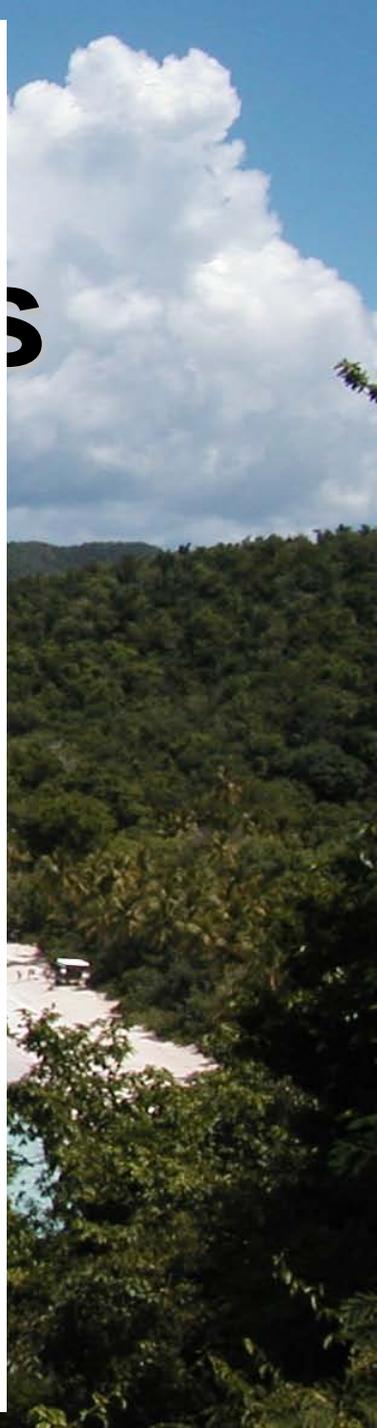
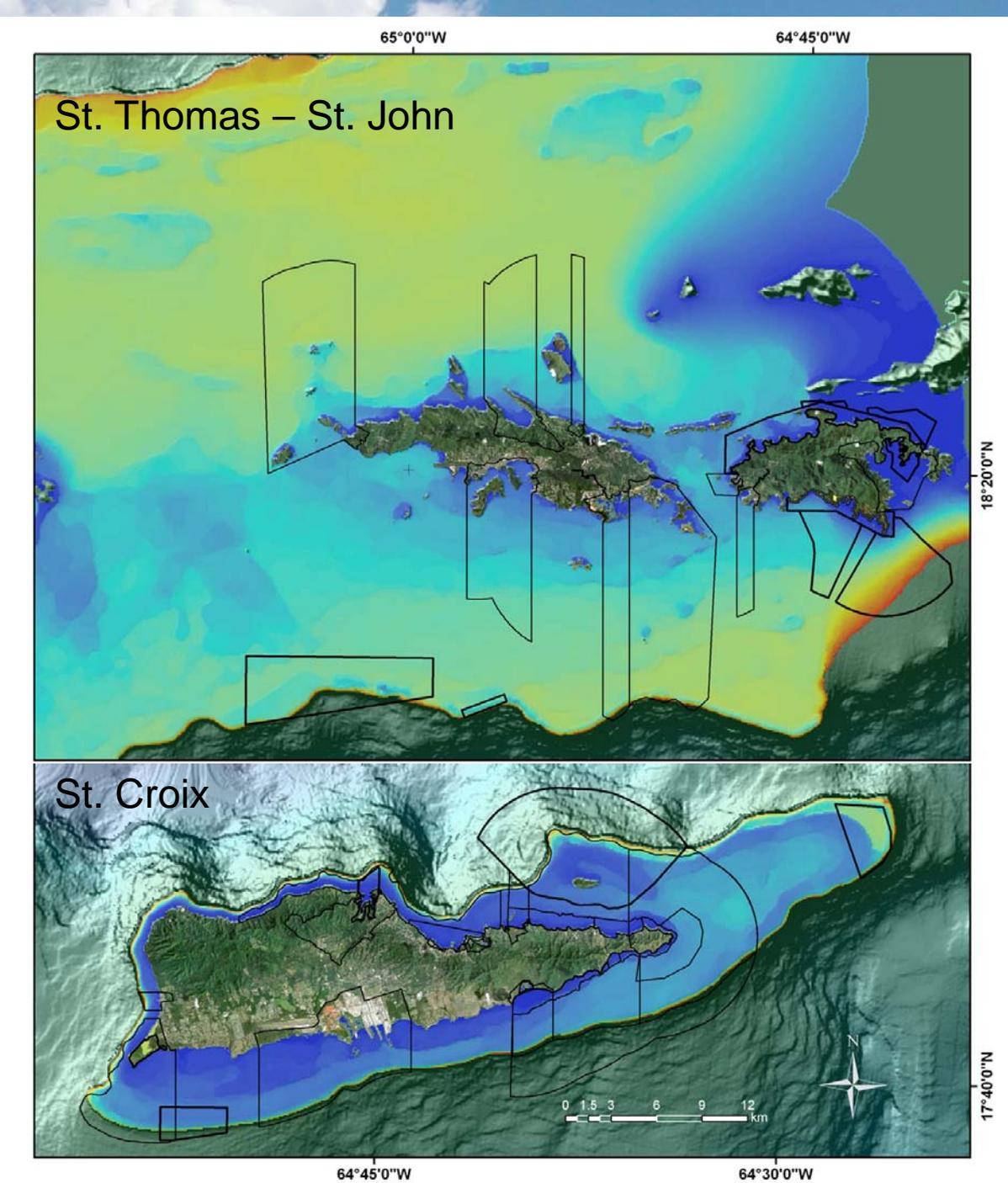


