

To: Jose Cedeño-Maldonado, District Engineer, US Army Corps of Engineers

From: David Silverman

cc: Kelly Finch, US Army Corps of Engineers

Sharon Coldren, Coral Bay Community Council

Robert Fox, Manko-Gold

Mark Chertok, Sive, Paget & Riesel

Subj: **Additional Information Requested in Public Comments**

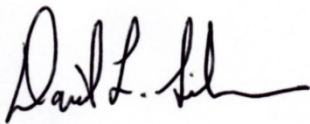
Dear Mr. Cedeño,

Thank you, again, for your visit to Coral Bay on October 3, 2015. You suggested that it would be useful for us to summarize the public comments and provide them to you to assist in your drafting the request for additional information from the applicant. Consistent with your suggestion, we have compiled the most salient comments and questions of the public, the Friends of the Park, the Coral Bay Yacht Club, and the Coral Bay Community Council into a concise list of questions and requests for additional information.

We have also reviewed the template which you provided for a Corps Environmental Assessment and have coded each of the public concerns and questions to a specific topic in the template. For completeness we have included in the table the studies and information requests identified by five federal agencies (EPA, USFWS, NMFS, NOAA HCD, and NPS). The requested information must be provided by the applicant.

We are still strongly of the opinion, for all of the reasons cited in our comments of August 25, 2015, that the applicant's permit application should be denied by the Corps. Barring denial, a complete Environmental Impact Statement, as also requested by the EPA and the NPS and thousands of public letters, is, in our opinion, the correct approach to evaluating the extensive adverse impacts on the human environment.

Sincerely,

A handwritten signature in black ink, appearing to read "David L. Silverman". The signature is fluid and cursive, with a long horizontal stroke at the end.

David Silverman

13 Oct 2015

In order to provide some organization to these questions, concerns, and requests for additional studies, we have referenced the Corps regulations, specifically 33 CFR 320.4 – “General policies for evaluating permit applications” which is included (in part) in the Public Notice. The notice states:

*“EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including cumulative impacts thereof; among these are **conservation, economics, aesthetics, general environmental concerns, wetlands, historical properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food, and fiber production, mineral needs, considerations of property ownership, and in general, the needs and welfare of the people.** Evaluation of the impact of the activity on the public interest will also include application of the guidelines promulgated by the Administrator, EPA, under authority of Section 404(b) of the Clean Water Act of the criteria established under authority of Section 102(a) of the Marine Protection Research and Sanctuaries Act of 1972. A permit will be granted unless its issuance is found to be contrary to the public interest.”*

	Additional Information and/or Answers Required from the Applicant to Complete the Environmental Assessment	Source for Request	EA Section
Issues related to Conservation			
1	Marine mammals are regularly found in Coral Bay harbor. Dolphins are frequent visitors (a video and still photograph has been provided), and migratory humpback whales are seen almost every year just outside the harbor. The acoustic impacts of the pile driving, and the impacts of marine traffic and water quality on marine mammals needs to be studied and quantified.	Public Comments, CBCC Comments	7.0(a)
2	Protected Resources: The extensive concerns of the public relating to marine turtles, corals, and other protected resources, including sea grass meadows, are all included in the comments of NOAA, NMFS and USFWS, below.	Public Comments, Agency Letters	7.0(a)
3	Virgin Islands National Park and Coral Reef National Monument: The concerns and extensive issues raised by the public concerning impacts to park resources are all included in the comments of the National Park Service, below.	Public Comments, NPS	7.0(a)
4	Impacts to an Aquatic Resource of National Importance: The impacts to habitat, species and water quality in an ARNI have not been justified, particularly concerning given the practical alternative locations available for a marina on St John.	Public Comments, CBCC Comments	7.0(a)
Issues related to Economics			
5	Economic Viability: What is the estimated time and cost to construct the marina, with sufficient detail to independently analyze the	Public Letters, Expert	7.0(b)

