

St. CROIX EAST END MARINE PARK

Management Plan Summary Document

November 2013



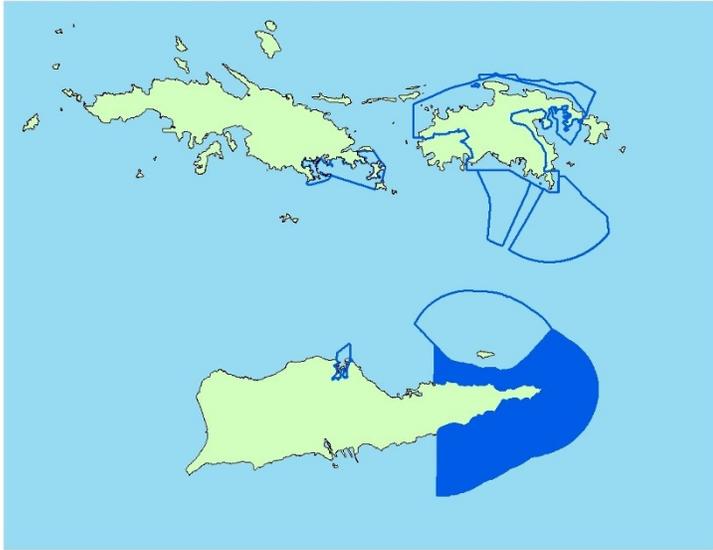
The St. Croix East End Marine Park (STXEEMP)

The updated 2013 STXEEMP management plan contains the roadmap for effectively conserving the coastal and marine, natural and cultural resources of the east end of St. Croix.

In recognition of the importance of adjacent natural and cultural resources as well as the imminent threats to them, a collaborative planning process between the STXEEMP community and the Virgin Islands Department of Planning and Natural Resources, implementation partners, University of the Virgin Islands and The Nature Conservancy was initiated in July 2012 to update the 2002 management plan, provide the long term vision for the area and guide near-term (3-5 years) objectives and activities. The updated management plan does not contain any new rules or regulations that do not already exist in the VI Code.

Project Area

GOAL & Mission



The St. Croix East End Marine Park (STXEEMP) was established in 2003 under V.I. Code 12, Sections 903-906. The original management plan, published in 2002, calls for a periodic revision of management strategies. This update was produced using a Conservation Action Planning (CAP) Process, designed by The Nature Conservancy. This management plan is intended to guide the Park's workplan for the next five years.

STXEEMP and the St. Thomas East End Reserves (STEER) are managed by the USVI Territorial Government and are part of the Virgin Islands Marine Protected Area Network (VIMPAN). Along with National Park Service MPAs, these are designed to protect the system of coastal resources including mangroves, sea-grass beds, coral reef communities and other critical coastal and marine habitats.

The MPA described in this plan encompasses 58 mi² of significant coastal, marine and fisheries resources, including mangrove forests, salt ponds, lagoons, coral reefs and beaches. Many species of birds, sea turtles, fish and shellfish, including important commercial fisheries resources, spend a portion of their life protected in the shallow foreshore reefs and seagrass beds while feeding and growing before populating other marine habitats in the area.

The goal for STXEEMP as written in the CZM Act is *to protect territorially significant marine resources, promote sustainability of marine ecosystems, including coral reefs, sea grass beds, wildlife habitats and other resources and to conserve and preserve significant natural areas for the use and benefit of future generations.*

Based on this goal, the **mission** of management actions taken over the next five years is:

To promote the responsible use and management of significant coastal and marine resources through research and monitoring, education, restoration, and community engagement to protect and preserve the ecological and cultural value for residents and visitors.

TARGETS

Conservation **TARGETS** can be thought of as the resources important or unique to the STXEEMP that need to be protected whether they are natural, cultural, or socio-economic. **The resources targeted for protection, enhancement and restoration in STXEEMP are:**



Mangrove Communities

Includes associated blue crabs, sea birds, etc.



Coral Reef Communities

Includes lobsters, reef fish, and *Acropora* spp.



Sea Turtles



Beaches



Seagrass Beds

Includes conch & nursery species

Conservation Action Planning

Conservation Action Planning (CAP) is based on the principles of adaptive management and is designed to facilitate and utilize input from stakeholders. The CAP process guides project teams to identify effective conservation strategies. It provides an objective, consistent and transparent accounting of conservation actions and the intended and actual outcomes of conservation projects.

Ultimately, the CAP process results in an identification of capacity issues, development of strategies for the abatement of threats and addressing capacity issues, scheduling and financing planned for monitoring and management effectiveness measures, and creation of an overall work plan for the local management authority to be able to translate into yearly work plans. It enables project staff to responsively adapt their actions to improve strategy effectiveness and achieve greater conservation impact.



