

Overview of Environmental Flows in Texas

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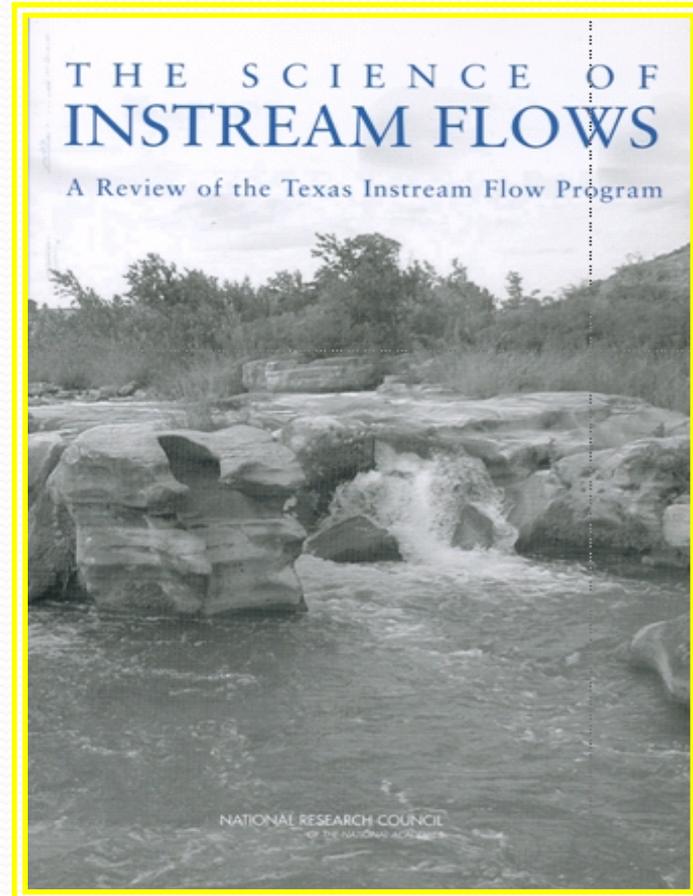
Senate Bill 2

- In 2001, the Texas Legislature passed Senate Bill 2 which directed the Texas Commission on Environmental Quality, Texas Parks and Wildlife Department, and the Texas Water Development Board to “jointly establish and continuously maintain an instream flow data collection and evaluation program.”
- The legislature also directed the three agencies to “conduct studies and analyses to determine appropriate methodologies for determining flow conditions in the state's rivers and streams necessary to support a sound ecological environment.”
- The agencies implemented the statute by creating the Texas Instream Flow Program (TIFP).



Scientific Peer Review

- State methodology peer reviewed by National Research Council
- Review completed in February 2005

