

Dakota County Cooperative Weed Management Area

2020-2021 Plan



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Attachments

Attachment 1. Wild Parsnip Identification Course August 13, 2020
Wild parsnip Identification courses to be held outdoors at the City of Hampton – Fire Station and City Hall. Course is intended for City and Township Officials.

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Introduction

In 2017, Dakota County, Dakota County Cities and Township realized that Wild Parsnip, Spotted Knapweed, Leafy Spurge and other noxious weeds were becoming more prevalent in road right of ways, state and county controlled properties and railroad right of ways. Some plants are noxious because they can harm people, animals the food we eat, and nature. Wild parsnip was spreading at a rapid rate; first appearing in small patches in state right of ways and quickly spreading to county and local roads. Efforts were started by individual Townships and by the Dakota County Transportation Department to control wild parsnip. Actions, control methods, and weed management resources varied from entity to entity. Noxious weeds spread and invade without regard to borders and traditional control methods and were increasing the areas of infestations. Dakota County determined that working as individual departments or municipalities was not as effective as working together to create control plans and pool resources. Dakota County Soil and Water Conservation District (SWCD) presented to the Township Officers and Dakota County Transportation and Dakota County Parks Department the idea of developing a Cooperative Weed Management Area.

A Cooperative Weed Management Area (CWMA) is a formal partnership developed between Landowners, government agencies and organizations with the goal of managing invasive plants across jurisdictional and landownership boundaries. The CWMA establishes a defined work area where local units of government, state and federal agencies, and citizens can pool resources to address invasive species problems held in common. CWMA's established in similar counties in Minnesota have found that these partnerships are more efficient and effective than piecemeal approaches and have proven successful when partnerships were established for long term commitments made by formal agreements.

Cooperative Weed Management Areas (CWMA) are not a new concept. State and County experts in noxious weeds have helped private landowners for years. However, the scale of the problem was often confined to an individual landowner instead of on a community, watershed or landscape basis. For a variety of reasons one landowner often diligently combated noxious weeds while a neighbor did not, which exacerbated the problem. Varying levels of interest, knowledge, skills, resources and commitment were wasted while noxious weeds continued to expand.

With support from the Dakota County Transportation, Dakota County Parks Department and Dakota County Township Officers Association, the Dakota County SWCD applied for grant funding to form a Cooperative Weed Management Area (CWMA). The effort would be led by the SWCD and would be guided by a steering committee.

Cooperative Weed Management Area (CWMA) Organization

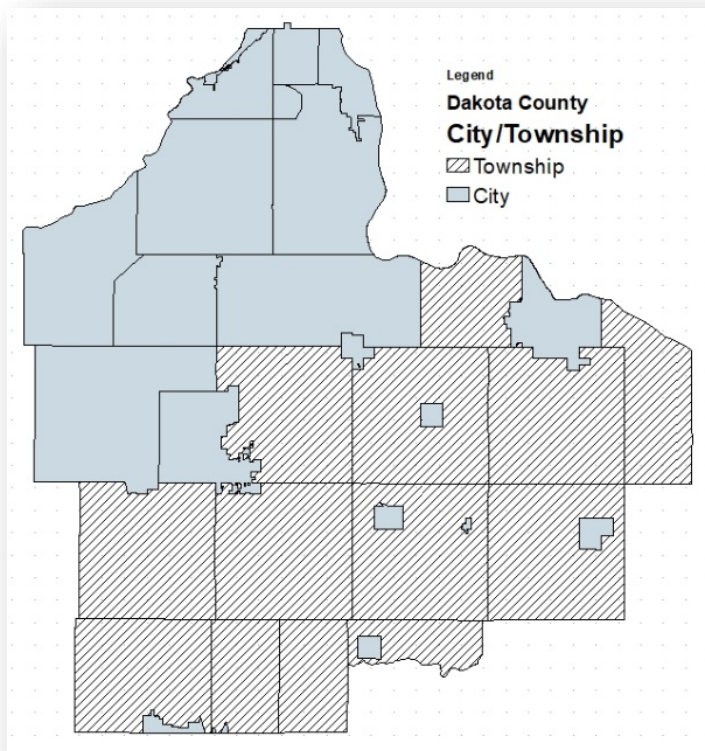
With a grant funded from the Minnesota Board of Soil and Water Resources (Mn BWSR), the Dakota County SWCD agreed to hold meetings to organize the Cooperative Weed management Area. A Steering Committee was solicited by the SWCD to identify partners, seek input, and develop goals and strategies for the CWMA. The Steering Committee was instrumental in determining the Geographic area of the CWMA. All cities, townships, Dakota County, and Dakota County citizens would be encouraged to participate in the CWMA. State and federal agencies, and Railroads Companies with a vested interest in noxious weed control in Dakota County, would also be encouraged to participate in the CWMA. The Dakota County SWCD, as one of the founding partners of the CWMA, would maintain a roster of participating partners that have signed MOUs. The Dakota County SWCD would act to organize CWMA meetings as determined by the Steering Committee. Sub committees would be established to create an education and outreach program for the CWMA. The Steering committee determined that a formal agreement between partners was needed to attain a wide array of stakeholders and landowners. The formal agreement or Memorandum of Understanding (MOU) would be useful in developing the organization and would aid in decision making and growth of the CWMA.

