

## **WHNIP 203 Stakeholder Group Meeting #2**

**18 December 2019, 10:00 – 11:30**

### **USACE Wilmington District**

PowerPoint presentations and other project information can be found at:

[https://www.saw.usace.army.mil/Missions/Navigation/Dredging/Wilmington-Harbor/WHNIP\\_203\\_Study/](https://www.saw.usace.army.mil/Missions/Navigation/Dredging/Wilmington-Harbor/WHNIP_203_Study/)

Present: (see attendance sheet)

USACE: Christine, Tim, Jenny, Emily, Roger, Todd, Mitch, Kevin, Dave, Sophia

Intro – Christine Brayman

Recap of 203/NEPA Process – Emily Hughes

#### 1. Presentation on Shoreline Erosion from Vessel Wake Impacts – Jeff Sheldon, Moffat & Nichol

Notes:

(Fix slide #12 so it's not cut off)

Battery Island turn – 4,000ft radius curve proposed

Modeling compared existing depths to proposed depths

Only modeled two areas: Battery Island/Southport (in the same “model box”) and Orton Point/Brunswick Town (in the same “model box”)

Variation along points sampled (see cross-sections with bed shear stress)

More significant impacts at Brunswick Town and Orton Point

Impacts:

Water surface elevation @ NE Southport (inbound and outbound analyzed)

Results show no impacts to Battery Island

Orton Point and Brunswick Town – inbound has impacts; outbound impacts shown at Orton and MOTSU

Mitigative Measures: sills, living shorelines, etc. To be addressed during PED

Need for further modeling?

Senator Harper Peterson asked about Smith Island Channel complex (adjacent to Bald Head Island); why was this not modeled?

Brian Hemphill voiced the same concern for Fort Caswell on opposite side

Lindsay Addison, Audubon concern for bird islands (South Pelican which is close to the channel)

Chris McCall, VBHI spoke regarding Bald Head Shoal Reach 2 where the terminal groin exists and the need for modeling here.

Malcolm Charles, MOTSU asked if impacts shown at their North Wharf would also occur in the Middle and South wharves? Ports doesn't think so but MOTSU doesn't agree.

Layton Bedsole, New Hanover Co. expressed concern for Buzzard's Bay/Corn Cake Inlet and the need to model the rock revetment

Tom Jarret, P.E. asked what the side slopes are. Ports replied that they would be the same as they are (3:1)

## 2. Presentation on Oceanfront Modeling – Jeff Sheldon, Moffat & Nichol

Notes:

Wave model grids on BHI, Caswell and Oak Island beaches

Used Gencade and found practically no change in wave heights

Eric Olsen, P.E. asked why Gencade and not Delft 3D? Jeff responded that Delft 3D is being used for morphological changes...

Eric continued saying that Delft 3D is much more accurate (based on beach monitoring) and Gencade is a much less robust model. He also noted that the nodal point is not correct, and they should be looking at West Beach, BHI as well.

Johnny Martin, Moffat & Nichol representing Oak Island would also like to see morphological results

Craig Blazinsky representing Carolina Beach asked about live/hard bottom impacts and the potential impacts to the aquifer beneath. Jeff responded that groundwater effects will be addressed in the next Stakeholder Group meeting.

Eric Olsen asked if the ship wake modeling was to 43 feet only? Stated that the maximum wake for largest ship may be much different. The ports need to model to the largest ship (47 feet).

Tom Jarrett asked about shoaling rates. He said there is good indication from shoaling modeled in the Turning Basin (Anchorage Basin). Jeff answered that they have determined a 10% increase in shoaling overall.

Kure Beach Mayor expressed concern for water quality in the aquifer, stating that this is the area's source of drinking water.

Layton asked about model domains.

Next SHG meeting is scheduled for January 15, 2020