MCFADDIN WILDLIFE REFUGE

- 58,861 Acres
- Largest Texas Coast Freshwater Marsh
- 52,800 Acres at Risk
  - ↑ RSLR
  - Beach & Dune Erosion
  - Saltwater Intrusion
  - ↑ Salinity Levels
  - ↓ Fresh & Brackish Vegetation
- 285 Bird Species
  - Geese
  - Duck
  - Songbirds
  - Alligator
  - Otter
  - Fox
  - Coyote
PHASE 2 MCFADDIN BEACH NOURISHMENT PROJECT

9 mcy of Sand
EXISTING FLUVIAL CHANNELS

Channel

Point Bar/Clinoforms

Undiff. Floodplain Seds
MCFADDIN 2014 – 2015 SAND SEARCH

- 2014 - 2015 Tracklines
- Project (Construction) Limits

- 247.8 nmi
- Magnetometer
- Sidescan Sonar
- Sub-bottom Profiler

Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, ©
61 Vibracores
5 Avoidance Areas
Total Sand: 4.1 mcy
2017 MCFADDIN BEACH NOURISHMENT
2017 MCFADDIN BEACH NOURISHMENT

Volume Removed: 855,000
Overburden Remaining: 1.8 mcy
Sand (WI): 3.2 mcy
2015 OVERBURDEN
MCFADDIN INFRASTRUCTURE
2018 PROJECT: 9 MCY

273 Magnetic Anomalies
134 Acoustic Targets
Sand (WOI): 2.6 mcy
2018 INTERPRETATION
2018 VIBRACORE PLAN
PLANNED VC 01 - CLINOFORM
SIGMOIDAL OBLIQUE CLINOFORM

Clinoforms

Sand

Faults
PLANNED VC 04 - SAND
PLANNED VC 07 - CHANNEL
PLANNED VC 19 – MIXED SEDIMENT
MIXED SEDIMENTS

Sand

Channel Bottom
SUMMARY

• 2015
  • 246 nmi Geophysical
  • 61 Vibracores
• 2015 Borrow Area
  • 855,000 cy Removed
  • 2.6 mcy Remain
• 2018 Borrow Area
  • 9 (6.4) mcy Needed
  • 30 Vibracores
    • Sand
    • Clinoforms
    • Channels