Old Black Point Beach (East Lyme, CT) Stewardship Site Nomination Submitted to EPA Long Island Sound Study Management Committee by EPA LIS Stewardship Work Group on behalf of: Old Black Point Association, East Lyme, CT (for discussion at EPA LISS Management Committee meeting July 18, 2013)

Background/Recommendation:

At the suggestion of co-chairs of the EPA LISS Stewardship Work Group, the Old Black Point Association has requested Stewardship Site designation for the majority its 17- acre property within the existing <u>Pattagansett Marsh – Watts Island Stewardship Area</u> in East Lyme, Connecticut. Upon review of the Stewardship Site designation criteria described below, the Stewardship Work Group finds that **the portion of the property, outlined in Figure 2. below, should be designated an EPA LISS Stewardship Site.** This recommendation is offered due to the high quality and uniqueness of the coastal habitats at the site, rare species occurrence, significant historic estuarine ecological research conducted in the past, and, because it is an integral part of the larger existing Pattagansett-Watts Island Stewardship area/ecological complex.

The property includes approximately 15 acres of relatively undisturbed barrier beach and primary dune, back barrier sand flats, and estuarine emergent marsh. Most or all of the area proposed for Stewardship Site designation is subject to a conservation easement held by TNC-CT. The remaining approximately 2 acres of the site are dedicated to site access, parking and support facilities for Association recreational use (labeled ' Area excluded from nomination' in Figure 2). Although the Association indicates that the general public routinely accesses the lagoon and sand flats in the lee of the barrier beach during the boating season by small craft, no portion of the property is authorized for use by the general public and public access will not be required if Stewardship Site designation status is conferred. Therefore, this Stewardship Site nomination was evaluated based solely on the site's ecological values, its location within the larger Pattagansett Marsh- Watts Island Stewardship area and its history of supporting scientific research.

Ecological site evaluation criteria considered to select the 33 inaugural EPA LIS Stewardship Sites where used to evaluate the current Stewardship Site designation proposal. Criteria included whether the site: (1.) represents a natural habitat type or ecosystem typical to the Long Island Sound; (2.) contains examples of unique or rare habitats or ecosystems (e.g. unditched tidal marshes, secondary dunes etc.); (3.) supports or has supported significant baseline scientific research worthy of continued support or contains areas of intrinsic value (e.g. unditched tidal wetlands) for future long-term scientific research; (4.) provides habitat for a Federal or State-listed endangered, threatened, or species of special concern; or (5.) may provide rare habitat for an assemblage of rare species or for an unusually high concentration of a single rare species.

Ecological Values of the Site

- Site of highest dunes in Connecticut on a portion of this coastal property supporting one of the best examples of a maritime 'salt-spray pruned' coastal woodland/shrubland dominated by black cherry and shadbush.
- Seabeach sandwort, *Honckenya peploides* (Connecticut species of special concern) has been observed at the site in the recent past. Storms Irene and Sandy may have caused it to disappear, but it may simply be that the plants are buried and roots are still viable.
- Undeveloped barrier beach coastal land form creates low energy back barrier lagoon providing important habitat especially for breeding, migrating and overwintering waterfowl. The area supports the American black duck, a state-designated species of Greatest Conservation Need.

Site's Context within the Larger Stewardship Area and Scientific Research Value:

Because of the diversity of habitat types and landscape features at the site (e.g., barrier beach, dune, coastal woodland/shrubland, estuarine emergent marsh, back barrier sand flat, shallow water lagoon) and its position at the mouth of the Pattagansett River, **the site provides an unusually high diversity of faunal and botanical habitat within a relatively small area**. This habitat complex is dominated spatially by the Pattagansett River estuary which provides overwintering waterfowl habitat for black duck, a state-designated species of Greatest Conservation Need, and is a migratory stopover area for shore and land birds and breeding habitat for marsh birds. The site has also hosted several significant coastal ecology scientific research studies including: *Reproduction, growth and feeding habits of Menidia menidia (Ahtherinidae) in a tidal marsh-estuarine system in southern New England,* by Cadigan, K. M. and P. E. Fell (1985); *Abundance of Melampus bidentatus and Gukensia demissa along the Pataguanset Estuary (Connecticut) in relation to salinity and other tidal marsh invertebrates* by Fell, P. E., and J. H. Williams (1986); and *Development of a tidal marsh in a New England River Valley* by Orson, R.A. , R. S. Warren and W.A. Niering (1987).

Figure 1 Old Black Point Association Property Proposed Stewardship Site Within Context of Existing Stewardship Area & TNC-CT Stewardship Sites





Figure 2 Old Black Point Association Property, Black Point, East Lyme, CT

Figures 3a and 3b Old Black Point Beach Site Photographs



Primary dune system



Lagoon and back-barrier sand flats

Figures 4a and 4b Old Black Point Beach Site Photographs



Restoring dune and back-barrier sand flat



Barrier beach and dunes