

South Miami-Dade Issues Coordination Meeting

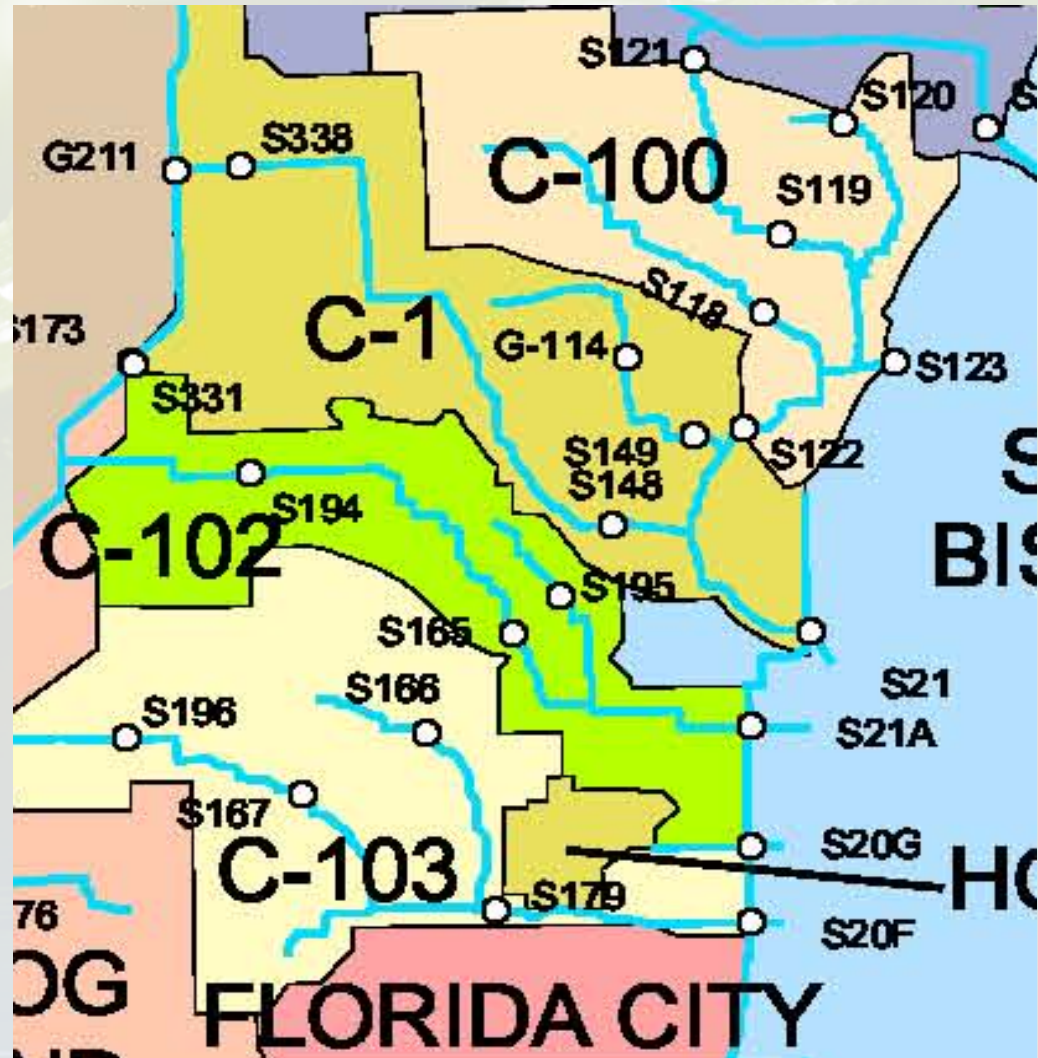
Biscayne Bay Coastal Wetlands Project Project Implementation Report and Construction Update

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Biscayne Bay Coastal Wetlands (BBCW) Drainage Basins

