

**Environment and Natural Resources Trust Fund  
2019 Request for Proposals (RFP)**

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**Project Title:**

**ENRTF ID: 143-CH**

Mississippi National River & Recreation Area Forest Restoration

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**Category:** H. Proposals seeking \$200,000 or less in funding

**Sub-Category:** C. Environmental Education

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**Total Project Budget:** \$ 199,500

**Proposed Project Time Period for the Funding Requested:** June 30, 2021 (2 yrs)

**Summary:**

This is a forest restoration project within the Mississippi National River and Recreation Area to address the loss of ash trees to EAB and plant 15,000 native trees and plants.

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**Name:** Mary Hammes

**Sponsoring Organization:** Mississippi Park Connection

**Title:** Environmental Stewardship and Volunteer Manager

**Department:** \_\_\_\_\_

**Address:** 111 Kellogg Blvd. East, Suite 105  
St. Paul MN 55101

**Telephone Number:** (612) 291-8164

**Email** mhammes@parkconnection.org

**Web Address** parkconnection.org

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**Location**

**Region:** Metro

**County Name:** Anoka, Dakota, Hennepin, Ramsey

**City / Township:**

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**Alternate Text for Visual:**

A picture of Emerald Ash Borer and infected tree. A map of project sites within MNRRA.

<input type="checkbox"/>	Funding Priorities	<input type="checkbox"/>	Multiple Benefits	<input type="checkbox"/>	Outcomes	<input type="checkbox"/>	Knowledge Base	
<input type="checkbox"/>	Extent of Impact	<input type="checkbox"/>	Innovation	<input type="checkbox"/>	Scientific/Tech Basis	<input type="checkbox"/>	Urgency	
<input type="checkbox"/>	Capacity Readiness	<input type="checkbox"/>	Leverage	<input type="checkbox"/>		TOTAL	<input type="checkbox"/>	%
<input type="checkbox"/> If under \$200,000, waive presentation?								



**Environment and Natural Resources Trust Fund (ENRTF)  
2019 Main Proposal Template**

**PROJECT TITLE: Mississippi National River & Recreation Area Forest Restoration**

**I. PROJECT STATEMENT**

This is a forest restoration project within the Mississippi National River and Recreation Area, a 72-mile corridor of the Mississippi River that runs through the metropolitan area of the Twin Cities. Through this project, we will support city and county land managers to remove hazardous ash trees that have succumbed to emerald ash borer (EAB) and proactively remove ash in areas that will soon be infested, perform shelterwood removal to create canopy gaps, inventory land with existing ash trees for emerging EAB, and plant more than 15,000 native trees, shrubs, and understory plants to build species diversity.

MNRRRA is home to more than ½ million ash trees. Of the river’s canopy, more than 20% consists of green and black ash. In certain areas, ash cover exceeds 45% of the canopy. Since emerald ash borer (EAB) was discovered in Saint Paul in 2009, cities and counties have struggled to address EAB in park natural areas where erosion, habitat loss, and hazardous trees are all concerning.

This proposal supports a Mississippi River crew from the Conservation Corps of MN and IA, planting 10,000 native trees, and 5,000 native shrubs and understory plants, and coordinating with land-managers from eight river communities and three park managers to support 15 community parks within the Mississippi National River and Recreation Area (MNRRA). These parks were determined by consulting the National Park Service’s forest management plan for MNRRA and through consultation with the community partners listed below. Volunteers, managed cooperatively between the National Park Service and Mississippi Park Connection, will support planting efforts with in kind support.

**II. PROJECT ACTIVITIES AND OUTCOMES**

**Activity:**

**Restore forested areas of the Mississippi National River and Recreation Area that have been or will soon be affected by Emerald Ash Borer by planting 15,000 native trees, shrubs and understory plants.**

**ENRTF BUDGET: \$ 195,000**

<b>Outcome</b>	<b>Completion Date</b>
1. Planting of 15,000 trees and shrubs in forest understory over two years.	October 2021
2. Install tree tubes to protect trees from herbivory.	October 2021
3. Identify parks that have new EAB infestations within MNRRA.	November 2021

**III. PROJECT PARTNERS:**

**A. Partners receiving ENRTF funding**

<b>Name</b>	<b>Title</b>	<b>Affiliation</b>	<b>Role</b>
Nick Cox	Youth Outdoors Program Manager	Conservation Corps of Minnesota and Iowa	Nick will coordinate crews in partnership with Mary.
Mary Hammes	Environmental Stewardship and Volunteer Manager	Mississippi Park Connection	Mary will oversee all scheduling and partnership coordination with other land-holding partners and non-profits.



