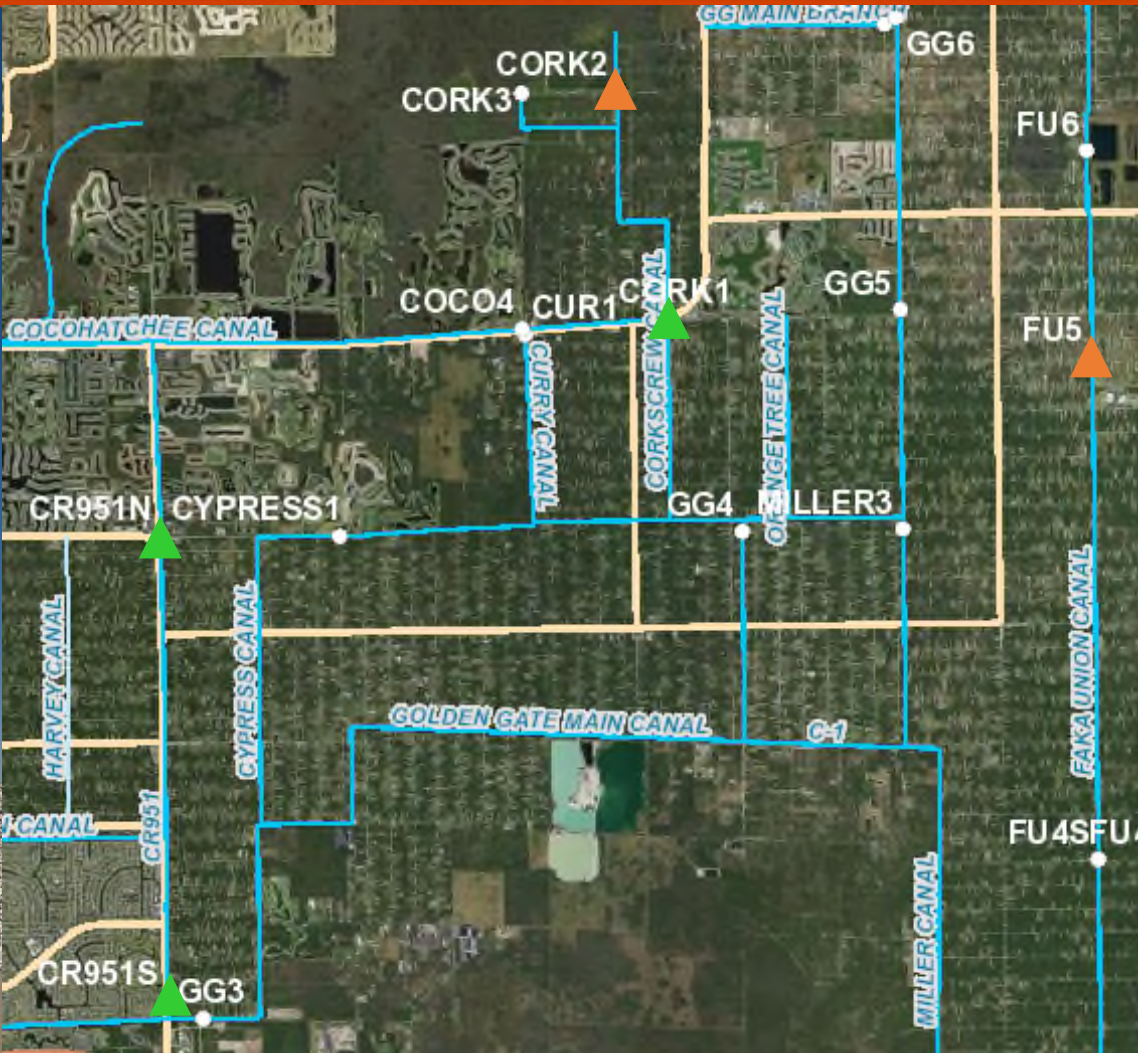


Big Cypress Basin Capital Project Update

Lucine Dadrian, P.E.
Project Management Section Administrator
Engineering and Construction Bureau
February 25, 2021