- Deering Estates lies within C-100 Basin
- Cutler Wetlands component lies within C-1 Basin
- L-31E component spans C-102, C-103 and a portion of Florida City Canal Basin
- C-100, C-1, C-102, C-103 and Florida City basins together exceed 150 square miles



Problems

- The quality, quantity, timing and distribution of flows to BBCW and its coastal wetlands have been adversely impacted by construction and operation of the flood control network
- Lowered water table elevations have resulted in a net loss of native freshwater wetlands, many of which have shifted to non-native invasive species
- Both animal and plant distribution, life cycles, community structure and population densities have been affected by changes in the regional hydrology
- Sport and commercial fisheries rely on Biscayne Bay and its associated wetlands to support 11 important species of fish including red grouper, gray snapper, snook, spiny lobster, blue crab and stone crab. The bay and wetlands also support bald eagles, osprey, wading birds, reptiles, amphibians and over 35 species of mammals

Opportunities / Objectives

- Improve the quantity, quality, timing and distribution of freshwater to Biscayne Bay
- Reestablish productive nursery habitat along the shoreline of the bay
- Redistribute freshwater flow to minimize point source canal discharges
- Preserve and restore the spatial extent of natural coastal glades habitat
- Reestablish connectivity between the Biscayne Bay coastal wetlands and adjacent wetlands
- Improve near-shore and saltwater wetland salinity regimes

Constraints

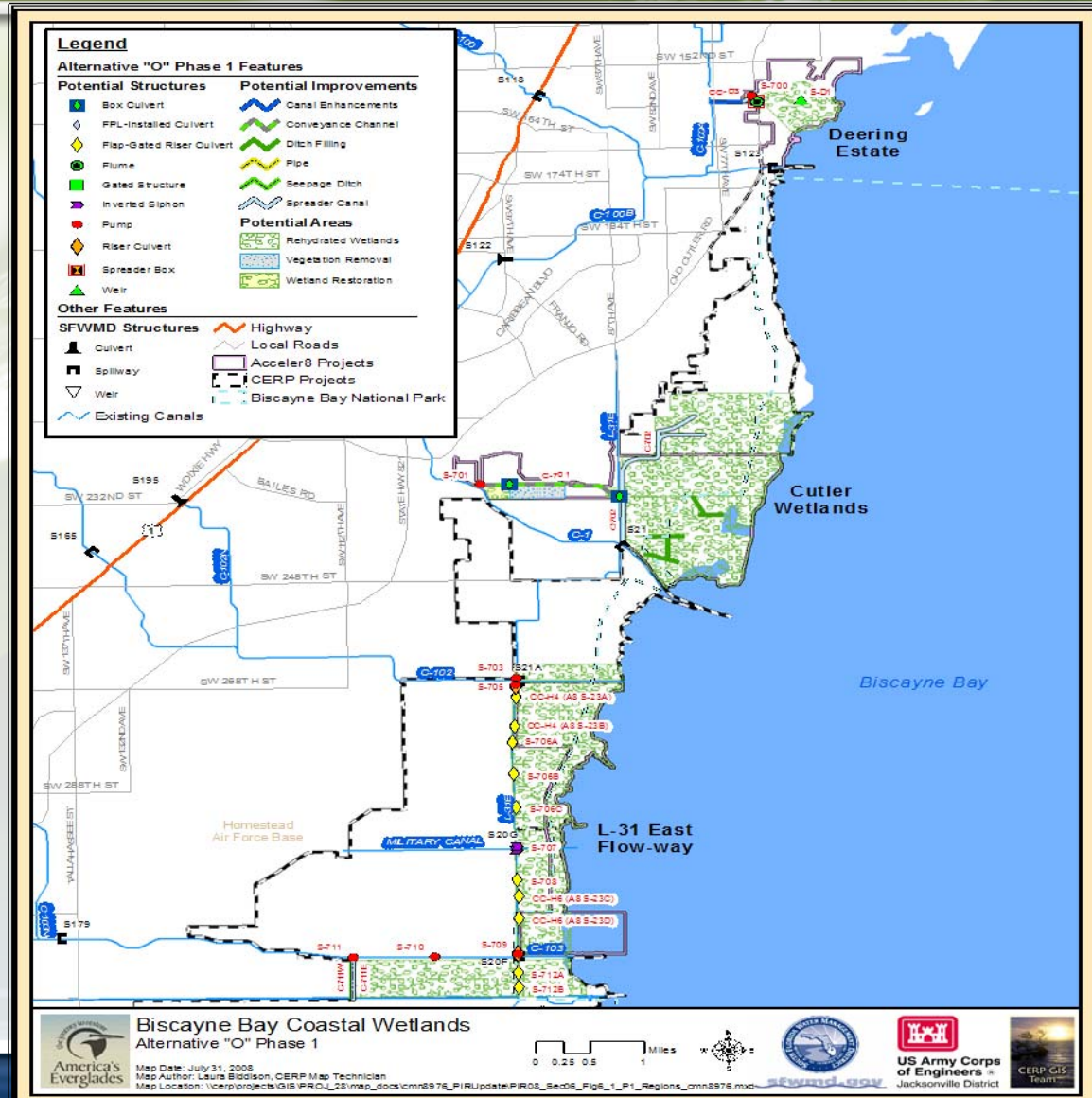
- Maintain existing levels of flood protection
- Not adversely affect existing legal users of water
- Avoid adverse impacts to protected species (e.g. American Crocodile)

