



FINAL

MEETING NOTES: PORT EVERGLADES INTERAGENCY WORKING GROUP (IWG) MEETING

Port Everglades Navigation Improvement Project (NIP)

26-27 July 2016 - Saint Leo's University, Orlando, FL

Executive Summary:

An Interagency Working Group (IWG) was formed and assembled on 26-27 July 2016 to focus on development of the Port Everglades (PE) NIP environmental Monitoring Plan. The agencies agreed that this group would work in a transparent and collaborative fashion with the U.S. Army Corps of Engineers (USACE) and PE (partners for implementation of the NIP), to develop a Monitoring Plan that would address, to the extent practical, resource agency concerns while furthering progress in implementation of the Monitoring Plan consistent with USACE and PE project schedules.

The IWG adopted meeting goals and guidelines. Several agencies presented monitoring plan proposals, raised technical issues, and shared ideas regarding their overall concerns and requirements. USACE provided a project overview and status (schedule). USACE, the Florida Department of Environmental Protection (FDEP), and the National Marine Fisheries Service (NMFS) shared lessons learned from the related, but separate, Port Miami Dredging Project which promoted considerable discussion regarding if and how these lessons could be applied to development of the PE Monitoring Plan and the dredging project itself. A list of items was generated for consideration during the PE Monitoring Plan development.

Because clear and collaborative communications has been a challenge in the past for these agencies, a draft Issue Resolution Decision Tree Process was proposed to facilitate issue resolution among the agencies and to keep the project on schedule and progressing. The agencies agreed in principle to the process, but each agency retains its own decision making authority. Further details regarding the essential communication elements of the process are being prepared by USACE as well as draft Communications Plan under preparation by PE.

Many technical considerations were brought to light and fleshed out through discussion and recommendations were made on how to improve the Monitoring Plan. It was agreed that this body of information and recommendations would be considered during development of the Monitoring Plan and that a Core Technical Team comprised of agency technical representatives would convene to provide technical input concerning the final details for the Reconnaissance Plan Phase (using an accelerated schedule) and to develop technical input for the remaining Plan phases. A similar Core Technical Team was identified to provide USACE with technical input on Plans and Specifications (methods and means).

The IWG identified specific follow-up actions, responsible leads, and a schedule for completing these actions. The agencies agreed that they were committed to a successful outcome for the Monitoring Plan as well as their scheduled commitments and involvement.

This document is a compilation of discussions between representatives from the participating State and Federal governmental bodies/agencies. The purpose of the meeting was to solicit and discuss information and approaches to fulfilling the agencies' responsibilities with regard to applicable laws, regulations and procedures. Final resolutions will be outlined in separate documents, permits or opinions that shall be made in writing by representatives of the parties and shall be independently authorized by appropriate statutory authority and subject to budgetary constraints.

Meeting Objectives:

A kick-off and initial meeting of the Port Everglades (PE) IWG was held to build the team and focus on development of the PE NIP Monitoring and Adaptive Management Plan. Meeting objectives were:

- *Identify IWG participants*
- *Share information on current status of the project*
- *Identify changes expected from Port Miami lessons learned*
- *Share results of pre-meeting agency interviews*
- *Identify communication methods to increase transparency and support decision-making*
- *Outline a Monitoring and Adaptive Management Plan for the project*
- *Agree on timeline and path forward to complete the Plan*

Meeting Documents:

This document is intended to record key discussions, points of agreement, items for further discussion and resolution, and next steps identified by the IWG.

The following documents are attached to this agenda:

- Meeting Agenda (Attachment A)
- List of Participants (Attachment B)
- Other Issues of Concern – EPA (Attachment C)

The following documents/presentations were discussed at the meeting and will be provided to all meeting participants by USACE:

- Port Everglades Navigation Improvement Project, Broward County, FL (Power Point) – USACE
- Detailed Project Schedule – USACE handout
- Miami Harbor After Action Review Environmental Considerations – USACE
- Lessons Learned from Port Miami: Implications for Development of PE Monitoring Plan – Florida Department of Environmental Protection - FDEP
- Port Miami Lessons Learned – National Marine Fisheries Service - NMFS
- Suggested Process for Conflict Resolution PE Environmental Monitoring Plan - USACE
- Port Everglades Draft Outline of DEP Suggested Biological Monitoring – FDEP

DAY ONE – 26 July 2017

A. Opening Comments

Port Everglades (Mr. Anderton) – First of many meetings; important to port, region, nation; significant project economic benefits. For the period June-July 2016, fifty-five Post-Panamax ships called on PE. Many coming in light-loaded. Port and Corps put together group to work together and looks forward to collaboration which is essential for project progress.

