

## Outdoor Heritage Fund Status and Final Report Form/Guidelines

This report is used to show progress of grant projects funded through the Outdoor Heritage Fund. Status Reports and the Final Report must be submitted as required in Contract.

Contract Number 014-156	Report Date 11/30/2019	Period Covered by Report (8/1/2019 to 11/30/2019) <b>Revised 1/2/2020</b>
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Project Name  
**Natural Resource Stewardship in ND's Parks, Preserves, and Natural Areas II**

Project Sponsor Name  
**North Dakota Parks and Recreation Department**

Responsible Official (Last, First Middle) <b>Duttenhefner, Kathy G</b>	Responsible Official's Title <b>Biologist II/ Natural Resources Division Coordinator</b>
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Project Sponsor Address  
**1600 East Century Ave.**

City <b>Bismarck</b>	State <b>ND</b>	Zip Code <b>58503</b>	Telephone Number <b>701-328-5370</b>
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**Financial Update**

Please provide the following information regarding the funding for your project based on the contract award:

	Funds Spent THIS Reporting Period*	Total Funds Spent to Date	Balance of Remaining Funds
Match Funding	\$107.90	\$107.90	\$10,991.10
In-kind Funding	\$4,275.00	\$4,275.00	\$18,725.00
Sponsor Funding	\$1,697.88	\$1,697.88	\$2,302.12
OHF Funding	<b>\$2,389.86</b>	<b>\$2,389.86</b>	<b>\$106,290.14</b>
<b>Total</b>	<b>\$8,470.64</b>	<b>\$8,470.64</b>	<b>\$138,309.36</b>

Do you anticipate needing to request a grant extension?    /\_/ Yes    /X/ No

If yes, please explain:

Work Completed during Period Covered by Report:    August 1 – November 30, 2019

\*As appropriate please provide copies of receipts for purchases.

(This information will be posted on the Outdoor Heritage Fund/Industrial Commission website)

## Project Goals

1. Conserve and enhance existing native and restored prairies, woodlands, tree and shrub plantings, within parklands, preserves and natural areas to maximize biodiversity of plant and animal species and provide healthy ecosystems.
2. Successfully manage trees and shrub plantings within parks, preserves, recreational, interpretive and natural areas to provide safe and enjoyable experiences for park visitors.

## Measurable Objectives-Results

1. Within four years, increase and enhance **native prairie restoration** acres on parklands, preserves and natural areas through the use of high diversity native seed mixture obtained from local seed sources.
2. Within four years, increase the percent species composition of native grasses and forbs on prairie restoration sites as determined through systematic monitoring and recorded in restoration plans.
3. Within four years, decrease the percent species composition of noxious and invasive species within prairie restorations as determined through systematic monitoring and recorded in restoration plans.
4. Within four years, increase **woodland habitat and tree and shrub planting** acres on parklands, preserves and natural areas through the creation of a mosaic of woodlands by planting a diverse selection of native trees and shrubs. Maintain a 75% survivability rate.
5. Within four years, decrease noxious weeds and invasive species within tree and shrub planting in parklands, preserves and natural areas through the use of chemical, mulch and mechanical removal strategies.
6. Within 4 years increase tree and shrub planting protection through the use of tree wrapping, bark protectors, mulching and fencing.
7. Within four years, strengthen **tree risk management program** through continuation or tree risk assessment program to include annual assessments, recommendations for appropriate actions and funding for remedial actions within timely manner to ensure safe and healthy tree plantings and woodlands within high use areas.



Figure 1 Fort Ransom State Park – Fall 2019

# Native Prairie Restoration and Enhancements Strategies and Best Management Practices

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 and provide optimal visitor experiences. The prairie restoration and enhancement strategies and best management practices will include the use of a variety of practices including fire, haying, grazing, tillage, herbicides, and seeding and planting of native grasses and forbs.

## Tasks Completed August 1, 2019 – November 30, 2019

1. In process of updating existing 40 prairie restoration plans 40 restoration plans and identifying 2020 management actions (NDPRD Biologists – 25 hours)

PARK	MANAGEMENT UNIT	RESTORATION CLASSIFICATION	INITIAL SEEDING (Year)	BURN UNIT #	ACRES
BLSP	Entrance Prairie Restoration Site	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	2017	3	0.3
CRSP	Cottonwood Meadow South Prairie Restoration Site	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	2012	5	0.7
CRSP	Cottonwood Meadow North Prairie Restoration Site	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	2012	4	0.8
DLSP	RG1	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	1993	NA	24.6
DLSP	RG2	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	1993	NA	5.6
DLSP	RG3	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	1993	NA	3.5
DLSP	RG4	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	1993	NA	41.3
DLSP	RG5	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	1993	NA	50.1
DLSP	RG6	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	1993	NA	53.4
DLSP	RG7	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	1993	NA	36.4
DLSP	RG8	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	1993	NA	27.3
DLSP	RG9	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	1993	NA	5.7
DLSP	RG10	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	1993	NA	6.9
DLSP	Grahams Island Prairie Restoration Site	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	2011	3	11