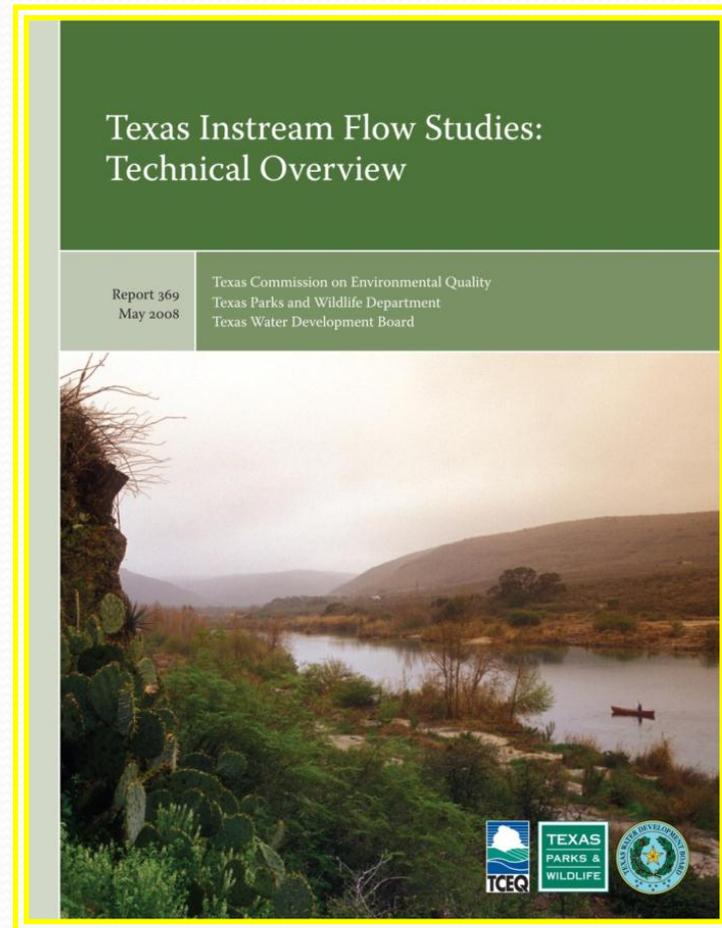


https://www.twdb.texas.gov/surfacewater/flows/instream/nas_review/index.asp



TIFP Technical Overview Document

- Revised in response to National Research Council and stakeholder comments
- Published in 2008
- General description of study procedures and methods for instream flow studies



