

David L Silverman
9901 Emmaus
Coral Bay, St John, US Virgin Islands

18 August 2014

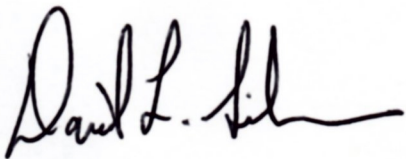
Mr. Jean-Pierre Oriol, Acting Commissioner
Department of Planning & Natural Resources
Cyril E. King Airport, Terminal Bldg., 2d Floor
St. Thomas, Virgin Islands 00802

Dear Commissioner Oriol,

Attached please find my written comments on the CZM Permit Application(s) and Environmental Assessment Report for the "St John Marina" proposed by Summer's End Group, LLC.. Since it wasn't clear to me whether one, two, or three permits were being requested (the Major Land Permit, Major Water Permit, and the Trust Lands Occupancy Permit), I have treated this as a single application and combined my comments into one document. I believe from the applicant's perspective all three parts must come together in order to implement their development plan.

As further detailed in my comments, I was a volunteer on a Coastal Zone Management Commission for the Village of Head-of-the-Harbor (located in Long Island, New York) for ten years prior to moving to the Virgin Islands. I am intimately familiar with the federal Coastal Zone Management Act and the conduct of coastal consistency determinations for developments within the coastal zone. I have relied on this personal background and expertise in preparing my comments, which I hope the St John CZM Committee will find useful in their deliberations.

Respectfully submitted,

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 L Silverman



Comments on Application for Major Land and Major Water CZM Permits
by Summer's End Group LLC
for "St John Marina"

Submitted By
David L Silverman
18 August 2014

Table of Contents

Introduction	2
Personal Background and Qualifications	2
Scope of the Proposed Development	3
The Mooring Field	3
Size of Project Area - The Site Limits.....	4
Scope of this Review	5
Coastal Consistency Review	7
Consistency With Section 903 Goals.....	9
Consistency With Section 906 Policies.....	13
Development Policies	13
Environmental Policies.....	15
Amenity Policies.....	18
Section 910(a)(2)(A) Conclusions	21
Adverse Environmental Impacts and Mitigations	21
Is the "Mooring Field" Part of this Application?	22
Marina Impact on Legally Moored Vessels.....	23
Benthic Mitigation Plan - Marine Meadows	25
Description of Adverse Impacts.....	25
Quantification of Habitat Loss	26
Summary: Critical Habitat Loss	28
Compensatory Mitigation.....	29
Recipient Site Selection and Probability of Success in Habitat Restoration.....	32
Habitat Compensatory Mitigation Ratios	32
Mitigation Requirement of the VI CZMA	33
Social Environment - Historic Viewsheds.....	33
CONCLUSIONS	34

INTRODUCTION

First, I would like to thank the Commission and the applicants for sharing this voluminous CZM application and Environmental Assessment Report with the community and providing an opportunity for constructive comments. Most of the observations which I will be making are drawn directly from the application documents. With a few notable exceptions, it appears as though the application is technically "complete" (in the sense that answers have been provided for all of the required questions) and contains sufficient information to enable CZM to make the mandatory consistency and environmental impact determinations.

Although there are certainly errors, inconsistencies and omissions, some quite serious and many of which have been noted by others, it has not been my primary objective (with limited exceptions) to comment on those points. The primary purpose of my review has been to apply my background and expertise to perform an independent assessment of consistency and environmental impact mitigation.

PERSONAL BACKGROUND AND QUALIFICATIONS

Before getting into specific comments, I would like to offer a little background on my personal history and credentials which are directly relevant to this review. Prior to moving to St John in 2008, I served for ten years on the Joint Coastal Commission of the Villages of Nissequogue and Head-of-the-Harbor, in Long Island, New York. This Joint Coastal Commission was the exact counterpart of the CZM that we have here in the Virgin Islands. The Joint Coastal Commission on which I served was established under the federal Coastal Zone Management Act of 1972, in the same manner as the Virgin Islands CZM board. Its role in assessing the consistency of development plans within the Coastal Zone with the goals and policies of the Coastal Zone Management Plan (which in our municipality was known as the Local Waterfront Revitalization Plan), was identical to the role of this CZM commission. Over the ten years which I served as a Coastal Commission member, I reviewed many private dock applications, a public marina application, and countless residential projects and subdivisions, both large and small, within the coastal zone. As a consequence of this background I am very familiar with the Coastal Zone Management Act and its implementation.

