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Port Everglades Navigation Improvement Project
IWG Meeting: Review of Project Habitat Map (aka modified Walker map, updated reef map) and Update of Draft Monitoring Plan
June 15, 2018: 2:00 – 3:30 pm

Final Meeting Notes

Teleconference: 1-877-336-1831, Access code: 3709243, Security Code: 1234
Webinar: https://usace.webex.com/meet/lacy.s.pfaff

Meeting Purpose: Port Everglades Updated Reef Map (aka Modified Walker Map, Benthic Habitat Map) discussion and path forward to provide confidence in mapping results; update on proposed changes to the Draft Monitoring Plan.

Meeting Goals:

- Common understanding of goal of the project's benthic habitat map.
- Clear understanding of how the latest map was assembled including verification activities.
- Respond to comments/questions received June 5, 2018, from the DEP.
- Path to provide reasonable assurance and confidence in the use of the project benthic habitat map.
- Information share on Corps current review of the Draft Monitoring Plan.

Attendees:

Debby Scerno - USACE	Gina Ralph - USACE
Jennifer Peterson - DEP	Jennifer Derby - EPA
Kelly Logan - NOAA	Jocelyn Karazsia - NOAA
Lacy Pfaff - USACE	Lainie Edwards - DEP
Mark Lamb - NOAA	Wade Lehmann - EPA
Matt Harold – Broward Co.	Nicole Sharp – Broward Co.
Pace Wilber - NOAA	Brendan Biggs - DEP
Xaymara Serrano - USACE	Bill Precht – DCA
Shelby Wedelich - DEP	Mike Rice - DCA
Erik Neugaard – Broward Co.	Marie Burns – EcoLogix Group (Facilitator)

A. Introductions, Review of Agenda and meeting goals: Corps/Port/Marie

- No additional meeting goals proposed

B. How will the map be used - now and in the future?

- DEP – map is critical to move forward to plan mitigation acreage and to decide on location of monitoring stations. These decisions need to be made before submittal of a permit application.

- Important to have one map in which the group has confidence; no additional work needed on the back end.
- Terminology used: Decision was made to call this map the "Project Area Habitat Map" which maps the acreage and boundaries of benthic habitat types in the project area. The project area is defined as 1200 meters north and south of the entrance channel.

C. Walk through of how the map was assembled and verified by Mike Rice with DCA.

- Walker 2014 map was used as a foot print to work from. Modified outer edges based on the multi-beam/side scan data and ground truthing data which included bounce dives. No real changes were made to habitat classification within reef.
- Multi-beam/side scan sonar data was obtained by the Corps in 2016 within the original study area (850 ac) designated by the Corps.
- The initial study area was selected by the Corps based on literature and lessons learned from Miami (note- follow-up with Terri to confirm)
- After initial meetings with the IWG the Corps made the decision to enlarge the survey area to 1,375 acres. No additional multi-beam/side scan sonar was done outside the initial 850 acres.
- Areas outside the 850 acres were verified using the NOAA Bathymetric Attributed Grids (**BAGs**). This left a 75-foot strip in the area north of the channel verified by BAG data and a
- Evolution of the revision – Mike looked at multi-beam/side-scan sonar data and how it matched up to the Walker - Klug 2014 data. Multi-beam gave good data enhanced with side scan sonar.
- DCA did towed video of those areas where there were differences. 12 video transects were done. The goal was to capture those areas where it looked like there were spatial changes to ensure capturing correct movement of the line.
- DCA deployed divers to locations which represented habitats where signatures were marginal and they wanted to get an idea of how the signature was showing up in real space. Where edge is unclear they labeled it as scattered rock.
- Kurtis Gregg: Verified 4 transect and dives associated with that – nothing in the report. **Should be presented.**

D. DEP comments –

- How did the study area come about?
    - Verified that there was no coordination with the IWG on expansion of the boundaries.
    - Received clarification that the areas north and south of the channel beyond the Corps multi-beam/side scan sonar were revised using the BAG map.
    - A request was made that information be provided on background information for each of the maps; they would like an understanding of the

data layers, when they were obtained; metadata on the data layers to understand on what went into the map.
    - Any data to verify Walker edge – those areas should have additional ground truthing.
    - Walker map is not useful for project planning.
    - Third reef signatures need more diver verification.
    - How useful is the BAG? Continued concern over different methodology and that the project area as presently shown is too small.
    - Entire area needs more ground truthing to get as accurate and thus gain confidence in a benthic map for the project.

E. Discussion over taking a conservative approach instead of additional verification:

    - Corps proposed that on those areas where there is a discrepancy between sand and hardbottom, default to calling it hardbottom. Appears on first glance to be approximately 10 acres
    - This would help determine mitigation acreage; DEP cautioned that the team has yet to have mitigation discussions therefore it is unknown what the mitigation per acre of impact would be and the cost of mitigation. The additional area of hardbottom would increase costs of mitigation further.
    - DEP – For consistency would like to see the BAG map used to refine the Walker & Klug map in the near shore area.
    - Fritz: FWC supports this approach
    - NOAA: Jocelyn – sounds reasonable.
    - Pace would like to see the PDF maps from today's meeting; they will be provided to the IWG as well.
    - ArcMap showing layers has metadata. – Mike – look at posting to an FTP site.
    - Kelly: Comment on not being able to collect data in the sand by-pass area. County and Corps have extensive survey data in that area. Regulatory, DEP did extensive diving there.
    - Extent of the map will include 1200 m north and south of the outer entrance channel from nearshore to the 3rd reef. OK from NMFS understanding that minimization measures will be enacted. 2000 – 3000 meters may be needed without minimization approach.

F. Monitoring Plan – Corps is looking at the monitoring plan and will be proposing some changes to the original plan.

- Brendan: Caution in that methods are based off lessons learned from Port of Miami.
- Gina: Described some of the proposed changes to address how the data is organized and presented to the IWG. Templates should be included in monitoring plan with how

data would be inputted and all of files should have an introductory sheet including how data is collected, organized and method of input.

G. Meeting Taskers:

- Tasker: Who is writing up the conservative approach – Gina and Xaymara. End of next week (6/22/2018).
- Tasker: Erik can get nearshore area information to Mike – End of next week. (6/22/2018).
- Tasker: Jocelyn: Taskers matrix previously sent is not working so Marie will put another one together for next Friday. Jocelyn: NOAA emails have a 20 megabyte limit. Please use multiple emails or perhaps use the Ports FTP site. (6/22/2018).
- Tasker: PDFs for today's new maps will be sent out to the IWG by Monday (6/18/2018)
- Tasker: Metadata for map layers and source information - Mike