Electrification and Remote Operations



- Improves operational response time, adds resiliency, lowers field station staff burden, and increases staff safety
- **Package 1:** CORK1, CR951N, CR951S – add powered operations only
 - Construction completion Spring 2021
- **Package 2:** Includes CORK2 remote operations and FU5 generator building
 - Advertise for bids Spring 2021
 - Construction Summer 2021

Electrification and Remote Operations

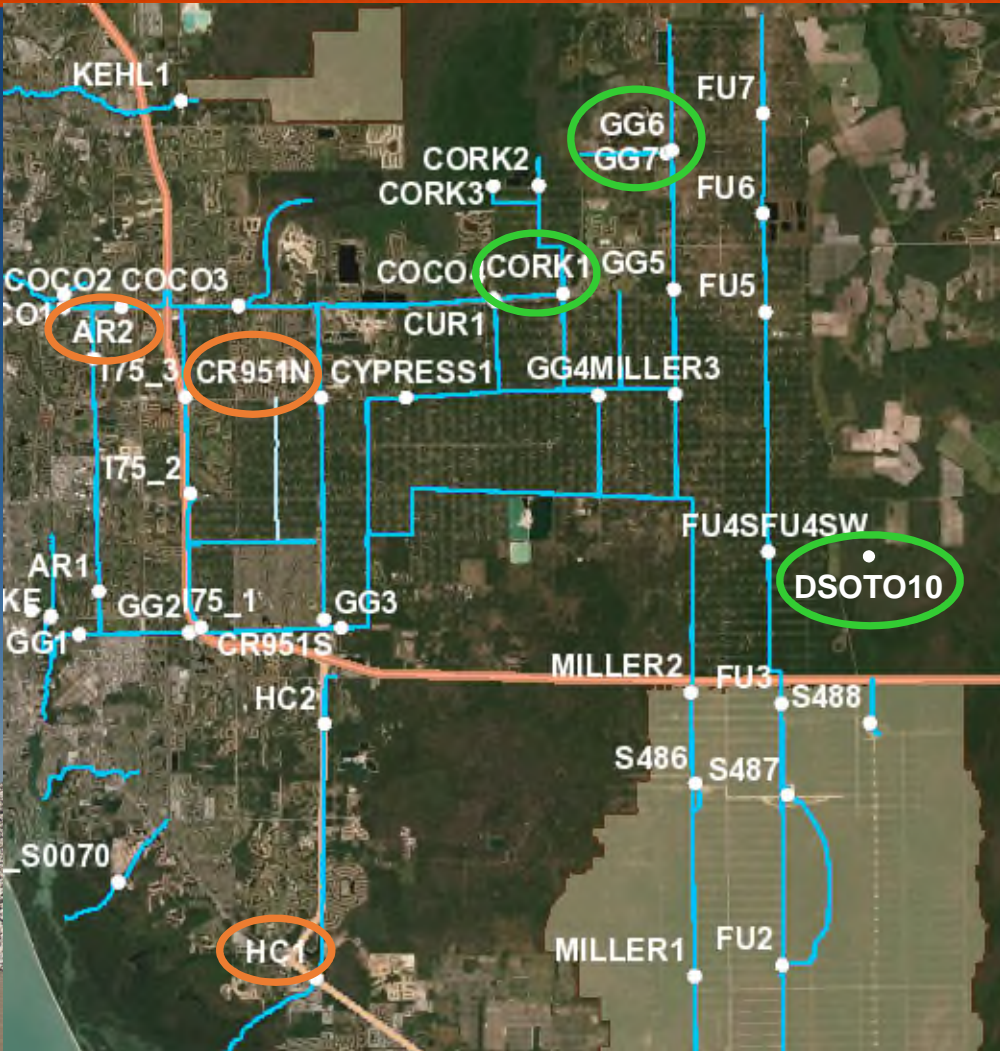


CR951N: New Gate Header, Stem & Actuator



CORK1: New Gate Header, Stem & Actuator

