

Loop Environmental Monitoring: 2001 Vegetation and Wildlife

Starting date: 1/01/2001

Duration: 18 months

Completion date: 6/30/2002

Funding: State

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Problem

The purpose of this research is to determine if the construction and operation of the LOOP Facility has impacted surrounding plant communities and wildlife. The pipeline system that connects the offshore marine terminal to the Clovelly Salt Dome Oil Storage Facility and to loading facilities on the Mississippi River at St. James, Louisiana, consists of 159 km of pipeline traversing major wetland habitats in the Louisiana coastal area.

Objectives

The objectives of this research are to:

- 1) Collect and evaluate ecological data that can be related to historical baseline conditions.
- 2) Identify impacts on the environment caused by construction and operation of the LOOP facility so that corrective action(s) can be taken.
- 3) Maintain sufficient data to determine the cause(s) of environmental



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impacts, if any are determined.

4) Provide information in order to evaluate short-term and long-term impact by the LOOP facility.

Description

The scope of work includes the following field surveys:

1) *Vegetation Biomass Survey (intermediate marsh)* - Vegetation from plots (controlled and experimental) near the Clovelly Salt Dome will be sampled, sorted by species, and weighed in order to measure the natural annual variability in plant biomasses of wetland plant communities.

2) *Beach Vegetation* - Vegetation on the LOOP pipeline backfill at the beach will be monitored.

3) *Beach Elevation* - Topography of the LOOP pipeline backfill at the beach will be monitored to determine if erosion is occurring by measuring the beach topography and elevation with surveying equipment.

4) *Clovelly Radial Transects* - Vegetation surrounding the Clovelly Salt Dome Storage Terminal will be surveyed via helicopter along a series of 12 transects. Vegetation will be observed, identified, and assigned a cover value. Sediment core samples will be collected and analyzed for salinity.

5) *Overflights* - Biological conditions will be surveyed via helicopter along the pipeline corridor.

6) *Aerial Survey of Wading Bird and Seabird Rookeries* - Wading birds and seabird rookeries will be estimated via aerial survey to check on the activity of previously located rookeries and nesting bird colonies.

7) *Aerial Survey of Muskrats* - Muskrat houses will be estimated via aerial survey along the pipeline corridor.

Implementation Potential

Environmental concerns will be addressed through this project by monitoring of the wildlife, vegetation, and marine life related to the LOOP pipeline as required by the Louisiana State Legislature.



Biological conditions will be surveyed via helicopter.