

# SITE SPECIFIC WORK PLAN FOR INVASIVE SPECIES MANAGEMENT ON FOREST PRESERVE IN THE ADIRONDACK PARK

*Iris pseudacorus* – Siamese Ponds Wilderness Area

DATE: May 5, 2011

APPLICANT: Adirondack Park Invasive Plant Program

PREPARED BY: Brendan R. Quirion

STATE LAND UNIT: Siamese Ponds Wilderness Area

DEC REGION: 5

COUNTY: Warren

TOWN: Johnsburg

TARGET SPECIES: *Iris pseudacorus*

CONTROL METHOD: Herbicide treatment using best management practices in accordance with the Inter-Agency Guidelines for Implementing Best Management Practices for the Control of Terrestrial and Aquatic Invasive Species on Forest Preserve Lands in the Adirondack Park.

UTM COORDINATES: (Decimal Degrees)

43.68790172 Latitude and -74.07567597 Longitude

OBS ID # from iMap: New Sites for 2010 not yet in iMap

- **Narrative**

The project proposes to treat five small to moderate sized patches of *Iris pseudacorus* (yellow iris) located in wetlands near Barton Mines LLC. in the town of Johnsburg. Patches range from a few plants to 0.2 acres. The control method selected is to apply a treatment of a glyphosate based herbicide via stem injection in accordance with the best management practices identified in the “Inter-Agency Guidelines for Implementing Best Management Practices for the Control of Terrestrial and Aquatic Invasive Species on Forest Preserve Lands in the Adirondack Park, prepared by NYS Department of Environmental Conservation and the Adirondack Park Agency”. This stem injection treatment involves cutting each flower stem with clippers 8-9 inches above the root crown and then pushing a cavity needle into the soft pithy center of the stem. This creates a hollow area in the center of the stem that will hold the herbicide. Glyphosate will be injected into the hollow cavity while slowly withdrawing the cavity needle. The stem injection method is useful in minimizing injury to neighboring plants when compared to spray techniques. Also, stem injection can be conducted during windy or rainy conditions. A marking dye will be used to identify which stems have been injected with herbicide so that stems are not injected more than once. All clothing, boots, and equipment will be cleaned prior to leaving the site to prevent the spread of seed or rhizome fragments.

- **Inventory of target and non-target species**

The sites were mapped by the Adirondack Park Invasive Plant Program (APIPP) on 5-5-2007 and 7-9-2009 as part of a rapid response inventory after being made aware of the infestation.

## **Treatment of *Iris pseudacorus* within the Siamese Ponds Wilderness Area**

Within the invaded sites yellow iris coverage ranged from 10-75% above ground biomass and non target species included *Calamogrostis*, *Solidago*, *Juncus*, *Aster*, *Spiraea*, *Carex*, *Typha*, *Salix*, and *Cornus*. No protected plant species were identified during the inventory.

- **Target species impacts and concerns**

Areas impacted by *Iris pseudacorus* can range from large scrub shrub palustrine wetland communities to private lakes and ponds. Saturated or open water habitats often provide the best conditions for invasion by this species. If infestations are not controlled, and suitable habitat is present, this species will spread vegetatively by rhizome growth, and/or seed dispersal to create a monotypic plant community in the impacted area. This can result in an overall decrease in the native biodiversity and ecological quality of the invaded habitat. These infestations will also continue to serve as source populations for future invasion.

- **Natural Heritage review**

A review of the Natural Heritage database indicated that there are no known occurrences of rare, threatened or endangered species present on this site.

- **Adjoining land uses and nearby State land units**

Seed pods from a source population within the tailings pond owned by Barton Mines LLC are traveling downstream into Forest Preserve, establishing new infestations. The preparers of the workplan received permission from Barton Mines LLC staff to perform treatment of infestations on private land and will continue to cooperate on the yellow iris removal project. There will be no offsite impacts to nearby uses on State Land.

- **Assessment of treatment alternatives**

Cutting/Mulching - Cutting is an option that has already been tried at similar yellow iris infestations within the Adirondack Park. Although in most cases repeated yearly cutting did prohibit plants from going to flower or seed, it did not stop plants from growing back.

Pulling - Hand pulling is not an option due to the size of the impacted area, the sites soil characteristics, and the number of plants present.

Herbicide – A treatment of glyphosate based herbicide is currently the best option due to the plants moderate size in this stage of infestation.

Black Plastic - Covering the sites with black plastic is not an option due to the size of the infested areas and amount of standing water within and around the sites

Excavation - This method is not currently a viable option due to its cost.

- **History of past treatment methods used on site**

Past cutting and pulling of yellow iris plants elsewhere within the Adirondack Park has not succeeded in completely eradicating those infestations.

- **Timeframe by which the work will be undertaken and completed**

The work will be undertaken from the middle of May to the end of June for five years. At this time the plants will be in flower and will be able to be easily distinguished from the native blue flag iris (*Iris versicolor*). During this stage of development the plants will be readily transporting

## **Treatment of *Iris pseudacorus* within the Siamese Ponds Wilderness Area**

nutrients to the roots making herbicide application extremely effective. When yellow iris is not in flower it is nearly impossible to distinguish from the native iris species, therefore no treatments will occur. A photographic record will be made to document management progress. Any and all new infestations of *Iris pseudacorus* that establish in future years as a result of seed dispersal or rhizomatic growth from these parent stands will be treated in a similar manner until 2016.

- **Schedule of anticipated future work**

See monitoring section below.

- **Monitoring provisions to determine the effectiveness of the management action**

The site will be inspected and a rapid assessment of dominance by the target species will be performed before and after treatment. The site will be inspected again in July/August 2012 (and each year thereafter) to look for native plant and/or yellow iris recovery. If yellow iris plants are detected during these monitoring visits, subsequent treatment will be undertaken. The photographic record will be continued to document the management progress of the site.