Project Level Monitoring

- Hydrometeorological monitoring is necessary to ensure project benefits, guide adaptive management decisions and protect existing levels of flood protection
- Hydrologic monitoring will include stage and flow monitoring at all three project components. Meteorological data will be obtained from existing stations
- Ecological monitoring is necessary to ensure project benefits and guide adaptive management decisions. It will include monitoring oysters, submerged aquatic vegetation, estuarine fish, juvenile crocodiles, near-shore salinity and wetland algae
- Water quality monitoring is necessary evaluate BBCW's performance with regard to restoration goals and regulatory requirements
- Water quality monitoring will include specific conductance, color, PH, dissolved oxygen, nitrogen (TKM and NOX), total phosphorus and salinity

BBCW Alternative "O Phase 1"

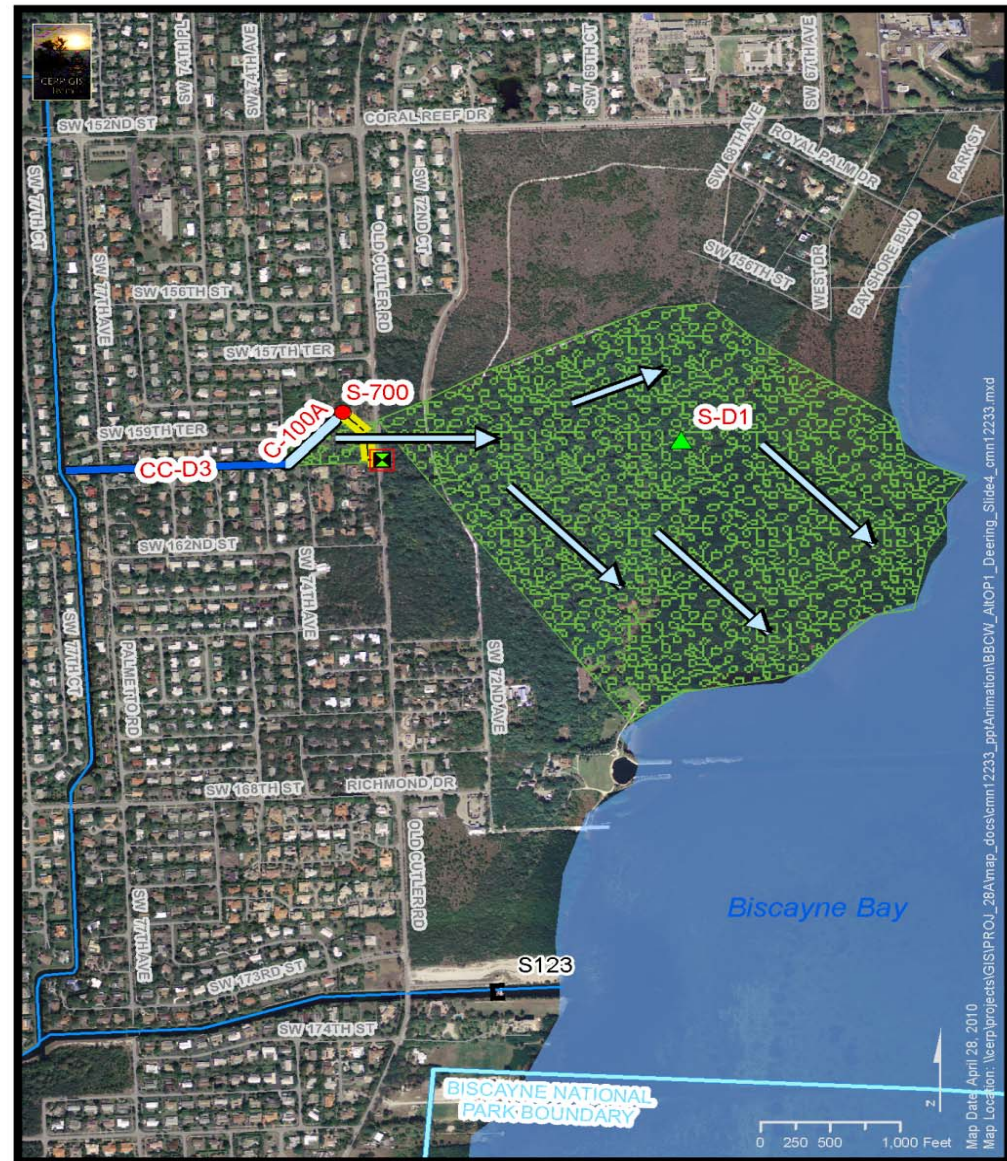
- Deering Estate
- Cutler Wetlands
- L-31E (including North Canal Freshwater Wetland)