	estimate and assess the risks. What are the operating costs (including Trust Land Lease, insurance, utilities, maintenance, debt service, staff)?	Opinion	
6	Economic Viability: Given the costs identified in (5), what fees will be charged for slip rental in order to ensure an adequate return on investment and does this demonstrate economic viability for the marina?	Public Letters	7.0(b)
7	Water Dependent Use: Is the water dependent use (the offshore marina) economically viable? Indications are that the marina cannot be economically sustainable due to the lack of demand, the remote location, and the short season. The land project (shops, restaurant, crew quarters) is not water dependent.	Public Letters	7.0(b)
8	Project Need: The applicant has not demonstrated a market need for a marina located in Coral Bay. A detailed marketing analysis based upon current data is required to demonstrate that a marina in this location would be sufficiently attractive to yacht owners to cause them to utilize this facility. An analysis of the relative market attractiveness of this location with other locations on St John, including Enighed Pond and Cruz Bay Creek is also required.	Public Letters, Expert Opinion	7.0(b)
9	Net Economic Impact to Coral Bay and St John: What is the projected net economic impact to Coral Bay (and St John), including any positive contribution from the marina construction and operation, plus the economic impact on the existing Coral Bay economy (either positive or, as public comments have stated, very negative). Sufficient detail to analyze these estimates is required.	Public Letters, CBCC Comments	7.0(b)
10	Economic Impact: The construction and operation of the marina will adversely impact the appeal of Coral Bay as an ecotourism destination. How is this factored into the economic model? What market research on the existing tourism economy of Coral Bay has been done and where is that data and what are the results of that research?	Public Letters, CBCC Comments	7.0(b)
11	Impact on Real Estate Values and Taxes: Will the construction and operation of the marina increase, decrease, or have no effect on property values in Coral Bay? Will the construction and operation of the marina tend to increase, decrease or have no effect on real estate taxes? Where is the data and detailed real estate analysis supporting conclusions on this subject?	Public Letters, Realtor Letters	7.0(b)
12	Funding: What evidence does the Summer's End Group, LLC, have to demonstrate the availability of sufficient funding to complete this project? There is a history of large projects that were begun on St John and never completed due to lack of sufficient funding. What assurance does the community have that this will not happen in Coral Bay resulting in permanent damage to the public harbor.	Public Letters	7.0(b)
13	Construction Experience: What experience does the Summer's End Group, LLC (or its principals) have in marina construction? What experience does the Summer's End Group, LLC (or its principals) have in large scale commercial construction of any type?	Public Letters	7.0(b)
Issues related to Aesthetics			

14	Aesthetic Impacts: Substantial documentation has been supplied to demonstrate how this project would fundamentally, and adversely, change the aesthetics of Coral Bay. The historic character, the historic usage of the waters, the viewshed over historic properties, would all be dramatically transformed. No evidence has been supplied to indicate that this change either would not happen, or would not be deleterious to the aesthetics of Coral Bay. Market research based on social, cultural and historic values needs to be provided to assess the impact to aesthetic values.	Public Comments, CBCC Comments	7.0(c)
Issues related to General Environmental Concerns			
15	Construction / Substrate Analysis – Has any analysis been done of the substrate in the location of the proposed pilings? The applicant indicates use of a vibratory pile driver "where possible." Has the extent of vibratory driving versus impact driving been quantified? Without this information (depth, method of driving, substrate) how can the construction time be accurately estimated? If "blue bitch" (extremely hard basaltic rock) is encountered, how will this impact construction?	Public Letters	7.0(d)
16	Acoustic Impacts on the Human Environment: Has the applicant assessed the acoustic impacts on the human environment from pile driving during the construction phase? Residents and tourists value Coral Bay for its quiet atmosphere (this is frequently cited in comment letters). How will the reverberation of the acoustic impacts during potentially several years of construction impact the environment, the health and well being, and overall quality of life for residents and visitors to Coral Bay ?	Public Letters	7.0(d)
17	Light Pollution: What levels of light will be emitted by boats at the marina, and by lighting on the marina structures? What impacts will this have on fish, marine turtles, birds, and other flora and fauna in the region ? Quantification of night lighting and scientific data on its impact in similar habitats is required.	Public Letters, Expert Opinion	7.0(d)
18	Sound Pollution: What level of sound will be generated by yachts in the marina through operation of their generators, air conditioners, and other utilities? During what hours will these sounds be generated? What impacts will this have on residential units in Coral Bay? Have sound transport studies been done in the Coral Bay environment to measure the impact of ambient sounds emanating from the marina on residents of the area? Where is the data and analytical results of all of these environmental studies?	Public Letters	7.0(d)
19	Air Quality – Diesel Generators: What is the quantity of diesel generator exhaust that will be created by electric generators operating on yachts while in the marina? What are the air quality standards applicable to these exhaust fumes and how will air quality be monitored to ensure compliance with these standards? What studies have been done to ascertain the public health issues associated with this exhaust under the geographic conditions of Coral Bay?	Public Letters	7.0(d)
20	Cumulative Impacts / Sediments: Given the extensive sediments that	Public Letters,	7.0(d)