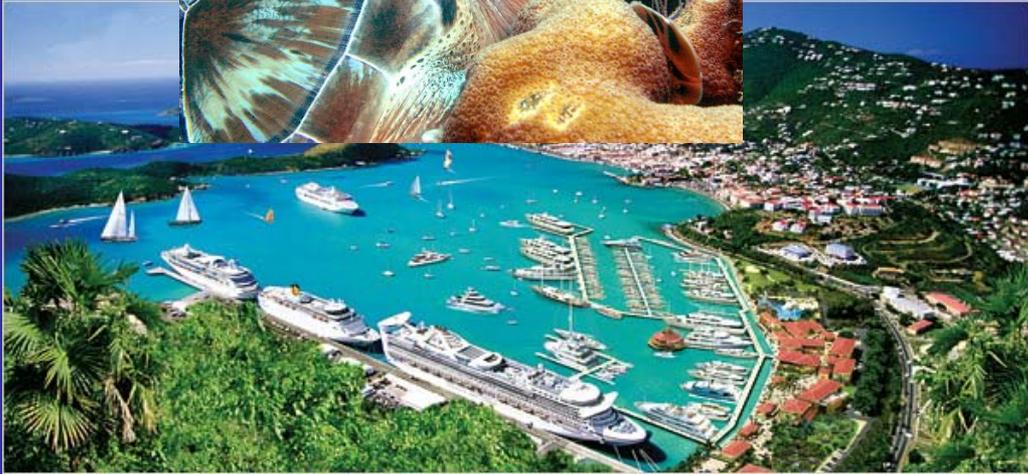
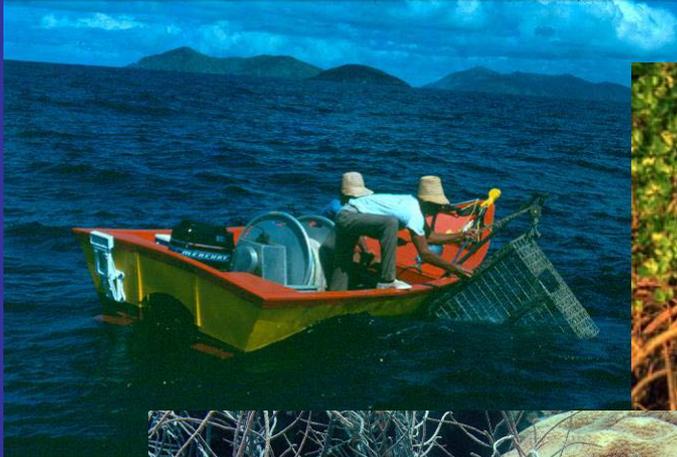
U.S. Virgin Islands