SCADA Replacements



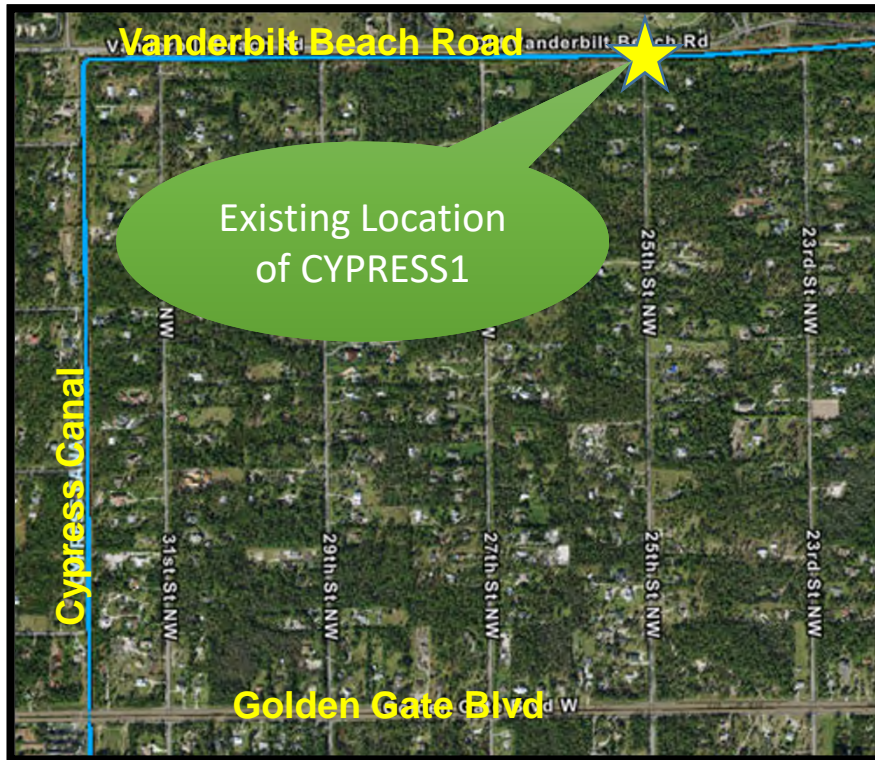
- Increases ability to make real-time decisions for flood control and water conservation operations
- Adds ability to accurately calculate & report flowrates to improve modeling and operations
- Radio upgrades for 95 existing monitoring sites
 - installation in FY21/FY22
- **Package 1** – New sites CORK1, DSOTO10, GG6/7
 - Construction start in February 2021
- **Package 2** – New sites CR951N, AR2, upgrade HC1
 - Final design plans February 2021
 - Construction summer 2021

