



Shoreline Management and Pre-dredge Analysis
Project Update
February 2018





Discussion Outline

- Mary's & Turtle Creek Permit Status
- Feeder Canal & Bay Area Permit Status
- Jinks Creek Shellfish Survey & 3rd Agency Coordination Meeting
- Updated Construction Costs
- Next Steps
- Comments & Questions

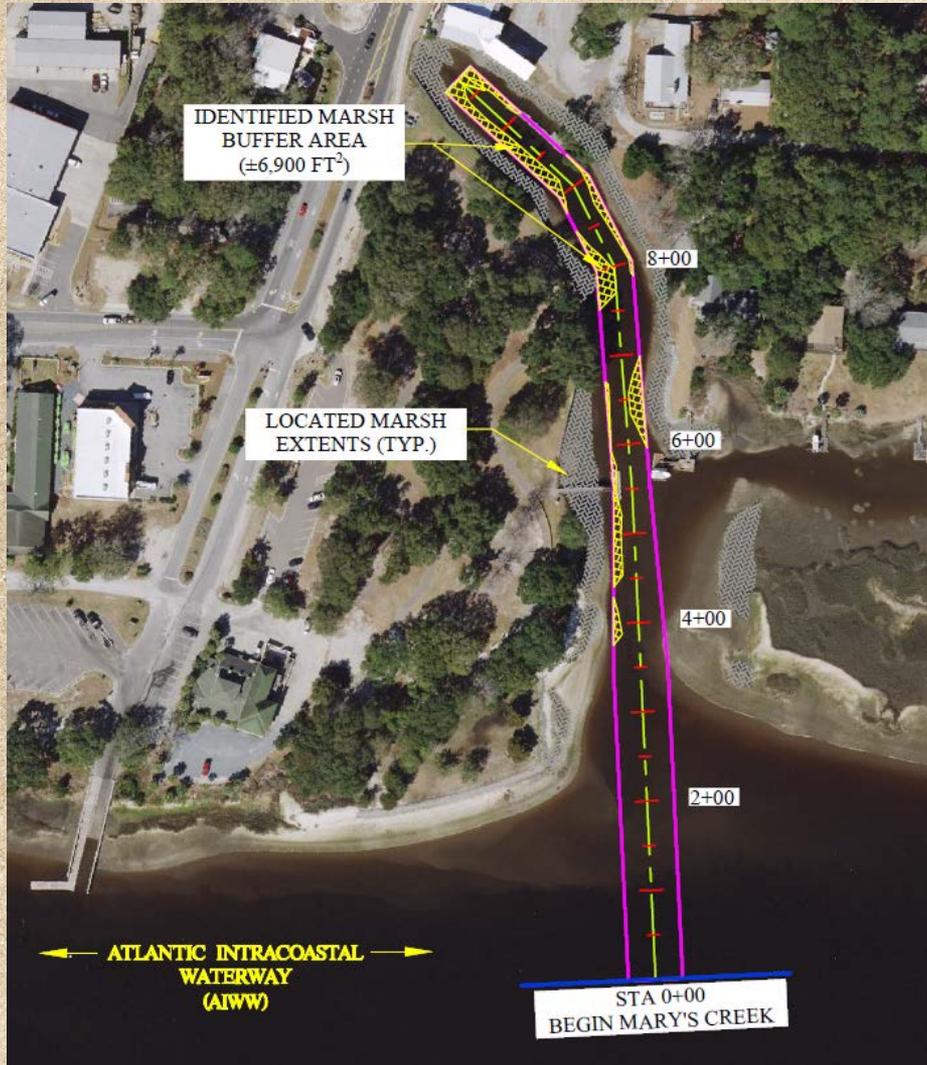


Mary's & Turtle Creek Permit Status

- Permit submitted on February 19th after DCM requested revisions to the plan. Approval expected mid-June.
 - Application needed to show a 20-ft buffer between any existing marsh grass and the dredge footprint.
 - Dredge footprint can not be moved without significant permitting efforts. (New dredging in a PNA)
 - The footprint had to be reduced or minimized in areas where marsh grasses have encroached near the footprint.
 - At the time of construction the marsh grass will need to be mapped and a new buffer must be implemented.