In addition, I served as the Chairman of the Village Planning Board for five years for the Village of Head-of-the-Harbor. As Chair of a Planning Board I was responsible for reviewing subdivision applications, site plans, zoning, code revisions, and liaison with cultural, historic, and environmental review groups. So not only do I have relevant experience in Coastal Zone Management, but I also have a deep practical background in suburban planning.

I have been a member of the Board of Directors of the Coral Bay Community Council for the past two years, and have offered my name to the Governor to become a member of the St John Coastal Zone Management Committee. As of this time, other than an acknowledgement of my interest, I have had no further response from the Governor's office regarding my offer.



It would appear, and this needs to be confirmed with the applicant, that the 8 acres described as the "project area" is actually only the finally developed portion of the site, and the entire site which is within the Site Limits is around 30 acres. If the Mooring Field regions are added, the entire site is approximately 40 acres, covering most of the navigable water of Coral Bay Harbor, and around 50% of the entire harbor acreage.

If it was an unintended oversight not to mention the total site acreage then this can be corrected in the application, and it should be resubmitted with this acreage forming the basis for the EAR and impact studies on the marine meadows. If the mooring field is intended to be within the formal scope of the project then this too needs to be added and the application amended. If the total acreage was intentionally omitted then this is a serious matter which should be dealt with administratively.

SCOPE OF THIS REVIEW

Although many members of the community may view the CZM permit hearing as an opportunity to comment and critique specific details of the proposed marina project, that is not, and should not be the focus of the public hearing, public comments, and the deliberation of the commission following this public hearing. The role of the CZM in this process is clearly spelled out in the Virgin Islands Code (VIC), and can be found in Title 12, Chapter 21, Section 910. This section says, in relevant part:

"any person wishing to perform or undertake any development in the first tier of the coastal zone ... shall obtain a coastal zone permit in addition to obtaining any other



Summer's End has made the following statement regarding vessels within the marina site: "Construction of the marina will result in a decrease in available mooring within the immediate footprint of the marina. Based on a recent inspection perhaps up to 6 permitted vessels may be required to move." It is difficult to reconcile that statement with their aerial photograph, unless they are claiming that roughly 46 of the 54 vessels are not permitted. I do not believe this to be the case.

Nevertheless, it is clear that some number, perhaps a large number of individual moorings will be displaced by the construction of the proposed marina. Clearly the owners of these vessels cannot be displaced until alternative suitable arrangements have been made.

The allocation and regulation of moorings is a responsibility assigned explicitly to DPNR (25 V.I.C. § 401). The code explicitly requires DPNR to implement a mooring plan (25 V.I.C. § 404: "The Department shall develop and implement a mooring plan, subject to the approval of the Legislature's Committee on Planning and Natural Resources.") Furthermore, 25 V.I.C. § 404 states: "Until such time as a water use plan is developed, the Department shall administer programs in a manner consistent with the goals and objectives of this chapter and in a manner responsive to social and environmental needs."

Thus, due to tremendous unsatisfied demand, research shows that in its first year of operation, The St. John Marina will reach a minimum occupancy of 62.5 percent by non-seasonal users, with boats up to 60 ft, and 27.5 percent by seasonal guests, whose yachts exceed 60 ft, in their 145 available slips, not including the facility's 12 moorings.

The applicant is, according to their own estimate, forecasting 62.5% occupancy for non-seasonal (year round) users in their slips up to 60 ft, and 27.5% occupancy for the seasonal mega-yacht slips.