Miller #3 Gate Replacement



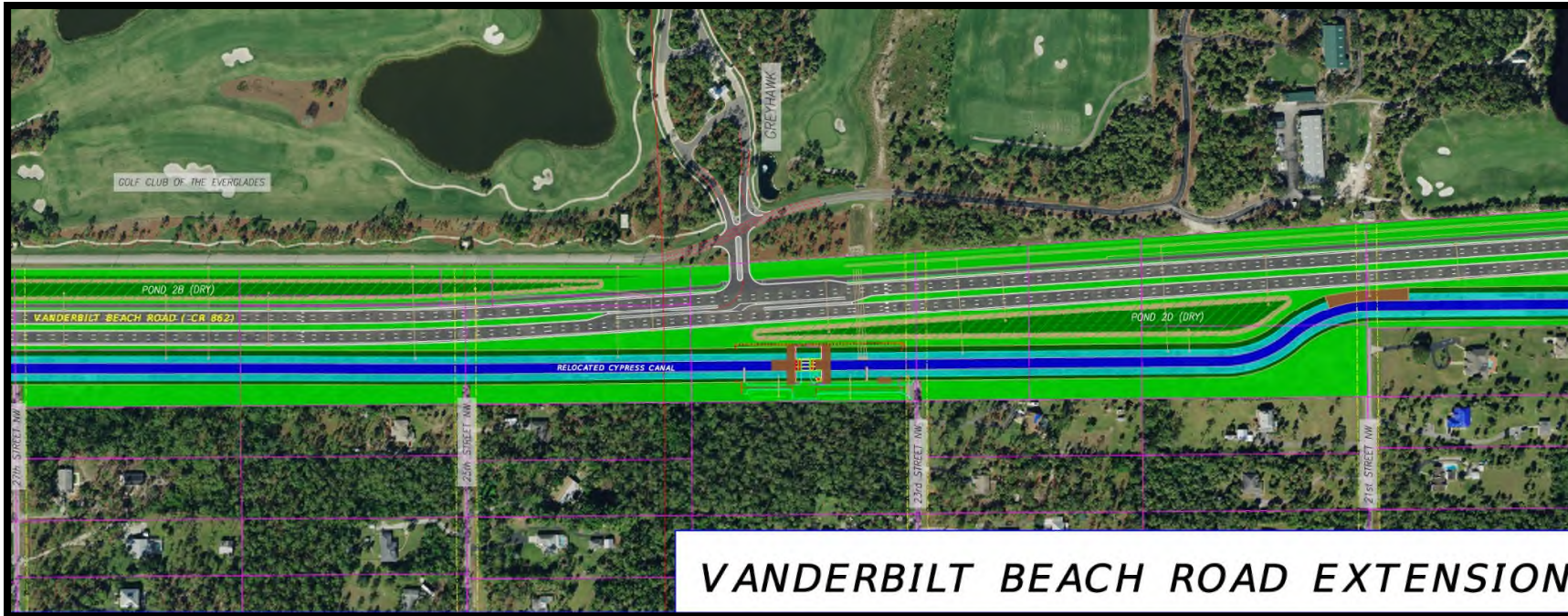
- Structure constructed in 2014
- Replacement of 3 gates on existing water control structure
- Replaces double leaf gates with single leaf gates to improve reliability and operations
- Restores full flood control capacity as originally designed
- Construction completion Fall 2021