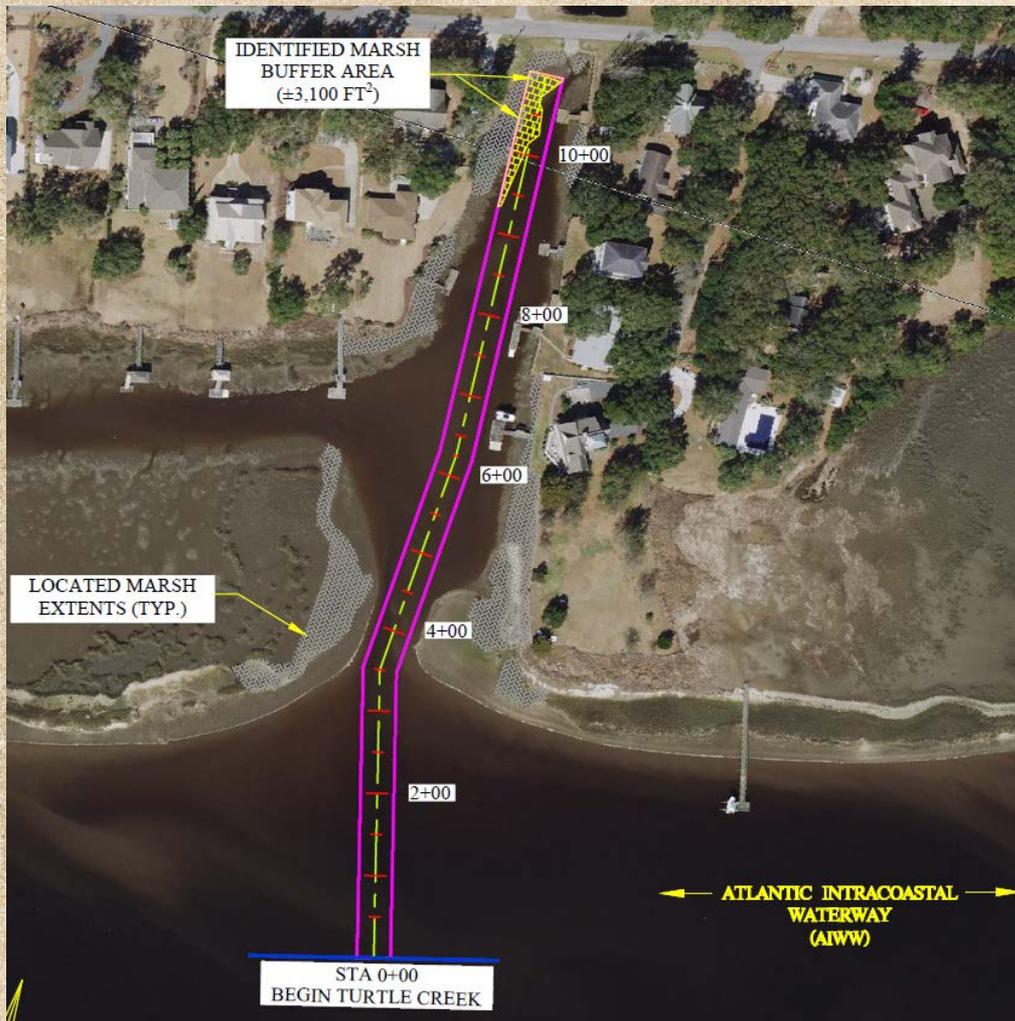
Mary's & Turtle Creek Permit Status



- Marsh buffer must extend 20-ft from any identified grasses at the time of construction . (Mary's Creek dredge template should maintain a minimum 20 ft width based on expected conditions.)
- May also be required to relocate existing clams within the dredge footprint at the time of construction.



