DELTA FARMS

LOCATION: The Delta Farms EMU is bordered by the west, south, and east by its own levee system. On the north, the boundary is the Intracoastal waterway.

SOILS: Fresh - intermediate marshes and shallow water bodies predominate. A unique fresh - intermediate water lake created by recent flooding of a previously drained and leveed farmland exists in the southern part of the unit.

VEGETATION: Modified wetland vegetation dominates the area. Vegetation ranges from fresh marsh in the western portion of the unit to the dominant intermediate marshes and to brackish marshes fringing Bayou Perot, Little Lake, and Clovelly Canal. Along the canals dug for reclamation and mineral extraction in the northern portion of the unit, spoil bank brushy vegetation can be found on the higher banks.

SUBSIDENCE POTENTIAL IF DRAINED: The study unit has a Very High subsidence potential, over 72 inches in 60 years has been recorded in the southern section.

LAND LOSS POTENTIAL:

1. Land Loss Due to Channelization: Land loss potential due to saltwater Intrusion, channelization, and wave action.
2. Land loss due to reclamation: This area was originally marshland reclaimed for agricultural purposes. Loss of protective levees along the Intracoastal waterway has created a new ecological feature; a new fresh - intermediate lake.

TOPOGRAPHIC FEATURES: The Study Unit is bounded on the west and north by the Intracoastal Canal, Bayou Perot on the east and Little Lake; Clovelly Canal, and Bayou Lafourche ridge on the south. Location canals and other drainage canals are found throughout the unit. Dixie Delta Canals runs east - west, cutting the unit approximately in half. The Delta Farms area was drained and leveed (land was protected by a 4 foot levee) for agricultural purposes in 1910. Elevations in the unit are now minus five (-5) feet MSL. The loss in elevation is due to subsidence from draining marshland, saltwater intrusion, channelization, and wave action. A new lake created by flooding of the unit in 1974 now has an average depth of 6 feet. (Falgout, 1978).

FLOODING POTENTIAL: The entire unit is flood prone.

IMPORTANT FARMLANDS: None.

USE OF-LAND: The unit is an excellent area for fishing, hunting, and trapping. The area contributes directly to the Barataria Basin estuary system and is a nursery ground for many commercial and important recreational fisheries species.

The unit has been heavily used by the oil and gas industries. Several major pipelines cross the unit. Fields in the unit include West Delta Farms Oil Field, Little Temple Oil and Gas Field, and Bayou Poignard Gas Field. The Intracoastal Waterway bordering the unit is a major transportation route. Camps are the only dwellings found on Delta Farms.

UNIQUE ECOLOGICAL FEATURES:

1. **Geological Features:** Delta Farms is open to the Intracoastal Waterway on the west and, through several canals, connects to Little Lake on the east. The breach in the Intracoastal Waterway levee has resulted in flooding of Delta Farms, creating a new brackish lake. Turbid and poor quality waters entering this lake, via the Intracoastal Waterway flow into Little Lake. No research has been done to assess the effects of the new water flow on the water quality of Little Lake, but both commercial and sport fishermen report a change in Little Lake waters. High turbidity of the Intracoastal Waterway water prevents aquatic vegetation from being established and wave wash from the canal has led to land loss. The breach in the canal levee has also created a new path for saltwater intrusion into previously fresh marshes (Falgout, 19781.
2. **Botanical Features:** None.
3. **Biological Features:** Part of the Barataria Basin

RECREATIONAL POTENTIAL: Fishing, hunting, and trapping are excellent in the Delta Farms Unit.

HYDROLOGIC RESOURCES: The hydrology of the Delta Farms unit has undergone drastic changes with the introduction of water from the Intracoastal Waterway. Once an area of fresh marsh, reclamation and resultant flooding have changed both the salinity and quality of water in this area.