TNC, 2007. *Conservation Action Planning Handbook: Developing Strategies, Taking Action and Measuring Success at Any Scale.*

THREATS TO STXEEMP

The THREATS to the Targets,

also considered impacts or risks, can be something that directly influences a conservation target or indirectly affects an ecological process important to sustaining the target. Knowing the threats that impact the resources forms the basis for formulating strategies and activities for the management of the STXEEMP.

Over twenty direct threats to the targets have been identified, with critical ones being:

- **Unsustainable or Illegal Fishing**
- **Climate Change** → bleaching
- **Turtle Poaching**
- **Lionfish**
- **Land-based Sources of Pollution**

The threat matrix below, demonstrating the use of ranking of the sources of stress to targets, shows how overall impacts to resources elevate targets to require the most attention for conservation, restoration or protection (e.g., effective enforcement solutions), or abatement of critical threats (e.g., land-based sources of pollution).



Stormwater runoff
© A. Holecek

A section of the threat matrix, showing some (not all) of the threats to the resources and reference to some of the strategies to abate the threats:

Threats \ Targets	Coral Reef Communities	Seagrass Community	Sea Turtles	Mangrove Communities	Beaches	Summary Threat Rating
Land Based Sources of Pollution	1. Great Pond Restoration 3. Pave dirt roads 12. Work with DPW 13. Ghut restoration 24. Blue Flag	3. Pave dirt roads 12. Work with DPW 13. Ghut restoration 24. Blue Flag		1. Great Pond Restoration 12. Work with DPW 13. Ghut restoration 24. Blue Flag		High
Illegal Fishing	4. Judicial 5. Stagger enforcement 6. Signage 9. rec fishing license 10. Ed/out commercial fishers 22-23. Yacht Club-Boater outreach 29. Public notice of infractions	4. Judicial 5. Stagger enforcement 6. Signage 9. Rec fishing license 10. Ed/out commercial fishers 22-23. Yacht Club-Boater outreach 29. Public notice of infractions				High
Thermal stress bleaching	21. Climate change adaptation/mitigation communications					High
Poaching adult turtles, eggs			4. Judicial 5. Stagger enforcement 7. Signage 14. Citizen sci day patrol 29. Public notice of infractions			High
Lionfish	16. Lionfish derbies 17. Lionfish removal	16. Lionfish derbies 17. Lionfish removal				High
Invasive predators– turtle hatchlings & eggs			7. Signage 14. Citizen sci day patrol 24. Blue Flag			Medium
Oil Spill	22-23. Yacht Club-Boater outreach 24. Blue Flag		24. Blue Flag	Not Specified	24. Blue Flag	Medium
Sea Level Rise				21. Climate change adaptation/mitigation communications	21. Climate change adaptation/mitigation communications	Medium
Fishing gear	9. Rec fishing license 10. Ed/out commercial fishers	9. Rec fishing license 10. Ed/out commercial fishers				Low
Summary Target Ratings:	Very High	High	High	Medium	Medium	High

STXEEMP STRATEGIES

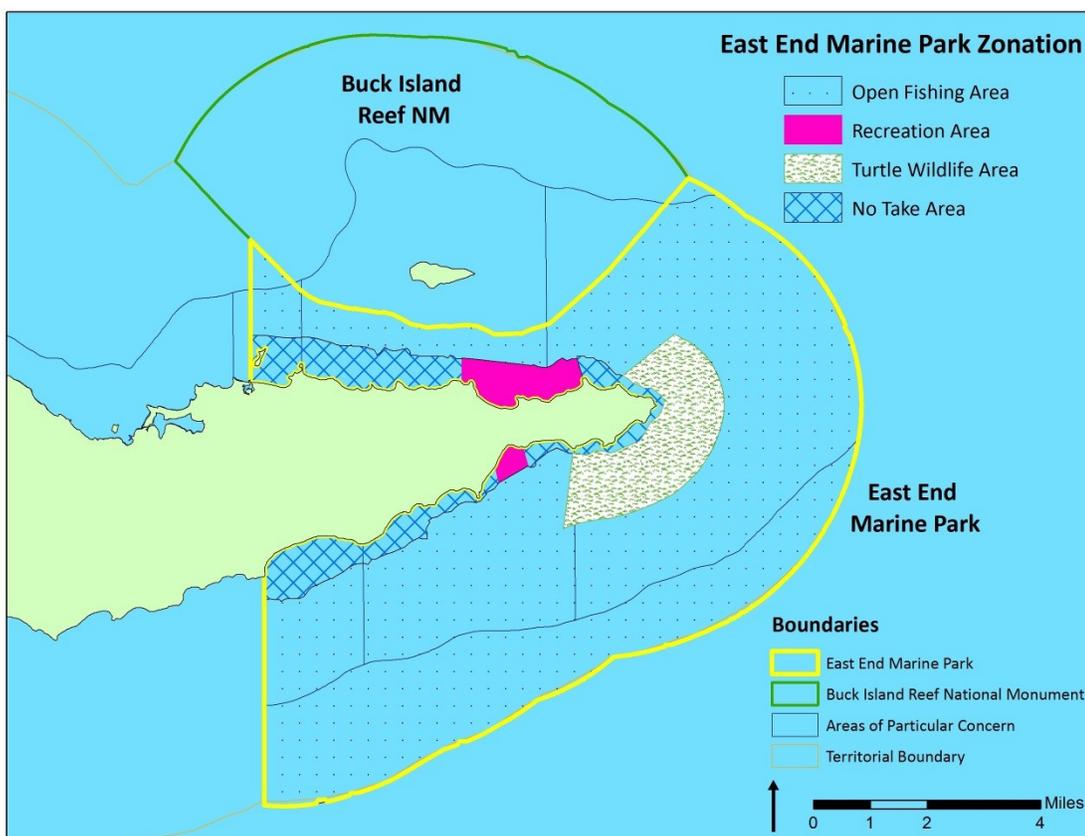
The Objectives, Strategies and Action Steps form the meat and bones of the management plan. Developing these items took the longest in the drafting of the plan, but they *are the most important components of the plan* for guiding actions, funding, and monitoring.