Elsewhere, in the Army Corps permit drawings, the slip mix and boat capacity for the proposed marina are explicitly tabulated (Sheet Number 03, Appendix E - USACE Permit Drawings):

<i>St. John Marina Slip Mix</i>		
<i>Slip Size (ft)</i>	<i>Number</i>	<i>Linear Feet</i>
North Club		
25	25	625
40	33	1,320
50	11	550
45	14	630
55	11	605
Side Tie*	2	225
Total	96	3,955
South Club		
90	2	180
100	11	1,100
110	3	330
120	1	120
130	1	130
140	10	1,400
160	6	960
210	1	210
Side Tie*	14	1,621
Total	49	6,051

To compute shading from boats, I will use an average figure for the beam (width) of the boats in the two clubs. For the boats between 25 and 55 feet in length I will assume an average beam of 15 feet. For the boats from 90 to 210 feet in length I will assume an average beam of 25 feet. Both of these figures are conservative estimates based on a sample of listings in yachtworld.com (an online yacht brokerage).



Although no ruler is provided to estimate the size of the bare patch, the blades of *Thalassia* provide a reasonable measuring aide. *Thalassia* blades are typically around one foot in length (see reference cited above). Using this as a yardstick, the patch depicted in the photograph appears to be roughly ten feet in diameter (ten blades). This is equivalent to an area of less than 100 square feet. The applicant, however has made the following unsubstantiated claim: "There are currently 115 boats anchored or moored within the bay and these conservatively impact an area of between 34,500 and 46,000 sq. ft. based on their anchor drag and rope swing impacts." The figures 34,500 and 46,000 apparently are based on average impacts of 300 square feet ($300 \times 115 = 34500$) and 400 square feet ($400 \times 115 = 46000$) per boat. As the prior analysis indicates, the photograph supplied by the applicant demonstrates a "typical" scouring area of less than 100 square feet.

Given that at least half of the 115 boats currently moored in the harbor are on DPNR registered, inspected and approved moorings, utilizing essentially the same technology as Summer's End proposes for the managed mooring field (helical anchors and shackles), it is surprising that they can claim such mooring practices typically scour 300-400 square feet when installed by a boater, but negligible impact when installed by Summer's End. The reality is that seabed scouring is caused by line or chain drag, and this can be eliminated through use of floats or other devices to keep the lines off of the seabed.

The mitigation claimed for the prospective, out-of-scope mooring field is thoroughly inappropriate to be considered in this application. Alternatively, if the applicant wants this mitigation to be considered by the CZM Committee, then the Mooring Field must be included in the application, together with the engineering, EAR, and legal authority for its construction. Frankly, that would be impossible.

The total mitigation which this applicant has demonstrated is 2,500 square feet.

RECIPIENT SITE SELECTION AND PROBABILITY OF SUCCESS IN HABITAT RESTORATION

The applicant has proposed a recipient site at the north end of Coral Bay Harbor. The target site was once covered in sea grass but much of the vegetation has been lost due to sediment accumulation from upland overland sediment sources.

The plan proposes to transplant the *Thalassia* and *Syringodium* from the piling foot prints to an area in the northwestern corner of the harbor. Seagrass has been lost in this area due to the deposition of sediment. The Summers End Group will be undertaking improvements and maintenance of this drainage way and should significantly abate the input of terrestrial sediment. The area once had thriving seagrass beds. The placement of sod units in this area should serve to accelerate the re-colonization of this area.

