

Invasive Species Control Plan for Construction Activities and Post Construction Monitoring Plan

Roaring Brook Wind Power Project Town of Martinsburg, Lewis County, New York

PURPOSE

Wetland and stream corridors are a sensitive and abundant resource in the Project area associated with the Roaring Brook Wind Power Project. Project construction activities will disturb these resources as a result of a culvert replacement and upgrade, access road construction, buried electrical line installation and earthwork activities. A potential threat to wetland and stream resources is the risk of introduction or spread of invasive vegetative species, either through the movement of topsoil, fill, gravel, construction equipment, or during restoration activities. Invasive species are non-native species that can cause harm to the natural ecology of an area, often by out-competing native species. The Roaring Brook Wind Farm Project will initiate an Invasive Species Control Plan (ISCP) to minimize the spread of invasive species within federal and NYSDEC regulated wetlands, streams, and other riparian areas affected by wind development activities on-Site.

No official list of invasive non-native vegetative species is available from the New York State Department of Environmental Conservation. However the Invasive Plant Council of New York State has developed list of the 18 most invasive species in New York State (*www.nysgextension.org/glhabitatepacd/pages/plants/invasives.htm*). This ISCP assumes targeted invasive species are as described in this identified species list.

It is the purpose of this ISCP to prevent the introduction and spread of the target invasive species to new locations resulting from project activities within the limit of project disturbance. The goal of the ISCP is an overall 0% net increase in the aerial coverage of target invasive species within regulated/jurisdictional wetlands and streams identified within the limit of disturbance of all project temporary and permanent component activities.

EXISTING SITE CONDITIONS

The first step in controlling the spread of target invasive species is to identify and assess the extent of any existing invasive species within the subject control area. Significant multiseason wetland delineation and ecological survey fieldwork has been conducted on-site in summer and fall 2007, and spring and summer 2008. Common reed (*Phragmites australis*), is the only target species identified within the limit of project disturbance. Two small areas of common reed were identified in delineated wetland MM, located along the existing unpaved main Wind Project entrance road (Alaska Highway). This species was not identified as being a dominant species within the regulated wetland areas. These isolated patches of common reed will be demarcated with survey flagging prior to construction.

PROPOSED CONTROL MEASURES

Controlling the spread of the target species will be achieved through the implementation of four appropriate measures; 1) construction materials inspection; 2) target species treatment and removal; 3) construction equipment sanitation; and 4) restoration.

- 1. **Construction Materials Inspection:** Construction material such as seed mixes, mulch, topsoil, sand, gravel, crushed stone, and rock brought on the project site from an outside source shall be free of invasive plant material.
- 2. Target Species Treatment and Removal: If unavoidable areas containing target invasive species are encountered within regulated wetlands/streams, then appropriate treatment and removal methods would be conducted. Common reed is the known target species existing on site. Therefore, hand removal of all plant materials including root mass, rhizomes, and stolons would be performed within the projects area of disturbance, followed by proper disposal. Disposal methods of the removed plant material will be based upon density and quantity of invasive species encountered, and may include herbicide treatment, placement in an interim designated secure container, transport in a sealed container and proper offsite plant material disposal in a designated areas by introducing disturbance and thereby promoting further spread of target invasive species, therefore, soil removal is not considered a preferred method of control. Any herbicide spot treatment will be applied by a Commercial Certified Pesticide Application in accordance with NYSDEC approved herbicide and treatment measures.
- 3. **Construction Equipment Sanitation:** The contractor will be required to wash down all major construction equipment prior to entry into the project site using a mobile pressure washer. The washing of construction equipment will prevent invasive plant propagules from dispersing further into the project site.
- 4. **Restoration:** Regulated wetland and stream areas that are temporarily impacted during construction will be stabilized and restored in accordance with the project specific Stormwater Pollution Prevention Plan.

POST CONSTRUCTION MONITORING

Monitoring of the control of invasive species for the Roaring Brook Wind Farm Project will have two (2) phases. The first is monitoring the implementation of the ISCP during construction. The second is monitoring the success of the ISCP for a two-year period to coincide with the monitoring of other project restoration activities. The change in invasive species coverage on-site from pre-construction to post-construction will be conducted by visual inspection of regulated areas within the limit of disturbance during the growing season for two consecutive years following restoration. A report detailing the success of the ISCP will be included in an annual monitoring report. If the goal of 0% net increase has not been accomplished during the monitoring period (within the regulated wetland/stream areas in the limit of project disturbance), a control plan will be developed by a New York State Registered Landscape Architect or equivalent professional, to be followed by subsequent annual monitoring in consultation with the NYSDEC, until the no net increase goal is achieved.