

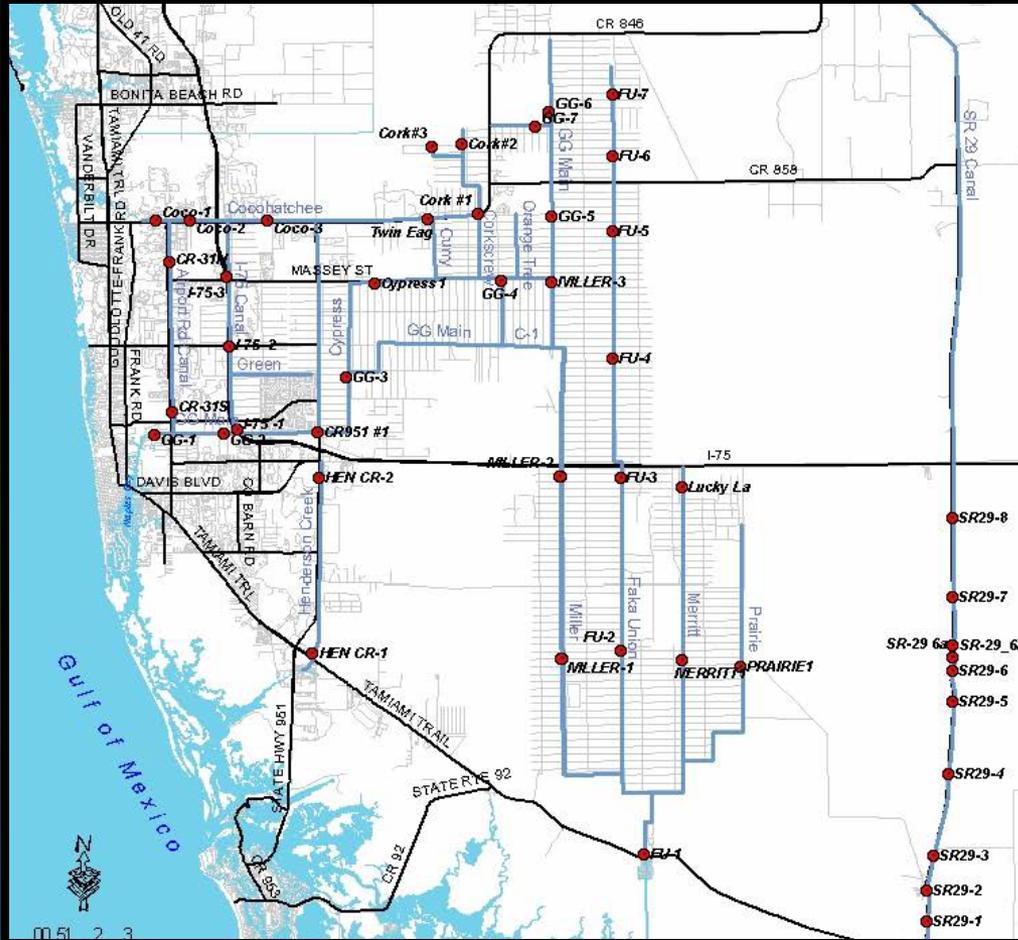


Big Cypress Basin Capital Project Update

Jeff Kivett, P.E., Division Director
Operations, Engineering and Construction

October 2015

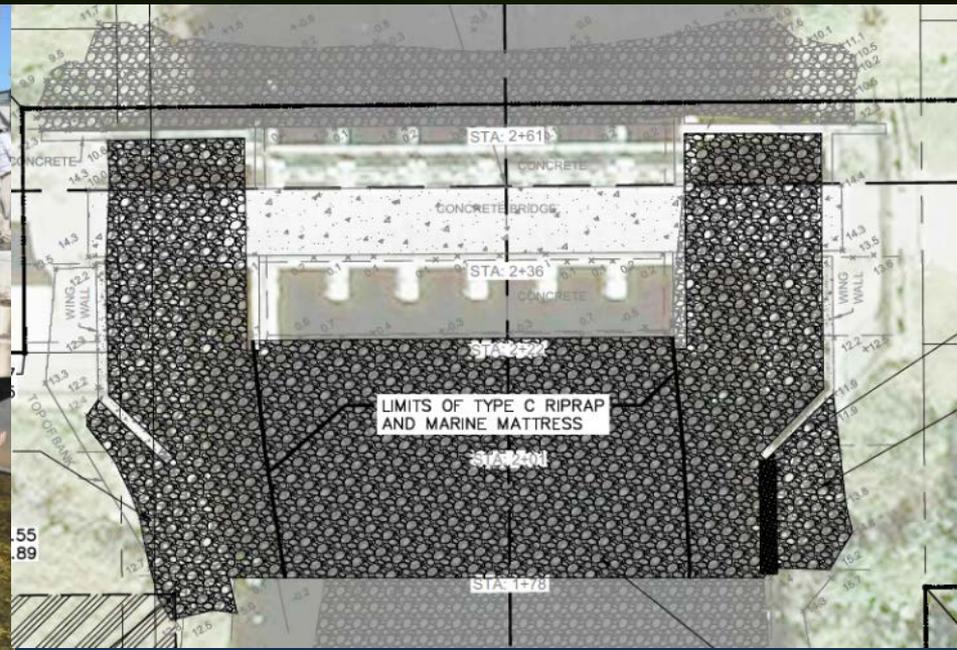
Current FY15 / FY16 Projects



1. Faka Union #4 Scour and Riprap Repairs
2. Fall Protection – Phase 1
3. Golden Gate #4 Replacement
4. Stage Recorders and Rain Gages
5. Remote Monitoring and Communication
6. COCO 1 Riprap Replenishment
7. Level of Service Assessment – Phase 1
8. Curry Canal

Faka Union #4 Scour and Riprap Repairs

- Construction contract executed
- Submittal review in progress
- NTP and Mobilization scheduled for October 19
- Substantial Completion scheduled for March 2016
- Final Completion April 2016



BCB Fall Protection – Phase 1

- 9 Sites: GG 1, GG 2, GG 3, FU 4, ARS/CR31, CR951-1, HEN 2, I75-1, and I75-2
- NTP Date - October 16
- Submittal reviews in progress
- Mobilization scheduled for early November following materials fabrication
- Substantial Completion scheduled for March 2016, Final Completion April 2016



Golden Gate Weir #4 Replacement

- Design Work Order executed with Black & Veatch
- Design Kickoff Meeting conducted on October 5
- Construction scheduled for the end of FY17



