



Texas Environmental Flows Dashboard Sabine and Neches River basins and Sabine Lake Estuary *as of Aug 2023*

Instream flows, number of measurement points: The expert science team recommended comprehensive flow regimes at 6 major measurement points in the Sabine River Basin and 6 major measurement points in the Neches River Basin. TCEQ adopted flow standards for almost all those points. Unfortunately, TCEQ has declined to require the use of those flow regimes as the basis for calculating flow protection levels to be applied at additional flow gages. As a result, determination of compliance with flow protections for individual permits often is based on flow levels at very distant gages that may be located on an entirely different stream. That means a diversion that dries up a local stream may “comply” with flow standards if there is flow at the distant measurement point.

Instream flows, diversions down to subsistence levels: The adopted flow standards allow diversions down to subsistence flow levels whenever flows at the measurement point are below the seasonal baseflow level. Because subsistence flows represent very low levels intended to be reached only rarely during drought periods, aquatic species are at risk at those levels. If impoundment or diversion under older permits without any flow protections causes flows to drop below baseflow level, flow protections applicable for new permits also drop, just when better protection under new permits is most needed.

Instream flow, levels of baseflows: The expert science team recommended three different levels of baseflows, representing dry, average, and wet conditions because different species do better with different flow levels. Under those recommendations, the lowest levels of protection would apply only during dry conditions when flows naturally are lower, with the highest protection levels applying during wet periods. The flow standards adopted by TCEQ only protect a single level slightly above the level recommended by the expert science team for protection during dry conditions.

Instream flows, levels of pulse flows: The expert science team recommended two different levels of pulse flows, generally representing average, and wet conditions, for protection. However, the adopted flow standards only protect a single level of pulse flow that corresponds to the lowest level recommended for protection by the expert science team.

Instream flows, strategy targets: Under the applicable statute (SB 3), flow standards, in addition to establishing criteria for new permits, are intended to establish target levels of river flows and freshwater inflows to bays and estuaries to be met through the voluntary implementation of proactive strategies to improve impaired flow levels. There are no strategy targets for instream flows or freshwater inflows in these flow standards.

Freshwater inflows, drought period criteria: The expert science team evaluated the levels of inflows expected to reach Sabine Lake if its full instream flow protection recommendations were adopted. The

science team concluded those recommendations would protect adequate levels of freshwater inflows. TCEQ, although adopting much less protective levels for instream flow than recommended by the expert science team, relied on that science team evaluation as support the agency's decision not to adopt separate freshwater inflow protections, such as drought period inflow criteria.

Freshwater inflows, reopener mechanism: Senate Bill 3 directs that permits issued after Sept. 1, 2007, can be reopened to increase protection by a limited amount if flow standards later are amended to be more protective. Although there are no separate inflow protections, increased protections for instream flows, if those flows were passed all the way to the estuary, would increase protections for inflows.

Freshwater inflows, strategy targets: There are no targets to guide voluntary proactive strategies, such as purchases of existing water rights, to increase instream flows or bay inflows.

Overall: match with science team recommendations: The expert science teams were charged with developing recommendations adequate to protect a sound ecological environment. Levels of protection in adopted flow standards are much lower than recommended by the expert science team.