Table 1. Parkland Prairie Restorations

PARK	MANAGEMENT UNIT	RESTORATION CLASSIFICATION	INITIAL SEEDING (Year)	BURN UNIT #	ACRES
FALSP	Stables Prairie Restoration Site	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	2010	3	1.33
FALSP	Keller A Prairie Restoration Site	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	2015	4	42
FALSP	Keller B Prairie Restoration Site	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	2015	5	2.5
FRSP	RG 1	Big Bluestem Tallgrass Prairie	1981	NA	7
FRSP	RG2	Big Bluestem Tallgrass Prairie	1981	NA	47
FRSP	RG3	Big Bluestem Tallgrass Prairie	1981	NA	23
FRSP	Entrance Restoration Site	Northern Cord Grass Wet Prairie	2019		13.8
FSSP	North Prairie Restoration Site	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	2012	4,5	32
FSSP	South Prairie Restoration Site	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	2011	2	10
FSSP	Nelson Prairie Restoration Site	Needle-and-Thread-Western Wheatgrass Prairie	2011	6	5.6
FSSP	Pollinator Plot Restoration Site	Needle-and-Thread-Western Wheatgrass Prairie	2016	NA	0.56
FSSP	Visitor Center Prairie Restoration Site	Needle-and-Thread-Western Wheatgrass Prairie	2015	NA	0.96
ISP	RG1	Sand Bluestem-Prairie Sandreed Sand Prairie Site	2002	NA	
ISP	RG2	Sand Bluestem-Prairie Sandreed Sand Prairie Site	2002	NA	
ISP	Visitor Center West Tract 1 Prairie Restoration Site	Sand Bluestem-Prairie Sandreed Sand Prairie Site	2011	7	10
ISP	Visitor Center North Tract 2 Prairie Restoration Site	Sand Bluestem-Prairie Sandreed Sand Prairie Site	2011	6,8	2.3
ISP	Visitor Center West Tract 3 Prairie Restoration Site	Sand Bluestem-Little Bluestem Sand Prairie	2011	7	6.2
LCIC	Lewis and Clark Interpretive Center Prairie Restoration Site	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	16, 2017, 20	NA	1.5
LSSP	North	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie		NA	
LSSP	South	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie		NA	
LSSP	JT North Prairie Restoration Site	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	2011	7	11.9
TMRA	Turtle Mountain Recreational Area Prairie Restoration Site	Western Wheatgrass-Green Needlegrass Mixedgrass Prairie	2017	NA	0.42

# Tree and Shrub Plantings Strategies and Best Management Practices

A multi-site, long term, collaborative project with a specific goal to enhance existing tree and shrub planting habitat acres and biodiversity on parklands, preserves and natural areas. The project purpose is to enhance the existing mosaic of tree and shrub complex habitats through the planting of a diverse selection of native trees and shrubs. The diverse plantings of trees and shrubs will provide food, living space, and cover for a variety of wildlife species.

## Tasks Completed August 1, 2019 – November 30, 2019

1. **Deer fencing** was installed at Cross Ranch and Fort Abraham Lincoln State Parks. The University of Mary assisted with installing deer fence at FALSP. (NDPRD staff, Park staff, and Volunteers over 66 hours – 40 staff) 530 feet of 5' C Flex deer fence was purchased and utilized at Fort Abraham Lincoln, Beaver Lake, Cross Ranch and Lake Sakakawea State Parks.



*Figure 2 University of Mary Volunteers*



*Figure 3 University of Mary Volunteers*



*Figure 4 Deer Fence and bark protectors at Fort Abraham Lincoln State Park*

2. In addition to deer fence, **bark protectors, mesh tree guards and stakes** were also installed at several parks. Bark protectors were installed by park staff and staff biologists. Bark protectors are distributed through out the park system. Both solid wall and screen mesh tree guards will protect trees and shrubs from rabbits and rodents. (NDPRD staff – over 25 hours).



Figure 5 Mesh Tree Guard



Figure 6 Solid Wall Tree Guard

3. **Level 1 Limited Visual Tree Risk Assessment** (ANSI A300 Standard) tree risk assessments and identification of removal of high-risk trees is an ongoing task. Natural Resource Division staff completed or initiated tree risk assessments at Beaver Lake, Lake Sakakawea, Fort Abraham Lincoln, Cross Ranch, Lake Metigoshe and Fort Stevenson State Parks. This year GIS collector was utilized to assess and map the high-risk trees. (NDPRD staff – over 116 hours). Post processing data and map creation will be completed throughout the winter.