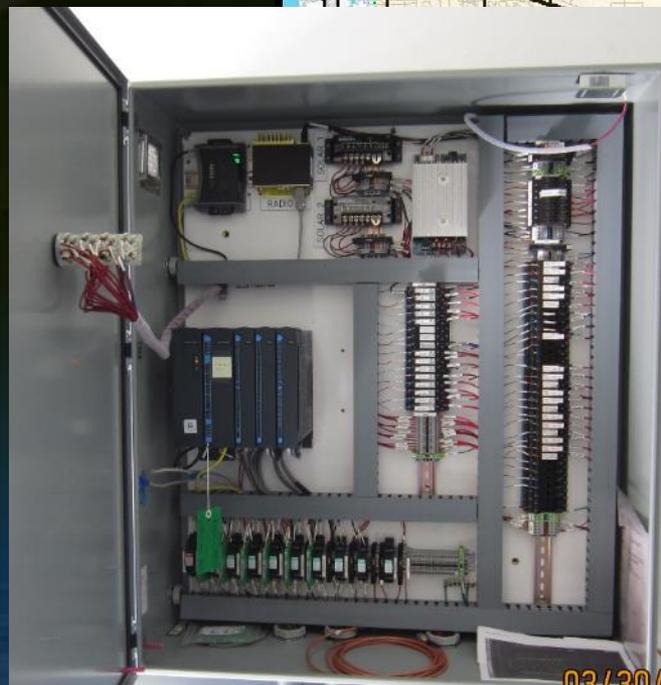
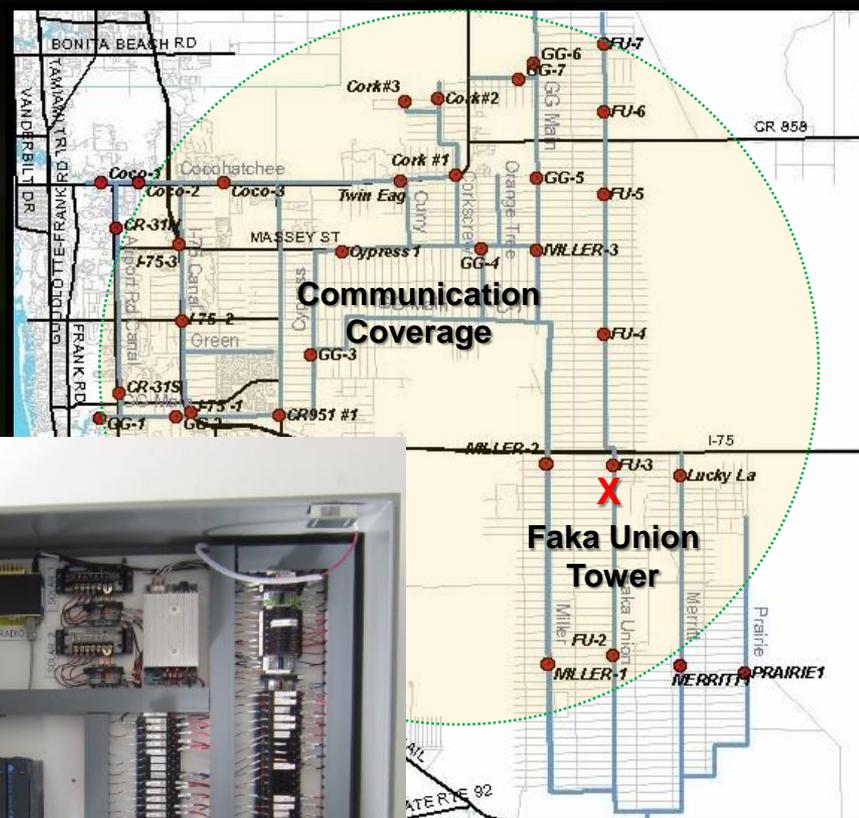
Stage Recorders and Rain Gages

- SCADA monitoring infrastructure to be installed in FY16
- Stage Recorders at 4 sites: Twin Eagles, I-75#3, FU6, and CR951-2
- Rain Gages at 2 sites: I-75#2, GG6 or GG7
- \$247,500 Budgeted in FY16



Remote Monitoring and Communication

- Upgrade current CR10s and MOSCADs to ACE RTUs for 9 sites.
- Currently building ACE RTUs at FOC facility.
- FY16 installation of ACE RTUs.
- \$320,000 Budgeted to complete communication install in FY17.



COCO 1 Riprap Replenishment

- Replenish rubble riprap around structure
- Installation by Field Station crew
- \$200,000 budgeted for FY16 dry season construction



Level of Service Assessment – Phase 1

Phase 1: Technical Assessment

- **Comprehensive examination of the existing system and its current level of flood protection, a projection of future conditions and the resulting change in flood protection**
- **\$250,000 Budgeted for FY16**

Curry Canal

- Request to control flows south at intersection of Curry and Cocohatchee Canals
- \$50,000 Budgeted for FY16
- \$500,000 Budgeted for FY17





Big Cypress Basin Field Station Relocation Project Update

Construction Phase

Schedule

- April 2015 Issue NTP for Phase 2 (Issued 4-8-15)
- April 2016 Substantial Completion
- May 2016 Final Completion

Cost

\$6,669,104.80

Key Activities Since Last Update

- Installed all structural steel for Administration and Maintenance Buildings.
- Constructed Chemical Storage Building and Dumpster Enclosure.
- Installed metal decking and roofing system for Administration, Maintenance, and Chemical Storage Buildings.
- Poured Slabs on grade (SOG) for Maintenance and Chemical Storage Buildings, Covered Storage (PEMB) Area, & Vehicle Wash Area.
- Installing rough-in mechanical, electrical, plumbing and fire-sprinkler.
- Installing metal framing for interior walls.
- Installing Covered Storage PEMB.
- Installing underground storm sewer, sanitary sewer, water and fire lines.