Geographic Boundaries and Description

Location: The Dakota County CWMA is geographically defined as the lands and waters within the geopolitical boundaries of Dakota County, Minnesota. Dakota County is 587 square miles in area and is situated in the southeast corner of the Twin Cities Metropolitan area and is the third-most populous

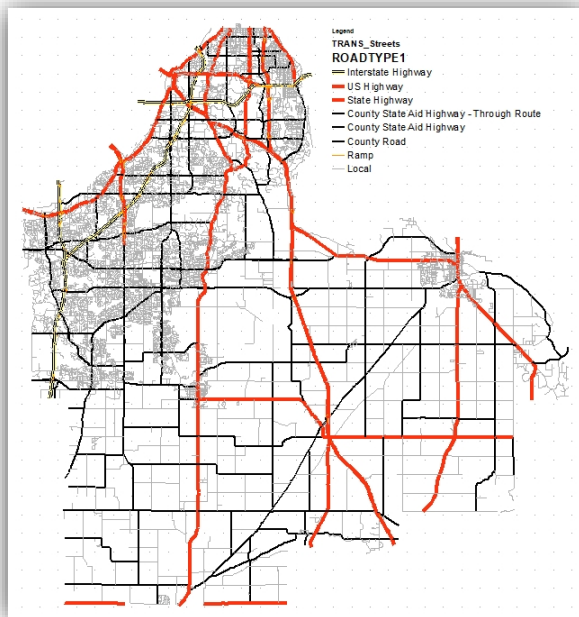
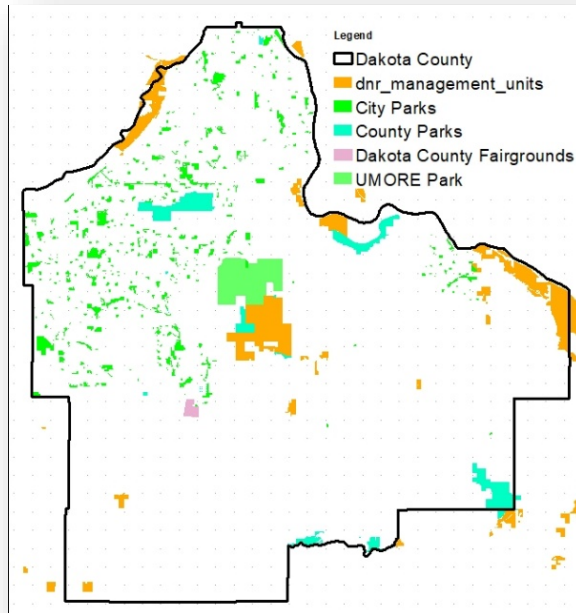
county in the state of Minnesota. In 2018, Dakota County, MN had a population of 425,423 people with a median age of 38.2 and a median household income of \$86,302.

