

February 1, 2010

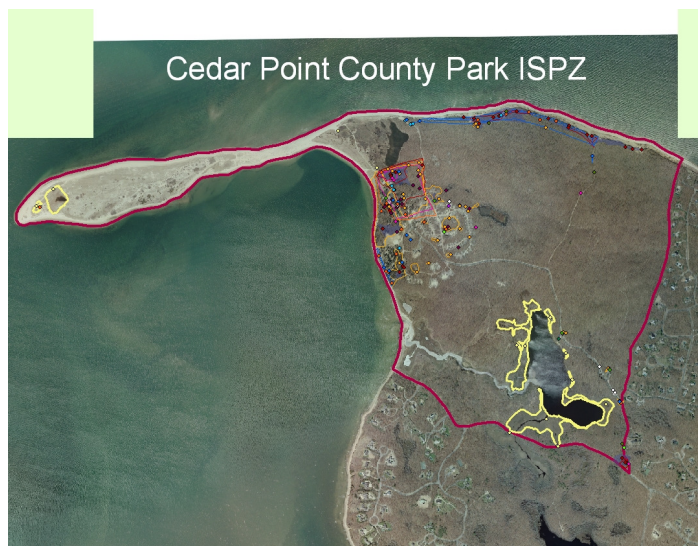
## Invasive Species Prevention Zones

An Invasive Species Prevention Zone (ISPZ) is a formal LIISMA<sup>1</sup> designation for a natural area that is dominated by native species and is known to support exceptional biodiversity concentrations. By delineating Invasive Species Prevention Zones, land managers can maximize limited staff, equipment and funding resources by focusing on sites that are relatively free of invasive species, have high ecological value, and thus are most likely to yield results. For a site to be formally designated as an ISPZ, invasive species are mapped, management efforts are prioritized, and a site-specific, integrated invasive species management plan is written. Prevention, 'early detection' of new invaders and a 'rapid response' to their discovery are the main focuses of the management plan and subsequent eradication efforts. Prevention activities are commonly accepted to be the most effective and efficient (for both cost and effort) for invasive species management. Because ISPZs are widely distributed and use standardized methods, this approach allows for multi-agency, cooperative, coordinated management on a much larger scale.

As climate predictions become increasingly dire, natural resource managers continue to evaluate adaptation options for climate-sensitive ecosystems and seek actual on-the-ground implementation mechanisms. Resiliency is defined as the amount of change or disturbance that a system can absorb before it undergoes a fundamental shift to a different set of processes or structures. Helping to ensure the resilience of an ecosystem is predicated on maintaining the genetic diversity, biologic diversity, and heterogeneity of landscape mosaics within the system. To keep this diversity, ecosystem processes (*i.e.*, water cycle, mineral cycle, energy flow, and community dynamics) need to remain as intact as possible – processes that invasive, non-native plants and animals threaten. ISPZs serve as refugia for native species which may result in greater resilience of our ecosystems. Protecting areas with ecological memory (*e.g.*, ISPZs) theoretically increases the chance of ecosystem reorganization after disturbance, including organisms adapting in place and the areas serving as stepping stones for other species to move between suitable sites. If the conditions are right, these sites may also have the potential of colonizing outward. As the pressure from invasives in New York grows, the need for ISPZs will increase.

### ISPZ Criteria

- *Invasive plant cover:* < 5% cover in core/interior.  
< 10% cover in a 50 meter buffer inside the boundary and around any roadways that bisect the core.
- *Size:* ≥ 500 acres, unless deemed a "biodiversity hotspot".
- *Ownership:* landscape must have some level of protection already (*e.g.*, public title, easement).
- *Phragmites:* Only *Phragmites australis* growing in freshwater environments will be included in the estimation of % invasives cover. Data analysis revealed that several pristine areas were not eligible for ISPZ designation when *Phragmites* growing in salt marshes was included in the % cover calculation.



### ISPZ Plan

- Identify and interrupt invasive species pathways.
- Manage land/water to enhance growth of desired natives.
- Implement early detection/rapid response strategies.
  1. Educate staff, visitors, volunteers & neighbors.
  2. Update the invasive species location maps.
  3. Immediately control.
- Monitor
  1. By means of the ISPZ criteria.
  2. Results of control efforts.

**Suffolk County Parks has worked closely with the Long Island Invasive Species Management Area (LIISMA) to map and complete development of a management plan for invasive species at Cedar Point County Park.**

<sup>1</sup> The Long Island Invasive Species Management Area (LIISMA) is a voluntary association of public and private land managers working together to prevent the spread of invasive species, chaired by The Nature Conservancy. LIISMA brings together representatives from more than 50 government agencies, non-profits, and private businesses to discuss, share and learn from each other the latest invasives strategies and issues.

**Invasive Species Prevention Zones on LI – totaling over 33,000 acres**

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| 1) Connetquot River State Park (~3,400 ac)       | 8) Rocky Point NRM (~4,700 ac)**                                 |
| 2) Cedar Point County Park (630 ac)              | 9) Hither Hills/Hither Woods/Koppelman Complex<br>(3,200 ac)     |
| 3) Sears Bellows Complex (~5,700 ac)**           | 10) David A. Sarnoff State Preserve (2,900 ac)**                 |
| 4) Brookhaven State Park (~2,000 ac)**           | 11) Fire Island National Seashore Wilderness Area<br>(~1060 ac)* |
| 5) Dwarf Pine Plains/Hampton Hills (~5,700 ac)** | 12) Montauk Point State Park (724 ac)**                          |
| 6) Brookhaven National Lab (~2,400 ac)*          |  |
| 7) Long Pond Greenbelt (~600 ac)**               |  |

\* Plan pending approval

\*\* Mapped, but plan not completed