	have been deposited in Coral Bay harbor and the considerable federal and local investment to remediate the land-based sources of these sediments, the proposed marina will cause vast amounts of sediment to be released due to die-off of sea grasses (which retain the sediments in their root systems). The potential for release of large quantities of sediment needs to be scientifically analyzed in the context of recent history of the harbor. The potential for the marina to destroy the positive impacts of federal investments in watershed improvements needs to be studied.	CBCC Comments, Expert Opinion	
Issues related to Wetlands			
21	Incorrect Computation of Sea Grass Impact: The estimates of sea grass acreage impacted by construction and operation of the marina do not agree with independent estimates. Most comments suggest that as much as 20-30 acres of sea grass could be lost through a combination of construction, shading, and sediment release. An accurate scientifically based estimate of the impact to sea grass and other special aquatic sites must be created and the data presented in a format suitable for independent review.	CBCC Opinion	7.0(e)
22	Lack of Compensatory Mitigation: The applicant has provided no mitigation to compensate for the loss of aquatic function from the destruction of 20-30 acres of sea grass and Essential Fish Habitat. The loss of these resources, which are critical for the health and vitality of Coral Bay, must be mitigated so that there is no net loss of aquatic function. Please explain how this will be done.	Public Comments, CBCC Comments	7.0(e)
Issues related to Historical Properties			
23	Impacts on Historic Viewshed: The view of multiple listed properties will be partially or wholly obscured by the proposed marina (Fortsberg, Emmaus Church, Usher Quay).	Public Comments, CBCC Comments	7.0(f)
24	Historic Marine Archeology: A comprehensive survey of the seabed for historic wrecks over the entire marina footprint has not been conducted. The construction of the marina will forever preclude the use of magnetometry due to the large number of steel pilings. A complete survey of at least the entire marina site (28 acres) must be conducted.	Public Comments, CBCC Comments	7.0(f)
Issues related to Fish and Wildlife Values			
25	Water Transport and Current Studies: A thorough analysis of water transport in Coral Bay harbor is needed in order to ascertain the impact of the marina on the water transport patterns. Surface transport by wind and wave action, tidal transport, eddy currents, and all other modes of water exchange (both longitudinally as well as vertically) must be documented during a typical twelve month cycle, as well as during extreme weather events. The interaction and impact of the marina on existing water transport patterns needs to be scientifically analyzed so that its impact on fish, wildlife, protected resources, and adjacent water bodies can be understood.	Public Comments, CBCC Comments	7.0(g)
26	Water Transport Studies / Mangroves: The mangroves directly to the	Public	7.0(g)

