

# **NYS Seagrass Task Force**

## **DRAFT Management Actions**

August 2008

### **Quantitative Goal: Maintain current seagrass acreage and restore/increase 10% by 2020, where possible**

While this overall goal is inclusive of all waters within the confines of New York's Marine District, it is encouraged that each separate estuary and respective managing estuary program set individual estuary-specific quantifiable targets.

### **Preservation and Management Actions**

1. Develop, adopt and implement new NYS Seagrass Protective Legislation.
2. Explore and assess the inclusion of seagrass protection in the Hudson River.
3. Identify and assess the use of protective mechanisms such as "eelgrass sanctuaries"/"habitat sanctuaries", especially at the local municipal level.
4. Identify, assess, and implement area, gear and activity restrictions and regulatory changes to reduce direct and indirect impacts of fishing, shellfishing, boating and personal watercraft activities on seagrasses.
5. Implement a conservation mooring technology pilot project to assess the technology's ability to minimize damage to currently existing seagrass beds and allow for decolonization and restoration.
6. Support increasing navigational channel markings and decreasing the distance between markers to prevent boats from running aground in seagrasses.
7. Assess the nitrogen contribution of currently utilized/installed onsite disposal systems (OSDS) in NY's estuarine watersheds and the potential impact on seagrasses. Promote alternative systems/options/phaseouts/upgrades as necessary.
8. Promote use of natural shorelines and encourage a net decrease in shoreline hardening structures.
9. Encourage coordination among and education of town, county, state, and federal enforcement agencies responsible for enforcing regulations, codes, and laws concerning and affecting seagrasses.
10. Encourage the protection and restoration of vegetated buffers to reduce the input of sediments, phosphorus, nitrogen and other land based pollutants to estuarine waters which can affect the health/existence of seagrasses.

11. Develop a dredging strategy for routinely maintained navigational channels near/abutting seagrass beds to minimize damaging effects.
12. Implement nonpoint source control, stormwater management, and retrofit plans and programs to reduce runoff volumes and pollutant concentrations in support of protecting and restoring high water quality required by seagrasses.
13. Adapt current management strategies in response to the current and future threat of sea level rise to allow for retreat of seagrasses.

### ***Restoration/Enhancement***

1. Create and establish comprehensive eelgrass restoration site suitability index models for each estuarine system to identify sites where natural and human induced seagrass restoration is probable; confirm and test through implementing in-field restoration test plots.
2. Establish criteria/objectives for successful seagrass restoration.
3. Explore and assess the seagrass habitat restoration potential of established shellfish spawner sanctuaries.
4. Explore use of developed Long Island Sound Study water quality criteria.

### ***Monitoring***

1. Implement comprehensive water quality monitoring program to include multi-parameter continuous data collection stations.
2. Implement a sentinel seagrass bed monitoring program in each estuary.
3. Support the development of a yearly New York State Seagrass Status Report Card assessing seagrass healthy and extent.
4. Support and implement recommendations of the New York State Seagrass Mapping Workgroup; standardizing biennial surveys and aerial imagery timing/frequency, digitization, analysis/interpretation, and groundtruthing protocols.

### ***Research***

1. Explore and assess multiple stressor impacts on eelgrass (as identified at the May 2007 New York Seagrass Experts Meeting).
2. Explore biological disturbances affecting seagrass persistence, restoration and recolonization (as identified at the May 2007 New York Seagrass Experts Meeting).

3. Develop restoration strategy including integration of landscape ecology into planning (as identified at the May 2007 New York Seagrass Experts Meeting).
4. Assess groundwater as a transport pathway for nitrogen and pesticides and identify potential effects on seagrasses (as identified at the May 2007 New York Seagrass Experts Meeting).
5. Develop nitrogen budget for each estuary to identify/determine potential controlling sources (as identified at the May 2007 New York Seagrass Experts Meeting).
6. Explore epiphytic grazer interactions to identify whether changes in grazer abundance or absence influence current seagrass distribution or restoration potential (as identified at the May 2007 New York Seagrass Experts Meeting).
7. Assess the impact of shellfishing practices and the connection between seagrass and shellfish (as identified at the May 2007 New York Seagrass Experts Meeting).
8. Identify the genetic diversity of seagrasses in and between estuarine systems (as identified at the May 2007 New York Seagrass Experts Meeting).
9. Determine the effects of physical disturbance on seagrass bed areas, including dredging, hardening, boating, etc. (as identified at the May 2007 New York Seagrass Experts Meeting).
10. Explore the causes of exacerbated wasting disease.
11. Identify, assess and compare how hardened and natural shorelines affect the health and extent of seagrass.

### ***Education and Outreach***

1. Build public awareness of the biological, ecological, social, and economic importance/value of seagrasses as well as the threats to seagrasses. Identify and promote actions (behavioral changes) that the citizens can undertake to help protect and restore seagrasses.
2. Hold a workshop for municipal officials on the biological, ecological, social, and economic importance of seagrasses, and threats to seagrasses.

### ***Funding***

1. Secure a NYS Environmental Protection Fund (EPF) funding line to implement seagrass management plan recommendations.