Deering Estate

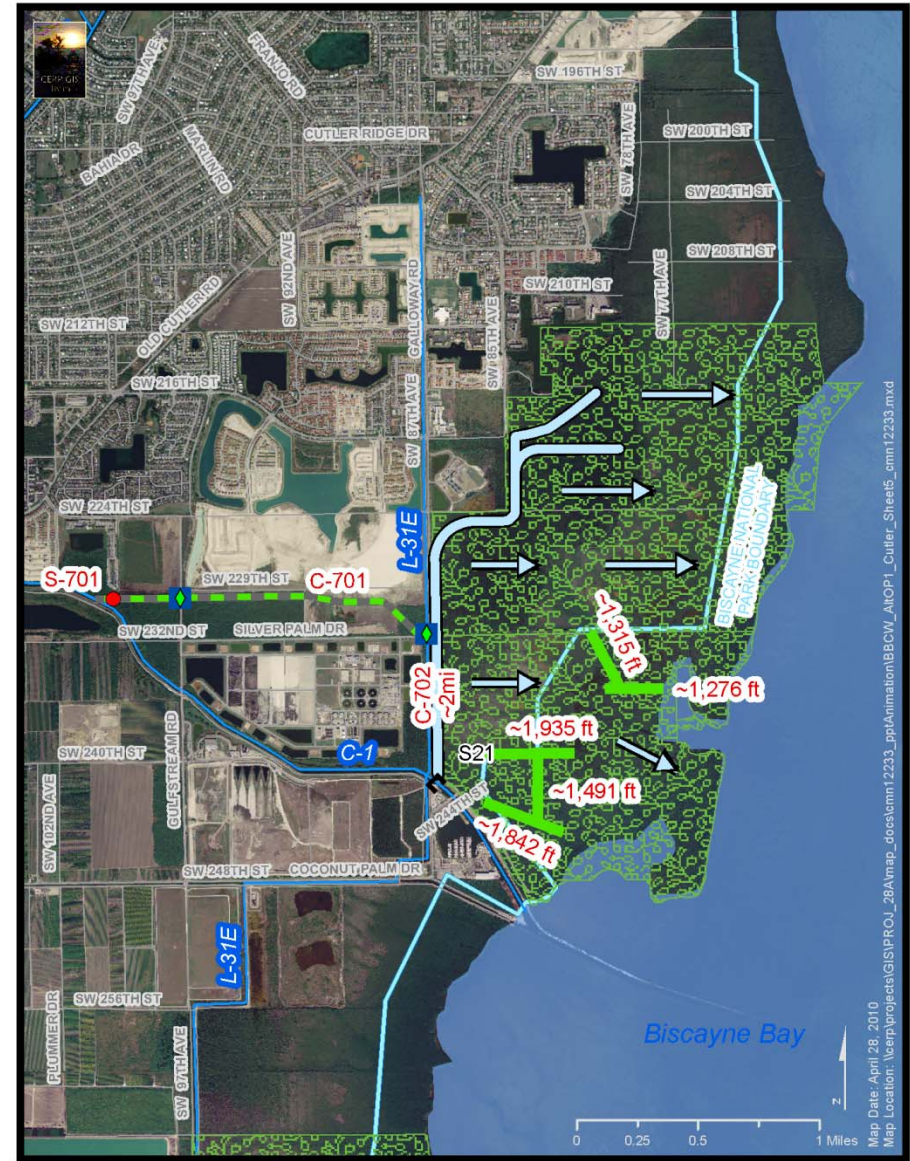
Expedited projects include:

- Construction of a 500-foot extension of the C-100A Spur Canal
- Construction of a 100 CFS Pump Station (S-700) to withdraw water from C-100A Spur Canal
- Installation of 538 linear feet of 60" pipe downstream of the pump station
- Construction of a spreader structure for discharges to the coastal wetlands located within the Deering Estate



Cutler Flowway

- Expedited construction of a 400 CFS Pump Station (S-701) on the C-1 Canal
- Expedited construction of a 1.3-mile-long lined conveyance canal to deliver water from the pump station to a proposed spreader
- Expedited installation of box culverts under SW 97 Ave, SW 87 Ave., and L-31E
- Expedited construction of a 2-mile-long spreader canal
- Future USACE construction of remaining portions of spreader canal and plugging of 2,500 LF of remnant mosquito ditches



L-31E Flowway

- Expedited installation of four flap-gated culverts (S-23A, S-23B, S-23C and S-23D) to discharge from L-31E to saltwater wetlands east of L-31E
- Future USACE construction of a 50 CFS pump station (S-703) on L31E with outlet spreader
- USACE construction of a 100 CFS pump station (S-705) on L-31E to discharge south to L-31E
- USACE construction of a 40 CFS pump station (S-709) to discharge from C-103 north to L-31E (and installation of an inverted siphon (S-707) at Military Canal to isolate it from L-31E)