Construction Phase



Construction Phase



West Elevation (Front Entrance)

Construction Phase



North Elevation



South Elevation

Construction Phase



East Elevation



Covered Storage Area (PEMB) and Vehicle Wash

Construction Phase

Vehicle Bays



Looking North



Looking South

Construction Phase

Admin Building

Metal framing,
electrical,
mechanical, and
plumbing work



Main Corridor



Mech & Elec Room

Construction Phase

Admin Building

Metal framing, electrical, mechanical,
and plumbing work



Corridor 37 at Public Restrooms



Corridor to Central Stores

Construction Phase

Admin Building

Metal framing,
electrical,
mechanical, and
plumbing work



Chris' New Home

Construction Phase

Vehicle Bays and Mezzanine

Fire Riser Room & Lockable Storage



Canal Levee Storage & Lube Equipment Room



Construction Phase

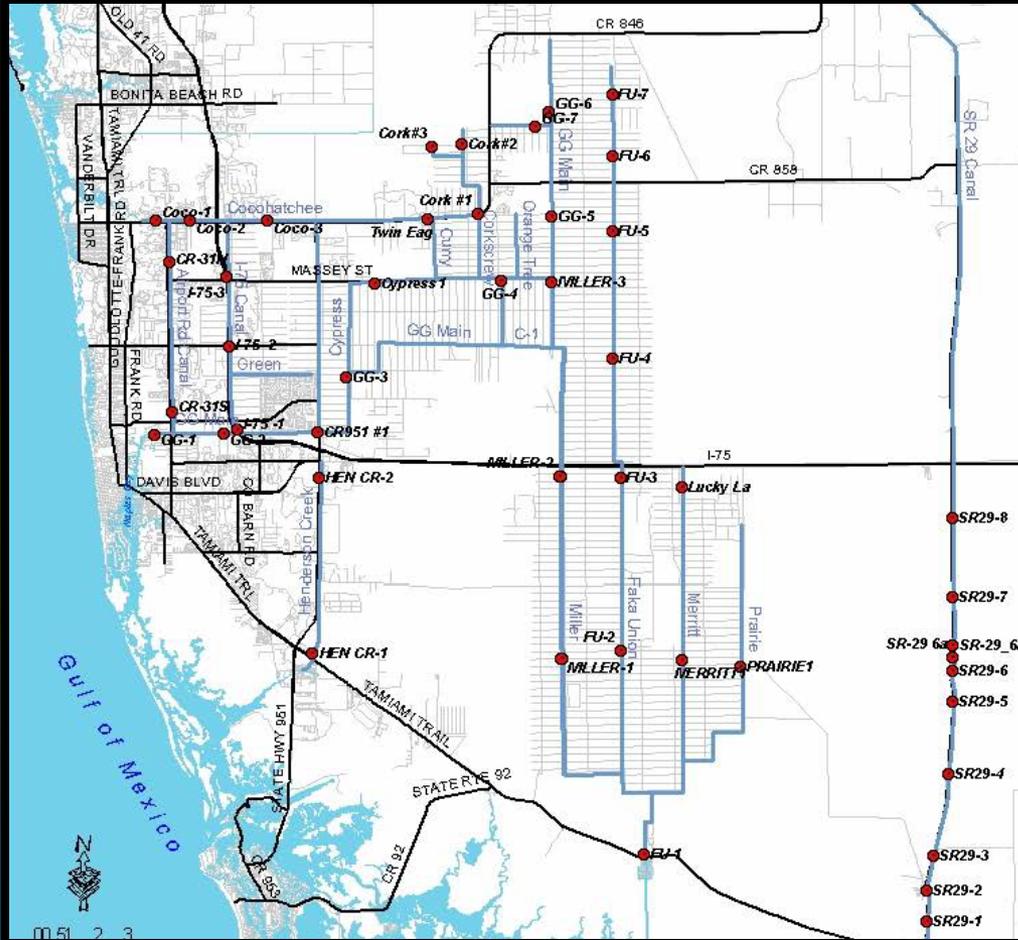
Generator Slab, Chemical Storage Building and Dumpster Enclosure





