

**Environment and Natural Resources Trust Fund
2010 Request for Proposals (RFP)**

LCCMR ID: 121-D

Project Title:

Invasive Plant Management Through Partnerships: Prevention, Education, & Research

LCCMR 2010 Funding Priority:

D. Invasive Species

Total Project Budget: \$ \$173,844

Proposed Project Time Period for the Funding Requested: 2 years, 2010 - 2012

Other Non-State Funds: \$ \$0

Summary:

A cooperative, integrated, proactive approach that uses prevention, education, and research will be used to manage invasive plants in the Metro Region and will build partnerships for long-term sustainability.

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Sponsoring Organization: Ramsey Conservation District

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Location:

Region: Metro

County Name: Ramsey

City / Township:

_____ Knowledge Base	_____ Broad App.	_____ Innovation
_____ Leverage	_____ Outcomes	
_____ Partnerships	_____ Urgency	_____ TOTAL

MAIN PROPOSAL

PROJECT TITLE: Invasive Plant Management through Partnerships: Prevention, Education, & Research

I. PROJECT STATEMENT

Invasive plants endanger native species, alter ecosystems, and limit recreation. They frequently become a massive economic drain on society. Large areas of parks, open spaces, private property, and public waters are degraded by invasive plant species. New infestations of exotic plants often go undetected. Once established, intensive management is needed to control the spread of invasive plants; eradication is usually not possible. Ramsey County's large and diverse population, extensive transportation systems, thriving nursery trade, and central location can all contribute to the spread of invasive plants. Conversely, the county's central location and presence of numerous natural resource agencies and organizations make it possible to combat invasive plants in a cooperative manner. The Ramsey County Cooperative Weed Management Area was formed in June, 2008 and currently consists of 12 partners from federal, state, and local government agencies, private businesses, and non-profit organizations. This partnership increases the effectiveness of invasive plant management by pooling resources and knowledge and working across political and jurisdictional boundaries.

Funding will be used to support a full time program manager that will expand the program to include additional partners and serve as a regional center and clearinghouse that will provide invasive plant assistance to municipalities, public and private landowners, and the general public. The program will focus on new invasive threats in a proactive manner through prevention, education, and research. This program will utilize public and private partnerships to develop resources and achieve invasive species management using a variety of innovative techniques. The program will coordinate with partners, colleges, and universities to provide research opportunities to provide quantitative results that will expand knowledge and management techniques of new invasive plants. Important baseline data being collected on existing populations could possibly be used to spur applied research by partners (e.g., Minnesota Department of Agriculture) and potential partners (e.g., University of Minnesota).

II. DESCRIPTION OF PROJECT RESULTS

Result 1: Prevention of new invasive plant establishment

Budget: \$68,922

Target species that are not well established in our region but have the potential to become serious threats have been identified by the partners. These species are high priorities for both the Minnesota Invasive Species Advisory Council and the Midwest Invasive Plant Network. Species include (but are not limited to): Miscanthus, wild parsnip, Japanese knotweed, tansy, yellow iris, flowering rush, hydrilla, Brazilian elodea, cut-leaved teasel, and Grecian foxglove. Efforts will be focused on locating and controlling populations of these plants in Ramsey County and coordinating with CWMA's and other agencies throughout the region to slow their spread and raise awareness. The program manager, natural resource managers and trained volunteers will locate new invasive populations and record data on GPS units which will be integrated into a GIS database. This database will be available on the program website and will be used to coordinate management options. The program manager will coordinate with partners and others to perform control on target species using innovative methods such as biological control and integrated pest management. Best management practices that are both timely and effective will be employed to manage a given species and could include chemical, mechanical, and cultural controls. All control efforts will be recorded on standardized forms. A mid-term and final management report will be created and will be used to formulate future management efforts.

Deliverable	Completion Date
1. Database indicating known populations (including locations, abundance, distribution, and treatment history data)	July 1, 2012
2. Mid-term Target Species management report	Dec. 15, 2011
3. Final Target Species management report	Dec. 15, 2012
4. Monitoring of known populations	Ongoing

Result 2: Provide educational network on invasive plants **Budget:** \$104,922

Training and educational information on invasive plant identification and management will be created and disseminated through the website, brochures, newsletters, and through other mass media outlets, including partner workshops, programs, and websites. Through its partnerships the program will establish a network of natural resource managers and professionals to provide guidance for public and private landowners in Ramsey County, and the Metro Region. Education efforts will include indoor and outdoor workshops and presentations for managers, municipal and parks workers, Master Gardeners/Naturalists, students, and the general public. Four travelling interactive educational kiosks displaying information on invasive plants will be constructed and displayed at nature centers, libraries, and landscape nurseries. These efforts will increase public awareness and play an important role in long term prevention.