Mary's & Turtle Creek Permit Status



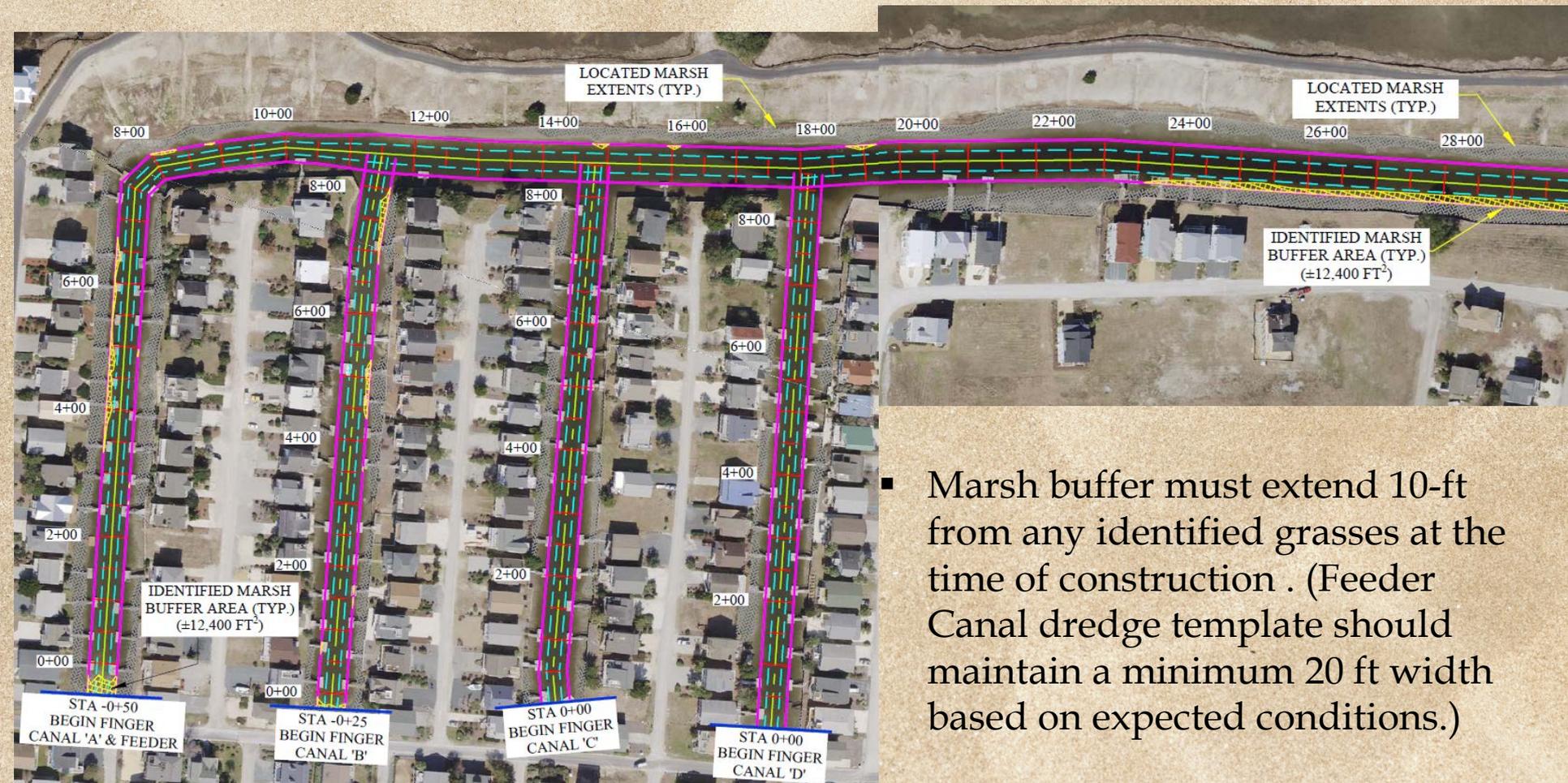
- Marsh buffer must extend 20-ft from any identified grasses at the time of construction . (Northern terminus of Turtle Creek most likely will be significantly reduced based on expected conditions.)
- May also be required to relocate existing clams within the dredge footprint at the time of construction.



Feeder Canal & Bay Area Permit Status

- Based on comments received from DCM February 13th, the maintenance work in the Feeder Canal or Bay Area can not exceed the controlling depth of Jinks Creek.
- Since controlling depth in N. Jinks Creek is approx. -2 MLW, the work must include N. Jinks Creek.
- DCM concerns are based on the potential to create water quality issues if the maintenance work dredges deeper than the connecting waters.
- Design template will be minimized (-5 MLW, +1) to avoid potential environmental concerns associated with N. Jinks Creek.
- Application will be revised to include Jinks Creek, Feeder Canal, & Bay Area. Submittal expected early May. (After agency review of shellfish survey results.)

