



UNITED STATES DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office

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February 5, 2015

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Colonel Alan Dodd, Commander
U.S. Army Corps of Engineers, Jacksonville District
PO Box 4970
Jacksonville, Florida 32232

Attention: Johann M. Sasso

Dear Colonel Dodd:

NOAA's National Marine Fisheries Service (NMFS) reviewed public notice SAJ-2004-12518 (SP-JMS) dated January 7, 2015. The applicant, Summer's End Group, LLC, proposes to construct a private commercial marina on the western shore of Coral Bay, St. John, U.S. Virgin Islands (USVI). The marina would have 145 slips of varying size to accommodate vessels up to 200 feet in length, a public dinghy dock, and 87 mooring buoys, of which 12 would service the marina and 75 would be located throughout Coral Bay and managed in partnership with the USVI Department of Planning and Natural Resources (DPNR). The marina construction would require installing 1,333 piles and repairing an existing rip-rap revetment. Additional upland infrastructure is also proposed, including construction of a restaurant, a Customs and Border Protection office, marina offices, parking areas, and amenities. The proposed project also includes a fueling facility, pump-out facility, and a sewage treatment facility for the upland development. As the nation's federal trustee for the conservation and management of marine, estuarine, and anadromous fishery resources, the following comments and recommendations are made pursuant to authorities of the Fish and Wildlife Coordination Act and the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

Essential Fish Habitat Consultation

The Jacksonville District did not provide an initial determination on whether the impacts to approximately 12 acres of sea bottom¹, including approximately 9.12 acres of seagrass designated essential fish habitat (EFH) by the Caribbean Fishery Management Council (CFMC), would result in an adverse impact on EFH or federally managed fishery species. The public notice indicates the U.S. Fish and Wildlife Service (USFWS) will be the lead Federal agency for consultation pursuant to the EFH provisions of the Magnuson-Stevens Act. According to the information provided, a portion of the project would be funded by the FWS Wildlife and Sport Fishing Restoration Program through a Boating Infrastructure Grant to the DPNR Division of Fish and Wildlife. By email dated January 21, 2015, NMFS provided USFWS with the mandatory and additional information requirements of an EFH Assessment from 50 CFR 600.920(e)(3) and (4). Please also note that the EFH conservation recommendation provided in this letter is preliminary and based on the information provided by the Jacksonville District. This EFH conservation recommendation may require augmenting once the EFH Assessment from USFWS is received and reviewed.

Impacts to Aquatic Resources of National Importance

Several fish and invertebrates known to inhabit the project area are aquatic resources of national importance (ARNI) in accordance with Section 906(e)(1) of the Water Resources Development Act of 1986 (PL 99-602), including tarpon (*Megalops atlanticus*) and snook (*Centropomus undecimalis*). These

¹ Additional impacts to seagrass and large coral colonies that would result from marina and mooring installation and vessel shading have not been quantified.



species utilize seagrass or coral habitats for spawning, refuge, foraging, or nursery areas (Randall and Bishop 1967, Aliaume et al. 1997, Kontos and Bologna 2008, Whittall et al. 2014). As proposed, the work would directly and permanently eliminate at least 9.12 acres of seagrass. In accordance with Part IV, Section 3(a) of the Memorandum of Agreement between the Department of Commerce and the Department of the Army, dated August 11, 1992, NMFS has determined that the proposed project may result in substantial and unacceptable impacts to ARNI.

Background on NOAA Partnerships and Investments in Coral Bay

NOAA recognizes land-based sources of pollution (LBSP) as a major threat to coral reefs in general and to the quality and quantity of seagrass and coral habitats within Coral Bay in particular. Studies specific to effects of LBSP in Coral Bay show steep slopes, highly erodible soils, and high runoff volumes, combined with a large percentage of dirt roads, active construction, and no existing stormwater management contribute to excessive sediment loading (Reed 2012). Research on St. John has also shown that unpaved roads can erode at rates many times higher than on undisturbed hillslopes (Ramos-Scharrón and MacDonald 2007). As a result, various NOAA programs, community stakeholders, and the territorial government, have placed much emphasis on stormwater management improvements along roads and associated ghuts in order to improve the quality and quantity of seagrass and coral habitats within Coral Bay.

