

## Response to EPA Letter to USACE

### Comment #1

This is in reference to Permit Application No. SAJ-1982-05019 (SP-JCM) by Mr. Rory Calhoun for the proposed construction of a private commercial offshore marina and ancillary facilities at Coral Bay, St. John, U.S. Virgin Islands. The Environmental Protection Agency (EPA) has reviewed the public notice for this project and referenced it to available information regarding environmental resources at Coral Bay, as well as to other commercial marina facilities being proposed for this general area. Based on our review, EPA is very concerned that the proposed project will result in significant impacts to the aquatic resources present at Coral Bay. EPA therefore recommends the denial of a Department of the Army permit for this project. This letter is intended to satisfy the requirements of both Part IV 3(a) and 3(b) of the Section 404(q) MOA between our two agencies.

Sirius Marina believes the EPA would have been able to better evaluate the projects and its potential impacts if they would have accessed the actual Environmental Documents prepared for this Permit application. These documents are readily available and a pdf of the EAR is attached.

Using the public notice as a guide for understanding the actual site conditions shows a woeful lack of scholarship and appropriate level of due diligence performed by the EPA in this matter. Furthermore, using information from older, larger failed projects that have been proposed for the greater Coral Bay area – especially those like the Summer's End project that failed to use appropriate measures of ecological analysis or show any avoidance and minimization of project impacts are clearly not useful for comparison with the current project.

Sirius Marina strongly believe that this smaller, carefully designed project strikes a balance between the environment and the various stakeholders and user groups in the region. The current project carefully vetted a number of alternatives and selected the most environmentally friendly project carefully avoiding and minimizing project impacts wherever practicable. They also believe that this project follows in the spirit of protecting the greater Coral Bay ecosystem and when constructed will result in significant environmental benefits to the Bay. Thus, the project will ultimately have a net positive – not negative – impact to the aquatic resources and biotic habitats present at Coral Bay.

### Comment #2

EPA is very concerned that the described work will result in significant impacts to the aquatic resources present at Coral Bay. Coral Bay is an enclosed harbor surrounded by mangroves. The bay serves as a nursery ground and provides habitat for numerous species. It also contains extensive seagrass beds and submerged aquatic vegetation that provide food and foraging habitat to endangered sea turtles and serve as nursery for commercially valuable fish stocks. Numerous coral species are found in the area, and the bay has been documented as a black tip, lemon and nurse shark nursery area. In addition to the seagrass and mangrove habitats at Coral Bay, numerous coral species are found nearby, including *Acropora palmata*, *Acropora cervicornis*, and *Orbicella annularis*, which are listed as threatened under the Endangered Species Act. Despite these valuable resources in the area, the U.S. Virgin Islands

The above comment is rife with numerous errors that precludes the reader from being able to carefully evaluate the resources present and the potential impacts to those resources.

Firstly, Coral Bay has been mostly denuded of its native mangrove vegetation with more 50% of the current shoreline being devoid of mangrove vegetation. Secondly, while part of the Bay contains seagrass, a majority of the Bay bottom within the footprint of the project is devoid of any

seagrasses or submerged aquatic vegetation. This is directly associated with the poor water quality associated with the upper, northeastern most reaches of the Bay which is highly turbid and highly polluted. Lastly, the coral species listed are not found in the project area or immediately adjacent to the project. The closest coral resources (which are not ESA listed species) to the project area are located on the far side of the Bay some 0.4 miles away. The closest ESA listed coral species are located slightly more than a half mile to the south-southeast of the project area. No impacts to coral resources are anticipated whatsoever, as a result of this project.

#### Comment #3

continued intense use of Coral Bay without a formal management plan has resulted in impacts from improper mooring and anchoring of vessels, plus additional impacts associated with improper waste disposal. In addition, developments on the lands surrounding the bay have increased the levels of pollutants and sedimentation that reach the harbor. EPA believes that the construction of the proposed marina has a significant potential to escalate the environmental impairment of Coral Bay.