Cypress Canal Weir Replacement



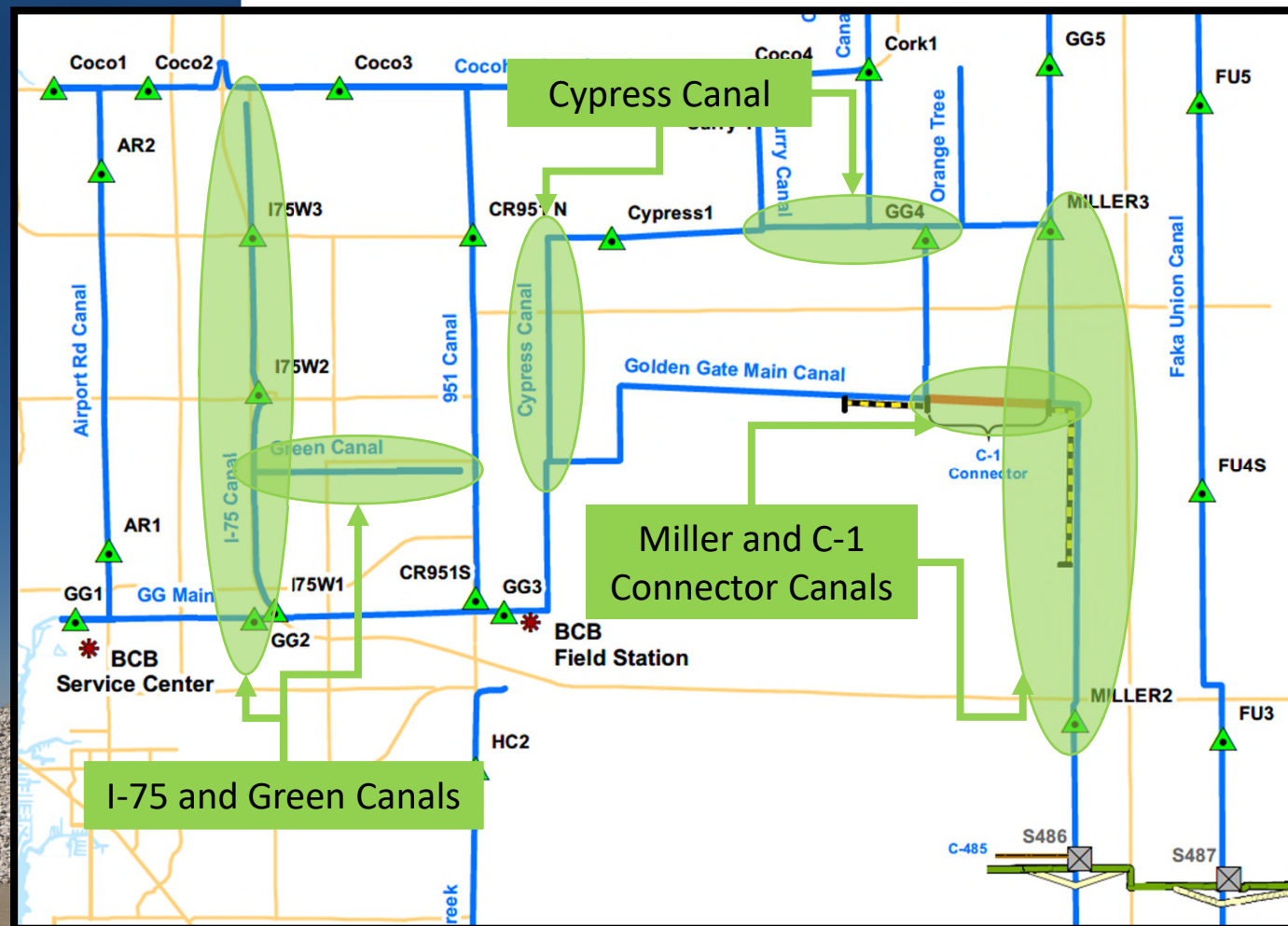
- Replace older deficient structure in a new canal alignment south of the existing canal
- Canal work to be performed by Collier County
- New structure will:
 - Reduce operation response time
 - Improve dry season groundwater recharge
 - Reduce dry season discharges to Naples Bay
 - Increase structure flow capacity by 22%