Landscape: Dakota County is organized with twenty-two Cities and thirteen Townships and roughly maintains a land use mixture of 1/3 urban, 1/3 suburban and 1/3 rural. This combination of land use and the confluence of two major rivers (the Mississippi and Minnesota) that form the county's northern and eastern borders makes Dakota County a unique geographic area.



Dakota County contains two park reserves, three regional parks and one county park, totaling more than 5000 acres and which protect some of the county's highest quality natural resources. In addition, the Dakota County park system is also developing a growing network of regional greenways that when complete will total nearly 200 miles of trails and serve as ecological functioning corridors when complete.

In Dakota County, The Minnesota Department of Natural Resources (Mn DNR) manages 700 acres of Aquatic Management Areas (AMA), 720 Acres of Scientific and Natural Areas (SNA), 2000 acres of State Park, and 9127 acres of Wildlife Management Areas (WMA).



Dakota County Transportation highway system is made up of 320 miles of County State Aid Highways (CSAH) and 104 miles of County roads (CR). The overall County system consists of 424 centerline miles of which approximately 359 miles (85 percent) are paved and 65 miles (15 percent) have a gravel surface.

In Dakota County, the Minnesota Department Transportation maintains a highway system made of 74 miles of Interstate highway, 77 miles U S highways and 175 mile of state highways.

Dakota County Townships and Cities maintain 2183 miles of roads

Cooperative Partners

The success of the Dakota County CWMA is dependent on the organization and participation of its partners. All Cities, Townships, State and Federal Agencies, as well as Railroads Companies, will be encouraged to participate in the CWMA as Partners or Cooperators. Participation in the CWMA is voluntary and CWMA partners may withdraw from the partnership by providing a written statement to the Steering Committee. Partner expectations are outlined in Section III of the Memorandum of Understanding (MOU). The Dakota County SWCD agrees to gather and maintain a roster of participating CWMA partners and cooperators. The roster shall be updated annually or upon notification in writing to the CWMA by the partner or cooperator.

Steering Committee

Steering Committee members were solicited by the Dakota County Soil and Water Conservation District for their expertise as well as to represent a geographic region. The Steering Committee consisted of partners that had expressed the most interest in noxious weed control and forming a CWMA. Committee members will serve on a voluntary basis. The Steering committee was chosen to represent the county as a whole. The purpose of the Steering Committee was to determine the project area of the CWMA, determine the primary and secondary weed species for control, establish a common database for entry of invasive and noxious weeds problem sites, establish an education and outreach program to help local management teams identify the primary and secondary invasive and noxious weed species, identify management techniques for control and eradication of these species, provide direction for a Dakota County Volunteer program that will be managed by Dakota County Parks -Natural Resources Department and ensure the implementation of the strategic plan.

Partner Organization:	Representative(s)
Burnsville	Caleb Ashling
Mendota Heights	Krista Spreiter
Inver Grove Heights	Craig Reller
Castle Rock Township	Sandra Weber
Hampton Township	Jim Sipe
Dakota County – Facilities Maintenance	Brad Deitner
Dakota County - Transportation	Mike Greten
Greenvale Township	Anthony Rowan
Mn Department of Natural Resources	Russel Smith
Dakota County – Natural Resources	Meghan Manhatten
Mn Department of Agriculture	Christina Basch
Dakota County – SWCD	Todd Matzke

Table 1: Dakota County CWMA Steering Committee

Mission

The mission of the Cooperative Weed Management Area (CWMA) is to enhance the success of the noxious and invasive weed management for Dakota County by encouraging sharing of resources, information and expertise.

Funding and Administration

Competitive grants will be the primary funding source of the Cooperative Weed Management Area. The fiscal agent for each grant will be determined as grants are being considered based on requirement of the grant. The Steering Committee will be responsible for reviewing and making recommendations on program budget and identifying projects to be funded. Initial funding to establish the CWMA has been provided for by a grant from the Minnesota Board of Water and Soil Resources. The fiscal agent of these funds is the Dakota County Soil and Water Conservation District and will expire on December 31, 2020.