Sirius Marina believes that it is precisely because this Bay has been developed without a plan, without proper waste disposal – especially human waste via pump-out facilities, illegal mooring by live-aboard boats that have caused irreparable harm to seagrass resources in the Bay, and finally a lack of proper on-land storm water management program – in tandem these factors have all led to the slow but steady degradation to water quality and concomitant degradation to the aquatic resources in the Bay and vicinity. Sirius Marina's marine consultants can attest that while performing the submerged aquatic vegetation studies in the northernmost portion of Coral Bay that this water was among the most polluted, dirty, foul smelling water that they had ever dived and feel lucky to have escaped these surveys without becoming ill.

On the contrary to EPA's belief, this project when implemented will greatly reduce and not escalate impairment of these resources.

#### Comment #4

Coral Bay was selected as a priority site for a U.S. Coral Reef Task Force Local Action Strategy due to its valuable environmental resources and the significant environmental impacts occurring by human activities in the area. Such designation led to significant investments by the National Oceanic and Atmospheric Administration (NOAA) and EPA in an effort to reduce and reverse environmental impacts at Coral Bay. For example, EPA awarded a Community Action for a Renewed Environment grant to the

As locals to the Coral Bay area, Sirius Marina is a strong supporters of all actions to help restore Coral Bay back to a state much less impaired than it is today. Accordingly, though the project and other community service based missions they stand ready to support all agencies in restoring Coral Bay. A healthier Coral Bay is in everybody's best interest.

#### Comment #5

With respect to seagrass, the applicant has estimated that the installation of pilings and other structures may result in impacts of 1.236 acre of seagrass, including shading impacts. But a comprehensive benthic survey of seagrass for the complete project area is needed. The survey should include the transit routes that would be used by vessels entering or exiting the marina, as well as any other areas of the bay that

These surveys have been performed and were included in the environmental documents prepared for the initial Environmental Impact Assessment for the proposed project and in the Responses to the ACE Letter of March 8, 2016

#### Comment #6

for refuge, foraging and spawning. While EPA defers to the expertise and statutory responsibilities of the U.S. Fish and Wildlife Service and the National Marine Fisheries Service regarding sea turtles and corals, the available information suggests that these threatened/endangered species, as they occur within the project area, are likely to be negatively affected by the construction and operation of the proposed marina. Seagrasses, which are aquatic resources of national importance, may also be substantially affected by the potential degradation of water quality that may occur from the construction and operation of the proposed facilities, the potential for fuel and wastewater spills, the increases in runoff from the associated upland development, and the overall increase of human activity in the area.

As noted above sea turtle and coral resources will not be impacted whatsoever by the construction or operation of this proposed marina facility.

Seagrasses have been avoided to the greatest extent practicable with most of the dock and slips of the marina being placed over areas of barren (mud) bottom. The majority of seagrass resources that will be impacted by the proposed project are those of a highly invasive, exotic seagrass species. This is discussed in great detail in our Environmental Impact assessment. The regulatory agencies with purview of these resources have determined that these exotic species are not to be considered in determining overall project impacts or resulting seagrass mitigation for those impacts that are unavoidable.

Again, Sirius Marina believes that the short term duration and ephemeral nature of project impacts during construction will be greatly outweighed by the project benefits, especially water quality when the project is completed.

#### Comment #7

To compensate for the unavoidable impacts of the project, the applicant proposes to transplant seagrass from the piling installation areas, to plant red mangroves (*Rhizophora mangle*) and to remove trash and derelict, sunken vessels from the sea floor. While these mitigation concepts may adequately compensate for some of the project's impacts, the information available does not adequately quantify the amount of seagrass to be restored, or how much red mangrove habitat would be created within the bay. In addition, detailed plans for the removal of sunken vessels from the bay, and the measures to protect subaquatic vegetation and water quality during the removal process are needed. Given the available information, it

Sirius Marina stands ready to work with – not against -- the permitting agencies in this matter. Accordingly, once they receive conceptual approval of this project they will work aggressively to move from a conceptual mitigation plan to a detailed final mitigation design plan that will then become part of the special conditions of the project permit and one that will be implemented as a requirement of project construction.