**Environment and Natural Resources Trust Fund (ENRTF)  
2019 Main Proposal Template**

**B. Partners NOT receiving ENRTF funding –**

<b>Name</b>	<b>Title</b>	<b>Affiliation</b>	<b>Role (Responsible for Park Management at the listed Park)</b>
Carrie Taylor	Restoration Ecologist	Anoka Conservation District	<ul style="list-style-type: none"> <li>Mississippi River Community Park</li> <li>Kings Island</li> </ul>
Lisa LaCasse	Recreation Supervisor	City of Anoka	
Brian Swoboda	Parks Superintendent	City of Inver Grove Heights	<ul style="list-style-type: none"> <li>River Road Park (7782 River Road, Inver Grove Heights)</li> </ul>
Virginia Gaynor	Open Space Coordinator	City of Maplewood	<ul style="list-style-type: none"> <li>Fish Creek</li> </ul>
Alex Roth	Ecologist	Friends of the Mississippi River	<ul style="list-style-type: none"> <li>Nicollet Island</li> <li>Mississippi River Gorge</li> </ul>
Scott Hagen	Natural Resources	Dakota County Parks	<ul style="list-style-type: none"> <li>Spring Lake Park Preserve.</li> </ul>
Eric Ogdahl/ Rebecca Tucker	Project Assistant Ecologist	Great River Greening	<ul style="list-style-type: none"> <li>Pilot Knob Hill Open Space Restoration</li> <li>Pike Island</li> </ul>
Maggie Barnick/ Emily Dunlap	Natural Resources Technicians	Saint Paul Parks and Recreation	<ul style="list-style-type: none"> <li>Highwood Park</li> <li>Henry Park</li> <li>Hidden Falls Regional Park</li> <li>Indian Mounds Regional Park</li> <li>Mississippi River Boulevard Ash Removal</li> </ul>
Missy Anderson	Invasive Species Coord.	Three Rivers Park District	<ul style="list-style-type: none"> <li>Mississippi Gateway (Coon Rapids Dam West)</li> </ul>
Nancy Duncan	Natural Resources Mgr.	Mississippi National River & Recreation Area	<ul style="list-style-type: none"> <li>Island 108 (Near Coldwater Spring)</li> </ul>

**IV. LONG-TERM- IMPLEMENTATION AND FUNDING:**

Pike Island within Fort Snelling State Park and parks within the City of Saint Paul have been hit hard by EAB, now in its 9<sup>th</sup> year of infestation. Lessons learned from forest restoration projects in these hard-hit communities can be shared with land managers in areas of MNRRA that are currently less far along in their infestations. The City of Anoka and Dakota County, for example, have not found EAB in their river parks yet. Working together throughout the river corridor, we can improve restoration outcomes as new infestations are found and need to be addressed. Through this request, we will build capacity during the most critical years of EAB’s spread through the Mississippi River Corridor while cities are ramping up their internal capacity to deal with this issue in the long-term.

Pending Funding: \$91,000 National Park Service, \$122,000 National Fish and Wildlife Foundation  
Current Funding: \$30,568 National Fish and Wildlife Foundation

**V. TIME LINE REQUIREMENTS:**

This is a two-year request beginning in June of 2019 and running through November of 2021.

## 2019 Proposal Budget Spreadsheet

Project Title: Working Across Geographic Boundaries to Address Emerald Ash Borer along the Mississippi

### IV. TOTAL ENRTF REQUEST BUDGET 2 years

BUDGET ITEM (See "Guidance on Allowable Expenses")	AMOUNT
Personnel: Environmental Stewardship and Volunteer Manager salary will be matched through general fund support at Mississippi Park Connection.	\$ 4,000
Professional/Technical/Service Contracts: Contract with CCMI	\$140,000
Equipment/Tools/Supplies: Plant Materials and Deer Browse Protection	\$55,500
Acquisition (Fee Title or Permanent Easements):	N/A
Travel:	N/A
Additional Budget Items:	N/A
<b>TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =</b>	<b>\$ 199,500</b>

### V. OTHER FUNDS (This entire section must be filled out. Do not delete rows. Indicate "N/A" if row is not applicable.)

SOURCE OF FUNDS	AMOUNT	Status
Other Non-State \$ To Be Applied To Project During Project Period: National Park Service (Service Wide Comprehensive Call Funding) \$91,000 (Pending), NFWF: 122,000 (Pending) NFWF: \$30,568 (Received)	\$243,568	See "source" column.
Other State \$ To Be Applied To Project During Project Period:	N/A	N/A
In-kind Services To Be Applied To Project During Project Period: Volunteer Hours	\$ 25,000	Received
Past and Current ENRTF Appropriation:	N/A	N/A
Other Funding History: National Park Foundation Grant (ends June 2019) \$200,000, The McKnight Foundation (ends June 2019) \$60,000. We plan on reapplying to both funding sources for 2019.	\$ 260,000	N/A

## What?

Emerald Ash Borer is an invasive pest that kills up to 99% of all ash trees. Green ash is present 42 percent of the total forested area of the Mississippi National River and Recreation Area and Black Ash is present in 28 percent of the total forested area.