https://www.twdb.texas.gov/surfacewater/flows/instream/doc/R369_InstreamFlows.pdf?d=1509982619564



Senate Bill 2 TIFP Study Process



Collect Baseline Information and Evaluate



Collaborate with Public and Stakeholders through Meetings and Workgroups



Study Design



Multidisciplinary Data Collection and Evaluation



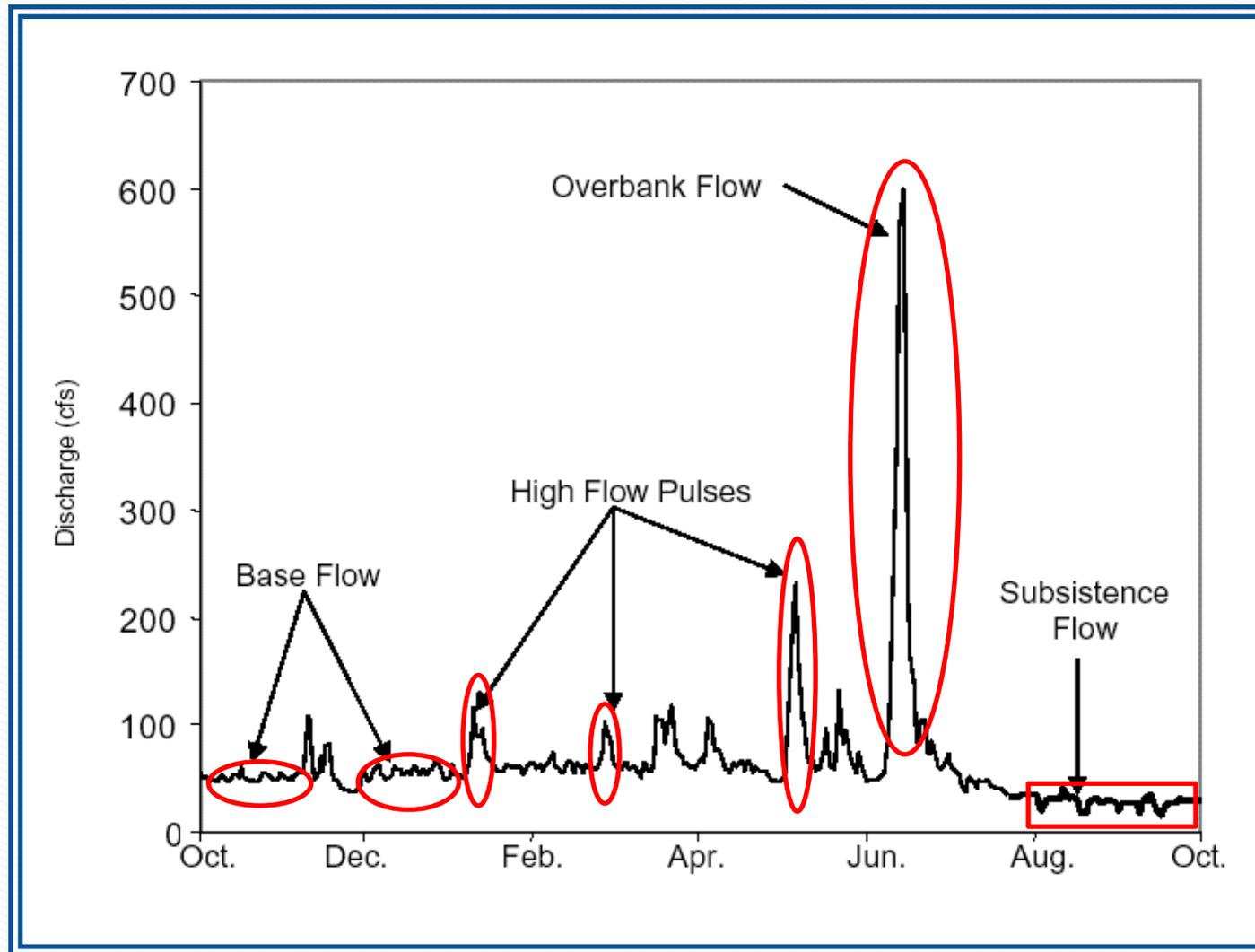
Data Integration to Generate Flow Recommendations



