

Appendix M

Exotics Control Plan

Exotics Control Plan Holcombe, Wisconsin and Dells Hydro Projects

Background Information

Purple loosestrife (*Lythrum salicaria*) is an exotic plant species that has aggressively invaded Wisconsin's wetlands in recent years. It is the only exotic species that has reached nuisance proportions and prompted implementation of control measures at any of the Chippewa River hydro project sites. This species is presently most abundant at the Holcombe Project but has also been found as isolated plants along other segments of the river.

Other nuisance exotic species that have been documented at one or more of the Chippewa River Project sites include the curlyleaf pondweed (*Potamogeton crispus*) and the carp (*Cyprinus carpio*). Two other very troublesome exotic species that could potentially invade the Chippewa River system are the zebra mussel (*Dreissena polymorpha*) and Eurasian watermilfoil (*Myriophyllum spicatum*). The zebra mussel has spread rapidly and has reached epidemic proportions throughout many of the large lakes and river systems of the eastern and central regions of the USA since it was first detected in Lake Erie in 1986-87. The species is now abundant in the Mississippi River, where it threatens to destroy the native mussel populations, but has not been documented in the Chippewa River system. (In order to document and possibly control the spread of zebra mussels, NSPW cooperates with the USFWS to monitor for the species presence at the Dells Dam.) Eurasian watermilfoil is an aggressive submersed aquatic plant species that has become problematic in some Midwestern lakes.

Holcombe: NSPW has worked cooperatively over the past several years with the Lake Holcombe Improvement Association (LHIA) in an effort to control or eradicate purple loosestrife on Lake Holcombe. In addition, NSPW conducted herbicidal control of small pioneering colonies of purple loosestrife around the lake during 1997, 1998 and 1999 as well as co-funding herbicidal application by the LHIA in heavily-infested areas over a several year time span. The LHIA has worked with the WDNR to introduce a non-native beetle and weevil to some of the more heavily-infested purple loosestrife areas and they have been somewhat effective at controlling the plant. The LHIA will continue to monitor the beetle and weevil introduction areas to determine their long-term effectiveness on purple loosestrife control/suppression.

Wisnota and Dells: Purple loosestrife has not yet been documented along the shores of Lake Wisconsin or Dells Pond although the threat of invasion remains.

NSPW Commitments

- NSPW shall continue to cooperatively work with the WDNR and the LHIA to control purple loosestrife on Lake Holcombe. Specific activities shall be determined mutually between the parties on an as-needed basis.

- NSPW shall continue to conduct annual monitoring and eradication of pioneer purple loosestrife plants on NSPW-owned shorelands of the Chippewa River hydro impoundments. The annual monitoring shall be conducted in July or August while the plants are flowering and shall consist of a slow boat tour of the shoreline during which time the location and relative abundance of loosestrife plants will be noted on a map and recorded in a notebook. At the same time, spraying of an appropriate herbicide will be conducted in an attempt to eradicate or prevent the spread of individual plants or clumps of loosestrife. A report of the findings from the annual monitoring and a description of any remediation that is undertaken shall be submitted to the WDNR, the USFWS, and other interested agencies by October 30.
- If purple loosestrife becomes established or if any other exotic or nuisance species threatens to become a problem within the project boundaries of the Chippewa River hydro projects through the term of the new licenses, NSPW shall work cooperatively with the WDNR, USFWS, other federal agencies, and local organizations to address management needs and alternatives.
- NSPW shall continue to place plate samplers and to monitor them for the presence of zebra mussels at the Dells Dam, until such time that the USFWS and NSPW determine that this effort is no longer necessary or meaningful.

Rationale

The threat that an exotic or nuisance aquatic species will become a problem on Chippewa River hydro project lands or waters during the term of the new FERC licenses is a real possibility. The provision for a cooperative agreement among parties will insure that NSPW, the resource agencies, and local entities will work together to develop a management plan to address any introduction or invasion.

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