

# **RED LAKE COUNTY COOPERATIVE WEED MANAGEMENT AREA STRATEGIC PLAN**

## **INTRODUCTION**

The Red Lake County Cooperative Weed Management Area (CWMA) Program was begun in 2008 as a multi-agency and community effort to coordinate and implement management and control of invasive plant species. The purpose of this grant was to begin control and management efforts for species agreed upon by the group in an agreed upon focus area. This management plan is meant to expand upon the initial efforts of the group to expand invasive species coordination and control to the entire county and to formulate a plan to ensure the long term persistence of the Red Lake County CWMA.

## **PURPOSE AND BACKGROUND**

This plan is meant to clearly define the Red Lake County CWMA objectives and priorities and some of the strategies for meeting those objectives. A long term commitment and plan is needed to effectively deal with invasive species and to continue a cooperative effort such as this. Invasive species will likely be a continual threat to Minnesota ecosystems and long term planning will minimize these threats. Monitoring of initial efforts and follow up treatment are essential to ensure those efforts are not wasted. We can learn from mistakes and continue control if a long term effort is made. Follow up treatments, along with early detection, are also more cost effective than returning to the problem years later. In addition, a plan is needed to determine what vegetation is desired that will maintain a healthy ecosystem and keep invasive species in check. Planning for the desired condition may at the same time allow for more effective long term invasive species control.

This management plan is meant to provide a framework for continuing cooperative weed management efforts in Red Lake County into the future, and is part of the objectives of grant received thus far. The Red Lake County CWMA is committed to Integrated Pest Management including mechanical, chemical, biological, and cultural methods of control. As new invasive species threats, control methods, and priorities emerge, this document may be modified.

The initial objectives and associated strategies of the Red Lake County CWMA are as follows. The main focus area will be the entire county.

### **Objectives of the CWMA Grant:**

- 1) The IPM treatment of land located within the County, isolating existing and emerging weed locations and preventing the continued spread into uninfested grasslands. Many of these treatments will target the successful isolation/possible elimination of emerging weed threats in the County such as Spotted Knapweed, Leafy Spurge, Absinth Woodworm, and Purple Loosestrife.
- 2) The development and implementation of a long-term comprehensive management plan for the Red Lake County Cooperative Weed Management Area.

- 3) Continue the implementation of an invasive species baseline inventory/GIS spatial dataset from which use to measure future success.
- 4) Host field tours to highlight successful IPM treatments within the County. Develop county brochures, presentations, newsletters, newspaper articles, and put information on the SWCD Website.
- 5) The Red Lake County CWMA steering committee comprised of Federal and State agencies, county government, township officials, private corporations, non-profit conservation groups, and private landowners will facilitate information transfer and foster a more collaborative approach to targeting weed management efforts. This will increase efficiency and enable the prioritizing weed management target treatments.

## **Strategies for CWMA Grant:**

### **TREATMENT**

The cooperative partners will be implementing an integrated IPM approach using biological, chemical, mechanical, and cultural control methods. IPM treatments will be prioritized and coordinated through the collaborative efforts of the partnerships and steering committee. Provide early detection and rapid response to manage and control the spread of existing and emerging invasive species infestations.

### **PLANNING AND MANAGEMENT**

Red Lake County CWMA planning and management will utilize, through meetings and communication, the steering committee to provide input into developing a comprehensive IPM/invasive species management plan. The development and utilization of the GIS spatial dataset is absolutely critical for the Red Lake County CWMA steering committee to successfully develop a comprehensive weed management plan or strategy. The plan will incorporate a collaborative targeting of invasive species and weed management effort.

### **INVENTORY AND MAPPING**

Continue the implementation of a baseline inventory/GIS spatial data set/layer using GPS and GIS software. This baseline spatial data will be used to prescribe targeted treatments, develop IPM strategies, and from which use to measure future success. The inventory and mapping will give the partners and Red Lake County the knowledge of weed infestation locations and severity. The partners and Red Lake County will also gather weed information in the form of pen and paper maps with the help of townships and concerned citizens. This information will then be entered into the GIS spatial data layer. The collection and integration of the invasive species data layer will be available in a GIS mapping system for the public to report new weed locations and to be used by partners to share information, and prescribe and conduct treatments.

### **EDUCATION**

The Red Lake County CWMA is partnering with the University of Minnesota Extension Service, collaborative partners, and the County to provide and disseminate valuable weed identification, reporting, and prevention information. The Red Lake County CWMA will be hosting field tours

highlighting successful IPM techniques and treatments. The development of an Invasive Species Tab on the SWCD Website will be useful in promoting and disseminating information to a large number of concerned citizens and will be an excellent communication tool. We will also be providing information in the form of brochures, newsletters, reports, pictures, and newspaper articles. It will be beneficial in having the public be involved with the Red Lake County CWMA project. As the public becomes active in the project we will be seeking volunteers to help further our educational efforts.