U.S. Army Corps of Engineers, Jacksonville (Mr. Summa) – Won't be successful unless all agencies are on same page and listen to one another. All state and Federal agencies should have a voice. Need tight communication; utilize and consider lessons learned from Miami.

National Marine Fisheries Service (NMFS), Nat'l Oceanographic and Atmospheric Administration (Dr. Strelcheck) – Important building on lessons learned. Put aside differences, build upon previous projects.

FDEP (Mr. Coates) - Stressed lessons learned; IWG should strive to be on same page to make this a good project. Wants to look back and be proud of what we did.

Environmental Protection Agency (EPA) (Ms. Derby) - Large team crosses so many jurisdictions. Pleased to be involved and collaborating with other agencies. High profile in EPA, high awareness of project by Director.

Florida Fisheries and Wildlife Commission (FWS) (Ms. DiGruttolo) – Agency pleased to participate and lend its considerable expertise. Will reach back further as need arises. Collaboration essential.

B. Meeting Goals – *The facilitator solicited input and discussion by meeting participants to identify what they considered were important meeting goals. Goals were identified by participants and agreed upon to guide the meeting and judge its success.*

- Establish a clear path forward and expectations
- Need transparency and input all agencies to have a voice
- Detailed schedule on monitoring plan and dates
- Identify other related project issues that need to be addressed – later embed in overall project schedule
- Tangible items for next steps; what can we do differently; establish tone of working together with common desire; collaboration and communication
- Shared responsibility with regard to project implementation within their respective areas of authority
- Breaking down barriers to communication
- Seeking non-traditional and innovative solutions; different from past

- Not working in isolation – improved communication and collaboration
- Concern on keeping project on schedule, timely flow of info.
- Balance of cost and monitoring requirements
- Clear idea of what is meant by timeliness for project and for agency involvement - being realistic and specific
- Appropriate mitigation to offset project impacts
- Recognition of uniqueness of area
- Implementing lessons learned from the Port Miami project
- Document/memorialize milestones we set at this meeting and commit to meeting them.
- Knowledge of coral baseline identified
- Incorporating sediment modeling into monitoring plan development
- Building, and in some cases, repairing relationships
- Building successful adaptive management strategy
- How to support USACE/Port contracting efforts
- Identifying next steps

C. Meeting Guidelines – *The facilitator solicited ideas to establish clear expectations on how the meeting would be conducted to maximize communications and productivity:*

- Assure that all of the agencies have a voice - listening with open mind to other agencies
- All afforded opportunity to speak and be heard
- Respectful discourse
- Positive focus
- Avoid jargon and acronyms
- Stay focused on monitoring for this meeting
- Realistic in expectations – be specific
- Seek to understand
- Be present in meeting “stay in today”
- Focus is on Port Everglades; consider relevancy of other projects as needed

D. Project Overview & Current Status (Lacy Pfaff and Jason Spinning – USACE) – *Presented a project description, description of expected environmental impacts and proposed mitigation from Corps Feasibility Report, project status including listing of Preconstruction, Engineering and Design (PED) phase actions, and detailed project schedule. Following highlights discussion:*

1. Q: What is likelihood of supplemental EIS? What is the timeline for NEPA?
A: Current plan is to prepare an Environmental Assessment (EA) for the project to supplement the EIS. A NEPA scoping meeting will be held early next calendar year to receive public comment. Further information will have been generated by that time including results of sediment modeling. A “significance” determination will be made thereafter as to whether to pursue the EA path or transition to Supplemental EIS, if warranted. The scoping meeting will be structured so that either path can be taken while maintaining overall project schedule.