HISTORIC/CULTURAL/ARCHEOLOGICAL:

1. **Historic Sites:** Delta Farms was an agricultural reclamation project undertaken in 1910. Flooding of the area occurred in 1971 resulting in a new lake.
2. **Cultural:** None.
3. **Archeological Sites:**

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   LF 78 Known Shell Midden on Intracoastal Waterway

GOALS:

1. Halt saltwater intrusion into Delta Farms Lake
2. Improve recreational facilities to provide Greater access to Delta Farms Lake
3. Maintain the integrity of the existing levee system surrounding the flooded portion of the EMU

4. Maintain the integrity of the relatively undisturbed fresh marsh area north of Delta Farms Lake by imposing mitigation conditions on any dredge and fill permits issued in this area that retard marsh erosion
5. Halt the spread of Lake Salvador into the Delta Farms fresh marsh area

POLICIES:

Delta Farm EMU is a unique area within the Lafourche coastal zone. Once a wetland area drained and farmed for sugar cane, a levee break in 1971 resulted in the flooding of the southern part of the EMU. This lake is almost fresh and processes very good fishing.

1. All General Policies for the Lafourche Coastal Zone shall apply in this EMU unless modified by specific EMU or sub-EMU policies stated in this EMU. policy statement.
2. Existing canals should be used whenever feasible to access new drilling sites in the Larose Oil Field area within the EMU, as indicated on the land cover map. New dredging should be kept to an absolute minimum here and subject to conditions stated elsewhere in the policies.
3. All canals dredged for any purpose throughout the EMU. should be plugged with earth or rip rap after abandonment to reduce the effects of saltwater intrusion as per Lafourche Coastal Zone General Policies ~ and 3. This especially applies to canals emanating from the Intracoastal Waterway into the Larose Oil Field Area.
4. No attempt should be made to drain the flooded portion of Delta Farms EMU until recreational potential of Delta Farms Lake can be assessed and a plan developed to utilize the area.
5. The existing boat launch into Delta Farms shall be cleared of trash and improved so as to provide greater access to Delta Farms Lake. This may be accomplished by applying conditions of mitigation on permitted activities that would include undertaking all or portion of these activities.
6. If a successful arrangement can be negotiated with the owners of Delta Farms, an attempt will be made to repair the levee that washed out along the Intracoastal Waterway, flooding Delta Farms. The aim of the rebuilding will be to preserve Delta Farms as a recreational freshwater lake. This work will not be undertaken until a comprehensive plan can be developed for the area.
7. North of Delta Farms Lake, the fresh marsh is in relatively undisturbed condition. It is EMU policy to keep dredge and fill activities here to an absolute minimum by means of policies stated elsewhere in this section and by requiring that: (1) Dredged materials in any excavation be spread out in priority areas of marsh deterioration so as to create new marsh sites as close as possible to the area (to be determined by local administrator) disturbed. (2) Canals connected to the Intracoastal Waterway shall have spoil placed continuously along their outside bands to retard the spread of saltwater into the fresh marsh area.
8. Any dredging along the Intracoastal Waterway should require that spoil be placed on the northern and southern bank along the north and northwest perimeter of this EMU, to reduce erosion and saltwater intrusion.

9. The existing levees surrounding the flooded portion of Delta Farms shall not be degraded in any way. If it is necessary to traverse the levees with pipelines, canals, etc., the levee will be rebuilt and vegetated after the activity is completed.
10. The major oil and gas access canal indicated on the Delta Farms EMU Land Cover Map should be plugged to retard saltwater intrusion as per Lafourche Coastal Zone General Policies 2 and 3. Any permits issued for dredge and fill activities in the vicinity of this canal may require participation in this construction as a mitigation measure pending approval from the landowner.
11. Expansion of Lake Salvador into the Delta Farms EMU should be retarded by the placing of spoil on the north and south banks of the Intracoastal Waterway and possibly the vegetating of these spoil banks to retard erosion from the lake. Mitigation measures on other permits issued in the vicinity may require the placement of soil in this area to combat erosion.
12. There shall be no illegal dumping in this EMU of any liquid or solid waste. Existing tank storage sites and well sites shall follow all applicable guidelines as specified by the Louisiana Department of Natural Resources regarding the storing and disposal of wastes from mud pits, well construction, etc.
13. Permanent human habitation dwellings should be discouraged throughout this EMU due to severe flooding potential from storms, and lack of adequate water and sewerage facilities. Any permits associated with recreational or any other type of permanent dwellings shall require adequate on site sewerage and proof of compliance with solid waste disposal and collection regulations of Lafourche Parish.

Besides these Guidelines, all coastal use guidelines as stated in the F.E.I.S. of the Louisiana Coastal Zone Management Program shall apply to this EMU where EMU policies refer to a "use of state concern", the policies are intended only as recommendations to the state program managers and are not legally binding on the permit applicant or the state CZM Program.