Sirius Marina and its support team will coordinate a time to meet with the resource agencies to discuss a final mitigation plan to offset any impacts of the project and they look forward to these discussions. In fact, if EPA's staff has any questions or concerns with any of the details in this matter, Sirius Marina would be more than willing to address them.

#### Comment #8

As EPA has previously stated for other projects proposed in this area, whatever the outcome of this proposed permit, EPA would like to work with the government of the U.S. Virgin Islands, other federal agencies and the interested public, on a strategy to remove all sunken, derelict vessels in Coral Bay and to improve waste management practices in this area. That work should continue, regardless of the outcome of the marina proposals.

Sirius Marina strongly agrees and believes that this project and its proposed mitigation options such as providing pump-out facilities, will help expedite this process.

Comment #9

EPA is also concerned about in-water and shoreline construction measures to control sedimentation and turbidity. The proposed upland components of the project (parking, restaurant, marina offices, and others) would likely involve land clearing, grading and excavation as well as major construction activity within the Coral Bay watershed. These activities may result in contaminated water and sediments reaching Coral Bay, as well as in the development of additional impervious surfaces and increased runoff flows that increase the risk of pollutants entering the water column. According to the information furnished by the applicant, these potential impacts would be minimized and abated through the implementation of a sediment and erosion control and storm water management plans. The project will require a permit under the Territorial Pollutant Discharge Elimination System (TPDES) program administered by VIDPNR for the discharge of storm water runoff from the proposed construction activities. The establishment of sediment controls and the diversion of storm water flows to control water velocity and the transport of sediments will be important factors in reducing the potential impacts from sedimentation in the bay. EPA reiterates the need to prepare a Storm Water Pollution Prevention Plan addressing all storm water and sedimentation issues pursuant to the requirements of the TPDES General Permit. The development and establishment of controls prior to the start of any earth movement activities is highly important, since they are critical to ensure adequate management of storm water erosion and sedimentation.

Sirius Marina is fully aware that it will need to apply for a Storm Water Pollution Prevention Plan (SWPPP) prior to start of any earthwork and we expect this to be a condition of both Permits. A SWPPP will be prepared and submitted after the CZM and ACE Permits are received. The land side of the Marina has a moderate slope with elevations from 14' to sea level. The site slopes south to the bay. Very little storm water enters the site as the Public Road, Route 10, to the north, intercepts all the upland runoff and directs it to the east, by-passing the site. With the Route 10 intercepting upland runoff, storm water runoff will be limited to what falls on the site.

Sirius Marina is aware that the CBCC has developed proposed mitigation measures and preliminary design features to reduce sediment from the Johnny Horn Gut. They have been in contact with the CBCC and will work with them in the final design of the proposed Johnny Horn Gut watershed improvements to reduce sediment runoff. Sirius Marina will work closely with the Moravian Church and adjacent landowners to define and obtain the necessary easements to provide the necessary check dams, sedimentation basins and emergency spillways. It is in our interest to improve the water quality in the Bay.

Comment #10

Given the significant direct and indirect impacts that the proposed project would have on the seagrass beds at Coral Bay, the relative large scale of the project, as well as its potential impacts on water quality and endangered species, EPA believes that the construction of this marina will have a substantial and unacceptable impact on aquatic resources of national importance. This is based on the potential infrastructure needs of the project, its potential for significant water quality degradation, its effects on aquatic resources of national importance (seagrasses and corals), its indirect impacts on endangered/threatened species and the consideration of the values and functions of the special aquatic

Sirius Marina strongly disagree with the conclusions drawn by the EPA in this matter. Failure on their part to understand the actual locations of corals, seagrasses and mangroves relative to the project footprint warrants harsh criticism. This lack of science-based management, and one based on an overall ideology that uses anecdote from previous failed projects does not lend to sound

stewardship of the resources that everyone is working so diligently to preserve, protect and enhance for future generations to use and enjoy.

Sirius Marina also believe that our Responses to the ACE March 8, 2016 letter and changes to the overall Marina design further reduces negative impacts to the Marine Environment.