



**DEPARTMENT OF THE ARMY**  
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT  
4400 PGA BOULEVARD, SUITE 500  
PALM BEACH GARDENS, FLORIDA 33410

**September 21, 2022**

Regulatory Division  
SAJ-2004-12518(SP-CF)

The Summer's End Group, LLC  
c/o Chaliene N. Summers, Managing Member  
5000 Estate Enighed, Suite 63  
St. John, Virgin Islands 00830

Dear Ms. Summers:

This is in reference to your Department of the Army permit application to construct a commercial marina referred to as St. John Marina (aka Summer's End). The project site is located at 10-17, 10-18, 10-91, 10-41 (Rem), in Estate Carolina, within Coral Bay, St. John, U.S. Virgin Islands (USVI). The project has been assigned Department of the Army (DA) application number SAJ-2004-12518. Please refer to this file number in future correspondence.

The U.S. Army Corps of Engineers (Corps) reviewed the information provided on February 14, 2022, and the information in our administrative file, and determined that it is not a complete response to the Final Letter Outlining Concerns dated September 13, 2021. The letter specifically outlined the additional information required pursuant to the procedures required by the National Environmental Policy Act (NEPA) and in order to make a final decision regarding your permit application. The additional information and/or modifications to the proposed project are necessary to document and ensure that the project would not be contrary to the public interest pursuant to 33 CFR Part 320.4. Additionally, the Corps does not have enough information to resolve the <sup>REFERRED</sup>

**REFERRED TO EPA FOR REVIEW**

, nor do we have enough information to resolve the

**REFERRED TO NOAA/NMFS FOR REVIEW**

Moreover, additional information is necessary to complete the interagency consultation procedures required by Section 7 of the Endangered Species Act (ESA) with National Marine Fisheries Service, Protected Resources Division (NMFS/PRD), the Magnuson-Stevens Act, and the National Historic Preservation Act. The response received is information that was previously submitted and a reiteration or new explanation of the same information and

fails to address the vast majority of issued identified. Therefore, we are unable to complete the required regulatory processing and evaluation of your project.

The Corps will continue to work with you and NMFS to define the Statement of Work for the requested Comprehensive Benthic Survey. In addition, the completeness letter (below) outlines specifically the remaining information needed to address the outstanding issues. It provides explanation of the request and the status of the applicant addressing the item. Further evaluation of your application will be held in abeyance for 60 days pending receipt of your response. It is recommended you take careful review of the requested information and take this opportunity to modify your project plan to reflect an alternative that would have less impact on the aquatic resources documented at the site or to add to our record whatever additional information you feel is relevant to our review process. We recommend that that you endeavor to provide all the information that the Corps has requested and any other information that will assist the Corps in continuing our review. If a complete response is not received by the Corps within the 60-day timeframe, the application may be withdrawn or the Corps may complete its application review with the information available, which may result in an unfavorable permit decision. We will be willing to meet with you prior to the 60-day timeframe to discuss the information in the letter and clarify any questions you may have. If you have any questions concerning this correspondence, please contact Carolyn Farmer, at the letterhead address, by telephone at 561-472-3527, or by electronic mail at [carolyn.h.farmer@usace.army.mil](mailto:carolyn.h.farmer@usace.army.mil).

Sincerely,



Alisa A. Zarbo  
Acting Chief, South Branch

## **COMPLETENESS SUMMARY**

### **DESCRIPTION AND NARRATIVES:**

#### **Project details**

1. Square footage: The Corps calculated the square footage of the proposed structures to total 73,662.05 square feet, as specified in Attachment 1. However, the drawings indicate that the structure is 73,591 square feet (1.69 acres). Please clarify the discrepancies in the numbers and confirm or provide an accurate detailed description of the docking structures, fixed walkway and dingy dock.

**COMPLETE:** *Square footage of the proposed structures is known.*

#### **Modeling Analysis:**

2. The Corps determined that the results of the modeling analysis, as submitted, cannot be verified and should not be used as an accurate measure of the limits of turbidity (further elaboration is discussed below). Either the modeling analysis should be calibrated and validated as specified below, or the Corps will assume worst case scenario that the seagrasses, corals and other benthic resources within the Coral Bay may be impacted as a result of the construction and operation of the marina. This area includes the reefs located at the mouth of the bay.

**COMPLETE:** *The Corps acknowledges that the applicant has made a good faith attempt to provide the modeling that was requested, and we do not anticipate any need to seek any additional information related to the modeling analysis (refer to January 10, 2022, email correspondence from the Corps to the applicant).*

### **QUANTIFYING IMPACTS:**

3. The Corps previously requested that the applicant provide all permanent, temporary, and/or secondary impacts with the quantities of the impact and type.

The information provided in Exhibit 1 (2020 RAI Response Table) and Exhibit 9 (Potential Impacts Graphic) indicates the impacts to seagrass associated with the proposed project as 0.48 acres for the construction of the dock, walkway and dingy dock and 0.03 acre for the installation of 896 pilings. In addition, 0.34 acre and 0.02 acre of temporary impacts to seagrass would occur due to prop wash and construction spudding, respectively. Finally, 2.82 acre of secondary impacts to seagrass would occur due to slip shading.

**INCOMPLETE:** *The applicant's February 12, 2022, response to the requested information references the requested Comprehensive Benthic Survey and the Numerical Modeling Analysis. The request for a comprehensive benthic survey has been previously requested in the Corps March 26, 2020, RAI and NFMS September 26, 2018, RAI but has not been provided. As stated above the Corps will continue to work*

with the applicant and NMFS to define the Statement of Work for the requested Comprehensive Benthic Survey so that the applicant can complete the required survey for the Corps and the agencies to continue to review the proposed project. Consistent with 50 CFR 402.02, the Action Area remains defined as “all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action.” The submitted Numerical Modeling Analysis discussed above was requested in an effort to evaluate sedimentation. However, development and operation of a marina has the potential to affect jurisdictional waters and resources with increased turbidity. Such an activity will also have affects to the aquatic species that inhabit and forage within Coral Bay Harbor. A baseline of benthic resources and aquatic species that occur in the harbor and defined Action Area needs to be established in order for the agencies to evaluate the effects of the proposed project on them.