2. Q: What is the impact of the Port Miami project litigation on PE project?
A: No impacts to project execution are expected.
3. Q: Can agencies receive copy of detailed project schedule:
A: Yes, electronic version of project schedule will be provided under separate cover and paper copies of the schedule in excel format were passed out to the attendees.
4. Q: When will baseline monitoring survey begin?
A: There was discussion about need to get divers in water as soon as possible to stay on project schedule and to avoid potential weather delays as winter approaches. Related discussions about need for sediment modeling results. Much further discussion in later agenda topics.

E. Lessons Learned from Miami and Impact on Port Everglades Monitoring Plan: (Note that EPA did not give a formal presentation but provided a two-page summary of other issues of concern, attached to this meeting summary.)

(USACE – Mr. Spinning): Discussed lessons learned from related Port Miami Harbor dredging project with respect to ongoing construction and monitoring at PE. Focus of much of the presentation was on sedimentation impacts on environment.

Q: Do we know how means/methods (for dredging, transfer, and placement) at Port of Miami project need to be adjusted and how these apply to PE?

Discussion: Corps beginning to evaluate now. Great opportunity for IWG to participate in providing their individual technical input. Upcoming NEPA scoping meeting will provide good opportunity for formal input.

Other discussions points brought to bear:

- When Scoping notice comes out (approximately January 2017) would be a good time for agencies to send in letters regarding their desire for the USACE to utilize alternative dredging methods. In addition, key leadership engagements are an excellent time to re-iterate this information.
- Agencies would like to see available imagery taken during dredging operations and “overflow” events to shed light on problem in order to potentially marry barge repairs to improved conditions.
- Suggestion and effort by Corps to look into potential methods to eliminate “double handling” of sediment placement --- viability, cost factors. Elimination potential overflows or leaking in certain locations would reduce turbidity and sedimentation.
- Consideration should be given to using sediment modeling to evaluate alternate dredging scenarios (methods/means) including looking at different disposal locations.
- Recommendation that cameras be placed on bottom to provide real-time information on project effects versus ambient sediment conditions.

- Consideration should be given to tying in methods useful to adaptive management (i.e., USACE Engineering, Research and Development Center tools for automated sediment measuring in field). Corps interested in evaluating and determining value of these methods prior to deploying.
- USACE indicated intent to hire a contractor or university to review all information, employ bottom cameras and provide expert recommendations on sediment monitoring. They also intend to have agencies share in the review of draft Plans and Specifications for the dredging contract prior to award. Agencies expressed strong desire for early engagement in providing input to the solicitation for proposals and impact on scope of 3rd party contractor work as well as preparation of Plans and Specs. Lot of discussion on timing, contractual limitations, and communications. Later taken up as action item.
- NOAA expressed desire to have Adaptive Mgmt. Plan (AMP) be controlled by interagency group, that is, collaborative identification of triggers and agreement of appropriate response in dredging, placement, and relocation procedures.
- Port expressed strong belief that appropriate lessons should be applied to PE. PE not proceeding with monitoring until it is satisfied that agencies have had appropriate and collaborative input.

(FDEP – Dr. Peterson) Presentation on Lessons Learned

- FDEP's presentation provides many details noted in the Power Point presentation. Lessons learned addressed a variety of issues as summarized below.
- While lessons learned from Miami are important, emphasized PE is a new project.
- Department needs reasonable assurance that all potential impacts will be documented and that compensatory mitigation provided for all project-related impacts.
- Permit conditions/contract requirements
- Baseline survey (s) spatial coverage and timing
- Position of monitoring stations proximate to channel
- Predictions and measurements of sedimentation
- Impact delineation protocols and timing after triggered
- Monitoring of permanently marked corals
- Artificial reef survey (towed-video)
- Communications, notification, reporting and deliverables

(NMFS - Ms. Karazsia) Presentation on Port of Miami Lessons Learned

- Presentation was developed to supplement FDEP slides in order to maximize limited time and avoid duplication.
- Emphasized need to monitor in locations where local oceanographic feature
- Clear need to complete baseline monitoring prior to the commencement of dredging.
- Need to monitor sponges and octocorals, in addition to stony corals for sediment-associated stressors (e.g., halo, burial of attachment points, increased prevalence of recent partial mortality).