Deliverable	Completion Date
1. Minimum of 10 publications and brochures to be distributed widely	July 1, 2012
2. Host a minimum of 6 training workshops	July 1, 2012
3. Website (website will provide training information, brochures, presentations, links, management database information)	Ongoing
4. Interactive educational kiosks, 4 (display at venues will be ongoing)	March 1, 2011

III. PROJECT STRATEGY

A. Project Team/Partners

Ramsey Conservation District (Paul Erdmann, RCCWMA Manager) will administer this program with support from multiple project partners, who will provide in-kind service in the form of technical assistance, equipment use, and educational components. The RCCWMA currently consists of the following partners: the Capitol Region Watershed District, City of Maplewood, Great River Greening, H.B. Fuller/Willow Lake Nature Preserve, Minnesota Army National Guard, Minnesota Department of Agriculture, Minnesota Department of Natural Resources, Minnesota Department of Transportation, National Park Service, Ramsey Conservation District, Ramsey County Parks and Recreation Department, Ramsey County Public Works, Ramsey-Washington Metro Watershed District, Rice Creek Watershed District, and St. Paul Parks and Recreation Department.

B. Timeline Requirements

Funding being requested will be used over two years. Dissemination of information created by this program will be ongoing. Inventory and control efforts will be conducted during the 2010, 2011, 2012 (through June) field seasons.

C. Long-Term Strategy

The Ramsey County Cooperative Weed Management Area will serve as a regional center for invasive plant management. Funding will help to improve the knowledge base and effectiveness of invasive plant control, increase public awareness, and decrease the populations of these exotic invasive threats. This integrated, cooperative, proactive approach to invasive plant management will have long lasting economic and environmental benefits throughout the region. Providing measurable results will increase the chances of securing future funding from partners, citizens, LGUs, and/or other grant programs.

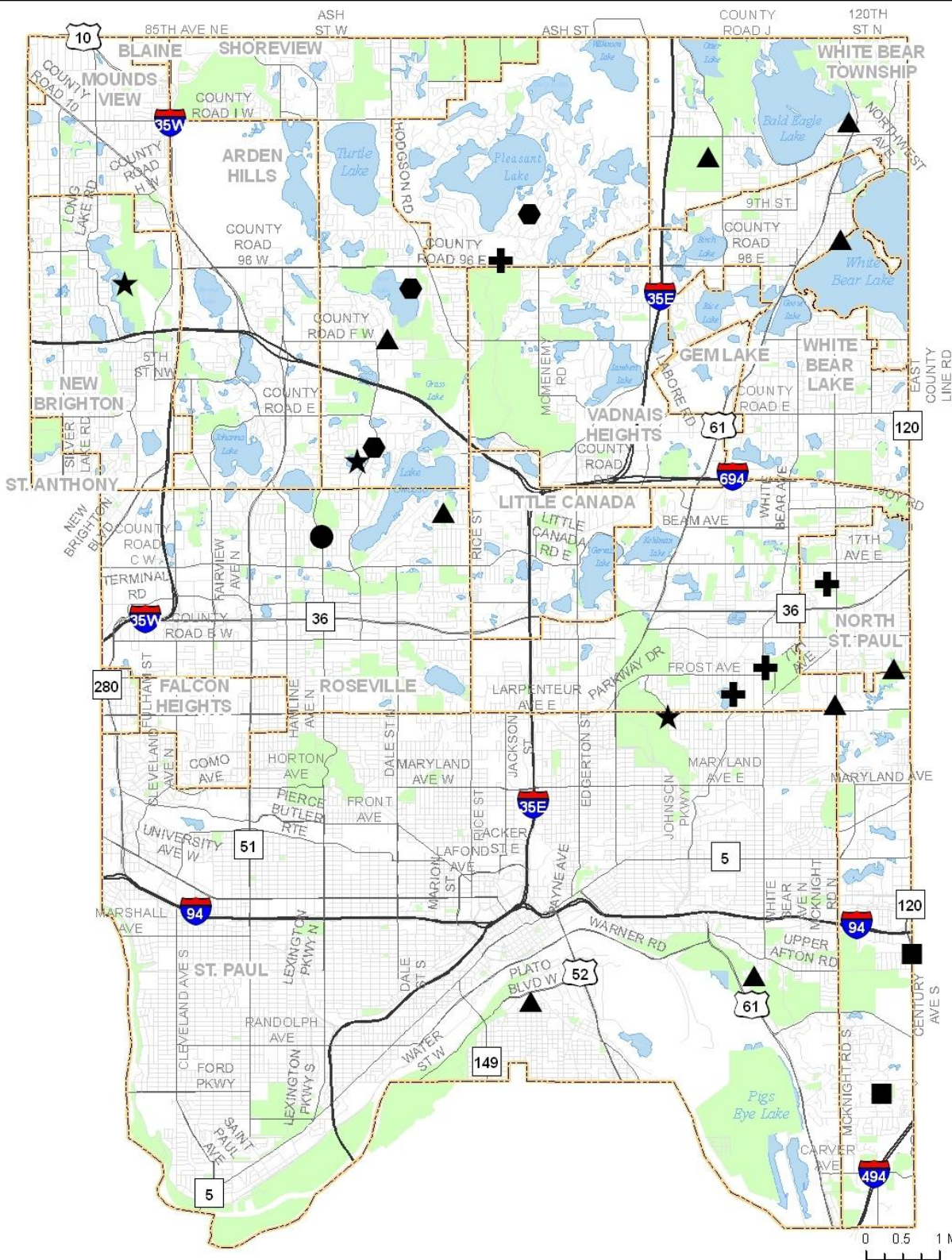
Invasive Plant Mgmt through Partnerships-Project Budget