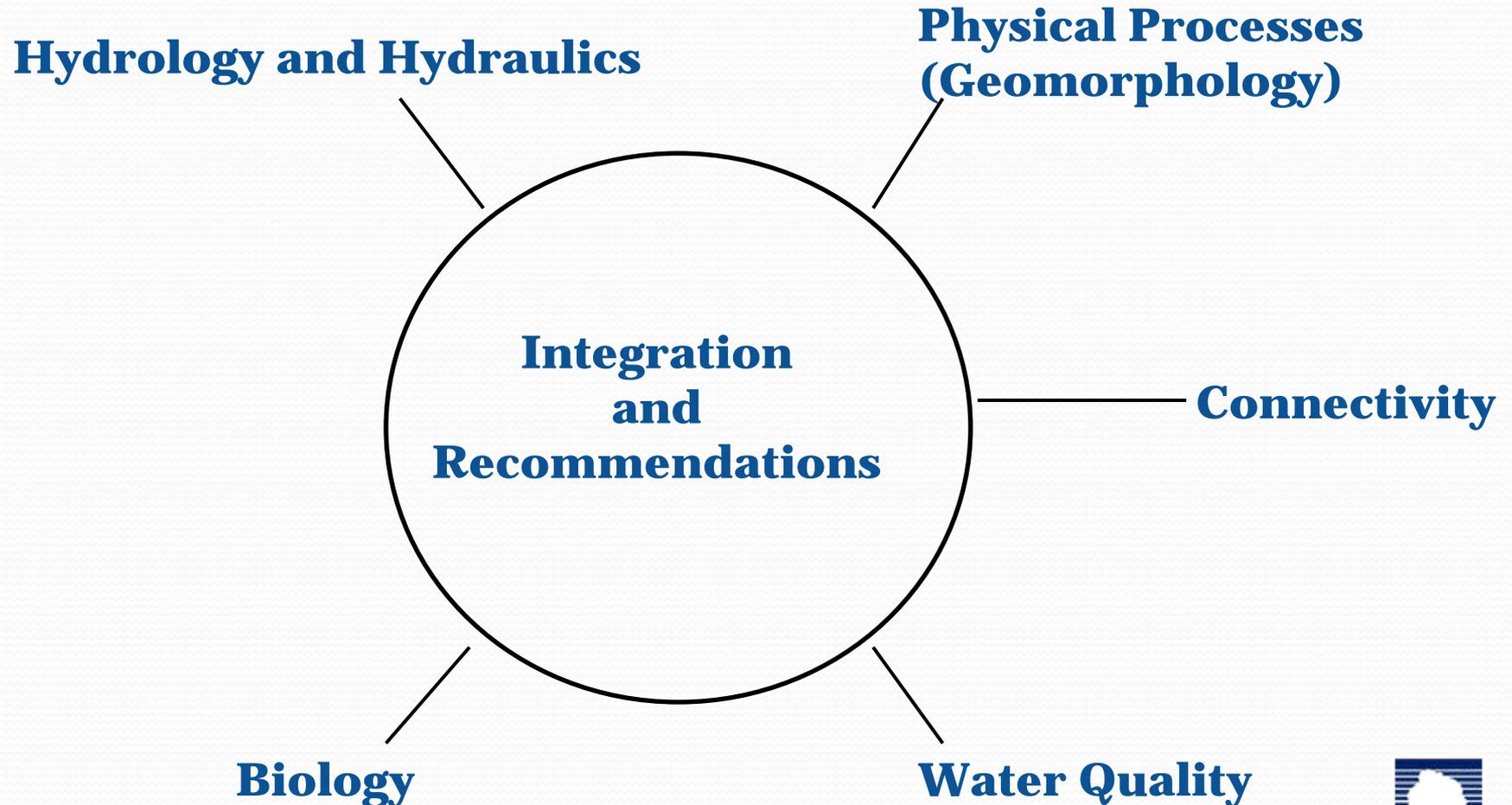
Study Report



TIFP Instream Flow Components



Primary Disciplines



TIFP Instream Flow Studies

- Given their complexity, instream flow studies take many years to complete with only a small portion of the State's rivers having been addressed to date.
- Studies for portions of the Brazos and San Antonio Rivers are anticipated to be completed by December of 2017.



Senate Bill 3 Background

- In 2007, the 80th Legislature passed Senate Bill 3 (SB 3) relating to the development, management, and preservation of the water resources of the state.
- SB 3 changed the process for incorporating environmental protection into water rights permits for new appropriations of water.
- SB 3 amended Texas Water Code (TWC) §11.1471 to require the TCEQ to adopt rules related to environmental flow standards.



SB3 Rulemaking

- The process for adoption of environmental flow standards in the state has been extensive and taken several years.
- Local science teams (BBEST) look at scientific information and present that information to TCEQ and a local stakeholder group (BBASC)
- The stakeholders look at the scientific information and future human water needs and presents its environmental flow recommendations to TCEQ.
- The TCEQ then writes rules for environmental flow standards for the basin and bay areas.

