The Guadalupe River Basin covers portions of seventeen counties and has 15 distinct sub-watersheds. This unique and diverse river basin flows through several ecoregions as it makes its way to San Antonio Bay and finally, the Gulf of Mexico. Many endemic and endangered species call the Guadalupe River Basin home, including the whooping crane, Guadalupe orb, and Texas wild rice.

Bacteria is the most common impairment in the basin, followed by dissolved oxygen. The most common statistically significant trends that were identified throughout the basin were changes in chloride and sulfate levels, which could be a result of changing rainfall patterns leading to changes in runoff.

Population growth, land use changes, and aging infrastructure are some of the biggest challenges in the basin. To maintain and improve water quality, focus should be placed on managing stormwater runoff, educating stakeholders in the basin on water quality best management practices, and proactively planning for the increasing population.

Stakeholders in the Guadalupe River and Lavaca-Guadalupe Coastal basins have greatly benefitted from the monitoring provided by the Clean Rivers Program. An incredible amount of data has been collected over the past three decades by the Clean Rivers Program partners in this basin. Data collected under this program has been utilized by stakeholders to develop watershed protection plans in five watersheds in the basin, including Plum Creek watershed, Geronimo & Alligator Creek watershed, Cypress Creek watershed, the Dry Comal Creek & Comal River watershed, and the Upper San Marcos River watershed. The public outreach opportunities provided by the Clean Rivers Program have increased public knowledge and involvement with the waters of the river basin through public outreach, volunteer monitoring training, and school programs.