

Environment and Natural Resources Trust Fund 2018 Request for Proposals (RFP)

Project Title:**ENRTF ID: 131-C**

Native Plant Education/Implementation Benefitting Pollinators and Water

Category: C. Environmental Education**Total Project Budget:** \$ 224,900**Proposed Project Time Period for the Funding Requested:** 3 years, July 2018 to June 2021**Summary:**

RCD will educate diverse kindergarten-adult audiences about how native plants are essential for protecting pollinators and water. RCD will assist residents with native plantings and provide matching grant incentives.

Name: Ann WhiteEagle**Sponsoring Organization:** Ramsey Conservation District**Address:** 1425 Paul Kirkwold Dr.
Arden Hills MN 55112**Telephone Number:** (651) 266-7271**Email** Ann.WhiteEagle@co.ramsey.mn.us**Web Address** <https://www.ramseycounty.us/residents/environment/ramsey-conservation-district>**Location****Region:** Metro**County Name:** Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, Washington**City / Township:****Alternate Text for Visual:**

Native Plants are Foundational to Our Lives. Native plant communities are the basis of our food webs and support the pollinators that make 1/3 of our food. They help conserve and protect our drinking water. But since we've lost 95% of native plants in 2/3 of our state, our foundation is quickly crumbling. the impacts on water resources and pollinators are startling and far-reaching. Ramsey Conservation District intends to start rebuilding our foundation by education at least 35,000 people across the Metro and planting at least 35,000 sq. ft with native gardens.

_____ Funding Priorities	_____ Multiple Benefits	_____ Outcomes	_____ Knowledge Base
_____ Extent of Impact	_____ Innovation	_____ Scientific/Tech Basis	_____ Urgency
_____ Capacity	_____ Readiness	_____ Leverage	_____ TOTAL _____%

PROJECT TITLE: *Native Plant Education/Plantings Benefitting Pollinators and Water*

I. PROJECT STATEMENT

With LCCMR appropriation, Ramsey Conservation District will **educate** at least 35,000 people with diverse backgrounds—kindergarten to adult—across the Metro about the multiple benefits of native plants and **implement at least 35,000 sq. ft. (about 200 typically-sized native gardens)** by providing resources, assistance and incentive matching grants.

Native plant communities are the basis of our food webs, but have been nearly entirely replaced with human-centered surroundings and non-native plants. The impacts on water resources and pollinators are startling and far-reaching. Three of the four Minnesota biomes (prairie, hardwoods, tallgrass prairie) are nearly gone. The northern boreal forests remain the most intact with about one-third still remaining. According to researcher Douglas Tallamy, native plant species support exponentially more animal species than non-native plants. For example, a native oak tree supports 534 butterfly and moth species whereas a non-native ginkgo tree is not known to support any Minnesotan insects.

Protecting and reestablishing native plant communities is not only important to Minnesota's wildlife food web, but humans' food supply too. Namely, native plants support native bees that pollinate many of our fruits and vegetable crops. A typical resident is unaware that there are about 427 native bees in Minnesota, most are virtually stingless, and much more effective pollinators than the well-known honey bee. Important research and education is being done by Minnesota Landscape Arboretum and U of M on honey bees, but native pollinators' important roles are often overlooked.

Native plants provide additional benefits in protecting and conserving our water resources. Strategic plantings, such as raingardens and shoreline stabilization projects, help keep water clean by absorbing polluted stormwater runoff and anchoring soil. In addition, native plantings conserve water because they are adapted to local conditions and require no watering after their first growing season. Native plants also reduce the need for chemical inputs because they bring in beneficial insects that keep pests in check. Furthermore, planting native plants will discourage the establishment of terrestrial invasive species.

II. PROJECT ACTIVITIES AND OUTCOMES

Activity 1: Educate Diverse Audiences (Kindergarten through Adult)

Budget: \$122,400 over 3 years

RCD will contract with area experts to lead education efforts. Kindergarten-Grade 8 lessons will be led by Dawn Pape, a licensed teacher with a Masters of Science in Environmental Education who is also a local children's author and started the Blue Thumb-Planting for Clean Water® program. She teaches with songs, stories, a puppet show, and hands-on, engaging activities. High school-age students and adults will be educated about native bees through workshops given by horticulturist, biologist, researcher, and award-winning author, Heather Holm. The water resource education component of these workshops will be presented by trained and certified Master Water Steward (MWS). In addition, people of all ages will be invited to attend guided walks to observe pollinators, stormwater features and native plants led by our education team.