L-31 E Flowway continued

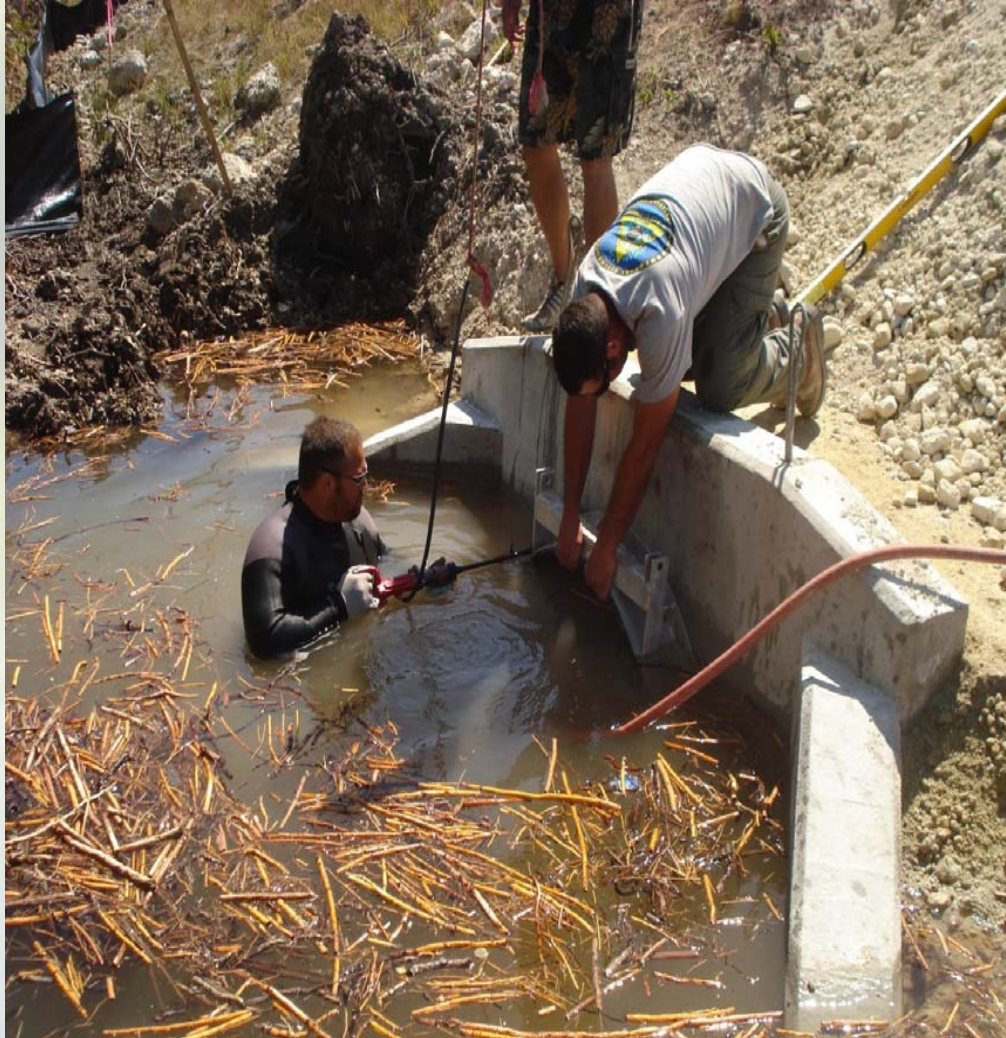
- USACE installation of six remaining flap-gated culverts (S-706A, S-706B, S-706C, S-708, S-712A, & 712B) to discharge from L-31E to saltwater wetlands
- USACE construction of a 40 CFS pump station (S-711) and spreader canal (C-711) to deliver water from C-103 to freshwater wetlands south of C-103
- USACE construction of 40 CFS pump station (S-710) to deliver water from C-103 to freshwater wetlands south of C-103 (via spreader structure)



Important Dates

- Jan 2010 – Notice to Proceed for installation of four L-31E culverts
- April 2010 – Notice to Proceed for Deering Estates
- May 7, 2010 – Deering Estates Groundbreaking Ceremony
- September 2010 – Civil Works Review Board
- January 2011 – Chief's Report signing
- June 2011 – Record of Decision

L-31E Construction Photos



Construction Progress as of 4/30/10

- Installation of L-31E Culverts is 100% complete
- Notice to Proceed for Deering Estates was issued on April 21, 2010. Construction should be complete by August of 2011
- Notice to Proceed for Cutler Wetlands component is contingent upon resolution of real estate issues and Governing Board approval of FY11 budget



Questions?