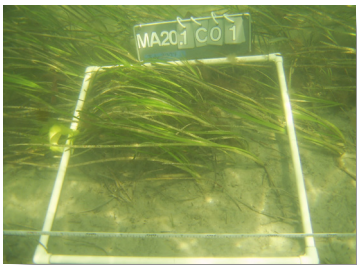


Patuxent Wildlife Research Center

Seagrass Condition Assessment Within NPS North Atlantic Coastal Parks



- **The Challenge:** Seagrasses represent productive and critical components of marine ecosystems. Extensive loss of seagrass habitat worldwide has led to a demand for improved approaches for seagrass monitoring. Evaluating the condition of seagrass resources within North Atlantic coastal parks is an important component of National Park Service (NPS) vital signs monitoring. Monitoring methods are needed that are capable of detecting seagrass trends before losses are irreversible, forecasting changes in distribution, abundance, and condition of seagrass resources, and predicting changes on a large spatial scale.



- **The Science:** A hierarchical approach to seagrass monitoring has been developed that targets water quality degradation as the primary management threat to seagrasses in the northeastern U.S. Measurements at different scales are optimized to evaluate responses to stressors and management actions. Integration of data and information across scales yields comprehensive assessments of seagrass extent, status, trends, and potential causes of change.



- **The Future:** The efficiency of tiered monitoring ensures feasibility of implementation for managers. Methods are highly cost-effective and have been adopted by northeastern coastal parks.