Feeder Canal & Bay Area Permit Status



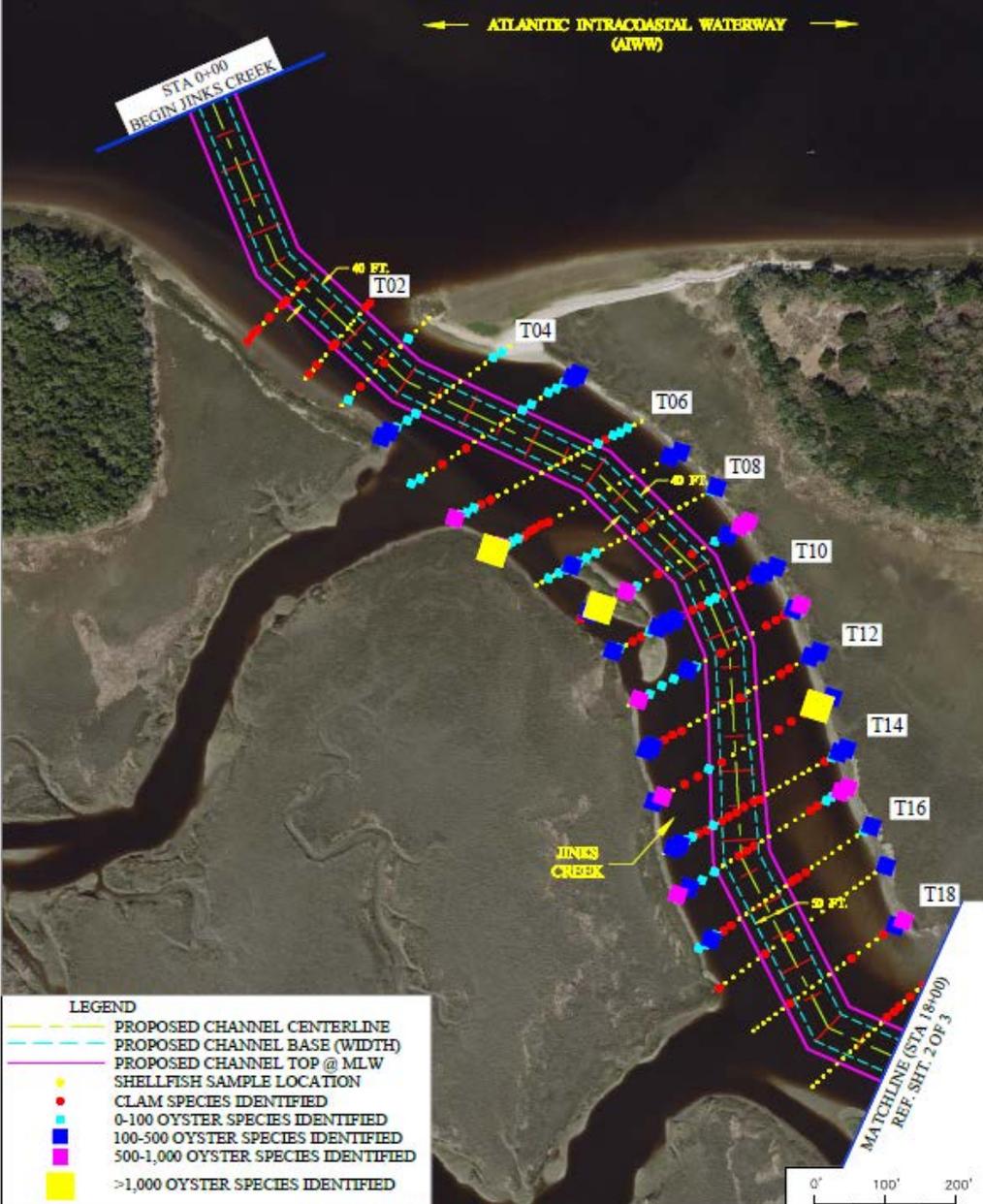
- Marsh buffer must extend 10-ft from any identified grasses at the time of construction . (Feeder Canal dredge template should maintain a minimum 20 ft width based on expected conditions.)



Feeder Canal & Bay Area Permit Status



- Bay Area dredge footprint not expected to be significantly impacted by the 10-ft marsh buffer. However, the conditions must be re-evaluated at the time of construction.



