The Cove Stormwater Pump Station Outfall Improvements And Water Quality Project
Existing Conditions
Existing Conditions

- Field Investigations
  - Geotechnical Investigation
  - Sediment Analysis
  - Habitat Assessment
Views and Amenities
Preliminary Design

Outfall Sump Design
Preliminary Design

Living Shoreline

- Incubate with bags or baskets over bed of cultch
- Spartina Alterniflora
- Rip-Rap Breakwater
- Oyster Reef
- Planting Zone (15-20 ft)
- Clean Fill
- Existing Seawall
- Armored Channel
- Varieties

Existing Concrete Cap

Rip-Rap Toe

0.69 MHHW
0.44 MHW
-0.5 MSL
-1.53 MLW
-2.07 MLLW
-3.0
-4.0

Stantec
NAPLES BEACH RESTORATION
Site Conditions

- Frequent Maintenance
- Beach Erosion & Aesthetics
  - Outfall 3
  - Outfall 5
  - Outfall 6
Site Conditions

Blocked Discharge
(Outfall 9)

Flooding of Gulf Shore Road
(Near 2nd Ave N/Outfall 8, Sept 2015)
Stormwater Outfalls at Naples Beach

Outfalls: #2, #3, #4, #5 and #6, #7, #8, #9, #10 (City-9)
“South System” Pump Station Design
“South System” Offshore Discharge & Diffuser
Offshore Diffuser System

Gulf of Mexico
Overflow System – Elevation Views

STA 5+75 SEAWARD ELEVATION VIEW

STA 6+03 SEAWARD ELEVATION VIEW
Questions and Discussion