As an example, NOAA awarded funds (approximately \$1.5 million²) to the Coral Bay Community Council through the American Recovery and Reinvestment Act (ARRA) of 2009 for implementation of best management practices (BMPs) based on watershed stabilization techniques appropriate for the USVI environment. These BMPs focus on targeting sources of sediment (e.g. trail erosion and drainage off unpaved roads). Of the 126 BMPs implemented during the course of this project, 74 actions were implemented in Coral Bay. As a result, over 11 acres of upland habitat benefited from this project. These areas are typically ghuts that now receive more natural-like and less sediment-laden flows (Reed 2012). Completion of this watershed stabilization project also reduced the threat of land-based pollution to Coral Bay habitats including seagrass and coral reefs.

The Local Action Strategy (LAS) developed for Coral Bay has additional strategies for improving the condition of seagrass and coral habitat. In 2002, the United States Coral Reef Task Force, which is co-led by NOAA and USFWS, adopted a resolution which called for the development of LAS by each of the seven U.S. states, territories, or commonwealths with coral reefs. The LAS for Coral Bay was developed by an interdisciplinary team including local stakeholders, academics, non-governmental organizations, and federal and local governments. The goals and objectives in the LAS for Coral Bay range from outreach and education to road and drainage improvements to improve water quality in Coral Bay, and research and monitoring projects to better understand the causes and effects of LBSP to the coral reef ecosystem that includes seagrass habitats.

Description of the Proposed Project

The public notice describes the project as containing six main components:

(1) Construction of 145 marina slips and a dinghy dock:

The over-water footprint of the multi-slip docking structure would be approximately 1.72 acres and occur within two zones. The Zone 1 docks would be approximately 21,100 square feet (0.48 acres), Zone 2 docks would be approximately 40,800 square feet (0.94 acres), and the main access walkway would be approximately 12,900 square feet (0.30 acres). In addition, a public dinghy dock (20 feet by 40 feet)³ would be located midway between the shoreline and the first

² http://docs.lib.noaa.gov/noaa_documents/CoRIS/Watershed_Stabilization_Proj_Hansen_Bay.pdf

³ The dimensions of the dinghy dock are also described in the public notice as 210 square feet. Clarification on the size of this structure is needed.

slip at the marina. The marina would be primarily constructed from the waterside using barge-mounted equipment to drive the dock piles with a vibratory hammer, where possible, and place manufactured deck sections. Dock construction would consist primarily of 15-inch coated-steel piles tied together with pre-cast concrete pile caps supporting a grated decking intended to allow as much light as practicable to reach the seabed.

(2) Mooring field installation (87 moorings):

The marina would include 12 permanent mooring balls. In addition, as an attempt to provide a long-term comprehensive mooring program for Coral Bay, another 75 mooring balls would be installed through a public-private partnership with the DPNR. The 12-inch or 15-inch diameter mooring balls would utilize helix anchoring systems with floated lines. The installation of the anchors would be done with barge-mounted equipment.

(3) Riprap revetment:

Minor repair and replacement of the existing revetment along the shoreline would be conducted from the uplands, and planting of fringing red mangroves in front of the revetment would be done by hand.

(4) Wastewater management and fuel services:

Wastewater generated from the pump-out system, with a publicly accessible pump-out located on the fuel dock and individual connections at the larger boat slips, would be pumped to a 3,000-gallon high-density polyethylene holding tank on the uplands. A local licensed waste hauler would be contracted to empty this tank on an as-needed basis and haul the waste to a permitted wastewater treatment facility for treatment and reuse/disposal. In addition, in-slip fueling would be installed to provide for high-speed fueling, which would be serviced by upland above-ground fuel storage tanks with projected capacities of 45,000 gallons of diesel and 5,000 gallons of gasoline. Refilling the fuel tanks would normally occur via barge.

(5) Upland construction of facilities:

The marina would be developed concurrently with an upland re-development project on seven generally contiguous parcels in Estate Carolina in Coral Bay. This upland re-development project will provide services for the marina, including off-street parking, a restaurant, a Customs and Border Protection office, and a marina office with other facilities such as apartments to support marina management. Additional facilities for fueling, solid waste disposal, potable water supply and pump-out services for both the marina occupants and the public boating community would be constructed within uplands. No boat maintenance facilities would be associated with this upland re-development.

(6) Compensatory mitigation:

A variety of activities described in the public notice and environmental assessment report (EAR) are meant to provide compensatory mitigation for unavoidable impacts to seagrass and corals habitats in Coral Bay. These activities include removal and disposal of derelict vessels and debris from within the marina footprint and mangrove planting along the eroding shoreline immediately adjacent to the marina as a means of habitat enhancement.