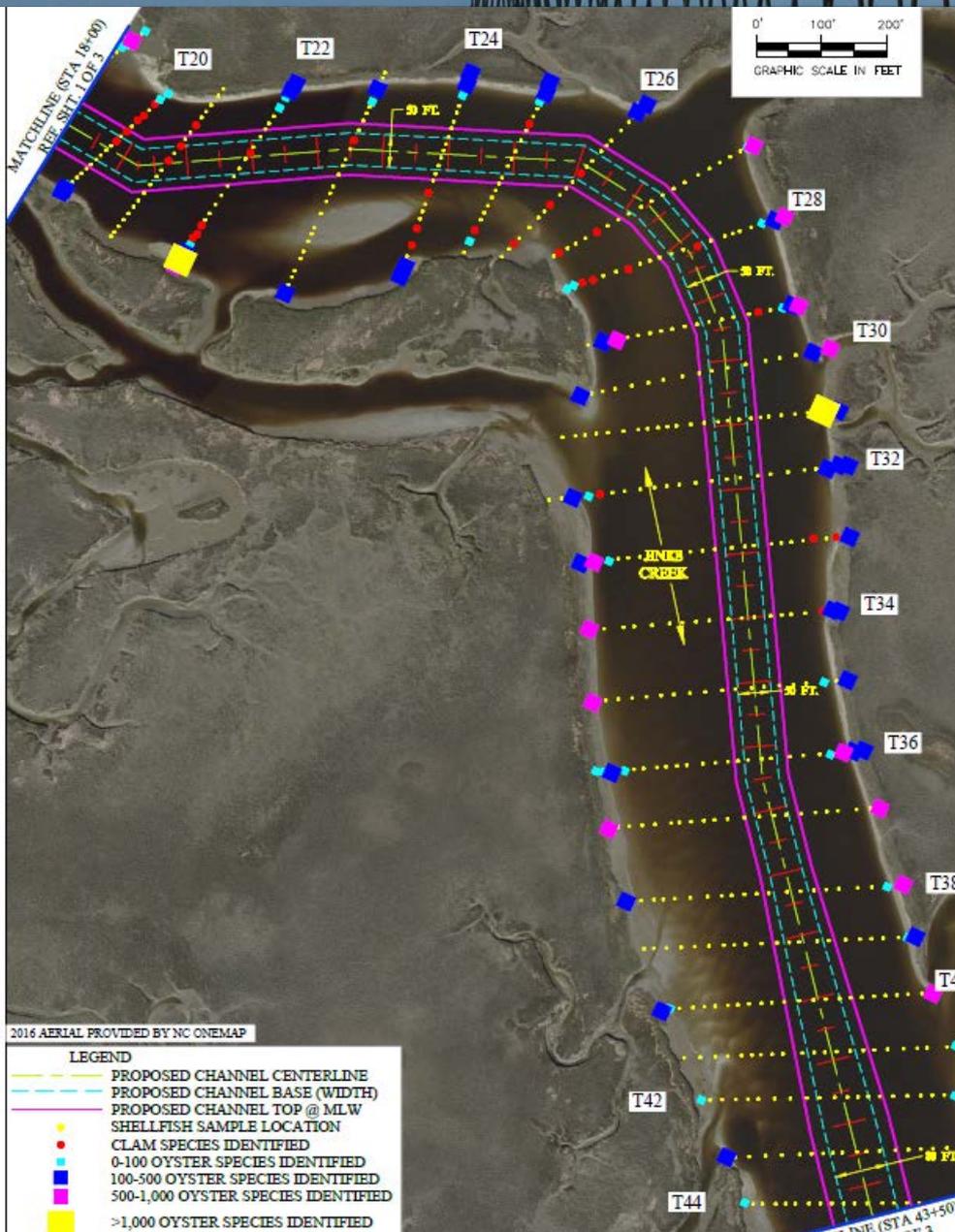
TOWN OF SUNSET BEACH
NAVIGATION PROJECT
JINKS CREEK SHELLFISH SURVEY

Jinks Creek Shellfish Survey

- Sampled 1,182 sites along 55 transects in Jinks Creek, from AIWW to Feeder Canal (Approx. 44-acre site).
- Identified approx. 50,000 oyster within Jinks Creek
 - 6,000 – Spat Classification (144 / acre)
 - 34,000 – Sublegal Classification (769 / acre)
 - 10,000 – Legal Classification (2,346 / acre)