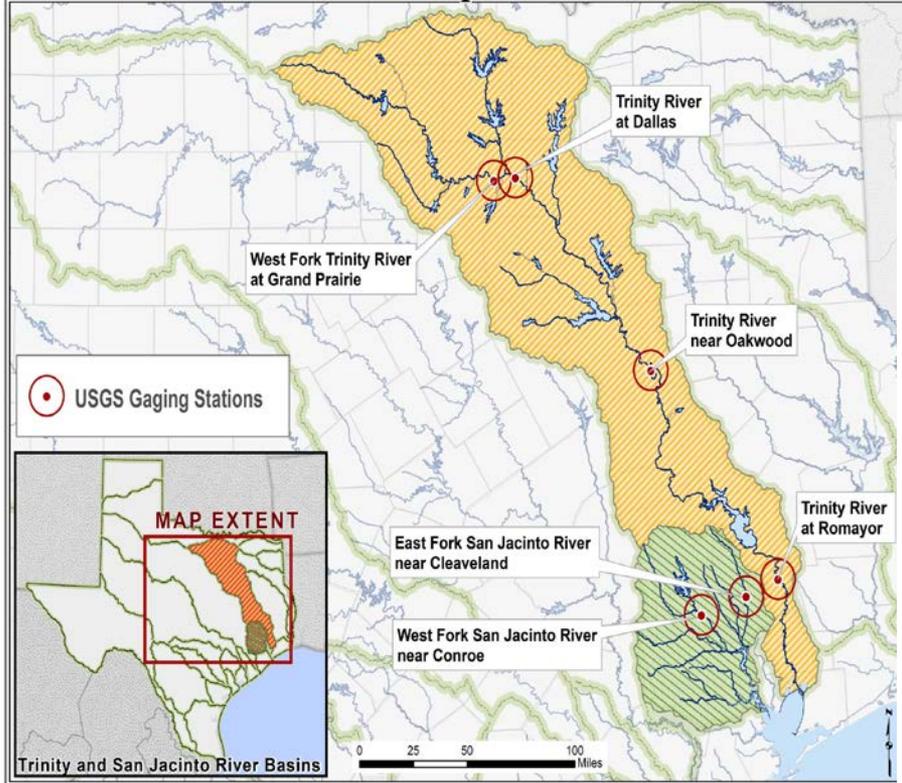


SB3 Rulemaking

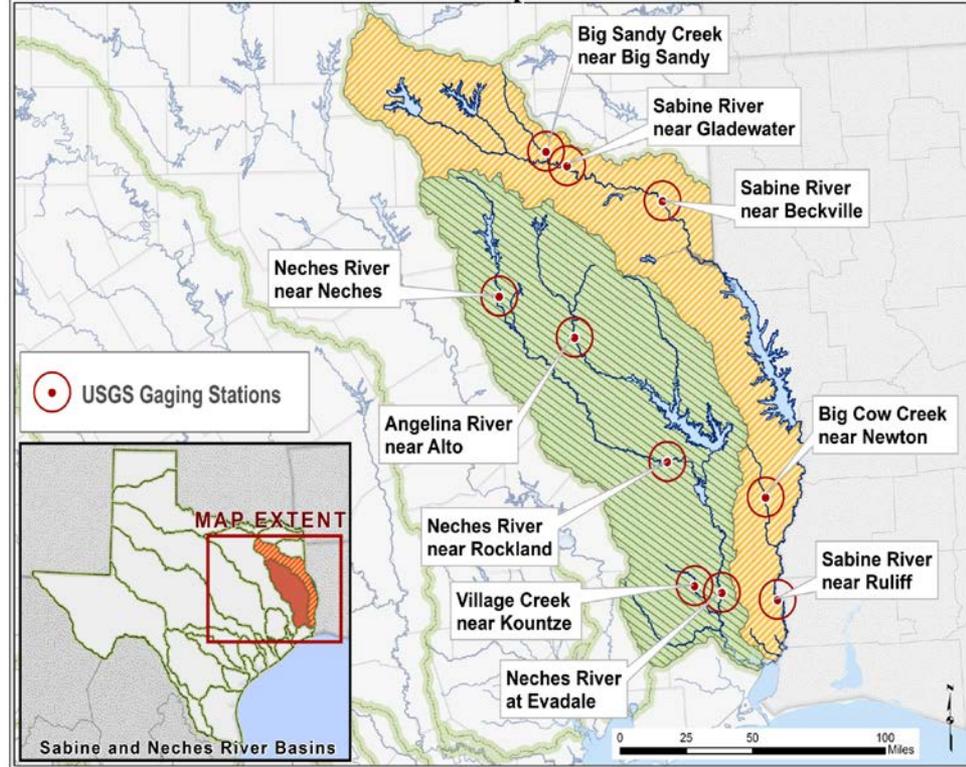
- To implement the rulemaking requirement of SB 3, the TCEQ conducted three separate rulemakings.
- The first rulemaking covered:
 - the river basin and bay system consisting of the Trinity and San Jacinto Rivers and Galveston Bay; and,
 - the river basin and bay system consisting of the Sabine and Neches Rivers and Sabine Lake Bay.
- This rule was adopted in April 2011.