Essential Fish Habitat within the Project Area

NMFS visited the project site in September 2014, and the habitat observations from the site visit are similar to the habitat descriptions in the EAR. Coral Bay is surrounded by dense mangroves, primarily composed of red mangroves (*Rhizophora mangle*). The Coral Bay bottom contains a mosaic of sandy bottom, live/hardbottom with coral, seagrass, and macroalgae beds. The seagrass beds are primarily composed of turtle grass (*Thalassia testudinum*) and manatee grass (*Syringodium filiforme*); however,

small patches of shoal grass (*Halodule beaudettei*) are also present. There are six relatively large smooth star corals (*Solenastrea bournoni*) and several small lesser starlet corals (*Siderastrea radians*) in the project site and offshore of the northernmost culvert within the project footprint. The EAR states there are no wetlands on the subject property beyond the mangrove fringed shoreline.

The CFMC identifies seagrass, algal flats, live/hardbottom, and sandy bottoms as EFH under the fishery management plans for spiny lobster, queen conch, coral, and reef fish. These habitats serve as nursery areas for fishery species. Seagrass, algal flats, sandy bottoms, and live/hardbottoms are part of a habitat complex that includes mangrove and coral, and this complex supports a diverse community of fish and invertebrates. Seagrass also provides important water quality maintenance functions (such as pollution uptake), stabilizes sediments, attenuates wave action, and produces and exports detritus (decaying organic material), which is an important component of marine and estuarine food chains. Additional information about these EFH designations and how these habitats support fishery species is found in *Essential Fish Habitat (EFH) Generic Amendment to the Fishery Management Plans (FMPs) of the U.S. Caribbean*⁴.

Impacts to Essential Fish Habitat

The information supplied in the public notice and EAR is limited to describing adverse impacts that would result from construction of the multi-slip marina and dinghy dock (project component 1). The EAR and public notice state the project may impact approximately 12 acres of Coral Bay bottom, including 9.12 acres of seagrass. However, it is unclear if this impact estimate only includes dock construction and shading, or if it also includes impacts that would result from in-water construction activities, including pile driving, vessel anchoring, or spudding. The impacts that would result from anchoring the mooring balls (project component 2) are not described. Impacts to seagrass and corals could occur from long-term shading effects from moored vessels and from scoring by mooring chains and vessel propwash. In addition, the stormwater run-off and associated sedimentation that may result from the upland construction (project component 5) are not well-described in the EAR or public notice. This project component should include a description of adverse impacts to seagrass and coral habitat in Coral Bay that could result from introduction of additional impervious surfaces for parking and subsequent greater runoff flows, and the potential for introduction of oils and greases into the water column.

NMFS does not expect adverse impacts to occur to mangroves from the repairs to the riprap revetment (project component 3). Regarding wastewater management and fuel services (project component 4), NMFS generally defers to expertise at the DPNR Division of Environmental Protection. The EAR states a subcontractor would be responsible for managing the fuel tanks and obtaining a DPNR Division of Environmental Protection operational license. The EAR states a *Marine Spill Prevention Control and Countermeasure (SPCC)* plan would be further developed to include the specific requirements of this permit, if awarded.

Project Alternatives

NMFS determines the alternatives analysis is overly narrow. Specifically, the analysis only considers alternative project sites and full build out and does not adequately analyze the environmental impacts of each alternative. NMFS determines information is lacking to support the applicant's conclusions that significant efforts have been made to eliminate and reduce potential environmental impacts. It is our understanding that the USFWS is preparing an Environmental Assessment or Environmental Impact Statement pursuant to the National Environmental Policy Act, and NMFS expects that document to present the environmental impacts to seagrass and corals in a comparative form and provide a clear basis for choice by decision makers. NMFS recommends less damaging alternatives be fully evaluated in the analysis.

⁴ Available at caribbeanfmc.com/fmp_efh.html.

Compensatory Mitigation

The applicant proposes several actions to compensate for impacts to seagrass. NMFS generally supports the proposed concept of removal and disposal of debris and derelict vessels from the marina footprint, as well as the red mangrove planting along the eroding shoreline adjacent to the marina. However, the seagrass habitat restored by these actions is not quantified. Therefore, NMFS does not have sufficient information to determine the proposed mitigation actions would sufficiently offset the impacts to at least 9.12 acres of seagrass. NMFS acknowledges the applicant has proposed other mitigation activities, including establishing a Marine Uses Advisory Panel, establishing a marketplace for local fishers and farmers, and installing informational buoys and signage aimed at protecting coral and seagrass. NMFS cannot accept these activities as mitigation for lost seagrass habitat.