Big Cypress Basin FY17 Capital Program Update

Current FY17 Projects



1. Fall Protection – Phase 2
2. Golden Gate 1 Scour Repair
3. COCO 2 Scour Repair
4. COCO 3 Riprap Replenishment
5. Cypress Canal Weir #4A1 Replacement
6. Electrification
7. NAVD 88 Vertical Datum Conversion
8. Curry Canal

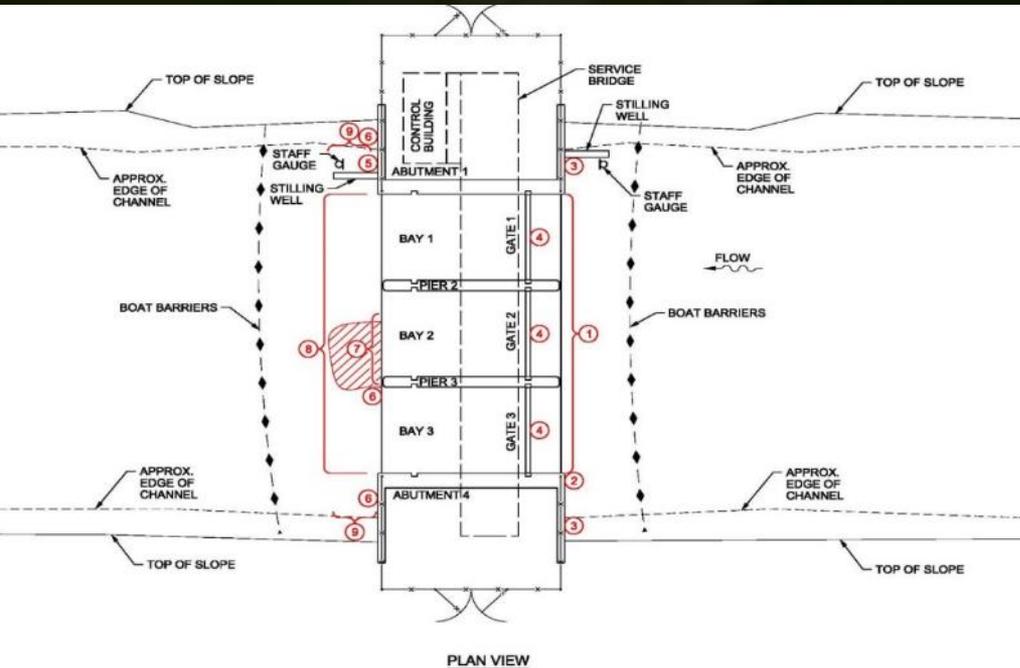
BCB Fall Protection – Phase 2

- **11 Sites: COCO 1, COCO 2, COCO 3, Cork-1, Cork-2, ARN (CR31), CR951-2, HEN 1, I75-3, TWINE and FU 5.**
- **Phase 2 design to be completed internally in FY16**
- **Preliminary plans complete**
- **Construction for Phase 2 to commence in FY17**
- **\$300,000 budgeted for FY17**



Golden Gate 1 Scour Repair

- Survey complete and no downstream scour found
- Design for void/seepage repairs under slab in progress
- Chemical grout between the existing sheet pile and slab
- \$200,000 budgeted for FY17 construction