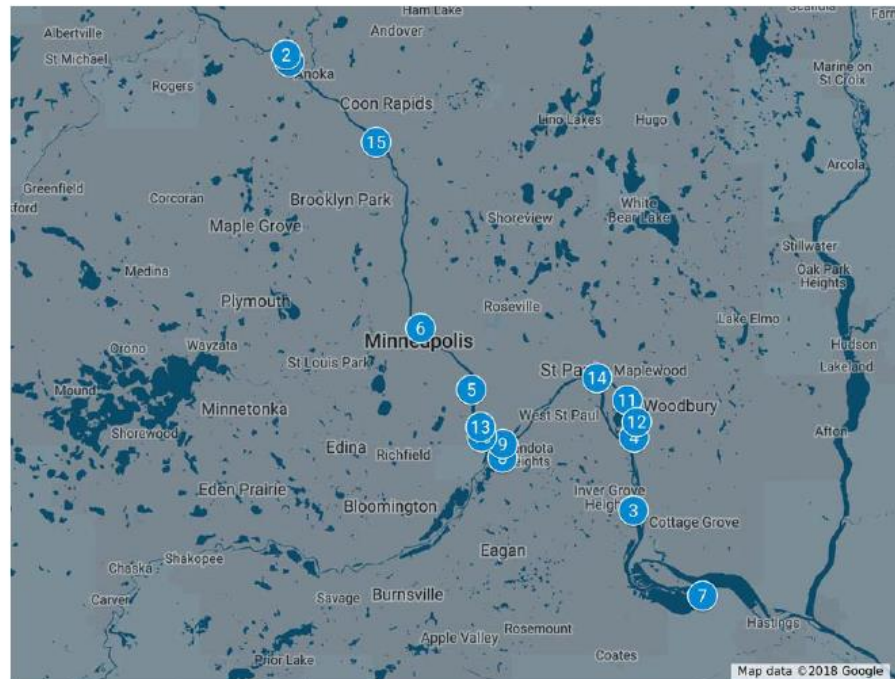
## Where?

Partners have identified 15 park sites within the Mississippi National River and Recreation Area where the forested areas will lose significant canopy cover when EAB spreads.

## LCCMR Project Sites

### List of Project Sites

- 1 Mississippi River Community Park
- 2 Kings Island
- 3 7782 River Rd
- 4 Fish Creek
- 5
- 6 Mississippi Gorge Regional Park
- 7 Nicollet Island
- 8
- 9 Spring Lake Park Reserve
- 10 Schaar's Bluff Trail
- 11 Pilot Knob Preservation Site
- 12 Pike Island
- 13 Island 108
- 14 Highwood Park
- 15 Henry Park
- 16 Hidden Falls Regional Park
- 17
- 18 Indian Mounds Regional Park
- 19
- 20 Coon Rapids Dam Regional Park



Environment and Natural Resources Trust Fund (ENRTF) Restoration Requirements Page:

A. All land in this project is in public ownership.

B. MNRRA Forest Management Plan will be Completed in May 2018. This proposal includes 15 partner sites within the MNRRA corridor. All 7 requirements of section B will be fulfilled the forest management plan.

The forest management plan for the Mississippi National River and Recreation Area is due out in May 2018. It will be the first of its kind and was created in partnership with the 25 cities, 5 counties, and state land-managers that own public land within the Mississippi National River and Recreation Area. The plan was created using information from the 2015 National Park Service Vegetation Inventory Program.

The National Park Service (NPS) Vegetation Inventory Program (VIP) is an effort to classify, describe, and map existing vegetation of national park units for the NPS Natural Resource Inventory and Monitoring (I&M) Program. The NPS VIP is managed by the NPS Inventory and Monitoring Division and provides baseline vegetation information to the NPS Natural Resource I&M Program. The USGS Upper Midwest Environmental Sciences Center, NatureServe, and NPS Mississippi National River and Recreation Area (MISS) have completed vegetation classification and mapping of MISS for the NPS VIP.