It is understood that the applicant will update information, as applicable once the comprehensive benthic survey has been completed. Again, please note that the Corps will assess the impacts as direct (pilings and over-water structures), indirect (shading from mooring in slips, mooring buoys, informational buoys, and shadow extensions) and indirect/temporary (spudding, propwash and shading of construction barge) as 100% over seagrass/seagrass habitat. Please quantify the impacts as indicated by the Corps and revise all appropriate plans. As an example, Exhibit 1 and Exhibit 9 indicate that the construction of the dock would impact 0.48 acres of seagrasses; however, if the dock is proposed to be 73,591 square feet, that equates to 1.69 acres.

### **Direct Impacts**

- DOCK: The footprint of the docks, finger piers, walkways and dingy dock of the marina would extend over approximately 73,591 square feet (1.69 acres) of seagrass/seagrass habitat. The cumulative footprint of the 896 piles would occupy approximately 1,350 square feet (0.03 acre) of seagrass/seagrass habitat.

**COMPLETE:** Direct footprint is known. As stated above, this is what the Corps has determined as the direct impacts of the proposed project.

**INCOMPLETE:** Resource impacts are not known until the benthic survey is completed.

### **Indirect impacts**

- VESSELS: At maximum capacity with the maximum sized vessels in each slip, the vessels would shade approximately 246,114 square feet (5.65 acres) of seagrasses within the marina.
- MOORING BUOYS: Twelve (12) mooring buoys would be installed south of the proposed marina dock. These buoys would use helix-type anchors and floated lines to minimize any impact to the seafloor and its benthic community. With an average vessel length of 30-foot wide and an 8-foot beam, the moored vessels

would shade approximately 240 square feet of seagrasses per vessel, totaling 2,880 square feet (0.06 acre). This shading effect shifts as the vessels pivot around the mooring buoys.

- **INFORMATIONAL BUOYS:** Seven (7) informational buoys would be installed near the reefs to the mouth of the bay. The informational buoys are proposed to warn boaters about the presence of the sensitive marine resources and shallow areas on the approach to the marina. The buoys, which are 3-feet tall and 8-inches to 12 inches in diameter, would be micro-sited and installed in areas devoid of corals. The buoys would be secured with screw anchors and floated lines to prevent impact on the marine bottom. The buoys would be installed in areas dominated by sandy bottom and seagrass beds.

**COMPLETE:** *Direct footprint is known. As stated above, this is what the Corps has determined as the indirect impacts of the proposed project.*

**INCOMPLETE:** *Resource impacts are not known until the benthic survey is completed.*

#### **Temporary Impacts:**

- **SPUDDING AND CONSTRUCTION IMPACTS FROM WORK VESSELS:** The applicant estimated that the construction barges would need to spud and relocate approximately 170 times, impacting 6 square feet of seagrasses for each event (**Figure 5**). In total, the indirect effects to seagrasses are estimated to be 1,020 square feet.
- **TURBIDITY FROM WORK VESSELS:** The Corps anticipates that turbidity would result from the construction vessels at the project site during in-water work. The Corps will require that the applicant utilize turbidity curtains and monitor water quality during in-water construction.
- **TURBIDITY FROM OPERATION OF THE MARINA:** The Corps anticipates that turbidity as a result from the operation of the marina.

**COMPLETE:** *Direct footprint is known. As stated above, this is what the Corps has determined as the temporary impacts of the proposed project.*

**INCOMPLETE:** *Resource impacts are not known until the benthic survey is completed.*

**INCOMPLETE:** *The Corps will require that the applicant monitor water quality during operation of the marina, if permitted, to determine if indirect effects that were not accounted for are occurring and provide a remedial plan to compensate for any loss of function and value of the resources. Please revise Exhibit 6 the Water Quality monitoring plan to include monitoring after construction and during the operation of the marina.*

## ALTERNATIVES

### Onsite alternatives

4. The on-site Alternative Analysis is not adequate for the Corps to determine that the proposed project has minimized impacts to the maximum extent practicable. Based on the Corps' review of public comments received in response to the public notices and the administrative record, the Corps determined that there is not sufficient information in the record to determine that the proposed project is the environmentally preferred alternative. The Corps believes that additional avoidance and minimization measures can be achieved.

**RESPONSE RECEIVED, BUT MAY NOT BE FAVORABLE:** *The applicant's February 12, 2022, response to the requested information references their August 18, 2017, response to the Public Notice Comments that was requested by the Corps. It was acknowledged by the Corps that the applicant responded to the comments. The proposed marina, with its piers, slips, moorings and navigation areas, would occupy approximately 25.8 acres, which is approximately 26% of the waters within Coral Harbor. Coral Bay is a highly sensitive area with seagrasses, corals, and is designated critical habitat for corals. Although unregulated mooring does currently occur in the area, the proposed project has the potential to affect the environment in Coral Bay. The Corps believes that additional avoidance and minimization measures can be achieved to reduce adverse effects on the environment.*

*The Corps believes that your project, as currently proposed, may be contrary to some of the public interest factors due to the failure to avoid and minimize the effects of the project impacts to the extent it is practicable to do so 33 CFR 320.4(r)(1) (losses will be avoided to the extent practicable). In order to determine that your proposed alternative to construct the marina at Coral Bay has avoided impacts to aquatic resources to the maximum extent practicable, the applicant must clearly demonstrate that it is not feasible to implement alternatives that have less adverse impacts on the aquatic ecosystem than the proposed project. Minimization includes alternate site plans/redesign and other steps that would reduce impacts to waters of the United States. This includes minimizing on-site impacts. The Corps has identified several features of the proposed project that could be minimized in order to reduce impacts to aquatic resources. Please clearly demonstrate why it is not practicable to minimize the following site features.*

*The applicant's February 12, 2022, response to the requested information reiterated the minimization efforts to date. The Corps is aware of these measures, however, as proposed, based on all the information provided and in the Administrative Record, the Corps determined that there is not sufficient information in the record to determine that the proposed project avoids and minimizes (losses) impacts to the extent it is practicable to do so. The Corps believes that additional avoidance and minimization measures can be achieved. All of the recommendations provided by the Corps were disputed by the applicant. The Corps is not in agreement that the applicant is unable to*



*implement any of the additional minimization measures.* The Applicant states that the 404(b)(1) guidelines relative to on-site alternatives do not require the Applicant to modify the proposed project that it no longer meets its project purpose. Please note the project purpose in the public notice dated July 9, 2015, is stated as the Basic: "Offshore Marina" and the Overall: "Construct a private commercial offshore marina with ancillary and commercial facilities in adjacent uplands in ST. John, USVI." It does not state, nor do Corps regulations define purpose and need related to the applicant's profitability. Information provided indicates that approximately 115 boats are regularly anchored or moored within Coral Harbor. This mostly consists of sailboats of varying size. The need for the project is not justified for a 144-slip marina with vessels varying in length up to 210 feet long.