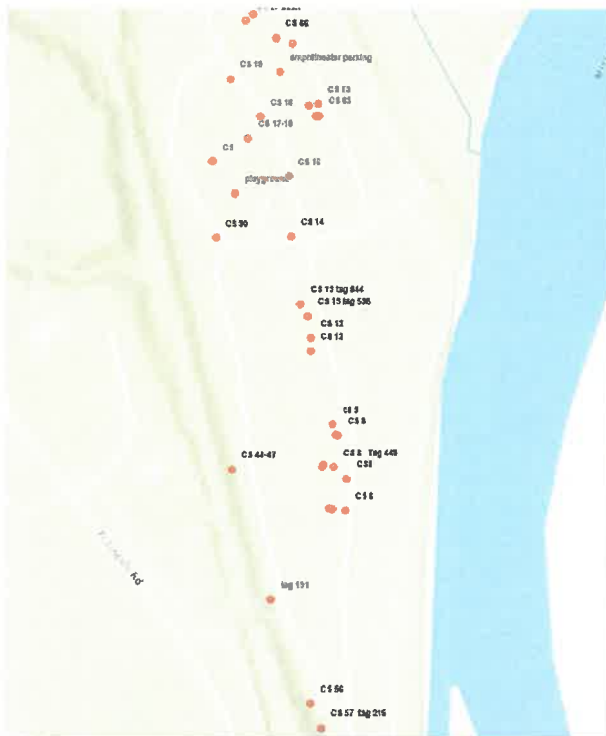


Figure 7 Tree Risk Assessment – Raw data



Figure 8 Tree Risk Assessment

4. Natural Resource Division staff completed or initiated **tree planting assessments** at Beaver Lake, Lake Sakakawea, Fort Abraham Lincoln, and Cross Ranch State Parks. This year GIS collector was utilized to assess and map the tree plantings less than 3 years old. (NDPRD staff – over 35 hours). Post processing data and map creation will be completed throughout the winter.



Figure 9 Tree planting assessments - Raw data



Figure 10 Tree Planting assessments

5. **Tree and shrub order** was placed with Lincoln Oakes Nursery. 446 bareroot trees and shrubs were order for 13 state parks, interpretive and natural areas. We have not been invoiced for these trees and shrubs to date. Balance that will be due in 2020 is approximately \$1,79.25.



# LINCOLN OAKES NURSERY

3310 University Drive - Bismarck, ND 58504  
701-223-8575 Fax 701-223-1291

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Website: [www.lincolnoakes.com](http://www.lincolnoakes.com)

## ORDER ACKNOWLEDGEMENT

ORDER NO  DATE

SOLD TO	ND Parks & Rec 1600 E Century Ave. Ste 3 Bismarck, ND 58503	SHIP TO	ND Parks & Rec 1600 E Century Ave. Ste 3 Bismarck ND 58503
SHIP DATE	<input type="text"/>	ORDER DATE	<input type="text" value="11/18/2019"/>
SHIP VIA	<input type="text"/>	TERMS	<input type="text" value="Net 30"/>
CUST. PO	<input type="text"/>	TELEPHONE	<input type="text" value="(701) 328-5370"/>
COMMENTS	<input type="text"/>		
BILL TO	ND Parks & Rec 1600 E Century Ave. Ste 3 Bismarck ND 58503		

QUANTITY	PRODUCT DESCRIPTION	SIZE	UNIT PRICE	AMOUNT
<b>Deciduous - Bareroot</b>				
10	Ash, Green	3-5'	1.650	16.50
20	Boxelder	5'+	1.300	26.00
25	Cherry, Pin	2-3'	1.150	28.75
50	Cottonwood, Siouxland	5'+	3.550	177.50
25	Currant, Golden	2-3'	1.150	28.75
90	Dogwood, Redosier	3-5'	1.650	148.50
25	Maple, Amur	2-3'	1.250	31.25
50	Maple, Silver	5'+	3.500	175.00
50	Oak, Bur	2-3'	1.250	62.50
20	Plum, American	3-5'	1.650	33.00
10	Poplar, Hybrid	5'+	3.550	35.50
10	Rose, Hanson Hedge	3-5'	1.650	16.50
10	Willow, Peachleaf	5'+	3.550	35.50
<b>Deciduous - Container</b>				
5	Ash, Green	1 gallon	7.000	35.00
12	Cottonwood, Native	1 gallon	7.000	84.00
5	Maple, Amur	1 gallon	7.000	35.00
<b>Conifers - Container</b>				
12	Spruce, Black Hills	1 gallon	7.000	84.00
18	Spruce, Colorado Blue	1 gallon	7.000	126.00