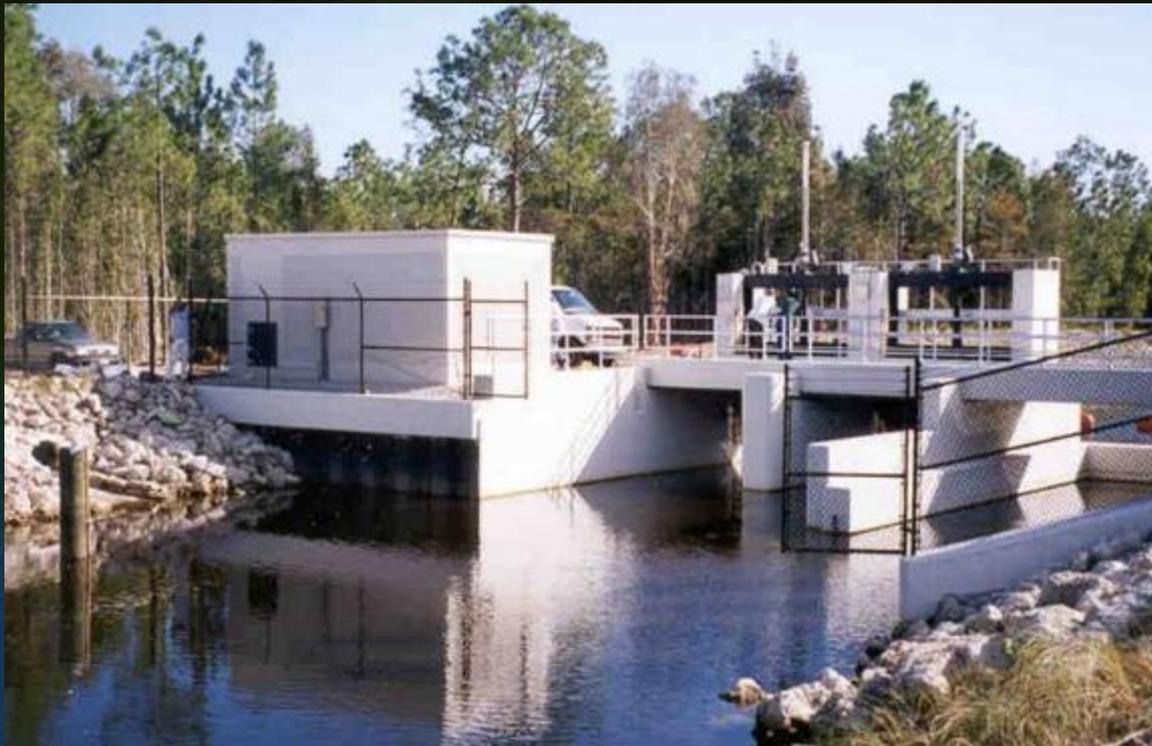
COCO 2 Scour Repair

- **Survey and CFD Modeling completed for scour**
- **Design in progress for scour repair under slab and downstream of structure**
- **\$500,000 budgeted in FY17**



COCO 3 Riprap Replenishment

- Replenish rubble riprap around structure
- Installation by Field Station crew
- \$200,000 budgeted for FY17 dry season construction



Cypress Canal Weir 4A1 Replacement

- Level of Service Assessment to be completed first
- \$50,000 budgeted for survey in FY17



Electrification

Electrification Phase 1

- Design in FY16
- Work includes Electric-Motor Actuators, Gate Stem Replacement, Control Panels, Commercial Power Hookup and Tow Around Generator

