

### September 4, 2013

To: Steve Wright, Director

**Narragansett Parks and Recreation** 

**Town of Narragansett** 

170 Clarke Road

Narragansett, RI 02882

From: Thomas Fortier, President

**Friends of Canonchet Farm** 

PO Box 418

Narragansett, RI 02882

The Friends of Canonchet Farm is proposing to expand its invasive plant control work at Lake Canonchet to include the eastern shore of Little Neck Pond. In the new area, we will employ the same successful methods used to control Japanese knotweed, Oriental bittersweet and other invasive vegetation at Lake Canonchet, including selective herbicidal treatment as permitted in the August 8, 2013 R.I. Coastal Resources Management Council Modification to Assent W2011-11-056.

This additional project area is a planned sequel to the Lake Canonchet work as described in our original permit application. In addition to your approval, this extension will require that you apply to CRMC for another modification to Assent W2011-11-056.

As with the habitat restoration work at Lake Canonchet, the Friends of Canonchet Farm will manage the new area at no cost to the Town of Narragansett.

Removal of invasive plants and restoration of native species in this area are important objectives in and of themselves. The work is also a necessary first step in the development of the linear park along Boston Neck Road and Narragansett Avenue, as described in the Canonchet Farm Master Plan Executive Summary adopted on June 27, 2011. Moreover, successful restoration of native species in this highly visible location will be a powerful example of what can be accomplished on public and private land in Narragansett and throughout South County.

This proposal will be attached to the application for modification to CRMC as Exhibit 1 to provide a description of work.

### **Little Neck Pond Invasive Plant Control**

## **Contractor**

The contractor for the proposed work is the Friends of Canonchet Farm, a 501(c)(3) non-profit organization dedicated to the preservation and improvement of Canonchet Farm in Narragansett, R.I.

Six members of the Friends of Canonchet Farm who are Certified Invasive Plant Managers are involved in management of the project:

- Thomas Fortier (Cert. No. 121, expires March 2014; RIAL# 534) is the President of the Friends of Canonchet Farm
- Ray Kagels (Cert No. 191, expires March 2014) is the Vice President of the Friends of Canonchet Farm
- Kathleen Kelleher (Cert. No. 130, expires March 2014) is the Secretary of the Friends of Canonchet Farm
- Michael Lapisky (Cert. No. 133, expires March 2014)
- David Smith (Cert. No. 149, expires March 2014)
- Rosemary Smith (Cert. No. 203, expires March 2015)

The Friends of Canonchet Farm will organize volunteers from among its members and other interested citizens (including URI Master Gardeners), who will be trained and supervised by the Invasive Plant Managers.

In addition to the habitat restoration at Lake Canonchet, the Friends of Canonchet Farm successfully managed a similar volunteer effort in partnership with the Town of Narragansett in November 2009, in which 58 volunteers removed asphalt from Canonchet Farm in response to a CRMC complaint.

# **Additional Area to be Managed**

The additional area to be managed is the 1,582 foot long eastern shore of Little Neck Pond in Narragansett. The pond is located across Boston Neck Road (RI 1-A) from the Narragansett Town Beach. Figure 1 shows the additional area and the location of vegetation shown in photos at the end of this document.



Figure 1 Little Neck Pond, Narragansett, R.I.

The pond is separated from the beach by the state highway and beach facilities including an asphalt parking lot and the beach's North Pavilion. If these facilities are included in the definition, the pond is within 200 feet of the beach. However, for purposes of this proposal, Little Neck Pond itself is considered a coastal feature/coastal pond.

Little Neck Pond is normally a fresh water body fed by Lake Canonchet and by sheet flow from the upland on Canonchet Farm to the west. A channel starting in the northwest corner of the pond provides outflow to Pettaquamscutt Cove. Testing of the adjacent Lake Canonchet on July 11, 2011 showed that there was 0 ppt salinity. However, testing of Lake Canonchet in May 2013 showed salinity levels of 5.0 ppt to 7.0 ppt, the result of overwashes from Superstorm Sandy in October 2012 and subsequent northeasters. It is presumed that Little Neck Pond is now similarly brackish, and will gradually return to being a freshwater body.

## **Ownership**

Lake Canonchet and Little Neck Pond occupy the southeast corner of Canonchet Farm, a 176-acre parcel owned by the Town of Narragansett. The parcel was purchased with funds from the U.S. Department of the Interior for open space and passive recreation.