Table 2 Proposed Expenses and Matches 2019-2023

Project Expense	OHF Request	Applicant's Match Share (Cash)	Applicant's Match Share (In-Kind)	Applicant's Match Share (Indirect)	Other Project Sponsor's Share	Total Each Project Expense
Native Prairie Restoration & Enhancements: <b>Native forb and grass seed</b> <sup>1</sup>	\$25,000.00	\$3,000.00	\$8,000.00 <sup>5</sup>	\$0.00	\$0.00	\$36,000.00
Tree and shrub Planting Enhancements: <b>Tree and shrub stock</b> <sup>2</sup>	\$60,000.00	\$5,000.00	\$9,000.00 <sup>5</sup>	\$0.00	\$4,000.00	\$78,000.00
Tree and shrub Planting Enhancements <b>Deer fence –3000<sup>3</sup> fence and rebar posts</b> <sup>4</sup>	\$4,500.00	\$1,000.00	\$0.00	\$0.00	\$0.00	\$5,500.00
Tree and shrub Planting Enhancements <b>Mulch. tubes (500), stakes (400)</b>	\$4,180.00	\$100.00	\$0.00	\$0.00	\$0.00	\$4,280.00
Native Prairie Restorations & Enhancements: <b>Chemical for restorations</b>	\$0.00	\$2,000.00	\$0.00	\$0.00	\$0.00	\$2,000.00
<b>Hazardous Tree removal services</b>	\$15,000.00	\$0.00	\$6,000.00	\$0.00	\$0.00	\$21,000.00
<b>Total Costs</b>	<b>\$108,680.00</b>	<b>\$11,100.00</b>	<b>\$23,000.00</b>	<b>\$0.00</b>	<b>\$4,000.00</b>	<b>\$146,780.00</b>

Table 1 Expenses and Matches August 1-November 30, 2019 – Revised 1/2/2020

Project Expense	OHF Request	Applicant's Match Share 398 (Cash)	Applicant's Match Share 398 (In-Kind)	Applicant's Match Share (Indirect)	Other Project Sponsor's Share N3536	Total Each Project Expense
Native Prairie Restoration & Enhancements/Assessment: <b>Native forb and grass seed</b>		\$107.90 <sup>3</sup>				\$107.90
Tree and shrub Planting Enhancements/Assessment: <b>Tree and shrub stock</b>					\$309.24 <sup>1</sup>	\$309.24
Tree and shrub Planting Enhancements: <b>Deer fence and rebar posts</b>	\$1,974.90 <sup>4</sup>		\$4275.00 <sup>2</sup>		\$375.00 <sup>1</sup>	\$6,625.40
Tree and shrub Planting Enhancements <b>tubes, stakes, guards</b>	\$414.46 <sup>5</sup>				\$399.84 <sup>1</sup>	\$814.30
Tree and shrub Planting Enhancements <b>mulch</b>					\$614.80 <sup>1</sup>	\$613.80
Native Prairie Restorations & Enhancements: <b>Chemical for restorations</b>						
Hazardous Tree Assessments/removal <b>Contracted Services</b>						
<b>Total Costs</b>	<b>\$2389.86</b>	<b>\$107.90</b>	<b>\$4275.00</b>	<b>\$0.00</b>	<b>\$1,697.88</b>	<b>\$8,470.64</b>

<sup>1</sup> North Dakota Forest Service America the Beautiful Grant Lewis and Clark Tree and Shrub Planting Grant 1508-N3536 Fund

<sup>2</sup> University of Mary Day of Caring at Fort Abraham Lincoln State Park – Deer Fence Installation 10/9/19 **\$4275** Volunteer Match

<sup>3</sup> ND Parks and Recreation Department– Milkweed Plants -**\$107.90** 1508 - 398 Special Funds

<sup>4</sup> Deer Fence from DeerBusters.com -1510 398 - **\$439.90, \$660.00, \$875.00 = \$1974.90**

<sup>5</sup> Tree bark guards, stakes and tying systems from Plantra **\$414.46**

Photos of work completed are welcome (If appropriate, please submit photos of key elements of the project completed or in progress during reporting period) Do not exceed five photos per project report.

This report was prepared pursuant to an agreement with the Industrial Commission of North Dakota, which partially funded the project through the Outdoor Heritage Fund. Project participants, its subcontractors, and the Industrial Commission of North Dakota, or any person acting on its behalf, do not:

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Signature of Responsible Official

Kathy Duff 1-2-2020