TEI Qualifications and Experience

Hickory Mound Impoundment Adaptive Water Management Assessment

Location: Perry, Florida - Taylor County

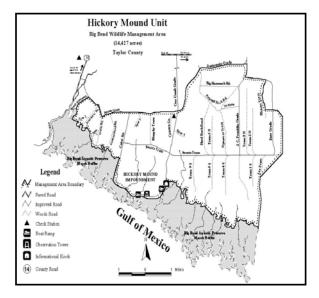
Client: Florida Fish and Wildlife Conservation Commission

Contact: Mr. Matt Pollack, Biological Administrator

386.758.0531

Value: \$25,000

Description: In May 2001, the FWC awarded Turnbull Environmental a contract to conduct a feasibility study for upgrading approximately 2 miles of levee associated with the Hickory Mound Impoundment (HMI) in Taylor County, Florida. HMI was constructed in 1968, and comprises approximately 1,800 acres of coastal wetlands behind an earthen berm and associated water control structures. Since construction, the southern portion of the surrounding levee has been subjected to numerous severe storm surges resulting in several breaches, degradation of habitat, and loss of management opportunities.



Management objectives for the impoundment focuses on proving habitat for migrating and wintering water fowl, shorebirds, wading birds, and a variety of other wetland-dependant wildlife. The proposed upgrade includes designing the levee to absorb a storm surge, with criteria for attaining a minimal difference in water elevation on either side of the levee during a storm event, to insure levee integrity.



required review assessment and compilation of storm surges in the Gulf Coast/Big Bend region of Florida, including speed and direction of storms, storm surges heights, and wave height and amplitude. Based on surge information, a 50 year storm event was modeled and used to evaluate conceptual designs upgrading the levee. The conceptual plan included recommendations and cost estimates for upgrading the impoundment system, including the quantity, size and types of spillways needed, levee height, width, and slope recommendations, and details for reinforcing levee side slopes and protecting structures to limit damage from major storm events.