	northwest of the proposed marina are a nursery for many marine species. The interaction of the marina structures with the water flushing of these mangroves need to be evaluated, particularly since the fuel dock is directly upstream of these mangroves. The marina pilings substantially reduce the reach of this portion of the harbor, and the impact of this reduced reach on species needs to be studied.	Comments, Expert Opinion	
27	Water Transport Studies / Hurricane Hole: There has been no data provided to demonstrate the extent of water exchange between Coral Bay harbor and Hurricane Hole. Boats waiting to enter the marina may be positioned in a location from which water may flow directly into Hurricane Hole. Waters of Coral Bay may be flushed out of the inner harbor, around Fortsberg, and into Hurricane Hole. Scientific study over an annual cycle of winds, tides, and waves needs to be performed to demonstrate the potential impacts to Hurricane Hole resources from pollutants entering Coral Bay harbor.	Public Comments, CBCC Comments	7.0(g)
28	Water Transport Studies / Peak Storm Surge Events: During a tropical storm, the storm surge at the northern end of Coral Bay could transport water into the salt pond and potentially across the Usher Cay peninsula into Hurricane Hole. If this water is contaminated from marina toxic substances, the impact to Hurricane Hole could be substantial. The potential for contamination of Hurricane Hole during peak storm surge events needs to be scientifically analyzed.	Public Comments, CBCC Comments	7.0(g)
29	Impacts to Shark Habitat: The site is a known pupping ground for Black Tip, Lemon, and Nurse shark. What impact would the marina structures, boat traffic, and adverse water quality have on this shark habitat? How would this impact be mitigated?	CBCC Comments, Expert Opinion	7.0(g)
Issues related to Flood Hazards and Floodplain Values			
30	Floodplain Analysis: The site is designated VE14 according to FEMA flood plain maps. Please explain what damage the marina, boats docked at it, and the upland facilities would incur if the maximum expected impacts in a VE14 zone were to impact the site.	CBCC Comments	7.0(h)
31	Above Ground Fuel Storage: Fuel storage tanks in a VE14 hazard zone present risks that have not been analyzed or reported. The risk of above ground fuel storage in this zone needs to be scientifically evaluated to ensure that it does not create a public or environmental safety hazard.	CBCC Comments	7.0(h)
Issues related to Land Use			
32	Land Use Concerns: Large numbers of Coral Bay home owners have said that the marina construction and operation will significantly destroy the value of their personal investments in their home, vacation rental property, and/or land. How can the proponents justify impairing the value of 500 owner occupied and rental properties and how will they propose to mitigate this economic impact?	Public Letters	7.0(j)
Issues related to Navigation			
33	Size / Draft of Vessels: Has any study been performed to ascertain the maximum draft of power yachts that will be able to utilize the marina? Many yachtsmen and captains have stated that 200' mega yachts will	Public Letters	7.0(k)

