

## Salt Marsh Restoration at Tide Gate Mitigation Bank

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Tidewater personnel were contracted to establish a mitigation bank through salt marsh restoration at a 273-acre site within Hunter Army Airfield (a sub-installation of Fort Stewart in Chatham County, Georgia near the city of Savannah). Tidewater is responsible for ongoing coordination with the U.S. Army Corps of Engineers (USACE) Savannah District Interagency Review Team (IRT); baseline data collection; and development of a prospectus, monitoring plan, and mitigation banking instrument. Salt marsh restoration will be initiated upon approval of the mitigation banking instrument and completion of permitting.

The Tide Gate Mitigation Bank was historically a tidal marsh (over one-hundred years ago) prior to the area being impounded. The area was impounded via construction of a dike and installation of one-way flapper valve tide gates along the dike. The valves allow freshwater to flow out and prevent salt water from entering the system. This arrangement rarely allowed water surface elevations to exceed creek banks. The lack of tidal exchange resulted in the demise of hundreds of acres of salt marsh.

The restoration and protection activities at TGMB are intended to compensate for tidal wetland impacts within the coastal plain of Georgia. In addition to providing wetland compensation, the primary goals and objectives for the project include:

- restore semi-diurnal flows to tidal marsh and creek systems by removing an existing tide gate structure;
- protect the restored tidal marsh, tidal creek, and upland buffer through an approved conservation plan;
- and restore tidal ecosystem through increased salinity and the dominance of salt tolerant vegetations.

The restoration project was assessed using aerial photograph and historic mapping, vegetative quadrat and transects, hydrologic monitoring, macroinvertebrate studies, and tidal creek studies. Tidewater submitted a draft Mitigation Banking Instrument (MBI) to the USACE dated November 25, 2008. Restoration activities are scheduled for fall 2010.

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