

Monitoring Sites for FY 2010

The sample design for surface water quality monitoring for basin 23, fiscal year 2010 is shown below.

The following is a list of headings used to describe and identify each column heading and its contents.

1. SEG - This column is used to identify the river segment in which a station is located.

The segments are described as follows:

Segments in the Rio Grande Basin		
Lower Rio Grande Basin		
Segment	Name	Description
2301	Rio Grande Tidal	From the confluence with the Gulf of Mexico in Cameron County to a point 6.7 mi (10.8 km) downstream of the International Bridge in Cameron County
2302	Rio Grande below Falcon Reservoir	From a point 6.7 mi (10.8 km) downstream of the International Bridge in Cameron County to Falcon Dam in Starr County
Middle Rio Grande Basin		
Segment	Name	Description
2303	International Falcon Reservoir	From Falcon Dam in Starr County to the confluence of the Arroyo Salado (Mexico) in Zapata County, up to the normal pool elevation of 301.1 feet (impounds Rio Grande)
2304	Rio Grande below Amistad Reservoir	From the confluence of the Arroyo Salado (Mexico) in Zapata County to Amistad Dam in Val Verde County
2313	Tributary - San Felipe Creek	From the confluence with the Rio Grande in Val Verde County to a point 4.0 km (2.5 mi) upstream of US 90 in Val Verde County
Upper Rio Grande Basin		
Segment	Name	Description
2305	International Amistad Reservoir	From Amistad Dam in Val Verde County to a point 1.8 km (1.1 mi) downstream of the confluence of Ramsey Canyon on the Rio Grande Arm in Val Verde County and to a point 0.7 km (0.4 mi) downstream of the confluence of Painted Canyon on the Pecos River Arm in Val Verde County and to a point 0.6 km (0.4 mi) downstream of the confluence of Little Satan Creek on the Devil's River Arm in Val Verde County, up to the normal pool elevation of 1117 feet (impounds Rio Grande)
2306	Rio Grande above Amistad Reservoir	From a point 1.8 km downstream of the confluence of Ramsey Canyon in Val Verde County to the confluence of the Rio Conches (Mexico) in Presidio County
2307	Rio Grande below Riverside Diversion Dam	From the confluence of the Rio Conches (Mexico) in Presidio county to Riverside Diversion Dam in El Paso County

2308	Rio Grande below International Dam	From the Riverside Diversion Dam in El Paso County to International Dam in El Paso County
2309	Tributary - Devils River	From a point 0.6 km (0.4 mi) downstream of the confluence of Little Satan Creek in Val Verde County to the confluence of Dry Devils River in Sutton County
2314	Rio Grande above International Dam	From International Dam in El Paso County to the New Mexico State line in El Paso County
Pecos River Sub-basin		
2310	Tributary - Lower Pecos River	From a point 0.7 km (0.4 miles) downstream of the confluence of Painted Canyon in Val Verde County to a point immediately upstream of the confluence of Independence Creek in Crockett/Terrell County
2311	Tributary - Upper Pecos River	From a point immediately upstream of the confluence of Independence Creek in Crockett/Terrell County to Red Bluff Dam in Loving/Reeves County
2312	Tributary - Red Bluff Reservoir	From Red Bluff Dam in Loving/Reeves County to the New Mexico state line in Loving/Reeves County, up to the normal pool elevation of 2842 feet (impounds Pecos River)

* This table includes segments for the entire Rio Grande Basin. Segments that are listed in the above table and are not in the CMS listed in this QAPP are sampled by TCEQ field offices, and not by USIBWC CRP.

2. REGION - This column is used to identify the TCEQ regional office in which the stations are located, and the TCEQ regional office conducting the water quality monitoring.

The TCEQ regional offices are identified as follows:

Region #	Location	Address
Region 6	El Paso	401 East Franklin Ave., Ste 560 El Paso, TX 79901-1206 (915) 534-4949
Region 7	Midland	3300 North A St., Bldg 4, Ste. 107 Midland, TX 79705-5404 (915) 570-1359
Region 13	San Antonio	14250 Judson Rd. San Antonio, TX 78233-4329 210-490-3096
Region 15	Harlingen	1804 West Jefferson Ave. Harlingen, TX 78550-5247 (956) 425-6010
Region 16	Laredo	707 E. Calton, Suite, 304 Laredo, TX 78043 (956) 791-6611

3. LAT - The GPS confirmed latitude of the sampling location.
4. LONG - The GPS confirmed longitude of the sampling location.
5. STATION DESCRIPTION - This column is used to describe the monitoring station locations.
6. STAT ID - The station ID is a unique TCEQ assigned number used to numerically identify the particular monitoring station.
7. START DATE/END DATE - These columns are used to identify the beginning and ending dates for which the designated sampling will take place.
8. Submitting Entity Code/Collecting Entity Code - This column is used to identify the source codes, which represent the entities responsible for the sampling. The submitting entity code identifies the entity responsible for the sampling, and the collecting entity code identifies the entity actually conducting the sampling at each station.

The following table contains a description of each abbreviation:

Submitting Entity Code	Entity
IB	U.S. International Boundary and Water Commission
Collecting Entity Code	Entity
BB	Big Bend National Park
IB	U.S. International Boundary and Water Commission
LA	City of Laredo, Health Department Laboratory
LE	City of Laredo, Environmental Engineering Division
RN	Rio Grande International Study Center
SL	Sul Ross University
UB	University of Texas at Brownsville, Environmental Sciences Department
UE	University of Texas at El Paso, Biological Services Department
BO	Brownsville Public Utilities Board

9. MONITOR TYPE - The program code describes the type of water quality monitoring that will be conducted at a particular station.

The following table describes the program type for the Rio Grande:

Program Code	Description
RT	Routine Water Sampling/Baseline (Long-term monitoring)

10. METALS WATER - The number of metals in water samples to be collected for determining compliance with water quality standards to protect aquatic life scheduled within the given sampling period. Parameters to be analyzed are listed on the chain of custody.
11. ORG WATER - The number of organics in water samples to be collected within the given sampling period. Parameters to be analyzed are listed on the chain of custody.
12. METALS SED - The number of metals in sediment samples to be collected within the given sampling period. Parameters to be analyzed are listed on the chain of custody
13. ORG SED - The number of organics in sediment samples to be collected within the given sampling period. Parameters to be analyzed are listed on the chain of custody
14. CONV - The number of conventional chemical water samples to be collected within the given sampling period. Conventional parameters to be analyzed are listed on the chain of custody. Conventional parameters may vary among CRP Cooperators due to minor differences in monitoring program objectives.
15. TOX WAT - The number of ambient toxicity in water samples to be collected within the given sampling period.
16. TOX SED - The number of ambient toxicity in sediment samples to be collected within the given sampling period.
17. FLOW - The number of instantaneous flow measurements to be taken within the given sampling period.
18. FIELD - The number of field measurements scheduled within the given sampling period. Minimum parameters to be collected are: Temperature (00010); PH (00400); Dissolved oxygen (00300); Specific conductance (00094); Secchi disc transparency (00078); Days since last precipitation event (72053); Flow severity (01351); Instantaneous flow (00061); Flow method (89835); Weather (89966); Wind intensity (89965); and Wind direction (89010). Field parameters may vary due to differences in monitoring program objectives among CRP Cooperators.
19. BACT – The number of bacteriological samples (e. coli) to be collected within the given sampling period.