

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

LCCMR ID: 188-F

Project Title:

Minnesota Landscape Arboretum Land Management and Environment Education

LCCMR 2010 Funding Priority:

F. Environmental Education

Total Project Budget: \$ \$1,169,200

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

Other Non-State Funds: \$ \$0

Summary:

The Arboretum proposes to undertake projects on a recent property acquisition including: eradicating invasive species, developing a management plan, increasing public access, constructing an outdoor education facility, and developing curriculum.

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Sponsoring Organization: U of MN - MN Landscape Arboretum

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Location:

Region: Statewide, Metro

County Name: Statewide, Carver

City / Township: Chaska

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

PROJECT TITLE: Landscape Arboretum Land Management and Environment Education

I. PROJECT STATEMENT

With the help of the LCCMR, the Arboretum recently purchased 90 acres of land containing maple-bass wood forest, wetlands, lakeshore and open fields. This peninsula of land was an inholding that was nearly encircled by existing property. This piece of property has several challenges for development to preserve the habitat, and increase public access and education.

The area is heavily infested with buckthorn (*Rhamnus cathartica*) which has degraded the habitat. A survey needs to be conducted to gather baseline information about the levels and types of invasive species in addition to Buckthorn and identify the existence and document the status of fragile habitats. A management plan must be developed to guide possible research and the future uses of the property. The area has no trail system to allow public access or any interpretive signage to educate and guide visitors. The existing Arboretum outdoor education areas are frequently at capacity and the Arboretum does not have programming that provides environmental education to youth and adult audiences using this newly acquired area as an outdoor "living laboratory."

Addressing these challenges will: 1. Eradicate the Buckthorn on 90 acres of property and educate the public about the process of invasive species abatement, 2. Create a plan for future research and potential uses of the property. 3. Install an additional three-season outdoor educational area within this new property at the Arboretum. 4 Provide increased public access to this newly acquired natural area and increase the educational opportunities available to the public and the Arboretum's more than 300,000 visitors each year.

II. DESCRIPTION OF PROJECT RESULTS

Result 1: Buckthorn Removal

Budget: \$ 80,500

The Arboretum will hire two seasonal staff to remove the buckthorn on the property.

Deliverable

Completion Date

1. 90% of the buckthorn will be removed from the designated property.
2. The Arboretum will create fact sheets about buckthorn, document the removal project and make the information available to the public.

7/1/2012

7/1/2012

Result 2: Property Survey

Budget: \$ 78,700

The Arboretum will conduct a survey of the acquired property to establish baseline information about the types of invasive species, the existence and status of fragile habitats and the current level of habitat degradation. Completing this survey and establishing baseline information will be used to shape future research projects that could be implemented on the property.

Deliverable

Completion Date

1. Survey the property to establish the types of invasive species, the existence and status of fragile habitats and the level of habitat degradation.
2. Using information from the survey, develop a comprehensive plan to guide future use, restoration and research.

7/1/2011

7/1/2012

Result 3: Install a Road and Trail System and Interpretive Signage

Budget: \$ 656,000

The Arboretum will design and install a trail system that allows visitors to explore the newly acquired 90 acres, and also connects to the existing Arboretum trail system. The Arboretum will also design and install interpretive and way-finding signage to guide and educate visitors.

Deliverable

1. The Arboretum will design trails to allow visitors access to the property.
2. The Arboretum will install an education drive and trail system.
3. The Arboretum will design interpretive signage to educate visitors about various aspects of the new property.
4. The Arboretum will install the interpretive and way-finding signage

Completion Date

7/1/2011
7/1/2012
7/1/2011
7/1/2012

Result 4: Environmental Education Program Building**Budget:** \$ 264,000

The Arboretum will design and install an interpretive, three-season sheltered program building to deliver programming for children, families and adults.

Deliverable

1. Identify a site and design the three-season sheltered program building
2. Construct the outdoor education program building.

Completion Date

7/1/2011
7/1/2012

Result 5: Environmental Education Programming**Budget:** \$ 90,000

The Arboretum will develop environment educational programming which uses the property as an outdoor "living laboratory" and teaching tool for children, adults and families. Some of the possible examples of educational programming that will be developed include: public policy conferences and experiential education classes for adults, hands-on curriculum for school groups aligned with Minnesota Science Standards, and exploratory, discovery-based programming for families.

Deliverable

1. Curriculum will be designed that targets multiple groups segmented by age, topic and interest area and uses the newly acquired property to enhance and extend the existing programming at the Arboretum.
2. The developed curriculum will be implemented, evaluated for effectiveness and revised for best-practice implementation.

Completion Date

7/1/2011

7/1/2012

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

Dr. Mary Meyer, Professor in Department of Horticultural Science at the University of Minnesota and Interim Director of the Minnesota Landscape Arboretum. Peter Moe, Director of Operations at the Minnesota Landscape Arboretum. Tim Kenny, Director of Education at the Minnesota Landscape Arboretum.

