

ITC Holdings – Willow Metropark IVM and Ecosystem Management

VMES, LLC consulting developed a vegetation management plan for ITC Holdings to contract mechanical vegetation removal work in August 2006 to clear trees and brush from its 345 and 120-kV electric transmission ROW traversing through Willow Metropark in Monroe Township, MI. The clearing allowed herbs, forbs and grasses to germinate, but also encouraged resprouting of trees and the invasive buckthorn and autumn olive shrubs, necessitating follow-up herbicide treatments.

Willow Metropark is several miles due west of Humbug Marsh of the Detroit River International Wildlife Refuge, where IVM Partners, Inc. has been hired by the U.S. Fish & Wildlife Service to develop and implement an integrated vegetation management plan to control invasive plants and restore native ecosystems beneficial to wildlife. Rick Johnstone, Principal of VMES, LLC, is also President of IVM Partners, and he recognized that the electric transmission ROW, in addition to providing safe and reliable transmission of electric power, can act as a greenway to support the same critical habitat as that of the refuge. The refuge could be considered a central hub of habitat with the transmission corridors acting as spokes radiating out and extending habitat from the refuge into the interior of the State of Michigan.

To document the significance of ROW habitat potential, ITC Holdings supported IVM Partners to contract with botanist M. Robin Haggie of Chesapeake Wildlife Heritage and inventory the plant community changes within established transects of the Willow Metropark ROW. A two-year study to document the effectiveness of various IVM techniques to establish and encourage growth of a wide diversity of native plants was undertaken according to the following prescription:

- The wire zone centerline of the 345-kV corridor was treated after mowing with herbicides applied by an ATV vehicle over the cut stubble of the brush to select out all broadleaf plants in October 2006. Since the herbicides could affect trees whose root systems lie under the treated area, the ROW border area was not treated to provide a buffer from the adjoining woodland.
- Brush in the 345kV border zone was subsequently treated after the 2007 growing season with herbicides that would not impact the adjoining trees.
- The 120-kV corridor did not receive any herbicide treatments so as to act as an adjacent control area for a direct habitat comparison between cutting by mower only, versus cutting plus herbicides.

The two ROW corridors were evaluated for their effectiveness in providing for safety, access and reliability needs of the electric transmission facilities, as well as their ability to provide a greenway for native flora and fauna on their route from Willow Run Metropark east to Trenton Channel and the wildlife refuge. The analysis after two years of documentation showed that the 345kV ROW that received herbicide treatments contained numerous low growing species that

provide food and nesting cover for a wide variety of wildlife, from pollinators to deer. The untreated 120kV ROW, in contrast, was dominated by non-native invasive shrubs and incompatible trees that averaged 8-feet in height after the second growing season.

The vegetation management plan and documentation were reviewed with the Wildlife Habitat Council in October 2008 and their biologist agreed to certify the study site as wildlife habitat. This designation will encourage other utilities to adopt similar management practices.

The site is recommended for a field tour and workshop, in conjunction with work at the Detroit River International Wildlife Refuge, to explain best IVM practices to the Great Lakes regional wildlife biologists, parks, utility and highway ROW managers and elected officials to demonstrate how all ROW can meet their respective management needs while controlling non-native invasive plants and providing improved habitat for a wide diversity of wildlife.

Rick Johnstone
VMES, LLC Principal
IVM Partners President