

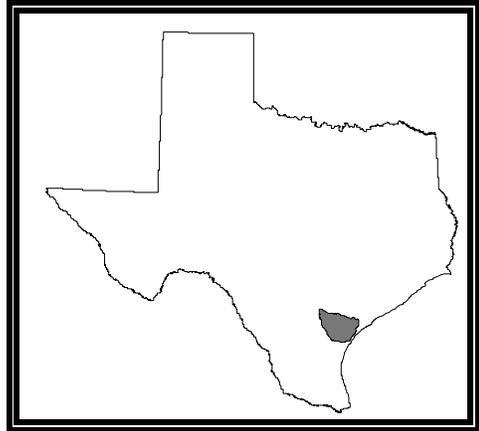
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Basin 20

San Antonio–Nueces Coastal

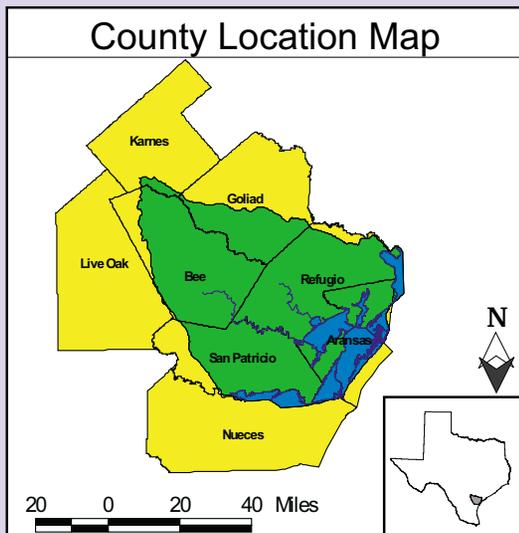


San Antonio–Nueces Coastal Basin Narrative Summary

This basin lies in the coastal plain between the San Antonio and Nueces Rivers. There are two minor rivers, but no watercourses that maintain significant stream flow. Runoff from the basin drains into Copano Bay and Aransas Bay. Total basin drainage area is 2,652 square miles. For water quality management purposes, four sites in four segmented waters on two rivers are monitored routinely. The economy of the basin is diversified, with petroleum-related activities and agriculture providing the base.

Elevated average sulfate and total dissolved solids concentrations cause nonsupport of the general water quality use on the above tidal portion of the Aransas River.

San Antonio-Nueces Coastal Basin Identified Water Quality Issues

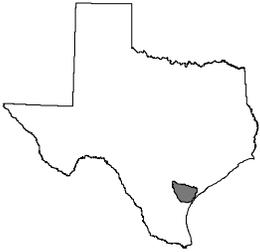


San Antonio–Nueces Coastal Basin Graphical Summary

Basin Map	Water Bodies									
	Segment 2001 Mission River Tidal	Segment 2002 Mission River Above Tidal	Segment 2003 Aransas River Tidal	Segment 2004 Aransas River Above Tidal						
DESIGNATED USE SUPPORT										
Contact Recreation	S	S	S	NA						
Noncontact Recreation	X	X	X	X						
Public Water Supply	X	X	X	X						
Fish Consumption										
Human Health	NA	NA	NA	NA						
Advisories/Closures	NA	NA	NA	NA						
Aquatic Life										
Dissolved Oxygen (Grab)	S	S	S	S						
Dissolved Oxygen (24-Hour)	NA	NA	NA	NA						
Metals in Water	NA	NA	NA	NA						
Organics in Water	NA	NA	NA	NA						
Water Toxicity Tests	NA	NA	NA	NA						
Sediment Toxicity Tests	NA	NA	NA	NA						
Macrobenthos	NA	NA	NA	NA						
Fish	NA	NA	NA	NA						
GENERAL USE SUPPORT										
Water Temperature	S	S	S	S						
pH	S	S	S	S						
Chloride	X	S	X	S						
Sulfate	X	S	X	N						
Total Dissolved Solids	X	S	X	N						

S = Support; P = Partial Support; N = Nonsupport; T = Threatened; NC = No Concern; C = Concern;
 NA = Not Assessed; X = Not Applicable

San Antonio–Nueces Coastal Basin Graphical Summary (Continued)

Basin Map	Water Bodies									
	Segment 2001 Mission River Tidal	Segment 2002 Mission River Above Tidal	Segment 2003 Aransas River Tidal	Segment 2004 Aransas River Above Tidal						
										
WATER QUALITY CONCERNS										
Contact Recreation	X	X	X	NA						
Noncontact Recreation	X	X	X	X						
Fish Tissue	NA	NA	NA	NA						
Sediment	NA	NA	NA	NA						
Narrative	NC	NC	NC	NC						
Nutrient Enrichment										
Ammonia Nitrogen	NC	NC	NC	NC						
Nitrite + Nitrate Nitrogen	NC	NC	NC	NA						
Orthophosphorus	NC	NC	NC	NA						
Total Phosphorus	NC	NC	NC	C						
Chlorophyll <i>a</i>	NC	NC	NC	NC						
Public Water Supply										
Finished Water Chloride	X	X	X	X						
Finished Water Sulfate	X	X	X	X						
Finished Water TDS	X	X	X	X						
Surface Water Chloride	X	X	X	X						
Surface Water Sulfate	X	X	X	X						
Surface Water TDS	X	X	X	X						
Aquatic Life										
Dissolved Oxygen	X	X	X	X						
Metals in Water	NA	NA	NA	NA						
Organics in Water	NA	NA	NA	NA						
Water Toxicity Tests	NA	NA	NA	NA						
Sediment Toxicity Tests	NA	NA	NA	NA						