IV. TOTAL PROJECT REQUEST BUDGET (2 years)

BUDGET ITEM	AMOUNT
Personnel	
Program Coordination- 1 staff for 2 years (Results 1 and 2; 72% salary, 28% benefits)(Program manager will continue to expand the program, perform early detection and control field work, coordinate with partners, plan workshops, give presentations, create educational info., hold regular meetings, and perform administrative duties.)	\$ 101,600
Intern- 1 intern for 2 field seasons (4 months/year; Results 1 and 2; 100% salary)(Intern will provide mapping, inventory, and educational support.)	\$ 12,000
Equipment/Tools/Supplies	
Kiosks (Educational travelling kiosks with interactive touch screen plus room for brochures and plant displays. Invasive plant content will be created by the CWMA, construction will be contracted out.)(4 units; Result 2)	\$ 20,000
Control Equipment (Personal protection equipment, herbicide applicators, & control equipment for the exclusive use for the program. Equipment will be available for use by partner organizations, cities, and supervised volunteer groups.)(Result 1)(\$1,200/yr)	\$ 2,400
Herbicide (For exclusive use of program.)(Result 1)(\$300/year)	\$ 600
Printing costs- Information for dissemination for 2 yrs (maps \$1500/yr, brochures, flyers, & reports \$10,000/yr)(Results 1 and 2)	\$ 23,000
Travel (Program manager + seasonal intern travel to/from sites for control and mapping, educational events; Results 1 and 2)(Average 170 miles/month x 24 months x \$0.55 2009 IRS mileage rate)	\$ 2,244
Additional Budget Items	
Workshops, 6 (Training materials, speakers, facility rentals-Average \$2000/workshop; Result 2)	\$ 12,000
TOTAL PROJECT BUDGET REQUEST TO LCCMR	\$ 173,844

V. OTHER FUNDS (2 Years)

SOURCE OF FUNDS	AMOUNT	Status
Other Non-State \$ Being Applied to Project During Project Period	n/a	
Other State \$ Being Applied to Project During Project Period	n/a	
In-kind Services During Project Period In-kind service: (12 partners x \$2000 [40 hrs/year @ \$50/hr] + \$3,000 equipment use) x 2 years=\$54,000. Partners will provide educational info. and technical assistance to the public and their own organizations, attend meetings, provide meeting space, perform outreach, share equipment, and assist on mapping and control efforts.	\$ 54,000	
Remaining \$ from Current Trust Fund Appropriation (if applicable)	n/a	
Funding History: MN BWSR Initial Start-Up Grant	\$ 16,000	
Funding History: MN DNR Metro Greenways Program Grant (\$5,000), Ramsey County Public Works (\$5,000). Funding for creation of mapping and inventory program and database, 2009 initial inventory efforts, and production of maps.)	\$ 10,000	



