

TOWN OF SUNSET BEACH  
2016 SHORELINE MANAGEMENT AND PRE-DREDGE ANALYSIS  
PERMITTING

PROGRESS REPORT DATE  
MARCH 15, 2019

**Report Period: February 01 thru February 28, 2019**

The items below provide a description of key elements related to the current progress, including outstanding items and anticipated resolutions, for completing the work known as Town of Sunset Beach, 2016 Shoreline Management and Pre-Dredge Analysis, Phase 3 - Permitting.

**Acronyms:** M&N – Moffatt & Nichol  
DCM – North Carolina Division of Coastal Management  
DMF – North Carolina Division of Marine Fisheries  
NMFS – National Marine Fisheries Service  
WRC – North Carolina Wildlife Resources Commission.  
USACE – US Army Corps of Engineers (Wilmington District)

**Phase 1 – Feasibility Analysis** (100% complete)

**Items Previously Completed:** (100%)

The Town of Sunset Beach (Town) and M&N initiated a contract on February 19<sup>th</sup> to study the feasibility of conducting approximately 3.5 miles of navigation dredging within the Town limits. The work areas include Mary’s Creek, Turtle Creek, Jinks Creek, the Feeder Canal and adjoining finger canals, and the Bay area. The results of the analysis were positive and the Town elected to move forward with the design and modeling of the proposed work on June 7<sup>th</sup>. The design work was authorized to begin July 1, 2016.

**Phase 2 –Design** (100% complete)

**Items Previously Completed** (100%)

M&N completed the design phase for the project in August 2017. The work included identifying a dredge alignment and determining the volume of dredge material. M&N also completed a shellfish survey for Mary’s and Turtle Creeks and identified material placement locations for the compatible and non-compatible material. The design will continue to be refined as new information becomes available from the environmental studies proposed through the permitting process.

**Phase 3 –Permitting** (99.96% complete)

**Items Previously Completed:** (98.69% complete)

1.0 Project Coordination

- Coordination efforts with the USACE determined the Town would need to remove any placed material within a 3-year period (most likely 1 year) in order to use the USACE managed disposal islands along the AIWW. However, due to project logistics and timing M&N recommended moving forward with a truck haul project in order to construct during the 2018-2019 dredge season. (The USACE would need to draft and execute the legal instrument allowing use and requiring the material removal. The instrument would be drafted by the Wilmington district and approved by the Atlanta division and Washington DC headquarters.

- The Town has elected not to construct Mary's & Turtle Creek prior to reaching a permit decision for S. Jinks, the Bay Area and Feeder Channel. This action resulted from the Town not wishing to create an excessive financial constraint of the residents of Mary's & Turtle Creek to fund the complete construction project. Once the State provides the final permits, the Town may evaluate how to move forward with each project.

## 2.0 Jinks Creek Shellfish Survey

- The agencies accepted the Jinks Creek Shellfish report without comments on April 9<sup>th</sup>, 2018. DMF reviewed the document and commented on its completeness at the April 9<sup>th</sup> Agency Coordination meeting.

## 3.0 Jinks Creek Site Meeting

- The Jinks Creek site meeting was held on Friday, July 21, 2017 with representatives from DCM, DMF, NMFS, USACE, WRC, the Town, and M&N. As a follow up from the site meeting M&N provided an extrapolated expected shellfish quantity in northern Jinks Creek. The list below provides the extrapolated results.
  - i. Area 1 – 17 Clams per acre / 534 Oyster per acre.
  - ii. Area 2 – 12 Clams per acre / 712 Oyster per acre.
  - iii. Area 3 – 1 Clam per acre / 870 Oyster per acre.
- Comments received from the site visit indicate NMFS supports the project, but will require some type of mitigation / relocation efforts for the impacted oyster in northern Jinks Creek. The agencies have also indicated the full shellfish survey of Jinks Creek will be required to evaluate the potential impacts.
- Alternate comments received from DCM suggested the agencies would prefer to see 3 permit applications for this overall project covering the following areas:
  - i. Mary's & Turtle Creek.
  - ii. Feeder Canal, Finger Canals, & Bay Area.
  - iii. Jinks Creek as a whole.

## 4.0 Agency Coordination Meeting

- The 3<sup>rd</sup> Agency Coordination meeting was held on April 9, 2018. The main outcome from the meeting was as follows:
  - DCM confirmed any dredging in the Feeder Canal or Bay Area could not exceed the governing depth of Jinks Creek or Tubbs Inlet. A connection at least as deep as the dredging depths must extend either to the Atlantic Ocean or to the AIWW. However, DCM also stated they would support a variance to this requirement (15 NCAC 07H.0208.b.1.f) if the Town requested one from the CRC.
  - DCM noted that other agencies such as DWR may also have concerns about dredging the Feeder Canal or Bay Area deeper than Jinks Creek, which is currently at -2MLW. DWR representatives left the meeting early and did not provide feedback regarding their concerns or lack thereof.

