May 30, 2013

DRAFT

To: **Steve Wright, Director**
Narragansett Parks and Recreation
Town of Narragansett
25 Fifth Avenue
Narragansett, RI 02882

From: **Thomas Fortier, President**
Friends of Canonchet Farm
PO Box 418
Narragansett, RI 02882

DRAFT: Application for Permit Modification to W2011-11-056
Restoring Habitat at Lake Canonchet, Narragansett, R.I.

Application for Permit Modification (Rule 9.09)

- Quadruplicate (4) site plans which clearly depict the proposed modification.
- Proof of property ownership (Letter from local tax assessor)
- Written narrative and any additional data which describes and details the proposed minor changes and/or modification proposed, and the reasons for the modification.

Narrative

R.I. Coastal Resources Management Council Assent W2011-11-056 governs invasive species management work being done by the Friends of Canonchet Farm along the east embankment of Lake Canonchet, which is owned by the Town of Narragansett and which is located across Boston Neck Road (Scenic 1-A) from the Narragansett Town Beach. The assent permits Friends of Canonchet Farm volunteers, under the supervision the organization's Certified Invasive Managers, to mechanically treat invasive vegetation. This narrative accompanies an Application for Permit Modification to add herbicidal treatment to the management tools available to the Friends of Canonchet Farm.

Site Plan

Refer to W2011-11-056 and the original proposal for a description of the Lake Canonchet project. Refer also to the progress report (Restoring Habitat at Lake Canonchet Year One)

submitted on March 13, 2013. There was no change in the area to be managed, and during 2012 there was no deviation from the description of work in the original application.

Proof of Property Ownership
There has been no change of ownership.

External Factors
The one significant external factor affecting the project area was overwash from the ocean during Superstorm Sandy and subsequent Northeasters:

- Causing the freshwater pond to become brackish
- Damaging some trees and shrubs
- Depositing debris, most of which the Friends of Canonchet has removed from the site, and a thin layer of beach sand.

Prior to the storms, testing of the lake showed that salinity was 0.00 parts/thousand. Testing in May 2013 showed salinity ranged from 5.00 ppt to 7.00 ppt at the three test locations. It does not appear that the saltwater has inhibited the invasive species, and it seems that the same is true of the native vegetation, although it is still too early to tell.

