

TPWD Sand and Gravel Permitting Program: History, Scope, and Protections Offered for Fish and Wildlife Values



Figure 1. A healthy stream corridor provides fish and wildlife habitats and offers high-quality recreational values.

History and Scope: Through authorities established by the Texas Legislature in 1911, the Texas Parks and Wildlife Department (TPWD) Sand and Gravel Permitting Program regulates the “disturbance or taking” of sand, gravel, shell, and other streambed and bay bottom materials in the State. This encompasses Texas bays and the coastal zone to 10.35 miles offshore in the Gulf of Mexico and the beds of State-owned and navigable rivers and streams. State jurisdiction over river and stream beds varies depending on the nature of patents or grants of land by the governments of Spain and Mexico, The Republic of Texas, or the State, but generally includes all major rivers and their tributaries upstream to a point where streams average less than 30 feet in width.

Protection of Fish and Wildlife Habitats: Dredging of sand, gravel, and shell from rivers and bays can negatively impact fish and wildlife habitats. Habitat alteration is the primary cause of population declines, loss, and extinction of freshwater fishes, mussels, and other aquatic organisms. Habitat alteration is also one of the primary contributors to listing of fish and wildlife as threatened or endangered under the Federal Endangered Species Act. The Legislature’s awareness of the impacts of dredging activities on fish and wildlife habitats led to establishment of the first fish and wildlife mitigation provisions in Texas law. The Legislature empowered TPWD’s predecessor agency (Game, Fish and Oyster Commission) to authorize dredging projects that “would not damage or injuriously affect an island, reef, bar, channel, river, creek, or bayou used for navigation, or any oysters, oyster beds, fish or wildlife in or near the water used in the operation.”

Permits: Approximately 30-35 permits are issued annually by the TPWD Sand and Gravel Permitting Program. This includes 1-2 permits to remove over 1,000 cubic yards of material, which have in recent years primarily consisted of commercial sand operations in the lower Brazos River. Material excavated by those operations was valued at approximately \$3.25 million annually between 2010 and 2018. During that timeframe, annual royalties (8% of gross receipts) paid to TPWD on the sale of materials averaged approximately \$260,000 (range of \$200,000-\$400,000 per annum). Eligible uses of royalties paid to TPWD consist of enforcement of the Sand and Gravel



Figure 2. Unpermitted manipulation of the stream bed in a Texas Hill Country stream.

Permitting Program and construction and maintenance of State fish hatcheries. Introduced during the 86th Texas Legislature, HB 1824 (Murr) is intended to expand upon existing eligible uses to allow royalties to be used to restore degraded streams, such as projects that stabilize erosional banks and restore natural stream channels to effectively transport flows and sediments.

The majority of projects permitted by the TPWD Sand and Gravel Permitting Program typically involve removal of less than 1,000 cubic yards of material. Those projects consist of small-scale construction projects such as maintenance of private road crossings and installation of pipeline crossings. As the number of applications for permits has increased, TPWD has established project guidelines such as seasonal restrictions that avoid or minimize impacts to recreational users; site-specific provisions to ensure channel stability; and best management practices to control bank erosion, avoid land loss, and reduce downstream impacts.

Statutory Exemptions: Projects exempted from the TPWD Sand and Gravel Permitting Program include Federal projects; navigation projects such as installation or maintenance of channels, docks, and boat ramps; lessees of coastal submerged lands for oil and gas development (administered by the General Land Office); Texas Department of Transportation road and bridge projects; projects to maintain municipal water supplies; and projects to install or maintain public utility lines. Additionally, cities and counties are not required to pay royalties to TPWD on excavated materials used to maintain public roads. The Legislature also transferred the ownership of stream beds within cities that had a population of 40,000 or more according to the 1920 census to the cities themselves (Beaumont, Dallas, El Paso, Fort Worth, Galveston, Houston, San Antonio, and Wichita Falls). Other cities (Waco and Austin) have acquired from the State title to portions of the stream beds within those cities. Therefore, no permit is required from the TPWD Sand and Gravel Permitting Program within those stream reaches no longer owned by the State.



Figure 3. Unpermitted stream crossing in the southern Great Plains of Texas.