- Performance standards for coral relocation should not be based solely on survival vs total mortality. A net gain (or no net loss) of live coral tissue after 2 years is a more appropriate performance standard.
- NMFS recommends 2 years of reef post-relocation monitoring to be able to properly evaluate relocation stress.
- NMFS provided information on successful octocoral and sponge relocation at Port of Miami as impact minimization.
- EPA suggested using this information to determine what corresponding mitigation is based on full extent of predicted and non-predicted impacts.
- Posed question: What caused the sedimentation impacts? To what degree do we need to answer this question before or during PE construction? And how?
- NMFS recommended the IWG consider developing fixed no-dredge windows to protect corals during spawning and allow corals to recover after thermal events.
- Provided an overview of Branes et al. (2015), Nelson et. al. (2015), Swart (2016), and Miller et. al. (under review).
- Provided an overview of the EFH consultation that was completed in 2003 with 3.3 acres of impact to coral reef and acknowledged the USACE commitment to re-consulting. The NMFS Biological Opinion and FDEP permit described 4.8 and 7.07 acres of impact to coral reef, respectively.

F. Listing of Combined Results from Lessons Learned – The IWG engaged in a technical discussion after the Lessons Learned presentations and explored these items:

- Importance of communication – keeping agencies informed in and out of water; immediate notification on critical events
- Exert better control and have flexibility to lead contractor
- Pre-construction monitoring must be completed prior to construction (usually within 1 year)
- Consideration of an expanded zone of monitoring from channel using grid format
- Sediment transport model important – agencies want early and prior involvement to decisions
- Permit conditions must be controlled; eliminate vague conditions;
- Agencies requested involvement in contract language
- Clear understanding of data deliverables – format and timing; agency input on data format to ensure usability
- Minimize potential impact by eliminating or minimizing sources (means and methods), through adaptive management, and altering work windows, where possible and appropriate
- Improve definition of terms
- Establish and understand role of 3rd party QA/QC
- Monitor for octocorals and sponges --- including relocations
- Interagency identification of triggers

- All information from environmental monitoring should be shared with all agencies; consider mechanisms for posting in real-time
- Need detailed response plan for emergency conditions
- Identify latest updated deliverables and updated “naming” convention

G. Communications – Related Issues

- a. Process for Conflict Resolution – Mr. Spinning presented a strawman process to improve technical issue resolution among agencies with regard to the monitoring plan and for potential use through implementation (Power Point). The process uses a sequential process for elevation of issues within and between agencies for quick identification and resolution, particularly those that cannot be resolved at the initial team level (first course of action and most desirable) and that are hindering project progress. It also includes frequent and regularly scheduled agency meetings. The agencies expressed support of the process. Essential elements are:
 - Use of an Issue Resolution Decision Tree process that shows the path of communication and elevation of issues for resolution. Issue articulation, when, who raised or source. Task for Jason Spinning to put together a draft of the decision tree.
 - Use of a Decision Log to record and document (akin to Corps Smart Planning process)
 - Documentation of meetings and clear identification of actionable items, lead responsibility and timelines for completion.
 - Common sense of urgency for resolving issues.

- b. Other Communication Strategies to Increase Transparency – Mr. Spinning solicited and agencies provided additional ideas as follows:
 - Need for a common project web-site; consider using Savannah Harbor web-site as example
 - Helpful for web-page providing project status, i.e., dashboard items including progress on task
 - Important to develop and share joint talking points (speak in one voice)
 - Regularly scheduled meetings/interactions among agencies important
 - Documentation of meetings essential
 - Helpful to share common/joint talking points for external communications
 - Regularly scheduled meetings with internal experts.
 - Need full understanding of monitoring budget, broken down by tasks.
 - Need clarity in understanding of Corps “contingency funding”
 - Project Delivery Team (PDT) open to public at monthly meetings.
 - Conference calls with constituents to review controversial topics
 - Note: Both Corps and Port preparing “Outreach Plans”