Based on the threats to the targeted resources in STXEEMP, the CAP process helped to develop STRATEGIES to abate these threats or to restore a targeted resource. Some key strategies include:

- Increased coordination of permitting, regulation and enforcement of non-point and point-source pollution and coastal development to prevent habitat loss and sedimentation
- Improving coordination of the patrol and monitoring of nesting sea turtles and hatchlings
- Improved watershed and stormwater management (i.e. pave dirt roads, improve ghuts and drainage basins)
- Community outreach and increased participation
- Developing a climate change adaptation plan
- Creation of a moorings program within STXEEMP (see details, next page)
- Great Pond restoration activities
- Sustainable financing, in part through sustainable tourism activities

A primary strategy and component of the management plan is to improve enforcement of the existing Park zones and coastal rules and regulations

With rules enforceable only recently (with the installation of zone marker buoys in 2011), first action steps include gaining a better understanding of the benefits of the regulations, effectiveness of enforcement and compliance, and the impacts to users of the Park.



IMPLEMENTATION

Monitoring Plan

A monitoring plan was developed to assess the status of the resources STXEEMP aims to protect and to evaluate the effectiveness of some of the strategies proposed in the management plan. This involved deciding how STXEEMP management will measure results. Having a plan for monitoring will enable managers to see whether a strategy is working as planned and thus whether adjustments will be needed.

It also helps keep an eye on those targets or threats we are not acting on at the moment, but may need to consider in the future. The management plan needs to be constantly reviewed, updated, and likely amended to reflect new needs or other information that can feed into management decisions. Periodic updates will be necessary as results are determined.

OBJECTIVE is where you want to be.
STRATEGY is how you will get there.
The CAP process helped the STXEEMP Core Planning Group to determine **8 HIGH PRIORITY strategies and 21 other strategies to make STXEEMP as successful as possible. The next step is to take action!**

One example of objectives and strategies found in the *Conservation Objectives, Strategies & Action Steps* section of the full management plan:

INSTALLATION OF DAY USE MOORINGS

Objective: *Reduce the number of anchored vessels by 20% in 3 years by installing up to 28 buoys distributed in the 5 most used bays.*

TARGETS: Seagrass beds and coral reefs

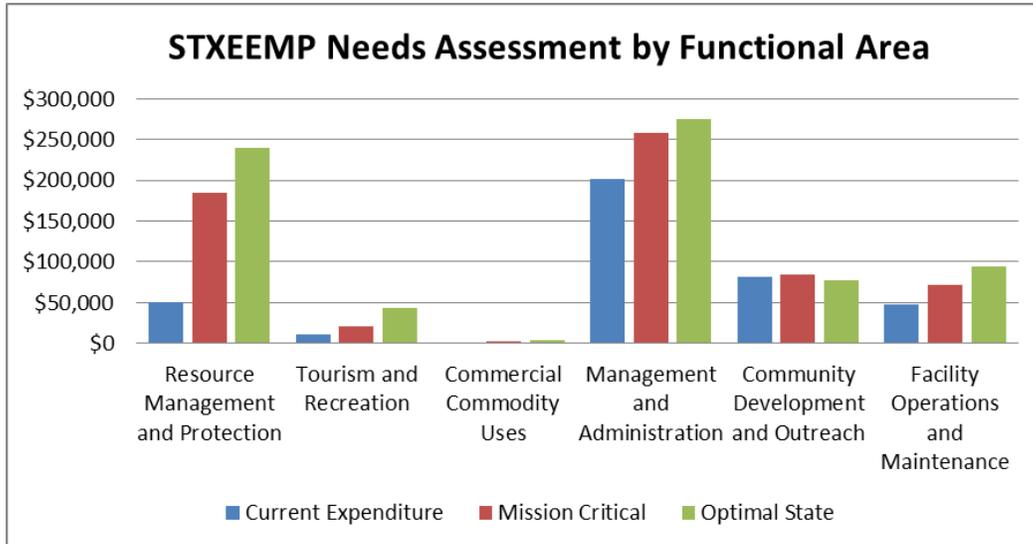
MAJOR THREAT: Anchoring on seagrass or coral habitat due lack of alternative

