Coordinated Monitoring in the Trinity River Basin

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Biographical Sketch of Author
Mr. Clingenpeel is the Manager of Special Studies and Assessments for the Trinity River Authority of Texas. He has a BA and BS in Biology from the University of Texas and an MS in Environmental Sciences from the University of North Texas. Mr. Clingenpeel is the project manager for the Trinity Basin Clean Rivers Program and as such is responsible for coordinating monitoring efforts throughout the basin. He has been active in the Texas Water Quality Monitoring Congress and serves on the board of directors of the Texas Rivers and Reservoirs Management Society.

Abstract
The Trinity River basin slices through the middle of the state of Texas, covering some eighteen thousand square miles from its origins near the Red River to its terminus near Anahuac, where it empties into Trinity Bay. As the river proceeds through the Dallas-Fort Worth area, it receives approximately 550MGD’s of domestic municipal effluent. The river is therefore routinely effluent dominated, especially during the region’s dry summers. Concurrently, the river is a major source of drinking water for the Dallas-Fort Worth area and the City of Houston. There is therefore significant interest in Trinity basin water quality. Accordingly, numerous entities have established comprehensive monitoring programs, some of which have been in place for fifty years.

The Trinity River Authority, under the Texas Clean Rivers Program, is tasked with collecting water quality data in the Trinity basin. Data provided via this program are used in regulatory processes by the Texas Commission on Environmental Quality, the State’s environmental regulatory body. In order to best meet this obligation, TRA partners with the aforementioned entities that have established independent monitoring programs. This strategy has had many advantages, including huge cost savings, outstanding watershed coverage, and the fostering of a spirit of coordination. The challenges of bringing these autonomous entities into a single coherent program however, have been daunting. Working through these issues a cohesive group of eight entities has emerged and a comprehensive, basin-wide monitoring program covering almost 200 stations, has been established. The key components that make this coordinated effort a success, include efforts to coordinate monitoring, annual training, data management and quality assurance.

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