## **IMPROVED EFFICIENCY**

Schedule meetings to incorporate the collaboration of ideas, planning, and transfer of information. The partnership will have an improved efficiency in coordinating activities such as educational efforts, targeting treatments and results, refining IPM treatments, and prioritizing weed management efforts and controls. The Red Lake County CWMA's cooperative partners will be able to collectively leverage our resources in a coordinated effort to control invasive species and manage the grassland landscape.

## **ADMINISTRATIVE FUNCTION**

The partners of the Red Lake County CWMA at this time are Farm Service Agency, USDA - Natural Resources Conservation Service, The Nature Conservancy, MNDOT, DNR, University of Minnesota - Extension Service, Pembina Trails RC&D, Red Lake Watershed District, Red Lake County SWCD, County Commissioners, Environmental Services, Highway Department, Cities, Townships, Vathauer Farm Supply, Red Lake County Cooperative, and local citizens. The lead for the Red Lake County CWMA will be the Red Lake County Soil and Water Conservation District. A Memorandum of Understanding has been signed by each of the participating agencies/individuals involved with the CWMA project.

Other CWMA's have been formed or are in the process of being formed in northwest Minnesota. The Red Lake County CWMA will coordinate with these groups to facilitate their progress and invasive species control in the region.

## **GOALS AND OBJECTIVES**

The primarily goal of the Red Lake County CWMA is to prevent the establishment and spread of invasive species in order to conserve the natural ecosystems of the county.

A committee met to determine objectives for this management plan for the Red Lake County CWMA. These objectives are as follows:

1. Inventory and map invasive plant infestations (Figure - map with known infestations) to aid in planning for control efforts. Mapping will help to prioritize control efforts and allow a method of tracking progress.
2. Strategies: Ultimately, the inventory information will be in a GIS system available to all members of the Red Lake County CWMA. It may also be available to the public so that they can also report invasive species locations. The information will include UTM coordinates, date of inventory, who recorded the infestation, the extent of the infestation, plant common and scientific names. The Red Lake County SWCD will develop and maintain the GIS database. The Red Lake County CWMA will work with the townships to record on a paper map or with GPS

the known locations of the above 4 species and to complete road inventories of unknown areas.

2. Develop a prevention and early detection program for invasive species not yet occurring in Red Lake County or occurring in low infestations.

Strategies: Identify which species to watch for based on nearby known locations in Minnesota or North Dakota, the aggressiveness of the species and its habitat, and known level of difficulty of control. Develop identification and training materials that can be easily distributed to agencies and the public. Work with extension, schools, etc. to conduct outreach to the public. Work with local nurseries and Minnesota nursery inspectors to ensure target invasive species are not sold in Red Lake County. Develop an early response team that can eradicate a species if it is found.

The species currently on the Red Lake County CWMA watch out list are:

3. Conduct education and outreach to increase awareness of the impacts of invasive species. Awareness will ultimately aid in increasing resources to address the problem.

Strategies: Determine priority audiences and develop educational programs and outreach tools for Red Lake County landowners, land managers, and communities. Specify which partners have the ability and time to do outreach with these materials. Possible materials include information on the SWCD website, brochures, presentations, newspaper articles, and newsletters.

4. Determine means for getting long term funding and resources to the appropriate entities for invasive species control. This may be funding for the Red Lake County CWMA in the next few years, but may also need to include funding to townships and agencies that can do the on the ground control.

Strategies: Future funding will be sought from grants through the Board of Water and Soil Resources, NFWF, and other sources. A Red Lake County CWMA subcommittee will make a plan for future funding needs and other funding avenues. Outreach to the public and legislators regarding the need for invasive species control.

5. Using an integrated approach, the Red Lake County CWMA will develop a cooperative control plan for each species below that were identified as priorities by the group. The Red Lake County CWMA recognizes that they may not be able to eradicate some species. Therefore, goals for containment and management of certain species will be established. For example, keep spotted knapweed confined to Gervais Township...

Priority species are spotted knapweed, leafy spurge, absinth woodworm, and purple loosestrife.

Thus far the Red Lake County CWMA has worked on the identification of where the priority species are located throughout the county.

Strategies:

Biological: beetles are available for leafy spurge and spotted knapweed.

Chemical: Herbicide application is sometimes the only practical way to control an invasive species. Many considerations must go into the use of an herbicide and specific plans will be made for each species on which herbicides may be used.

Mechanical: Manual and mechanical techniques such as pulling, cutting, or otherwise stressing plants, particular if populations are small. Grazing may also be appropriate for some species.

Cultural: This may include use fire, flooding, smothering, or desirable species plantings that can compete with invasive species.

6. Determine the desired vegetation for roadsides, natural areas, erosion control projects, landscaping, etc. in Red Lake County in order to promote a healthy ecosystem in which invasive species are limited.

Strategies: Research historic vegetation conditions, learn what successes/failures natural resource agencies and others have used to reach desirable vegetation goals. Use and promote the use of native vegetation, primarily prairie plants, for roadsides and natural areas.