	scour the bottom with propeller wash and cannot possibly navigate safely in the shallow waters of Coral Bay harbor. What evidence is there that the marina can safely accommodate the size of vessels described in their application?		
34	Vessel Traffic Studies: Although the applicant supplied a land traffic study (primarily for automobiles), there was no marine traffic study supplied. What analysis has been done to demonstrate that the size and number of boats proposed for the facility will be able to safely navigate in the proposed configuration, without danger to themselves, to the marina, or to other boats? This applies to marine daytime traffic, nighttime traffic, and navigation under adverse wind and wave conditions.	Public Letters	7.0(k)
35	Marina Location: Many residents of Coral Bay have commented that the location proposed for the marina is the worst, most dangerous location in Coral Bay harbor for a marina. It is the location where boats are wrecked on the shoreline during virtually every major storm. How can the applicant justify construction of the marina in a known hazardous location without protection from the open ocean?	Public Letters, Expert Opinion	7.0(k)
36	Wind and Wave Data: We believe that the applicants may not have used the correct data sets for their wind and wave analysis, and in any case their conclusions about site conditions do not comport with extensive local knowledge. Please refer to our comment letters on this subject and provide sufficient data so that the wind and wave conditions at the proposed site can be correlated with actual experience.	Public Letters	7.0(k)
37	Hurricane Preparedness: The facilities for safe anchorage in Hurricane Hole are fully subscribed. How will up to an additional 145 boats find safe anchorage in the case of a major weather event. Although it is unlikely that tropical storms will occur during prime yachting season, there may be a number of boats berthed at the marina on a year-round basis. What is the projected occupancy of the marina, by number and size of vessel, by month, and how will they find safety in the event of a storm?	Public Letters	7.0(k)
38	Dock Design / Slip Orientation: Roughly 2/3 of the marina slips are oriented broadside to the prevailing calm weather waves. All slips are double-wide. These features mean that the marina will be uncomfortable and unsafe ever during calm weather conditions. How does the applicant justify this design?	Public Letters, Expert Opinion	7.0(k)
Issues related to Shoreline Erosion and Accretion			
38	The applicant proposes to plant mangroves on a portion of eroded shoreline, currently protected by a rip-rap revetment. Mangroves are not currently growing in this location due to the wind and wave exposure. How will this eroded shoreline be protected?	Public Letters, CBCC Comments	7.0(l)
Issues related to Recreation			
39	The marina is opposed by the Kids and the Sea (KATS) program, by the Coral Bay Yacht Club, and by the St John Yacht Club. Each of these organizations has stated that the marina would make it difficult or	Public Letters, Organization Letters	7.0(m)

	impossible for their members to continue to enjoy use of the harbor as they do today.		
40	Vast numbers of tourists have said that if the marina were built they would no longer visit Coral Bay or St John – they would choose to enjoy their vacations elsewhere. The existing visitors to the island are not requesting a mega marina, and the negative impacts to recreational values are severe. How does the applicant justify these impacts to recreational values?		7.0(m)
Issues related to Water Supply and Conservation			
41	Potable Water: What volume of potable water will need to be trucked in on a weekly basis during peak periods of marina use? What is the profile (by month) of water usage that will need to be trucked in? Please supply details including water for consumption, for bathrooms, for boat washing, for laundry, etc. sufficient for independent analysis.	Public Letters, CBCC Comments	7.0(n)
42	Waste Water: How will the effluent from waste water treatment facilities be dispersed? Analysis indicates that there is insufficient vegetation on the small upland site to accommodate the volume of waste water. Has the applicant considered recirculating waste water for use in toilet flushing? What assurances are there that waste water effluent will not result in water quality impacts in the harbor?	CBCC Comments	7.0(n)
Issues related to Water Quality			
43	Marine Toxic Effluents from Yachts: Numerous yachtsmen as well as Marine Engineers and Captains have written letters detailing the types of toxic chemicals leached or directly discharged into the water by large yachts. This includes toxic ablative bottom paints (including TBT which is available in neighboring islands), bleaches, detergents, paint residues, other cleaning compounds, etc.. Has the applicant quantified the release of these pollutants from the boats utilizing the marina and analyzed their impact on the flora and fauna and protected resources of the harbor?	CBCC Comments, Public Letters	7.0(o)
44	Water Quality Impacts from Construction of Piling Field: The extensive piling field (1333 pilings supporting a structure covering 1.7 acres) will directly and adversely impact water quality both during construction as well as throughout its operational life. During construction the sediment released from the bottom will create sediment plumes that will smother surrounding sea grasses and other benthic organisms. The applicant has supplied no information on the type of sediment curtains to be employed, their efficacy under typical Coral Bay conditions, their interaction with marine life, their ability to restrain sediment spread while they are moved, or any other aspect of construction sediment management, nor has the applicant supplied scientific data on the composition of Coral Bay sediments in the location of the marina.	Public Letters, Expert Opinion	7.0(o)
45	Water Quality Impacts from Presence of Piling Field: The extensive piling field (1333 pilings supporting a structure covering 1.7 acres) will create increased sedimentation, reduced water circulation and increased holding time for toxic pollutants in the water column	Public Letters, Expert Opinion	7.0(o)