B. Timeline Requirements

This project is being planned as a two-year initiative. For the components, the first year is anticipated as the design and planning phase, with the second year's focus on implementation and dissemination of information to the public.

C. Long-Term Strategy

The Arboretum will continue the smaller scale invasive species management and management of restored areas after the term of this project. In addition, the education activities and curriculum will be adopted as part of the ongoing public education provided by the Arboretum.

LCCMR 2010 Project Budget - Minnesota Landscape Arboretum

IV. TOTAL PROJECT REQUEST BUDGET (2 years)

BUDGET ITEM **AMOUNT**

Personnel:

2 - 75% (9 mo.) Assistant Gardeners for 2 years (\$50,000 Salary/\$18,500 Benefits)	\$68,500
25% of 1 FTE Research Fellow for 2 years (\$21,000 Salary/\$7,750 Benefits)	\$28,750
5% of 1FTE Cartographer for 2 years (\$5,000 Salary/\$1,850 Benefits)	\$6,850
5% of 1FTE Wildlife Specialist for 2 years (\$4,000 Salary/\$1,500 Benefits)	\$5,500
5% of 1FTE Landscape Gardener for 2 years (\$5,000 Salary/\$1,850 Benefits)	\$6,850
50% 1 FTE Interpretive Specialist for 2 years (\$36,000 Salary/\$13,500 Benefits)	\$49,500
20% 1FTE Manager of Interpretation for 2 years (\$23,000 Salary/\$8,500 Benefits)	\$31,500
33% of 1FTE Children's Environmental Education Specialist for 2 years (\$31,000 Salary/\$11,500 Benefits)	\$42,500
33% of 1FTE Adult Environmental Education Specialist for 2 years (\$31,000 Salary/\$11,500 Benefits)	\$42,500

Contracts:

Education Drive Construction (7,000 feet @ \$50 per foot from Chanhassen)	\$350,000
Walking Path Installation (5,000 feet @ \$25 per foot)	\$125,000
Educational Program Building Construction (2,000 sq. ft. @ x\$125 per sq. ft.)	\$250,000

Equipment/Tools/Supplies:

Herbicide and Tools	\$12,000
GPS equipment and software	\$30,000
Field Guides and Training	\$750
Interpretive Signage	\$100,000
Microscopes for the Environmental Education Building (70 @ \$150)	\$10,500
Binoculars for the Environmental Education Building (70 @ \$50)	\$3,500
General Educational Programming Supplies	\$5,000

Acquisition (Fee Title or Permanent Easements):	N/A
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Travel:	N/A
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TOTAL PROJECT BUDGET REQUEST TO LCCMR	\$ 1,169,200
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V. OTHER FUNDS






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:	\$ -	N/A
Remaining \$ from Current Trust Fund Appropriation (if applicable):	\$ -	N/A
Funding History:	\$ -	N/A