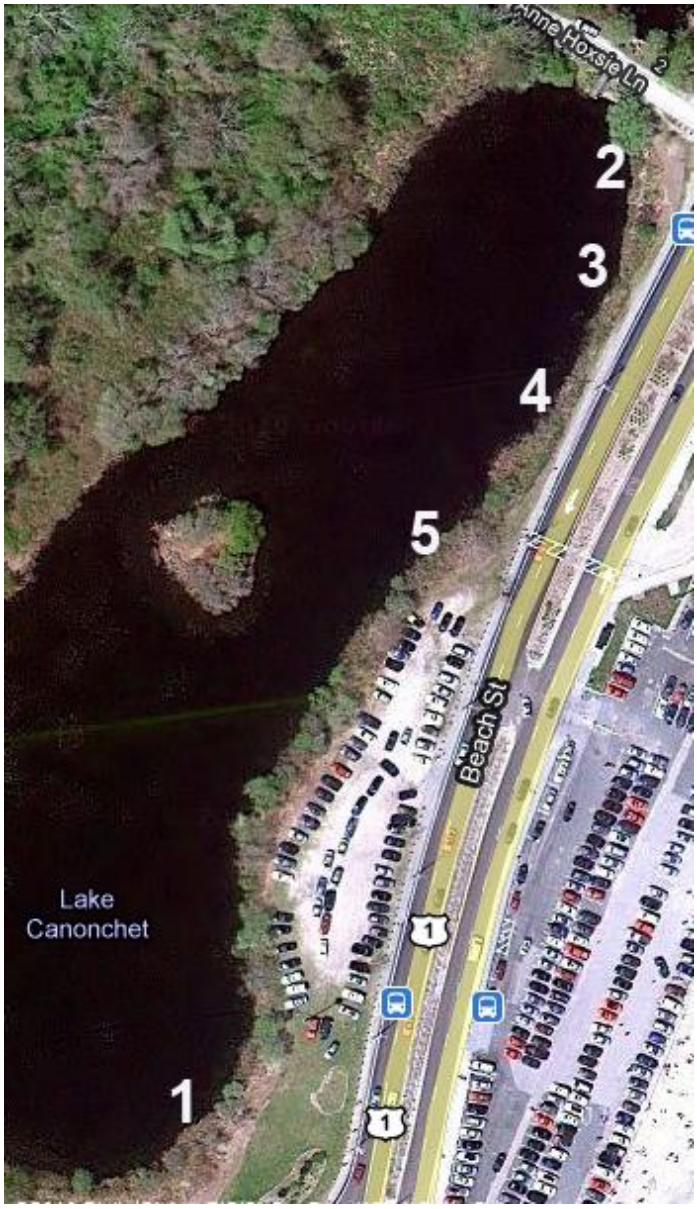

Figure A The Project area is the east embankment of Lake Canonchet from the intersection of Boston Neck Road and Narragansett Avenue north to Anne Hoxsie Lane. Numbers are keyed to photos of vegetation to be treated with herbicide.

Proposed Herbicidal Treatment

During 2012, the Friends of Canonchet Farm successfully managed Japanese knotweed, Asian bittersweet, Black swallowwort, and European honeysuckle in the project area by repeated cuttings over the course of the spring, summer and early fall. However, as noted in *Restoring Habitat at Lake Canonchet Year One*, selective application of herbicide is required to bring certain areas under complete control. For example, there is a well established infestation of knotweed at the southern end of the project area (see 1 on in Figure A and related photo). Even

though it has been weakened by successive cuttings, it will certainly rebound in several years if herbicide is not taken down into the root system.

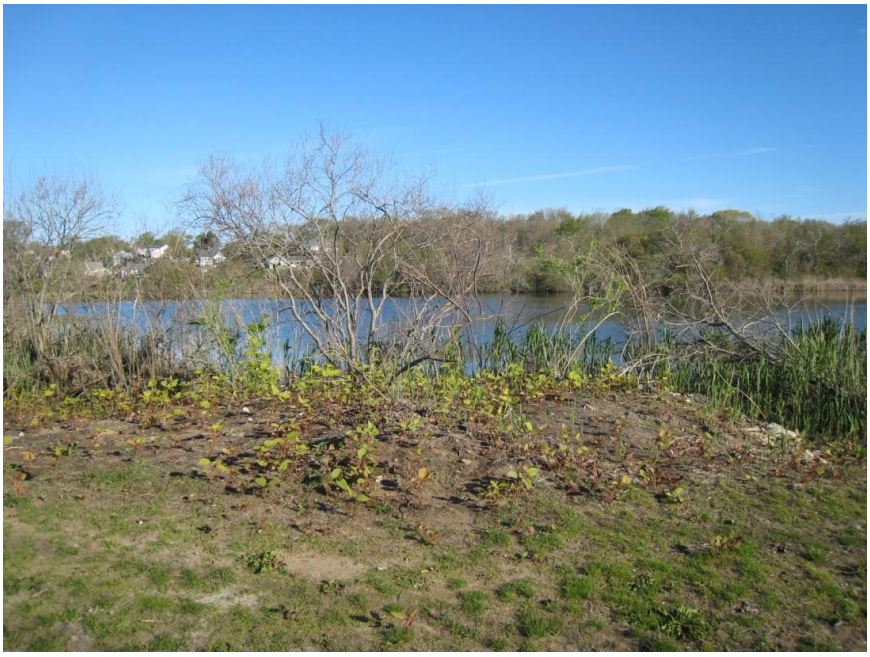

Photo 1: The overwash from Superstorm Sandy did not inhibit this infestation of Japanese knotweed at the southern end of the project area.

The Friends of Canonchet Farm plans to contract with Nickerson Tree and Landscape Service, a Rhode Island licensed chemical applicator, to chemically treat selected infestations in the project area.

Japanese Knotweed

Herbicidal treatment is required for two knotweed infestations of approximately 100 square feet each at the northern end of the project area (Photos 2 and 3) and for the previously noted segment at the southern end of the project area (Photo 1). During the spring and early summer we will continue to punish the plants with cutting and pulling, but then in late summer, allow the knotweed to leaf out so that there will be sufficient surface area for foliar spraying. The herbicide, glyphosate (Rodeo) or triclopyr (Garlon), or a combination of the two, will be applied by the licensed applicator using a backpack sprayer. Foliar spraying of knotweed may be used in other sections with appropriate protection of adjacent native species.