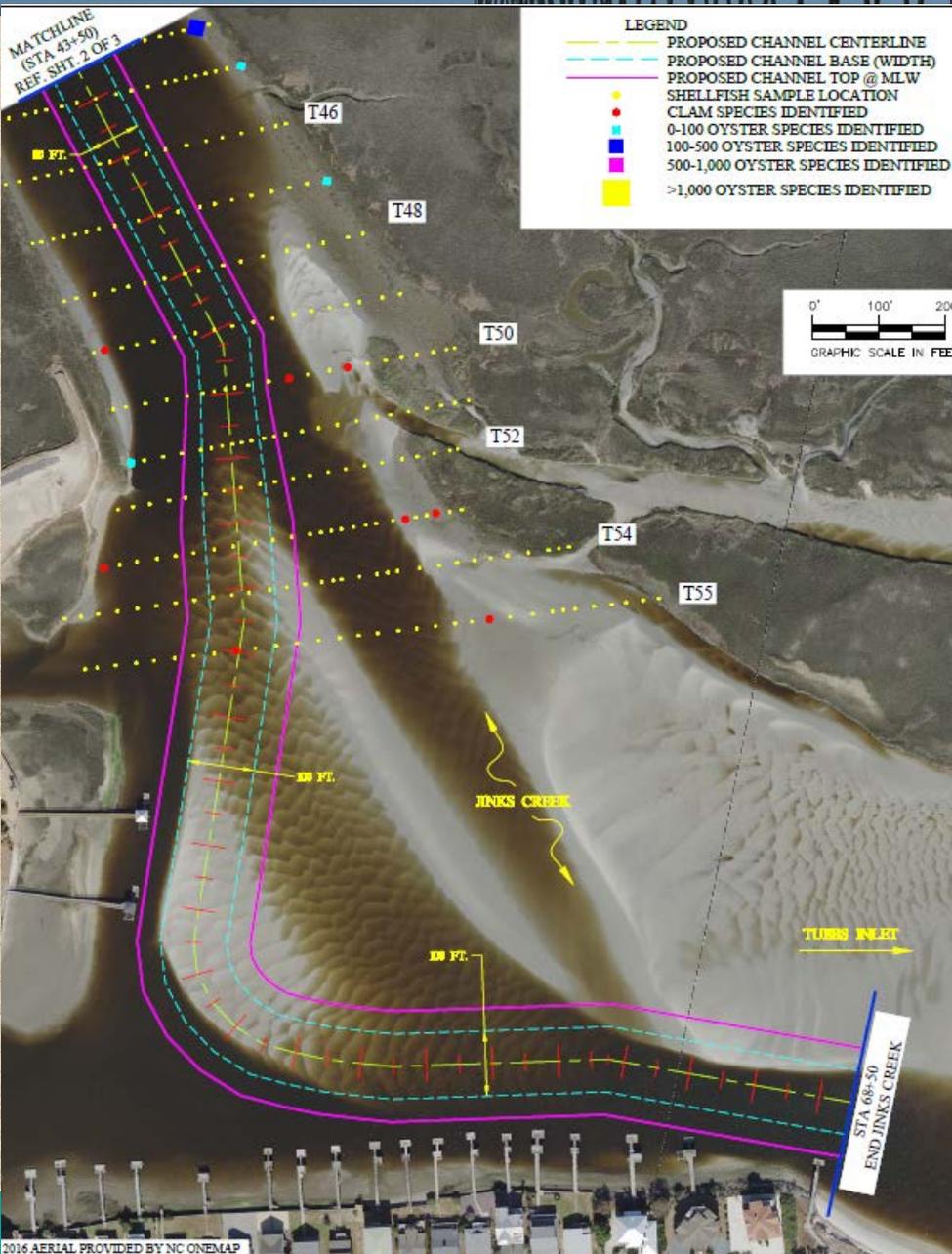
Total = 1,131 oyster identified per acre

Majority identified outside of dredge footprint in the intertidal area.



Jinks Creek Shellfish Survey

- As survey progressed into S. Jinks Creek, the shellfish resources became more concentrated on the shorelines.
- However, agencies are expected to consider the entire creek as suitable shellfish habitat.
- Therefore, mitigation is expected to be based on *potential* cumulative impacts.
- Avoidance and minimization efforts can be shown, but mitigation will be required.
- Mitigation will most likely require no net loss of oyster productivity and could result in relocation and/or transplanting efforts.