Measurement Points for Subchapter B- Trinity & San Jacinto River Basins



Measurement Points for Subchapter C - Sabine & Neches River Basins

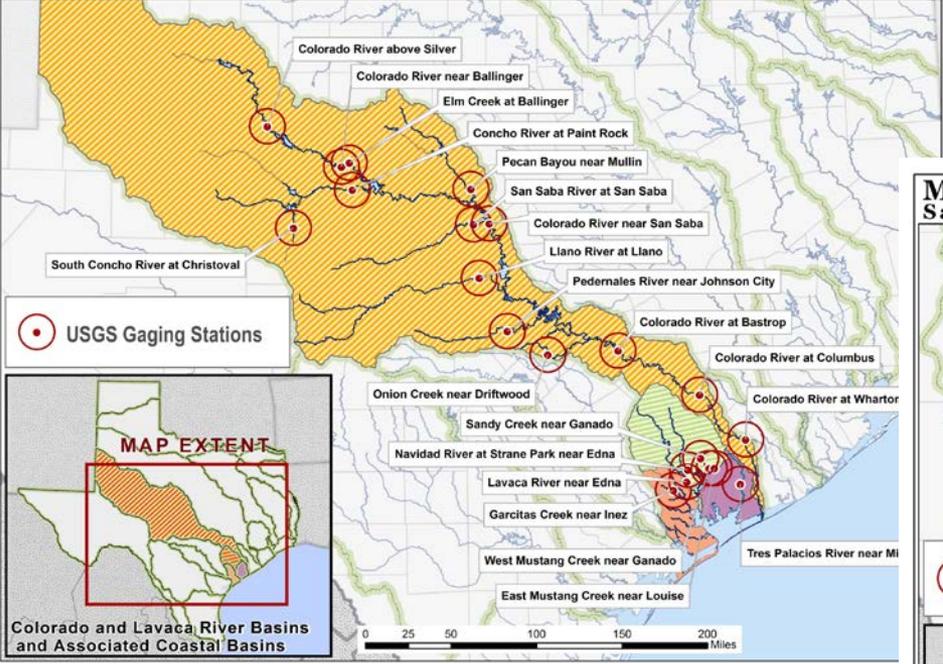


SB3 Rulemaking

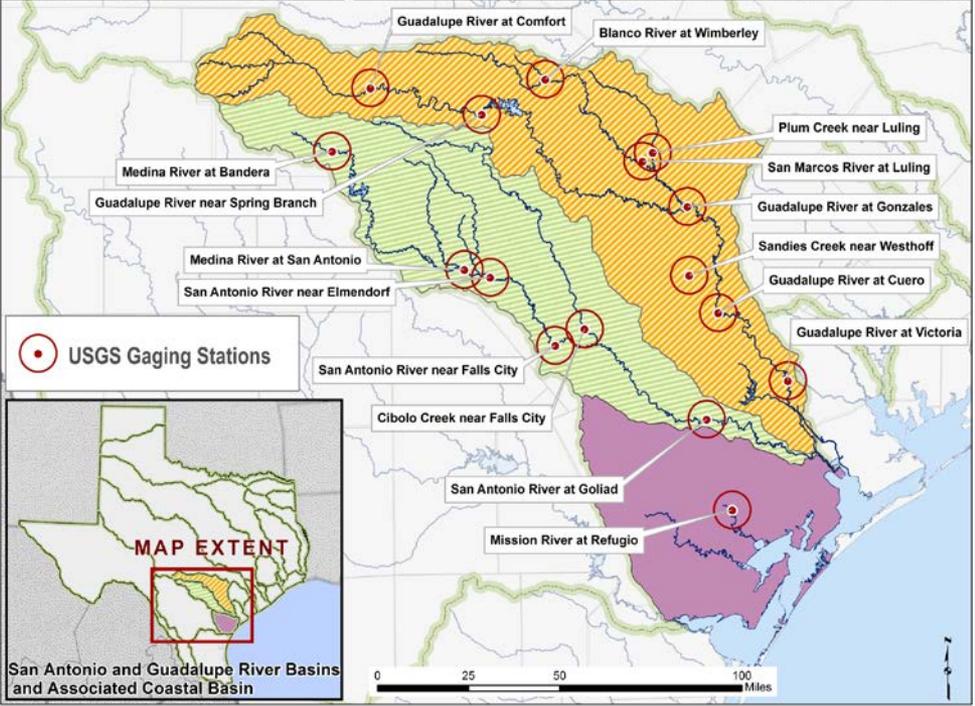
- The second rulemaking covered:
 - the river basin and bay system consisting of the Colorado and Lavaca Rivers and Matagorda and Lavaca Bays; and,
 - the river basin and bay system consisting of the Guadalupe, San Antonio, Mission, and Aransas Rivers and Mission, Copano, Aransas, and San Antonio Bays.
- This rule was adopted in August 2012.



