used to assess various aspects of the river's health.

Instream Flow – The amount of water running in a river, usually measured by the volume moving down the channel in a specified amount of time (discharge). A variety of instream flows are required to maintain a healthy river.

Overbank Flows – The component of an instream flow regime that represents infrequent, high flow events that exceed the normal channel. These flows maintain riparian areas and provide lateral connectivity between the river channel and active floodplain. They may also provide life-cycle cues for various species.

Riparian Environment – The strip of land beside a river that is the transition from river to land based ecosystems.

River Basin – The area surrounding the river that contributes to and is affected by the river's health.

Subsistence flows – The component of an instream flow regime that represents infrequent, natural low flow events that occur for a seasonal period of time. They maintain water quality criteria and provide sufficient habitat to ensure organisms can recolonize the river system once normal, base flows return.