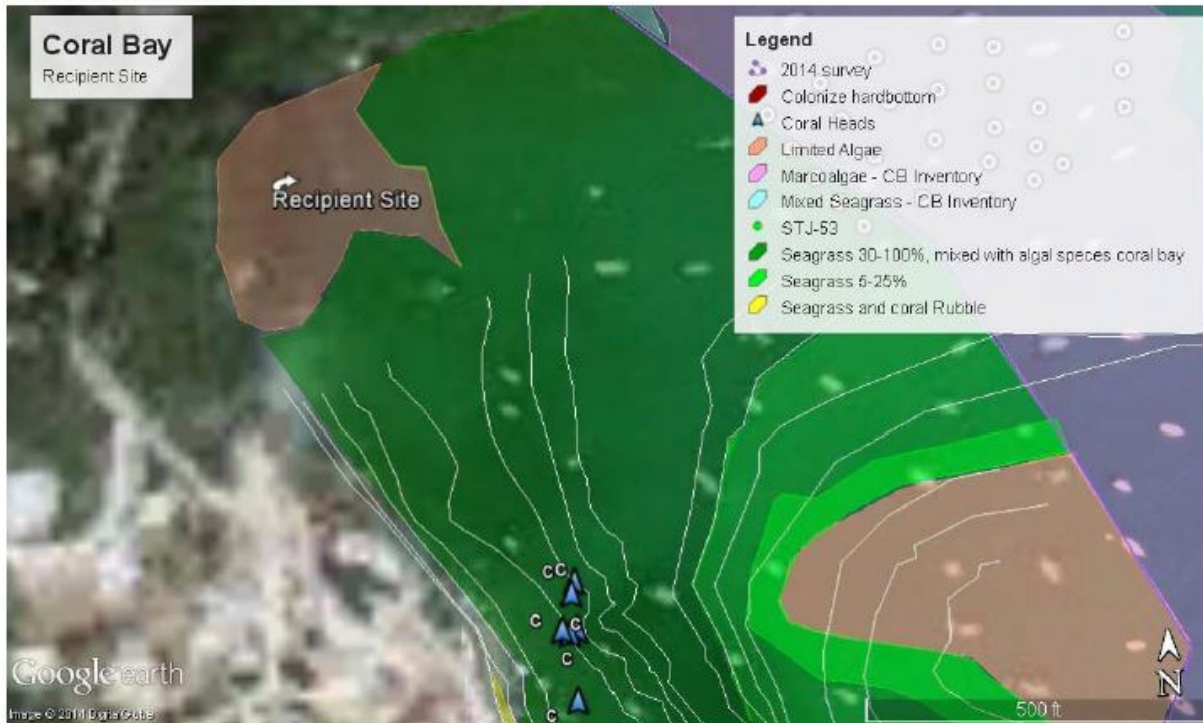


Figure 1. Location of seagrass Recipient Site

However, contrary to the claims made by the applicant, there is nothing in this application to mitigate those sources of sediment, which primarily stem from Kings Hill Road, the main Carolina ghut, the Johnny Horn Road, and the ghut near the fire station. All of the applicants efforts at removing sediment from upland sources apply to the surface water runoff approaching the marina itself, not the runoff which has impacted the seagrass in the designated Recipient Site. Efforts are being made (by others, not SEG) to reduce those sources, but nothing in the current application is relevant to that effort. It is highly likely that the 2500 individual sod plugs will not survive a single season.

HABITAT COMPENSATORY MITIGATION RATIOS

The standards for mitigation ratios (the area of restored habitat compared to the area of impacted habitat) vary widely depending on the locale, the species, and other variables. However, in all cases the mitigation ratio is something greater than 1:1 since it is widely recognized that there will be significant losses in the restored habitat. In order to simply remain habitat-neutral, the restoration ratio is often in

THE SOCIAL ENVIRONMENT - HISTORIC VIEWSHEDS

The CZMA explicitly defines "environment" to include the social environment - the manmade components of a site which help to define its character. This includes historical monuments, social institutions, scenic views enjoyed by the public, and all other aspects which give a site its unique "personality" apart from that which nature provided.

The photograph below was taken by me on August 8, 2014. I was standing on the rip-rap shoreline directly across the road from the Cocolobo complex. This is almost exactly at the point where the main marina pier meets the shoreline. It is a scenic vista enjoyed by residents and visitors countless times, almost every day of every year.

Three historic structures are visible on the opposite shore: The Emmaus Moravian Church, The Customs House on Usher Cay, and the Battery at Fortsberg. Two of these structures are listed on the National Register of Historic Places.



Rather than attempt an artist's rendering, I will simply assert that a 100' yacht docked approximately 180 feet offshore and parallel to the shoreline (as shown on the applicants permit drawings) as well as around 412 feet of lifts, supporting twenty-two 25' boats, again parallel to and about 180 feet offshore, would obliterate most of this viewshed.

This impact to the social environment has not been identified or addressed by the applicant. If it had been, then mitigation might consist of avoidance - locating the main pier north of the open viewshed, by slip arrangements leaving open spaces so as not to obliterate the entire horizon, or other architectural approaches to minimize, to the maximum extent feasible, the impact to this environmental resource. This is the requirement of the law.