The Corps recommends the following minimization measures. If the applicant is not able to implement these specifically, then please provide alternative measures that are comparable for consideration. It was stated that the applicant needs a certain number of slips to accommodate mega-yachts of 140 feet in length or greater and that by eliminating Docks F and G that would limit this size dock space. The applicant could consider redesigning the northern dock to include a variety of slips that includes more slips for larger vessels and less for smaller vessels. Also, it is understood that early in the process it was recommended for the applicant to have one single phase of construction. This did not mean to propose one large phase. It was intended to minimize the impacts overall. As the process has continued, it has not been satisfactory concluded with the amount of impacts to resources, potential impacts to cultural resources that have yet to be satisfactorily surveyed and proposed compensatory mitigation, to support the purpose and need for the project as proposed and adequately avoid and minimize impacts to the aquatic environment to the greatest extent practicable and ensure the final mitigation satisfies the preference hierarchy identified in 33 CFR Part 332.3 (b)(1). It is advised to propose one phase and after monitoring and information collected to support the purpose and need for a second phase. In addition, allow the applicant to demonstrate additional impacts of proposing an additional phase can be authorized.

- Reduce the width of the walkways

Although the finger piers are approximately 5 feet wide, the remaining walkways on the dock are approximately 8, 10, 12, 15, 16, and 19-foot wide. The docking structure is proposed over seagrasses, so a reduction in the width of the walkways would reduce the shading impacts to the seagrasses.

- Eliminate the southern dock

Specifically, the southern portion of the proposed marina could be eliminated to avoid impacts to historic properties, seagrasses and corals. As shown in Exhibit 16, page 2 of 16, this would eliminate dock F (slip section I and J) and dock G (slip section K). This would reduce the number of slips by 26 vessels, and

reduce the shading impacts by an additional 24,135.30 square feet (0.5 acre) solely from the dock (not including the shading reduction from the proposed vessels). This drawing also indicates that docks F and G are anticipated to have an annual occupancy rate of 29%, 38% and 30%, so the need is not demonstrated for these additional slips.

- Construct the dock in phases

The southern portion of the proposed marina (Piers I, J, and F) could be constructed at a later date if the need is justified, concerns over historic properties have been resolved, and if it is demonstrated that impacts to seagrasses and corals are minimal. Monitoring would be required.

- Reduce the number of boat slips

The Annual Occupancy indicates that much of the marina will not be at full capacity, so there may not be a need at this time to construct a marina of this size and with the number of slips. The Annual Occupancy of Dock B is 80-85% (46 vessels), Dock C has a 60% rate (24 vessels), Dock D has a 53-59% rate (28 vessels), Dock A has a 32% rate (10 vessels), Dock E has a 39% rate (10 vessels), Dock F has a 29-38% rate (21 vessels), and Dock G has a 30% rate (5 vessels).

## Avoidance and Minimization

5. Avoidance and minimization efforts: The Corps acknowledges that the applicant has proposed avoidance and minimization measures in the project; however, we believe that additional avoidance and minimization measures should be provided, including but not limited to downsizing the footprint of the marina and/or the number of slips. To date, the applicant has only reduced the number of slips by one (1). Additional measures can include but should not be limited to elimination of Piers F & G. These piers are projected to have an annual occupancy of only 29%, 30% and 38%. In addition, it is recommended that the proposed width of the piers be reduced to the minimal necessary. The Corps could consider the width of the walkways be at a width that is consistent with ADA requirements.

**RESPONSE RECEIVED, BUT MAY NOT BE FAVORABLE:** *The applicant's February 12, 2022, response again states that the number of slips including larger berths are "needed" pursuant to the market analysis. Pursuant to 40 CFR § 1502.13 - Purpose and need statement briefly specifies the underlying purpose and need to which the agency is proposing the alternatives including the proposed action. Under NEPA, the purpose and need statement identifies the agency's purpose of the proposed action and the need it serves. NEPA directs the Corps to conduct environmental reviews to consider the potential impacts on the environment by the proposed action. Purpose is considered the primary intent of the proposed project and need identifies problem or*



deficiencies and thus why a project is being proposed. NEPA requires this to be established using specific data than relying on general statements or entities need for profitability. The purpose and need are used to identify and determine the range of alternatives under considerations that are reasonable, prudent and practicable. As stated above the basic purpose is "Offshore Marina" and the overall purpose is: "Construct a private commercial offshore marina with ancillary and commercial facilities in adjacent uplands in ST. John, USVI." Therefore, the applicant's response that the Corps' request for additional avoidance and minimization measures are not practicable to support the project purpose and need is not an appropriate interpretation of the regulations. Project modifications to minimize adverse project impacts have been discussed with the applicant throughout the project review. Project modifications are those that are considered feasible (cost, constructability, etc.) to the applicant and that, if adopted, will result in a project that generally meets the applicant's purpose and need. Such modifications can include reductions in scope and size; changes in construction methods, materials or timing; and operation and maintenance practices or other similar modifications that reflect a sensitivity to environmental quality within the context of the work proposed.

6. To avoid and minimize impacts to corals, please move the gangway to the north at a minimum 20-feet in order to avoid sedimentation to the corals from the boats slips and shading from the gangway. An alternative to moving the gangway would be to move the corals. If this is the desired option, the applicant must submit a plan for the transplantation of the corals, to include details on methods (including turbidity controls) and monitoring for 5 years.

**INCOMPLETE:** It is understood that the applicant will update information, if applicable once the comprehensive benthic survey has been completed.

7. Grated decking for docks allows light transmission to submerged aquatic vegetation and other resources below. NMFS dock construction guidance requires a minimum of 43% light transmission, along with height requirements of 5 ft above MHW and size restrictions to give the resources a better chance of survival. It is unclear, from the drawings submitted, whether the dock specifications meet the 43% light transmission and height and size requirements. Please clarify. Please also specify the type of material that will be used for dock construction and decking.

