

Nueces River Authority

Nueces River Basin Enhanced Water Quality Monitoring

Project Description:

The Nueces River originates in Edwards County and flows approximately 315 miles to Nueces Bay in the Gulf of Mexico near Corpus Christi. The total basin drainage area is 16,950 square miles. Several water bodies in the Nueces River Basin are listed on the Texas Water Quality Integrated Report as impaired due to total dissolved solids ("TDS"), bacteria, depressed dissolved oxygen, and nitrate, and several water bodies in the basin are not meeting general use criteria, recreational use criteria, and/or aquatic life use criteria for fish and macrobenthic communities. A substantial part of the flow of the Nueces River and its tributaries enters the fractured and cavernous limestone formation of the Edwards Aquifer Balcones Fault Zone. As a result of this loss of flow to the recharge zone, the portion of the Nueces River Basin that is downstream of the recharge zone consists almost entirely of stormwater. During low-flow conditions, chloride, sulfate, and TDS levels increase due to natural and man-made activities.

SEP Funds will be used for sampling and analysis in the Nueces River Basin. Third-Party Administrator shall use SEP Funds to pay its contractors to conduct field measurements and laboratory tests for TDS, sulfate, chloride, arsenic, barium, and strontium. Third-Party Administrator shall also use SEP Funds to pay for vehicle and boat fuel necessary for the contractor to reach the monitoring sites. Third-Party Administrator's contractor shall measure water quality on a monthly basis at the following four sites:

1. Station No. 12980, Atascosa River at Farm-to-Market Road 99.
2. Station No. 12972, Nueces River at Farm-to-Market Road 1042.
3. Station No. 13023, Frio River at State Highway 16.
4. Station No. 12983, San Miguel Creek at State Highway 16.

These sites are shown on the map in Exhibit 3. Third-Party Administrator shall, at its own expense, ensure that it has permission to conduct water quality monitoring activities at each of these sites. Monitoring will be conducted under a Quality Assurance Project Plan ("QAPP") that will be approved by TCEQ prior to initiation of monitoring activities. All work conducted for this Project will be in addition to and separate from the work conducted by Third-Party Administrator under the Clean Rivers Program. All data collected under this Project will be provided to TCEQ.

Environmental Benefit:

Because many water bodies in the Nueces River Basin are listed as impaired due to total dissolved solids ("TDS"), bacteria, depressed dissolved oxygen, and nitrate, influences on water quality in this area need to be thoroughly studied. This Project will add to the understanding of pollutant loadings in the Nueces River Basin. It will also provide quality-assured data that can be used by TCEQ for pollution reduction efforts. The project will also increase the available water quality data for use in studies of the ecology of the Nueces River Basin.

Eligible Areas and Counties:

Atascosa, Bandera, Bee, Bexar, Dimmit, Duval, Edwards, Frio, Jim Wells, Karnes, Kerr, Kinney, La Salle, Live Oak, McMullen, Maverick, Medina, Nueces, Real, San Patricio, Uvalde, Webb, Wilson, and Zavala Counties.

Minimum Contribution Amount

\$500