	throughout its operational life. These factors individually and cumulatively will caused degraded water quality. The applicant has not provided any scientific information or data on the impact of the piling field on water quality.		
46	Piling Field Impacts on Reach and Aquatic Function: The extensive piling field, traversing half of Coral Bay harbor and directly perpendicular to the main surface water flows, will have the effect of reducing the reach of the entire northwest portion of the harbor, where some of the densest mangroves are found. The mooring field will cause die-off of sea grasses and adversely impact the aquatic function performed by the benthic flora. For these and other reasons the piling field is clearly subject to 404 permitting under 33 CFR 323.3(c)(1): "Placement of pilings in waters of the United States constitutes a discharge of fill material and requires a section 404 permit when such placement has or would have the effect of a discharge of fill material. Examples of such activities that have the effect of a discharge of fill material include, but are not limited to, the following: Projects where the pilings are so closely spaced that sedimentation rates would be increased; projects in which the pilings themselves effectively would replace the bottom of a waterbody; projects involving the placement of pilings that would reduce the reach or impair the flow or circulation of waters of the United States; and projects involving the placement of pilings which would result in the adverse alteration or elimination of aquatic functions."	Public Letters, CBCC Comments	7.0(o)
Issues related to Energy Needs			
47	Public Electric Power: The applicant has estimated a demand for 1.5MW of power, which is approximately 1/3 of the total power available in Coral Bay. There is no mention of use of solar power in spite of the fact that this is a priority for the USVI. A thorough evaluation of energy needs and the ability to satisfy them through sustainable means should be conducted.	Public Letters	7.0(p)
Issues related to Safety			
48	Public Safety / Storm Wreckage: How will road access to south side Coral Bay be maintained if a hurricane deposits boats and marina debris on the sole access road? How long will this take and how will emergency services access this region while the road is blocked ? How will water access to Coral Bay be restored if the marina is wrecked in a major storm ?	Public Letters	7.0(q)
49	Public Safety / Fire: What evidence is there that the proposed fire suppression methodology is adequate (golf cart with hose)? How much water and other retardants will be available for fire suppression? How will toxic smoke be managed and how will evacuation of the surrounding homes be managed in the case of a major conflagration? How will water quality in the harbor be monitored and remediated, if necessary, following a marina fire?	Public Letters	7.0(q)
50	Public Safety / Crime – Residents have stated that in other locations in the Virgin Islands marinas have been associated with an increase in	Public Letters	7.0(q)

	crime rate. Has this been analyzed and what is proposed in the way of public safety and police presence (if necessary) to manage this? If additional police presence is required, has the VIPD agreed to the required staffing levels?		
Issues related to Considerations of Property Ownership			
51	Rights of Landowners: How will the rights of other shoreline property owners be preserved? How will their rights to utilize the waters in front of their property be respected? Have adjacent land owners on Coral Bay harbor agreed that the proposed footprint does not impair their littoral rights? What justification in law or public policy is there to allow an entity who controls 15% of the shoreline to control 40% of the harbor?		7.0(t)
52	Lack of Property Ownership, Control, or Authorization: The applicant does not own any of the property associated with the project. The applicant has not supplied any evidence of control of the property, and the only evidence of authority to apply for permits has expired. Some of the property has been listed on the open market. If the applicant does not control, and can provide no evidence that they will control the property, then how can they have standing to apply for a permit?	CBCC Comments	7.0(t)
Issues related to the Needs and Welfare of the People			
53	The project is clearly not responsive to the needs of the people of Coral Bay (see petition, thousands of letters, business owners); the project does not address the welfare of the people of Coral Bay (adverse economic impacts, sound, light, air pollution); the project would significantly affect the quality of the human environment. Conversely the applicant has only demonstrated extremely limited support for the project, primarily from early investors. How does the applicant justify proceeding given the extraordinary level of public opposition from all segments of Coral Bay and St John?	Public Comments	7.0(u)
Issues raised by the United States Environmental Protection Agency			
54	Comprehensive benthic survey of the complete project area, including the transit routes that would be used by vessels entering or exiting the marina and any other areas of the bay that would be affected by the proposed upland elements of the project, is needed in order to properly quantify all potential impacts on these aquatic resources of national importance.	EPA Letter	
55	A comprehensive mitigation plan that includes the methodology to be used to compensate for all unavoidable impacts to sea grass and corals, an estimate of the area to be restored as compensation, and proposed performance measures to ensure that unavoidable impacts are ultimately mitigated.	EPA Letter	
56	Benchmark of water quality data and monitoring plan	EPA Letter	
57	An in-depth evaluation of the proposed watershed management measures to determine their compatibility with existing management programs and initiatives in the area and the benefits to be derived.	EPA Letter	
58	Detailed plans for the removal of sunken vessels from the bay, and the	EPA Letter	

