1. Please use the following table headers and provide a table for each activity proposed, acreage of impact and habitat being impacted by that activity. If docks impact more than one habitat, please place them on a separate line so that each habitat has its quantified impacts per activity being proposed.

Activity	Acreage of Impact	Habitat Impacted
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- 2. The proposal includes the installation of 12 mooring buoys with the inclusion of 75 mooring buoys as compensatory mitigation. The Corps has not determined that the 75 mooring buoys is appropriate for compensatory mitigation at this time as we have just begun compiling the functional assessment of the project impacts. Therefore, this is to inform you that if it is deemed inappropriate or unnecessary for the 75 mooring buoys to provide compensatory mitigation if the wish is to still have them a modification to any permit issued would be required in order to install the 75 buoys.
- 3. Please provide a table outlining the direct and indirect impacts. Include impacts to mangroves, seagrasses, listed and non-listed corals.
 - a. The Corps has determined that the direct impacts will include the following: the areas below the dock footprint; the areas below the vessels moored at the docks; the areas where the mooring buoys would be located; and the areas where the informational buoys would be located.
 - b. The indirect impacts would include the following: the areas where the construction vessels spud and/or work; and the areas that experience a measurable increase in turbidity during the construction and operation of the marina. Indirect impacts have been estimated to occur at a radius of 500 meters.
- 4. Marina Management Plan
 - a. The MOU presented has a yearly renewal and is unsigned. This agreement allows for up to 75 moorings, yet there are only 12 moorings in the application. Please clarify which number is accurate and revise accordingly. We would like to see the MOU signed for 5 years to match the monitoring requirements.
 - b. The Grant agreement states 10 years' salary, which is satisfactory, but it also states monies for 75 moorings. There are only 12 presented in the project files. Please clarify and correct.
 - c. Please submit both executed documents.
- 5. Water Quality Monitoring Plan
 - a. In addition to proposed turbidity readings, a reading needs to be taken during an outgoing tide once a day during construction operations and during marina operations. This is to ensure the outgoing tide is not taking turbid waters directly into the coral resources.
 - b. Page 8 of 21 describes turbidity control barriers. Please provide the draft permit condition that describes the requirement for the barriers to be in place prior to construction activity and remain in place until after work has ceased and conditions return to ambient. The permit condition should also specify turbidity barrier monitoring and maintenance intervals.

- c. Page 8 of 21 states that "if a storm event occurs, the barriers must be removed from the water to prevent impact to the benthic community...". If a storm event is predicted to pass over the project site, all construction operations must cease with enough time to allow for sediment to set prior to removing turbidity barriers and enough time to remove all construction materials that may become dislodged and cause harm to benthic marine resources due to weather conditions. Please modify to include this additional requirement.
- d. Page 9-12 of 21 describes 2x daily monitoring for turbidity at 10 assessment sites and 2 reference sites. We want the monitoring events to coincide with construction, e.g., maybe the measurements take place at least one hour after construction begins for the day.
- e. The monitoring needs to specify the data deliverables for all of the tasks, including file type, and the monitoring reports should be made available to NMFS.
- f. Please provide the draft permit condition on turbidity monitoring and corrective actions if 3 NTUs are exceeded. Please be clear on whether this is 3 NTUs total or above background. USACE and NMFS will need to work together to finalize the monitoring plan and NMFS will need to provide approval, which will also include final locations for sampling.
- g. The environmental monitoring starts on page 13 of 21. The applicant is proposing 42 permanent meter square photo quadrat stations. This section needs considerable work. No rationale is provided for the number of stations per habitat type. Any data analysis that would be done is not described. Of concern, it sounds like we would be sent a large amount of photos every 3 months which is not ideal; instead please design a monitoring effort based on analysis of photographs.
- h. For seagrass, NMFS requires the edge of the beds mapped in each monitoring event, species presence, percent cover, and condition. For the hardbottom surveys, NMFS requires the monitoring to follow a Before-After; Control-Impact (BACI) design with all ESA corals tagged and ~10 corals of each non-ESA coral species tagged and assessed pre-, during (monthly), and post-construction for sediment stress (dusting, sediment accumulation, sediment burial, recent partial mortality from sediment, and complete burial), disease and bleaching. NMFS will also want the hardbottom to be monitored for sediment deposition. Example methods to assess coral condition and measure sediment depth over hardbottom can be found here: https://peerj.com/articles/2711/
- i. Please provide an excel spreadsheet with the GPS coordinates of all ESA-listed species corals, size, and condition.
- j. Quadrats shall be placed, in respect to ESA-listed corals, to capture all species present.
- k. Sea Turtle Marine Mammal Plan Need to add NMFS to the notification list if a turtle in water or Marine Mammal is injured etc. (3rd/4th paragraph)

6. Mitigation

a. Please submit a drawing showing typical informational buoy design

- b. Here is a link for the educational signage: <u>https://www.fisheries.noaa.gov/southeast/consultations/protected-species-educational-signs</u>
- c. NMFS and USACE are discussing the trade-offs of seagrass transplantation. An option being considered is keeping the seagrass in-place to provide sediment stabilization and other functions in-lieu of transplantation (although the functions would be reduced by the project impacts). NMFS and USACE will continue evaluating the best course of action for the seagrass directly impacted by the construction.
- d. ESA Coral Out planting -Compensatory Mitigation -The coral relocation sites need to be completely outside of the project influence. We are operating under the assumption that Harbor Point and Penn Point could be within the indirect impacts, are there any other locations that would be viable?
- e. Please include the following BMP: No in-water construction during times of year with peak thermal stress and spawning, which would be June, July and August.
- f. The mitigation plan includes removal of 1,000 sq feet of marine debris. More than 1,000 sq feet of removal will likely be needed. NMFS and USACE are currently working through a UMAM to determine the mitigation amounts necessary to offset the impacts.
- g. In addition to the mangrove planting, are there additional opportunities for living shorelines in Coral Harbor? As noted above, additional mitigation may be needed for EFH compliance.
- 7. The 17 mooring buoys located within the project footprint to be relocated, are these part of your proposal or are these the responsibility of DPNR? If they are not your responsibility, then please note that relocation of the buoys will require a permit from the entity responsible for the installation and maintenance of those buoys.
- 8. Please confirm the use of impact hammer as the installation methodology for piling installation.
- 9. What BMPs will be employed during above mean seawater construction to prevent materials from entering the waterway?
- 10. Explain the difference between the two color envelopes and how they were determined



Figure 2a. Action area-Indirect Impacts.

11. Explain how these deposition ranges according to distance were produced and under what assumptions – Or reference a document as to where this information is discussed:



Figure 2b. Action area-Potential turbidity impacts.