- \$420,000 Budgeted for FY17 Construction

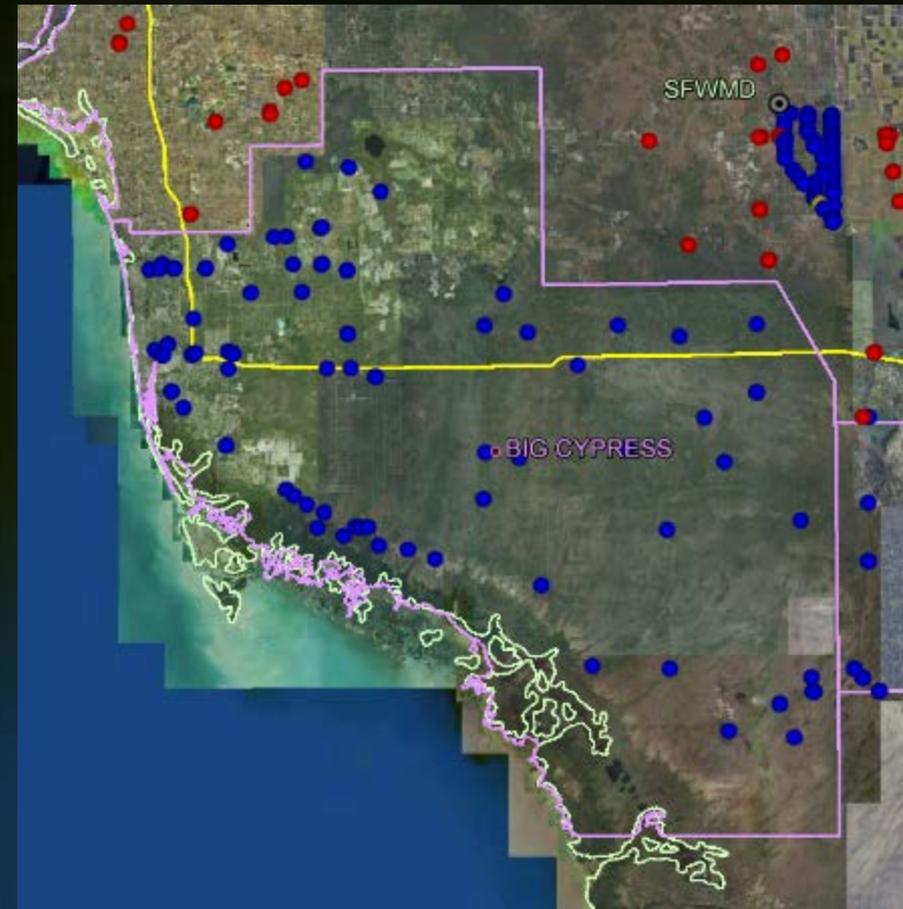
Electrification Phase 2

- Electrification at Cork 2 and CR951-2 after modeling for gate modifications.



NAVD 88 Vertical Datum Conversion

- Convert 74 sites from NGVD 29 to NAVD 88
- Install NAVD staff gauges, calibrate sites, and Update Databases, Hydrology Models, Water Regulation Schedules
- \$445,000 budgeted in FY17



Additional Items to Add to FY17 Budget

- \$212,500 for LOS Phase 2 to include survey and structure flow rating computations
- \$491,900 for 6 SCADA Site Rebuilds and 31 Loggernet Radio Conversions
- This is a budget increase of \$704,400 in the preliminary FY17 budget

Level of Service Assessment – Phase 2

Phase 2: Strategic Assessment

- Identify flood and sea level related issues
- Develop designs for a diversion and water level control structure on the Curry Canal
- Identify short-comings in the existing drainage infrastructure and prioritize issues
- \$212,500 Budgeted for FY17

SCADA Replacements

Site Rebuilds

- 6 sites: GOLDF2, MARCO, TMBR37, TMBR40, TMBR45, TMBR52
- \$272,800 budgeted for FY17

Loggernet Conversions

- 31 sites:
- \$215,900 budgeted for FY17

Total Budget \$488,700

951EXT	D28	GG7	HC1	NAP31
COCOPR	FAKI75	GOL846	HC1-TW	ROOK
COLGOV	GG1	GOLD4A	I75MZ	TAMTOM
COLSEM	GG2	GOLDF2	I75W1	TMBR37
CORK3	GG3	GOLDW4	MARCO	TMBR40
CR951S	GG6	GRDN	MLRI75	TMBR45
				TMBR52