	measures to protect subaquatic vegetation and water quality during the removal process are needed.		
59	A description of in-water and shoreline construction measures to control sedimentation and turbidity.	EPA Letter	
60	The applicant should layout plans for waste reduction, composting and recycling, and provide descriptions of the processes, the procedures to be followed, and the estimated reduction of solid wastes that would result from such strategies. This information should be incorporated into the solid waste management plan for the proposed development.	EPA Letter	
61	The applicant should provide information regarding the estimated wastewater volume that may be generated by all facilities (boats and upland facilities), whether additional holding tanks might be required, the estimated frequency of wastewater hauling and the capacity of the proposed treatment facility at Cruz Bay. EPA is concerned that the treatment facility targeted to receive wastewater from the project could exceed its capacity as a result of the increased loads, resulting in additional impacts to water quality elsewhere in the U.S. Virgin Islands.	EPA Letter	
62	The potential contribution to greenhouse gas emissions during the construction and operation of the marina should be thoroughly evaluated and all efforts should be made to avoid, minimize and mitigate those emissions.	EPA Letter	
63	Climate change will continue to occur and therefore the effects of climate change on Coral Bay, such as sea level rise, should also be considered.	EPA Letter	
64	In view of the high degree of interest and controversy that this project has generated, the unique characteristics of the area, its proximity to the Virgin Islands National Park, the uncertain risks associated with the proposed development, and the extent of the potential impact to aquatic resources, EPA continues to advise that a full Environmental Impact Statement (EIS) be prepared for this project.	EPA Letter	
Issues raised by the National Marine Fisheries Service (NOAA)			
65	An Essential Fish Habitat Assessment	NMFS Letter	
66	Assessment of impact on ARNI species	NMFS Letter	
67	An Endangered Species Act Section 7 Consultation	NMFS Letter	
68	A revised EAR that addresses any project changes since the issuance of the last USACE public notice, as well as addressing previous comments regarding potential project impacts to ESA resources.	NMFS Letter	
69	An adequate alternatives analysis that includes on and offsite alternatives and alternatives to the full marina project must be completed. At this time, the alternatives analysis does include some offsite alternatives, but only considers full build out and does not adequately analyze the environmental impacts of each alternative.	NMFS Letter	
70	Sea turtles are known to use Coral Bay and areas along the most common transit routes to and from the bay proposed as part of this project but, despite several requests, no sea turtle surveys have been	NMFS Letter	