Outcome	Completion Date
1. Teach at least 35,000 residents (children and adults) over 3 years about the benefits of planting native plants for pollinators and our water	Ongoing from July 1, 2018 to July 1, 2021
2. Teach children and adults how native plants are key in keeping water clean, conserving water and providing high-quality nectar for pollinators using age-appropriate methods to engage them	
3. Measure knowledge gained with pre- and post-test questions	
4. Train 30 certified MWS to coach adult audiences to implement water-friendly and pollinator-friendly projects and plantings	
5. Track number of projects implemented as a result of education	
6. Reach children with economically diverse backgrounds. About 60% of these students will be from low-income families. Of these families, 40% receive free/reduced lunches	
7. Provide signage to inform neighbors about planting and other printed materials	

Activity 2: Native Planting Technical and Monetary Assistance**Budget: \$102,500 over 3 years**

RCD efforts will not stop with education. RCD will also provide technical assistance to help the public with planning and planting implementation. RCD and MWS volunteers will offer follow up support to workshop attendees to increase the number and effectiveness of water and pollinator-friendly projects. Attendees will find the level of help they need (i.e. consult with MWS volunteer, schedule a site visit from RCD, help finding installers/designers, etc.) to match their needs. RCD has extensive experience running grant programs and will clearly establish how residents can apply, how the funds will be prioritized (e.g. habitat “deserts” or areas with water concerns), measured and targeted. \$35,000 of LCCMR appropriation will be used for matching grant incentives for native plantings.

Planting Native Plants Outcomes:	Completion Date
<ol style="list-style-type: none"> 1. Add a minimum of 35,000 sq. ft. of pollinator habitat, raingardens and lakeshore stabilization using native plants in Ramsey County (approximately 175—10x20 ft. gardens) 2. Conserve water (no irrigation required after established) 3. Track projects and long-term maintenance by requiring 10-year maintenance agreements 4. Measure water pollution load reductions. Annual Estimated Reductions/year (WinSLAM model): Runoff Volume Reduction—0.53 acre-ft./year; Total Phosphorous Reduction —1.24 lbs./year; Total Suspended Solids Reduction—0.17 Tons/year 5. Track hours MWS helped the public with questions about native plants 	Ongoing from July 1, 2018 to July 1, 2021

III. PROJECT STRATEGY**A. Project Team/Partners**Receiving Funds

- **Ramsey Conservation District**, (\$107,500) for grant manager, aid in coordinating/presenting workshops, matching grant distribution, technical assistance for the planting implementation
- **Dawn Pape**, (\$77,400) Lawn Chair Gardener Creative Services, preK-8 Educator (reaching an estimated 30,000-35,000 students by making 130 visits to YMCA before/after school and summer programs with an average of 85 students/group for three years across the Metro)
- **Heather Holm**, (\$20,000) Pollination Press LLC, Adult Native Bee Educator reaching 3,000-7,000 high school-adults
- **Master Water Steward Program, Freshwater Society**, (\$5,000) train adult water resources educators, set up two workshops/year

Project Partners Contributing Funds or In-Kind Assistance

- **Ramsey Conservation District**, in-kind, homeowner technical assistance in implementing native plantings
- **Master Water Stewards**, Leslie Yetka, in-kind, help public with assistance in planning, planting and maintaining native gardens and raingardens
- **YMCA, North District**, Tamara Boeck, School Age Care Program Director, in-kind, coordinate preK-8 education
- **West Metro Water Alliance**, Diane Spector, in-kind, host website to track plantings

B. Project Impact and Long-Term Strategy

Replacing traditional turf with native plants is a proven method to protect, restore, and enhance land, water, and habitat. All landowners receiving funding for plantings would be required to sign a 10-year maintenance agreement to ensure the planting would be long-term. Besides increasing habitat, conserving water, and reducing pollution going to area waters, we are seeking to change the culture surrounding lawns and “normalize” native landscaping in urban and suburban areas. Environmental psychologists and community-based social marketing research shows that people are likely to participate in a positive environmental behavior if they feel social pressure to do so. Once a status symbol, traditional lawns no longer make sense given the pressing pollinator and water resources issues facing us.

C. Timeline Requirements

Partnerships will already be in place and education and native plantings can start immediately after funding starts. Education is ongoing July from 2018-2021 and planting will during the growing seasons.

