

NAME: Grassy Flats Estuarine Habitat Restoration Project

LOCATION: Lake Worth Lagoon, Florida, USA

ACRES: 22.1 acres (19.8 submerged aquatic vegetation, 1.1 saltmarsh, 0.6 oyster reef, 0.3 mangrove wetlands, and 0.3 tidal flat)

NON-FEDERAL SPONSOR: Palm Beach County

PROJECT DESCRIPTION:

This project will cap anoxic, fine-grained organic sediments (i.e., muck) resulting in the restoration and enhancement of 22 acres of critical estuarine habitat. This project will restore and enhance seagrass habitat by capping approximately 30,000 cubic yards of muck sediment appropriate for seagrass recruitment and raising the elevation to depths appropriate for seagrass growth and by capping adjacent muck sediments, reducing turbidity, improving water quality, and providing for an increase in seagrass density. Also this project will restore tidal marsh, mangrove habitat, and tidal flat by capping muck with appropriate sediment at the elevations and planting some areas with smooth cordgrass (*Spartina alterniflora*), some areas with red mangroves (*Rhizophora mangle*), and allowing others areas to be unvegetated. Finally, the project will place limerock to promote oyster recruitment.

EXPECTED BENEFITS:

In addition to providing downstream water quality improvements and habitat for over 195 species of fish and 89 species of birds, including 19 Federal and State listed species, the project has been designed to improve ecosystem resiliency by maximizing carbon sequestration and allowing for a natural succession of habitat types as sea level rises.

STATUS: Planning and Design