Cypress Canal Weir Replacement



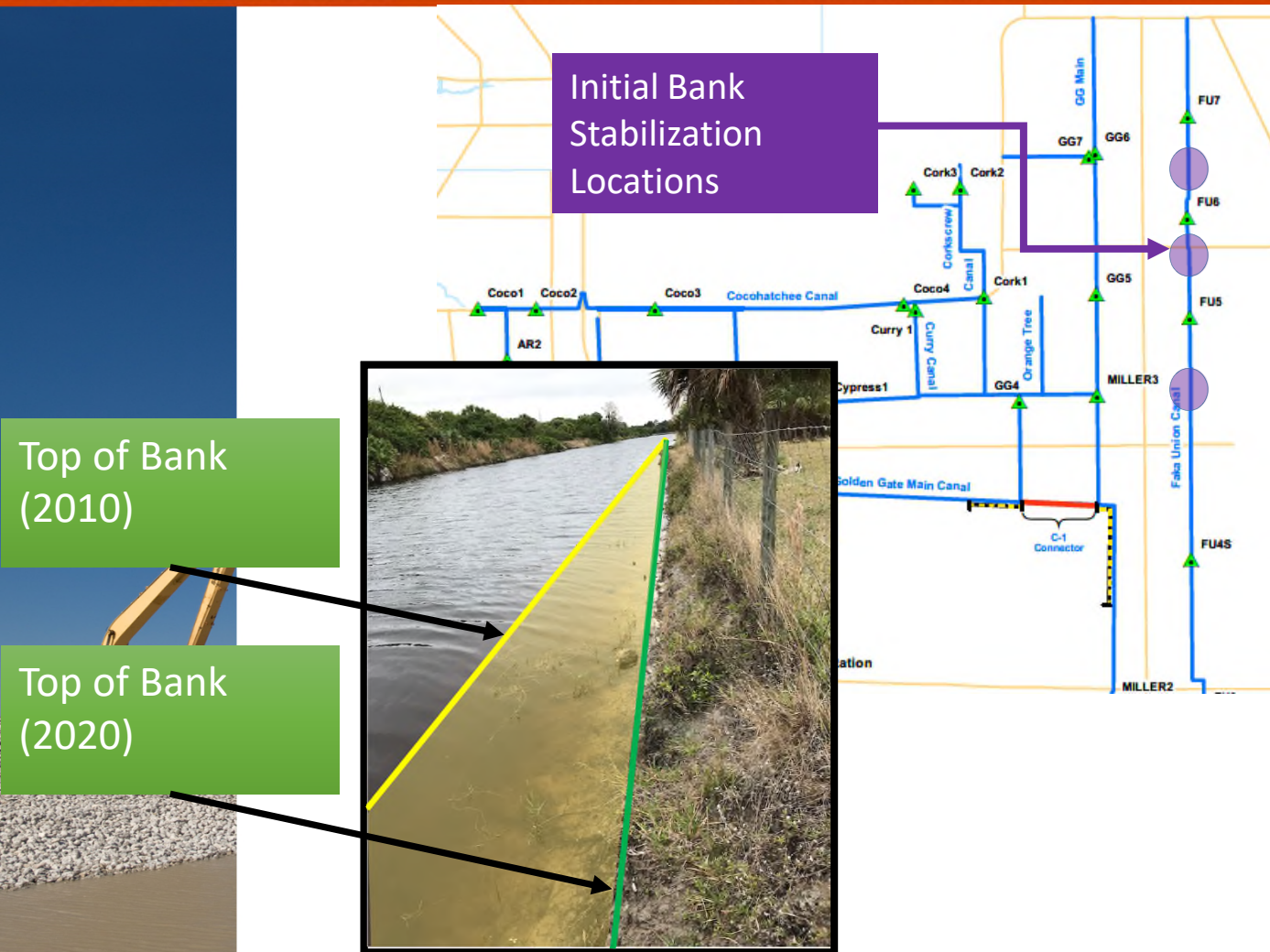
- Aligns with Collier County's Vanderbilt Beach Road (VBR) Project
- April Governing Board request for approval
- Construction start Summer 2021 – 1 yr. duration
- Construction Cost Estimate - \$3.5M