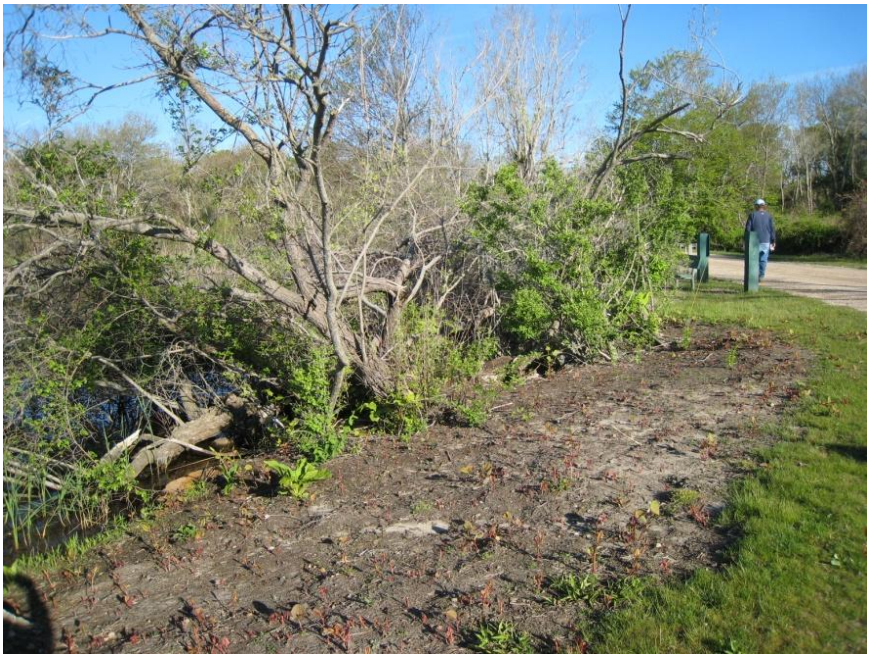

Photo 2: This persistent stand of knotweed at the northern of the project area, which was managed during 2012 with bi-weekly cutting, now requires backpack spraying.

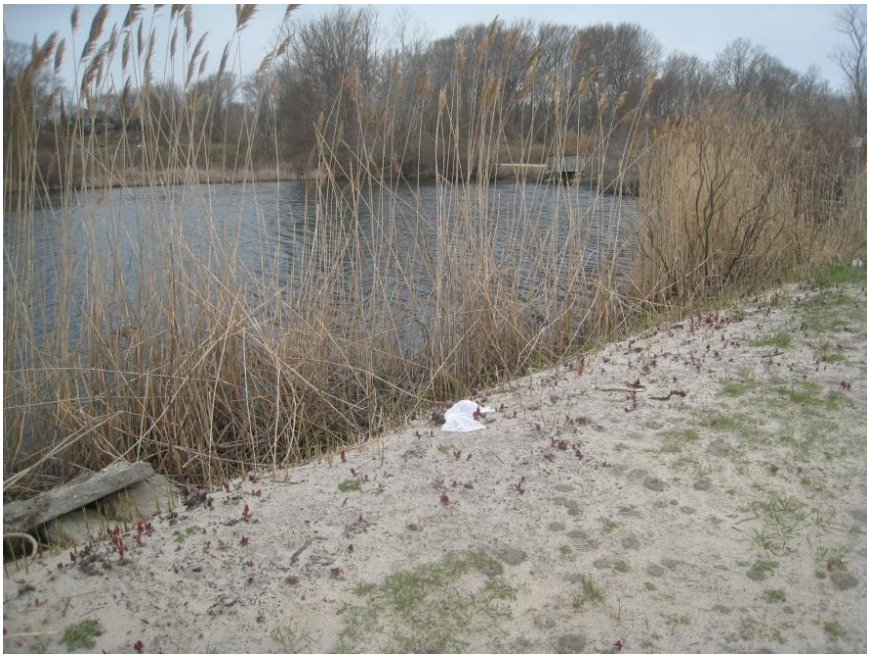

Photo 3: In mid-April 2013, knotweed emerged from a portion of the embankment that was covered with beach sand from the overwash.

Black Swallowwort

Black swallowwort is present in several sections along the edge of Lake Canonchet (Photo 4). So far we have been able to prevent it from flowering and seeding, but now need to treat it with herbicide to bring it under control. We plan to treat the swallowwort with Argon using the "bloody glove" technique, as the plant is mixed in with desirable native species.

Photo 4: Black swallowwort, here mixed in with Phragmites and Rosa rugosa, is present in about 20 percent of the project area.

Oriental Bittersweet

We plan to chemically treat all instances of bittersweet in the project area under the supervision of the licensed chemical applicator. We propose to paint re-cut bittersweet stumps (Photo 5) with Rodeo in late summer.

Photo 5: Bittersweet roots cut in 2012 will be re-cut and painted with Rodeo.