Highest Priority and Weeds of Concern

The Steering Committee has identified Wild Parsnip, Leafy Spurge, Spotted knapweed and Palmer Amaranth as the highest priority species due to public concern and interest. Garlic Mustard, Narrowleaf bittercress, Japanese hedge parsley, and Common or European Buckthorn were identified in the northern half of Dakota County as a species of concern. The Steering Committee recognizes that there may be other invasive noxious weeds within the boundaries of Dakota County. Species listed by the Minnesota Noxious Weed list will be considered by the Steering Committee to update the priority and weeds of concern list as these weeds become more prevalent or of higher concern.

Minnesota Department of Agriculture Noxious Weed list.

For a current list of noxious weeds, refer to Minnesota Department of Agriculture web site:

<https://www.mda.state.mn.us/plants-insects/minnesota-noxious-weed-list>

Cooperative Weed Management Area Objectives.

Objective 1. Development of the Cooperative Weed Management Area.

The CWMA recognizes that Dakota County is diverse with a unique mix of older developed communities, newer urban communities, and rural townships, each with a different perspective of vegetation management and invasive weed control. The CWMA realized that with this mix of partners there may be different objectives and goals. Each will need to be taken into consideration when considering new partners. However, the CWMA realizes that while this may create a challenge, this mix of partners can also provide an opportunity of bringing in knowledge and techniques for invasive weed control that would not necessarily be available if the CWMA was limited to one geographical area of the county. Therefore, it was determined that all Cities and Townships would be encouraged to participate in the CWMA. Any efforts to control noxious and invasive weeds would be missing a key partner unless state and federally controlled lands were not also adapted to the CWMA.

The following definition shall be used to define a **CWMA Partner**: A Dakota County City or Township, a local, state or federal government agency, a privately controlled business, or a not-for-profit organization. A CWMA Partner is an entity that has signed a Memorandum of Understanding (MOU) and agrees to participate in fulfilling the goals stated in Objectives 2 thru 9.

Various other organizations or individuals may choose to participate informally as **Cooperators** with the CWMA. Cooperators may contribute in kind services or funds. A Cooperator must provide a plan of activities to the CWMA Partner prior to any action. Finally, the CWMA recognized that railroad companies were a significant property owner within Dakota County. Because railroad companies are often controlled by managers that work from locations outside of the county and some are located outside the state, participation would be difficult. However, the CWMA has decided an effort should be made to contact railroads to participate. Railroad companies may become partners or cooperators.

Actions

- A. Develop a bi-annual Plan of Work.
- B. Identify and contact new partners.
- C. Identify and contact new cooperators.
- D. Develop a formal agreement with new partners using a Memorandum of Understanding.

Objective 2. Adopt a Baseline Collection and Mapping System.

The Steering Committee determined that using a readily available system, developed for identifying and mapping noxious weed rather than developing a new mapping inventory system would be the most effective and efficient. Early Detection and Distribution Mapping System (EDDMapS) was recommended by the Minnesota Department of Agriculture and was chosen by the Steering Committee for the initial inventory of invasive and noxious weeds. EDDMapS is a web-based mapping system for documenting invasive species distribution. This system was selected due to its speed, ease of use, and simplifies the data entry process even for users without geographic information systems experience. Launched in 2005 by the Center for Invasive Species and Ecosystem Health at the University of Georgia, it was originally designed as a tool for state exotic pest plant councils to develop more complete distribution data of invasive species.

Actions

- A. Present EDDMapS to new partners and Cooperators.
- B. Provide EDDMapS instruction for mapping and Inventory.
- C. Provide follow-up Instruction for the management of record points.

Objective 3. CWMA Partner Weed Identification Workshops.

Identifying wild parsnip and many of the weeds listed on the Minnesota Department of Agriculture – Noxious Weed list was identified as a primary concern by the Steering Committee. A survey of city and township officials indicated that many could not properly identify the weeds of concern and desired training to identify the primary weeds during the various stages of growth. The survey also identified training to help managers with timing and methods control of the various weeds.

Actions

- A. Weed Identification Workshop (Aug 2020, Sept 2020, 2021 training to be determined)

Objective 4. Inventory, Mapping, and Control

The strength of the CWMA is partners working together across boundaries to cooperatively control species. The inventory and mapping of priority species and weeds of concern will be the responsibility of the partners and cooperators. The inventory of priority weeds and weeds of concern will allow the CWMA to provide maps and coordinate a control plan with partners and cooperators.