DAY TWO – 27 July 2016

H. Monitoring Plan Goals – FDEP provided presentation outlining proposed elements of a Monitoring Plan for agency discussion and consideration (Word document – page 14 of this document). A facilitated discussion followed to identify essential monitoring plan goals. After items below were listed, IWG agreed that these goals (below) provided a fair representation and were worthy of the Monitoring Plan:

1. Provide reasonable assurance of environmental predictions (FDEP)
2. Provide adequate input parameters for Uniform Mitigation Assessment Model – UMAM to determine the amount of mitigation needed to offset project impacts (FDEP)
3. Define what part of plan requires input from the modeling (i.e., starting point at from which to base monitoring stations) with goal of minimization and avoidance of impacts.
4. List the major components of monitoring and investigations and survey and identify the specific monitoring requirements associated with each and the appropriate agency input.

Reconnaissance = survey

Pre-construction = (baseline) survey

Construction = monitoring

Post-construction = monitoring

Relocation = survey and monitoring

Regarding the above, FDEP clarified that survey will represent a one-time assessment to evaluate the condition of the resource/site, whereas monitoring involves multiple surveys for the purposes of documenting changes in the condition of the resources/site over time.

FDEP further clarified that for PE, a Reconnaissance Survey is needed to document the condition of the resources that will be impacted by the project for which mitigation will be provided. Monitoring will also be required to document any unpermitted impacts, requiring multiple surveys (i.e., a pre-construction (baseline) survey, during- and post-construction surveys).

5. Must define the appropriate temporal and spatial scale for the sediment impact and biological response to stressors.
6. Must differentiate between naturally induced (ambient) sedimentation and those from dredging (before/after impact design). Accounting for sedimentation impacts from all sources.
7. Must feed into AMP.

8. Should define how the Monitoring Plan translates into mitigation requirements for both the direct (up-front) and indirect impacts (prediction) and what happens if the impacts for both are exceeded (unpermitted impacts).

9. Defines what the data is yielding and the level of data resolution (deliverables). Data presented and how the results should be communicated...and deadlines

10. Must define how the information from monitoring feeds the functional assessments and mitigation

11. Must reach consensus on statistical analysis details

12. Agreement that AMP is separate but related and is fed by the triggers from data identified in the Monitoring Plan. General agreement that AMP should help minimize and avoid impact and be used to calculate mitigation.

FDEP Proposed Monitoring Plan Discussion - There was also considerable discussion regarding the FDEP proposed Monitoring Plan outline (Word document) and presentation. FDEP stressed that many details were yet to be developed. Some discussion points that will need further fleshing out by team during development of the final Monitoring Plan include:

- General positive reaction on FDEP proposal; wants to see details on species and purpose of using them (not just for UMAM) and additional assessment extent to evaluate effects on endangered species.
- Need to see projections on mitigation made early on in the monitoring phases and not wait until end to establish the mitigation (EPA)
- Concern by NOAA of coral reef habitat downslope of impact areas that have not yet been considered. Is the currently projected impact area by Corps appropriate? More time will be needed to determine how best to do including establishing number of transects.
- Strive to capture all information; especially if Habitat Equivalency Analysis (HEA) is needed or other requirements.
- Implication of cost/m² for various monitoring options (USACE) should be considered.
- EPA requested participation in discussions on UMAM analysis done by FDEP and USACE (note...FDEP and USACE will conduct UMAM separately and in parallel)
- EPA strongly recommended making projections for mitigation in the reconnaissance phase as an “overlay” to the Monitoring Plan.
- Think “out-of-box” for non-traditional methods of dredging or transportation that could minimize impacts up front and thereby reduce mitigation requirements (i.e., method to determine source of sediments and protocol to characterize what is coming out of dredge versus what finds its way to impacted areas) (EPA)
- Port expressed need to get divers out in the water as soon as they can although understands agency desires to have results of sediment modeling...discussion on how much risk involved with diving based on known information (surveys, satellite imagery)

and then making adjustments in the field based on new information generated from preliminary results of modeling (November 2016).