BCB Capital Program – Original Budget

BCB Capital Projects	FY16 Adopted	FY17 Preliminary	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	Total (FY17-FY26)
Structure Inspection Program	\$0	\$0	\$225,000	\$225,000	\$0	\$0	\$0	\$225,000	\$225,000	\$0	\$0	\$900,000
Fall Protection	\$0	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300,000
BCB Level of Service Assessment	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BCB Stage Recorders and Rain Gauges	\$247,500	\$0	\$99,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$99,000
Prioritized Projects												
Golden Gate #1 Scouring / Slab Repair	\$0	\$200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000
Scouring Repairs	\$200,000	\$700,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$700,000
SCADA Replacements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Remote Monitoring and Communications	\$0	\$320,000	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$420,000
Golden Gate Weir #4 Replacement	\$450,000	\$200,000	\$2,000,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,200,000
Faka Union Canal Weir #6 Replacement	\$0	\$0	\$50,000	\$0	\$391,000	\$782,000	\$0	\$0	\$0	\$0	\$0	\$1,223,000
Cypress Canal Weir #4A1 Replacement	\$0	\$50,000	\$0	\$335,500	\$671,000	\$0	\$0	\$0	\$0	\$0	\$0	\$1,056,500
Cork 1 & 2 and CR951 1 & 2 Electrification	\$0	\$420,000	\$300,000	\$0	\$740,000	\$0	\$1,020,000	\$0	\$0	\$0	\$0	\$2,480,000
NAVD88 Conversion	\$0	\$445,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$445,000
Curry Culvert Gate Retrofit	\$50,000	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500,000
Faka Union Canal Weir #7 Replacement	\$0	\$0	\$0	\$0	\$0	\$50,000	\$0	\$239,800	\$479,600	\$0	\$0	\$769,400
Barron River Control Structure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$402,667	\$1,100,000	\$1,552,667
C-1 Connector Canal Control Gate	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$50,000
Other Capital Projects												
BCB Field Station Design & Construction	\$1,132,878	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BCB Field Station Offset	\$1,700,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Henderson Creek Diversion	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capital Project Totals	\$4,030,378	\$3,135,000	\$2,774,000	\$1,560,500	\$1,802,000	\$832,000	\$1,020,000	\$464,800	\$754,600	\$402,667	\$1,150,000	\$13,895,567

BCB Capital Program – Proposed Additions

BCB Capital Projects	FY16 Adopted	FY17 Preliminary	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	Total (FY17- FY26)
Structure Inspection Program	\$0	\$0	\$225,000	\$225,000	\$0	\$0	\$0	\$225,000	\$225,000	\$0	\$0	\$900,000
Fall Protection	\$0	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300,000
BCB Level of Service Assessment	\$250,000	\$212,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$212,500
BCB Stage Recorders and Rain Gauges	\$247,500	\$0	\$99,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$99,000
Prioritized Projects												
Golden Gate #1 Scouring / Slab Repair	\$0	\$200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000
Scouring Repairs	\$200,000	\$700,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$700,000
SCADA Replacements	\$0	\$491,900	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$491,900
Remote Monitoring and Communications	\$0	\$320,000	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$420,000
Golden Gate Weir #4 Replacement	\$450,000	\$200,000	\$2,000,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,200,000
Faka Union Canal Weir #6 Replacement	\$0	\$0	\$50,000	\$0	\$391,000	\$782,000	\$0	\$0	\$0	\$0	\$0	\$1,223,000
Cypress Canal Weir #4A1 Replacement	\$0	\$50,000	\$0	\$335,500	\$671,000	\$0	\$0	\$0	\$0	\$0	\$0	\$1,056,500
Cork 1 & 2 and CR951 1 & 2 Electrification	\$0	\$420,000	\$300,000	\$0	\$740,000	\$0	\$1,020,000	\$0	\$0	\$0	\$0	\$2,480,000
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C-1 Connector Canal Control Gate	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$50,000
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BCB Field Station Design & Construction	\$1,132,878	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BCB Field Station Offset	\$1,700,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Henderson Creek Diversion	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capital Project Totals	\$4,030,378	\$3,839,400	\$2,774,000	\$1,560,500	\$1,802,000	\$832,000	\$1,020,000	\$464,800	\$754,600	\$402,667	\$1,150,000	\$14,599,967

Questions?