**PARTIALLY ADDRESSED:** The applicant's February 12, 2022, response references Exhibit 12 that illustrates the 43% light transmissivity of the proposed grated decking and the height requirements at both 5' and 4' above MHW but did not address the size (width) requirements.

8. The Corps is concerned that additional impacts could occur from the resuspension of sediments due to thrusters of large vessels entering and existing the marina. Please demonstrate that there are adequate water depths for the size vessels to be

moored at each slip given the existing water depths. Please provide a corresponding plan illustrating the existing resources, bathymetry, slips with proposed vessels to be moored, and the draft limit. Please include the anticipated size and draft limit of vessels to be moored at the mooring buoys. Please include a table on the dock plans (Exhibit 16) with this information. This information will also assist in demonstrating how impacts would be minimized from sedimentation, and turbidity within the vicinity of the marina.

**ADDRESSED BUT MAY NOT BE FAVORABLE:** *The applicant's February 12, 2022, response references Exhibit 12 that illustrates a Benthic summary with birthing details and vessel details. This information will be used in evaluating impacts. The applicant's information also included an updated sunlight study to propose further minimization of project impacts through the use of floating dock structures for the north section of the marina where smaller vessels are to be berthed, instead of the currently proposed fixed structures. The Corps consulted with NMFS on the proposed floating docks based on the applicants updated sunlight study. The document provided lacks the traditional elements of a scientific study such as an introduction, methods, analysis, results, discussion, and literature cited. Furthermore, the document has not gone through a peer review process and therefore, we do not recognize this document as a scientific study. The conclusions drawn from the Sunlight Assessment (i.e., the sunlight study results indicate that a floating dock structure at 5 to 15 feet water depth will have similar sunlight penetration to that of a fixed dock structure at both 5 and 4 feet above MHW) is in direct conflict with a report NMFS co-authored with the US Army Corps of Engineers, Engineer Research and Development Center ([Evaluation of Regulatory Guidelines to Minimize Impacts to Seagrasses from Single-family Residential Dock Structures in Florida and Puerto Rico](#)). Specifically, the report concludes that "Floating platforms should not be used in seagrass areas". This study observed several instances of small floating structures attached to the docks for use with jet skis. These structures effectively block all light transmission and result in the complete elimination of seagrasses under all floating structures examined. Likewise, in Massachusetts, [Burdick and Short \(1999\)](#) reported a nearly complete loss of eelgrass cover under all floating platforms examined. Therefore, the authors recommend that "some mechanism be employed to discourage their use in areas that support seagrass habitat." It is unclear how there could be more direct penetration from the floating dock as opposed to the fixed raised dock. In addition, the Sunlight Assessment only applies to North/South facing docks and according to drawings provided on March 22, 2020, a small percentage of the docks proposed are planned in a north-south orientation. While some impacts to seagrass habitats will occur from the fixed docks construction, long-term impacts will be minimized if [Construction Guidelines for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation](#) are followed. Lastly, it is possible to explore the tradeoffs between sunlight penetration into the water and additional piles/spudding, however, to accomplish this, proper sunlight penetration modeling needs to be provided by the applicant to inform that discussion. Finally, as the applicant stated, the Corps and NMFS already advised the applicant to revise the previously proposed floating structures to fixed dock structures constructed a minimum*

*of 4' above MHW, made of aluminum frame and grated decking. The current proposal to go back to the floating dock structures is not providing additional avoidance and minimization measures but is doing the opposite and causing further delay by necessitating the evaluation issues that have already been addressed.*

*The Corps and NMFS have met numerous times and provided recommended additional avoidance and minimization measures to assist the applicant in designing a project that avoids and minimizes impacts to the extent it is practicable to do so. However, as stated above, if the applicant is not able to implement these specifically, then please provide alternative measures that are comparable for consideration.*

## **Mitigation**

9. Corals, both ESA-listed and non-listed species, are extremely sensitive to turbidity and can only withstand a small increase of turbidity without stressing out the animals. A 3 NTU threshold (USVI mandate) for construction and operation of the marina is required in order to avoid additional turbidity and stress to these corals that exist at the mouth of port. Please provide a detailed turbidity/water quality plan that utilizes this threshold for both construction and operation of the marina in order to maintain the health of these corals.
  - Please describe the locations and types of turbidity curtains that will be used during construction, including Penn reef. This can also be a drawing indicating the locations.
  - How will Summer's End determine if their pollution reduction plans, and relocation of vessels will decrease pollution or just displace it to another part of the bay or St. John? Does the management plan cover the entire Bay or just the marina facility?
  - Will the applicant implement upland construction BMPS to prevent erosion/sedimentation into the bay?

**PARTIALLY ADDRESSED:** *The applicant's February 12, 2022, response references Exhibit 6 – Environmental Acoustic and Water Quality Monitoring Plan and Exhibit 7 – Erosion and Sediment Control Plan. This information will be used in evaluating impacts and proposed mitigative measures. It is understood that the applicant will update information, if applicable, once the comprehensive benthic survey has been completed. The applicant has proposed to increase enforcement activities within the bays of St. John by funding a grant for a dedicated USVI Department of Planning and Natural Resources (DPNR) enforcement officer for the island of St. John. As discussed with the applicant, this is not an activity that is within our purview to authorize nor is it an activity that we can monitor or enforce.*

## Compensatory Mitigation

10. The applicant must first demonstrate that project impacts have been avoided and minimized to the maximum extent practicable prior to considering the compensatory mitigation plan. Even though sufficient avoidance and minimization measures have not been demonstrated at this time, the Corps is providing comments on the submitted Compensatory Mitigation Plan.

