

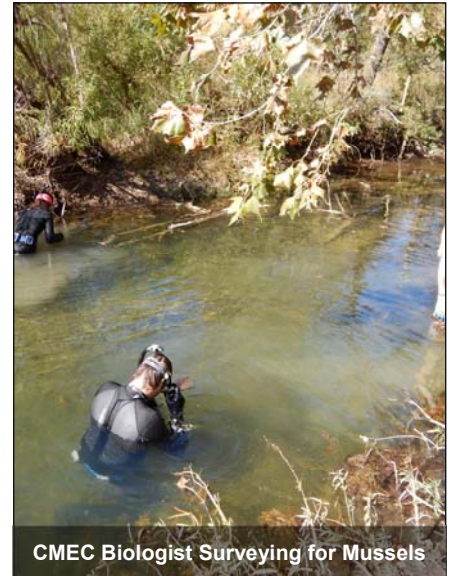


FRESHWATER MUSSEL SERVICES

Background

Freshwater mussels (Family *Unionidae*) are important elements of aquatic ecosystems and often comprise the major components of biomass. Unfortunately, unionids are sensitive barometers of environmental quality and are often the first organisms to decline and vanish in the face of ecological change and degradation. In Texas, the Texas Parks and Wildlife Department (TPWD) requires that entities coordinate with TPWD to develop an Aquatic Resource Relocation Plan (ARRP) to avoid impacts to aquatic species and, when necessary, relocate aquatic species outside of the project area. Construction or maintenance activities that take place in or near Public Waters may require freshwater mussel surveys, a TPWD-approved ARRP, and associated aquatic species relocation activities prior to construction. These activities include, but are not limited to:

- Pipelines
- Boring/Trenching
- Municipal Road/Bridge Construction
- Dam Work
- Boat Ramp Construction Maintenance
- Dewatering
- Cofferdams
- Stream Bank Restoration



CMEC Biologist Surveying for Mussels

What Cox|McLain Environmental Consulting, Inc. (CMEC) can do:

CMEC staff biologists hold a TPWD Scientific Research Permit and Oklahoma Department of Wildlife Conservation (ODWC) Scientific Collector's Permit for conducting surveys and relocation of state listed-threatened and endangered freshwater mussel species. Our experienced staff can provide expert advice and coordination with State Agencies to make compliance with regulation simple and easy. Additionally, our staff has experience with other aquatic fauna likely to be encountered during the ARRP process, including freshwater turtles, snakes, and fish. Services CMEC provides include:

- Mussel Habitat Assessments and Delineations
- Mussel Presence/Absence Sampling Surveys
- Surveys to Identify Mussel Density and Species Richness
- Aquatic Species Relocations and Monitoring
- Preparation of ARRP for TPWD Permitting



Neches River Basin Freshwater Mussels

Comprehensive Environmental Services:

CMEC is a HUB/DBE/WBE-certified environmental consulting firm founded in 2007 and based in Austin, Texas with offices in Houston and Irving, Texas as well as Tulsa, Oklahoma. CMEC staff includes biologists, wetland ecologists, planners, GIS specialists, archeologists, archival researchers, and architectural historians. We provide environmental, archeological, historical, and planning services to an array of clients throughout the Southwest region.

For more information about CMEC services please visit our website:

www.coxmclain.com

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