

Contract No. 001-016

“Natural Resource Stewardship in North Dakota’s Parks, Preserves and Natural Areas”

Submitted by North Dakota Parks & Recreation

Principal Investigator: Kathy Duttonhefner

Directives C, A, B & D

PARTICIPANTS

Sponsor	Cost Share	
North Dakota Parks and Recreation Department	\$ 80,000	
North Dakota Forest Service (Grant Award Pending)	\$ 12,400	
Arbor Day Foundation (Grant Award Pending)	\$ 3,500	
NatureServe	\$ 15,000	
Unknown (reduced funding)	<u>\$145,344</u>	
Subtotal Cash Cost Share		\$256,244
North Dakota Parks and Recreation Department	<u>\$260,743</u> (in-kind)	
Subtotal In-kind Cost Share		\$260,743
North Dakota Industrial Commission	<u>\$129,000</u>	
Total Project Cost	\$645,987	

Project Schedule – 60 months

Contract Date – 4/7/14

Start Date – 4/7/14

Completion Date – 6/15/19

Project Deliverables:

Status Report: November 30, 2014 ✓

Status Report: June 15, 2015 ✓

Status Report: November 30, 2015 ✓

Status Report: November 30, 2016 ✓

Status Report: June 15, 2017 ✓

Status Report: November 30, 2017 ✓

Status Report: November 30, 2018 ✓

Final Report: June 15, 2019 ✓

OBJECTIVE/STATEMENT OF WORK:

This project will provide hands-on assistance to manage, protect and enhance ND prairies, woodlands, plant and animal species of concern & natural areas ensuring a healthy environment. This work is broken down into the following areas:

Native Prairie Restoration and Enhancements Strategies and Best Management Practice: A multi-site, long term, collaborative project with specific goal to restore, enhance, and sustain a healthy, diverse and sustainable native prairie thus enhancing the biodiversity on parklands, preserves and natural areas.

Woodlands – Tree and Shrub Plantings Strategies and Best Management Practices: A multi-site, long term collaborative project with a specific goal to increase woodland and tree row habitat acres and biodiversity on parklands, preserves and natural areas. The project purpose is to create and maintain a mosaic of woodland tree and shrub plantings strategies and best management practices will include the use of a variety of practices ranging from site preparation, planting and monitoring.

Noxious Weed and Invasive Species Control Strategies and Best Management Practices; A multi-site, long term collaborative project with specific goals to control noxious weeds as required by state law; reduce nonnative invasive plants; continue the implementation of an integrated pest management system to reduce the use of chemical controls. The noxious weeds of primary concern include leafy

spurge, Canada thistle, and wormwood. To date, all noxious weed within major parks have been inventoried and mapped.

Natural Areas Registry: A cooperative program with the ND Geological Survey. The Natural Areas Registry Program is citizen-based conservation program that currently has 54 landowners involved in voluntary protection of their significant natural areas. The project is a multi-state, long term, collaborative project with a specific goal to encourage conservation of important natural lands in private and public ownership.

Natural Heritage Inventory: A cooperative program with NatureServe, a non-profit conservation organization whose mission is to provide the scientific basis for effective conservation action. The North Dakota Natural Heritage Program identifies the state's most significant natural areas through a comprehensive inventory of rare plant and animal species, exemplary natural communities, special geological features, and significant natural areas.

Tasks include:

- Conserve and enhance existing prairies, woodlands, tree and shrub plantings, within parklands, preserves and natural areas to maximize biodiversity of plant and animal species;
- Provide direction, technical assistance and funding for natural resource activities that are integral to and integrated within parklands, preserves, and natural area uses; C) effective control and eradication of noxious weeds and invasive species on parklands, preserves, and natural areas;
- Conduct biological surveys to identify the most significant natural areas of our state; E) assess and expand the existing system of registered natural areas which represent the full range of North Dakota's natural heritage;
- Maintain and upgrade the Department's state-wide biological conservation database; and
- Develop and strengthen working relationships with parkland and natural area owners.

STATUS:

The original request was for \$274,344. The amount awarded was \$129,000 with the stipulations that the OHF funding cannot be used for annual maintenance costs or staffing and the \$71,000 identified in the budget for technicians. As a result of the reduced funding the applicant stated: Although full funding was not received it is anticipated that all objectives will be met within the 5 year time frame. The reduction in funding for supplies and materials will directly affect the total number of acres seeded and the number of acres planted to trees but in any event both will show an increase in acres. Contract 001-016 was signed.

11/29/14 - Native Prairie Restoration and Enhancements Strategies and Best Management Practices; The 2014 prairie restoration and enhancement strategies and best management practices for 2014 included tillage, herbicides and seeding and planting of native grasses and forbs. The tasks completed May - November 2014 included: a) identified and mapped Turtle River State Park prairie restoration (2 sites - approximately 17.9 acres) utilizing a Trimble GPS Unit; b) Developed and updated Prairie Restoration Plans for Turtle River and Icelandic State Parks; c) Site preparation for weed and brome control prior to planting at Turtle River was critical. Utilized both application of herbicide and disking at Turtle River State Park; d) Selected seed mix for Icelandic State Park prairie restoration. Native seed mix selection was based on individual site characteristics. High diversity native seed mix included 16 native grass and forb species; e) Icelandic State Park (2 sites approximately 8.5 acres) prairie enhancements was accomplished through broadcasting/drill seeding according to the full seeding rate; f) Post-seeding weed control is an important part of successful prairie reestablishment. Mechanical method of mowing was used at Icelandic State Park; g) Monitoring the Icelandic prairie enhancement site will be conducted during the first three growing seasons and again at years 5 and 10, beginning in 2015; h) Record keeping