**ADDRESSED BUT MAY NOT BE FAVORABLE:** *The applicant's February 12, 2022, response to the requested information reiterated the avoidance and minimization efforts to date. The Corps is aware of these measures. However, as proposed, based on all the information provided and in the administrative record to date, the Corps determined that there is not sufficient information in the record to determine that the currently proposed avoidance and minimization measures are adequate to ensure that impacts (losses) are avoided to the extent practicable. Therefore, the Corps is unable to fully evaluate the compensatory mitigation plan and ensure the final mitigation satisfies the preference hierarchy identified in 33 CFR Part 332.3 (b)(1). In addition, it is understood that the applicant will update information, including the Compensatory Mitigation Plan, once the comprehensive benthic survey has been completed. Also, the impacts will be determined through an evaluation of the functional assessment analysis of the proposed impacts. However, until the applicant has demonstrated that the proposed project has avoided and minimized impacts to the aquatic environment to the greatest extent practicable, further review and discussion of the proposed compensatory mitigation plan to fully offset the loss of function and value of the unavoidable impacts will not be evaluated.*

- The following are potential mitigation options; however, further details are needed to quantify lift.
  - Mangrove planting possible compensatory mitigation (out of kind) but the plantings need to be located below MHWL (living shoreline type concept).
  - Removal of derelict vessels possible compensatory mitigation, however, may already being completed by NOAA/FEMA as hurricane recovery efforts. Need more information.
  - WQ Improvement projects maintenance may provide mitigation, however, need more information to determine if any mitigation lift can be quantified.
  - Relocation and tackle upgrade of up to 70 mooring buoys needs additional information/status update from DPNR and applicant.
  - Discussed possible opportunities/needs for coral rehabilitation projects in St. Thomas with the National Parks Service. Applicant can coordinate with NPS Superintendent to discuss possibilities.
  - Debris clean-up in the bay. Need more information.

11. The impacts and appropriate compensatory mitigation projects do not have a quantified function and value. Please provide a functional assessment analysis of the proposed seagrass impacts utilizing the Unified Mitigation Assessment Method (UMAM) to determine the functional loss. The functional assessment should separate each of the types of impacts (direct, indirect and temporary) and each activity (pilings, over-water structure, shading-mooring, spudding, propwash and shading during construction).

*NOT FULLY ADDRESSED: Results of the benthic survey are needed. The Corps has determined that the direct, indirect and temporary impacts of the proposed project are as restated above in question #3 Quantifying Impacts. The applicant's February 12, 2022, response, stated "We note that indirect seagrass impacts will not necessarily result in a net loss of seagrasses within the bay. As noted, the project will result in direct damage to seagrass only where pilings are driven. Losses due to shading may be compensated by removal of many improper moorings and anchorages that are documented to have scoured the seafloor in large arcs or even circles. In addition, improvements in sediment control may more than offset any losses created by the shading. As discussed at pages 21-22, supra, propwash is not expected to cause any loss of seagrasses". This response is not consistent with the Corps determination regarding the quantification of impacts and may not result in a favorable decision by the Corps.*

12. The applicant's 2020 Compensatory Mitigation Plan does not provide in kind mitigation for direct or indirect impacts to seagrass. It has been discussed that debris removal is proposed, however a detailed survey pre and post removal, UMAM analysis and associated 5-year monitoring plan is needed at a minimum to evaluate this type of mitigation proposal. Please provide a compensatory in-kind mitigation plan to offset the unavoidable impacts to seagrass. Please provide the plan utilizing the Corps 12 components of a mitigation plan outline. In addition, please provide a UMAM functional assessment of the mitigation plan to determine if the proposed plan provides adequate compensatory mitigation for the proposed impacts.

- The Corps and NMFS have been made aware that several components of the plan are already completed or are being completed by other entities (such as derelict vessel removal and watershed stormwater management). Please re-evaluate the submitted plan with what is currently being completed or recently completed within the Bay.
- The proposed planting of 300 red mangrove propagules along 850 linear feet of shoreline to restore the shoreline is proposed above the MHWL. This does not effectively provide habitat for species and protection of the shoreline being constructed above MHWL. Please revise the proposed plan to construct the restoration to provide habitat.



The Corps recommends that additional discussions occur with the agencies and the Corps to develop an acceptable compensatory mitigation plan that fully offsets the loss of function and value.

**INCOMPLETE:** *Compensatory Mitigation Plan is still incomplete and inadequate but is proposed to be revised once the benthic survey is completed.*

**NOT ADDRESSED:** *Requested coordination with agencies.*

### **Public Interest Factors**

13. The Corps evaluates the probable direct and cumulative impact of the proposed activity on the public interest by weighing relevant factors. This is a general balancing of the reasonably foreseeable benefits and detriments. General criteria included in the evaluation are:

**ADDRESSED BUT INCOMPLETE:** *The applicant's February 12, 2022, response to the requested information indicated that the Virgin Islands has adopted a Coastal Zone Management Act (CZMA) that recognizes that the coast and its environment need special protection and consideration. In addition, that the CZMA also recognizes the need to balance appropriate economic development and marine activities with the need for preservation. By federal law, the Corps may not take final action on your application until the state Coastal Zone Management Program has provided coastal zone consistency concurrence (CZCC) or concurrence has been presumed.*

**The public interest review is separate from CZCC.** 33 C.F.R. 230.4(a)(2). "A permit will be granted unless the district engineer determines that it would be contrary to the public interest." 33 C.F.R. 230.4(a)(1). The Corps' public interest review requires an evaluation of the practicability of reasonable alternative locations and methods of accomplishing the objective of the proposed work in order to avoid resource losses to the maximum extent practicable. 33 CFR §§ 320.4(a)(2)(ii) and 320.4(r)(1). In the applicant's February 12, 2022, submittal, response to the requested information is incomplete. However, the applicant has provided information on the public interest factors listed below (Exhibit 18). **As stated throughout this letter, the Corps is unable to determine that the applicant has avoided and minimized to the greatest extent practicable. The Corps believes that additional avoidance and minimization measures can be achieved.** Once the applicant has provided a complete response to the information previously requested by the Corps and which the Corp continues to request, the Corps will continue the review of the proposed project. **However, without all of the requested information, the Corps is unable to determine that the proposed project is not contrary to the public interest.**



The weight of each factor varies with its importance and relevance to the particular proposed project. Please provide any additional information on the public interest factors listed below in order for the Corps to determine whether the proposed project is contrary to the public interest.