Canal Improvements



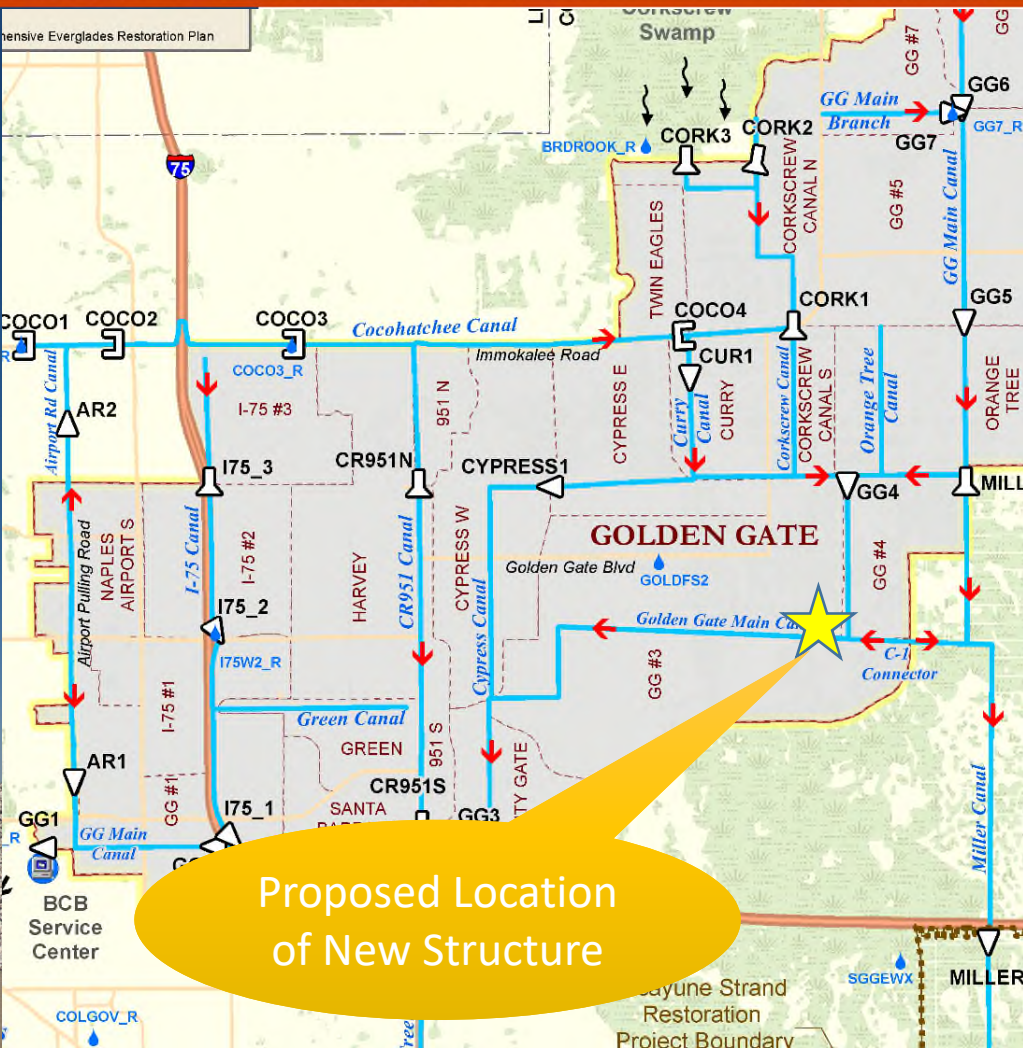
- Remove choke points in canal systems to lower flooding depths
- Multi-year program to evaluate and improve flood management
- Areas selected based on the 2018 Level of Service (LOS) study findings
- Expected assessment completion dates:
 - I-75, Green, Cypress Canals - Spring 2021
 - Miller & C-1 Canals – Summer 2021

Canal Improvements - Canal Bank Stabilization



- Protect canal rights of way and public/private infrastructure
- Prevent bank sediment from blocking canals
- Assess, prioritize, and repair known areas of erosion
- Develop assessment & ranking system to prioritize improvements for 143 miles of BCB canals
- Faka Union Bank Stabilization sites are being surveyed and design has commenced

C-1 Connector Canal Control Structure



- Improve surface & groundwater levels during dry season
- New water control structure near C-1 and Miller Canal intersection
- Complements C-1 Canal Improvements project
- Conceptual design included in Canal Improvement project Summer 2021
- Design completion Winter 2022
- Construction start Spring 2023

BCB Capital Budget Updates

- Fiscal Year 2020 – 2021 Approved Budget \$3,675,000
- Executed work to date 28% of budget
- Upcoming construction contracts:
 - Cypress Canal Weir Replacement
 - Electrification and Remote Operations Package 2
 - SCADA Replacements Package 2

Questions?