2018 Detailed Project Budget

Project Title: Native Plant Education/Implementation Benefitting Pollinators and Water

IV. TOTAL ENRTF REQUEST BUDGET 3 years

<u>BUDGET ITEM</u>	<u>AMOUNT</u>
GRANT ADMINISTRATION AND MATCHING GRANT FUNDS	
Personnel: Ramsey Conservation District, grant administration, matching grant program administration, (75% salary, 25% benefits); 25% FTE for 3 years	\$ 67,500
Equipment/Tools/Supplies: Matching grant	\$ 35,000
EDUCATION	
Professional/Technical/Service Contracts: Heather Holm, Pollination Press LLC, adult native bee education reaching a min. of 3,000 adults over 3 years	\$ 20,000
Dawn Pape, Lawn Chair Gardener Creative Services, K-8 school native bee and water education through puppet shows, hands-on ed, reaching ~30,000-40,000 students over 3 yrs.	\$ 77,400
Training Master Water Stewards	\$ 5,000
Acquisition (Fee Title or Permanent Easements): N/A	\$ -
Travel: Educator's mileage reimbursement (~9,000 miles @ 0.535/mi.)	\$ 5,000
Additional Budget Items: Printing of educational materials i.e. native bee posters, raingarden brochures, water conservation information, and native planting yard signs. Also cookies/beverages	\$ 15,000
TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =	\$ 224,900

V. OTHER FUNDS

<u>SOURCE OF FUNDS</u>	<u>AMOUNT</u>	<u>Status</u>
Other Non-State \$ To Be Applied To Project During Project Period: N/A	\$ -	
Other State \$ To Be Applied To Project During Project Period: N/A	\$ -	
In-kind Services To Be Applied To Project During Project Period: RCD, Freshwater Society (Master Water Steward Program), watershed and conservation districts coordinating workshops and	\$ 12,000	Secured
Master Water Steward (will provide in-kind assistance to residents with planting information) (2016 Estimated value of volunteer time \$24.14 x 100 hrs.)	\$ 2,414	Secured
YMCA coordinating preK-5 education schedules for three years	\$ 6,000	Secured
West Metro Water Alliance website that serves as a data base of pledges to plant native plants	\$ 5,000	Secured
Past and Current ENRTF Appropriation: N/A	\$ -	
Other Funding History: N/A	\$ -	

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- They help conserve and protect our drinking water

But since we've lost 95% of native plants in 2/3 of our state, our foundation is quickly CRUMBLING

THE IMPACTS ON WATER RESOURCES AND POLLINATORS ARE STARTLING AND FAR-REACHING.

HERE'S HOW RAMSEY CONSERVATION DISTRICT (RCD) INTENDS TO START REBUILDING OUR FOUNDATION



EDUCATE AT LEAST
35,000 PEOPLE

RCD will contract with area experts to educate Metro-area residents (Kindergarten through adult) about the benefits of native plants for protecting native pollinators, conserving water supply, and keeping water clean.

Youth engagement will include puppet shows and hands-on activities led by author and licensed teacher Dawn Pape. YMCA before/after school care and summer care programming will line up the K-8 teaching schedule.

Adult workshops, led by award-winning author, horticulturist and biologist, Heather Holm, will be coordinated by cooperating local units of government.

Teaching effectiveness will be measured with pre- and post-test questions.



PLANT AT LEAST **35,000 ft.²**
(~175 TYPICAL NATIVE GARDENS)

RCD will provide increased public assistance and matching grant incentives; \$35,000 LCCMR appropriation for matching native planting grants over 3 years.

RCD will work with West Metro Water Alliance's "Pledge to Plant for Pollinators and Clean Water" program to track impact of plantings. Metro-wide Master Water Steward volunteers will also assist the public with planting.

Grant recipients will be prioritized, targeted and measured. Maintenance agreements will be required to ensure project success.

**PLEDGE TO
PLANT**

*for
pollinators
and*

**CLEAN
WATER**



Established in 1973, Ramsey Conservation District (RCD) is one of 90 Soil and Water Conservation Districts in Minnesota. Ramsey Conservation District has assisted both public and private landowners prevent soil erosion, repair degraded landscapes, protect groundwater and wetlands, stabilize lake and stream shorelines, safeguard the quality of our surface waters from the damaging effects of urban stormwater runoff, and conserve open space and wildlife habitat.

The grant manager will be Ann WhiteEagle, the District Manager for the Ramsey Conservation District. Ann has a Master's Degree and has been with the RCD for over 10 years and has over 20 years of experience in finance and project management. Ann has over 10 years of experience in grant management of federal, state, and local sources.

Joe Lochner, Conservation Design Specialist for the Ramsey Conservation District (RCD), has a Master's Degree in Landscape Architecture and over 8 years of experience with BMP installation, design, construction oversight, and technical sign-off. Lochner will be the main technical person in charge of the incentive program. He has five years of experience in grant management of Federal, State, and Local sources. Joe has experience managing both small and large-scale projects with budgets between \$1,000 - \$150,000. The RCD has two other design staff with Master's Degrees in Landscape Architecture and are experienced in both project management and BMP installation, as well as grant management.