

Texas' Groundbreaking Environmental Flow Legislation

What are 'environmental flows'?

Environmental flows are the amount of water necessary for a river, estuary or other freshwater system to maintain its health and productivity.

Why this law is unique

In Texas, like much of the West, the concept of leaving water for the environment has been controversial. Water left in a river to flow out into an estuary or the Gulf of Mexico was once commonly described as 'wasted.'

The new law is one of the most comprehensive in the nation, as it will set environmental flow standards for every major river system in the state. The law sets up a public process for soliciting input from scientists and stakeholders. The state will then adopt legal standards for each river and bay system.

If implemented well, this should set a national precedent showing how water resources can be managed rationally to meet human needs and protect the environment. The legislation grew out of negotiations between environmental groups and an association of water suppliers.

Why it matters to wildlife

This new law will benefit fish and wildlife throughout the state, but its impact will be most pronounced along the coast.

Texas has seven major coastal estuaries, also known as bays, formed where freshwater from rivers meets the saltier water of the Gulf of Mexico. These estuaries are vital for fish, shrimp, oysters, crabs and many species of birds and they are the engine behind the \$2 coastal billion recreational and commercial fishing economy.

The Texas coastline also has one of the highest diversity of bird species in the world. A birding destination near Matagorda Bay, for example, regularly tops the Audubon Society's prestigious Christmas Bird Count. Probably the most famous bird species in Texas is the endangered whooping crane, which winters along San Antonio Bay near the mouth of the Guadalupe and San Antonio rivers.

The issue is pressing

Texas is growing faster than any other state in the nation; the population is expected to double by mid-century. Projections, such as the National Wildlife Federation's 2004 report *Bays in Peril*, indicate that many of the state's rivers and estuaries could end up deprived of adequate freshwater, particularly in drier years. However, for most of Texas' rivers and estuaries there is still time to change course and to avoid serious long-term damage.



USFWS



The last flock of wild, migrating whooping cranes winters along the Texas coast. Populations of its main food source, the blue crab, are correlated with the amount of freshwater flowing into the San Antonio Bay system. This new law creates a process to determine how much freshwater the bay should get annually.



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In 2001, the Rio Grande failed to reach the Gulf due to a combination of drought and overuse. Texas' population is expected to double by mid-century, threatening other Texas rivers with the same fate if nothing is done.



The process

The new law establishes a process for determining how much water is needed and begin the process of ensuring that the water is protected.

The law divides the state up into several areas based on river watersheds. Each area will have a team of stakeholders from diverse interest groups and a science team made up solely of technical experts.

The science team will study the issue and make a recommendation for flow quantities based on what the best available science indicates the rivers and bays need. The stakeholder committee will look at the science team recommendation and may make a separate recommendation based on what the group believes is possible in view of competing demands for water resources.

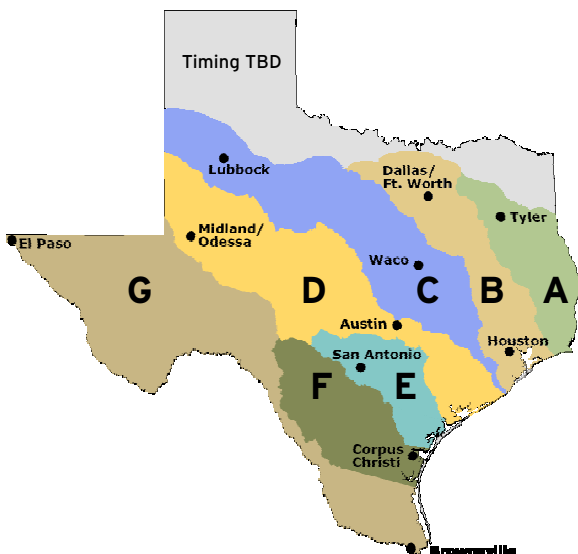
The state environmental commission will consider both recommendations and will adopt formal environmental flow standards.

These standards will be the goals for the amount of flows in the river and to the associated bay system. The flow standards likely will use a building-block approach, with a minimum level of flows to be provided during droughts and additional flow levels to be provided during wetter periods.

Securing the needed flows

When adopting the flow standards, the state environmental commission will also decide to “set-aside” some or all of the water that is not spoken for by existing permits.

In some river systems, however, there will be little water available for the environmental flow set-asides. In these cases, the stakeholder groups will make recommendations on how to make up the difference. This will likely include the dedication of urban return flows and donations or voluntary purchases of existing water rights.



Basins starting the process Nov. 2007

- A. Sabine & Neches rivers, Sabine Lake
- B. Trinity & San Jacinto rivers, Galveston Bay

Basins starting the process Sept. 2008

- D = Colorado & Lavaca rivers, Matagorda & Lavaca bays
- E = Guadalupe, San Antonio, Mission, & Aransas rivers, Aransas & San Antonio bays

Basins starting the process Sept. 2009

- C = Brazos River & estuary area
- F = Nueces River, Corpus Christi & Baffin bays
- G = Rio Grande River & Lower Laguna Madre

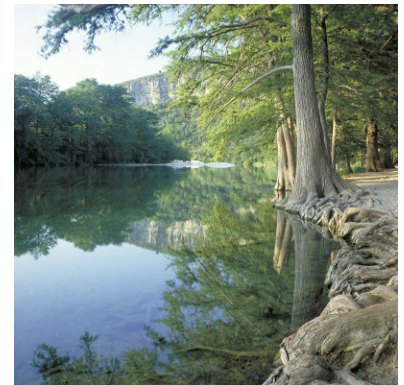
Map is preliminary. Exact boundary lines will be drawn during the process.



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Commercial and recreational fishing along the Texas coast create \$2 billion of economic activity annually. Most of Texas' marine sportfish depend on estuaries for at least one part of their lifecycle.



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The new law will set flow levels at various points in Texas' rivers, protecting water in the river as well as where the river finally flows into an estuary along the Gulf of Mexico. It is arguably the most comprehensive law of its kind in any state in the nation.

Please get involved!

Go to www.texaswatermatters.org/flows, call 1-800-919-9151, or email Jennifer Ellis at ellis@nwf.org.