### **Dimensions**

The additional area to be managed is an irregularly shaped band running 1,582 feet north-east from Anne Hoxsie Lane to NETT utility pole 209 and varying in width from 20 feet to 97 feet.

## **Future Areas to be Managed**

The Friends of Canonchet Farm plans to extend the project to a third area, the south edge of Lake Canonchet along Narragansett Avenue (Phase 3 in Figure 2). Timing of any proposal for additional phases depends on the early outcomes in the area along Little Neck Pond.



Figure 2 Additional Areas to be Managed

### **Existing Vegetation**

Vegetation along the water's edge includes both native plants and invasive species that are common in the Rhode Island coastal environment.

The native (or naturalized non-invasive) vegetation includes:

- Shadbush (Amelanchier canadensis)
- Bayberry (Morella [Myrica] pensylvanica)
- Sweet pepperbush (Clethra alnifolia)

The following invasive plant species are present:

- Autumn olive (Elaeagnus umbellata)
- Black swallowwort (Vince toxicum negrum)
- Japanese knotweed (Plygonum cuspidatum)
- Oriental bittersweet (Celastrus orbicalutus)
- Phragmites (Phragmites australis)
- Porcelain berry (Ampelopsis brevipedunculata)

In most of the management area, no one invasive has gained dominance and the invasives appear to be competing with each other as much as with the native species. With selective removal, the native plants will be able to gain control of the shore line without the need for additional planting.

However, we anticipate that some portions of the shoreline will require planting of native species to restore habitat and secure the embankment. Plants will be selected from the Rhode Island Coastal Plant Guide (URI CELS Outreach Center/CRMC).

Photos 1 through 5 at the end of this document show the mix of invasive vegetation and native plants in the area to be managed.

## **Post-Storm Cleanup**

An important component of this project is continuation of debris removal from the project area, work that was undertaken by the Friends of Canonchet Farm after Superstorm Sandy in October 2012. There was significant overwash at Little Neck Pond, especially in the center of the area across the street from the cabanas at Narragansett Beach. Removing both organic and inorganic debris will "free up" native plants and provide safe access to invasive plants (see Photo 3). We have continued this work in 2013 as additional volunteers were available during our work sessions at Lake Canonchet.

#### **Work Schedule**

The Friends of Canonchet Farm will begin work in the additional area as soon as the town receives the necessary assent modification. If the modification is granted this year, we will limit our activity to

removing knotweed on the north side of Anne Hoxsie Lane, an important defensive measure for the work on the Lake Canonchet side of Anne Hoxsie Lane, while continuing post-storm cleanup further north along Little Neck Pond.

Beginning in March 2014, we will begin systematic removal of invasive species using the same mechanical methods and segmentation that we used in 2012 and 2013 at Lake Canonchet. We will work from Anne Hoxsie Lane north, moving from the good to the bad. We will do selective foliar spraying in the late summer of 2014.

Phragmites is a more significant problem at Little Neck Pond than it is along Lake Canonchet (see Photo 5). During 2014 we will manage the problem by cutting stalks that are spreading up the embankment, in part to get access to Black swallowwort, which typically grows beneath the new reeds. As we gain more experience with the area, we will consult with CRMC to define a specific plan for managing Phragmites in the water and on the embankment.

#### **Removal Methods**

We will organize volunteers to work one day a week, clearing specific segments of the water's edge. Each week, multiple crews of four to five volunteers each will receive specific instructions on handling the plants in their assigned segment. They will then use hand tools to remove the unwanted vegetation. The following week, the crews will clear an adjacent segment, while going over the previous week's work to remove any new shoots. Herbicide treatment will only be scheduled for the Maintenance Phase in the late summer and fall. The treatments will be done by a licensed applicator using methods and materials described in our May 30, 2013 application for assent modification.

# Reporting

The Friends of Canonchet Farm will formally report on the progress of the invasives management along Little Neck Pond as part of our regular reporting at the end of the growing season on work under Assent 2011-11-056.



Photo 1: Japanese knotweed north of Anne Hoxsie Lane will be the starting point, working from the good area to the bad.



Photo 2 Knotweed infests much of the southern third of the new work area.



Photo 3: Storm debris is mixed in with grasses and emergent Black swallowwort.



Photo 4: A fan from overwash opposite the cabanas at Narragansett Beach is relatively free of invasives.



Photo 5: Phragmites encroaching up from the water's edge is a significant problem in the center of the additional project area.