Priority Coral Reef Mapping and Monitoring Needs

Presentation for
Atlantic/Caribbean CREIOS
Workshop, May 13, 2009



USVI Context



Categories of Need

- Water Quality
- Fishing
- Climate Change
- Management Issues
- Connectivity
- Capacity Needs



Water Quality

Land Based Sources of Pollution

(sediments, contaminants, nutrients, microbes)

Priority Needs:

- Reliable, intensive, spatially robust WQ monitoring
- Predictive models of delivery, dispersal (nearshore and regional current/circulation patterns)
- Causality between LBSP and organism & ecosystem responses
- Better understanding of watershed effects (incl. septic tanks)
- Numeric WQ standards for reefs & assoc. habitats
- Thresholds for LBSP stressors beyond which CRE resiliency becomes impaired

Water Quality

Water Based Sources of Pollution (marinas, cruise ships, oceanographic & storms)

Priority Needs:

- Assessment and monitoring of impacts from cruise ships
- Better understanding of effects of resuspension
- Dredging
- Marine disposal
- Upstream sources
- Toxins (e.g., sunscreen)



Fishing

Priority Needs:

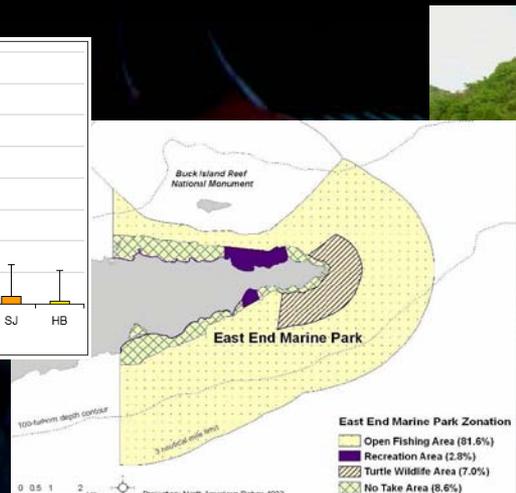
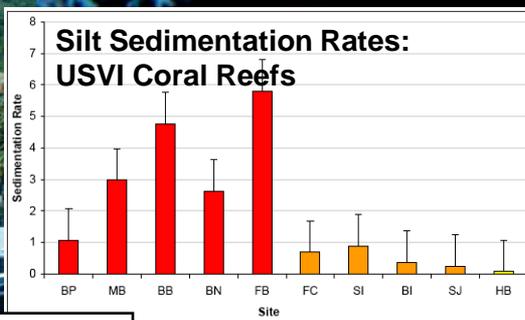
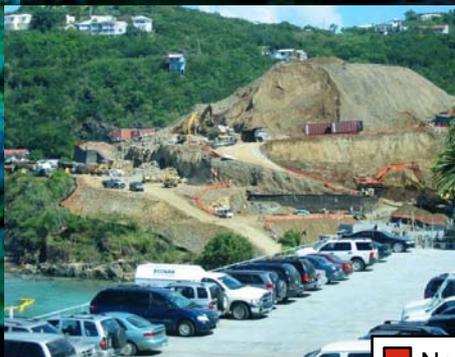
- Current fishing effort and mortality
 - Fishery dependent & independent monitoring
 - Subsistence & recreational impact
 - Unlicensed commercial impact
- Deep resources (fishery use, resources, EFH)
- Key species life history & habitat use patterns
- Effects of declining coral cover on fishery resources
- Quantify/monitor direct impacts to CRE from fishing activities
- SPAGs – location, status
- Lionfish – spatial distribution



Management Issues

Priority Needs:

- **Mgmt strategy effectiveness assessments (MPAs, moorings, etc.)**
- **Identify resilient / priority areas**
- **Human dimension of CRE resource use & degradation**
- **Collaborative rapid response capability**
- **Numeric WQ stds & stressor threshold values**
- **WQ/stressor effects on fish communities, diseases**
- **Improved coordination between/within Federal and Territorial agencies**



Capacity Issues

Priority Needs:

- Technical & enforcement capacity
- Better understanding of institutional limitations to effective management
- Solutions/strategies to increase jurisdictional capacity (i.e. NOAA Fellows, NOAA staff)
- Timely data analysis & interpretation
- Management support tools (comprehensive, centralized database, predictive/forecasting)
- Improved data access & translation

