

Tiger Pipeline Project

Potential Threatened & Endangered Species

Federally threatened and/or endangered species and/or candidate species may be present in the project area and include the species below. ETC Tiger will adhere to mitigation recommendations of the U.S. Fish & Wildlife Service, the Louisiana Department of Wildlife & Fisheries, and the Texas Parks & Wildlife during construction and operation activities.



LOUISIANA BLACK BEAR (*Ursus americanus luteolus*)

Federal status: Threatened (January 7, 1992)

State status: Threatened (August 20, 1992)

RED-COCKADED WOODPECKER (*Picoides borealis*)

Federal Status: Endangered (October 13, 1970)

State Status: Endangered (December 20, 1989)



INTERIOR LEAST TERN (*Sterna antillarum anthalassos*)

Federal Status: Endangered (May 28, 1985)

State Status: Endangered (December 20, 1989)

LOUISIANA PINE SNAKE (*Pituophis ruthveni*)
Candidate



Source: Louisiana Department of Wildlife & Fisheries

Tiger Pipeline Project

How We Cross Agricultural Areas and Farmlands

The Tiger Pipeline Project will cross agricultural lands and farm lands. We understand that these lands are the livelihood to farmers and ranchers. We will do our best to design the pipeline route and construction methods that will have the least amount of impacts to the environment and sensitive resource areas and we will carefully restore the rights-of-way in these lands to get them back into production as soon as possible. Some of the topics that will be addressed include:

Easements

- ETC Tiger will seek to acquire a 60-foot wide permanent easement to operate the pipeline. Farming can continue on the easement, however, no structures, wells, silviculture, or addition/removal of soil cover is permitted within the easement.



Access to Rights-of-Way

- Where additional access routes are needed, ETC Tiger will work with the landowners to specify routes that will minimize interference with landowner's activities.



Topsoil Segregation

- During construction in agricultural lands, ETC Tiger will require right-of-way where topsoil segregation is performed.

Restoration

- ETC Tiger will install the pipe at a depth sufficient to accommodate deep tilling or to maintain existing water or drainage systems.
- Topsoil will be stored safely away from the construction activity area. Following completion of construction, segregated topsoil will be spread back over the construction work area and restored to its original grade.



Agricultural Use After Construction

- Upon completing construction, ETC Tiger will cooperate with local farmers and agricultural agencies to allow continued agricultural use of property while minimizing impacts to pipeline operations.



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How We Cross Wetlands

Construction across wetlands will be performed in accordance with the FERC Procedures. Typical wetland crossing procedures described below do not apply to wetlands in actively cultivated or rotated cropland.

- **Typical Crossing Procedures:**

1. Minimize the length of time that topsoil is segregated and the trench is open.
2. Do not use rock, soil imported from outside the wetland, tree stumps, or brush riprap to stabilize the right-of-way.
3. Perform topsoil segregation over the trench except where standing water is present.
4. Assemble the pipeline in an upland area unless the wetland is dry enough to adequately support skids and pipe.
5. Install trench plugs and/or seal the trench bottom as necessary to maintain the original wetland hydrology at locations where the pipeline trench may drain a wetland.
6. Install a permanent interceptor dike and a trench plug at the base of slopes near the boundary between the wetland and adjacent upland areas.
7. Restore segregated topsoil to its original position after backfilling is complete.
8. Cleanup and restore the wetland, and monitor the restoration area.



How We Cross Rivers and Streams

There are four basic methods for crossing bodies of water:

1. **Open-Cut Wet-Ditch Method**

The open-cut wet-ditch method of construction consists of digging an open trench in the stream bottom, laying the prefabricated length of pipe necessary to reach bank to bank and then backfilling.

2. **Open-Cut Dry-Ditch Method**

The open-cut dry-ditch method of construction uses flume pipe(s) to transport the stream across the disturbed area, which allows trenching to be done in drier conditions.

3. **Dam & Pump-Around Method**

The pump-around method of construction can act as a substitute to the open-cut dry-ditch method of construction. It may be employed on small, low-flow streams where the dry-ditch method cannot be employed because of site-specific conditions.

In application, small sand bag dams are constructed both upstream and downstream around the work area across the stream channel. Stream flow is then diverted around the work area using gasoline-powered pumps and hoses.

4. **Horizontal-Directional Drilling (HDD) Method**

The tools and techniques used in the HDD process were developed in the oil well drilling industry. The rigs use similar components, with the major difference being that the pipeline rig is equipped with an inclined ramp.