- **Conservation:** Potential impacts to the park and monument soundscapes, lights capes, cultural and archeological resources and visitor use of the Virgin Islands National Park and Coral Reef National Monument, in particular Hurricane Hole have not been provided to demonstrate the conservation of this National Park located near the proposed marina.
- **Aesthetics:** The existing aesthetics based on social, cultural and historic values will be altered. The proposed project would modify the upland facilities to attract visitors and accommodate boaters who would utilize the marina and/or mooring areas. The proposed project would construct a large marina supporting 144 vessels and relocate currently moored vessels to a 12-slip mooring area. In addition, the proposed project includes a boardwalk along the shoreline. This would change the existing aesthetics of the existing natural shoreline to an active use. The Corps does understand that several boats are currently in the bay. Google Earth aerials taken on 2 June 2020, indicated that there are approximately 100 vessels moored in Coral Bay.
- **General Environmental Concerns:** Acoustics on the aquatic and human environment from the piling driving have not been fully assessed. The geotechnical information does not conclusive demonstrate the substrate and a full acoustic analysis from the proposed project has not been provided. There will be changes in light, sound, and air quality as a result of the proposed marina that may affect the aquatic and human environment from the existing condition. Concern with the continue resuspension of sediments due to the size of the proposed vessels to utilize the marina and existing water depths and currents within the bay are not addressed. The water circulation study is not adequate to provide the needed information to understand the proposed effects of the marina on the aquatic environment.
- **Historic Properties:** An 18<sup>th</sup> to 20<sup>th</sup> century shipwreck has been documented within the footprint of the proposed project. It has not been determined if SHPO/VISHPO have concurred if the proposed marina will affect the cultural resource.
- **Fish and Wildlife Values:** This bay is a known pupping ground for Black Tip, Lemon, and nurse sharks. In addition, a fuel dock is to be located directly upstream of mangroves. Also, the size of the marina and number of pilings may substantially reduce the flushing to the existing mangroves. The water circulation study is not adequate to provide the needed information to understand the

proposed effects of the marina on the aquatic environment. The interaction of the proposed marina and the wind and wave action, tidal transport, currents and weather events need to be evaluated to determine effects on fish and wildlife values.

## Consultations

### 14. National Marine Fisheries Service, Protective Resources Division (NMFS, PRD)

a. **REFERRED TO NOAA/NMFS FOR REVIEW**

[REDACTED] please provide a response to NMFS' comments, with the exception of Comment #1 and #2. The Corps has clarified the response with NMFS PRD for these two items.

b. Benthic Resource Survey: To complete consultations with the NMFS, the Corps requested an updated benthic resource survey. In the December 13, 2019, submittal, a comprehensive benthic aquatic resource survey was not provided. The last survey was conducted in February 2018. The file was withdrawn/deactivated from the Corps review on October 30, 2018. On December 13, 2019, the applicant submitted a response to the Corps to reactivate the application (13 months from when it was deactivated and 22 months since the last survey). In addition, the February 2018 survey was just months after major hurricanes therefore conditions were not normal including increased turbidity. **REFERRED TO NOAA/NMFS FOR REVIEW**

The applicant concludes that from the benthic surveys conducted to date, with the last being in February 2018, there is no presence within the project footprint or project action area of essential features of designated critical habitat for elkhorn and staghorn corals. Exhibits 10 & 10A illustrate the latest map as 2017. Exhibit 11 Critical Habitat map from 2018 only illustrates ESA species. Therefore, for the reasons stated above the Corps requires a more recent survey comprehensive benthic analysis of the project area and action area. Unless the applicant can provide revised modeling and validated calibration, the affected area will remain as stated to be 114 acres. Thus, the comprehensive benthic survey needs to provide data on the resources and habitat present within the action area.

As previously requested, please provide the detailed methodology developed in concert with NMFS that was utilized that ensures detecting and identifying any ESA-listed coral species that may be present and essential features of designated critical habitat, any other species of corals not listed that may be present and coral hardbottom, any native and non-native seagrasses that may be present, any sponges or octocorals, etc. In addition to being developed in coordination with NMFS, this survey should include the entire action area, including any areas at risk of impact from sedimentation.

- Please note that the request is for all areas that may be impacted directly or indirectly by the proposed project. This includes at a minimum the proposed navigation channel, both Pen Point and Harbor Point known coral areas, the proposed marina and all mooring areas, any proposed mooring buoy areas, any area where stormwater activities are to take place, etc. The surveys submitted to date do not include the requested areas because the applicant has made assumptions from the results of the Numerical Modeling that these areas will not be affected. As a reminder, without the validation and calibration of the modeling analysis, the Corps and the agencies are unable to use the modeling assumptions.

***INCOMPLETE:** The Corps will continue to work with the applicant and NMFS to define the Statement of Work for the requested Comprehensive Benthic Survey. It is understood that the applicant will update information, if applicable, once the comprehensive benthic survey has been completed.*

15.NMFS, Habitat Conservation Division (HCD)

**REFERRED TO NOAA/NMFS FOR REVIEW**



In the December 13, 2019, submittal response #2 regarding Essential Fish Habitat and the circulation study, the applicant states that the “overall analysis provides reasonable assurances that the proposed marina will not adversely impact the ESA-listed corals located at the west and east mouth of the harbor, due to both the depth of those resources and the distance from the marina”. Since a comprehensive

benthic aquatic resource survey was not conducted, how does the applicant know the depth of the resources or what resources are present?

- To answer this question the applicant stated that the modeling analysis support's the Applicant's science-based conclusion that neither Harbor Point nor Penn Point reefs would be affected by potential sediments carried from the marina.
- As stated above, the model results are not able to be used. Thus, the Corps is still requiring the requested information below. In addition, the applicant states that complete coverage of both reef areas using sonar technology was completed; however, Exhibit 14 only provides a map of Penn Point.
- Since the Corps has determined that the existing resources have not yet been fully documented, and the model conclusions are not validated, and the action area remains 114 acres, the following information remains unresolved.

The applicants' statement does not include the potential effects of utilizing the navigation channel. However, the vessels would need to avoid the existing resources in order to not impact those resources with turbidity and sedimentation through the use of the channel. Therefore, the Corps requests that navigation channel is included in the analysis.

- The Corps recognizes that the applicant's stated that the deposition effect on the Penn Point corals were at a rate of 8% possibility not occurrence. However, the information provided is in question and until fully accepted/validated the Corps cannot evaluate/accept the applicant's conclusions.
- Please evaluate impacts to corals not listed under ESA as well in the response.
- Please provide the reasonable assurances the applicant states are present.

