



Publications

TR-411

Arroyo Colorado Watershed Protection Plan Implementation Project Final Report

T.A. Berthold, J. Flores

- [Full Text](#)

The Arroyo Colorado (AC) is an ancient channel of the Rio Grande that extends eastward for about 90 miles from near the city of Mission, Texas through southern Hidalgo County to the city of Harlingen in Cameron County, eventually discharging into the Laguna Madre near the Cameron-Willacy County line. Since 1996, the AC has been impaired for low dissolved oxygen (DO) levels within the tidal segment; not meeting the aquatic life use designated by the State of Texas and described in the Water Quality Standards. In addition, bacteria has always been a parameter of concern and

as of 2006, the AC became impaired due to elevated levels.

Developed by the Arroyo Colorado Watershed Partnership (ACWP), the Arroyo Colorado Watershed Protection Plan: Phase I (ACWPP) is a comprehensive watershed-based strategy created to address these impairments; however, it primarily addresses the low DO levels in the tidal segment of the AC. The goal of the ACWPP is to reduce the addition of pollutants such as oxygen-demanding substances, nitrogen, phosphorus and sediment to the AC and to improve natural habitat to the degree necessary to meet the uses designated by the State of Texas. Although not specifically targeted for reduction, fecal bacteria loading to the AC is also expected to diminish as a secondary effect. The ACWPP takes into consideration the current uses of the waterbody, including flood control, navigation, conveyance of municipal/industrial wastewater discharges and irrigation return flows, recreation, and environmental uses and presents a detailed strategy to restore and protect these uses. Furthermore, the plan describes the institutional framework for current management programs and proposes a strategy for improving management of water quality in the future for the AC.

The ACWP is an organization of more than 715 members who share an interest in the welfare of the Arroyo Colorado and the Lower Laguna Madre. The Partnership grew out of smaller groups of local stakeholders involved in the Total Maximum Daily Load (TMDL) process and is now the leading stewardship organization in the watershed.

Over time, the smaller groups of stakeholders have formed workgroups that have determined specific indicators and milestones that are outlined in the ACWPP. Information about the progress of implementing the ACWPP in meeting the various indicators and milestones can be found in the Arroyo Colorado Watershed Protection Plan Progress Report (Appendix A).

Texas Water Resources Institute

1500 Research Parkway A110
2260 TAMU
College Station, TX 77843-2260

TWRI and the [Texas A&M Institute of Renewable Natural Resources](#) are working together to foster and communicate research and educational outreach programs focused on water and natural resources science and management issues in Texas and beyond.

Phone: 979.845.1851

Fax: 979.845.0662