## 5.0 - 8.0 EFH, BA, Cultural Resource Review, & CAMA Major Permit Review

- DCM issued the CAMA major permit for the maintenance dredging of Mary's & Turtle Creek on December 11<sup>th</sup>. Dredge material will be transferred from a bucket to barge system to dump trucks at the WRC boat ramp adjacent to Mary's Creek. Material will then be transported to an upland landfill facility for final deposition. The same upland landfill facility will be used for the Feeder and Bay Area material (including the finger canals). The Town will use Cobia Street as a material transfer site for the Feeder and Bay Area project. (Material from S. Jinks Creek will be placed as beneficial reuse along the Sunset Beach shoreline.

- M&N resubmitted the CAMA major permit for S. Jinks Creek, the Bay Area and Feeder Channel system on December 3<sup>rd</sup>. However, the DCM returned the application again on December 21 due to only providing 3 sediment samples from S. Jinks Creek and other minor clarifications. NCAC requirements stipulate a minimum of 5 cores must be obtained from any borrow source to describe beach compatible material. A total of 26 cores were collected as part of the sampling process; however, only the area containing the 3 cores was recommended for beneficial reuse (beach placement).

#### 9.0 Coordination with the Town of Ocean Isle Beach (OIB)

- M&N discussed the potential for cost sharing sand placement on OIB with Town leaders of Ocean Isle Beach. OIB elected not to participate in the project financially citing the proposed placement volume would not create a significant enough benefit for OIB residents. (Approximately 30,000 CY should be placed as beneficial reuse for the project.)

#### 11.0 Profile Surveys

- Geodynamics completed the beach profile surveys necessary for characterizing the recipient beach for beneficial reuse material placement in July 2018. The survey data has been incorporated into the permit drawings.

#### 12.0 Sediment Analysis

- ECS completed the sediment analysis necessary for characterizing the recipient beach for beneficial reuse material placement in August 2018. The results indicate material from S. Jinks Creek would be compatible for beneficial reuse on Sunset Beach.

#### 13.0 S. Jinks Sediment Collection & Analysis

- The Town authorized moving forward with the collection of sediment samples in S. Jinks Creek to satisfy NCAC requirements for a minimum of 5 samples from any potential beneficial reuse borrow area. Athena Technologies collected the S. Jinks Creek sediment samples in early 2019.

**Progress this Period:** (1.27% of total task)

#### 13.0 S. Jinks Sediment Collection & Analysis

- M&N reviewed the initial sediment analysis results for the additional samples collected for South Jinks Creek. The samples appeared to meet the beach compatibility requirements stipulated by the State and the results will be incorporated into the CAMA Major permit application. Submittal of the application is anticipated by March 22<sup>nd</sup>.

#### **Outstanding Items and Anticipated Completion Dates:**

##### 8.0 CAMA Major Permit Submittal

- The CAMA Major permit for S. Jinks Creek, the Bay Area, and Feeder Channel system should be resubmitted by March 22<sup>nd</sup>. Pending the agency review and permit decision, the Town may request a variance hearing with the CRC to exclude a ‘deep water connection’ to the AIWW or Atlantic Ocean. (15 NCAC 07H.0208.b.1.f requires all dredging projects to connect to adjacent waters at an equal or greater depth than the proposed dredging.)

**TOWN OF SUNSET BEACH  
2016 SHORELINE MANAGEMENT & PRE-DREDGE ANALYSIS  
DESIGN & PERMITTING**

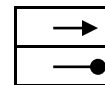
**PROGRESS REPORT  
MARCH 15, 2019**

**Progress Schedule**

| Tasks                               | 2017 |     |      |      |     |      |     |     |     |     |     |     | 2018 |     |      |      |     |      |     |     |     |     |     |     | 2019 |     |      |  |  |  |
|-------------------------------------|------|-----|------|------|-----|------|-----|-----|-----|-----|-----|-----|------|-----|------|------|-----|------|-----|-----|-----|-----|-----|-----|------|-----|------|--|--|--|
|                                     | Apr  | May | June | July | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr  | May | June | July | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr  | May | June |  |  |  |
| Pre-Dredge Analysis Design Phase    |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |  |  |  |
| Project Coordination                |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |  |  |  |
| Jinks Creek Shellfish Survey        |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |  |  |  |
| Jinks Creek Site Meeting            |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |  |  |  |
| 3rd Agency Coordination Meeting     |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |  |  |  |
| EFH Assessment                      |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |  |  |  |
| Biological Assessment (BA)          |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |  |  |  |
| Cultural Resources Review           |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |  |  |  |
| CAMA Major Permit                   |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |  |  |  |
| Coordination with OIB               |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |  |  |  |
| Environmental Management            |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |  |  |  |
| Profile Surveys                     |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |  |  |  |
| Sediment Analysis                   |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |  |  |  |
| S. Jinks Sed. Collection & Analysis |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |      |     |      |     |     |     |     |     |     |      |     |      |  |  |  |



Anticipated timeframe to complete task.  
Anticipated overrun in task.



Work in progress (WIP) for task.  
Actual timeframe to complete task.