



Big Cypress Basin Field Station



Henderson Creek Structure 2



Control room for Cocohatchee  
Structure 1



Golden Gate Structure 3  
(GG3)

# Big Cypress Basin Field Station Activity Report

Juan Bethencourt  
Superintendent  
August 27, 2020

# OVERVIEW

- Rainy Season Activities
- S-488 Merritt Pump Station, ME#1 Repair
- Tropical Storm Isaias
- Three Month Outlook





# RAINY SEASON ACTIVITIES



Before



After

Corkscrew Canal Bank Repairs

Presenter: Juan Bethencourt



# RAINY SEASON ACTIVITIES



Before



After

951 Canal Bank Repairs

Presenter: Juan Bethencourt



# RAINY SEASON ACTIVITIES



Before



After

Henderson Canal Vegetation Removal

Presenter: Juan Bethencourt



# RAINY SEASON ACTIVITIES



Before



After

Airport Canal Vegetation Removal

Presenter: Juan Bethencourt



# RAINY SEASON ACTIVITIES



Before



After

GG Canal Access Ramp # 32 - Bar Gate Installation

Presenter: Juan Bethencourt



# Merritt/S-488 Pump Station ME#1 Repair



Merrit Pump Station

## MERRITT PUMP STATION S-488

- Accepted June 2016
- 4 Diesel Engines 220 Cubic Feet Second each (CFS)
- 2 Electric Pumps 75 CFS each
- Total approx. capacity 6.7 million gallons per day

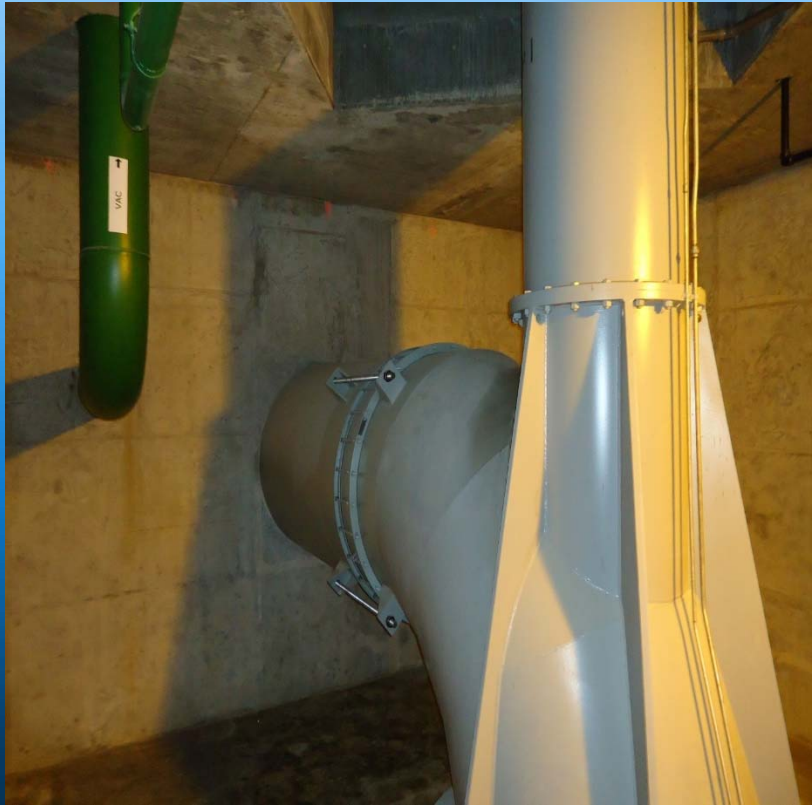
On June 8<sup>th</sup>, 2020 during preventive maintenance inspections a broken shaft was found on main engine #1

Background

Presenter: Juan Bethencourt



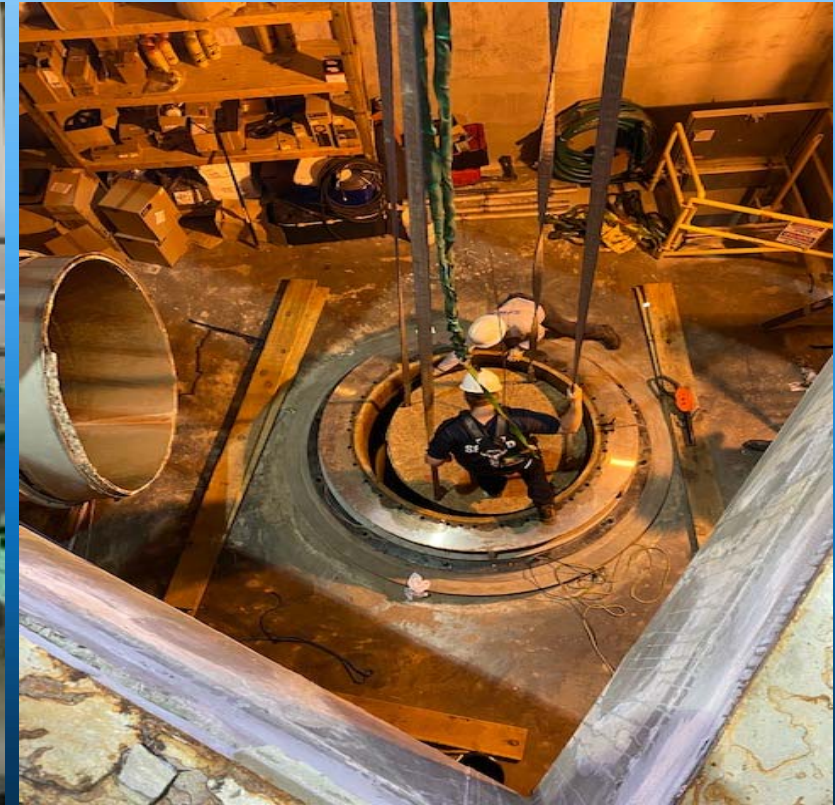
# Merrit/S-488 Pump Station ME#1 Repair



Original



Power Take Off (PTO)



Shaft / Impeller

Presenter: Juan Bethencourt



# Merrit/S-488 Pump Station ME#1 Repair



Broken Shaft



Shaft Deficiencies

Presenter: Juan Bethencourt



# Merrit/S-488 Pump Station ME#1 Repair



Impeller Repairs



Shaft/ Impeller Assembly



Pump Assembled

Presenter: Juan Bethencourt



# Tropical Storm Isaias Preparations



FAKA By-Pass Plug Removal



All Equipment Staged at FS



Generator Structures, Miller #3

Storm Activities  
Presenter: Juan Bethencourt





# THREE MONTH OUTLOOK

- Mechanical harvesting of debris and vegetation along canal banks and weed barriers.
- Supporting avoid verbal operational orders (AVO's) throughout the wet season as requested by Water Managers.
- Structure Inspection Program repairs, 90% repairs completed out of 105 deficiencies for FY20.
- Continue with riprap installation along canals as needed.
- Pressure wash and paint various structures.

Presenter: Juan Bethencourt





# QUESTIONS

Presenter: Juan Bethencourt