EFH Conservation Recommendation

In addition to the impacts to ARNI, NMFS concludes the docking structure construction, mooring facility, and upland development will adversely impact EFH. Section 305(b)(4)(A) of the Magnuson-Stevens Act requires NMFS to provide EFH conservation recommendations when an activity is expected to adversely impact EFH.

The Department of the Army shall not authorize the project as proposed.

NMFS may revise this recommendation upon review of:

- A complete impact assessment that quantifies all potential direct and indirect impacts to corals and seagrass, including work vessel spudding areas, shading by barges during construction, fuel barge operations, deck shading long-term, and mooring placement and potential impacts due to vessel shading in mooring field. The information provided should include a map clearly depicting and quantifying impacts by location and habitat type.
- Description of on-site and off-site project alternatives that demonstrate avoidance and minimization of impacts to corals and seagrass to the maximum extent practicable.
- A biological monitoring plan that gauges actual impacts relative to those predicted in the impact assessment and triggers additional compensatory mitigation when appropriate. The plan should include pre-construction, during construction, and post-construction water quality monitoring. In addition, the plan should include examination of long-term on-site stormwater management measures to reduce runoff created by the impervious surface constructed for the parking area.
- A spill contingency plan that includes precautionary measures, emergency actions should a spill occur, and spill reporting criteria. The plan also should demonstrate a tiered approach for minor versus major spills.
- An amended compensatory mitigation plan that describes how unavoidable impacts to seagrass and corals would be fully offset. The plan shall include a description of mitigation activities and the mitigation site(s), expected results from the mitigation, and a monitoring plan with schedule that will gauge how the performance criteria will be met. In this regard, NMFS would support the relocation of all corals (including corals smaller than 10 centimeters), which would eliminate the need for compensatory mitigation for corals. The mitigation plan shall demonstrate that the amount of seagrass and coral mitigation is sufficient through a functional assessment or appropriate analytical tool.
- A list of BMPs that will be implemented during construction and operation of the upland infrastructure, docking facility, and mooring field to ensure that impacts to coral and seagrass habitats are minimized to the maximum extent practicable.

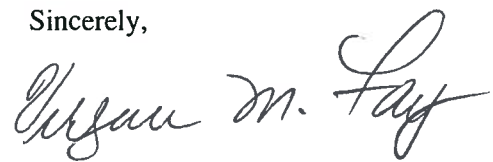
Section 305(b)(4)(B) of the Magnuson-Stevens Act and implementing regulation at 50 CFR Section 600.920(k) require the Jacksonville District to provide a written response to this letter within 30 days of its receipt. If it is not possible to provide a substantive response within 30 days, in accordance with

NMFS's "findings" with the Jacksonville District, an interim response should be provided to NMFS. A detailed response then must be provided prior to final approval of the action. The detailed response must include a description of measures proposed by the Jacksonville District to avoid, mitigate, or offset the adverse impacts of the activity. If your response is inconsistent with our EFH conservation recommendation, the Jacksonville District must provide a substantive discussion justifying the reasons for not following the recommendation.

The public notice or EAR also state that elkhorn coral (*Acropora palmata*) and boulder star coral (*Orbicella annularis*) have been identified within the vicinity of the project area. In addition, hawksbill sea turtles (*Eretmochelys imbricate*) have been observed in Coral Bay. Species protected under the Endangered Species Act and under the jurisdiction of NMFS may occur in the vicinity of the docking and mooring facility. Impacts to endangered or threatened species and their critical habitat may require consultation with the NMFS Protected Resources Division. Further questions about consultations under the Endangered Species Act should be directed to Dr. Lisamarie Carrubba at Lisamarie.Carrubba@noaa.gov.

Thank you for the opportunity to provide these comments. Related questions or comments should be directed to the attention of Ms. Lia A. Ortiz at NOAA HCD, 3013 Estate Golden Rock, Almeric Christian Federal Building Box 4, Christiansted, St. Croix, U.S. Virgin Islands. She may be reached by telephone at 340-718-1236 or 305-213-3089, or by e-mail at Lia.Ortiz@noaa.gov.

Sincerely,



Virginia M. Fay
Assistant Regional Administrator
Habitat Conservation Division

cc: (sent via electronic mail)

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