Jinks Creek Shellfish Survey

- Mitigation options will be discussed with resource agencies at 3rd agency coordination meeting (March).
- Clam relocation efforts also expected as part of minimization and avoidance measures.
- Revised permit submittal expected early May with mitigation options.
- Note: Dredge footprint is approx. 10.72 acres.



Updated Construction Costs

Site	Dredge Volume (CY)	Dredge & Fill		Spoil Island Improvements (\$)	Mobilization & Bonds ²	Tipping Fee	
		Unit Costs (\$/CY)	Total (\$)			Unit Costs (\$/CY)	Total (\$)
Mary's Creek	8,100	\$ 6.75	\$ 54,675	\$ 10,455	\$ 47,527	\$ 5.75	\$ 46,575.00
Turtle Creek	7,800	\$ 6.75	\$ 52,650	\$ 10,067	\$ 45,767	\$ 5.75	\$ 44,850.00
Feeder Canal & Finger Canals	33,600	\$ 8.50	\$ 285,600	\$ 43,366	\$ 197,149	\$ 5.75	\$ 193,200.00
Bay Area	15,900	\$ 8.50	\$ 135,150	\$ 20,521	\$ 93,294	\$ 5.75	\$ 91,425.00
Jinks Creek (Non-Compatible)	33,000	\$ 6.75	\$ 222,750	\$ 42,591	\$ 193,628	\$ 5.75	\$ 189,750.00
Jinks Creek (Compatible)	40,500	\$ 12.50	\$ 506,250		\$ 237,635	-	-
Subtotal	138,900		\$ 1,257,075	\$ 127,000	\$815,000.00		\$ 565,800

Site	Subtotal (\$)	Contingency (15%)	Total (\$)
Mary's Creek	\$ 159,232.00	\$ 23,884.80	\$ 183,116.80
Turtle Creek	\$ 153,334.00	\$ 23,000.10	\$ 176,334.10
Feeder Canal & Finger Canals	\$ 719,315.00	\$ 107,897.25	\$ 827,212.25
Bay Area	\$ 340,390.00	\$ 51,058.50	\$ 391,448.50
Jinks Creek (Non-Compatible)	\$ 648,719.00	\$ 97,307.85	\$ 746,026.85
Jinks Creek (Compatible)	\$ 743,885.00	\$ 111,582.75	\$ 855,467.75

State Share (\$)	Local Share (\$)
\$ 122,138.91	\$ 60,977.89
\$ 117,614.84	\$ 58,719.26
\$ 551,750.57	\$ 275,461.68
\$ 261,096.15	\$ 130,352.35
\$ 497,599.91	\$ 248,426.94
\$ 570,596.99	\$ 284,870.76

Total	\$ 2,764,875.00		\$ 3,179,606.25
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\$ 2,120,797.37	\$ 1,058,808.88
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Updated Construction Costs

Summary of Costs	
Item	Cost
Mobilization	\$800,000.00
Bonds / Insurance	\$15,000.00
Spoil Island Improvements	\$127,000.00
Dredge & Fill	\$1,257,075.00
Tipping Fee	\$565,800.00
Sub-Total	\$2,764,875.00
Contingency (15%)	\$414,731.25
TOTAL	\$3,179,606.25
State Share	\$2,120,797.37
Local Share	\$1,058,808.88

- If local cost divided based on number of properties in the project area (350), each property owner would be responsible for approx. \$3,025.¹⁷
- Monitoring cost could equal approximately \$500 annually (estimated) per property.



Next Steps

- Submittal of Jinks Creek Shellfish Survey Report for Agency Review expected on Thursday, March 1st.
- 3rd Agency Coordination Meeting to discuss mitigation options for N. Jinks Creek expected in March.
- Revised and final permit submittal for Jinks Creek, Feeder Canal, & Bay Area expected in May (pending discussions with OIB).
 - Since Jinks Creek must be included in the Feeder Canal and Bay Area work, confirmation from OIB is necessary for any cost sharing activities and planning where placement of beach compatible material should go.
- Permits expected in September for complete project (assuming resource agencies do not require additional studies.)
- **Construction expected in October 2018.**
 - Additional survey & design work for material placement islands expected in summer 2018.



Thankyou!

Questions / Comments

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