RCCWMA Known Infestations

Ramsey County, MN April 2009

Target Species

- ▲ Japanese knotweed
- Miscanthus
- ✚ Tansy
- Cut-leaved teasel
- Wild parsnip
- ★ Yellow iris

Invasive Plant Management through Partnerships: Ramsey County Cooperative Weed Management Area Program Qualifications

The Ramsey County Cooperative Weed Management Area (RCCWMA) is a group of government agencies, individual landowners, non-profit organizations, and other interested parties that are pooling knowledge and resources to better manage invasive plants that negatively impact natural lands/waters, parks, and open spaces in Ramsey County. As invasive plants recognize no political boundaries, the RCCWMA works across party lines to substantially increase effectiveness. Ramsey County is comprised of numerous entities that give the county a unique opportunity to manage invasive plants in a cooperative manner. **Partners in the RCCWMA currently include:** the Capitol Region Watershed District, City of Maplewood, Great River Greening, H.B. Fuller/Willow Lake Nature Preserve, Minnesota Army National Guard, Minnesota Department of Agriculture, Minnesota Department of Natural Resources, Minnesota Department of Transportation, National Park Service, Ramsey Conservation District, Ramsey County Parks and Recreation Department, Ramsey County Public Works, Ramsey-Washington Metro Watershed District, Rice Creek Watershed District, and St. Paul Parks and Recreation Department. This list will continue to grow as the program expands and organizations and LGUs recognize the benefits of a cooperative weed management area. Each partner has an appointee to the RCCWMA Steering Committee that attends meetings and provides support and direction for the program. Some active members of the Steering Committee that were integral to the formation of the RCCWMA include **John Moriarty (Ramsey County Natural Resources Manager), Bill Bartodziej (Ramsey-Washington Metro Watershed District Natural Resources Specialist), Ken Graeve (Minnesota Department of Transportation Plant Ecologist), and Nancy Duncan (National Park Service Resource Management Specialist).**

The RCCWMA focuses on early detection and education. The group has selected five "Target Species": **yellow iris (*Iris pseudacorus*), Japanese knotweed (*Polygonum cuspidatum*), common tansy (*Tanacetum vulgare*), wild parsnip (*Pastinaca sativa*), and Miscanthus grass (*Miscanthus sinensis*, *Miscanthus sacchariflorus*).** These plants are not well established in the county but have the potential to spread quickly and become serious threats to parks, open spaces, and backyards. Other species of concern include **hydrilla (*Hydrilla verticillata*), Brazilian elodea (*Egeria densa*), Grecian foxglove (*Digitalis lanata*), flowering rush (*Butomus umbellatus*) and cut-leaved teasel (*Dipsacus lacinatus*).** These species occur in single populations, occur in surrounding counties, and/or have a high potential for invasion. Through education, outreach, early detection and rapid response, the RCCWMA is working to locate populations of these plants to prevent their spread. The RCCWMA is actively involved with the Midwest Invasive Plant Network, a regional invasive plant network that focuses on early detection of new invasive plants and provides guidance to CWMA's throughout the United States.

Paul Erdmann, Conservation Technician, Ramsey Conservation District, administers the Ramsey County Cooperative Weed Management Area. Paul has battled invasive plants for most of his adult life. He has conducted research on invasive and aquatic plants and was recently published in the journal Ecological Restoration. He has terrestrial and aquatic plant survey experience. Since June 2008, he has signed on 12 partners to the program, created fliers & brochures, given presentations, coordinated workshops, created the RCCWMA website, conducted regular meetings, and performed outreach to the public and media. Paul will continue to expand the program, perform early detection and control field work, and perform administrative duties.

Invasive Plant Management Intern, TBD, Ramsey Conservation District. The intern will be familiar with invasive plant identification and management, and will work during the field season to locate, map, and control the target species. They will also perform outreach, research, and educational aspects related to the RCCWMA.