San Antonio–Nueces Coastal Basin

Segment 2001 - Mission River Tidal

Water body description: From the confluence with Mission Bay in Refugio County to a point 7.4 km (4.6 miles) downstream of US 77 in Refugio County

Water body classification: Classified

Water body type: Tidal Stream

Water body length / area: 19.00 Miles

Use support summary: Available data indicate that the aquatic life, contact recreation, and general uses are supported. The fish consumption use was not assessed due to insufficient data.

Water quality concerns summary: Available data indicate that there are no water quality concerns.

Monitoring sites used in the assessment

Station	Station Description
12943	Mission River Tidal at FM 2678 Bridge between Refugio and Bayside

Wastewater dischargers

Permit type	Number of outfalls
Domestic	1

Historical fish kills

Start date	Location	Fish killed	Suspected cause
07/01/1996	Mission River Oaks Subdivision off 136, in Sous Creek	150	Low dissolved oxygen

San Antonio–Nueces Coastal Basin

Segment 2002 - Mission River Above Tidal

Water body description: From a point 7.4 km (4.6 miles) downstream of US 77 in Refugio County to the confluence of Blanco Creek and Medio Creek in Refugio County

Water body classification: Classified

Water body type: Freshwater Stream

Water body length / area: 9.00 Miles

Use support summary: Available data indicate that the aquatic life, contact recreation, and general uses are supported. The fish consumption use was not assessed due to insufficient data.

Water quality concerns summary: Available data indicate that there are no water quality concerns.

Monitoring sites used in the assessment

Station	Station Description
12944	Mission River at US 77 upstream from Bridge at Refugio

Wastewater dischargers

Permit type	Number of outfalls
Domestic	4

Historical fish kills

Start date	Location	Fish killed	Suspected cause
04/30/1997	3 miles N of Blackburn Ranch into Indian Creek, leading to Blanco Creek	12	Organic compound

San Antonio–Nueces Coastal Basin

Segment 2003 - Aransas River Tidal

Water body description: From the confluence of Copano Bay in Aransas/Refugio County to a point 5.3 km (3.3 miles) upstream of Chiltipin Creek in Refugio/San Patricio County

Water body classification: Classified

Water body type: Tidal Stream

Water body length / area: 6.00 Miles

Use support summary: Available data indicate that the aquatic life, contact recreation, and general uses are supported. The fish consumption use was not assessed due to insufficient data.

Water quality concerns summary: Available data indicate that there are no water quality concerns.

Monitoring sites used in the assessment

Station	Station Description
12946	Aransas River Tidal near salt water barrier 1.9 km upstream of Chiltipin Creek confluence

Published studies

Publication	Date	Author
IMS 40 Chiltipin Creek	Aug. 1974	Petrick, D.

Wastewater dischargers

Permit type	Number of outfalls
Domestic	5

San Antonio–Nueces Coastal Basin

Segment 2004 - Aransas River Above Tidal

Water body description: From a point 5.3 km (3.3 miles) upstream of Chiltipin Creek in Refugio/San Patricio County to the confluence of Poesta Creek and Aransas Creek in Bee County

Water body classification: Classified

Water body type: Freshwater Stream

Water body length / area: 58.00 Miles

Use support summary: General water quality uses are not supported due to elevated average sulfate and total dissolved solids concentrations. The aquatic life use is supported. Contact recreation and fish consumption uses were not assessed due to insufficient data.

Water quality concerns summary: Total phosphorus is a concern.

Additional information: A wasteload evaluation (WLE) for dissolved oxygen was approved in 1993 and has been incorporated into the state Water Quality Management Plan. Advanced waste treatment is required for one or more dischargers.

A project is scheduled for sulfate and total dissolved solids to do one or more of the following: assess the relevant water quality standard; to confirm the impairment; to conduct a total maximum daily load (TMDL) to evaluate the causes and sources and allocate the allowable loading; or to correct the impairment under another program. For more information on specific TMDL projects, visit the TNRCC Web site at www.tnrcc.state.tx.us/water/quality/tmdl/.

Monitoring sites used in the assessment

Station	Station Description
12948	Aransas River at US 77 Bridge between Woodsboro and Sinton
12952	Aransas River at county road east of Skidmore

Published studies

Publication	Date	Author
IS 48 Aransas River	April 1982	Twidwell, S.

Wastewater dischargers

Permit type	Number of outfalls
Domestic	2

Historical fish kills

Start date	Location	Fish killed	Suspected cause
11/28/1994	In Poesta Creek City park, 1.0 mi to the Beeville STP outfall	801	Low Dissolved Oxygen