	conducted for the project. A sea turtle survey plan should be developed in coordination with the National Marine Fisheries Service (NMFS) Protected Resources Division and implemented in order to determine the use of the project area by different species of turtles so that avoidance and minimization measures can be developed for the project. An analysis of potential vessel strikes, including the time, number and size vessels are expected to be moored (in the marina or on mooring buoys) versus outside the marina in order to determine the potential extent of impacts to sea turtles from operation of the marina.		
71	A complete benthic survey to include transit routes into and out of the bay needs to be conducted. To date, detailed benthic information has been presented only for the immediate area of the marina.	NMFS Letter	
72	Details of pile driving and quantification of potential acoustic impacts to sea turtles given that 1,333 piles will be driven in order to construct the proposed facilities, as well as proposed impact minimization measures. These calculations and measures should be specific to the proposed marina project and should also include pile driving associated with shoreline construction as appropriate.	NMFS Letter	
73	Details of the fuel barge operation for refueling the marina facilities, including where barge will dock and its draft.	NMFS Letter	
74	Information regarding the number of vessels currently within the proposed marina footprint and the relocation plan for these vessels to determine whether this will result in additional impacts to other areas of Coral Bay.	NMFS Letter	
75	Details of the construction plan for inwater and shoreline construction, including sediment and turbidity control measures, maintenance and monitoring schedules for these controls, and information regarding the proposed spud barge and work vessel anchor locations, including information as to whether spud holes will be backfilled.	NMFS Letter	
76	Copies of recent water quality monitoring data for the project area, including the area of the marina and mooring field, as well as the proposed water quality and sediment monitoring program to be implemented for pre, during, and post construction and throughout project operation. This program should include the ghut as it will receive discharges from the upland portion of the project, the marina basin, the mooring field, and control sites in Coral Bay, as well as other sites that are downstream of the marina and mooring field based on current patterns in the bay.	NMFS Letter	
77	Current data for Coral Bay, including tidally influenced and wind driven transport patterns, as well as patterns during large storms such as hurricanes and tropical storms.	NMFS Letter	
78	Details of the anticipated transit locations of users of the marina and mooring field to determine the potential extent of impacts to ESA resources due to the introduction of up to 235 new vessels to the area given the locations of ESA listed corals, acroporid coral critical habitat,	NMFS Letter	

	and habitat for ESA listed sea turtles, as well as the presence of ESA listed sea turtles in relation to the proposed project and likely transit routes and use of different areas around St John.		
Issues raised by the National Park Service			
79	The realistic estimate of vessels associated with the project is far above the 157 listed in the permit application. What is a realistic estimate of the peak number of vessels associated with the project?	NPS Letter	
80	The EAR does not contain a section on Vessel Traffic impacts to any marine resource. What are the impacts of vessel traffic on marine resources, specifically within the Park and Monument?	NPS Letter	
81	Evaluation of impacts to park and monument soundscapes, lightscares, cultural and archeological resources and visitor use and experience.	NPS Letter	
82	Revised EAR to address potential impacts to Virgin Islands Natural Park and Virgin Islands Coral Reef National Monument, and in particular Hurricane Hole.	NPS Letter	
83	The proposed development has proven to be so controversial and can reasonably be expected to cause significant long term harm and impairment to the resources of Virgin Islands National Park and Virgin Islands Coral Reef National Monument as to require the permitting agency to complete a full Environmental Impact Statement.	NPS Letter	
Issues raised by the US Fish and Wildlife Service			
84	The applicant should address all direct and indirect impacts to sea grasses within the project areas.	USFWS Letter	
85	The project's footprint should be superimposed on a benthic habitat map in order to determine the extent of marine habitat that would be occupied by the project and to assess the potential impacts to marine habitat from the project's footprint	USFWS Letter	
86	The applicant should develop a compensatory mitigation plan that reflects not only the direct impacts of the placement of piles, boat slips and decking, but also reflects the long term degradation of the construction and operation of the marina for the entire project limits.	USFWS Letter	
87	The applicant should assess the possible long term effects of contaminants on marine habitats in and around the proposed marina. Measures to mitigate or minimize these long term impacts should be included in the mitigation plan.	USFWS Letter	
Issues raised by NOAA Habitat Conservation Division			
88	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.	NOAA HCD Letter	
89	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.	NOAA HCD Letter	

90	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.	NOAA HCD Letter	
91	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.	NOAA HCD Letter	
92	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. The mitigation plan shall demonstrate that the amount of seagrass and coral mitigation is sufficient through a functional assessment or appropriate analytical tool.	NOAA HCD Letter	
93	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.	NOAA HCD Letter	