**INCOMPLETE:** *The applicant's February 12, 2022, response to the requested information again references the requested Comprehensive Benthic Survey and the Numerical Modeling Analysis. The request for a comprehensive benthic survey has been previously requested in the Corps' March 26, 2020, RAI and NFMS September 26, 2018, RAI but it has not been provided. As stated above, the Corps will continue to work with the applicant and NMFS to define the Statement of Work for the requested Comprehensive Benthic Survey so that the applicant can complete the required survey for the Corps and the agencies to continue to review the proposed project. Consistent with 50 CFR 402.02, the Action Area remains defined as "all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action." The submitted Numerical Modeling Analysis was requested to evaluate sedimentation. However, development and operation of a marina has the potential to affect jurisdictional waters and resources with increased turbidity. Such an activity will also have affects to the aquatic species that inhabit and forage within Coral Bay*

*Harbor. A baseline of benthic resources and aquatic species that occur in the harbor and defined Action Area needs to be established in order for the agencies to evaluate the effects of the proposed project on them.*

*It is understood that the applicant will update information, if applicable, once the comprehensive benthic survey has been completed. However, again please note that the Corps and NMFS will need to address the issues in the 3a/3b letter and a complete response to the September 13, 2021, Letter will assist the Corps in the required resolution of the issues raised in that letter.*

#### 16.Environmental Protection Agency (EPA)

**REFERRED TO EPA FOR REVIEW**



**INCOMPLETE:** *The applicant's February 12, 2022, response to the requested information again references the applicant has provided the additional information requested and that the reports and analysis provided in the submittal, which will all be updated upon completion of the updated benthic surveys as necessary, that address the issues in the 3a/3b letters and met the 404(b)(1) guidelines. The Corps will need the requested and updated information to complete the required resolution of those issues raised.*

#### 17.Section 106

The Corps' archaeologist has been working with the applicant to proceed with the Section 106 review. The initial assessment by the Corps archaeologist, provided to you on April 22, 2021, noted that the project area had not been fully and sufficiently surveyed for undocumented archaeological resources, and that a reported shipwreck within the project's area of potential effect (APE) has not been sufficiently analyzed to determine if there would be adverse effects to the shipwreck. This assessment was based upon review of the Panamerican archaeological survey report dated January 2013, a field analysis summary of the historic shipwreck remains by Ken Wild dated January 2019, and various communications related to

historic resources that were submitted to the VI SHPO over the past several years. The Corps noted that a Section 106 determination of effects could not be completed without further information obtained through additional archaeological work.

Subsequent meetings with the applicant and their associates addressed the Corps' requirements and the Corps archaeologist offered to look at any additional data that may be available that was not associated with archaeological surveys but that may prove useful for assessing the marina footprint for archaeological deposits. This included additional remote sensing imagery/data acquired during a geophysical survey of the area conducted by Sea Diversified. No additional data associated specifically with archaeological work was provided. Unfortunately, the additional information was not sufficient for the purposes of assessing archaeological deposits, and there has been no additional information provided that could inform the deficiencies in archaeological identification.

Because the Corps still does not have enough information to make a Section 106 determination of effects, the Corps' request for additional archaeological survey of the permit area, and additional archaeological investigation of the reported shipwreck is still applicable. A submerged cultural resources assessment survey for the entire permit area is required that utilizes currently accepted, professional standards of archaeological survey methodology including the use of sidescan sonar and magnetometer remote sensing techniques as well as other methods appropriate to the project environment as agreed upon between the USACE, VI SHPO, and the agent's archaeologists. It is probable that additional diver investigation may be required in order to assess significant targets identified in the remote sensing survey.

Additionally, a detailed analysis of the reported shipwreck site by a professional underwater archaeologist is required in order for the Corps to continue the Section 106 and Appendix C review. Archaeological testing of this site must define the extent and boundaries of these deposits. The testing must be sufficient to establish the boundaries of the site and to establish the nature and significance of the site with respect to eligibility for inclusion on the National Register of Historic Places.

A subsequent report of the additional permit area survey and site testing must be submitted to the Corps for assessment and review in order for the Corps to make a determination of effects as prescribed in 36 CFR Part 800.5.

**INCOMPLETE:** *The applicant's February 12, 2022, response to the requested information references information that has already been provided to the Corps, and the Corps has already indicated to the applicant this information is insufficient to make a determination of effects as prescribed in 36 CFR Part 800.5. The Corps has had numerous meetings to explain and clarify for the applicant the information that was requested. The most recent was in March 2022, when the Corps met with the applicant's Marine Archeologist (SEARCH) to discuss the survey requirements*



necessary to provide the information for the Corps to continue the Section 106 and Appendix C review. **To date, the Corps has not received any additional information.**

18. Additional comments:

a. Survey and sonar: The applicant continues to assert that side sonar and multibeam sonar were conducted on both Harbor Point and Pen Point reefs, which indicate no corals are present or areas of concern below 2 meters in depth. The submitted Exhibit 11 Critical Habitat Map only provides Pen Point reef. As stated previously, that a comprehensive benthic aquatic survey of both reef areas will confirm the sonar information.

b. With regards to the provided Summer's End Harbor Management Docking and Mooring Plan (HMDMP):

- The management of the marina is stated to include the installation of the channel markers; however, the applicant has submitted application to the USCG only for informational markers to denote shallow areas or resources. Please modify the HMDMP with the updated proposed markers.

**ADDRESSED BUT MAY NOT BE FAVORABLE:** *The applicant's February 12, 2022, response to the requested information stated that the channel markers are not necessary for marina operations and were removed from the proposed project. The public interest factors are a balance between impacts to the environment and the public need. The channel markers to demark the navigational channel are important to public safety and navigation and may have a negative effect to the public interest if not included. The applicant can locate the channel markers in areas to minimize impact once the comprehensive benthic survey has been completed and the location of resources adequately identified.*

- The HDMP states that condemned moorings shall be professionally removed with no impacts. The applicant's response does not provide the necessary assurances that no impacts to existing resources will occur during removal. Please provide a detailed comprehensive plan including methodology with pre and post monitoring surveys.

**INCOMPLETE:** *The applicant's February 12, 2022, response to the requested information states that a detailed removal plan will be provided as part of the updated Compensatory Mitigation Plan.*

- The HDMP states that non-compliant vessels in the harbor are expected to vacate Coral Harbor to places unknown. It is stated that vessels remaining in Coral Harbor will be relocated to an approved, permitted mooring area by USVI DPNR. The applicant states USVI DPNR is the permitting authority and enforcement for moorings and non-compliant vessels outside of the National Park. Is there an agreement/MOU between the applicant and DPNR for the

management of the up to 75 mooring buoys to relocate the existing vessels currently moored in the harbor? Please provide and supporting information.