Measurement Points for Proposed Subchapter D - Colorado and Lavaca River Basins and Associated Coastal Basins



Measurement Points for Proposed Subchapter E - San Antonio and Guadalupe River Basins and Associated Coastal Basin

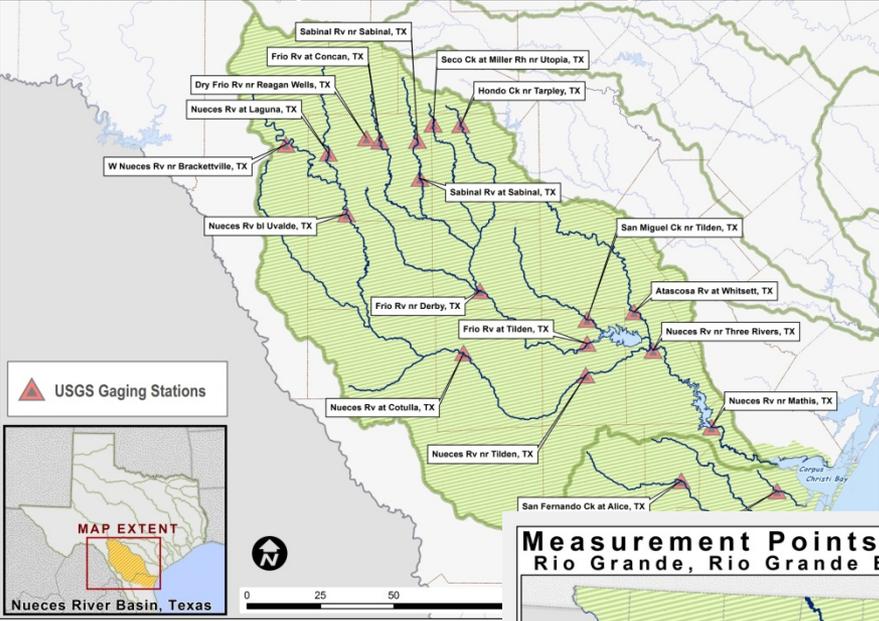


SB3 Rulemaking

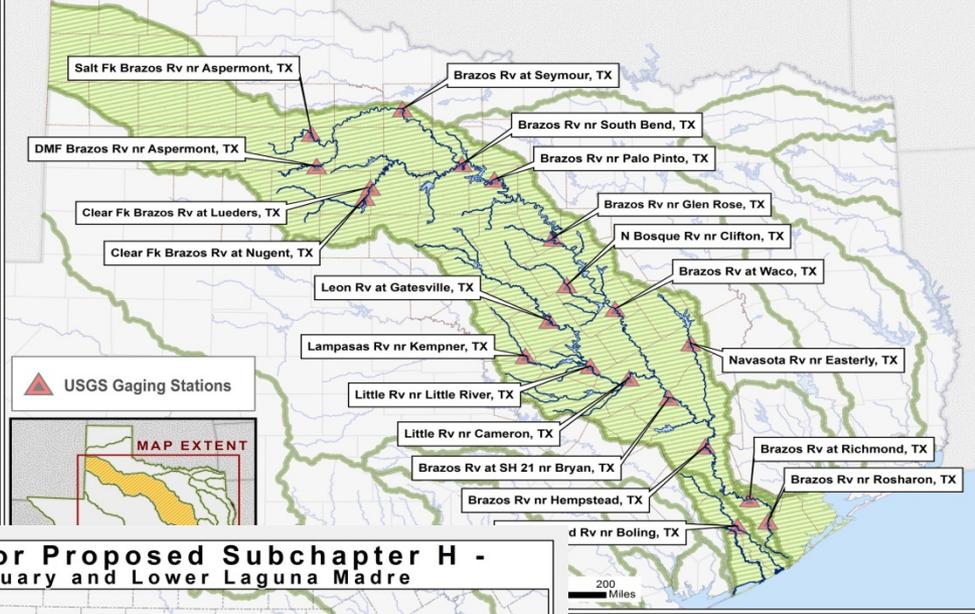
- The third rulemaking covered:
 - the river basin and bay system consisting of the Nueces River and Corpus Christi and Baffin Bays;
 - the river basin and bay system consisting of the Rio Grande, the Rio Grande estuary, and the Lower Laguna Madre; and,
 - the Brazos River and its associated bay and estuary system.
- This rule was adopted in February 2014.