- Discussion on normal/historic sediment plumes without project detectable through imagery.
- Discussion regarding ability to agree on additional spatial extent that could be considered for initial recon as a mechanism for reducing cost risk of having to do additional field work (remobilization) later based on modeling results...idea of expanding monitoring initially to capture potential impact areas
- Noted that current proposal by the Port with Dial Cordy & Associates for the Reconnaissance phase of the monitoring plan proposes 3000' monitoring extent to north of dredged channel and 1,500' the south. May be possible to expand contractor survey for pre-construction monitoring if sediment model predicts greater spatial impact than currently planned.
- FDEP illustrated and proposed a grid methodology that could be used to gather information over the full project impact area.
- *It was agreed that many of the detailed issues identified above should be taken up in detailing and finalizing agreement of Monitoring Plan offered for consideration by FDEP.*

I. Other Issues Outside of Monitoring Plan – Important issues of concern to agencies outside of development of the Monitoring Plan were also discussed. These are enumerated below:

- Need for a Rapid Response Plan to identify situations and appropriate actions, including communications during dredging phase and perhaps latter phases of monitoring.
- Development of a discrete and separate AMP.
- Reaching agreement on definition of impacts, i.e., what is minimal/temporary versus persistent in environment that might warrant mitigation.
- Adequately identifying mitigation downslope of dredging
- NEPA and Biological Assessment concerns.
- Estimated mitigation from impacts (up-front mitigation)
- More detailed assessment of secondary impacts
- Input on operational controls by agencies (EPA)
- Minimize impacts of anchoring
- Emergency response plan and activities – moving of dredge and safety of divers during coral relocations
- Monitoring Plan – seagrasses and mangrove
- Model validation and calibration
- Use of other assessment methods – i.e., remote sensing and acceptability of use of data by resource agencies. Considerations: speed, cost, accuracy

J. Next Steps to Craft the Monitoring Plan

1. **Core Technical Teams** – Two teams were identified. The first will develop the content of the “*Recon Assessment*” portion of the Monitoring Plan with acknowledgement that same members (or augmented/changed by agencies) would continue to develop details

for remaining phases of the Plan at a later date. Urgency to move out quickly in developing the Recon Phase details of the Plan will allow divers to commence field efforts quickly, a desire of PE.

A 2nd and separate Core Technical Team was identified to review the *Plans and Specifications* (P&S) from the Miami dredging project with the goal identifying how things can be done better at PE. The P&S Team will address:

- How contractor will operate dredging and can he provide flexibility in means and methods to minimize/avoid unwanted effects?
- Will P&S meet permit requirements and conditions?
- Intent is to provide informational input to USACE contracting entity

The following Technical Team members were identified:

AGENCY	RECON PHASE TEAM MEMBER	PLANS AND SPECS TEAM MEMBER
USACE	Jason Spinning: Lead	Lacy Pfaff; Lead, Jason Spinning, Contracting rep
FDEP	Jennifer Peterson	Bob Brantley, Lanie Edwards
NMFS – NOAA	Kelly Logan, Jocelyn Karazzia	Jocelyn Karazzia, Kelly Logan
EPA	Jennifer Derby, Mel Parsons	Jennifer Derby, Chris McArthur
FWC	Laura DiGruttolo, Marissa Krueger	Laura DiGruttolo, Marissa Krueger
USFWS	Jeff Howe	Jeff Howe
Port Everglades	Matt Harold, Martha Robbart, Bill Precht	Matt Harold
Broward County	Ken Banks	Nicole Sharpe

2. Schedule (Major Commitments and Taskers)

To Support Start of Recon Survey

- 1 Aug 2016 USACE distributes contractor Scope of Work to IWG for Recon Phase with highlighted departures from FDEP Proposed Monitoring Plan outline. Also include rough estimate of costs for recon survey and ESA work.
- 1 Aug 2016 USACE provides Scope of Work for bottom camera monitoring
- 9-12 Aug 2016 USACE holds webinar on scope of sediment modeling*
- 15 Aug 2016 USACE provides updated project schedule and budget breakout for monitoring plan including contingencies
- 15 Aug 2016 Team members provide written comments to USACE on SOW for Recon Phase. NOAA will include comments based on their internal, not yet released, draft of endangered species monitoring protocol.
- 19 Aug 2016 USACE holds web-meeting of core team to discuss how to

address agency comments

* To include discussion of justification of why model chosen, modeling scenarios, model inputs, selection of grid, potential to compare with imagery