**INCOMPLETE:** *The applicant's February 12, 2022, response to the requested information states that a detailed removal plan will be provided as part of the updated Compensatory Mitigation Plan once the benthic survey is completed.*

- The Corps evaluation of the impacts to existing resources with the increased ingress and egress of the Harbor are still in question and under review due to incomplete information provided on the existing resources and the unvalidated Modeling Analysis as requested and stated above.

**INCOMPLETE:** *The applicant's February 12, 2022, response to the requested information states that the Benthic Survey Method, Scope of Work (SOW) was submitted for approval. The Corps will need the requested and updated information to complete the evaluation of the impacts and resolution of the issues.*

**Attachment 2: NMFS, PRD's Comments:** The following request for information was provided to the Corps during the initiation of consultation for the proposed project with NMFS. The information requested is needed in order for the Corps to provide a complete initiation package to NMFS to begin Section 7 consultation.

**ADDRESSED BUT NOT ABLE TO DETERMINE IF COMPLETE:** *The Corps has been coordinating with NMFS and the applicant on the Scope of Work for the Benthic Survey for the applicant to proceed with conducting the survey. The applicant's February 12, 2022, provided responses to the below questions, however, the Corps will need all of the above requested and updated information including the results of the benthic survey to reinitiate consultation with NMFS PRD.*

Reference: June 2017 - latest seagrass survey during growing season and Feb 2018 - latest benthic resource survey, side scan not comprehensive, which did not include all resources.

1. According to the plans, there are 12 moorings included in the project, please confirm that there are only 12, as there are 17 moorings stated in the USACE letter on page 7.
2. According to project documents, the applicant will be using a vibratory hammer, however both vibratory and impact hammer are mentioned in USACE letter, please verify which one will be used.
3. USACE modeling experts reviewed a report and sediment transport model provided by the applicant, and the USACE experts did not support the report's conclusions. The USACE recommended improvements to the model, however

we have yet to see an updated version. An interested 3<sup>rd</sup> party provided USACE an alternative report and sediment transport model with significantly different conclusions from those provided by the applicant. The USACE modeling experts should review and validate the alternative report and model, or the USACE should share with us how it intends to evaluate sedimentation impacts from the marina's construction and operation, including the composition, extent and depth of sedimentation resulting from this project. This information is essential for our agency's ESA Sec 7 analysis. In the absence of this information, NMFS will be compelled to use a worst-case scenario to develop the action area for the project and quantify impacts to ESA-listed species. Please provide an updated model that can be validated by USACE experts and that supports any conclusions made.

4. The applicant must avoid and minimize impacts to corals. The access gangway is placed in a location that would impact corals. Please move the gangway to the North in order to avoid sedimentation to the corals from the boats slips and shading from the gangway. An alternative to moving the gangway would be to move the corals. If this is the desired option, the applicant must submit a plan for the transplantation of the corals, to include details on methods and monitoring for 5 years.
5. Information submitted regarding the natural resources within the project area are contradictory and incomplete. NMFS requests an updated, comprehensive benthic resource survey of the project footprint AND the entire action area, which would include all benthic resources at risk from project construction and operation. This survey should be developed in close coordination with NMFS and should include the entire action area, including any areas at risk of impact from sedimentation.
6. There are 1.69 acres according to the applicant and 1.74 acres according to USACE, of direct seagrass impacts for turtle forage and refuge habitat. There are also 5.65 acres according to the applicant and 6.02 acres according to USACE of indirect impacts to seagrasses for turtle forage and refuge habitat due to vessel shading. **REFERRED TO NOAA/NMFS FOR REVIEW**

**REFERRED TO NOAA/NMFS FOR REVIEW**  
Please provide detailed mitigation plans for these resources. Also, **REFERRED TO NOAA/NMFS FOR REVIEW**

**REFERRED TO NOAA/NMFS FOR REVIEW**  
Please re-evaluate the submitted plan with what is currently being completed or recently completed within the Bay.

7. Please confirm that all buoy anchors, both mooring and informational, shall only be installed in sand patches.
8. Grated decking for docks allows light transmission to submerged aquatic vegetation and other resources below. NMFS dock construction guidance requires a minimum of 43% light transmission, along with height requirements of 5 ft above MHW and size restrictions to give the resources a better chance of survival. It is unclear, from the drawings submitted, whether the dock specifications meet the 43% light transmission and height and size requirements. Please clarify. Please also specify the type of material that will be used for dock construction and decking.
9. Please provide the scientific data that supports this statement as being adequate to protect SAV populations from impacts due to marina operations: "The parameters will ensure not to exceed a clear space of less than eighteen inches from the seabed at low tide which will ensure the vessel does not disturb the seabed ecosystem." The seagrasses can grow to heights of 15 inches, 18-inch clearance does not seem to be sufficient.
10. Corals, both ESA-listed and non-listed, are extremely sensitive to turbidity and can only withstand a small increase of turbidity without stressing out the animals. A 3 NTU threshold (USVI mandate) for construction and operation is required in order to avoid additional turbidity and stress to these corals that exist at the mouth of port. Please provide a detailed turbidity/water quality plan that utilizes this threshold for both construction and operation of the marina in order to maintain the health of these corals.
11. Please describe the locations and types of turbidity curtains that will be used during construction, including Penn reef. This can also be a drawing indicating the locations.
12. How long will the applicant fund enforcement dockage and other associated expenses? The applicant is agreeing to cover the enforcement officer's salary for 5 years, what happens after the first five years to officer's salary? How is this continuing enforcement ensured? How will the harbor management plan be enforced? Will this be the enforcement officer's job?
13. How will Summer's End determine if their pollution reduction plans, and relocation of vessels will decrease pollution or just displace it to another part of the bay or St. John? Does the management plan cover the entire Bay or just the marina facility?

14. Will the applicant implement upland construction BMPS to prevent erosion/sedimentation into the bay?
  
15. Will the applicant install navigation buoys to enter Coral Bay in addition to escorting vessels? It seems impractical and improbable that all vessels will be escorted into the marina, so installing navigational buoys as a back up to the escort seems to be a way to protect the reefs.