and maintaining a written record of observations and management activities are recorded. Woodlands - Tree and Shrub Plantings Strategies and Best Management Practices. Tasks Completed May - November 2014 included a) utilizing a Trimble GPS, identified and mapped potential tree and shrub 50th Anniversary tree planting sites at 11 state parks. 550 trees and shrubs to be planted in 2015. Parks included Fort Abraham Lincoln, Cross Ranch, Lake Sakakawea, Fort Stevenson, Lake Metigoshe, Grahams Island, Lewis and Clark, Fort Ransom, Icelandic, Turtle River and Beaver Lake State Parks. B) Inter-planted 480 trees and shrubs on approximately 8.2 acres on three sites at Fort Stevenson State Park; c) Use of volunteer staff was critical in the success of the planting project at Fort Stevenson State Park; d) Species selected for the 2015 50th Anniversary Tree and Shrub Planting; e) Several sites for the 50th Anniversary Tree and Shrub planting sites were treated with using herbicide application. Noxious Weed and Invasive Species Control Strategies and Best Management Practices. The noxious weed and invasive species control strategies and best management practices for 2014 included the use of a variety of practices ranging from inventory, mapping, implementing integrated biological chemical and mechanical controls, reporting and monitoring. Tasks Completed May - November 2014 included a) Biological technician located and re-mapped noxious weeds utilizing Trimble GPS units in 9 state parks including Fort Abraham Lincoln, Fort Ransom, Beaver Lake, Lake Sakakawea, Fort Stevenson, Grahams Island, Icelandic, Turtle River and Lake Metigoshe State Parks; b) Biologist and biological technicians treated all noxious weeds with appropriate control methods at 16 major state parks include several recreation, natural areas and nature preserves. (Approximately 1,080 acres treated); c) Followed standard reporting protocol as determined by ND Department of Agriculture; d) GIS Specialist produced noxious weed treated vs non-treated maps utilizing ArcGis. Natural Areas Registry. Tasks completed during May-November, 2014 included Natural Area visits and site assessments conducted in Missouri River and Elkhorn Natural Areas, Stumpf Site, Anderson Woods and Thuen Prairie Registered Natural Area. Site visits including noxious weed spraying conducted at Head of the Mountain, Cross Ranch and Gunlogson Nature Preserves. No Outdoor Heritage Funds were utilized to accomplish these tasks, therefore we did not record any match funds. Natural Heritage Inventory. Tasks completed during May-November, 2014 included the biological conservation database was upgraded to a NatureServe web-based program which will require a substantial annual maintenance and support fee. No Outdoor Heritage Funds were utilized to accomplish these tasks, therefore we did not record any match funds. More detailed information is available in the full report that is posted on the website.

6/15/2015 - Status report received. A detailed status report has been provided with photographs. Work was completed in each of the categories -- Native Prairie Restoration and Enhancement Strategies and Best Management Practices; Woodlands - Tree and Shrub Plantings Strategies and Best Management Practices; Noxious Weed and Invasive Species Control Strategies and Best Management Practices; Natural Areas Registry; and Natural Heritage Inventory. See detailed report posted on the website for more specific information.

11/30/2015 - Status report received. A detailed status report has been provided with photographs. Work was completed in each of the following categories -- Native Prairie Restoration and Enhancements Strategies and Best Management Practices; Woodlands - Tree and Shrub Plantings Strategies and Best Management Practices; and Noxious Weed and Invasive Species Control Strategies and Best Management Practices. See detailed report posted on the website for more specific information on the work accomplished during the period of 6/1/2015 - 11/30/2015.

11/30/2016 - Status report received. A detailed status report has been provide with photographs and has been posted on the Outdoor Heritage Fund website. Work was completed in each of the following categories--Native Prairie Restoration and Enhancements: Strategies and Best Management Practices;

Woodlands - Tree and Shrub Plantings Strategies and Best Management Practices; Noxious Weed and Invasive Species Control Strategies and Best Management Practices; and Natural Heritage Inventory.

6/15/2017 - Status report received - A detailed status report has been provided with photographs and has been posted on the Outdoor Heritage Fund website. Work was completed in each of the following categories--Native Prairie Restoration and Enhancements: Strategies and Best Management Practices (over 48 acres impacted); Woodlands - Tree and Shrub Plantings Strategies and Best Management Practices (over 1640 trees and shrubs planted); Noxious Weed and Invasive Species Control Strategies and Best Management Practices; and Natural Heritage Inventory.

11/30/2017 - Status report received. A detailed status report has been provided with photographs and has been posted on the Outdoor Heritage Fund website. Work was completed in each of the following categories--Native Prairie Restoration and Enhancements: Strategies and Best Management Practices; Woodlands - Tree and Shrub Plantings: Strategies and Best Management Practices; and Noxious Weed and Invasive Species Control: Strategies and Best Management Practices.

11/30/2018 - Status report received. A detailed status report has been provided with photographs and has been posted on the Outdoor Heritage Fund website. Work was completed in each of the following categories--Native Prairie Restoration and Enhancements: Strategies and Best Management Practices; Woodlands - Tree and Shrub Plantings: Strategies and Best Management Practices; and Noxious Weed and Invasive Species Control: Strategies and Best Management Practices. As well as Natural Areas Registry and Natural Heritage Inventory.

6/14/2019 – Status report received. A detailed status report has been provided with photographs and has been posted on the Outdoor Heritage Fund website. Work was completed in each of the following categories--Native Prairie Restoration and Enhancements: Strategies and Best Management Practices; Woodlands - Tree and Shrub Plantings: Strategies and Best Management Practices; and Noxious Weed and Invasive Species Control: Strategies and Best Management Practices. As well as Natural Areas Registry and Natural Heritage Inventory.

A final summary of the project has also been provided and is available on the website.

This contract is now closed.

Updated 7/17/2019