To Support Review of Plan and Specifications and Operational Controls

- 5 Aug 2016 USACE distributes Miami Specifications to core team members
- Mid Oct (TBD) Means and Methods Team will be identified and convene
- Early 2017 Agencies submit contract acquisition support letters

To Support other Critical Items - (Detailed project schedule embedding key deliverables under preparation and for distribution by USACE: 15 Aug 2016)

- 5 Aug 2016 USACE distributes issue resolution tools package (spreadsheet tracker, decision log, decision tree process)
- Nov 2016 USACE distributes draft results of sediment modeling to IWG
- 15 Dec 2016 USACE completes Draft Monitoring Plan
- 15 Dec 2016 USACE prepares and distributes schedule for preparation of rest of Monitoring Plan (all phases) – *elements for other phases will require further IWG discussion*
- 17 Jan 2017 USACE issues formal NEPA scoping letter soliciting agency and public input to Draft Monitoring Plan

Attachments:



Second Final
Workshop Agenda.c



Working group
attendees.xlsx



EPA other issues of
concern p1.pdf



EPA other issues of
concern p2.pdf

Port Everglades DRAFT Outline of DEP Suggested Biological Monitoring

I. PRE-APPLICATION AND PERMITTING PHASE

A. Reconnaissance Survey for Predicted Impacts

1. Purpose:
 - a. Characterization for Uniform Mitigation Assessment Method (UMAM).
 - b. Communities surveyed serve as reference for mitigation (e.g., artificial reefs).
 - c. Locate and enumerate colonies/individuals of listed species.
2. Timing: Prior to submission of application (0-2 years prior; need "current condition").
3. Location: Within direct impact area (channel) and predicted secondary impact areas.
4. Methods:
 - a. Random stratified sampling within habitat types inside predicted impacts areas.
 - b. Employ temporary transects and quadrats.
 - i. Video surveys, Line-intercept surveys, and BEAMR quadrat surveys.
 - ii. Documentation of listed species (enumeration, locations).

II. POST-PERMITTING THROUGH POST-CONSTRUCTION PHASE

A. Assessment area and control site monitoring

1. Purpose:
 - a. Provide reasonable assurance that unpermitted impacts will be identified.
 - b. Provide information on distribution, spatial extent (acreage), severity (functional degradation / loss), and permanence (persistence) of any project related unpermitted impacts; required for DEP to conduct UMAM analysis to determine amount of additional compensatory mitigation necessary to offset impacts.
2. Timing: Once Pre- (baseline), repeatedly During-, and once Post- Construction.
3. Location: Within the area that could potentially be influenced by the project (secondary impacts) and at control sites.
4. Methods:
 - a. Employ a Before-After Control-Impact (BACI) design.
 - b. Monitoring stations installed based on a grid.
 - c. In situ surveys along permanent transects, belt transects, and quadrats at stations:
 - i. Video surveys
 - ii. Interval sediment depth measurements (every meter)
 - iii. Sediment characterization (every 5 m)
 - iv. Identification and size measurements of corals, octocorals, and sponges within belt transects.
 - v. Assessment of tagged corals, octocorals, and sponges.
 - vi. BEAMR surveys within quadrats.

B. Minimization effort monitoring (e.g., monitoring of transplants)

1. Purpose: Document success of various minimization efforts.
2. Timing: Repeatedly following implementation
- 3 and 4. Location / Methods: Dependent on efforts employed

C. Mitigation monitoring

1. Purpose: Document success of mitigation.
2. Timing: Repeatedly post-mitigation construction.
- 3 and 4. Location / Methods: Mitigation sites / Dependent on type of mitigation

III. ADDITIONAL COMPONENTS (APPLICABLE TO ALL PHASES)

- A. QA/QC – within primary monitoring firm, also by independent 3rd party
- B. Deliverables and reporting