Mappers, ecologists, and botanists collaborated in 2015 to identify and describe vegetation types within the U.S. National Vegetation Classification (USNVC) and to determine how best to map them by using aerial imagery. The team collected data from 132 vegetation plots within MISS to develop detailed descriptions of USNVC associations. Data from 52 verification sites were also collected to test both the dichotomous key to vegetation associations and the application of vegetation types to a sample set of map polygons. Furthermore, data from 776 accuracy assessment (AA) sites were collected (of which 757 were used to test accuracy of the vegetation-map layer). These data sets led to the identification of 45 vegetation association in the USNVC at MISS.

A total of 45 map classes were developed to map the vegetation and open water of MISS, including the following: 35 map classes represent natural (including ruderal) vegetation in the USNVC, 7 map classes represent cultural vegetation (agricultural and developed) in the USNVC, and 3 map classes represent non-vegetative open-water bodies (non-USNVC). Features were interpreted from viewing color-infrared digital aerial imagery dated September and October 2012 (during peak leaf-phenology change of trees) via digital onscreen three-dimensional stereoscopic workflow systems in geographic information systems (GIS). The interpreted data were digitally and spatially referenced, thus making the spatial-database layers usable in GIS. Polygon units were mapped to either a 0.5 ha or 0.25 ha minimum mapping unit, depending on vegetation type.

A geodatabase containing various feature-class layers and tables shows the locations of USNVC vegetation types (vegetation map), vegetation plot samples, verification sites, AA sites, project boundary extent, and aerial image centers. The feature-class layer and relate tables for the vegetation map provides 4,498 polygons of detailed attribute data covering 21,771.6 ha, with an average polygon size of 4.8 ha; the vegetation map covers the entire administrative boundary for MISS.

Summary reports generated from the vegetation-map layer show map classes representing USNVC natural (including ruderal) vegetation associations apply to 4,012 polygons (89.2% of polygons) and cover 8,938.7 ha (41.1%) of the map extent. Of these polygons, the map layer shows MISS to be 27.5%

forest and woodland (5,986.2 ha), 1.6% shrubland (353.6 ha), 11.2% herbaceous vegetation (2,431.8 ha), and 0.8% sparse vegetation (163.9 ha). Map classes representing USNVC cultural types apply to 415 polygons (9.2% of polygons) and cover 7,628.5 ha (35.0%) of the map extent. Map classes representing non-vegetative open-water bodies (non-USNVC) apply to 71 polygons (1.6% of polygons) and cover 5,204.4 ha (23.9%) of the map extent.

C. The majority of this project proposes to employ CCMI.

D. All evaluation requirements will be met.

## **Project Manager Qualifications**

Project Manager: Mary Hammes, Environmental Stewardship and Volunteer Manager

Affiliation: Mississippi Park Connection

Mailing Address: 111 E. Kellogg Blvd; Suite 105, St. Paul, MN 55101

Telephone: 651-291-8164

Email: mhammes@parkconnection.org

Mary has been the Environmental Stewardship and Volunteer Manager with Mississippi Park Connection for three years. She coordinates with local governmental and non-profit partners to facilitate natural resource project coordination between the 26 communities within the corridor the Mississippi National River and Recreation Area (MNRRA), a national park unit that runs for 72 miles along the Mississippi River through the Twin Cities metropolitan area. Mary also coordinates research and forest management planning efforts in partnership with the National Park Service, administers grants, and hires and supervises summer seasonal positions at MPC, and co-manages a volunteer program that engages more than 5,000 each year.

## **Work Experience:**

2015 – present Environmental Stewardship and Volunteer Manager, Mississippi Park Connection

2014 – 2015 Minnesota Pollution Control Agency, TMDL Liaison for Stormwater Program

2013 – 2014 Minneapolis Park and Recreation Board, Water Quality Educator

2009 – 2012 Conservation Corps of Minnesota and Iowa, Field Specialist/Crew Leader

## **Education:**

2014 MS in Natural Resource Science and Management, University of Minnesota

2007 BA in Psychology from University of Wisconsin

## **Project Manager Responsibilities:**

As the Project Manager, Mary will provide overall project direction, budget management, supervision of field efforts for MPC. As the Environmental Stewardship and Volunteer Manager, Mary has demonstrated her ability to manage budgets, direct staff, coordinate with partners, and efficiently and effectively deliver project outcomes.

## **Organization Description:**

The mission of Mississippi Park Connection is to strengthen the enduring connection between people and the Mississippi River by enriching the life of the river and the lives of all who experience our national park, the Mississippi National River and Recreation Area. Since 2007, MPC has enabled the park to lead environmental stewardship efforts throughout the corridor, from wildlife monitoring to shoreline restoration. The National Park Service provides the leadership to bring together the many organizations in our community dedicated to specific facets of the Mississippi River. By providing support for the park and its partners, Mississippi Park Connection boosts the activities of all of the park's partners, thereby increasing community engagement in the Mississippi River watershed.