

Arroyo Colorado Tidal

Segment: 2201 Nueces-Rio Grande Coastal Basin

Basin number:	22
Basin group:	E
Water body description:	From confluence with Laguna Madre in Cameron/Willacy County to a point 100 meters (110 yards) downstream of Cemetery Road south of Port Harlingen in Cameron County
Water body classification:	Classified
Water body type:	Tidal Stream
Water body length / area:	26 Miles
Water body uses:	Aquatic Life Use, Contact Recreation Use, General Use, Fish Consumption Use

Standards Not Met and Concerns in Previous Years Assessment Area	Use	Support Status or Concern	Parameter	Category
Approx. 1 mile upstream to 3 miles downstream of Camp Perry	Aquatic Life Use	Not Supporting	ambient toxicity in sediment	5c
Approx. 1 mile upstream to 3 miles downstream of Camp Perry	Aquatic Life Use	Not Supporting	depressed dissolved oxygen	5c
Approx. 2 miles upstream to approx. 2 miles downstream of Marker 22	Aquatic Life Use	Not Supporting	ambient toxicity in sediment	5c
Approx. 3 miles upstream to 2 miles downstream of Marker 27	Aquatic Life Use	Not Supporting	ambient toxicity in sediment	5c
Lower 9.0 miles of segment	Aquatic Life Use	Not Supporting	ambient toxicity in sediment	5c
Upper 4 miles of segment	Aquatic Life Use	Not Supporting	ambient toxicity in sediment	5c
Upper 4 miles of segment	Aquatic Life Use	Not Supporting	depressed dissolved oxygen	5c

Additional Information: The contact recreation and general uses are fully supported. The fish consumption use was not assessed.

This segment was identified on the 2000 303(d) List as not supporting the aquatic life use due to depressed dissolved oxygen. Because an insufficient number of 24-hour dissolved oxygen values were available in 2002 to determine if the criterion is supported, this segment will be identified as not meeting the standard for dissolved oxygen until sufficient 24-hour measurements are available to demonstrate support of the criterion.

This segment was also identified on the 2000 303(d) List as not supporting the aquatic life use due to ambient toxicity in sediment. Because there were insufficient data available in 2002 to evaluate changes in water quality, this segment will be identified as not meeting the standard for ambient toxicity in sediment until sufficient data are available to demonstrate use support.

(based on data from 03/01/1996 to 02/28/2001)

2002 Concerns:			
Assessment Area	Use or Concern	Concern Status	Description of Concern
Approx. 1 mile upstream to 3 miles downstream of Camp Perry	Nutrient Enrichment Concern	Concern	nitrate+nitrite nitrogen
Approx. 3 miles upstream to 2 miles downstream of Marker 27	Nutrient Enrichment Concern	Concern	nitrate+nitrite nitrogen
Upper 4 miles of segment	Aquatic Life Use	Use Concern	depressed dissolved oxygen
Upper 4 miles of segment	Nutrient Enrichment Concern	Concern	ammonia
Upper 4 miles of segment	Nutrient Enrichment Concern	Concern	nitrate+nitrite nitrogen

Monitoring sites used:		
Assessment Area	Station ID	Station Description
Approx. 1 mile upstream to 3 miles downstream of Camp Perry	13073	ARROYO COLORADO TIDAL AT CAMP PERRY NORTH OF RIO HONDO
Approx. 2 miles upstream to approx. 2 miles downstream of Marker 22	13071	ARROYO COLORADO TIDAL AT MILE 10 (MARKER 22)
Approx. 3 miles upstream to 2 miles downstream of Marker 27	13559	ARROYO COLORADO TIDAL AT MARKER 27 (MILE 15) 0.8KM N. OF THE POINT WHERE CHANNEL BECOMES BOUNDARY BETWEEN WILLACY AND CAMERON CO.
Lower 9.0 miles of segment	13782	ARROYO COLORADO TIDAL NEAR CM 16 AT ARROYO CITY, KM 10.9
Upper 4 miles of segment	13072	ARROYO COLORADO TIDAL FM 106 BRIDGE AT RIO HONDO

Published studies:		
Publication	Date	Author
AS 69 Arroyo Colorado	Feb. 1994	Davis/Kleinsasser/Cantu
IMS 72 Arroyo Colorado	Aug. 1976	Twidwell, S.
IS 49 Arroyo Colorado	Aug. 1982	Davis, J.
IS 61 Arroyo Colorado	March 1981	Davis, J.
IS 69 Arroyo Colorado	Aug. 1983	Davis, J.
LP 86-05 Arroyo Colorado	July 1986	Bowles, R. (Region 15)
LP 89-07 Arroyo Colorado	Dec. 1987	Davis, J.

Historical fish kills:			
Date	Location	Fish Killed	Suspected Cause
11/4/1996	Arroyo Colorado, from water tower in Arroyo City, upstream to Circle X	1000	Disease
6/18/1997	Arroyo Colorado, Port Harlingen to Camp Perry	1000000	Low Dissolved Oxygen
8/4/1997	In Arroyo Colorado at Rio Hondo near Pt of Harlingen	1000000	Low Dissolved Oxygen
7/13/1998	On the west bank of the Arroyo Colorado from the port of Harlingen to N of the Rio Hondo swing bridge.	100000	Low Dissolved Oxygen
7/30/1998	Arroyo Colorado at the Rio Hondo bridge	100000	Low Dissolved Oxygen
8/17/1998	Arroyo Colorado approximately 0.5 miles N of Rio Hondo bridge	2000000	Low Dissolved Oxygen
7/26/1999	Arroyo Colorado T Pt of Harlingen	16804	Low Dissolved Oxygen

(based on data from 03/01/1996 to 02/28/2001)

Historical fish kills:			
Date	Location	Fish Killed	Suspected Cause
8/3/1999	Arroyo Colorado Low Water Bridge to Pt of Harlingen	4160	Low Dissolved Oxygen
8/6/1999	Arroyo Colorado	19840000	Low Dissolved Oxygen
9/8/1999	Pt of Harlingen downstream 1 mile	20000	Low Dissolved Oxygen