The CWMA realized that completing the inventory of priority weeds and weeds of concern would not be enough to control these species. A coordinated strategy and method to document control efforts would also be needed. Invasive Species Management Tracking System (ISMTrack) was recommended by the Minnesota Department of Agriculture as a software application that could be used to track many invasive species management activities including: staffing, treatment method, travel time, volunteer or crew hours, weather conditions, completion dates and other critical information.

ISMTrack is a cloud-based software system developed by the Minnesota Department of Agriculture, University of Minnesota, University of Wisconsin-Extension, Minnesota Department of Natural Resources and Minnesota Department of Transportation. ISMTrack was developed to help land managers track invasive species management across sites and over time. ISMTrack is integrated with EDDMapS. ISMTrack is being used on limited basis by Dakota County to track weed control projects in Dakota County Parks and Dakota County Transportation Spray Crew activities. Data can be shared, downloaded and analyzed to increase efficiency and improve invasive species management by a team and across organizations. Using EDDMapS and ISMTrack databases. The CWMA partners or cooperators will generate maps from EDDMapS that will be used for future control.

Actions

- A. Upload historical bulk data from each city/township to facilitate data sharing over boundaries
- B. Coordinate an inventory of priority weeds and weeds of concern using EDDMapS.
- C. Present and Provide instruction for ISMTrack.

Objective 5. Share Information Among CWMA Partners and Cooperators

As partners inventory and in some instances start to control areas, the CWMA will have the ability to see these efforts, and in 2021 and beyond, coordinate and focus weed eradication across municipal boundaries. The CWMA will coordinate an overall management strategy.

Using the software tools EDDMapS and ISMTrack, partner organization will have access to inventories and control data of neighboring townships, cities, county or state agencies. This information when shared across boundaries will allow partners to coordinate and, in many instances, combine efforts to control species. Contracts to mow or spray areas could be combined by two or more partners. The benefit being to pool funds and tap into technical expertise, knowledge, and control techniques. Shared contracts between entities will also be a function of the CWMA to facilitate lower costs and increase ease of invasive species management. The CWMA or groups of partners may create group contracts or utilize existing county or state contracts to perform work in a more efficient and cost-effective manner.

Action

- A. CWMA to coordinate and develop shared management-strategies
- B. CWMA to coordinate group contracts
- C. CWMA to coordinate equipment

Objective 6. Restore Impacted Areas

The removal of vegetation often leaves a void in the landscape. These voids created by removing noxious weeds and invasive species is often forgotten when creating a control program. Managers often rely on the surrounding vegetation to provide a seed source or the rhizomes of roots to fill in those voids. When the areas are small, such as those created by spot application of herbicide this technique works relatively well.

Where the invasive species infestations have overwhelmed large areas, chemical application or mechanical control will create large areas barren of vegetation. A restoration plan will need to be incorporated into the control plan to prevent the re-infestation of unwanted plants.

Prior to European settlement, Dakota County was a mix of hardwood forests and vast areas of native prairies. The CWMA understands it is unrealistic to restore all areas of the county to pre-settlement condition. Managers are encouraged to research the conditions that existed prior to European settlement and devise restoration plans that would mimic pre-settlement conditions. When the site conditions are not feasible, managers should select species that will fill the void left by chemical or mechanical vegetation control with species that will outcompete invasive or noxious weeds.

Action

- A. Conduct site restoration workshops as part of Weed Identification Workshops.

Objective 7. Monitor Control Area

Invasive and noxious weeds grow aggressively, multiply quickly without natural controls and often show adverse effects to people through contact or ingestion. Sites that have been documented and have been treated will need to be revisited to evaluate the effectiveness of control. Often these sites will require multiple visits over several years and require multiple control treatments to eradicate a troublesome species. Annual actions would include revisiting areas to monitor for the effectiveness of the previous control and possibly treat the area or schedule the area for future treatment. Both the EDDMapS and ISMTrack software allow the user to go back to previously reported areas and document the area visit. Simple training to use the software apps will be accomplished during weed identification workshop.