Boundary Plan



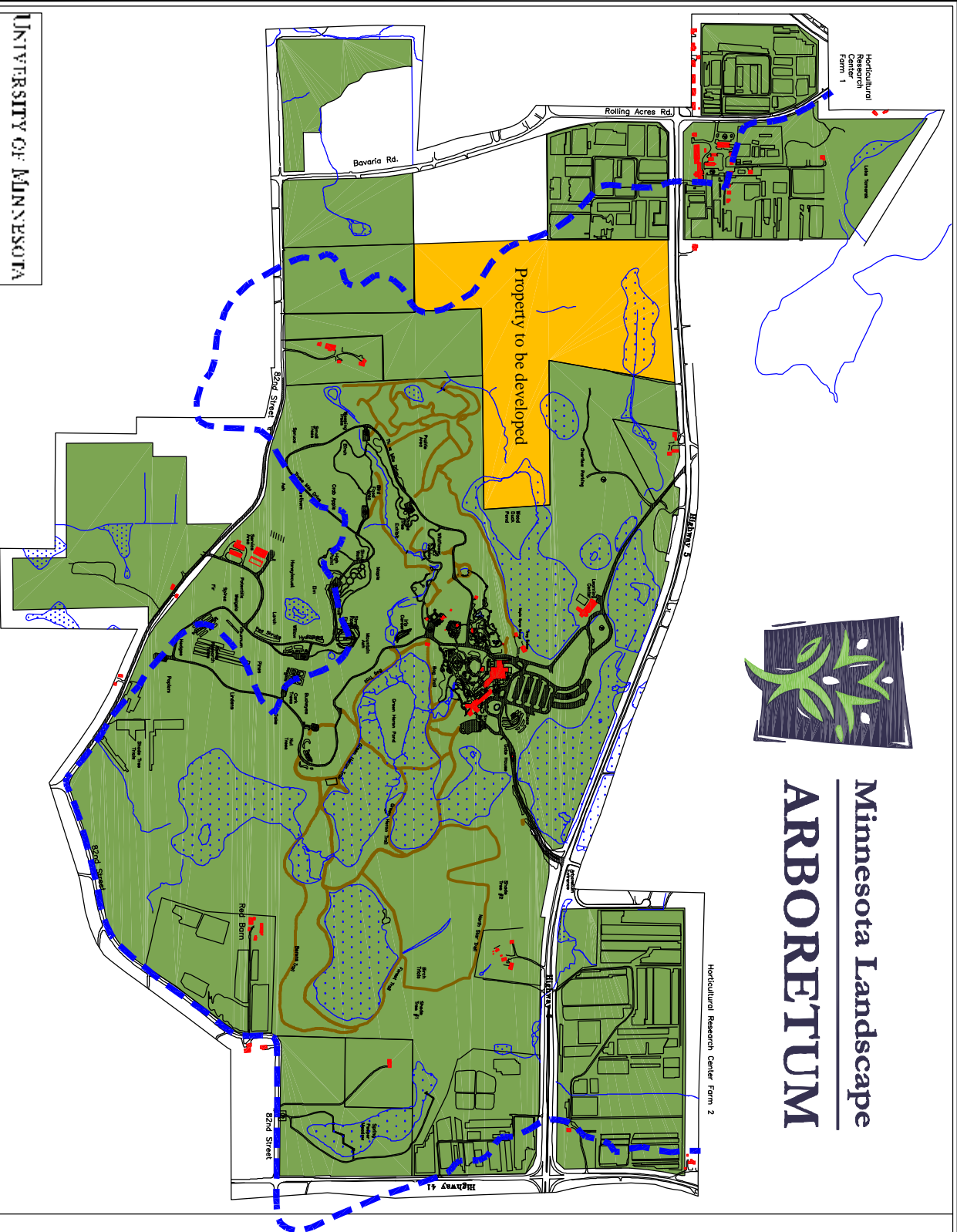
Minnesota Landscape
ARBORETUM

Legend

-  Parking
-  Stream / Waterbody
-  Buildings / Other Structures
-  WLA Property Boundaries
-  Major Watersheds



Date: Apr 14 2009



UNIVERSITY OF MINNESOTA

2010 LCCMR Proposal Project Manager Qualifications and Organization Description

Project Manager Qualifications

Dr. Mary Hockenberry Meyer, Interim Director of the Minnesota Landscape Arboretum, was the State Coordinator for the Master Gardener program based at the Minnesota Landscape Arboretum since 1995. During that time she was responsible for the development and coordination of statewide multi-media educational programs in environmental and consumer horticulture. Meyer received a B.S. from Clemson University, M.S. from Cornell University, and Ph.D. from the University of Minnesota. Meyer's research focus is native and ornamental grass culture and production and the use of low maintenance turfgrasses. In 2007, Meyer was awarded the American Society for Horticultural Science Outstanding Extension Educator Career Award. In addition, Meyer is a member of the Minnesota State Horticultural Society Board of Directors.

Minnesota Landscape Arboretum

The Minnesota Landscape Arboretum consists of 1,137 acres of native ecosystems, research plots and unique public gardens. The Arboretum has 32 display and specialty gardens, 48 generic plant collections, 5,000 species of plants, and 8 native and restored environments. In addition, the Arboretum maintains extensive research activities. Innovative natural science and horticultural education programs are offered for individuals of all ages. Andersen Horticultural Library is world-renowned for its extensive collections, publications, and innovative reference service.

The Arboretum is a vital element of the cultural, educational, and economic fiber of the Twin Cities and larger community. It serves a broad audience of 300,000 visitors and more than 20,000 members. Nearly 55,000 children, teachers, and families participated in a wide variety of horticultural and natural science education programs. Therapeutic Horticulture programs served 5,000 individuals with physical and developmental challenges. The Arboretum's Horticultural Research Center has developed 139 varieties of cold-hardy fruit and landscape plants.

Minnesota Landscape Arboretum's Mission

As part of the University of Minnesota, the Minnesota Landscape Arboretum strives to be a resource for horticultural and environmental information, a center for research and public education and a place to inspire and delight visitors with quality plants in well-designed and maintained displays, collections, model landscapes and conservation areas.

Minnesota Landscape Arboretum Goals

- To educate a broad spectrum of the public about plants and the environment, through a wide variety of programs for all ages, along with interpretive displays and replicable models.
- To develop and deliver innovative, interactive programming that immerses children and active learners of all ages in direct experiences with nature and helps them understand the essential role of plants in sustaining our lives, and the role we all play in preserving and improving the quality of the environment.
- To conduct coordinated research programs that deal with the acquisition, evaluation, breeding, culture, physiology, and use of plants in northern climates and urban landscapes.
- To inspire visitors with beautiful, accessible gardens and display areas that offer respite and renewal.
- To promote public understanding of issues related to the urban ecosystem through dissemination of information about the urban environment and how it is affected by human interactions with it.