- **Attachments**

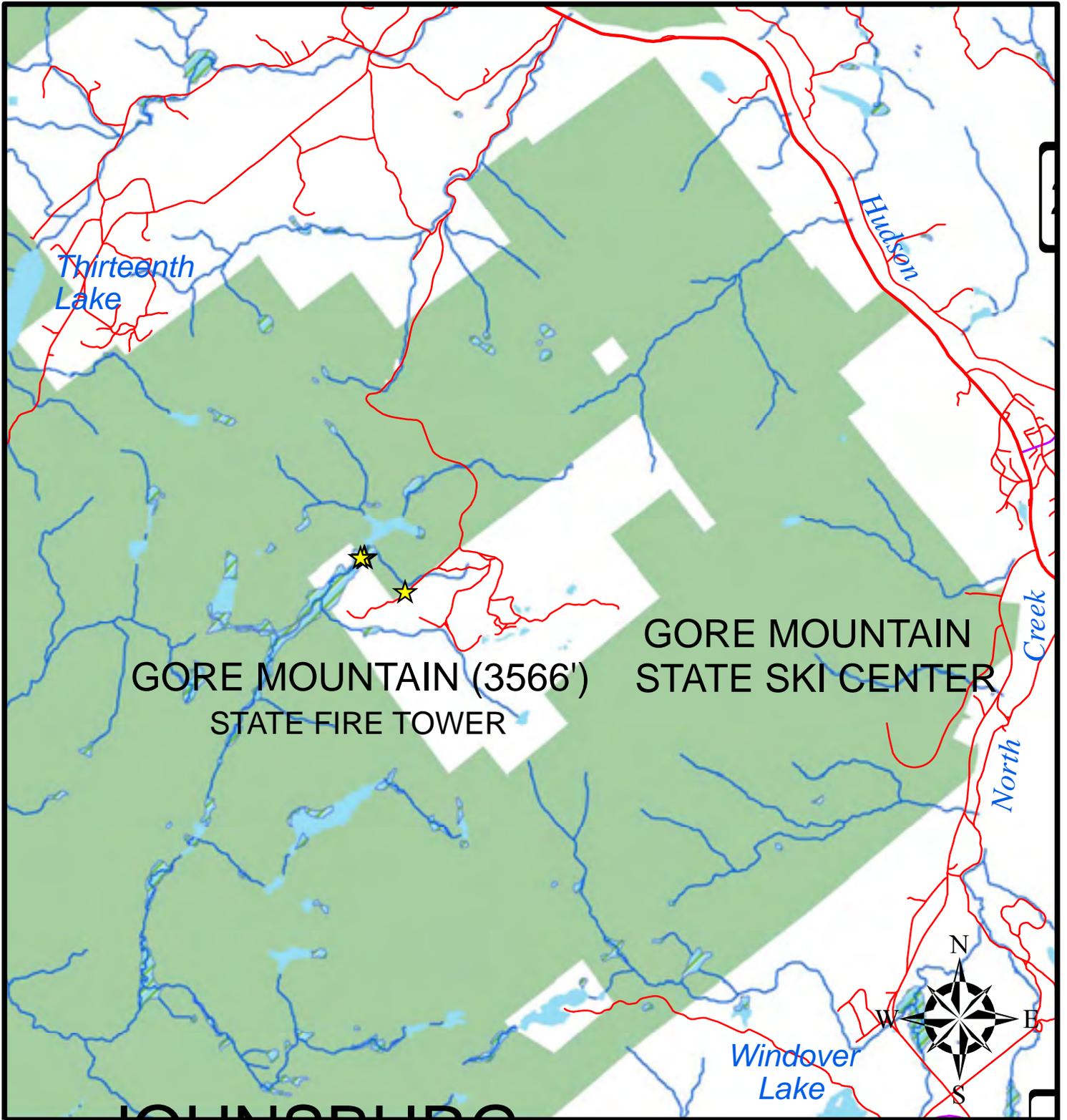
Two different map scales are provided below. The location map shows all of the project sites to be treated within the designated forest preserve unit. The project site maps show a closer view of each project site to be treated.

**Location Map:** Map 1

**Project Site Map:** Map 2

**SEQRA documents (long environmental assessment form)**

**Site Photo Documentation**



**GORE MOUNTAIN (3566')  
STATE FIRE TOWER**

**GORE MOUNTAIN  
STATE SKI CENTER**

### Location - Map 1

- Key:**
-  Yellow Iris
  -  Small Rivers/Streams
  -  Large Rivers/Streams
  -  Wetlands
  -  Lakes/Ponds
  -  Forest Preserve
  -  PRIMARY HIGHWAY WITH LIMITED ACCESS
  -  PRIMARY ROAD WITHOUT LIMITED ACCESS
  -  SECONDARY and CONNECTING ROAD
  -  LOCAL, NEIGHBORHOOD, and RURAL ROAD
  -  VEHICULAR TRAIL





## Project Site - Map 2

- Key:**
-  Yellow Iris
  -  Small Rivers/Streams
  -  Large Rivers/Streams
  -  Wetlands
  -  Lakes/Ponds
  -  Forest Preserve
  -  PRIMARY HIGHWAY WITH LIMITED ACCESS
  -  PRIMARY ROAD WITHOUT LIMITED ACCESS
  -  SECONDARY and CONNECTING ROAD
  -  LOCAL, NEIGHBORHOOD, and RURAL ROAD
  -  VEHICULAR TRAIL



Photos 1 & 2 – Only Site

1.



2.