Action:

- A. Review site maps and schedule follow up visits
- B. Provide EDDMapS training for area re-visits

Objective 8. Public Education and Outreach.

Private citizens will be encouraged to work with Dakota County Cooperative Weed Management Area partners to report and inventory weed infestations. Dakota County Parks has a robust volunteer program and will, as needed, host volunteer registration and time tracking for practices for partner who do not have volunteer engagement infrastructure in place. Volunteers would be recruited through public outreach such as newsletters, public notices in newspapers, social media websites, signage in populated public areas and word of mouth.

The CWMA recognizes that many private citizens will not have the skills or knowledge to identify the priority weeds or most of the noxious weed listed by the Minnesota Department of Agriculture. Therefore, weed identification education courses will need to be conducted. In addition, new infestations will need to be recorded. Private citizens would be instructed how to use the EDDMapS software application on their personal cell phone or tablets. Dakota County Parks will open their early detection workshops to any CWMA volunteer, regardless of where they plan to survey. They will share training slideshows and handouts with CWMA partners who wish to use them.

Action

- A. Conduct species identification and EDDMapS workshops.
- B. Develop resources for continued education and outreach
- C. Coordinate training scheduling with Dakota County Parks

Objective 9. Seek Grant Funding

The CWMA recognizes controlling noxious and invasive species can be time consuming and costly. Wild parsnip has been spreading rapidly across Dakota County. Many of the townships and cities have indicated that maintenance budgets would not be able to cover the additional costs of controlling and containing wild parsnip and have the funds for usual annual expenses. Additional funding sources will need to be acquired through county, state and federal grants as they become available. Administration of the grant will be determined by the type and terms of grants. Only active CWMA partners may be eligible for grant funding.

As grants become available, sub committees will be formed to write grant applications and solicit state, county and federal partners. With majority approval of the active CWMA partners, these grants will be submitted on behalf of the CWMA.

For the fiscal year 2020, The Minnesota Department of Agriculture (MDA) has awarded \$537,000 to combat noxious weeds across Minnesota. Thirty-five projects were funded through the 2020 Noxious Weed and Invasive Plant Grant.

The MDA anticipates another \$100,000 will be available through the Noxious and Invasive Plant Grant for the next fiscal year (FY21: July 1, 2020 – June 30, 2021). The Request for Proposals (RFP) will be released by September 2020 and grants will be awarded in 2021.

MDA Grants funds were awarded at two levels for Fiscal Year 2020 (FY20). Level 1 projects were awarded up to \$10,000 each to be spent in one year to support local activity. Level 2 projects were awarded between \$10,000 and \$50,000 each to be spent over two years to promote collaboration with entities within and outside their jurisdictions.

Actions

- A. Apply for grant funding
- B. Determine fiscal agent

Appendix

Abbreviations

• AMA	Aquatic Management Area
• CSAH	County State Aid Highway
• CR	County Road
• CWMA	Cooperative Weed Management Area
• EDDMapS	Early Detection and Distribution Mapping System
• ISMTrack	Invasive Species Management Tracking System
• MDA	Minnesota Department of Agriculture
• MN BWSR	Minnesota Board of Water and Soil Resources
• MN DNR	Minnesota Department Natural Resources
• SNA	Scientific and Natural Area
• SWCD	Soil and Water Conservation District
• WMA	Wildlife Management Area

Roster of Active CWMA Participants

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|--|-------------------|
| 1. Dakota County Soil and Water Conservation District
todd.matzke@co.dakota.mn.us 651)480-7780 | Todd Matzke |
| 2. Ravenna Township
clerk@ravennatownshipmn.com 651)480-1502 | Caroline Spurgeon |
| 3. Castle Rock Township
sandra@CrUSAdermfg.com 651)463-4725 | Sandra Weber |
| 4. Mendota Heights
kristas@mendota-heights.com 651)255-1123 | Krista Spreiter |
| 5. Eureka Township
dpalmquist@eurekatownship-mn.us 952)469-3736 | Donovan Palmquist |