Key Actions:

1. In the Human Use Mapping project (winter 2013-14), engage stakeholders in identifying buoy locations, type of buoys (day use/ overnight)
2. install buoys (permits from DFW- Amend USACE permits on locations)
3. Outreach– to advertise locations, proper mooring practices, size limits of boats. Include conflict resolution in Coakley Bay– zone kite surfing
4. Develop and follow a maintenance plan to provide regular maintenance of buoys
5. Consider fee structure for overnight use
6. Develop means to collect fees (see sustainable finance- account, trust, etc.)
7. Consider Bay Host or homeowners to help monitor use
8. Use the funding generated to create more moorings and maintain existing ones

Sustainable Finance Plan

The Sustainable Finance Plan (SFP) of 2010 uses business planning methodology, adapted for protected areas, to address cost and revenue gaps and lays the foundation for achieving financial sustainability. The plan identifies the operational and investment needs of STXEEMP (based on the previous management plan and operating costs at the time the SFP was written), the available financial resources, and proposes a portfolio of financial mechanisms to fund these needs. The funding will have to come



from a variety of sources, as well as larger scale fund raising programs down the road. The cost will be significant, but conservation of the STXEEMP area is in the best interest of the residents, the private sector and the government as it contributes enormously to the tourism industry (the main economic activity of the island), and it provides ecosystem services that are extremely costly, if not impossible, to replace that benefit the Virgin Islands community. The Sustainable Finance Plan is an essential action step to achieve these objectives.

The establishment of a **PROTECTED AREA TRUST** was seen as an important tool to mitigate volatility in revenue generation and act as a pass through for all revenue generated by the Marine Park, ensuring that this revenue is reinvested into conservation activities. Other high priority financial mechanisms including local government and federal funding, concession fees, permits and licenses, membership dues and private donations to a fiduciary body such as Friends of STXEEMP were seen to be the most feasible finance mechanisms as determined through research and by stakeholder review and input. **Revenue projections for the most feasible financial mechanisms (excluding the federal sourced Territorial Coral Reef Conservation Grant) total \$256,000 per year and \$4.6 million per year for future, more complex financial mechanisms. (The total recurrent needs of the STXEEMP at the critical level are \$633,000 and \$734,000 at the optimal level.)**

Tourism and STXEEMP

Tourists are constantly flocking to STXEEMP. So are island residents, our “local visitors”. Many local businesses such as dive operators, charter boats and tour operators conduct business within STXEEMP. Big Beards, for example, operates out of Christiansted, and splits trips taking visitors to Buck Island and Coakley Bay.

With help from the NOAA Coral Reef Fellows assigned to work in the Park, a **Sustainable Tourism Plan** was developed to guide activities that have a low impact, poten-



tial revenue generation, and are most feasible according to users, businesses and residents. Major initiatives include:

- **Development of marine operator guidelines**
- **Adventure tourism and Park events**
- **Improving the Visitor Center**

Core Planning Team and Stakeholders

The Core Planning Team was made up of DPNR personnel whose work was directly related to the management of the area, UVI staff to serve as consultants, implementation partner groups, and The Nature Conservancy to lead the writing of the management plan. An important step in the process included first reviewing the actions identified in the original 2002 plan to put into context the accomplishments, impact, action items that were no longer relevant, and to better understand the realities of available assets and capacity.

A series of stakeholder focus group meetings were held to gather input and track activities completed to date. Focal meetings held in October and December 2012 included:

- Fisheries Strategies
- Watershed Plan Implementation Strategies
- Sustainable Tourism and Financing
- Sea Turtle Protection Strategies
- Research and Monitoring

Active and interested stakeholders will be able to receive updates on meetings, materials, and presentations following the management plan drafting process. Participants attending meetings are noted in the Appendix of the Management Plan.

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Additional details regarding the CAP process, STXEEMP management plan and appendices will be available at www.czm.dpnr.gov.vi under the publications tab

For comments/questions, or to find out how to participate in planning and management, please email jeanne_brown@tnc.org or call (340) 718-5575