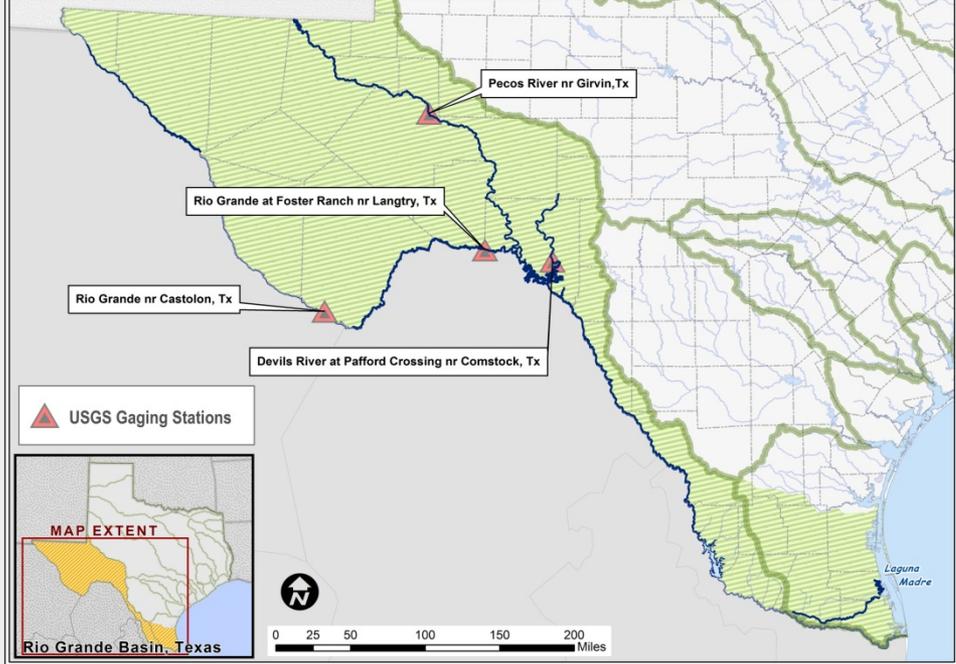
Measurement Points for Proposed Subchapter F - Nueces River and Corpus Christi and Baffin Bay



Measurement Points for Proposed Subchapter G - Brazos River and its Associated Bay and Estuary System



Measurement Points for Proposed Subchapter H - Rio Grande, Rio Grande Estuary and Lower Laguna Madre



SB3 Rules

The adopted environmental flow standards can be found in Chapter 298 of TCEQ's rules in Title 30 of the Texas Administrative Code (TAC).

Subchapter	Basin and Bay System
A	General Provisions
B	Trinity and San Jacinto Rivers and Galveston Bay
C	Sabine and Neches Rivers and Sabine Lake Bay
D	Colorado and Lavaca Rivers and Matagorda and Lavaca Bays
E	Guadalupe, San Antonio, Mission, and Aransas Rivers and Mission, Copano, Aransas, and San Antonio Bays
F	Nueces River and Corpus Christi and Baffin Bays
G	Brazos River and its associated bay and estuary system
H	Rio Grande, the Rio Grande estuary, and the Lower Laguna Madre



Applicability of SB3 Rules

- By rule, the adopted environmental flow standards are adequate to protect a sound ecological environment.
- The SB3 environmental flow standards in Chapter 298 of TCEQ's rules do not apply to water rights issued before September 1, 2007.
- The rules only apply to a new appropriation of water or an amendment to an existing permit for a new appropriation of water which was issued after September 1, 2007.



Adaptive Management

- SB 3 is an adaptive management process. After submitting their recommendations to the TCEQ, the stakeholders, with the assistance of their science team, prepare a work plan.
- The work plan establishes a periodic review of the science and recommendations, may include monitoring or other studies, and establishes a schedule for continuing the validation and refinement of the standards.
- The local groups are currently working on various studies under their workplans.



SB3 Ongoing Studies

- TIFP studies can provide available science to be considered during the SB3 adaptive management process.
 - Interim results from San Antonio River Instream Flow studies were considered by the stakeholders in developing recommendations for the adopted SB3 standards.
- The SB3 groups have completed studies and continue with ongoing studies to gather scientific information to refine and validate the adopted standards.
 - <https://www.twdb.texas.gov/surfacewater/flows/environmental/index.asp#trinity>
 - https://www.tceq.texas.gov/permitting/water_rights/wr_technical-resources/eflows



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